

U.S. DEPARTMENT OF THE INTERIOR

Office of Occupational Safety and Health Medical Program Handbook

Fifth Edition



Produced by:

Office of Occupational Safety and Health
Division of Occupational Health and Medical Programs

Table of Contents

INTRODUCTION AND SCOPE	5
HANDBOOK ADMINISTRATION	7
CHAPTER 1 - RESPONSIBILITIES	8
1.1 DOI OFFICE OF OCCUPATIONAL SAFETY AND HEALTH (OSH).....	8
1.2 DOI OFFICE OF HUMAN RESOURCES.....	8
1.3 BUREAU SENIOR MANAGEMENT	8
1.4 BUREAU AREA/REGIONAL MANAGEMENT.....	9
1.5 LOCAL OFFICES	9
CHAPTER 2 - ROLES	10
2.1 OCCUPATIONAL HEALTH AND MEDICAL PROGRAMS.....	10
2.2 DOI MEDICAL OFFICER (DOI MO)	10
2.3 AGENCY AND/OR PROGRAM MEDICAL OFFICER(S) (AMO(s))	11
2.4 HUMAN RESOURCE OFFICER(S).....	11
2.5 SAFETY OFFICER(S)	12
2.6 HEALTH CARE PROVIDERS	12
CHAPTER 3 - MEDICAL SERVICES PROVIDERS	13
3.1 ACQUIRING OR ACCESSING SERVICES.....	13
3.2 EXAMINING HEALTH CARE PROVIDER QUALIFICATION STANDARDS/CREDENTIALS	13
CHAPTER 4 - MEDICAL RECORDS - EMPLOYEE MEDICAL FILE SYSTEM	17
4.1 MANAGEMENT AND RECORDS MAINTENANCE	17
4.2 CONFIDENTIALITY/RELEASE OF RECORDS.....	19
CHAPTER 5 - MEDICAL PROGRAM GUIDANCE	22
5.1 ESTABLISHING AND PROVIDING SERVICES	22
5.2 UNION-MANDATED	23
5.3 MEDICAL REVIEW PROGRAM	23
5.4 BASIC REQUIREMENTS FOR EXAMINATION PROCEDURES	23
5.5 DISCRETIONARY SERVICES	27
5.6 EMERGENCY MEDICAL CARE.....	30
5.7 HOW TO ESTABLISH OR CHANGE MEDICAL QUALIFICATION STANDARDS FOR HAZARDOUS AND/OR ARDUOUS POSITIONS	31
5.8 PRE-PLACEMENT MEDICAL EVALUATIONS	34
5.9 MEDICAL SURVEILLANCE	39
5.10 SPECIAL EMPHASIS TOPICS.....	44
<i>Drug and Alcohol Testing</i>	
<i>Employee Assistance Program Services</i>	
<i>Reasonable Accommodation</i>	
<i>Time and Attendance / Conduct / Performance</i>	
<i>Authority to require an examination</i>	
<i>Authority to offer an examination</i>	
<i>Medical Employability Determinations</i>	
<i>OWCP Recordable Injuries and Illnesses</i>	
CHAPTER 6 – COMMON OCCUPATIONAL HEALTH TOPICS.....	51
6.1 RESPIRATORY PROTECTION/MEDICAL CLEARANCE	51
6.2 HEARING CONSERVATION	56
6.3 OCCUPATIONAL HAZARDS.....	57
A. <i>Chemical Stressors</i>	57

<i>B. Physical Stressors</i>	59
Exertion	62
Heat Stress/Heat related illness	62
Cold Stress	62
<i>C. Biological Stressors</i>	70
Bloodborne Pathogens	70
Vaccine-Preventable Diseases	71
Other biological stressors	
Tuberculosis.....	72
Rabies	73
Hantavirus	74
Mosquito Borne Diseases.....	75
Lyme Disease.....	76
Poisonous Plants.....	78
6.4 DRIVING FOR WORK PURPOSES.....	79
6.5 AUTOMATIC EXTERNAL DEFIBRILLATORS	81
6.6 FIRST AID KITS	83
CHAPTER 7 - MEDICAL STANDARDS	86
COMMISSIONED LAW ENFORCEMENT OFFICERS.....	87
WILDLAND FIREFIGHTERS	106
DIVERS	107
INSPECTORS	126
<i>A. Land-Based Inspectors</i>	127
<i>B. Off-Shore Inspectors</i>	139
TOWER CLIMBERS	155
DRILL RIG OPERATOR/HELPER DUTIES	170
CREWMEMBERS ABOARD LARGE VESSELS.....	186
ROPE ACCESS TECHNICIANS	200
CRANE OPERATORS	215
HAZARDOUS WASTE WORKERS	225
PILOTS / AVIATORS	230
LABORATORY WORKERS.....	247
APPENDIX	255
Forms.....	255
DI-7001 – Medical Surveillance Introductory Letter to Employees.....	256
DI-7002 – Industrial Hygienist Interview Form	260
DI-7003 – Occupational/Work History Form.....	263
DI-7004 – DOI Standard Medical History and Examination Form	269
DI-7005 – Privacy Act Notification Form	281
DI-7006 – Authorization for Disclosure of Information Form	284
DI-7007 – Request for Respirator Clearance Form.....	286
DI-7008 – Respirator Clearance Questionnaire.....	288
DI-7009 – Respirator Medical Evaluation Questionnaire Summary and Recommendations	295

Foreword

This *Occupational Health Program Handbook* was prepared by the U.S. Department of the Interior (DOI) Office of Occupational Safety and Health. This Fifth Edition of the *Handbook* represents the continuing efforts of the contributing agencies to provide and improve occupational health services for DOI employees. It reflects comments and suggestions offered by users over the years since it was first introduced, having been developed to address findings, concerns, and recommendations summarized in the final report of a program review completed in 1994 by representatives of the Uniformed Services University of the Health Sciences.

First published in 1997, the *Handbook* underwent major updates in 2000, 2005, and 2010. This 2018 edition of the *Handbook* has been reorganized for easier accessibility, and incorporates updates and enhancements that have been made in DOI policies and occupational health practices since the last edition. This Handbook is posted on DOI's Web page at: <https://edit.doi.gov/pmb/osh> and on DOI SafetyNet at <https://safetynet.doi.gov/>

Questions regarding the content of the Handbook may be directed to:

U.S. Department of the Interior
Office of Occupational Safety and Health
Occupational Health and Medical Programs Division
1 Denver Federal Center
PO Box 25007, D-115
Building 25, Suite 2400
Denver, CO 80225

Office of Occupational Safety and Health contact information can be found at:
<https://safetynet.doi.gov/contacts/index.html#ohs>

Introduction and Scope

This *Handbook* represents a culmination of efforts to improve occupational health services for the employees of the Department of the Interior (DOI).

VISION STATEMENT - Occupational Health Reinvention

All Department of Interior employees, volunteers, contractors, and visitors are provided a work or recreation environment free of health hazards that may cause injury or illness. Further, occupational health hazards are identified and evaluated using professional industrial hygiene concepts. Measures are then instituted to eliminate or minimize potential adverse effects by means of appropriate training, protective equipment and medical services.

MISSION STATEMENT

The Office of Occupational Safety and Health provides program direction, develops policy, and facilitates the decision-making process to achieve a safe and healthful occupational and recreating environment. In addition, the Office does the following:

- a) provides consultative services to facilitate program improvement;*
- b) provides information services, in depth studies, and analysis;*
- c) conducts evaluations to aid program compliance and continuous improvement; and,*
- d) represents the Department to assure that interests and needs are addressed in outside venues.*

GOALS

The goals of the Occupational Health Program are to:

- a) Create, circulate, and promote effective approaches, processes, and guidance for organizations to achieve safe and healthful work and recreation environments;*
- b) Be responsive, reliable, informative, and professional in meeting customer needs;*
- c) Develop customer service standards, by listening and responding to their program needs;*
- d) Promote and advocate the benefits of embracing the Departmental Occupational Safety and Health (OSH) Program; and*
- e) Define the program elements and document how and why we do them.*

With the above direction established, the program guidelines presented in this *Handbook* were prepared by the DOI's Office of Occupational Safety and Health (OSH). The guidelines were developed as part of the Department's efforts to improve and standardize the provision of occupational health services throughout its many bureaus, offices, and agencies, and to meet its articulated vision, mission, and goals for occupational health. The *Handbook* is intended to be specific enough to provide easily understood guidance, procedures, and forms that may be used by managers in establishing a program through which occupational health services meet the needs of the Department, the individual agencies, DOI employees, and the public we serve. The *Handbook* also is intended to be generic enough to allow for local flexibility in utilizing available resources and creativity to meet occupational health program needs.

The guidelines, and the programs they support, should be viewed as an integral part of overall program management, reflecting responsibilities of every DOI supervisor and manager. It is expected that programs and services carried out under these guidelines will demonstrate ongoing coordination and cooperation with local Federal Executive Boards and other interagency committees and organizations, as appropriate.

All occupational health programs established or provided for DOI employees should be consistent with the provisions of this *Handbook*. Assistance with program development and implementation, or consultation regarding the adequacy and appropriateness of the program (as specified in 5 U.S.C 7910) may be requested from the DOI Office of OSH. Additionally, the Office of OSH will provide a central point of contact with the Office of Personnel Management to assure that medical programs instituted under this guide are consistent with 5 U.S.C. 339 and other applicable statutes.

For assistance in the use of this *Handbook*, setting up a local occupational health program, reviewing an existing program, or securing further guidance or consultation on occupational health or safety matters, please contact:

U.S. Department of the Interior
Office of Occupational Safety and Health
Occupational Health and Medical Programs Division
1 Denver Federal Center
PO Box 25007, D-115
Building 25, Suite 2400
Denver, CO 80225

Office of Occupational Safety and Health contact information can be found at:
<https://safetynet.doi.gov/contacts/index.html#ohs>

Handbook Administration

DISTRIBUTION

This *Handbook*, and all updates, revisions, and additions, as well as the DOI Medical History and Examination Forms can be found on DOI's Web page at: <https://edit.doi.gov/pmb/osh> and on DOI SafetyNet at <https://safetynet.doi.gov/>

MAINTENANCE

OSH staff will have primary responsibility for maintaining this *Handbook*, including an annual review for accuracy, consistency with current DOI policies and organizational structure, appropriateness of content, and completeness. Updates, revisions, and additions that are identified as necessary will be made on the internet-available version following this review.

Any DOI employee may submit requests for changes, additions, or corrections to the Handbook by contacting the Office of OSH.

All DOI employees are encouraged to work with their local supervisors and managers to have their occupational health questions and concerns addressed. Issues that require further clarification of occupational health information or existing policy may be directed to the DOI Office of OSH to initiate appropriate action.

Chapter 1 - Responsibilities

1.1 DOI Office of Occupational Safety and Health (OSH)

The Office of OSH provides up-to-date guidance on all aspects of the Occupational Health Program, keeping pace with federal regulations and the advancement of science in occupational health and industrial hygiene. OSH staff provides much of the professional guidance and support for this occupational health program.

The Office of OSH will:

- Publish, via this *Handbook* and/or other methods, DOI policy and guidance in the occupational health program area;
- Assist the bureaus in establishing their occupational health programs, evaluating these programs, and resolving issues that are of common bureau interest or involve outside agencies;
- Serve as the primary DOI occupational health liaison with outside agencies, including the Office of Personnel Management, the United States Public Health Service, and the Occupational Safety and Health Administration; and
- Maintain the *Occupational Health Program Handbook*.

More information regarding the Office of OSH occupational health program responsibilities is presented chapter 2 (*Roles*).

1.2 DOI Office of Human Resources

As a support function for the occupational health program, the DOI Office of Human Resources provides up-to-date guidance on all aspects of the Personnel Management program in keeping pace with federal regulation. Specifically, the DOI Office of Human Resources will provide up to date guidance on the administrative aspects of personnel medical programs.

More specific information regarding occupational health program responsibilities of the various offices of personnel is presented in chapter 2 (*Roles*).

1.3 Bureau Senior Management

Executive Order 12196, *Occupational Safety and Health Programs for Federal Employees*, makes each Federal agency head responsible for establishing and maintaining an effective and comprehensive occupational safety and health program. Within DOI, bureau senior management is responsible for the implementation of occupational health programs within their respective bureaus that meet all applicable federal laws and regulations. This *Handbook* provides certain guidance and describes services that are available from the Office of OHS and other DOI and non-DOI agencies, but the individual bureaus and area/regional programs have programmatic and financial responsibility for the services provided to their employees.

Centered on each bureau's Designated Agency Safety and Health Official (DASHO) and involving senior line management throughout the organization, management assures that top priority is given

to the “zero-loss” safety and health culture within their organization. This includes a commitment to having all employees in arduous or hazardous occupations medically fit and physically capable of performing their duties without undue risk of harming themselves or others.

Bureau senior management will:

- Assure that all personnel in arduous and hazardous occupations are medically qualified for their positions; and
- Assure that all agency-funded occupational medical service programs meet or exceed the guidelines set out in this *Handbook* and/or applicable federal regulation.

1.4 Bureau Area/Regional Management

Bureau senior management at the area or regional level is responsible for the implementation of occupational health programs within their respective bureaus that meet all applicable federal laws and regulations. The guidance and service descriptions covered for Bureau Senior Management, above, apply similarly to area/regional managers, within their own programmatic purview.

1.5 Local Offices

Local DOI field offices generally have the “point of application” responsibility for employee health and safety. These local offices must assure that all employees in arduous and/or hazardous occupations are medically fit and physically capable of performing their duties without undue risk to themselves or others. In addition, depending on the financial management arrangements within individual bureaus, local offices may have responsibility for financing and arranging for services for its employees.

In general, local offices will:

- (1) Coordinate with local Federal Executive Boards and other federal committees and organizations, as appropriate, in arranging for and securing occupational health services for eligible DOI employees;
- (2) Assure that all office personnel in arduous and hazardous occupations are medically qualified for their positions; and
- (3) Assure that all agency-funded occupational medical programs meet or exceed the guidelines set out in this *Handbook* and/or applicable federal regulation.

Chapter 2 - Roles

2.1 Occupational Health and Medical Programs

The Chief, Occupational Health and Medical Programs serves as the focal point for all aspects of the DOI occupational health program. Specifically, the Chief is the central authority for all program and policy determinations; the central point of contact for all external agency occupational health issues; and the central clearinghouse for the occupational health program.

2.2 DOI Medical Officer (DOI MO)

The DOI MO is has oversight responsibility for the Department's occupational health program. In fulfilling the oversight responsibility, the DOI MO's role ensures individual accountability and provides a mechanism for a uniform and consistent application of medical decisions and policies throughout the Department. Specific operational assistance and services from the DOI MO can be arranged individually by bureau, regional, or local agency management.

The DOI MO does not have personnel or management decision-making authority within DOI. All input from or by the DOI MO must be considered only as consultative or advisory in nature, and the use of such advice and consultation is solely at the discretion of DOI managers.

With this in mind, the DOI MO provides or oversees the following advisory and consultative services:

- (1) Provides up-to-date and complete medical and technical information regarding specific medical and physical conditions or medical examination procedures relevant to existing or proposed physical requirements or health related personnel management programs for federal employees;
- (2) Reviews and makes recommendations regarding the results and conclusions derived from medical examinations conducted by non-DOI or DOI contract physicians;
- (3) Provides technical assistance (including advisory opinions in medical and occupational health areas, e.g., worker's compensation, disability retirement, medical standards, civil lawsuits, MSPB challenges, EEOC cases, etc.) to ensure compliance with agency policy;
- (4) Provides expert reviews and analyses of medical documentation and other materials submitted in support of:
 - Medical disqualifications of selectees;
 - An employee's restoration rights under 5 U.S.C. 8151 following full or partial recovery from a compensable on-the-job injury;
 - Requests for job accommodations or other special benefits regarding health conditions;
 - Written reports on medical standards, medical policy issues, or individual medical documentation reviews, as requested;
 - Advisory opinions clarifying medical/psychiatric issues regarding the suitability of federal employees who hold top security clearances;

- Guidance regarding new and experimental procedures (i.e., refractive eye surgery, surgical implants, prosthetic devices) as a means of satisfying medical, vision, hearing requirements, etc.;
- Research and analysis of complex legal and medical issues through coordination with the office of the solicitor;
- Research and analysis of technical, scientific and medical data in support of policy development and program management;
- Assistance in the development and implementation of occupational medical evaluation and clearance programs for candidates and incumbents, including such services and topics as are covered in this *Handbook*.

2.3 Agency and/or Program Medical Officer(s) (AMO(s))

Once the technical and policy issues relating to a specific occupational medical program have been resolved, the services of an Agency/Program MO can be arranged for individually by a bureau, or by regional or local agency management. An AMO secured in this fashion will function in a similar manner on the local or bureau level as that summarized above for the DOI MO, with the exception of those functions related to national program and policy issues. If an agency or local program obtains the services of a medical officer for a specific occupational medical program, the DOI OSH should be notified.

The AMO shall be a licensed doctor of medicine (MD) or osteopathy (DO). At a minimum, it is recommended that any AMO be board certified or board eligible in the field of occupational medicine, or have at least five years of experience in the full-time practice of occupational medicine and be board certified or board eligible in another medical specialty. The AMO shall be qualified to provide professional expertise in the areas of occupational safety and health as they relate to the specific positions covered under the applicable mandatory medical examination portions of this program. For the purpose of conducting medical evaluations, the AMO shall understand the physiological and psychological demands placed on the bureau's employees and shall understand the stressful, hazardous, and possibly life-threatening conditions under which these employees may have to perform their duties.

2.4 Human Resource Officer(s)

The Human Resource Officer (HRO) is charged in many cases with maintaining employee occupational health records, including audiograms, physical examination results, exposure records, and physician reports, recommendations, and summaries as they relate to occupational exposures, injuries, illnesses, return to duty recommendations, and physical qualifications. The day-to-day maintenance or custodianship of these records may be delegated contractually to another appropriate agency or private entity when that organization provides the occupational health services for DOI. Further information on the topic of employee occupational health records may be found in chapter 4 under *Medical Records - Employee Medical File System*.

The HRO also has a key role in the management of actions which may include requesting and reviewing medical certifications for sick leave or other absences, where consultation with the DOI OSH and the DOI MO may be of assistance.

2.5 Safety Officer(s)

The lead safety official for the Department in the medical program area is the Chief, Occupational Health and Medical Programs Division, and additional specific information regarding this official's role is provided in this chapter under *Handbook Administration* and *Responsibilities*. A safety officer also is assigned or designated for each operating division or program within the Department. These safety officers are responsible for advising management regarding matters of occupational safety and health. They are responsible for developing and/or managing the safety program within their jurisdiction, and coordinating safety activities. They keep management informed of findings and recommendations that relate to the safety and health of DOI employees and members of the public who are impacted directly by DOI programs. Studies are conducted, or arranged for, to evaluate the effectiveness of safety and health programs, and safety and health information is forwarded to the safety and health counterparts at more central levels of the DOI.

2.6 Health Care Providers

The role of the health care provider in the Department's occupational health program ranges from that of the personal, primary provider of clinical care for individual employees (and, therefore, beyond the purview of departmental direction, but frequently the recipient of requests for, and the provider of, medical documentation regarding those employees) to the providers of occupational medical services and the gatherers of occupational medical information that permits the review and consideration of employees' compliance with agency medical standards. Health care providers also may provide important consultation to employees receiving services and to the agency/program medical officer and/or the DOI MO. In addition, the health care provider serves as a "first-line" observer for health effects of work place exposures and the health status of DOI employees. Health care providers may include professionals from a variety of professional backgrounds, including physicians, nurses, nurse practitioners, physician assistants, audiologists, audiometric technicians, laboratory technologists, and others in the health care arena. All health care entities, including individual providers or corporate health care organizations, that provide services for DOI employees are expected to do so in a manner consistent with good medical practice. When work is performed under contracts or agreements with DOI, it is expected to be done in a manner consistent with this *Handbook*, the specified terms of those contracts or agreements, and local standards for health care services. Information regarding securing health care providers for local occupational health programs may be found in chapter 3, *Medical Service Providers*

Chapter 3 - Medical Services Providers

3.1 Acquiring or Accessing Services

The participation of medical service providers in an agency's medical program may be secured on an agency-to-physician or agency-to-clinic basis, if this arrangement is most practical in meeting local circumstances and preserves established service relationships. Arrangements also may be made as part of a multi-agency contract or agreement that may minimize costs and make the overall program more efficient. Please see section within chapter 5 *Medical Program Guidance - Establishing and Providing Services* for further information regarding organizational aspects of securing services. Ideally, to avoid situations where work-related objectivity may be compromised by established personal relationships between patients and their physicians, contracts for medical service providers should be sought with health professionals who are not the personal health care providers for the employees who are to receive those DOI-sponsored occupational health services. It is recognized, however, that in remote locations or where the availability of health care providers may be limited, contracts with the personal health care providers of at least some employees may not be avoidable.

3.2 Examining Health Care Provider Qualification Standards/Credentials

Many of the DOI positions for which employees will receive medical examinations involve some aspect of exposure to chemical substances or arduous and/or hazardous duties. The clinical examination services provided must be performed by or under the supervision of a licensed physician, or by other health care professionals licensed to perform independent medical examinations. Preferably, the examiner will be knowledgeable in occupational medicine.

The examining health care providers, whether serving as individual contractors, or through a larger clinic or multi-agency arrangement, should demonstrate that they possess the necessary credentials, including:

1. Current health care provider licensure in the state where services will be provided;
2. Current certification, or eligibility for certification, by the national board or specialty organization for an appropriate health care field, e.g., occupational medicine, preventive medicine, internal medicine, family practice; (certification in occupational medicine is highly preferred, though certification in another specialty, and additional training in occupational medicine, is acceptable); Possess current professional practice liability insurance (minimum coverages of \$1 million per occurrence and \$3 million in aggregate are recommended) or, if a federal employee, the type of services they plan to provide for DOI must be covered by their current position description and/or personnel orders (the Federal Tort Claims Act provides liability protection for federal employees while performing official duties, including carrying out health care services);
3. Availability to meet the specified examination needs of the covered employees, and are available to respond to urgent consultation or health care needs following exposure incidents (Note: refer to section in chapter 5 entitled *Medical Program Guidance - Emergency Medical Care*; as with any emergency situation, emergency care for injuries or exposures that result in acute symptoms should be provided by the closest available provider of emergency health care services);
4. Have access directly, or via contract, to certified laboratory services for blood and urine

testing (including testing for agents, or the biological effects of agents, such as heavy metals, pesticides, and polychlorinated bi-phenyls); in turn, these laboratories should be able to demonstrate current certification of program quality, such as by accreditation by the College of American Pathologists, certification as a Medicare provider, or active participation in the Clinical Laboratory Improvement Program of the Centers for Disease Control and Prevention or the American Association for Clinical Chemistry;

5. Have access directly, or via contract, to radiology services, including over-reads by board certified radiologists and, for any asbestos or silica exposure, individuals certified to perform “b-readings;”
6. Use certified, regularly calibrated equipment for pulmonary function testing, audiometry, and electrocardiography;
7. Have mechanisms to avoid conflict of interest, such as self-referral, in the services they provide (DOI employees requiring follow up care should be referred only to their own physician, or to other specialists with the concurrence of the employee’s own physician);
8. Offer competitive prices for services;
9. Ability to provide local access, or easy access arrangements, to services for the employees; this may involve having physicians visit the DOI work site to provide services (e.g., when a sufficient number examinations are to be conducted), or having employees travel distances that are deemed reasonable by the employees and DOI management;
10. Availability on an ongoing, timely basis to provide local clinical and occupational medicine consultation and guidance for DOI management and employees; and
11. Have a system of medical records that assures both the physical security and confidentiality of the records, with release of any information from an employee’s record, or about an employee’s health status or clearances, only upon prior written consent from that employee (see section within chapter 4 entitled *Medical Records - Employee Medical File System*) or by the direction of the Employee Medical File System Manager or his designee.

Medical records **MUST** either be maintained by the physician or his/her clinic for the time periods required by regulation (e.g., the period of employment, plus 30 years, for services related to occupational exposures) and available for access by DOI using normal release of information procedures, or forwarded to DOI for incorporation into the separately stored medical portion of the employees’ official personnel folders.

For most established clinical programs that provide occupational health services, the above requirements either already are in place or can be implemented easily and their existence only needs to be confirmed for the DOI manager who is seeking to enter into a contractual arrangement for such services. In settings where the option of joining another DOI office or agency in an existing program does not exist, the proposed physician or clinic should be willing to supply information that confirms compliance with these basic expectations. Where questions arise about local options for clinical services, consultation may be sought with other nearby federal agencies for their experience in securing services, or the local medical society may be contacted for guidance on options. Also, before arrangements are finalized for local contract services, the DOI Office of OSH or the DOI MO may be consulted to confirm the appropriateness of the proposed clinical arrangements.

3.3 Certification of Other Clinical Staff

Other clinical staff performing services with or for the examining physician must also be able to demonstrate their qualifications if services are not performed under immediate supervision by the physician. Such services specifically include audiometry and spirometry.

Consistent with 29 CFR 1910.95, audiometry is to be conducted either with a microprocessor audiometer, or by an individual who meets one of the following qualifications: 1) a licensed or certified audiologist, or an otolaryngologist or other licensed physician; or 2) a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation and is responsible to an audiologist, otolaryngologist, or other physician (see also section in Chapter 6 – *Hearing Conservation*).

Consistent with applicable sections of 29 CFR 1910 related to pulmonary function testing for occupational exposures to identified agents, persons providing such testing are to have successfully taken a NIOSH-approved course in spirometry.

3.4 Certification of Laboratories

As covered above under *Examining Health Care Provider Qualification Standards/Credentials*, any laboratory providing services for DOI should be able to demonstrate current certification of program quality, such as by accreditation by the College of American Pathologists, certification as a Medicare provider, or active participation in the Clinical Laboratory Improvement Program of the Centers for Disease Control and Prevention or the American Association for Clinical Chemistry.

3.5 Certification of Clinical Equipment

As covered above under *Examining Health Care Provider Qualification Standards/Credentials*, only certified, regularly calibrated equipment is to be used for pulmonary function testing, audiometry, electrocardiography, or other machine-assisted clinical procedures.

3.6 Referrals to Sub-Specialists

As covered above under *Examining Health Care Provider Qualification Standards/Credentials*, mechanisms must be in place so that clinical providers contracted to serve DOI employees avoid conflicts of interest, such as self-referral for follow up specialty or ongoing primary care. DOI employees requiring follow up care for personal health problems or preventive health services should be referred only to their own physicians or to other specialists with the concurrence of the employees' own physicians. Consultation regarding referrals for conditions that relate to job performance or safety issues should be sought through the Occupational Health Programs Manager.

3.7 Data Systems/Records

As covered above under *Examining Health Care Provider Qualification Standards/Credentials*, any provider of clinical services for DOI employees must have a system of medical records in place that assures security and confidentiality, with release of any information from an employee's record, or about an employee's health status or clearances, only upon prior written consent from that employee (see also section within chapter 4 entitled *Medical Records - Employee Medical File System*) or by

the direction of the Employee Medical File System Manager or designee. To avoid misunderstandings and later conflicts, consents for the release of information gathered as a result of a DOI-sponsored examination service should be obtained at the time of initial patient appointment (see Appendix for *Authorization for Disclosure of Information Form*) so that appropriate and necessary DOI access to the information is not restricted.

4.1 Management and Records Maintenance

Federal regulations (5 CFR 293.502) define the Employee Medical Folder (EMF) as “*a separate file folder (normally SF 66-D) established to contain all of the occupational medical records (both long-term and short-term records) designated for retention, which will be maintained by the employing agency during the employee's Federal service.*” Further, “*Occupational Medical Record means an occupation-related, chronological, cumulative record, regardless of the form or process by which it is maintained (e.g., paper document, microfiche, microfilm, or automatic data processing media), of information about health status developed on an employee, including personal and occupational health histories and the opinions and written evaluations generated in the course of diagnosis and/or employment-related treatment/examination by medical health care professionals and technicians. This definition includes ... Employee Exposure Records and occupational illness, accident, and injury records.*”

These regulations also define the Employee Medical File System (EMFS) in which the EMFs are managed as “*the agency's complete system (automated, microfilmed, and paper records) for employee occupational medical records.*”

As specified in 5 CFR 293.506 (Ownership of the Employee Medical Folder), “*The EMF of each employee in a position subject to civil service rules and regulations is part of the records of the Office (Office of Personnel Management [OPM]).*” In other words, civil service employee occupational health records belong to the OPM, even though they are the responsibility of the employing federal agency and may be under the day-to-day custodianship or management of a health services provider under contract with that agency.

In order to manage these EMFs, 5 CFR 293.503 (Implementing instructions) specifies that “*Agencies must issue written internal instructions describing how their [Employee Medical File System] EMFS is to be implemented. These instructions must:*

1. Describe overall operation of the system within the agency including the designation of the agency official who will be responsible for overall system management [i.e., the Employee Medical File System Manager, or EMFSM; the EMFSM for DOI is the Chief, Occupational Health and Medical Programs Division. The EMFSM may then designate others within the agency to handle the day-to-day management of the records, e.g., the custodian of the records at the site where they are maintained [or the program manager for an agency medical standards assessment and clearance program];
2. Be prepared for joint participation by agency medical, health, safety, and personnel officers;
3. Describe where and under whose custody employee occupational medical records will be physically maintained;
4. Designate which agency office(s) will be responsible for deciding when and what occupational medical records are to be disclosed either to other agency officials or outside the agency;
5. Ensure proper records retention and security, and preserve confidentiality of doctor/patient relationships;
6. Be consistent with Office regulations relating to personnel actions when medical evidence is

- a factor (5 CFR parts 339, 432, 630, 752, and 831);
7. Provide guidance on how an accounting of any record disclosure, as required by the Privacy Act (5 U.S.C. 552a(c)), will be done in a way that ensures that the accounting will be available for the life of the EMF;
 8. When long-term occupational medical records exist, provide for the creation of an EMF for an employee transferring to another agency or leaving Government service, and whether an EMF is to be established at the time an employee is being reassigned within the agency;
 9. Ensure a right of access (consistent with any special Privacy Act handling procedures invoked) to the records, in whatever format they are maintained, by the employee or a designated representative;
 10. Ensure that a knowledgeable official determines that all appropriate long-term occupational medical records are in an EMF prior to its transfer to another agency, to the NPRC, or to another office within the same employing agency;
 11. Ensure that all long-term occupational medical records an agency receives in an EMF are maintained, whether in that same EMF or by some other agency procedure, and forwarded to a subsequent employing agency or to NPRC;
 12. Ensure that, if occupational medical records are to be physically located in the same office as the Official Personnel Folder (OPF), the records are maintained physically apart from each other;
 13. Sets forth a policy that distinguishes, particularly for purposes of records disclosure, records in the nature of physician treatment records (which are generally not appropriate for disclosure to non-medical officials) from other medical reports properly available to officials making management decisions concerning the employee;
 14. Provide guidance that distinguishes records properly subject to this part from those (e.g., Postal Service or Foreign Service employee medical records) subject to different rules, particularly in Privacy Act and Freedom of Information Act matters;
 15. Ensure that guidance regarding the processing of Privacy Act matters is consistent with Office regulations implementing the Privacy Act at 5 CFR parts 293 and 297; and
 16. Ensure that no security classification is assigned to an EMF by including therein any occupational medical record that has such a classification. In this regard, the agency creating the classified medical record is required to retain it separately from the EMF while placing a notice in the EMF of its existence and describing where requests for this record are to be submitted.

All information in the EMF, whether stored in paper, electronic, photographic, or other means, must be considered medically confidential, and must be maintained in a manner that strictly controls access to the information, and assures the safety and physical integrity of those records.

These confidential records may be found in several places, complicating the task of assuring confidentiality and security. Records may be found in medical, personnel, dispensary, safety, or other designated DOI program offices, or in clinics managed by DOI, other federal agencies, or private health care providers where occupational health services have been provided over the period of the employee's federal employment. Regarding personnel files, 5 CFR 293.503 (m) specifies that an agency must "*ensure that, if occupational medical records are to be physically located in the same office as the Official Personnel Folder (OPF), the records are maintained physically apart from each other.*" so these records cannot be commingled in the same folders or files.

The EMF is to be maintained for the period of the employee's services with DOI, and then is to be transferred to the National Personnel Records Center for storage or, if indicated, transferred to the appropriate personnel office or designated occupational health care provider of the next employing federal agency. Some records (e.g., certain medical surveillance or exposure records) must be maintained for extended periods of time (e.g., employment plus 30 years); others must be stored, but for lesser periods.

When medical services are provided by non-DOI personnel in non-DOI facilities, information should be maintained in each of the employees' official personnel folders that identifies the names, addresses, and phone numbers of the health care providers where the occupational medical records are located in order to facilitate retrieving those records at a later date, should they be necessary for any further official purposes.

4.2 Confidentiality/Release of Records

This section covers the issue of releasing confidential client/patient information, including conclusions or opinions directly derived from such confidential information, to any person other than the employee covered by those records. Applicable references include the Privacy Act of 1974; 29 CFR 1910.20 (Access To Employee Exposure and Medical Records); and OPM/GOVT-10 Employee Medical File System Records.

Employees must be offered access to their own exposure and occupational medical records. This access must be prompt (generally within 15 working days) and present no unreasonable barriers for the employee. If a physician who is representing the agency or is the custodian of the occupational health record believes that direct employee access to certain sensitive information could be detrimental to the employee, the records requested by an employee are to be released to another licensed health professional who has been identified as being acceptable to the employee.

It is the policy of DOI that all medical confidential information will be handled in accordance with the Privacy Act of 1974 and subsequent amendments. At the time of their first DOI occupational health clinical service, all employees are to receive a *Privacy Act Notice Form* (an example may be found in the Appendix) which outlines the purposes for which the medical information may be used, and the specific conditions under which information provided by or on behalf of an employee may be disclosed. Employees who already have received clinical services, but who have not yet had the opportunity to review a Privacy Act form, should be offered the form at the time of their next clinical service. While obtaining the employee's signature is recommended, it is not mandatory that an employee sign this form as an indication that it has been reviewed.

Without a signed consent from the subject employee, no confidential information will be released to or shared with individuals other than: 1) the subject of the records (i.e., the employee himself or herself); 2) authorized OSHA officials; 3) health professionals within the DOI-arranged system of health services who have a justified, programmatic "need to know"; 4) other individuals in the Department with a specific, official "need to know," such as the EMFSM or agency personnel specifically designated by the EMFSM; or 5) as provided for in the System of Records notice for the owner of the confidential records (OPM, as covered in OPM/GOVT-10). The DOI system of occupational health services may include federal employees or contracted health professionals who work as representatives of DOI.

It is important to note that a general consent form to release medical records DOES NOT include the release of records dealing with HIV and/or AIDS, or substance abuse or mental health diagnosis and/or treatment, unless those subject areas are explicitly included in the signed consent by the subject individual.

In order to avoid confusion and allegations of lack of knowledge or consent, and even though both the Privacy Act and OPM/GOVT-10 authorize certain releases of information, all individuals who are to receive medical examinations or other non-emergency services (for which *any* medical or summary information is to be forwarded to recipients other than the employee him/herself) will be required first to sign and date an *Authorization for Disclosure of Information form* before any services are provided. The nature and scope of the information to be disclosed to the agency must be specifically authorized by the employee on the form before the services are provided or the resulting information is released. No medical information, including summary information derived from medical records, may be disclosed to DOI management, or to others, without this signed form (or one providing similar information), unless expressly authorized by the agency's designated Employee Medical File System Manager. A copy of the *Authorization for Disclosure of Information form* is provided in the appendix.

If an employee chooses to exercise his/her right to not sign a disclosure form to release agency-requested medical information, all clinical services (with the exception of *emergency* services intended to preserve the individual's life, limb, or health) will be withheld, along with any associated medically-based clearances. Such clearances may be required in order to use a respirator, or to perform specified jobs, such as law enforcement, so the employee's supervisor is to be informed of the lack of such clearance(s) in order for any necessary and appropriate personnel action to be initiated.

For some DOI agencies or job categories, a disclosure to the agency of the entire occupational medical record may have been determined to be necessary. This must be noted on the disclosure form that authorizes the release of this information (signed prior to the provision of clinical services) so the employee understands that this level of disclosure will take place. In most cases, however, disclosures will be more limited. For these limited disclosures, it is suggested that the statement of the intent of the release and the nature of information to be disclosed include language similar to the following:

“Summary of the occupational health-related findings from the [specify type] exam, including the resulting clearances, restrictions, recommendations, and suggested follow up.”

The Occupational Safety and Health Administration (OSHA) has provided guidance regarding the content of this limited information that may be appropriate to disclose to an employer regarding the results of a medical evaluation.

According to OSHA, the physician's written opinion to the employer should include:

1. Whether [or not] the employee has any medical condition that would place the employee at increased risk from occupational exposure;
2. Limitations to assigned work or use of protective equipment;
3. A statement that the employee has been informed of the results of the medical examination;

and, *if exposures warrant,*

4. A statement that the employee has been informed of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure.

With this type of limited disclosure, the physician's written opinion to the employer should NOT reveal specific findings, test results, or diagnoses unrelated to occupational exposures. For other releases (such as a copy of the entire record, or clinical data regarding a specific diagnosis), the Disclosure form similarly should describe the specific nature of the information to be disclosed, so the employee is able to grant (or withhold) informed consent to the disclosure of the information.

If a request for copies of records is received from the surviving spouse of a deceased employee, the request, and a copy of the requested information, must be sent to a departmental Freedom of Information Act (FOIA) coordinator for review. The FOIA coordinator will determine what information may be released, and will release as appropriate a copy of the records after masking any information that has been determined to be inappropriate for release.

If a request for copies of records is received from any individual who has been granted power of attorney by the employee, the information may be released if the power of attorney is unrestricted (general power of attorney), or if it specifically covers confidential information. A request for information release under this circumstance must be accompanied by a signed copy of the power of attorney, a copy of which must remain in the medical record along with a summary of which documents were released.

Other requests for the release of confidential medical information should be referred to the agency's Employee Medical File System Manager (i.e., the DOI Chief, Occupational Health and Medical Programs Division).

5.1 Establishing and Providing Services

Executive Order 12196, *Occupational Safety and Health Programs for Federal Employees*, makes each federal agency head responsible for establishing and maintaining an effective and comprehensive occupational safety and health program. Further, as specified in 5 U.S.C. 7901, the U.S. Public Health Service is to be consulted regarding the adequacy and appropriateness of health programs established for federal workers.

In determining what occupational health services are to be provided, and how they are to be secured and offered to employees in each area, several factors must be considered, including the following:

1. Nature of the job requirements of employees who are to be covered by the services, including the potential for exposure to hazardous materials or activities;
2. Past history or experience with work-related claims for injuries or illnesses, and established “past practices” for employees;
3. Number of employees to be provided services within an identified geographic or programmatic area;
4. National and local DOI management decisions regarding the provision of only mandatory services, versus mandatory and certain discretionary services;
5. Availability of co-located DOI programs or other federal agencies with which services may be coordinated and costs shared;
6. Availability of service providers capable of meeting specified occupational health service and program needs, as presented in this *Handbook*;
7. Availability of funds and administrative support at the level of the proposed program to support its establishment and ongoing maintenance;
8. Guidance from the U.S. Public Health Service on the adequacy and appropriateness of the proposed program of services to be provided; and
9. Concurrence with the proposed program by the DOI Office of Occupational Safety and Health.

In geographic settings where existing federal occupational health programs are in operation, it may be possible simply to enroll the agency and its employees as “members” of that health program, and receive the benefits and services offered there. It remains the responsibility of the local DOI manager, however, to assure that services provided in this manner are consistent with the provisions of this *Handbook*. The local manager is encouraged to contact both the prospective health program and the DOI Office of Occupational Safety and Health for further guidance.

In more isolated settings, arrangements for occupational health services may be arranged through contracts or agreements with local private health care providers. Selection of qualified providers, and determination of appropriate services, poses more of a challenge for the DOI manager under this alternative. This *Handbook* provides an overview of the types of services to be considered, as well as how to select a health care provider if local contracts for services are necessary or are considered advantageous to the agency (see Chapter 3, *Medical Service Providers*).

5.2 Union-Mandated

Specific health services related to provisions of local or national employee union contracts must be adhered to by managers at the organizational levels indicated in those contracts. Periodicity of exams and other services, employee groups covered, work place hazard exposure considerations, and other factors may need to be addressed in setting up and providing services. In general, all the required services under such contracts may be provided successfully with the assistance of this *Handbook*.

5.3 Medical Review Program

Chapter 2 (in the section on *Agency Medical Officer(s)*) offers specific information regarding the role of the AMO in providing consultation and programmatic assistance to DOI managers regarding occupational medical issues. Whether arranged for locally, or by accessing the services of the DOI MO by contacting the DOI Office of OSH, the medical review function is an important part of a successful and effective occupational health program. All personnel and program decisions of an occupational health nature are to reflect the input of the DOI Office of OSH and the DOI MO, whether by their direct involvement or through the appropriate use of forms and guidance they have provided.

5.4 Basic Requirements for Examination Procedures

The examination components and the standards that are applied for each of the job categories covered in this *Handbook* are based on an expectation that the specified tests and procedures will be conducted in a standard, consistent, and professional manner, regardless of the examined employee's specific bureau, or job title, or geographic location. The specific medical history, physical exam, and laboratory tests to be conducted will vary by job title or other specified requirements. However, the methods used to carry out these activities should be consistent. This requires the services of qualified health care providers and equipment (see the applicable sections within Chapter 3, *Medical Service Providers*), as well as appropriate methods and techniques in carrying out the tests, procedures, and examinations, to assure accuracy and consistency in the assessment of each employee.

All medical forms and examinations must not include a request for employees to provide any genetic information. Pursuant to 29 C.F.R. 1635.8(b)(i)(B), the Genetic Information Nondiscrimination Act of 2008 (GINA) prohibits employers and other entities covered by GINA Title II from requesting or requiring genetic information of an individual or family member of the individual, except as specifically allowed by this law. 'Genetic information' as defined by GINA, includes an individual's family medical history, the results of an individual's or family member's genetic tests, the fact that an individual or an individual's family member sought or received genetic services, and genetic information of a fetus carried by an individual or an individual's family member or an embryo lawfully held by an individual or family member receiving assistive reproductive services.

The following expectations shall apply when these examination components are provided to DOI employees.

Forms. Where DOI-sponsored or authorized forms are available for recording the results of

examinations and procedures (e.g., the DOI Standard Medical History and Examination Form; see Appendix), these are to be used by all health care providers serving within the DOI occupational health program. If, for a specific service, a DOI form is not available, other forms may be used as long as all of the required data elements are obtained and recorded in a clear and complete fashion. OPM Forms OF-178 (Certificate of Medical Examination) with SF-93 (Report of Medical History) may be suitable for occupations involving light duty, but are not recommended for employees in arduous and hazardous positions.

General Physical Examination. Please refer to the section entitled “Periodic Health Exams” within this chapter for a discussion of the appropriateness of focused versus comprehensive or general physical exams for healthy individuals. In either case, these exams are for occupational health screening purposes only. They are not conducted for the purpose of diagnosis and treatment, nor are they intended to replace regular periodic physical exams provided for employees by their personal health care providers. The provision of a comprehensive, general physical exam usually will be limited to those employees whose positions require medical clearances, or where potentially harmful workplace exposures may be present. Other factors, such as union contracts, may impact decisions regarding whether to provide examinations and the type of examinations to be provided.

If it is decided that a general physical exam is to be provided, it should address all of the major body systems. Employees will be asked to disrobe for parts of the exam to allow the physician to fully observe and examine them as necessary. The examiner will pay particular attention to specified body systems, organs, or physical signs that must be assessed for clearance purposes; or signs that may reflect the harmful effects of exposures identified in the occupational history. All findings are to be recorded, including the notation of “normal” findings, as well as written descriptions of all abnormal findings or distinguishing features. In most cases, the general physical examination will address at least the following:

1. Vital signs: pulse, respiration, and blood pressure
2. Height, weight, body mass index
3. Dermatological system
4. Ears, eyes, nose, mouth, throat
5. Cardiovascular system
6. Peripheral vascular system
7. Respiratory system
8. Gastrointestinal system
9. Genitourinary system
10. Endocrine and metabolic system
11. Musculoskeletal system
12. Neurological system, peripheral and central
13. Mental status

A brief or limited exam may be carried out in certain circumstances (e.g., when only a hearing test is needed for noise-exposed employees). The tests or procedures described below may be done as part of a brief or comprehensive exam, depending on individual program or employee requirements.

Vision and Eye Tests. (Color; Corrected and Uncorrected Near and Far Visual Acuity; Depth Perception; and Peripheral Vision). Color vision must indicate the type of test used (e.g., Ishihara,

Farnsworth D-15, colored yarn), and the number of screens or items correctly identified compared to the number tested. For many examinations, such as those for Department of Transportation / Commercial Driver’s License purposes, the ability to distinguish red, green, and amber (or yellow) must be recorded specifically whenever an employee has less than a perfect score on a panel of color vision tests. In other cases, such as for law enforcement examinations, the Farnsworth Dichotomous Test for Color may be required. Both corrected and uncorrected visual acuity are to be assessed if the employee requires corrective lenses (i.e., glasses, contacts), and if such lenses are used for any part of the employee’s job. If contacts are worn, the employee must bring and use his/her own supplies for removing, cleaning, and replacing them, when uncorrected vision is to be tested. Visual acuity is to be recorded in Snellen units (e.g., 20/20). Depth perception is to be recorded in seconds of arc or percentage (Shepard Frye), with the type of test specified. Peripheral vision is to be recorded in degrees on a lateral plane (both nasal and temporal) for each eye (e.g., R nasal = 45°, R temporal = 90°; L nasal = 40°, L nasal = 85°). Tonometry generally is not required for occupational purposes (peripheral vision having more pertinence), though tonometry may be of value for personal health and preventive health purposes when provided by an employee’s personal eye care physician.

Audiogram¹. Baseline and periodic audiograms are to be carried out using equipment and test locations that meet the criteria established by the Occupational Safety and Health Administration (OSHA) in the regulations cited at [29 CFR 1910.95](#). Audiograms are to be conducted by personnel certified by Council for Accreditation in Occupational Hearing Conservation (CAOHC), or by using a currently-calibrated microprocessor audiometer and persons trained in its use. Audiograms ideally should be performed in an ANSI-approved “soundproof” booth (ANSI S3.1-1977, or current version) with equipment calibrated to ANSI standards (ANSI S3.6-1973, or current version). If a booth is unavailable, the test room sound pressure levels should not exceed those specified in the federal OSHA noise regulations (29 CFR 1910.95), as follows:

Rooms used for audiometric testing shall not have background sound pressure levels exceeding those in Table D-1 when measured by equipment conforming at least to the Type 2 requirements of American National Standard Specification for Sound Level Meters, S1.4-1971 (R1976), and to the Class II requirements of American National Standard Specification for Octave, Half-Octave, and Third-Octave Band Filter Sets, S1.11-1971 (R1976)

Table D-1--Maximum Allowable Octave-Band Sound Pressure Levels for Audiometric Test Rooms

<i>Octave-band center frequency (Hz)</i>	<i>500</i>	<i>1000</i>	<i>2000</i>	<i>4000</i>	<i>8000</i>
<i>Sound pressure level (dB)</i>	<i>40</i>	<i>40</i>	<i>47</i>	<i>57</i>	<i>62</i>

Employee hearing thresholds for each ear are to be recorded separately at each of the standard frequencies (500, 1000, 2000, 3000, 4000, 6000, and 8000 Hz). The test is to be done without hearing aids (if the employee otherwise wears them), unless the test is being done for medical clearance purposes only (rather than as part of a hearing conservation program) and the use of

¹ A much more crude assessment of hearing, the “whisper test” (*examiner stands not less than five feet behind the seated patient and whispers a combination of numbers and letters and then asks the patient to repeat the sequence. Each ear is tested individually. If the patient responds correctly, he/she passes the test and does not need additional testing*), occasionally may be used in lieu of an audiogram, if an audiogram is not required for a 29 CFR 1910.95 compliant hearing conservation program. For example, DOT/CDL medical clearance examinations (if only done for purposes of a CDL) may use a whisper test.

hearing aids is allowed under the applicable medical standards (e.g., the use of hearing aids generally is not permitted for wildland firefighters, but they may be used by those whose clearance exam is for a commercial driver's license under DOT regulations). The use of hearing aids during an audiogram must be noted on the report form.

Chest Radiograph. (or other required radiographs). Scheduled (e.g., non-medical emergency) radiographs (X-rays) are to be done only if indicated in this *Handbook*, or requested by the MO, or if required by regulation (e.g., for asbestos exposure, using the schedule established by regulation such as 29 CFR 1910.1001(l)(2)(ii)). When included as part of the exam, radiographs must be obtained by a radiologist or other licensed physician, or a qualified radiographic technician, and must be read by a radiologist. Radiographs taken to evaluate possible effects of exposure to asbestos or silica also must be read by a certified "B-reader." If the radiologist is certified as a "B-reader," the standard reading of the radiograph and the B-reading may be done concurrently. A written interpretation is to be provided and entered into the employee's DOI medical file.

Pulmonary Function Test. (or Spirometry). Pulmonary function test (PFT) should be conducted when an employee has known (or the potential for) exposures above the action level to regulated agents that may affect the respiratory system (e.g., asbestos, benzene, coke oven emissions, cotton dust, ethylene oxide, or formaldehyde). Some health professionals also use the PFT to evaluate the effects of exposure to agents that can cause asthma and other lung disorders, as well as to evaluate employees' ability to work safely while using a respirator (see Chapter 6, *Medical Clearance for Respirator Use* for guidance on appropriate inclusion/non-inclusion of this test). The test should be administered only by individuals who have successfully completed a NIOSH-approved course in spirometry. Only a spirogram that is technically acceptable and demonstrates the best efforts by an examinee should be used as part of the examination. Automatic spirometers, providing an environmentally-adjusted analysis and printout of results, should be used when available. These will measure Forced Vital Capacity (FVC), Forced Expiratory Volume in 1 sec (FEV₁), FEV₁ as percent of FVC (FEV₁/FVC), Forced Expiratory Flow between 25% and 75% of the Vital Capacity (FEF 25-75), and Peak Expiratory Flow (PEF). These machines also calculate the percent of expected levels (for age, height, gender, and sometimes race), providing important standards for comparison and the tracking of trends for the individual employee. Although the spirometric test results may not provide a specific diagnosis, they can help to demonstrate trends or patterns of respiratory function and distinguish the difference between restrictive and obstructive pulmonary disorders, and allows an interpretation of the severity of the condition.

Electrocardiogram. Electrocardiograms should be standard 12-lead studies, and may be automated or manual. A written evaluation of the electrocardiogram by a physician trained in their interpretation or, at a minimum, an automated reading must be included when this test is performed. Electrocardiograms are of limited value as a screening tool for asymptomatic individuals, but may be useful as part of an occupational health exam, particularly in establishing an employee's baseline health status.

Exercise Stress Test. This test should only be done if it is specified as part of an identified examination protocol in this *Handbook* as a mandatory test, or if it has been cleared with the AMO to assure that it is necessary, and that the arrangements for testing and interpretation are appropriate. Because of relatively frequent false positive as well as false negative results found with stress tests, they must be applied cautiously to any personnel action that may be considered in association with

an examination. The tests must be conducted by or under the direction of a physician with demonstrated training in carrying out stress tests, and must be interpreted by a cardiologist. Generally, the test to be conducted is a maximal, symptom-limited, graded exercise test using the Bruce protocol.

Laboratory Tests. Standard blood tests should be obtained following a 12 hour fast by the employee. Special (e.g., post-exposure) testing may be conducted on non-fasting samples. Urine tests may include a standard urinalysis, a spot (or random) urine collection, or a 24-hour collection for purposes of detecting over-exposures to certain toxic materials (e.g., heavy metals). While samples may be obtained from employees by any health care provider meeting the qualifications presented in Chapter 3, *Medical Service Providers*, laboratories utilized must be able to demonstrate their qualifications, such as accreditation by the College of American Pathologists, certification as a Medicare provider, or active participation in the Clinical Laboratory Improvement Program of the Centers for Disease Control and Prevention or the American Association for Clinical Chemistry.

5.5 Discretionary Services

Some occupational health services are provided as a result of specific federal regulations, union/management-negotiated contract provisions, or DOI policies and directives. Other services, however, may be provided as a result of local management's discretionary use of available operating funds, reflecting a concern for improved productivity, employee morale, or general program benefit. Discretionary services may include, for example, periodic health exams, routine occupational health center services, and health promotion (see below for a description of these services). When a decision is made to provide discretionary services, they must be in addition to those services that are considered mandatory, according to regulation, contract, or DOI policy. Discretionary services may be provided through any appropriate clinical service arrangements that may exist or be established in a given area (see *Establishing and Providing Services* at the beginning of this chapter).

Further, in order to assure appropriate use of public funds, these discretionary services should be limited to those known to have established, demonstrated health benefits. The *Guide to Clinical Preventive Services* represents the reports of the U.S. Preventive Services Task Force, and serves as the best current summaries of preventive services that have been shown through scientific study to have beneficial effects for healthy and apparently-healthy individuals. The document is updated periodically, and the most current version of the *Guide to Clinical Preventive Services* will serve as the basis for consideration of discretionary preventive health services within the Department.

Periodic Health Exams. Annual medical examinations for asymptomatic members of the general public are no longer recommended by national health professional organizations. Focused annual or less frequent medical examinations may be appropriate, however, for employees in certain arduous or hazardous jobs (e.g., law enforcement officers), or whose work involves possible exposure to known toxic agents (e.g., lead, or loud noise). Other periodic health exams (PHE) that focus on services of proven value also may be appropriate, and may be offered as a discretionary service for DOI employees. Such exams are intended to identify those who have underlying or asymptomatic disease and may benefit from early intervention, and to provide a basis for counseling and referral to the employee's primary care provider for diagnosis and ongoing health care services.

When determined by management to be appropriate, PHE may be provided to those employees who

wish to take advantage of this type of preventive health service. It should be considered strictly voluntary, and the results of the examination are to remain confidential (i.e., no results or summary information are forwarded to the employer for review). The recommended frequency of the PHE is once every three to five years, though this may be adjusted depending on age or local management decisions.

Forms used in support of a PHE will depend on the provider of services. Most established, organizational medical service providers (e.g., a private or federal occupational health clinic) have standard forms for this purpose. These may be specific to that program, or generic forms, such as the DOI Standard Medical History and Examination Form (see Appendix). If PHE services are obtained from private providers, it is suggested that the DOI form be used.

As noted, the most recent version of the *Guide to Clinical Preventive Services* serves as the best current summary of preventive services that have been shown through rigorous evaluation and scientific study to be beneficial when used as screening tools by the general public (rather than for diagnostic purposes for specific individuals with symptoms or other justifications for more extensive testing). While services may be provided that go beyond those recommended by the *Guide*, this should be done with the knowledge that such extra services may not be based on solid evidence of benefit and may even be detrimental, though the tests and this list are revisited on a regular basis by the U.S. Preventive Services Task Force and updated as additional information becomes available. For the most current version of the *Guide* and updated findings and recommendations for specific tests, please visit the *Guide*'s website:

<http://www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/guide/index.html>

Some of the basic PHE elements that many physicians and other health care providers may offer include the following services:

1. Medical History and Review of Systems
2. Vital Signs (Height, Weight, Blood Pressure)
3. Vision Screening
4. Tetanus-diphtheria vaccination (once every ten years)
5. Cardiac Risk Blood Profile (Total Cholesterol, HDL and LDL Cholesterol, and Triglycerides)
6. Health Risk Appraisal (HRA (One of several standardized assessments of health risk behaviors))
7. Physical Examination
8. Counseling, Instruction, and Referral, as indicated

Especially for services arranged outside of an established occupational health center, care must be taken to assure the health records resulting from these services are maintained in a confidential and secure manner (see Chapter 4, *Medical Records - Employee Medical File System*). Medical records are usually maintained for the individual at the site of the examination, and a copy is made available to the individual to share with his/her personal physician. No further medical reports or summaries are prepared or distributed to agency representatives. Records indicating that services were provided are to be maintained in order to support billing statements and reports of utilization of the service.

Routine Occupational Health Center Services. If arrangements are made to provide occupational health services for employees through an occupational health center, clinic, or program, those services generally should be directed at minimizing employees' time away from work, and assuring that a timely medical response is provided in the case of emergencies. This should be done regardless of whether or not these services are obtained from private sources, a DOI-specific facility, or in collaboration with other local federal agencies.

If the decision is made to provide routine occupational health center services for local DOI employees as an established, organized discretionary program, those services should be oriented towards efficiency both for the agency and for the employees, minimizing time that an employee must spend away from work because of minor health care problems, and responding in a timely and appropriate manner to more urgent medical conditions. These routine services generally are in addition to other specified services that may be chosen (as part of a PHE) or required for inclusion in the occupational health program, and serve to provide a more immediate benefit when they are utilized.

Services recommended for inclusion as routine occupational health center services include:

1. **Walk-in and first response care.** This service allows employees to seek and receive treatment or referral for medical problems that occur or become worse during working hours. Most facilities or arrangements for occupational health services will not be able to provide the full range of emergency medical care that would be available in a hospital emergency room. The intent of a walk-in or first response service is not to provide emergency diagnosis and treatment, but rather to provide an initial assessment and either treatment or referral to a higher level emergency facility, as appropriate. An employee's supervisor must always be notified if the employee visits the health center for such services.

Generally provided by an occupational health nurse, walk-in and first response care may include follow-up evaluations for certain findings from medical surveillance or clearance examinations (e.g., blood pressure checks, repeat blood tests), treatment for minor injuries or illnesses (e.g., cuts, scrapes, or headaches), short term bed rest when it becomes necessary (e.g., for an employee recovering from an illness or injury), and assessment and referral employees with true emergency conditions (e.g., chest pain, major injury). Preventive health services also may be provided, including basic disease screenings (e.g., blood pressure checks) and health education services to encourage the adoption or maintenance of a healthy lifestyle.

2. **Interventions Prescribed by an Employee's Physician.** In order to save time for an employee, the occupational health center nurse often is able to provide medications or minor treatments under orders provided by the employee's personal physician. This may include periodic bed rest, blood pressure monitoring, blood sugar monitoring, administration of medications (e.g., allergy shots, hormones, special vaccines or antibiotics), and dressing changes (e.g., for healing wounds that are under the physician's care).
3. **Immunizations.** Certain immunizations are particularly valuable in preventing disease for individuals or among groups of employees. Administration of immunizations in the

occupational health clinic minimizes time away from work for the employee, and facilitates the provision of services that benefit the work force in general. Such immunizations often include those for the prevention of influenza and tetanus.

4. **Health Counseling.** In order to maximize the opportunity for a healthy work force, individualized health counseling may be provided to offer guidance regarding smoking cessation, diet, physical exercise, alcohol and other drug use, and other health-related behavioral topics. See also *Employee Assistance Program Services* later in this chapter.
5. **Occupational Health Site Visits.** The on-site or near-by availability of an occupational health professional makes possible visits to the employees' work sites to assist the safety officer in assessing the site for potential occupational hazards. This on-site familiarity also assists the health center professional in being prepared for injuries or illnesses that may be more likely to occur, and in preparing appropriately tailored educational sessions for employees.

Care must be taken to assure that all health records related to these services are maintained in a confidential and secure manner (see Chapter 4, *Medical Records - Employee Medical File System*).

Health Promotion. Health promotion services may be provided as part of routine occupational health center services, if such discretionary program services are provided, or the services may be arranged and offered through separate contracts or agreements with other federal or private agencies. These services are intended to address health concerns and interests expressed by employees, or that have been identified by management as being beneficial for employee welfare. Services may consist of regularly scheduled formal educational sessions, informal "brown-bag" lunch programs, or clinical projects directed at specific health issues (e.g., blood pressure screenings, tick removal, back injury prevention). Services should be provided by knowledgeable health professionals, and in a setting that allows for questions and appropriate educational interaction.

5.6 Emergency Medical Care.

As specified in 29 CFR 1910.151, employers must "ensure the ready availability of medical personnel for advice and consultation on matters of plant [workplace] health." The regulations also require that people trained in first aid be available. This training should include basic life support (e.g., cardiopulmonary resuscitation, or CPR). Also, first aid supplies must readily be available through the agency if there are no public or other federal facilities nearby to provide immediate treatment for acute illnesses or injuries. The first aid supplies to be included should be reviewed for completeness and appropriateness by a consulting physician (such as the local AMO, or the national DOI MO). Further, eye and body wash facilities must be provided in the work area if employees may be exposed to "injurious corrosive materials." For more specific information on the appropriate content of first aid kits, please see Chapter 6, *First Aid Kits*.

In the case of an on-the-job injury or illness, management, the employee, and the health care provider all have important roles to play in providing necessary, timely services, getting the employee back to work, and avoiding future injury incidents. Employees requesting treatment for job-related injuries are to be treated as quickly as possible, either by personnel from the agency's occupational health clinic (if available) or the nearest public medical facility or qualified private health care provider. An employee injured by an accident while in the performance of official duties

has the right to select a qualified physician of her or her choice to provide the necessary treatment. Generally, up to 25 miles from the place of injury, employing agency, or the employee's home is considered a reasonable distance to travel for non-emergency medical care (i.e., conditions that are not life- or limb-threatening). However, other pertinent factors must also be considered (e.g., specialty services that may be necessary; or weather and road conditions). Qualified health care providers for this purpose may include doctors of medicine or osteopathy, podiatrists, dentists, clinical psychologists, and chiropractors.

5.7 How to Establish or Change Medical Qualification Standards for Hazardous and/or Arduous Positions

The medical qualification standards presented in this *Handbook* reflect the most current information available for each DOI job function for which standards have been developed. It is anticipated that the content and specific information of the *Handbook* will change as further needs are identified by employees and managers within DOI programs, and as the science and art of occupational health evolve. When a reader or user of the *Handbook* finds discrepancies in the information presented, or becomes aware of important topics that have not been addressed, or has comments and suggestions for improvements that can be made in subsequent editions, he or she is encouraged to convey this information to the DOI Office of OSH either directly, or through the safety officer or manager for the employee's agency, as covered in the section entitled *Handbook Administration - Maintenance*. The job-specific standards were developed wherever possible using current regulations and/or on-site assessments of work tasks and job requirements. When site visits were not possible prior to this edition of the *Handbook*, and specific regulations were not in place, other sources of occupational health guidance and consultation were used, as referenced within the individual sets of standards. These standards may be modified as experience is gained in their use.

Under existing OPM regulations and guidance (5 CFR 339.202), DOI under its own authority can establish medical standards for a job series when the Department has 50% or more of the positions in that series. OPM is responsible for establishing and approving medical standards for positions that are government-wide or for which no individual department has the majority of incumbents.

DOI has established a formal protocol for establishing new medical standards for positions that are not currently covered under existing OPM-approved medical qualification standards, or for evaluating existing OPM-approved medical standards for potential improvement. This protocol involves assembling a team of subject matter experts representing the Department and the bureau or bureaus with an interest in the position to be evaluated. The team is then provided in-depth, first-hand experience and knowledge of the conditions under which essential elements of the position are performed. While the process is flexible, the minimum team usually includes departmental medical, safety, and personnel representatives along with bureau(s) management, safety, personnel, field-level supervisory, and field-level employee representatives. Additional team members are added as needed or appropriate. Bureaus or offices interested in establishing or modifying medical standards are encouraged to contact both their own bureau safety office and the DOI Office of OSH for further information.

Required Services – General. DOI is committed to ensuring that candidates or incumbents for DOI positions are not discriminated against because of a medical or physical condition that with reasonable accommodation would not prevent their successful performance of essential functions.

This commitment extends to the privacy and confidentiality of medical and personnel records. Certain job categories within DOI have minimal physical qualifications that have been determined to be required for these jobs to be performed safely and efficiently. These physical qualifications are measured using standard medical examination criteria, and/or with a series of physical fitness tests. These job categories and the applicable examination requirements, including the periodicity of those exams, are covered below, as well as Chapter 7 for specific guidance for a particular position with medical standards. The medical clearance process used by the DOI to arrive at a medical clearance determination ensures a comprehensive and objective assessment of an individual's ability to perform the full range of duties required for the position.

DOI medical exams differ from what most people regard as a "check-up or "physical." The information collected during a DOI exam takes into account the specific medical standards, the essential functions of the position, and the unique needs of the employee and the agency, as well as the employee's health status. The objectives of occupational medical exams are, after all, intended for very specific occupational purposes.

The basis for this portion of the *Handbook* is to ensure that employees and selectees for positions covered by specific physical qualification standards meet those medical standards and physical requirements, are physically and medically fit, and are able to perform the hazardous, complex, varied and demanding duties of the position. The program is designed to do the following:

1. Determine whether an individual is physically and mentally able to perform essential DOI job duties without undue risk of harm to him/herself or others;
2. Monitor and determine evidence of exposure to specific physical, environmental, or other occupational hazards;
3. Detect changes in an individual's health status that may be caused by harmful working conditions;
4. Detect any patterns of disease or injury in the DOI that might indicate an underlying work-related problem;
5. Provide the individual with information about his/her occupational hazards and present health status;
6. Comply with the provisions of the Rehabilitation Act of 1973 and subsequent Amendments, the Equal Employment Opportunity Commission's (EEOC's) implementing regulations, and 5 CFR 339, Medical Qualification Determinations.

It should be noted that the objectives listed above do not include providing routine preventive medical services. Preventive medicine services are important and worthwhile for personal health purposes but should be considered complementary to, rather than a substitute for, job-related medical examinations.

The DOI medical examination program for mandatory medical services, such as periodic qualification exams for law enforcement officers, uses a two tiered approach to the medical process. The first tier is the medical examination, where an incumbent or selectee for a position receives a DOI-sponsored medical examination by a qualified medical provider according to a specific preset examination protocol. The *DOI Standard Medical History and Examination Form* (see Appendix), or a similar form approved by DOI, is to be used for this purpose. The SF-78 (*Certificate of Medical Examination*, revised 10/69) and SF-88 (*Report of Medical Examination*, revised 3/89) forms are

considered obsolete and are not recommended for use in DOI medical examination programs. The OF-178 (replaced the SF-78 in 2009) is considered an inadequate form for properly assessing individuals in job categories that have physical qualifications; thus its use is also not recommended in DOI medical examination programs.

In the second tier, the results of this medical examination are forwarded to an *Agency Medical Officer (AMO)* who renders recommendations relating to the findings of the exam and the medical fitness of the selectee or incumbent for the position. Sufficient information is to be provided to the AMO to allow meaningful recommendations to be made, such as the medical history, a description of critical job duties, potential exposures, and any information about known exposures. In addition, the physician is to be told of any occupational illnesses known to DOI which could affect the screening of individual workers.

The most important characteristic of the two tiered medical approach is that the examining physician concentrates on the patient examination, and the AMO concentrates on the relationship between the medical data provided by the examining physician and the known characteristics of the job. While the examining physician may see one or a few candidates or incumbents for a specific position, the AMO will see and render consistent medical recommendations on the agency's large pool of selectees or incumbents for a specific position who are covered by a medical standards program.

DOI policies and procedures require a case-by-case higher level of review when a selectee or current employee requests a reconsideration or disagrees with the results or recommendations derived from a medical examination. DOI procedures also provide for a medical "second opinion" when the AMO is uncertain about the limitations or prognosis of the individual's condition, or if there are discrepancies in any of the interpretations or findings. If after a second opinion there remains a disagreement about the findings or appropriate placement or restriction recommendation, a third physician (acceptable to both the DOI and the selectee or employee) will be consulted.

Employee/Selectee Responsibilities. The DOI medical evaluation program includes pre-placement and/or baseline medical evaluations, interim or periodic evaluations, and exit medical evaluations, as well as return to duty medical evaluations. Each selectee or current employee is expected to cooperate, participate, and comply fully with the medical evaluation program as it applies to the employee's position or known exposures, providing complete and accurate information to the DOI reviewing physician.

Using the *DOI Standard Medical History and Examination Form*, or a similar form approved by DOI, each selectee or current employee shall report to the AMO information regarding any significant exposures (e.g., chemical, infectious, biological, etc.) or medical conditions that may interfere with the individual's ability to perform safely and efficiently the full range of duties required for the position. If the selectee or current employee develops an acute medical problem or newly acquired chronic medical condition that precludes a meaningful assessment of his or her overall abilities, the scheduled medical evaluation (or selected portions) may be postponed until that person has recovered sufficiently from the condition and can be rescheduled for an exam or further testing and/or procedures, but any necessary clearances also may have to be withheld until the full evaluation can be completed.

5.8 Pre-Placement Medical Evaluations

After an offer of employment has been made to a selectee, a pre-placement examination may be necessary to assure that the selectee is medically qualified for certain positions. The Rehabilitation Act of 1973, as amended, prohibits employment discrimination against any individual in hiring, compensation, and firing actions. The Act requires employers to hire workers with disabilities if the worker is otherwise the best qualified individual for the job. A qualified individual is considered to be one who can perform the essential functions of a job either without any special accommodation, or with “reasonable accommodation,” as defined in the Act. Employers must modify the job or the physical work environment to allow the disabled employee to perform the essential functions of a job, as long as these accommodations do not present an undue hardship for the employer (e.g., they are not excessively expensive or create a significant difficulty for the employer) and the essential job functions can be accomplished with safety and efficiency.

Pre-placement medical evaluations assess an individual’s health status after a job offer has been made but before they have been assigned to a position that involves arduous or hazardous conditions (i.e., job placement is contingent upon meeting any established medical or physical standards). The purpose of the evaluation is to ascertain whether the individual has any health condition(s) that may prevent him or her from performing the job safely and efficiently, including the ability to wear any protective equipment (e.g., a respirator) required for the job. The evaluation also should identify any health problems that could be aggravated and/or accelerated by the anticipated physical demands and working conditions of the job. Further, it serves as a baseline for those employees whose job duties include the need for medical surveillance.

Pre-placement examinations are to be conducted for all selectees prior to entering into a training program or performing in an emergency or operational environment (i.e., inspections, investigation, rescue duties, etc.) for which medical standards have been established, and selectees must be certified by the AMO as meeting those applicable medical standards before they begin work in a position for which medical standards have been developed. Each selectee will be evaluated to assess the effect of any medical conditions on the selectee’s ability to perform in the necessary work capacity. A selectee will not be certified as meeting the medical requirements if the AMO determines that the selectee has a medical condition that is incompatible with the established standards for the position. The AMO also may be asked by management to offer opinions on accommodations that may be proposed by the selectee or his/her physician.

Pre-placement evaluations are governed by 5 CFR 339 (Medical Qualification Determinations). Section 339.202 (Medical Standards) specifies that:

“An agency may establish medical standards for positions that predominate in that agency.... Such standards must be justified on the basis that the duties of the position are arduous or hazardous, or require a certain level of health status or fitness because the nature of the position involves a high degree of responsibility toward the public or sensitive national security concerns. The rationale for establishing the standard must be documented. Standards established by ... an agency must be:

1. *Established by written directive and uniformly applied,*
2. *Directly related to the actual requirements of the position, and*
3. *Consistent with OPM instructions....”*

In addition to medical standards, an agency is authorized by Section 339.203 (Physical requirements) to:

“Establish physical requirements for individual positions without OPM approval when such requirements are considered essential for successful job performance. The requirements must be clearly supported by the actual duties of the position and documented in the position description.”

Such physical requirements may include fitness requirements, such as the “Pack Test” used by wildland firefighters. They also may be applicable to positions that, due to their physical location (e.g., an office at the lower levels of a hydroelectric dam) or geographic remoteness (e.g., on a small, sea-going research vessel), impose practical health and safety-related requirements and restrictions on the physical conditions of employees. Because of the public safety risks involved, examinations also generally are required for selectees or incumbents for positions involving:

1. Operation of motor vehicles (e.g., truck drivers, crane operators);
2. Law enforcement functions;
3. Food handling;
4. Exceptional physical or mental stress;
5. Direct physical contact with people (e.g., nurses); and
6. Hazardous work above ground level, or around power-driven machinery.

Two types of information are essential for a pre-placement medical evaluation for those in positions that have qualification standards:

1. First, the physician reviewing the results of the examination (the Agency Medical Officer, or AMO) must understand the hazardous working conditions and physical demands of the position. Additionally, the AMO must be furnished additional information such as specific job duties or task lists if the DOI has conducted a validation study or job hazard analysis. The AMO also should be familiar with the organizational structure of the DOI and how the position in question contributes to meeting the agency’s mission. For the evaluation of some medical conditions, the physician will need to obtain further information about specific job duties in order to make a determination. This may require on-site inspections and consultation with the DOI Office of Occupational Safety and Health.
2. Second, the AMO needs to have accurate information about the selectee’s health status, the functional limitations associated with any medical conditions, and an understanding of how physical demands and working conditions would impact on that condition. Accurate diagnoses often are key factors in determining a selectee’s capabilities. The physician must also recognize that individual variability may exist between persons with the same specified clinical condition. Upon completion of the examination, the AMO will inform the employing office whether the selectee is considered to be medically qualified to perform the full range of duties required for the position. The AMO also may offer recommendations regarding the physical requirements of the job and any restrictions that may be indicated for the selectee.

Having defined the goals of the pre-placement exam, and carefully identified and validated the essential job functions, the next step for the agency is the formulation of the components of the core physical examination, laboratory tests, and general occupational and medical history that will be

required for each DOI selectee.

Content of the Pre-Placement Medical Examination

Because the pre-placement medical examination must be tailored to the identified requirements of specified positions, there are no uniform, general recommendations for the scope and content of every physical examination, lab test, or history.

The following recommendations are considered to be a valid starting point and guide to appropriate services.

1. A comprehensive medical history is essential. The medical history should cover the selectee's known health status and problems, such as major illnesses, surgeries, medication use, allergies, etc. Symptom review also is important for detecting early signs of illness or possibly-limiting conditions. In addition, a comprehensive medical history should include a personal health history, a health habits history, an immunization history, and an occupational history to collect information about the selectee's past occupational and environmental exposures (see Appendix for an example of a form that may be used for this purpose).
2. The examination consists of a general medical and physical evaluation of the individual. The DOI Medical History and Examination Form may be used to record the results of the examination (see Appendix). The general examination includes consideration of the following:
 - Vital signs: pulse, respiration, and blood pressure;
 - Visual acuity, color vision, depth perception and peripheral vision testing;
 - Dermatological system;
 - Ears, eyes, nose, mouth, throat;
 - Cardiovascular system;
 - Respiratory system;
 - Gastrointestinal system;
 - Endocrine and metabolic system;
 - Musculoskeletal system;
 - Neurological system;
 - Mental status;
 - Audiometry;
 - Electrocardiography (ECG);
 - Pulmonary Function Testing (PFT);
 - Laboratory testing (see below);
 - Other procedures that may be necessary, based on the position

If they are to be done, these last procedures and tests (items *l through p* above) must be carried out using standard methods and properly recorded so that the results may be used for the intended purposes:

Audiometry (Hearing Test): Audiograms ideally should be performed in an ANSI-approved "soundproof" booth (ANSI S3.1-1977 or most recent version) with equipment calibrated to ANSI standards (ANSI S3.6-1973 or most recent version). If a booth is unavailable, the test room sound pressure levels should not exceed those specified in the federal OSHA noise regulations (29 CFR

1910.95) for specified frequencies, as follows:

Rooms used for audiometric testing shall not have background sound pressure levels exceeding those in Table D-1 when measured by equipment conforming at least to the Type 2 requirements of American National Standard Specification for Sound Level Meters, S1.4-1971 (R1976), and to the Class II requirements of American National Standard Specification for Octave, Half-Octave, and Third-Octave Band Filter Sets, S1.11-1971 (R1976)

Table D-1--Maximum Allowable Octave-Band Sound Pressure Levels for Audiometric Test Rooms

<i>Octave-band center frequency (Hz)</i>	<i>500</i>	<i>1000</i>	<i>2000</i>	<i>4000</i>	<i>8000</i>
<i>Sound pressure level (dB)</i>	<i>40</i>	<i>40</i>	<i>47</i>	<i>57</i>	<i>62</i>

Electrocardiography: A standard 12-lead electrocardiogram should be recorded and interpreted by, or with the ability to consult with, a cardiologist.

Pulmonary Function Testing: Pulmonary function testing is helpful as part of the documentation of current pulmonary health status, and as a baseline for later comparison to determine if workplace exposures have had a detrimental effect on the lungs. The test should be administered only by certified or thoroughly experienced individuals. The result of the test is called a spirogram, and only spiograms that are technically acceptable and demonstrate the best efforts by a selectee should be used.

Note: Electronic spirometers are available and may be used to measure Vital Capacity (VC), Forced Expiratory Volume in 1 sec (FEV₁), Forced Expiratory Volume in 1 sec as a portion of FVC (FEV₁/FVC), and Peak Expiratory Flow in L/min (PEF). These machines also will calculate the percent of expected levels (corrected for age and height), providing useful standards for comparison. Although the spirometric test results may not allow a specific diagnosis, they can distinguish the difference between restrictive and obstructive pulmonary disorders and allow an interpretation of the severity of the process or condition.

Laboratory testing: Baseline laboratory tests for the Pre-Placement examination may include: complete blood count (CBC), a routine urinalysis, and selected serum chemistries, which may include:

- Glucose;
- Total Cholesterol;
- HDL-Cholesterol;
- LDL-Cholesterol;
- Triglycerides;
- AST;
- ALT.

Special tests may be appropriate, depending upon the selectee, the proposed job duties, or local medical problems (e.g., tuberculosis, hepatitis). If exposure to asbestos or silica is anticipated, a

chest X-ray also may be indicated.

Note: The following special tests, while often appropriate and very valuable for general preventive health examinations or diagnostic purposes, are **NOT** indicated routinely for occupationally-related pre-placement medical examination purposes:

- Exercise stress test (ETT, or cardiac stress test; this test may be appropriate in some situations for assessment of aerobic capacity);
- VDRL (Venereal Disease Research Laboratory, a test for syphilis);
- Proctosigmoidoscopy (flexible sigmoidoscopy) or colonoscopy;
- Digital rectal examination (DRE);
- Fecal Occult Blood Test (FOBT);
- HIV testing;
- Body fat composition;
- Papanicolaou (PAP) smear;
- Mammogram;
- Pelvic examination; and
- PSA (prostate specific antigen).

All selectees receiving a Pre-Placement medical evaluation are to be informed ahead of time about the purpose of the medical evaluation and the content of the exam. The results of any medical examination are considered to be confidential medical information and are subject to customary medical confidentiality restrictions regarding their use and release (see [Chapter 4](#)). Under most circumstances, results and recommendations arising from these evaluations will be expressed in general terms, without specific diagnostic information.

The DOI employing office generally will be informed simply that:

- (1) The candidate is medically qualified for the job; or
- (2) The candidate is medically NOT qualified for the job; or
- (3) The results of the examination are inconclusive, and follow-up information is required.

DOI management will be told only on a need to know basis the specific diagnoses or laboratory test results, and identifiable medical information will be released only with the explicit written permission of the selectee. In most cases a simple statement will suffice, for example:

“Based on the results of the pre-placement medical evaluation of [date], Jane Jones is [or is NOT] medically qualified for the position of [specify].”

In cases where more specific information is needed in order to make a medical clearance decision on the status of a selectee, a specific consent form releasing that information should be obtained from the selectee. The results of the examination and tests will be reviewed with the selectee, and the medical/occupational significance of any abnormal results explained. Copies of the medical examination findings and laboratory test results can be provided to the selectee and, with the proper written authorization from the selectee, to the selectee’s personal physician.

5.9 Medical Surveillance

In a single individual, a physical examination may be conducted for purposes of both medical *surveillance* (looking for possible health effects of occupational exposures) and medical *clearance* (determining if an individual meets job-specific medical requirements). It must be understood that these purposes are quite different, and the actions taken in response to an exam that is done for both purposes must keep this distinction clear. An individual may not meet the medical requirements for his position, but demonstrate no ill effects of current job exposures. That individual also may meet all medical requirements to be cleared for a given job, but have evidence of harmful effects of job exposures. The responses to these two situations are quite different.

For example, an individual's exam may demonstrate a standard threshold shift (a hearing loss due to noise exposure), but still meet the minimum hearing requirements for a position. Or, the individual may not meet the requirements for a medical clearance as a result of diabetes that requires insulin for control, but not show any adverse effects or elevated blood test results from exposure to environmental lead.

Determination of Need for Employee Enrollment

Enrollment of an employee, or a group of employees, in a medical surveillance program ultimately is a management decision. There are regulations that specify factors that direct inclusion in a program, but the specific activities taken to determine an individual's actual or presumed exposures to harmful agents and, as a result, which regulations apply, may vary from agency to agency. As steps are taken within DOI to standardize the assessment and determination of exposures and workplace hazards, decisions regarding the inclusion of employees within medical surveillance programs will become more standardized. This is consistent with the stated goals of the DOI Office of OSH.

Until DOI positions and workplaces are studied and workplace hazards characterized by actual measurements and environmental sampling, it is necessary to consider employees for inclusion in a medical surveillance program based on the limited data that may be known, and the exposures that are believed to be present and posing potential threats to the employee's health and well-being. This may be done by management and safety officer reviews of position descriptions, or with interviews or employee questionnaires. Once a decision has been made to enroll an employee in the medical surveillance program, the services to be provided are based on the specified exposures and work hazards (see specific topics within Chapter 6).

General Medical Surveillance Guidance

Background. As a result of their job duties, federal employees may be exposed to chemicals, dust, noise, and other workplace hazards that may be covered by specific federal regulations regarding medical surveillance for the possible effects of those exposures. In those instances where workers are exposed to a potentially hazardous work environment, ***engineering safeguards*** often can be instituted to eliminate, or at least minimize, the possibility that a worker actually comes in direct contact with a dangerous substance or work process. Where such work hazards cannot be eliminated totally through engineering controls, ***administrative controls*** can be established (e.g., required breaks, mandatory training, time limitations at a

given task) to minimize exposures. As a final measure, the worker can be outfitted with proper ***personal protective devices*** (such as hearing protection, respirators, eye protection, gloves, aprons, boots, chemical protective suits, etc.) to further minimize the likelihood of harmful exposures. Periodic safety and industrial hygiene surveys provide the means to identify, evaluate, and control potential worksite hazards.

A further assurance that employees are not receiving deleterious exposures is provided through a medical surveillance program. Such a program provides information about the actual effectiveness of the engineering, administrative, and personal protective measures, and an early warning to employees and managers if harmful effects are occurring. A comprehensive program also will provide standardized data for computer-based tracking of occupational health data. Computerization more easily can provide individual and unit costs for the program, tracking of individual employees, evaluation of patterns and trends, cost projections for future evaluation, etc.

An effective medical surveillance and screening program also is necessary to protect workers from adverse effects due to occupational stressors or tasks. Because work-related diseases generally do not have an acute onset, but rather develop over time, medical surveillance requires periodic medical monitoring of the workers at risk.

Screening and medical surveillance, although closely related, are not the same thing. *Screening* refers to detecting injury/illness in individuals before symptoms ordinarily would lead a person to seek medical care. As such, medical screening is a form of secondary prevention, i.e., the opportunity to find and treat or otherwise affect the outcome of disease that is already present. Medical screening allows the presumptive identification of unrecognized disease or defects by the application of tests, examinations or other procedures that can be applied rapidly. Screening tests sort out apparently well persons who probably have a disease or significant finding from those who probably do not. Although a screening test is not intended to be diagnostic, it must detect as early as possible any abnormality related to an exposure if it is to be useful in disease prevention. Ideally, such a test will detect a physical effect or adaptation to the exposure long before symptomatic impairment occurs. Screening focuses on individuals within a population. It is the application of clinical procedures to members of a group who often are asymptomatic, but may be at high risk, for the purpose of identifying those who need further attention or evaluation.

When the risk of a particular disease outcome is known or suspected to be elevated in employees in a particular workplace or job category, *medical surveillance* is the strategy used to determine the group experience with that outcome. Surveillance, while involving tests or exams provided to individuals, focuses its analysis on the collective findings for the specified population that is considered to be at risk. Information is obtained for the purpose of detecting group patterns of abnormal medical parameters or actual disease in order to initiate intervention, control, or additional investigation, if needed. Surveillance involves collecting medical information on groups of people in order to demonstrate changes or trends. This may allow workplace job interventions which, in turn, can lead to primary prevention of harm to the other individuals in that group.

Surveillance programs must utilize the best available tests which are in use at the time. A test

which is controversial or which is difficult to interpret may lead to confusion, and may delay prompt action. The most widely applied mandatory surveillance procedures are based on relatively simple and straightforward tests. Medical surveillance programs must also include tests and examinations which are acceptable to the workers. Also, as with any clinical procedure, the benefit of the test to the worker must outweigh any potential harm the test itself may cause.

The frequency of testing depends on the natural history of the disease; latency periods between an actual exposure and the appearance of disease are important considerations. Most surveillance procedures are repeated annually, since one year represents a reasonable reflection of economic concerns related to the cost of conducting exams, and the time over which adverse effects of harmful exposures may become evident. The following sections present a more specific summary of the components, purposes, and procedures of a medical surveillance program.

The appendix provides an example of a letter that may be used to inform employees of the medical surveillance program, the tests that may be conducted, and the way the resulting information is to be handled and used by the agency.

- (1) Components. The major components of DOI medical surveillance programs are designed to address the principles and concerns described in the previous discussion:
 - (a) Job Title/Position Exposure Profile
 - (b) Employee Specific Exposure Profile
 - (c) Exposure-Specific Examination and Laboratory Services
 - (d) Standardized Clinical Procedures
 - (e) Second Level Review by AMO
 - (f) Data Management and Analysis
 - (g) Agency and Employee Reporting Mechanisms
 - (h) Program Evaluation and Modification

Job Title/Position Exposure Profile

Medical surveillance programs should be based on a comprehensive evaluation of an agency's workforce, worksites, and job duties. This evaluation is intended to identify the type, frequency and severity of an employee's potential exposures to physical, environmental, chemical, or biological stressors according to the worker's duties and responsibilities. Using position descriptions, employees often can be divided into exposure groups that, for medical surveillance purposes, may be quite similar. This *Handbook* provides several such job/exposure-specific sets of recommended services, along with forms and specific guides.

Industrial hygiene and occupational medicine specialist surveys form the basis for the most specific hazard identification. Among the techniques available for further refining hazard identification and quantification are walk-through surveys and environmental monitoring.

A walk-through survey of the work environment provides a means of identifying hazards and unsafe or high risk work practices as the worker goes about a task. Employee and supervisory input also are sought in this assessment phase of the program. The work environment survey ideally should be performed by an occupational health and safety team consisting of the industrial hygienist, agency safety specialist, and an occupational health physician or nurse.

Whenever possible, the medical surveillance program also should reflect environmental monitoring. In environmental monitoring, periodic or continuous measurements are made of potential exposures in the workplace. The industrial hygienist may include workplace and/or personal sampling techniques in the analysis for specific exposures or stressors.

Following the position description or job title exposure profile assessment, the agency should identify individual employees to be included in the medical surveillance program, with the assistance of supervisors, the safety manager, the industrial hygienist, and the occupational health professional. These employees then should be notified of their inclusion in the program and informed as to the program's goals, benefits, and procedures.

Employee Specific Exposure Profile

The aggregation of employees into essentially homogeneous exposure groups by job title or position involves compromises since, by definition, each exposure group is intended to contain employees whose tasks are such that their probability of exposures is nearly the same. Most personal exposure profiles cannot be determined entirely accurately in this manner, due to the diversity of specific tasks within a given job title or position description.

More specific exposure information may be obtained from each employee by way of an individual interview, or an employee-completed occupational exposure history form. The interview allows the industrial hygienist to determine specific frequencies and severities of exposures. Interview information also should be reviewed by the employee's supervisor to help assure validity. See the Appendix for an example of a form that may be used to record the results of an industrial hygienist's employee interview.

An occupational exposure history form also may be used to document an employee's perception of hazards to which s/he feels actually or potentially exposed. Individual histories should be reviewed by supervisory personnel, the safety officer, and an occupational health professional (e.g., the AMO) to determine the employee specific exposure profile. This history form is useful especially where exposure data from environmental monitoring is sparse or nonexistent, where industrial hygiene interviews cannot be (or have not been) conducted, and where a more formal job/title assessment has not been done. In these circumstances, it may be necessary to overestimate the extent of exposure in order to avoid missing true exposures, and the harm that may result for the employee and the agency. See Appendix for an example of a form that may be used as an employee-completed occupational exposure history form.

Exposure-Specific Examination and Laboratory Services

The combination of the job title/position exposure profile and the employee specific exposure profile allows an occupational medicine professional to determine the recommended tests and examinations for each employee. Most listings of such tests and examination items reflect a basic core of services, upon which specific additional tests are performed, based on the identified exposures.

Standardized Clinical Procedures

The medical evaluation can be provided in a variety of ways (see Chapter 3, *Medical Service Providers*, in this *Handbook*). Nurses and physicians providing services must be aware of the goals of the program, and the necessity of collecting clinical information in a systematic manner. While a “general” physical examination may be performed, a key part of the medical surveillance program is the extra attention given to target organs and systems that may be affected by agents identified in the exposure profile.

Second Level Review by Occupational Health Experts

Upon its completion, the clinic conducting the examination should forward the data collected during the examination process to the AMO for review. To facilitate the review, copies of all the applicable physical exam forms, history forms, lab tests, audiograms, spirometers, electrocardiograms, X-ray reports, etc., should be provided. By virtue of training and experience, the AMO is the individual designated by the agency as uniquely qualified to integrate clinical data with the toxicological profile of various substances and to recognize an association between symptoms and/or other findings and the presence of work-related exposures. In addition, examinations done at different sites and by different examiners can be compared by the AMO in the event similar findings among employees with similar exposures or exposure risks are encountered and identified. During this review process, any further studies which should be performed as part of the medical surveillance program (usually to further clarify a potential work-related problem) can be determined.

Data Management

All medical surveillance information must be treated with appropriate confidentiality. Any medical data used for analysis must be compiled in an aggregate (non-individually-identifiable) form before being shared with agency managers (or others) who have not been identified as having a “need to know,” and with employee representatives. The data will allow labor and management to evaluate workplace-associated problems and to take remedial action without jeopardizing the rights of individual employees. See [Chapter 4](#), *Medical Records - Employee Medical File System*, for further information on this topic.

Agency and Employee Reporting Mechanisms

Since one of the primary purposes of medical surveillance is to safeguard the health of employees, both individually and collectively, a written summary of any examination should be sent to the employee. This summary should contain the results of the medical surveillance evaluation, including a report of laboratory tests and other procedures, as well as an interpretation of the significance of any findings. Recommendations should be made to the employee for any additional

testing indicated as part of the medical surveillance program, and information on non-work-related problems requiring further medical evaluation also should be conveyed to the employee in a timely manner.

The local agency manager should receive a written statement from the AMO indicating the physician's opinion concerning: **1)** any detected medical conditions which place the employee at increased risk of harm from continued performance of the job; **2)** any recommended work modifications; and **3)** and a statement that the employee has been informed of the results of these findings and any other findings requiring further medical follow up. Medical conditions should not be identified specifically in these agency letters. No medical findings or diagnoses unrelated to the effects of the employee's job should be included in the report to the supervisor. For further information on this subject, see [Chapter 4](#), *Medical Records - Employee Medical File System*.

Program Evaluation and Modification

It is important for any program to continuously assess the quality of its functions and to improve those areas in which it is deemed to be deficient. The purposes of a comprehensive quality review include: **1)** documentation of high quality health care services; **2)** measurement of the efficacy of program activities in meeting agency goals (with subsequent modification of the program, as appropriate); **3)** identification of areas warranting improvement; **4)** assessment of client satisfaction; and **5)** satisfaction of legislative and regulatory requirements. Assistance with setting up a program evaluation process may be sought through the AMO.

5.10 Special Emphasis Topics

Drug and Alcohol Testing. The Department of the Interior supports the goal of a drug and alcohol-free Federal workplace. The use of illegal drugs, on or off duty, will not be tolerated. Alcohol possession and/or consumption while on duty and reporting to duty while intoxicated or under the influence of alcohol will not be tolerated. Certain testing designated positions (such as positions involving law enforcement, national security, the protection of life and property, public health or safety, or other functions requiring a high degree of trust and confidence) are subject to selection for random drug testing. The [Department of the Interior's Drug Free and Alcohol Free Workplace policy](#) can be located on [DOI ELIPS](#) or by clicking the link below:
<https://elips.doi.gov/elips/DocView.aspx?id=4609&searchid=d2ee3e9c-746c-4e7f-9ba3-c6cfc839d8bd&dbid=0>

For DOI positions involving safety-related functions (e.g., driving large trucks) on U.S. public inter- or intra-state highways, the Department of Transportation has established rules that apply to the use of controlled substances and alcohol. These rules can be found in 49 CFR 382 (Controlled Substances & Alcohol Use and Testing). Employers of such workers are required to establish a testing program to assure that those workers do not carry out the sensitive functions while impaired. The testing program must include pre-employment, post-accident, random, and reasonable suspicion testing. More specific information about testing program requirements is beyond the scope of this *Handbook*, and the reader is referred to the regulations at the citation noted above.

Employee Assistance Program (EAP) Services. The Rehabilitation Act of 1973, as amended in 1992 to incorporate provisions of the Americans with Disabilities Act (ADA) (which has been amended as the Americans with Disabilities Act Amendments Act of 2008 [ADAAA]), prohibits discrimination against an employee on the basis of disability. Substance abuse and mental health problems may be considered disabilities under the ADA, and responding to employee needs in these areas is not only required by law, it is appropriate and reasonable in the interest of maximizing productivity and protecting the government's primary assets-- its employees.

Every DOI office/program has an EAP oriented towards assisting troubled employees to address personal problems, including substance abuse and mental health problems that have an impact on their ability to carry out the functions of their jobs. Possible indicators that an employee may be having such difficulties include excessive absences, poor work decisions, and high or unexplained accident rates. At a minimum, EAP services provide counseling to address short term problem solving, crisis counseling, critical incident stress debriefing, and substance abuse counseling or referral.

Employees participating in EAP services will not jeopardize their jobs or promotion potential by doing so. EAP services assure full confidentiality of the records established and maintained for all employees, following the principles for confidentiality covered in Chapter 4 of this *Handbook*. It must be understood, however, that participation in an EAP does not exempt an employee from complying with the requirements of his/her job, specifically in regards to time, attendance, performance, and conduct. This link provides information on this important program for DOI employees <https://www.doi.gov/pmb/hr/eap>

Reasonable Accommodation. The Rehabilitation Act of 1973 (codified at 29 CFR 1614.203) and the Americans with Disabilities Amendments Act of 2008 (ADAAA) prohibits employment discrimination against people with disabilities, and requires employers to hire (and retain) individuals who can successfully perform the essential functions of the job, despite their disability, even if this requires the employer to offer "reasonable accommodation." This means that the employer must modify the job's requirements, or the work place, to allow the employee to perform the essential functions of the job, unless this accommodation requires excessive expense or difficulty for the employer. How much is "excessive," or too much "difficulty," is not fully described, requiring considerable care and attention on the part of the employer to assure that the employee is being dealt with fairly, and the law is adhered to.

In cases where an employee has physical limitations or medical findings that indicate he or she may be unable to fulfill all of the assigned duties in a safe and efficient manner, the supervisor must evaluate the job requirements and determine whether adjustments in duties, or the way duties are accomplished, can be arranged. When an employee, even with reasonable accommodation, is unable to perform essential functions of a position due to a disability, Federal civil rights laws require employers to offer the employee reassignment to a vacant, funded position for which the employee is qualified (with or without accommodation) at the same grade or level, in the same commuting area, and serviced by the same appointing authority, unless it is demonstrated that the reassignment would result in an undue hardship on the program. The supervisor is encouraged to consult with the local personnel office for assistance in this regard. Before any adverse personnel action is taken with an employee for medical or physical reasons, the supervisor also should consult the AMO (local or national). An ad hoc Reasonable Accommodation Committee may be assembled, involving the

supervisor, local management, the local personnel office, the local Office for Civil Rights, and persons with disabilities and, if deemed appropriate, representatives from the Office of OSH, the AMO or the DOI MO, and the U.S. Office of Personnel Management to review the case and consider alternatives to termination or other adverse action. Additional guidance is available by contacting the DOI Office of OSH.

Time and Attendance/Conduct/Performance. It is an employee's responsibility to carry out the functional requirements of his or her job in a professional, efficient, and timely manner. Failure to do so may result in adverse action, up to and including termination. If an employee contends that time and attendance, conduct, or performance failures are due to medical causes, it is the responsibility of that employee to offer sufficient information from valid and reputable medical sources to substantiate the medical claim that is presented. The *Medical Employability Determinations Guide*, found within this chapter, provides further, specific guidance and step-by-step actions that may assist the manager in this often difficult area. Please also see the sections within this chapter on *Authority to require an Examination*, *Authority to offer an examination*, *Employee Assistance Program Services*, and *OWCP Recordable Injuries and Illnesses*.

Authority to require an Examination. Under the authority of 5CFR339.301, an agency may require an examination of an employee when:

- (1) A routine pre-appointment examination is appropriate only for a position which has specific medical standards, physical requirements, or is covered by a medical evaluation program established under these regulations.
- (2) Subject to § 339.103 of this part, an agency may require an individual who has applied for or occupies a position which has medical standards or physical requirements or which is part of an established medical evaluation program, to report for a medical examination:
 - a. Prior to appointment or selection (including reemployment on the basis of full or partial recovery from a medical condition);
 - b. On a regularly recurring, periodic basis after appointment; or
 - c. Whenever there is a direct question about an employee's continued capacity to meet the physical or medical requirements of a position.
- (3) An agency may require an employee who has applied for or is receiving continuation of pay or compensation as a result of an on-the-job injury or disease to report for an examination to determine medical limitations that may affect placement decisions.
- (4) An agency may require an employee who is released from his or her competitive level in a reduction in force to undergo a relevant medical evaluation if the position to which the employee has reassignment rights has medical standards or specific physical requirements which are different from those required in the employee's current position.
- (5) An agency may order a psychiatric examination (including a psychological assessment) only when:

- a. The result of a current general medical examination which the agency has the authority to order under this section indicates no physical explanation for behavior or actions which may affect the safe and efficient performance of the individual or others, or
- b. A psychiatric examination is specifically called for in a position having medical standards or subject to a medical evaluation program established under this part.

A psychiatric examination or psychological assessment authorized under (i) or (ii) above must be conducted in accordance with accepted professional standards, by a licensed practitioner or physician authorized to conduct such examinations, and may only be used to make legitimate inquiry into a person's mental fitness to successfully perform the duties of his or her position without undue hazard to the individual or others.

Authority to offer an examination. Under the authority of 5CFR339.302, an agency may offer an examination of an employee (including a psychiatric evaluation) in any situation where the agency needs additional medical documentation to make an informed management decision. This may include situations where an individual requests for medical reasons a change in duty status, assignment, working conditions, or any other benefit or special treatment (including reasonable accommodation or reemployment on the basis of full or partial recovery from a medical condition) or where the individual has a performance or conduct problem which may require agency action. Reasons for offering an examination must be documented. An offer of an examination shall be carried out and used in accordance with 29 CFR 1613.706.

If the individual refuses to be examined or to submit medical documentation, the agency should act on the basis of the information it has available. For example, the agency may refuse a benefit requested by the employee that is not supported by adequate medical documentation, or the agency may take action based on the employee's performance or conduct in the light of currently available information or medical knowledge.

Medical Employability Determination. When an employee raises a medical condition as a defense against alleged performance, conduct, or time and attendance deficiencies, the burden is on the employee to provide the agency with medical documentation (within time limits set by agency) which establishes that: the employee has a medical condition/disability which needs to be taken into account; the medical condition/disability is causally related to the performance, conduct, or time and attendance deficiency, and (where appropriate) accommodation is necessary.

Acceptable Documentation. If the employee provides documented evidence acceptable to the agency (including the Agency Medical Officer, if necessary) which demonstrates: a medical condition exists; the condition is causing or exacerbating the performance, conduct, or time and attendance deficiency; and whether there is a need for accommodation, then the agency is responsible for determining whether any "reasonable accommodation" can be made (this is a management rather than a medical determination).

If reasonable accommodation can be made either within the position, or by reassigning the employee to a vacant, funded position for which he/she qualifies, the agency must do so.

If the agency determines that no accommodation can be made or is reasonable, and if reassignment is not an option, then the agency proceeds with appropriate corrective personnel action. (The employee must also be counseled regarding disability retirement if appropriate.)

Unacceptable Documentation. If the employee provides medical documentation, but the Agency Medical Officer considers it to be “unacceptable” (e.g., incomplete, not pertinent), the agency may either:

- (1) Require the employee to provide additional documentation; or
- (2) Offer the employee a medical exam by an agency-selected physician, at agency expense in order to obtain the necessary information.

If the individual refuses to be examined or to submit medical documentation, the agency should act on the basis of the information it has available. For example, the agency may refuse a benefit requested by the employee but not supported by adequate medical documentation, or the agency may take action based on the employee’s performance or conduct in the light of current medical knowledge.

Standard for Review of Medical Documentation

- A. Review of medical documentation is an assessment by, or in coordination with, a physician to ensure that the following criteria are met:
 - (1) The diagnosis or clinical impression is justified in accordance with established diagnostic criteria, and
 - (2) The conclusions and recommendations are consistent with generally accepted medical principles and practice.
- B. The following kinds of information are taken into account, as appropriate, when medical records are reviewed:
 - (1) The history of the specific medical condition(s), including reference to the circumstances of onset, findings from previous evaluations, treatment, and responses to treatment;
 - (2) Clinical findings from the most recent medical evaluation, including any of the following that have been obtained: results of physical examination; laboratory tests; x-rays; EKG’s and other special evaluations or diagnostic procedures; and, in the case of psychiatric disease, the results of mental status evaluation and psychological testing;
 - (3) Assessment of the current clinical status and plans for future treatment;
 - (4) Diagnosis;
 - (5) The expected date of full or partial recovery; and

(6) Impact of the medical condition on life activities both on & off the job.

C. The following is the analysis methodology of the medical documentation:

- (1) A medical basis to support a conclusion that the medical condition has, or has not, become static or well stabilized;
- (2) A medical basis to support a conclusion that indicates the likelihood that the individual is, or is not, expected to experience sudden or subtle incapacitation as a result of the medical condition;
- (3) A medical basis to support a conclusion that duty restrictions or accommodations are, or are not, warranted, and if they are, an explanation of their risk-avoiding or therapeutic value and the nature of any similar restrictions or accommodations recommended for non-work related activities; and
- (4) A medical basis to support a conclusion that indicates the likelihood that the individual is, or is not, expected to suffer injury or harm by carrying out, with or without accommodation, any of the tasks or duties of a position to which the individual is assigned or for which the individual is qualified.

OWCP Recordable Injuries and Illnesses

Department of Labor forms [CA-1](#) (Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation) and [CA-2](#) (Notice of Occupational Disease and Claim for Compensation), are used by most agencies to file claims for work related injury or illness compensation. The Department has established the Safety Management Information System ([SMIS](#)) as the official Administrative System for electronic entry of accident and illness claims data. SMIS is an Internet based data system and can be found on the internet at <http://www.smis.doi.gov>

As specified by the Occupational Safety and Health Administration for its **Log of Work-Related Injuries and Illnesses** (OSHA's Form 300), the following definitions apply:

- A. Work-related injury – “An injury is any wound or damage to the body resulting from an event in the work environment” and may include a “cut, puncture, laceration, abrasion, fracture, bruise, contusion, chipped tooth, amputation, insect bite, electrocution, or a thermal, chemical, electrical, or radiation burn.” Also, “sprain and strain injuries to muscles, joints, and connective tissues are classified as injuries when they result from a slip, trip, fall or other similar accidents.”
- B. Work-related illness – These may include skin diseases or disorders (“involving the worker's skin that are caused by work exposures to chemicals, plants, or other substances”), respiratory conditions (“associated with breathing hazardous biological agents, chemicals, dust, gases, vapors, or fumes at work”), poisoning (“evidenced by abnormal concentrations of toxic substances in blood, other tissues, other bodily fluids, or

the breath that are caused by the ingestion or absorption of toxic substances into the body”), hearing loss, and other illnesses (including “heatstroke, sunstroke, heat exhaustion, heat stress and other effects of environmental heat; freezing, frostbite, and other effects of exposure to low temperatures; decompression sickness; effects of ionizing radiation (isotopes, x-rays, radium); effects of nonionizing radiation (welding flash, ultra-violet rays, lasers); anthrax; bloodborne pathogenic diseases (such as AIDS, HIV, hepatitis B or hepatitis C); brucellosis; malignant or benign tumors; histoplasmosis; coccidioidomycosis”).

- C. A recordable illness or injury – Is one that results from an accident or exposure in the work environment and results in death, an illness, or an injury that involves the requirement for medical treatment (beyond first aid), loss of consciousness, restriction of work or body motion, or transfer to another job. The guidelines for recording injuries and illnesses, and some of the pertinent regulations that govern the rights and responsibilities of employees and employers in the case of work-related illness or injury are presented on the Department of Labor forms CA-1 (for injuries) and CA-2 (for illnesses), accessible at <http://www.dol.gov/owcp/regs/compliance/ca-1.pdf> and <http://www.dol.gov/owcp/regs/compliance/ca-2.pdf>, respectively.

Chapter 6 – Common Occupational Health Topics

Certain exposures or work task requirements (e.g., heat, lifting, and asbestos) may place a DOI employee at increased risk of harm. This *Handbook* provides guidance regarding an appropriate focus for medical examinations related to these work conditions. Because of difficulty in assessing actual work requirements and levels of exposure under individual work situations, the examining physician and the AMO must use individual judgment in evaluating cases.

6.1 Respiratory Protection/Medical Clearance

A respirator medical clearance is necessary (as specified in 29 CFR 1910.134(b)(10)) prior to use, and then on a periodic basis, for all employees whose job duties require them to use a respirator. This clearance may be provided based on the *DOI Respirator Medical Evaluation Questionnaire* (see Appendix), or it may be provided as a distinct examination and clearance process, or as part of an examination and review carried out for other purposes (e.g., a comprehensive medical surveillance or other clearance program). The information listed below presents a summary of types of respirators, clinical considerations, and a listing of suggested services to be provided as part of a respirator medical clearance examination. The actual services provided depend on the judgment of the examining physician and the regulations applicable to certain known or anticipated exposures (e.g., significant asbestos and formaldehyde exposures require the regular performance of pulmonary function testing). The determination of appropriate services also involves a consideration of a current medical history, known medical conditions, the type of respirator to be used, and the circumstances of its intended use. As a follow-up to the medical clearance to use a respirator, fit testing is necessary in order to assure that a proper seal of the respirator can be obtained, and that the respirator can be worn effectively by the employee.

Fit testing of respirators for those employees who must wear them is addressed in [Appendix C of 29 CFR 1910.1001](#), “Qualitative and Quantitative Fit Testing Procedures - Mandatory” but is not further described in this *Handbook*.

A. Medical Clearance for Respirator Use

The following is a guide to the medical examination and review of information related to the use of respirators. It may be used for general reference on the subject, or the materials may be used to implement a full program acceptable to DOI. All employees who are in a respirator protection program need to be medically cleared to wear a respirator before fit testing and commencing use. In certain circumstances, the *DOI Respirator Medical Evaluation Questionnaire* (see Appendix) will suffice for a medical clearance, however in some positions such as those with arduous and/or hazardous duties, a medical examination may be required (in conjunction with the *DOI Respirator Medical Evaluation Questionnaire*). For specific guidance whether an examination is required for medical clearance, contact the AMO or the DOI Medical Officer.

(1) Evaluation Steps

- (a) A signed and dated request, consistent with the “*Request for Respirator Clearance*” form (see Appendix), is to be prepared by the employee’s supervisor

or higher manager. Other forms may be used as long as the following items are covered:

- (i) The name of the employee to be evaluated;
- (ii) The employee's phone number and the best time to call at that number;
- (iii) The job title of the employee to be evaluated;
- (iv) The type of respirator to be worn;
- (v) The duration and frequency of respirator use;
- (vi) Other personal protective equipment to be used concurrent with respiratory protection;
- (vii) The job activity in which the respirator is to be worn, including the reason(s) for its use; and
- (viii) Known or anticipated toxic substances to which the employee may be exposed and for which the protective device is to be worn.

- (b) This information is to be provided to the examining facility or licensed health care provider at the time of the medical examination, or the review of the Respirator Medical Evaluation Questionnaire.

Please refer to section within this chapter entitled "*Types of Respirators*" for a description of the various types of respirators, their uses, and the physiological effects of their use.

- (c) A copy of the *DOI Respirator Medical Evaluation Questionnaire* (see Appendix) is to be completed by the employee and reviewed by the AMO or other licensed health care professional prior to initial use of a respirator IF the medical evaluation does not include a physical examination. Subsequently, either a physical examination, or the *Questionnaire* (plus a physical examination, if the *Questionnaire* indicates to the health care professional that this is necessary), are to be carried out periodically.
- (d) When a physical examination is to be conducted, a medical/occupational history questionnaire which addresses at least the following topics is to be completed by the employee, signed and dated, and then made available to the examining physician at or before that exam. The *DOI Standard Medical History and Examination Form* (See Appendix) is appropriate for this purpose:
 - (i) Smoking history;
 - (ii) General health status;
 - (iii) Hearing or ear conditions or symptoms, including sense of smell;
 - (iv) Cardiovascular or pulmonary conditions or symptoms;

- (v) Diabetes, or impairment of visual or auditory function;
- (vi) Musculoskeletal, rheumatologic (joint), or neurologic conditions or symptoms;
- (vii) Skin condition that might interfere with wearing a respirator;
- (viii) Facial surgery or disfiguring illness or injury;
- (ix) Presence of dentures;
- (x) Vision or eye conditions or symptoms;
- (xi) Requirement for corrective lenses and the type worn (contacts or glasses);
- (xii) Current medications and allergies;
- (xiii) Psychological (mental health) conditions or symptoms;
- (xiv) Presence of or problems with claustrophobia; and
- (xv) Past and present job duties, including potential and actual hazardous exposures and personal experience with respiratory protective devices.

(e) When a physical examination is to be conducted, it should be directed at the areas of concern to the health care professional upon review of the *Respirator Medical Evaluation Questionnaire*, or a general examination that that may include the following areas:

- (i) Vital signs (blood pressure, pulse, height, and weight; also, temperature, if clinically indicated);
- (ii) Visual acuity (utilizing an automated vision screener, such as Titmus™ or Optec™ machines, if available); a clinical evaluation by the examiner also may be conducted;
- (iii) Hearing (audiogram); a clinical evaluation by the examiner also should be conducted;
- (iv) Examination of the head (tympanic membranes, eyes, scalp, nose, oral cavity), neck, lungs and heart;
- (v) Musculoskeletal and neurological evaluation relevant to use of a respirator;
- (vi) Spirometry (FEV1 and FVC, actual and % predicted) (if deemed necessary by the examining physician);
- (vii) Resting 12 lead electrocardiogram (if deemed necessary by the examining physician)
- (viii) Additional testing as warranted by the medical history and/or physical exam findings; examples of such testing are a serum chemistry profile, chest radiograph, or an exercise tolerance test (e.g., a treadmill ECG); and

- (ix) A respirator use test, if clinically indicated, e.g., the examiner has reservations regarding the examinee using a respirator due to physical and/or psychological conditions.

NOTE: performance of exercise tolerance testing is to be approved by the DOI MO.

If an employee is enrolled in another medical surveillance or clearance program, the medical evaluation for respirator use can occur concomitantly with physical examinations conducted for these other purposes.

- (f) A written disposition based on available information (signed and dated by the examiner) shall be provided to the designated DOI supervisor or manager regarding the medical clearance for respirator use by the examinee. The disposition should not contain specific examination findings (including laboratory results) or specific medical diagnoses. The printed name and signature of the examiner, the date of the evaluation, and the location of the facility in which the evaluation occurred shall appear on the examination form.
- (g) Communication with the Employee is required to explain fully any abnormal findings of an examination. If additional medical information is needed from the employee for adequate evaluation of a medical condition, a letter requesting the needed information can be issued to the examinee for completion by the employee's personal physician or health care provider.

B. Types of Respirators

The following information should be provided to the servicing examination site to assist the health care providers as they conduct the respirator medical clearance examinations. Engineering descriptions of the various types of respiratory protective devices are inadequate by themselves for guiding examining providers who conduct respirator medical clearance examinations. Factors related to the physiologic effects and consequences of the various devices for the wearer are more important considerations than are the internal mechanical characteristics of the device in use or to be used. All respirators used at Federal worksites should be NIOSH/MSHA approved.

- (1) **Air-Purifying, Negative Pressure (non-powered) Respirator** - This category includes several types of devices. All have a face piece (either full or partial) which provides a tight seal against the face. Inhalation of toxic substances is prevented either by direct filtration through the face piece material, through filters/cartridges attached to the face piece, or by a remote assembly typically worn on the belt and involving a chemical reaction. An air-purifying respirator, as the name implies, can only be used in an environment with an adequate supply of oxygen, since the respirator only filters/purifies and, to some extent, prevents physical contact with ambient gas. The negative pressure designation relates to the method of air delivery and removal, i.e., the wearer creates a negative pressure inside the face piece in order to inhale. This type of device may be completely disposable or may contain replaceable parts.

The hazard eliminating mechanism is specific for the physical state of the hazard, i.e., some devices protect only against particulates while others protect only against gases or vapors. (Some devices protect against both.)

A negative pressure respirator is not appropriate for certain hazards and for concentrations of hazards exceeding its protective capacity. If the means of respiratory protection is via particulate filtration, the resistance to breath will increase as the filter becomes saturated. Since the major limiting factor to using this type of device is breathing resistance, particularly for workers with obstructive airway conditions (predominately on inhalation if there is an exhalation valve), this factor should be considered during medical clearance examinations, especially if a “use test” is conducted with a “clean” respirator. The cloth **high efficiency particulate air** (HEPA) filter mask, commonly used for protection against exposure to tuberculosis, is an example of this type of respiratory protective device.

- (2) **Air-Purifying, Positive Pressure (powered) Respirator (PAPR)** - This variant of the air-purifying type of respirator utilizes a blower worn on a belt at the waist to move ambient air through the filtering mechanism. Consequently, respirable air is presented to the wearer under slightly positive pressure. Because the blower operates continuously, i.e., air is constantly flowing into and out of the face piece, resistance both to inhalation and exhalation is negligible as is the physiologic dead space. This feature may be helpful to workers with mild to moderate disease who are otherwise able to meet their job requirements.

Some PAPRs rely on high air flow rates to prevent toxic substances from entering the mask rather than forming a seal against the face. Variants of these devices utilize a hood or helmet which fits over the entire head with respirable air supplied to the entire space beneath the hood/helmet. This alternative is particularly useful for workers with beards or other facial features that interfere with forming a tight seal with a face piece. A PAPR is not appropriate for IDLH (immediately dangerous to life and health) environments or other situations requiring a high level of respiratory protection.

- (3) **Self-Contained Breathing Apparatus (SCBA)** - An SCBA is a device for which the wearer carries his/her source of respirable air in a compressed gas cylinder typically positioned in a back harness. The gas flow path conforms to either an open or closed circuit, i.e., expired air is either exhausted through a valve to the ambient environment or returned to a bag of pooled gas at ambient pressure, respectively. Carbon dioxide is scrubbed in the closed circuit and inhalations are drawn directly from the bag.

An SCBA is worn with a mask (usually a full face piece) which is supposed to provide a tight seal against the face. If the wearer uses lenses, specially configured lenses that can fit entirely within the face piece must be worn, i.e., temples (sidebars) cannot penetrate the seal between the mask and the face.

SCBAs provide air to the wearer under positive pressure. They usually operate in demand or pressure demand mode. In the demand mode, respirable air is available

when inspiratory effort lowers the pressure in the face piece below ambient pressure. In the pressure demand mode, positive pressure is in the face piece throughout the respiratory cycle, i.e., gas is supplied when inspiratory effort lowers mask pressure, but not all the way to ambient pressure. Consequently, in a pressure demand device, exhalation is accomplished against greater resistance than in a demand device. (This drawback is counterbalanced by the greater protection offered by a pressure demand device, since continuously positive mask pressure suppresses inward leaking during the entire respiratory cycle.)

The considerable weight of an SCBA (up to 35 pounds) may limit functional (exertional) capacity during performance of heavy work, especially for workers with certain cardiovascular conditions. Exertional capacity while wearing an SCBA may also be limited by the inability of the device to support very high ventilatory rates, either through limited maximal air supply rates or, in the case of the pressure demand device, working against increased exhalation resistance. It is also noteworthy that attempts to breathe at ventilation rates greater than the device's maximal flow rates may lead to inward air/gas leakage from the ambient environment (mask pressure can be forcefully driven below ambient pressure by extreme ventilatory efforts).

SCBAs can operate in a continuous mode (air is flowing regardless of inspiratory effort). In this type of device, resistance during exhalation is less than with demand mode devices, since the exhalation valve essentially is held open. SCBAs with pressure demand regulators are used in oxygen deficient atmospheres (<19.5% O₂) or other environments which are immediately dangerous to life or health (IDLH), i.e., they require a high level of respiratory protection (e.g., firefighting).

- (4) **Supplied Air Respirator** - Some respirators are designed to provide the wearer with non-ambient, respirable air from a remote source. The air/gas reaches the user's breathing apparatus through a flexible pressurized hose, which usually is tethered at the waist. Air is delivered to the wearer's face piece either through a demand or pressure demand type regulator, similar to an SCBA, or through a flow system, similar to a PAPR.
- (5) **Other Respirators** - In addition, agencies and their employees may use respirators, such as simple dust masks, and emergency escape respirators, which do not require a medical clearance in order for them to be used. N95 masks, which require a tight fit to be effective, do require a medical clearance, which generally requires only the medical review of a screening questionnaire. For more information, contact your safety officer.

6.2 Hearing Conservation

Occupational Noise Exposure is addressed in [29 CFR 1910.95](#), emphasizing the requirements for employers to implement feasible administrative or engineering controls if employees would otherwise be exposed to noise that exceeds the permissible levels specified in the regulation (e.g., 90 dB for 8 hours, or 92 dB for 6 hours). If exposure to lower levels cannot be assured, employees are

to receive and use personal protective equipment to reduce below those levels their workplace exposure to sound. For employees exposed to an 8-hour time weighted average (TWA) sound level of 85 dB or greater, a hearing conservation program must be implemented. Further, employees who serve in certain law enforcement positions or otherwise use firearms regularly in their work should automatically be placed in a hearing conservation program due the risk of harmful exposures to impact noise. Under these programs, employers must monitor workplace noise exposures, notify employees of the results of the monitoring, allow employees or their representatives to monitor the monitoring, and provide an audiometric testing program. The testing program must be at no cost to the employee, performed by an appropriately licensed or certified health professional (or a technician using an audiometric microprocessor), and include baseline and annual audiograms, with evaluation and follow up of the results, as specified in the regulations. Other provisions of the hearing conservation program, including re-testing, employee notification, response to a standard threshold shift, hearing protectors, and other points are addressed in the regulations, and should be referenced for more details.

Hearing conservation programs should be reviewed regularly to assure that they are complete, meet the requirements of the regulations, and are reasonable for the employees and work place managers. A hearing loss must be recorded in the OSHA 300 log if:

- (1) There is an standard threshold shift (STS) from the baseline (or most recent revised baseline) of an average of 10 dB in either the right or left ear at 2000, 3000, and 4000 Hz; and
- (2) That average is 25 dB or higher.

For further information on the interpretation of results and recording of a hearing loss, please see the specific regulations at http://edocket.access.gpo.gov/cfr_2005/julqtr/pdf/29cfr1910.95.pdf and OSHA guidance on the Recording criteria for cases involving occupational hearing loss at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9641

Age Correction - Under OSHA regulations, employers may continue to use age correction in determining if an STS has occurred, as provided for in Appendix F of 29 CFR 1910.95, but are not required to do so. However, age correction may not be used to determine if the 25 dB criteria has been met for recording the hearing loss on the OSHA 300 Log.

NOTE: It is the practice of the DOI to NOT use age correction, even in the determination of standard threshold shifts. The American Medical Association Guides to the Evaluation of Permanent Impairment state that total hearing loss should not be age adjusted, and there is no recognized consensus method for age adjusting a single audiogram. Hearing loss due to “age” generally actually is considered due to the long-term effects of noise exposure, and would not occur otherwise.

6.3 Occupational Hazards

A. Chemical Stressors - Chemicals and other agents identified by OSHA as requiring specific medical evaluation when exposures exceed the PEL are listed below. The regulation citation for each

chemical also is listed, and may be referenced for specific guidance on testing or other services that must be offered to the exposed employee. For medical surveillance on chemical stressors not covered by these specific OSHA standards, please call your AMO, or the DOI OSH.

OSHA-Mandated Medical Surveillance - The Occupational Safety and Health Administration (OSHA) has established specific exposure-related requirements for several occupational hazards. Employees exposed to these hazards (with or without personal protective equipment) above the Permissible Exposure Level (PEL) may need to be provided medical surveillance examination or other services to determine if the employee has suffered any adverse effects from the exposure. The reader is encouraged to review the provisions of the specific federal regulation for any actual or potential exposures to these substances above the PEL. These hazards, summarized in [29 CFR 1910 Subpart Z - Toxic and Hazardous Substances](#), along with their locations in the CFR, include:

(a)	1910.1000	Air contaminants
(b)	1910.1001	Asbestos
(c)	1910.1002	Coat tar pitch volatiles
(d)	1910.1003	13 Carcinogens (4-Nitrobiphenyl, etc.)
(e)	1910.1004	alpha-Naphthylamine
(f)	1910.1006	Methyl chloromethyl ether
(g)	1910.1007	3,3'-Dichlorobenzidine (and its salts)
(h)	1910.1008	bis-Chloromethyl ether
(i)	1910.1009	beta-Naphthylamine
(j)	1910.1010	Benzidine
(k)	1910.1011	4-Aminodiphenyl
(l)	1910.1012	Ethyleneimine
(m)	1910.1013	beta-Propiolactone
(n)	1910.1014	2-Acetylaminofluorene
(o)	1910.1015	4-Dimethylaminoazobenzene
(p)	1910.1016	N-Nitrosodimethylamine
(q)	1910.1017	Vinyl chloride
(r)	1910.1018	Inorganic arsenic
(s)	1910.1025	Lead
(t)	1910.1026	Chromium (VI)
(u)	1910.1027	Cadmium
(v)	1910.1028	Benzene
(w)	1910.1029	Coke oven emissions
(x)	1910.1030	Bloodborne pathogens
(y)	1910.1043	Cotton dust
(z)	1910.1044	1,2-dibromo-3-chloropropane
(aa)	1910.1045	Acrylonitrile
(bb)	1910.1047	Ethylene Oxide
(cc)	1910.1048	Formaldehyde
(dd)	1910.1050	Methylenedianiline
(ee)	1910.1051	1,3-Butadiene
(ff)	1910.1052	Methylene chloride
(gg)	1910.1096	Ionizing radiation

B. Physical Stressors - Examining physicians, the AMO, and the DOI MO may make recommendations for individual employees regarding their safe exposure to such physical stressors as exertion, heat stress, and cold exposure. These recommendations are based on the known effects of such stressors and the information gathered in the medical history, the physical examination, and other tests that may suggest an increased risk for health problems when engaging in certain physically stressful activities. It should be noted that, because of variations in individual responses to medical conditions and work tasks, the reviewing physician intentionally may err on the side of caution in evaluating and making recommendations in these situations.

Some factors that need to be considered regarding the effects of exertion, heat stress, and cold exposure include: 1) physical demands of the job or tasks (both maximal exertion and endurance); 2) the total length of time an employee is engaged in the activity; 3) the temperature and humidity of the work environment; 4) type of personal protective equipment and clothing that commonly is or must be used (e.g., cartridge respirators, SCBA, Tyvek suits, etc.); 5) other hazards associated with the task (besides exertion, heat stress, and cold exposure); 6) the ergonomics of the task (e.g., how much reaching or bending is necessary); 7) other tasks that are being conducted concurrently with the listed task; 8) the skill and training of the employee in carrying out the task in an energy-efficient manner; 9) the physical and aerobic conditioning of the employee; and 10) the availability of assistance from co-workers or mechanical devices to reduce the effort necessary to carry out the tasks, or if reserve capacity or other assistance may be needed in emergencies.

Finally, the employee's own perception of how much strain or effort is necessary to carry out a task is also very important. If an employee feels that a task requires too much of a physical strain, or causes symptoms such as shortness of breath, rapid pulse, light-headedness, or pain or discomfort in the chest, that work activity (or the conditions under which the work is carried out) likely is excessive for that employee. In these situations, the employee may need work restrictions or job modifications related to these tasks.

Physical Exertion and Heat Stress - Following a medical evaluation, employees with certain medical conditions may be given a recommendation to limit their level of physical exertion and heat stress to reduce the risk of serious health problems. The employees' level of physical fitness also impacts their ability to perform safely at various levels of exertion. Physical fitness may be measured in terms of oxygen consumed, or tasks that may be accomplished in a specified period of time. The physical exertion examples presented below are intended to provide a general overview of the types of work activities that would be expected to fall within the listed levels of exertion. It is necessary to use reasonable judgment in interpreting or applying examples such as these to specific work settings.

It is important to remember when considering the effects of heat that humidity has a major impact on the ability of the body to cool itself. In periods of high humidity, or in work settings in which humidity cannot be lowered below approximately 60%, the length of time spent at given levels of exertion, or the level of exertion required, must be reduced to avoid potentially dangerous heat stress. This is particularly important for workers who have medical conditions that tend to reduce their ability to tolerate heat and exertion safely. Other important factors that will affect safe working times include the amount of occlusive or protective clothing that is worn (e.g., Tyvek, rubber, or other chemical-protective clothing), air movement over and around the worker, and the availability

of assistance from co-workers or mechanical devices to reduce the effort necessary to carry out the tasks. These factors may increase or decrease the amount of time that can be worked safely, depending on their presence or absence and the relative impact of each factor.

Physical Exertion Examples - The following information is provided to assist DOI managers and employees regarding exertion and heat stress. The examples presented below are intended to serve only as a general guide to types of activities and levels of stress that should be considered when employees are exposed to heat.. Other job tasks and activities may be compared to these examples when making specific adjustments in work activities for an individual employee.

The examples in the lists presented below are grouped as light, moderate, and arduous depending on the fitness and medical condition required of the person performing the task. To gauge physical fitness status, maximal oxygen consumption (Max VO₂) may be measured or estimated. Max VO₂ is expressed in milliliters of oxygen per kilogram of body weight per minute. This assessment may be done with a standard test of fitness, such as a “step test,” or by the “pack test.” For general DOI purposes, Max VO₂ levels for the specified levels of exertion are: **1) arduous** (Max VO₂ of 45); **2) moderate** (Max VO₂ of 40); and **3) light, or low** (Max VO₂ of 35).

The examples are intended to provide a general overview of the types of work activities that might be expected to fall within the specified groups, but they require the use of reasonable judgment in interpreting or applying them to specific work settings.² For additional information, a rough *estimate* of the time that might be expected to be spent in “uninterrupted” performance of the activity is shown for each example. These time estimates include the usual breaks, such as for lunch (e.g., “full shift” of work at a given task would be expected to include a lunch break and two or more other brief rest periods).

² Developed with the assistance of information provided in Ergonomic Design for People at Work, Suzanne Rogers, et.al., Van Nostrand Reinhold, New York, 1986

I. Light

Task	Usual Time Spent
Crouching, kneeling	
Sitting; work involving feet and hands; desk work; typing; drafting	15 minutes
Sitting in a vehicle	Full shift
Standing, work involving hands	2 or more hours
Light assembly or repair work	Full shift
Sitting, monitoring equipment	Full shift
Inspecting materials	Full shift

II. Moderate

Task	Usual Time Spent
Driving a truck or other large equipment	Full shift
Finishing carpentry, woodworking	2 or more hours
Stocking, warehouse work	Full shift
Use of hand tools, chest high	15 minutes or more
Lifting 20 pounds, chest/head high	Up to an hour
Sign painting	2 or more hours
Gardening/lawn maintenance	Full shift
Painting/sandblasting with air hood and coveralls	2 or more hours
Walking, level ground, ~3 mph	2 or more hours
Operating a crane	Full shift
Laying brick	2 or more hours
Sorting scrap	2 or more hours
Welding/cutting	2 or more hours
Pulling fish screens	2 or more hours

III. Arduous

Task	Usual Time Spent
Asbestos abatement	Up to 2 hours
Hazardous spill response	Up to 1 hour
Carpentry, building structures	2 or more hours
Emptying trash cans	2 or more hours
Digging with hand tools	Up to an hour
Painting buildings/structures	2 or more hours
Lifting 40 pounds, chest/head high	15 minutes or more
Climbing ladder, without load, 36 ft./min.	15 minutes or more
Overhead cleaning/scraping	Up to 2 hours
Use of a sledgehammer, 12 cycles/min.	15 minutes or more
Chopping wood	Up to an hour
Use of a jackhammer	15 minutes or more
Mixing cement	15 minutes or more
Shoveling; ditch digging	Up to 2 hours
Tree planting	Up to 2 hours

Heat Stress - Personnel going from cool to hot climates will need to acclimate to the warmer environment – and as such they may be more susceptible to heat related illness and should be aware they will need to acclimate first.

Personnel exposed to extreme heat or work in hot environments may be at risk of heat stress.

- Exposure to extreme heat can result in occupational illnesses and injuries.
- Heat stress can result in heat stroke, heat exhaustion, heat cramps, or heat rashes.
- Heat can increase the risk of worker injuries as it may cause in sweaty palms, fogged-up safety glasses, and dizziness.
- Personnel at greater risk of heat stress include:
 - Those who are 65 years of age or older; are overweight; have heart disease or high blood pressure; or take medications that may be affected by extreme heat.
- Consult with the site safety and health officer to determine work/rest recommendations

Heat Stroke

Heat stroke is the most serious heat-related illness. It occurs when the body becomes unable to control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not given.

Symptoms - **Fatal** if treatment is delayed

Confusion, altered mental status, slurred speech	Seizures
Loss of consciousness (coma)	Very high body temperature
Hot, dry skin or profuse sweating	

First Aid - Take the following steps to treat someone with heat stroke:

- Call 911 for emergency medical care.
- Stay with worker until emergency medical services arrive.
- Move the worker to a shaded, cool area and remove outer clothing.
- Cool the worker quickly with a cold water or ice bath, if possible; wet the skin, place cold wet cloths on skin, or soak clothing with cool water.
- Circulate the air around the worker to speed cooling.
- Place cold wet cloths/ice on head, neck, armpits, & groin; soak clothing w/cool water.

Heat Exhaustion

Heat exhaustion is the body's response to an excessive loss of the water and salt, usually through excessive sweating. People most prone to heat exhaustion are those that are elderly, have high blood pressure, and those working in a hot environment.

Symptoms

Headache	Weakness	Confusion	Elevated body temperature
Nausea	Irritability	Vomiting	Decreased urine output
Dizziness	Thirst	Heavy sweating	

First Aid - Take the following steps to treat someone suffering from heat exhaustion:

- Take worker to the clinic or emergency room for medical evaluation and treatment.

- If on site or local medical care is unavailable, call 911.
- Stay with worker until help arrives.
- Remove worker from hot area and give liquids to drink.
- Remove unnecessary clothing, including shoes and socks.
- Use cold compresses to cool the worker; or cool head, face, & neck with cold water.
- Encourage frequent sips of cool water.

Rhabdomyolysis

Rhabdomyolysis is a medical condition associated with heat stress and prolonged physical exertion, resulting in the rapid breakdown, rupture, and death of muscle.

Symptoms

Muscle cramps/pain	Exercise intolerance
Abnormally dark (tea or cola colored) urine	Asymptomatic
Weakness	

First Aid: Take the following steps to treat someone with symptoms of rhabdomyolysis:

- Stop activity
- Increase oral hydration (water preferred).
- Seek immediate care at the nearest medical facility.
- Get checked for rhabdomyolysis (i.e., blood sample analyzed for creatine kinase).

Fainting

Heat fainting (i.e., heat syncope) is an episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position. Factors that may contribute to heat syncope include dehydration and lack of acclimatization.

Symptoms

Fainting (short duration)	Light-headedness (prolonged standing; suddenly rising from a sitting or lying position)
Dizziness	

First Aid: Take the following steps to treat a worker with symptoms from fainting:

- Sit or lie down in a cool place.
- Slowly drink water, clear juice, or a sports drink.

Heat Cramps

Heat cramps usually affect personnel who sweat a lot during strenuous activity. This sweating depletes the body's salt and moisture levels. Low salt levels in muscles causes painful cramps. Heat cramps may also be a symptom of heat exhaustion.

Symptoms

Muscle cramps, pain, or spasms in the abdomen, arms, or legs
--

First Aid: Personnel with heat cramps should:

- Drink water & have a snack and/or carbohydrate-electrolyte replacement liquid (e.g., sports drinks) every 15 - 20 minutes.
- Avoid salt tablets.

- Get medical help if the worker has heart problems, is on a low sodium diet, or if cramps do not subside within 1 hour.

Safe work practices - Heat stress control measures

Hydration

- People should drink an appropriate amount to stay hydrated.
- If in the heat <2 *hours* and involved in moderate work activities, drink 1 cup (8 oz.) of water every 15–20 minutes.
- During prolonged sweating lasting several hours, drink sports drinks containing balanced electrolytes.
- Avoid alcohol and drinks with high caffeine or sugar.
- Generally, fluid intake should not exceed 6 cups per hour.

Rest Breaks

- Personnel should take appropriate rest breaks to cool down and hydrate.
- Rest and take water breaks when you feel heat discomfort.
- Modify work/rest periods to give the body a chance to get rid of excess heat.
- Shorten work periods and increase rest periods:
 - As temperature, humidity, and sunshine increase.
 - When there is no air movement.
 - If protective clothing or equipment is worn.
 - For heavier work.

The recommendations below reflect estimates of lengths of time that may be spent working at the specified temperatures and the specified levels of exertion, for a healthy person who has no medical conditions that would be expected to place that individual at an increased risk of complications. Employees with certain medical conditions may be given a recommendation to limit their activity and heat stress to reduce the risk of problems. Please see the previous section for examples of work tasks that may fall within the levels of exertion used below.

It's important to remember when using the following information that humidity has a major impact on the ability of the body to cool itself. In periods of high humidity, or in work settings in which humidity cannot be lowered below approximately 60%, the length of time spent at given levels of exertion, or the level of exertion required, must be reduced to avoid potentially dangerous heat stress. This is particularly important for workers who have medical conditions that tend to reduce their ability to tolerate heat and exertion safely. Other important factors that affect safe working times include the amount of occlusive or protective clothing that is worn (e.g., Tyvek, rubber, or other chemical-protective clothing), air movement over and around the worker, and the availability of assistance from co-workers or mechanical devices to reduce the effort necessary to carry out the tasks. These factors may increase or decrease the amount of time that can be worked safely, depending on their presence or absence and the relative impact of each factor.

In general, the use of occlusive clothing (e.g., Tyvek, or heavy leathers, rubber suits) should lead to a further restriction by management of a person's activities. For example, someone otherwise cleared for heavy exertion generally should be limited to moderate exertion if using occlusive clothing under the various heat stress categories noted below. Similarly, if otherwise cleared for moderate exertion, an individual should be restricted to light exertion if using occlusive clothing.

Summary of Heat Stress Factors

I. Low Heat Stress

Temperatures up to 75°F

- + **Light and Moderate Exertion** for full shift or the usual period for the task
- + **Arduous Exertion** for up to one to two hours

II. Moderate Heat Stress

Temperatures of 75°F to 85°F

- + **Light Exertion** for full shift
- + **Moderate Exertion** for 3/4 of the full shift or the usual period for the task
- + **Arduous Exertion** for an hour or less

III. High Heat Stress

Temperatures of 86°F or more

- + **Light Exertion** for up to a full shift or the usual period for the task, with less time for temperatures above 96°F
- + **Moderate Exertion** for up to two hours, with less time for temperatures above 96°F
- + **Arduous Exertion** for less than an hour, and severely restricted for temperatures above 96°F

Further guidance for assisting employers manage workload in heat include the National Weather Service's heat index, which considers both humidity and temperature. The index can be found at: <http://www.nws.noaa.gov/os/heat/index.shtml>. Another useful tool is the wet-bulb globe temperature, which is a measure of the heat stress in direct sunlight which takes into account temperature, humidity, wind speed, sun angle, and cloud cover. The following link provides more technical information regarding measurement of wet bulb globe temperature, as well as more general information regarding heat exposure in the workplace: https://www.osha.gov/dts/osta/otm/otm_iii/otm_iii_4.html

Heat Related Illness - Heat related illness is a constant danger when workers perform intense exercise in the heat. Hyperthermia is characterized by an uncontrolled increase in body temperature that exceeds the body's ability to lose heat. When individuals with hyperthermia become symptomatic, the condition is known as heat related illness. Heat-related illness represents a wide spectrum of conditions typically ranging from skin rashes and heat cramps, to heat exhaustion, heat syncope, and heatstroke.³

- (i) **Risk Factors** - Age, weight, degree of physical fitness, degree of acclimatization, metabolism, use of alcohol or drugs, and a variety of medical conditions and medications all affect a person's sensitivity to heat. Other risk factors include a previous history of exertional heatstroke, sleep deprivation, sunburn, and recent illness. It is difficult to predict who will be affected and when, because individual susceptibility varies.⁴ The **most common** risk factors for all types of heat related illness include the following: 1) Strenuous exercise in

³ <http://www.cdc.gov/niosh/fire/pdfs/face200917.pdf>

⁴ https://www.osha.gov/dts/osta/otm/otm_iii/otm_iii_4.html#2

high ambient temperature and humidity; 2) Lack of acclimatization; 3) Poor physical fitness; 4) Obesity; 5) Dehydration.

- (ii) **Symptoms** - Symptoms of excessive heat exposure range from mild to severe. It is important to be vigilant regarding symptoms, as early signs of heat related illness such as heat cramps may lead to heat exhaustion or stroke.
- Heat rash symptoms include: clusters of red bumps on skin, often on neck, upper chest, folds of skin;
 - Heat cramp symptoms include: severe muscle cramps/spasms, typically in the calves, feet, or hands;
 - Heat exhaustion symptoms include: heavy sweating, excessive thirst, dizziness, weakness, nausea, headache, fatigue, anxiety and confusion; and
 - Heat stroke symptoms include: nausea, vomiting, dizziness, fatigue, hot, dry skin, decreased sweating, shortness of breath, confusion, delirium or loss of consciousness, and convulsions.⁵

For more mild symptoms, such as those associated with *heat rash* and *heat cramps*, the employee should rest in a shady cool area, drink water or other cool beverages, and wait a few hours before returning to strenuous work (or stop working in the heat).

If the employee's symptoms appear severe, or if the employee has symptoms of heat stroke, seek medical attention immediately (call 911), as heat stroke (the most severe manifestation of heat related illness) is a life-threatening medical emergency. An employee suspected of more severe heat related illness (such as heat exhaustion or heat stroke) should be moved to a cooler location. The employee should be lying down with clothing loosened (or removed), and cool, wet cloths or ice packs should be placed on the person's body. The employee should never be left unattended.

Ultimately, the focus for avoiding heat related illness lies in awareness, prevention, and education. All supervisors with employees whose occupations involve exposure to excessive heat should be educated on the signs and symptoms of heat illness, as early recognition and treatment can be life-saving. Environmental conditions should be measured regularly, and work/rest cycles should be adjusted accordingly. If possible, certain work should be scheduled to avoid the hottest part of the day. Employees should be provided adequate opportunities and encouragement to rest and rehydrate. In positions that involve excessive heat exposure, it is recommended that employees undergo a medical evaluation to identify those at increased risk for heat disorders due to preexisting medical conditions or use of medications.

Ultraviolet Light - Many DOI jobs require extensive periods out of doors, with the potential for significant exposure to sunlight. Because of the ultraviolet radiation in sunlight, this exposure poses the potential for complications, such as skin cancer, cataracts, immune suppression, and premature aging of the skin, unless appropriate protection is used on a regular and effective basis. The wavelengths of light considered here are referred to as UV-A (315-400 nm), UV-B (280-315 nm), and UV-C (below 280 nm), with UV-A and UV-B having the greatest health effects. While UV-C essentially is blocked by the atmospheric ozone layer, UV-A and UV-B can penetrate the ozone

⁵ <http://firstaid.webmd.com/understanding-heat-related-illness-symptoms>

layer and clouds, so protection is important even on cloudy days. UV-A is associated with both skin cancer and premature aging of the skin. UV-B also is associated with skin cancer, particularly the more serious form, melanoma. Comprehensive occupational sun protection includes: 1) wearing sunglasses that provide at least 99% UV-A and UV-B protection; 2) wearing a hat with a wide brim; 3) wearing tightly woven, loose-fitting clothing, including long sleeves and pants; 4) use of a sunscreen with a Sun Protection Factor (SPF) rating of at least 30, reapplying the sunscreen every two hours if the exposure continues; and 5) limiting exposure or being especially vigilant about the use of barrier methods during the middle of the day (i.e., 10 AM until 4 PM).

Ultraviolet light primarily is of concern due to its link with skin cancer, the most common type of cancer in the United States. About 40 to 50 percent of Americans who live to age 65 will be diagnosed with it, at least once. It is found in more than 2.2 million Americans each year and will kill over 9,000 people. And it is largely preventable.

Skin cancer is an abnormal overgrowth (a tumor) of certain types of skin cells in the epidermis that began as normal skin structures. A tumor can be either benign (generally localized and not life-threatening) or malignant (invasive or spreading, and may be deadly). Skin cancer is a malignant tumor, able to invade surrounding tissues and metastasize (or spread) to other parts of the body, but whether or not it is deadly depends on the type of skin cancer, and how or if it's treated.

Solar ultraviolet (UV) radiation is the main cause of skin cancer. Artificially-produced UV radiation, such as from sunlamps and tanning booths, can also cause skin cancer.

UVB rays are more likely than UVA rays to cause sunburn, but, UVA rays pass deeper into the skin. UVB radiation is thought to be the cause of melanoma and other types of skin cancer. UVA radiation may cause skin damage that can lead to skin cancer and cause premature aging of the skin. UV Exposure Varies by day, time of day, altitude, and weather.

People most at risk for skin cancer include those with light skin, hair, or eye color; a family history of skin cancer; a personal history of skin cancer; certain types and a large number of moles; freckles, which indicate sun sensitivity and sun damage; chronic exposure to the sun; a history of sunburns early in life; and certain medical conditions and medications.

Skin cancer is primarily prevented by avoiding overexposure to the ultraviolet rays in sunlight. This is important because ongoing, excessive UV light is harmful even for adults. Such exposure likely leads to more skin cancer, cataracts and other eye disorders, immune system suppression, plus other skin damage, such as actinic keratosis, thickening of the skin, wrinkles, atrophy (thinning skin), pigmented and non-pigmented spots, and sagging skin. In addition to cataracts, other eye disorders include pterygium (i.e., tissue growth that can block vision), other types of skin cancer around the eyes, and degeneration of the macula (the primary point of vision in the eye).

Avoidance of sun exposure involves wearing protective clothing (sun hats, long sleeves, long pants), applying and regularly renewing sunscreens (those with an SPF of 30 block most of the sun's harmful rays), using UVA- and UVB-blocking sunglasses, and watching the UV Index for the local area, to avoid the highest exposure times of the day (generally 10 am-4pm).

For further information, please see:

- National Cancer Institute (<http://www.cancer.gov/cancerinfo/wyntk/skin#3>)
- Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion (<http://www.cdc.gov/cancer/skin/>)
- Environmental Protection Agency (<http://www.epa.gov/sunwise/uvindexcontour.html>)

Exposure to Cold

Many DOI employees work in geographic locations, or under particular environmental conditions, that increase their risk of exposure to extremely cold temperatures. Those exposures may involve either dry or wet (damp) conditions, and with or without exposure to the additional cooling and drying effects of wind. These factors are combined in a tool prepared by OSHA:

Health Effects of Cold Exposure - There are **four** primary types of health effects of exposure to cold temperatures: *hypothermia*, *frostbite*, *trench foot*, and *chilblains*.

Trench Foot

Trench foot, also known as immersion foot, is an injury of the feet resulting from prolonged exposure to wet and cold conditions. Trench foot can occur at temperatures as high as 60 °F if the feet are constantly wet. Injury occurs because wet feet lose heat 25-times faster than dry feet. Therefore, to prevent heat loss, the body constricts blood vessels to shut down circulation in the feet. Skin tissue begins to die because of lack of oxygen and nutrients and due to the buildup of toxic products.

Symptoms

Reddening of the skin	Numbness	Bleeding under the skin
Leg cramps	Tingling pain	Gangrene (the foot may turn dark purple, blue, or gray)
Swelling	Blisters or ulcers	

First Aid: Personnel suffering from trench foot should:

- Remove shoes/boots and wet socks.
- Dry their feet.
- Avoid walking on feet, as this may cause tissue damage.

Chilblains

Chilblains are caused by the repeated exposure of skin to temperatures just above freezing to as high as 60 degrees F. The cold exposure causes damage to the capillary beds (groups of small blood vessels) in the skin. This damage is permanent and the redness and itching will return with additional exposure. The redness and itching typically occurs on cheeks, ears, fingers, and toes.

Symptoms

Redness	Possible blistering
Itching	Possible ulceration in severe cases
Inflammation	

First Aid: Personnel suffering from chilblains should:

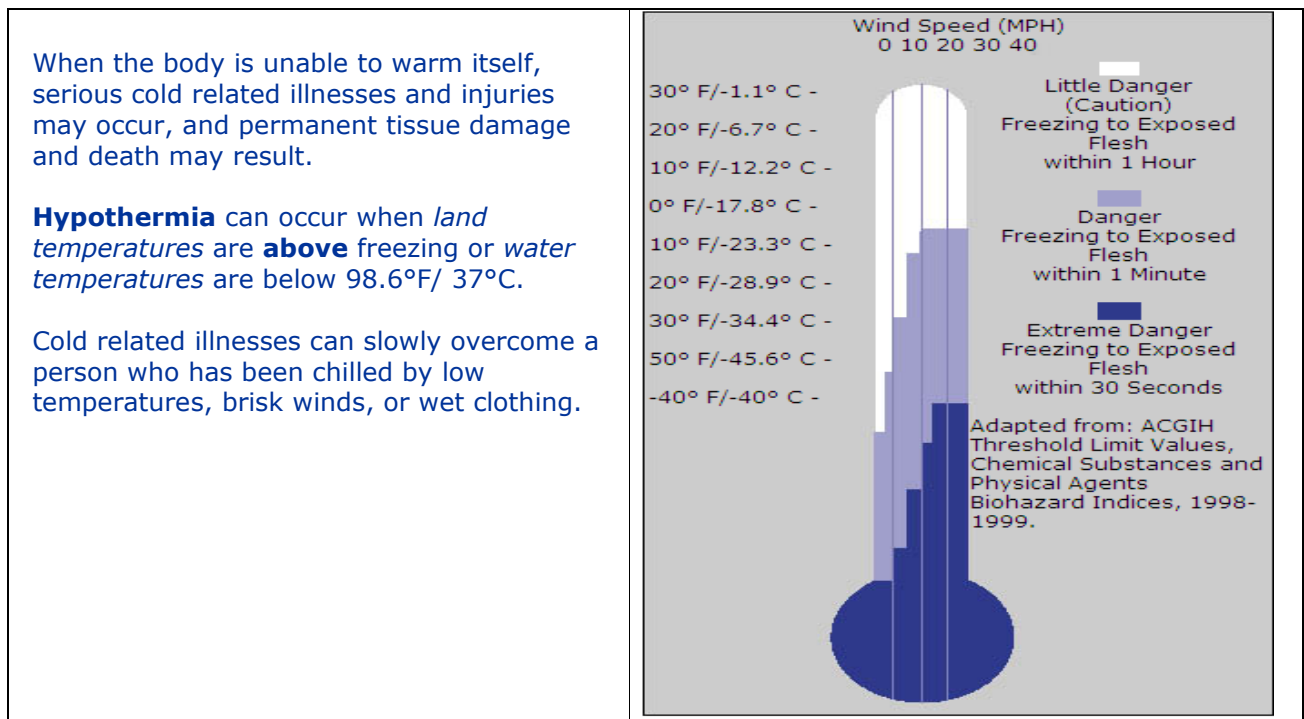
- Avoid scratching
- Slowly warm the skin
- Use corticosteroid creams to relieve itching and swelling
- Keep blisters and ulcers clean and covered

Exposure to Cold - The following information and summary of recommendations are drawn from the Centers for Disease Control and Prevention (CDC)'s and the Occupational Safety and Health Administration (OSHA)'s web sites, which are excellent resources that should be utilized for further information on this subject.^{6,7}

THE COLD STRESS EQUATION

U.S. Department of Labor
Occupational Safety and Health Administration
OSHA 3156
1998

LOW TEMPERATURE + WIND SPEED + WETNESS = INJURIES & ILLNESS



Cold Exposure Recommendations for Workers - Workers should avoid exposure to extremely cold or prolonged low temperatures when possible. When cold environments or temperatures cannot be avoided, workers should follow these recommendations to protect themselves from cold stress:

- Wear appropriate clothing;
- Wear several layers of loose clothing. Layering provides better insulation;
- Tight clothing reduces blood circulation. Warm blood needs to be circulated to the extremities;

⁶ <http://www.cdc.gov/niosh/topics/coldstress/>

⁷ <http://www.osha.gov/Publications/coldcard/coldcard.html>

- When choosing clothing, be aware that some clothing may restrict movement resulting in a hazardous situation.
- Make sure to protect the ears, face, hands and feet in extremely cold weather;
- Boots should be waterproof and insulated;
- Wear a hat; it will keep your whole body warmer (hats reduce the amount of body heat that escapes from your head);
- Move into warm locations during work breaks; limit the amount of time outside on extremely cold days;
- Carry cold weather gear, such as extra socks, gloves, hats, jacket, blankets, a change of clothes and a thermos of hot liquid;
- Include a thermometer and chemical hot packs in your first aid kit;
- Avoid touching cold metal surfaces with bare skin;
- Monitor your physical condition and that of your coworkers.

C. Biological Stressors

1. **Bloodborne Pathogens** - *Detailed information about bloodborne pathogen programs at individual DOI work locations is beyond the scope of this Handbook. The following information and summary of recommendations are drawn from the Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (NIOSH), as well as Occupational Safety & Health Administration (OSHA). This information can be found at:*

<http://www.cdc.gov/niosh/topics/bbp/>
<http://www.cdc.gov/niosh/docs/2009-111/pdfs/2009-111.pdf>
<https://www.osha.gov/SLTC/bloodbornepathogens/index.html>.

Exposures to blood and other body fluids occur across a wide variety of occupations. Health care workers, emergency response and public safety personnel, and other workers can be exposed to blood through needlestick and other sharps injuries, mucous membrane, and skin exposures.⁸ Infections microorganisms in blood can cause serious or life-threatening illnesses. Because of the potential risk, OSHA developed a bloodborne pathogens standard to protect workers who can be reasonably anticipated to come into contact with blood or other potentially infectious materials as a result of doing their job duties.

What are bloodborne pathogens?

Bloodborne pathogens are infectious microorganisms in human blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV). Needlesticks and other sharps-related injuries may expose workers to bloodborne pathogens.

What can be done to control exposure to bloodborne pathogens?

OSHA's bloodborne pathogens standard can be found at 29 CFR 1910.1030. The standard's requirements state what employers must do to protect workers who are occupationally exposed to blood or other potentially infectious materials. In order to reduce or eliminate the hazards of occupational exposure to bloodborne pathogens, an employer must implement an exposure control

⁸ <http://www.cdc.gov/niosh/topics/bbp/>

plan for the worksite with details on employee protection measures. The plan must also describe how an employer will use a combination of engineering and work practice controls, ensure the use of personal protective clothing and equipment, provide training, medical surveillance, hepatitis B vaccinations, and signs and labels, among other provisions.⁹

- 2. Vaccine-Preventable Diseases** - DOI employees may on occasion find themselves exposed to vaccine-preventable diseases as a result of their official duties. Recommendations on some of the vaccine-preventable diseases that DOI employees may be exposed to as a result of their work are based on CDC's current Recommended Adult Immunization Schedule, and are generic in nature. A detailed discussion of recommended adult immunizations is beyond the scope of this handbook. More detailed, site-specific recommendations can be provided on request from the AMO or DOI MO or may be obtained from local health department or public health service officials.

Websites that are particularly valuable on this subject include:

<http://www.cdc.gov/vaccines/schedules/index.html>

<https://wwwnc.cdc.gov/travel/destinations/list> (specific information on travel vaccine requirements)

Tetanus

- All employees at risk of field-work-related cuts, scrapes, or other open injuries, or those exposed to potentially contaminated or unsanitary water, such as those personnel working in outdoor water or wildlife research, should be up to date in their vaccination status for *Tetanus*. This requires an injection every 10 years with a combination tetanus/diphtheria vaccine, and, at least once, with a tetanus/diphtheria/acellular pertussis vaccine, for adequate protection.

Hepatitis A

- *Hepatitis A* vaccination is recommended for the following employees: 1) travelers to developing countries or other areas of known high or intermediate endemicity of hepatitis A; 2) men who have sex with men; 3) injection drug users; 4) persons who work with HAV-infected non-human primates or work with HAV in the laboratory; and 5) those who have chronic liver disease or receive clotting factors concentrates. Hepatitis A has not been recognized as a significant occupational hazard in other settings where known outbreaks are not taking place.

Cholera, Yellow Fever, Typhoid

- Vaccination for *Cholera, Yellow Fever, Typhoid*, and other more "exotic" diseases is not necessary in this country at this time, but could be if personnel are traveling to endemic areas elsewhere in the world, or may be exposed to these diseases as a result of research or laboratory work with the infectious agents.

Influenza

- *Influenza* vaccination is recommended annually for all people age 6 months and older.

⁹ <https://www.osha.gov/SLTC/bloodbornepathogens/index.html>

3. Other Biological Stressors

A. Tuberculosis

- *Tuberculosis* - A full discussion of this topic is beyond the scope of the *Handbook*. A general discussion of the prevention of transmission of tuberculosis may be found below.

Over the course of history, tuberculosis (TB) has been one of the world's leading causes of morbidity and mortality. Fortunately, the number of cases in the United States has declined since 1993, largely due to increased funding and increased attention to tuberculosis. But TB continues to be a problem, as multidrug resistant TB has been an on-going issue, and there remains a higher burden of TB among certain racial and ethnic minorities.

For most DOI employees, the risk of exposure to co-workers or members of the public who have tuberculosis and are contagious is quite small. For some employees, however, tuberculosis is a disease prevalent among the population they serve or with whom they have regular contact. As covered in "*Questions and Answers about TB;*" and "*Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005*" on the Centers for Disease Control and Prevention website (links provided above), the bacterium responsible for tuberculosis is carried in airborne droplets generated when persons with active tuberculosis sneeze, cough, speak, or otherwise forcefully expel air from their airways. TB is not spread by casual contact such as shaking someone's hand and sharing food or drink.

Environmentally, the risk of transmission from one person to another is increased by:

- (a) Exposure in relatively small, enclosed spaces;
- (b) Inadequate local or general ventilation, such that contaminated air is insufficiently diluted or droplets are not removed from the circulating air;
- (c) Recirculation of air that contains infectious droplets.

The risk of becoming infected is related to the concentration of infectious droplets in the inhaled air, and the duration of exposure to that air. When the droplets are inhaled by a susceptible person, infection may occur. Being infected with tuberculosis bacteria (*Mycobacterium tuberculosis*) does not mean the person has active disease. A positive tuberculosis screening test requires additional medical attention and may require treatment (medications).

While antibiotic treatment continues to be effective for most cases, prevention of infection and consequent disease is the primary goal of public health efforts directed at tuberculosis. Users of this *Handbook* are encouraged to refer to the *Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Facilities, 2005*, cited above. Although written for health care facilities, the document provides valuable and pertinent guidance that applies to other settings in which the risk of exposure to droplets containing *M. tuberculosis* is thought to be elevated. As presented in the *Guidelines* and modified here for other than just health care facilities:

"Specific measures to reduce the risk for transmission of *M. tuberculosis* include the following:

- Conducting a risk assessment to evaluate the risk for transmission of *M. tuberculosis* in all areas of the [program], developing a written TB infection-control program based on the risk

assessment, and periodically repeating the risk assessment to evaluate the effectiveness of the TB infection-control program.

- Developing, implementing, and enforcing policies and protocols to ensure early identification, diagnostic evaluation, and effective treatment of [employees] who may have infectious TB.
- Developing, implementing, maintaining, and evaluating a respiratory protection program.
- Educating and training [employees] about TB, effective methods for preventing transmission of *M. tuberculosis*, and the benefits of medical screening programs.
- Developing and implementing a program for routine periodic counseling and screening of [employees] for active TB and latent TB infection.
- Promptly evaluating possible episodes of *M. tuberculosis* transmission in [program facilities], including PPD skin-test conversions among [employees], epidemiologically associated cases among [employees or the public served]; and contacts of [the public served or employees] who have TB and who were not promptly identified and isolated.
- Coordinating activities with the local public health department, emphasizing reporting, and ensuring adequate ... follow-up and the continuation and completion of therapy.”

Probably the most important step in the area of tuberculosis prevention and control for DOI programs and offices is to conduct a risk assessment. If there is any suspicion that exposure to tuberculosis is a realistic potential for employees, a risk assessment should be conducted by persons knowledgeable in this activity. If resources are not available locally for determining the need for a risk assessment or carrying out such an assessment, the local health department or the DOI Office of OSH may be contacted for guidance and further information.

The Centers for Disease Control and Prevention website on tuberculosis can be found at:

<http://www.cdc.gov/TB/topic/basics/default.htm>
http://www.cdc.gov/tb/publications/faqs/qa_introduction.htm#Intro1

B. Rabies - Rabies is a preventable viral disease most often transmitted to mammals through the bite of a rabid animal. The following provides background information and current recommendations on Rabies for DOI employees who may be exposed to vectors of the disease as a result of their work.

It is the intent of the Department of the Interior that all DOI employees be protected from rabies virus exposure, infection, or disease. Within each operating division, an assessment should be made of the likelihood of exposure for individuals or groups of employees to animals or conditions in which rabies virus might be transmitted. Appropriate action should be taken or offered to affected employees.

Wild (92%) and domestic (8%) animals are the primary sources of rabies in the United States. The most frequently reported rabid wildlife species are raccoons, skunks, bats, foxes, and other wild animals including rodents. Cats, dogs, and cattle are the most common domestic animals affected.

Humans are at risk when exposed to rabid animals, primarily by bites or scratches, but aerosols (in bat caves) or medical procedures (such as corneal transplants) may be sources of infection. The

number of rabies-related human deaths in the U.S. has declined from more than 100 annually in the early 1900s to one or two per year in current times. Modern day prophylaxis has proven nearly 100% successful. In the U.S., human fatalities associated with rabies occur in people who fail to seek medical assistance, usually because they were unaware of their exposure. High risk jobs (involving “Continuous” potential exposure) include rabies research lab workers, and rabies biologic production workers. High-medium risk jobs (“Frequent” potential exposure) include rabies diagnostic lab workers, spelunkers (cave explorers), veterinarians and staff, and animal control or wildlife workers in high rabies risk areas. Medium-low risk (“Infrequent” potential exposure) jobs include veterinarians and staff, and animal control or wildlife workers in low rabies risk areas, as well as travelers to high risk areas where access to medical care is limited. Low risk jobs (“Rare” potential exposure) include the general US population.

Prevention of rabies first involves avoidance of exposure to potential vectors. If a possible exposure occurs, an assessment of the risk of infection must be conducted to determine treatment. Local public health officials should be contacted.

Detailed information on rabies may be found at: <https://www.cdc.gov/rabies/>

C. Hantavirus - It is the intent of the Department of the Interior that all DOI employees be protected from exposure, infection, or disease due to a hantavirus. Within each operating division, an assessment should be made of the likelihood of exposure for individuals or groups of employees to conditions in which hantavirus infection may occur. Appropriate action, as indicated in the following discussion, should be taken or offered to effected employees.

The primary hantavirus disease in the United States is hantavirus pulmonary syndrome (HPS), which is caused by a hantavirus called the Sin Nombre Virus (SNV). Several other types of hantavirus are known from around the world, and most cause a syndrome of hemorrhagic fever and kidney disease that generally are not found in the U.S. The SNV was first recognized in the United States in 1993 following a cluster of deaths in the southwest. As a result of the investigation of this cluster, other hantaviruses have been identified, but most cases of HPS have been due to the SNV. A total of more than 624 cases have been reported through 2013, and 38% of cases have been fatal. Cases have been reported in 34 states. Most cases have been in the southwest, west, and northwest states.

Hantavirus generally is transmitted through aerosols of mouse urine or feces. It also may be transmitted by bites, or ingestion of food contaminated with mouse urine, feces, or saliva. The animal most commonly responsible for transmission of hantavirus in the southwestern U.S. is the deer mouse (*Peromyscus maniculatus*), the cotton rat (*Sigmodon hispidus*), the rice rat (*Oryzomys palustris*), and in the Northeast, the white-footed mouse.

The incubation period after exposure may vary from about one to five weeks after exposure to fresh urine, droppings, or saliva of infected rodents. The clinical disease starts with non-specific symptoms, including fever, muscle aches, headache, and chills, which may last for up to a week. Gastrointestinal symptoms also are frequently present, including nausea, vomiting, diarrhea, and abdominal pain. Four to ten days after the initial phase of the illness, the late symptoms appear, including coughing and shortness of breath. Employees developing these symptoms should be encouraged to seek medical attention. Treatment of the disease is supportive, and usually requires

hospitalization and intensive care. Approximately 38% of individuals who develop HPS die of the disease. Because there are no specific treatments or vaccines for hantavirus infection, prevention is critical.

Anyone who comes into contact with rodents that carry hantavirus is at risk of HPS. Humans are at most risk when doing things that stir up or put them in contact with mouse droppings and waste. These activities include such things as cleaning or maintaining cabins, barns, or other buildings that have been infested with deer mice. Because the disease may be transmitted by aerosols, any activity that stirs up dust in buildings with mouse infestations may present a risk of infection.

Preventing exposure begins with taking steps to avoid infestation with mice, both inside and out. Elimination of food, nesting material, and nesting sites for mice in buildings or other structures used by humans is necessary. In settings where mouse infestation is apparent, avoiding aerosols by thoroughly wetting the area with detergent or a hypochlorite solution is effective because the hantavirus is surrounded by a lipid (fatty) coat that makes it susceptible to these agents. Mopping or sponging, while wearing latex or other barrier gloves, should be used to remove contaminated materials. Rodents should be prevented from entering buildings by sealing cracks in foundations and closing gaps in walls with concrete or metal barriers. Removal of rodents may necessitate the assistance of a pest control service.

An excellent website for specific guidance and further information on hantavirus may be found at: <https://www.cdc.gov/hantavirus/hps/index.html>

D. Mosquito Borne Diseases

Individuals who work outdoors are at a higher risk of being bitten by mosquitos. Most individuals who have been bitten by a mosquito may not display any symptoms, while others may have a mild illness that lasts for a couple days. Although rare, severe cases of mosquito-borne diseases can cause long-term illness.

Mosquito-borne diseases are spread by the bite of an infected mosquito. Such diseases include Zika virus, West Nile virus, Chikungunya virus, dengue and malaria. The risk of each type of disease depends on the species of mosquito, geographic location, season, time of day, and local habitat.

The best way to avoid all mosquito-borne disease is to prevent mosquito bites. Mosquitos breed in standing water; thus to reduce risk of mosquito bites, employers should remove standing water and debris from ditches, and remove water from buckets and other containers that may retain water. Employees should be encouraged to wear protective clothing such as long-sleeved shirt and long pants, and use and EPA- registered insect repellents on exposed skin and clothing. Employers should also keep mosquitos from entering indoor worksites by ensuring that doors and windows have screens and are kept closed when possible. Employers can also protect employees by providing training about the risk of exposure to mosquitos, measures that can be taken to prevent mosquito bites, and symptoms of diseases that can be spread by mosquitos.

If an employee exhibits any symptoms of a mosquito-borne disease, symptoms should be reported immediately to their supervisor, and medical attention should be sought. Employees should drink fluids to prevent dehydration, and get plenty of rest.

Zika

Zika virus is spread primarily from the bite of an *Aedes* species mosquito. These mosquitoes are most active during the day. Outdoor workers, and laboratory and health care workers are at a risk of being infected with Zika virus. This virus has been reported in Florida (Miami), Puerto Rico, the U.S. Virgin Islands, American Samoa and multiple countries. Most people with Zika do not become ill and may not realize they have been infected. If symptoms do occur, the most common symptoms may include fever, rash, joint pain and red eyes. People usually do not get sick enough to go to the hospital.

West Nile

West Nile virus is spread by mosquitoes who become infected by feeding on infected birds. This virus has been reported in 47 US states and the District of Columbia. Most individuals who become infected with the West Nile virus are asymptomatic. About 1 in 5 people who are infected will develop a fever and mild symptoms such as body aches, headache, joint pains, vomiting, diarrhea and rash. Less than 1% of those infected develop a serious illness.

Chikungunya

Chikungunya virus is spread by the same mosquitos that transmit the Zika virus and dengue. Cases of this virus have been transmitted in Florida, Puerto Rico, and the US Virgin Islands. The most common symptoms for this virus are fever, joint pain, headache, muscle ache, joint swelling, or rash.

Dengue

Dengue is a leading cause of illness and death in the tropics and subtropics to include Latin America, Southeast Asia, the Pacific Islands, and the Caribbean. It rarely occurs within the continental United States; however, cases have been reported among US travelers returning from affected areas. In addition to the common clinical manifestations of mosquito-borne diseases, the dengue virus may cause mild bleeding and easy bruising.

Malaria

Malaria is the only mosquito-borne disease caused by a parasite. Most cases of this disease within the United States occur in travelers and immigrants returning from sub-Saharan Africa and South Asia where the transmission of malaria is quite prevalent. Clinical manifestations of malaria include high fevers, shaking chills and flu-like illness. Although malaria can be a deadly disease, illness and death from malaria can usually be prevented.

For further information on mosquito borne diseases, refer to <https://www.cdc.gov/niosh/topics/outdoor/mosquito-borne/default.htm>

EPA Mosquito Control Program
<https://www.epa.gov/mosquitocontrol>

E. Lyme Disease

Lyme disease is diagnosed in approximately 20,000 people per year, mostly in the summer months when outdoor work and recreational activities are more common. Preventing Lyme Disease is possible through mechanical, chemical, and administrative (scheduling) measures that the employee can use. Unfortunately, the vaccine that had been available for Lyme disease prevention was taken off the market in 2002. Because the effectiveness of the vaccine wanes over time, individuals who were vaccinated previously should not consider themselves now to have sufficient immunity for protection.

Lyme disease is spread through the bite of infected ticks. The disease is caused by *Borrelia burgdorferi*, a spirochete bacteria that was first identified in 1982. The bacteria may be found in several species of small ticks, including *Ixodes dammini*, *I. pacificus*, *I. ricinus*, and *I. persulcatus*. The preferred host for most infected ticks is one of several species of animals, particularly rodents and deer. Humans may become infected when bitten by an infected tick, though the risk of infection usually is low and treatment for Lyme disease at the time of a tick bite generally is not indicated (see the following sections for further information regarding treatment). The risk of contracting Lyme disease is increased when individuals live or work in areas prone to tick infestation, especially when engaged in activities involving exposure to woods, brush, or tall grass.

Lyme disease is most common in the northeast and the Midwest states, with 95% of all U.S. cases from the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, Minnesota, New Jersey, New Hampshire, New York, Pennsylvania, Vermont, Virginia, and Wisconsin. However, the disease has been found in at least 47 states. Each year, approximately 30,000 cases of Lyme disease are reported to CDC by state health departments, mostly in the summer months when outdoor work and recreation activities are more common.

To determine whether or not you or your employees work in a high-risk area, contact your State Health Department to determine the number of confirmed cases in your area. Additional information can be obtained from the Centers for Disease Control and Prevention (CDC) (www.cdc.gov) or from your local, regional, and national bureau safety officers.

Symptoms - A common symptom of Lyme disease is the appearance of a characteristic rash, called erythema migrans. This target or bulls-eye shaped rash most commonly appears 7 to 14 days after the bite of an infected tick, but may appear as soon as 3 or as long as 30 days or more after a bite. It generally appears initially at the site of the bite, and then spreads out from there. Headache, fever, mild neck stiffness, and muscle aches and pains may follow the onset of the rash. Medical evaluation should be sought if these conditions occur, or if an employee has concern after a known tick bite. If an infection is diagnosed, prompt antibiotic treatment is important to avoid potentially-

significant further complications of the infection.

Prevention - Prevention of tick bites should be attempted through such measures as avoiding known areas of tick infestation or, when this is not practical, the use of personal barriers and repellants. Wearing long pants (tucked in to socks or boots) and long sleeve shirts helps limit tick access to the skin; and some clothing (boots, socks, pants) can be pre-treated with permethrin. Use repellants that contain 20-30% N,N-Diethyl-m-toluamide [DEET¹⁰] on exposed skin.

Careful examination of all areas of the skin (including exposed areas as well as those covered by clothing) should be carried out every 3 to 4 hours while in tick infested areas to detect and remove ticks. The small size of some tick species (some as small as the period at the end of this sentence) requires that such examinations be carried out carefully and completely. Ticks that have become embedded should be removed using fine-tipped tweezers (do not use petroleum jelly, a match, nail polish, or other methods). Ticks should be grasped firmly and as closely to the skin as possible, then pulled away from the skin with a steady, smooth motion.

****A Lyme disease vaccine is no longer available. The vaccine manufacturer discontinued production in 2002, citing insufficient consumer demand. Protection provided by this vaccine diminishes over time. Therefore, if you received the Lyme disease vaccine before 2002, you are probably no longer protected against Lyme disease.*

Testing - According to the Centers for Disease Control, the *“diagnosis of Lyme disease is based primarily on clinical findings, and it is often appropriate to treat patients with early disease solely on the basis of objective signs and a known exposure. Serologic testing may, however, provide valuable supportive diagnostic information in patients with endemic exposure and objective clinical findings that suggest later stage disseminated Lyme disease. When serologic testing is indicated, CDC recommends testing initially with a sensitive first test, either an enzyme-linked immunosorbent assay (ELISA) or an indirect fluorescent antibody (IFA) test, followed by testing with the more specific Western immunoblot (WB) test to corroborate equivocal or positive results obtained with the first test.”* The tests must be interpreted with caution. False negative tests may be due to the frequently slow rise in the antibody titers following infection, and positive tests may reflect prior Lyme disease that is unrelated to current symptoms that may be due to other infectious agents. If a screening program is being considered, consultation should be sought first with local health authorities, infectious disease specialists, or occupational health physicians.

Vaccination - As previously noted, the only available vaccine to prevent Lyme disease (LYMERixTM) was taken off the market and is no longer available. Even when it was in use, however, the vaccine was not considered sufficient to prevent infection in all cases, and the use of basic preventive measures (see above paragraph) was strongly recommended despite vaccination status.

Additional information can be found at: <http://www.cdc.gov/lyme/>

¹⁰ According to studies sponsored by the Missoula Technology and Development Center (MTDC) and carried out by the Underwriters Laboratories, DEET may cause a reduction in the flame resistance of Nomex clothing under certain circumstances, and must be used with caution where the fire resistance efficacy of Nomex clothing is important. Anderson, Leslie, and Petrilli, Tony, “DEET Mosquito Repellent Reduces the Flame Resistance of Firefighters’ Nomex Clothing,” Fire Tech Tips, MTDC, July 2005.

F. Poisonous Plants - Poisonous plants represent one of the hazards that may be encountered by Department employees as they carry out the field work common to many positions. The three most common poisonous plants to which employees may become exposed include poison ivy, poison oak and poison sumac. Because all of these plants contain the potent antigen urushiol, they are a common cause of allergic contact dermatitis and from 60% to 80% of people who are exposed to the antigen will become sensitized to it. It is a volatile oil that may contaminate other objects, such as fur, clothing, shoes, or tools, from which it may be transferred to exposed skin. The common response is for a sensitized person who has been exposed to the antigen to develop a rash with blisters a day to a day and a half later. Because exposure may result in urushiol binding to skin proteins within about 15 minutes of first contact, this window of time provides an opportunity to remove the antigen by washing with soap and water before the binding and the resulting reaction occur. Once fixed to skin proteins, the antigen cannot be washed off and it will not cross contaminate other objects or areas of skin.

Preventing exposure is strongly recommended, as is proper clean up of tools and organic debris from plant cutting or removal activities.

6.4 Driving for Work Purposes

- Where a Commercial Driver's License (CDL) is **not** required:

Many DOI employees are in positions which require them to drive government vehicles to carry out their duties. As representatives of the federal government, and in the interest of the public safety, these drivers are expected to be able to drive safely and to carry out their duties with a minimum of risk to themselves and to others. Thus, the provisions of the Department of Transportation (DOT) regarding medical standards for a Commercial Driver's License may be used at agency discretion in clearing employees to drive non-commercial vehicles (i.e., vehicles used on public roads, but which are not governed otherwise by the DOT regulatory provisions for a CDL).

- Where a CDL **is** required: DOT Vehicle Operators (Medical Clearance for Commercial Driver's License)

The Department of Transportation has established regulations (49 CFR 391.41 (b)(1) through (b)(13)) governing the medical examination requirements for individuals who need a Commercial Driver's License to operate trucks, buses, or other heavy equipment on public highways. In order to drive such a vehicle, a driver must: 1) have the technical skills to operate the equipment (this subject is not covered further in this Handbook); 2) meet the requirements of the physical examination; and 3) comply with drug and alcohol testing requirements. Drug and alcohol testing is covered in Chapter 5 (Special Emphasis Program Guides).

- The physical examination form can be accessed at:

<https://www.fmcsa.dot.gov/medical/driver-medical-requirements/dot-medical-exam-and-commercial-motor-vehicle-certification>

- The physical examination requirements are presented below:

“As specified in [49 CFR 391.41](#):

- A person shall not drive a commercial motor vehicle unless he/she is medically certified as physically qualified to do so and, except as provided in paragraph (a)(2) of this section, when on duty has on his/her person the original, or a photographic copy, of a medical examiner's certificate that he/she is physically qualified to drive a commercial motor vehicle.

- A person is physically qualified to drive a commercial motor vehicle if that person—

(1) Has no loss of a foot, a leg, a hand, or an arm, or has been granted a skill performance evaluation certificate pursuant to § 391.49;

(2) Has no impairment of:

(i) A hand or finger which interferes with prehension or power grasping; or

(ii) An arm, foot, or leg which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or any other significant limb defect or limitation which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or has been granted a skill performance evaluation certificate pursuant to § 391.49.

(3) Has no established medical history or clinical diagnosis of diabetes mellitus currently requiring insulin for control;

(4) Has no current clinical diagnosis of myocardial infarction, angina pectoris, coronary insufficiency, thrombosis, or any other cardiovascular disease of a variety known to be accompanied by syncope, dyspnea, collapse, or congestive cardiac failure.

(5) Has no established medical history or clinical diagnosis of a respiratory dysfunction likely to interfere with his/her ability to control and drive a commercial motor vehicle safely;

(6) Has no current clinical diagnosis of high blood pressure likely to interfere with his/her ability to operate a commercial motor vehicle safely;

(7) Has no established medical history or clinical diagnosis of rheumatic, arthritic, orthopedic, muscular, neuromuscular, or vascular disease which interferes with his/her ability to control and operate a commercial motor vehicle safely;

(8) Has no established medical history or clinical diagnosis of epilepsy or any other condition which is likely to cause loss of consciousness or any loss of ability to control a commercial motor vehicle;

(9) Has no mental, nervous, organic, or functional disease or psychiatric disorder likely to interfere with his/her ability to drive a commercial motor vehicle safely;

(10) Has distant visual acuity of at least 20/40 (Snellen) in each eye without corrective lenses or visual acuity separately corrected to 20/40 (Snellen) or better with corrective lenses, distant binocular acuity of at least 20/40 (Snellen) in both eyes with or without corrective lenses, field of vision of at least 70° in the horizontal Meridian in each eye, and the ability to recognize the colors of traffic signals and devices showing standard red, green, and amber;

(11) First perceives a forced whispered voice in the better ear at not less than 5 feet with or without the use of a hearing aid or, if tested by use of an audiometric device, does not have an average hearing loss in the better ear greater than 40 decibels at 500 Hz, 1,000 Hz, and 2,000 Hz with or without a hearing aid when the audiometric device is calibrated to American National Standard (formerly ASA Standard) Z24.5 - 1951.

(12)

(i) Does not use any drug or substance identified in 21 CFR 1308.11 Schedule I, an amphetamine, a narcotic, or other habit-forming drug.

(ii) Does not use any non-Schedule I drug or substance that is identified in the other Schedules in 21 CFR part 1308 except when the use is prescribed by a licensed medical practitioner, as defined in § 382.107, who is familiar with the driver's medical history and has advised the driver that the substance will not adversely affect the driver's ability to safely operate a commercial motor vehicle.

(13) Has no current clinical diagnosis of alcoholism.”

For further information, the reader may contact the AMO, the DOI MO, or the Department of Transportation.

6.5 Automatic External Defibrillators

With the advent of lightweight portable automatic external defibrillating machines, there has been an increased interest in this technology to help prevent deaths due to cardiac arrest. The information below provides further information on cardiac arrest and the possible role of automatic external defibrillators in DOI work settings.

“Sudden cardiac arrest (SCA) is a condition in which the heart suddenly and unexpectedly stops beating. If this happens, blood stops flowing to the brain and other vital organs. SCA usually causes death if it is not treated within minutes.”¹¹

Cardiac arrest occurs when the heart’s electrical system malfunctions. This can be caused by abnormal, or irregular, heart rhythms called arrhythmias. The most common cause of sudden cardiac arrest is due to cardiovascular disease—such as coronary heart disease, cardiomyopathy, valvular heart disease, electrical abnormalities, blood vessel abnormalities, and congenital heart disease. Non-cardiac causes include trauma to the chest, infections, nutritional imbalances, and recreational drug use.

Cardiovascular disease is the most common cause of death in the U.S; and more than one third of all cardiovascular disease deaths are due to sudden cardiac arrest. Sudden cardiac arrest claims more than 1,000 lives per day, or one person every 90 seconds. Clearly, this is a major public health issue for Americans.

Unfortunately, approximately 92% of those who experience sudden cardiac arrest do not survive. This is because most of the SCA events occur outside of the hospital and victims do not receive immediate care that could be lifesaving.

This immediate care is referred to by the American Heart Association (AHA) as the “chain of

¹¹ <http://www.nhlbi.nih.gov/health/health-topics/topics/scda/>

survival.” The chain of survival is a series of integrated (linked) steps following cardiac arrest that can improve survival rates for cardiac arrest victims. According to the AHA, “Emergency systems that can effectively implement these links can achieve witnessed ventricular fibrillation cardiac arrest survival of almost 50%.”¹² The links in the chain include:

- Immediate recognition of cardiac arrest and activation of the emergency response system;
- Early CPR (cardiopulmonary resuscitation) with an emphasis on chest compressions;
- Rapid defibrillation with an automated external defibrillator (AED);
- Effective advanced life support;
- Integrated post-cardiac arrest care.¹³

While the last two links occur in a hospital setting, and are thus not applicable to the *Handbook*, the first three links are critical for improving sudden cardiac arrest survival, and often require action by a medically-untrained bystander.

Recognizing the need for the public to assist with responding to sudden cardiac arrest, CPR/AED programs have been implemented in public settings and in the workplace that focus on the first steps of the chain of survival. Recognition that cardiac arrest has occurred is based on unresponsiveness of the victim and lack of normal breathing. After recognition, the rescuer should immediately activate the emergency response system, get an AED/defibrillator (if available)—or have someone else get one, and start CPR with chest compressions. The goal of such a program is to shorten the time from the onset of sudden cardiac arrest until CPR is started and the AED is applied. Survival rates are best when defibrillation occurs within 3-5 minutes of collapse.

As noted, death is almost certain unless appropriate intervention is provided, including, automatic external defibrillation, or AED. AED devices were first developed in the 1980s, and became available in the early 1990s for out-of-hospital use. When connected to a victim’s chest, the device senses the heart’s electrical activity and, if fibrillation is present, provides a shock to the heart at the correct time in the electrical cycle. These devices are portable, light weight, and simple to use, and cost about \$1,500 for each machine. AED devices in the workplace require a prescription to purchase and use them, and medical oversight is required for DOI agencies that provide AED services.

DOI managers are encouraged to carefully consider the relative value and need for AED before setting up a program for their employees or for the public that may be served by the agency. AED programs are ONLY permitted as part of a complete “chain of survival” program. This includes designation and training of sufficient staff to provide initial management of cardiac arrest cases, including initial first aid/CPR as well as using the AED device. Furthermore, formal medical oversight and equipment maintenance programs are essential.

Factors to consider include:

¹² http://circ.ahajournals.org/content/122/18_suppl_3/S676.full

¹³ http://circ.ahajournals.org/content/122/18_suppl_3/S676.full

Risks (Of Cardiac Arrest) and Available Services, Including:

- Location (remote; city; traffic patterns; near EMS; services not available);
- Activities (office; power plant);
- Population (elderly; young; many; few; general public; only federal workers);
- Previous work force experience and employee expectations.

Implementation Factors, Including:

- Local state laws on emergency medical care;
- Initial costs;
- Administration factors (medical oversight, maintenance/security of device, assigned personnel);
- Training (initial and on-going) for first responders, program administrators, medical personnel.

For more information, or further assistance, contact the DOI Office of OSH.

References

Occupational Safety and Health Administration (OSHA), Automated External Defibrillators (AEDs): <https://www.osha.gov/SLTC/aed/>

American Heart Association, Cardiopulmonary Resuscitation (CPR) Statistics:
<http://www.americanheart.org>

Centers for Disease Control and Prevention, National Center for Health Statistics:
<http://www.cdc.gov/nchs>

6.6 First Aid Kits

First aid supplies are required to be readily available under paragraph § 1910.151(b). An example of the minimal contents of a generic first aid kit is described in American National Standard (ANSI) Z308.1-1978 “Minimum Requirements for Industrial Unit-Type First-aid Kits.” The contents of the kit listed in the ANSI standard should be adequate for small worksites. When larger operations or multiple operations are being conducted at the same location, employers should determine the need for additional first aid kits at the worksite, additional types of first aid equipment and supplies and additional quantities and types of supplies and equipment in the first aid kits.

In a similar fashion, employers who have unique or changing first-aid needs in their workplace may need to enhance their first-aid kits. The employer can use the OSHA 200 log, OSHA 101s or other reports to identify these unique problems. Consultation from the local fire/rescue department, appropriate medical professionals, or local emergency departments may be helpful to employers in these circumstances. By assessing the specific needs of the workplace, employers can ensure that

reasonably anticipated supplies are available. Employers should assess the specific needs of their worksite periodically and augment the first aid kit(s) appropriately.

If it is reasonably anticipated that employees will be exposed to blood or other potentially infectious materials while using first aid supplies, employers are required to provide appropriate personal protective equipment (PPE) in compliance with the provisions of the **Occupational Exposure to Blood borne Pathogens** standard, § 1910.1030(d)(3) (56 FR 64175). This standard lists appropriate PPE for this type of exposure, such as gloves, gowns, face shields, masks, and eye protection.

In areas where there is a higher than normal risk for accidents that may result in suffocation, severe bleeding, or other life threatening or permanently disabling injury or illness, a response time of no more than 3 to 4 minutes, from time of injury to time of administering first aid, is required. In other circumstances, i.e., where a life-threatening or permanently disabling injury is an unlikely outcome of an accident, a longer response time such as 15 minutes may be acceptable.

Where first aid treatment cannot be administered to injured employees by outside professionals within the required response time for the expected types of injuries, a person or persons within the facility shall be adequately trained to render first aid.

If the facility provides a first aid kit for its employees to use themselves, the agency needs to have a mechanism for routinely checking the kit to be sure it is complete, and that nothing has become outdated. Any use of the kits' contents should be logged in some way so that it's clear what has been used, for what purpose, and with what follow up, and so that the kit can be restocked with the items that have been used.

Keep in mind, including medications in a workplace kit can raise issues of liability, especially related to **who** provides the medication (e.g., do individuals take the medications themselves [lower liability], or does someone else administer the medication to others [greater liability, even for over-the-counter medications]). If one individual provides over the counter medication to others, it must be for immediate use and cannot be repackaged (i.e., transferred from one container to another) or dispensed to someone for their later use.

Depending on the types of injuries and exposures that may be experienced by an individual work force, the contents of a first aid kit might include such items as:

- **First Aid Manual Information** (including phone numbers for the regional Poison Control Center, and if 911 is not in your area, emergency services for local police, fire department, and ambulance services);
- **Latex or, if latex allergy is known or thought likely to be present among employees, vinyl examining gloves;**
- **and:**

adhesive bandages (various sizes)	antiseptic solution
bandage closures/"butterfly bandages"	triangular bandage
adhesive tape	safety pins
mild soap	burn treatments

antiseptic swabs	elastic bandage
gauze pads (various sizes)	metal splints
gauze bandage	aluminum splint
scissors	forceps
disposable, instant-activating cold packs	tweezers
eyewash solution	eye dressing
cleansing tissue	hydrogen peroxide
cough suppressant	antihistamine
decongestant tablets	calamine lotion
hydrocortisone cream	acetaminophen, ibuprofen, aspirin tablets

Quantities should be sufficient to prevent exhausting any single item, based on expected frequency of use, regular inspections, and re-supply. Further information on first aid kits can be found at the Occupational Safety and Health Administration website:

<http://www.osha.gov/Publications/OSHA3317first-aid.pdf>

Chapter 7 - Medical Standards

The job requirements for DOI employees in positions listed below are by their nature arduous and hazardous. The job requirements of these positions are performed under variable and unpredictable working conditions. Due to these job requirements and working conditions, DOI has developed an occupational safety and health program that includes a model set of medical standards for these positions. The specific examination topics, the periodicity of evaluations and medical examinations, and the required results for considering an individual medically and physically qualified are listed under these model programs. Individual agencies may develop their own specific medical standards, subject to the review and approval provisions of 5 CFR 339.202 and departmental policy (DM446).

Positions listed are by their nature arduous and hazardous.

- Law Enforcement Officers
- Wildland Firefighters
- Divers
- Inspectors
 - Land-Based Inspectors
 - Off-Shore Inspectors
- Tower Climbers
- Drill Rig Operators
- Crewmembers aboard Large Vessels
- Rope Access Technicians
- Crane Operators
- Hazardous Waste Workers
- Pilots / Aviators
- Laboratory Workers

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

Review Criteria for Medical Review Officers

These Standards are Applicable to Positions Requiring

Commissioned Law Enforcement Officers

General Background

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for positions with duties that are arduous or hazardous in nature. The medical standards described in this section are established because of the arduous and hazardous occupational, functional and environmental requirements of the position covered by these standards. The medical standards, which establish minimum requirements for medical fitness that are considered necessary for the safe and efficient performance of the full range of essential functions of [...agency...] Commissioned Law Enforcement Officers, are provided to aid the agency medical review officer (MRO), agency Program Manager, and agency officials in identifying those medical problems that may hinder an individual's ability to satisfactorily perform their job without undue risk to self or others. They are to be used to ensure consistency and uniformity in the application of medical expectations upon selectees and incumbents. Executive Order 11478 (as amended) prohibits discrimination in federal employment because of race, color, religion, sex, national origin, handicap, age, or sexual orientation.

These standards and their application will be guided by the considerations set forth in 5 CFR Part 339, *Medical Qualifications Determinations*. Listed below are both minimal expectations and examples of medical conditions and/or physical impairments that may be disqualifying. ***No medical condition may be considered to be disqualifying automatically in its own right.*** Individualized assessments must be made on a case-by-case basis to determine an individual's ability to meet the requirements of the position covered by these standards and their ability to perform his or her duties in a safe and efficient manner, with or without reasonable accommodation, despite any medical condition that may be present. Final consideration of a medical qualification recommendation may require additional medical information and/or testing that is not routinely required during either the baseline or periodic medical examination.

These medical standards are intended to serve as a general guideline for the safe placement into and the continued working in a hazardous and arduous job position within the Department of Interior's law enforcement program. Each of the medical standards listed in this document is subject to clinical interpretation and application by the agency MRO who will incorporate into the review of each case his/her knowledge of the job requirements and environmental conditions in which employees may be expected to work.

The medical standards in this document are not listed in order of importance. They're listed in an order that approximates the sequence in which an examination might be carried out, and the resulting pieces of medical information assembled and reviewed by the MRO, but their order is not pertinent. The only pertinent issues are the content of the standards and the context in which they are applied.

The standards and guidelines have been developed using many references and resources, including:

- 5 CFR-339 Medical Qualifications Determinations
- A review of existing Federal agency law enforcement medical guidelines and standards
- Federal agency law enforcement scientific studies, including the U.S. Secret Service study on visual acuity, U. S. Treasury study on radial keratotomy, and U.S. Marshall study on hearing loss
- State of California law enforcement medical guidelines (Peace Officer Standards and Training, POST), 2004
- Onsite observation of the performance of law enforcement training and duties by DOI and U.S. Public Health Service personnel.
- Executive Order 11478 (1969) as amended by Executive Order 13087 (1998).
- November 10, 2005 DRAFT of DOI Directive 3200: Physical Readiness Program

Rationale for Medical Evaluation and Review of Law Enforcement Positions

The job requirements for DOI law enforcement employees are by their nature arduous and hazardous. These job requirements are performed under variable and unpredictable working conditions. Due to these job requirements and working conditions, DOI has developed an occupational safety and health program that includes medical standards for law enforcement positions in order to insure the following:

1. DOI law enforcement personnel will be able to perform the full range of duties under the conditions under which those duties must be performed.
2. Existing/preexisting medical conditions of DOI law enforcement personnel will not be exacerbated, aggravated, or accelerated.
3. Adherence to DOI's strong commitment to public safety and to maintaining the integrity of mission accomplishment.

The implementation of the DOI occupational safety and health program insures the uniformity, consistency, and defensibility of the DOI medical personnel management decision-making process.

Periodicity of Medical Evaluations

Medical standards apply to all selectees and all incumbent [...agency...] Commissioned LEOs on a 24 hour-a-day / 7 day-a-week basis. The generally recommended schedule for medical evaluations of selectees and incumbents in order periodically to assess compliance with these standards is as follows:

Selectees:

(Baseline exam)

Incumbents:

(Periodic exam) Every 3 years, regardless of age

(Exit exam)· Within a month prior to separation from a permanent LE position

In addition, the MRO may determine and recommend that, due to health or safety factors, the medical evaluation of an individual employee may require a different schedule, an increased frequency, or additional components for their exam in order to evaluate the medical fitness of the individual to perform the full range of functional requirements of the job.

**Essential Functions and Work Conditions of a
Commissioned Law Enforcement Officer**

Time/Work Volume	Physical Requirements*	Environment	Physical Exposures
<i>May include:</i>			
<ul style="list-style-type: none"> • typically a 5-day work week, including nights, weekends and holidays • 8 hour work days with repetitive days exceeding 8 hours • irregular work schedules with consecutive overlapping schedules • numerous off-duty call outs to return to work for emergencies • multiple and consecutive duty assignments without a significant break between • a pace of work set by emergency situations • ability to be deployed at any time in any geographic area for extended assignments up to 21 days • adjust to time zone changes • working independently for extended periods • working in small and large teams for extended periods 	<ul style="list-style-type: none"> • using batons, hand cuffs, pepper spray, tasers and other defensive equipment in self-defense and to apprehend and control suspects • demonstrating proficiency with handguns, rifles, and shotguns (e.g. loading, clearing, firing) • using techniques such as ground wrestling, control holds and strikes with hands and feet for self-defense and to apprehend and control suspects. • detecting and responding to real and apparent threats (e.g. booby traps, knives, guns, uncooperative suspects) • rigorous exertion in emergency situations • extensive walking, climbing, kneeling, stooping, running, jumping, twisting, bending and standing in place • lifting and carrying at times for distances, more than 50# 	<ul style="list-style-type: none"> • varied climates (e.g. cold, hot, dry, humid, snow, rain) • varied light conditions, ranging from total darkness to extremely intense sun • high altitudes/mountains • heights/tall buildings • very steep terrain • uneven surfaces with holes and drop offs • rocky, loose, or muddy ground surfaces • thick vegetation • down/standing trees • wet slippery vegetation • very rough roads and trails • caves and enclosed natural and made made-type areas • marine settings, such as lakes, open ocean, and swift water • dense swamps • high voltage electrical hazards • isolated/remote areas 	<ul style="list-style-type: none"> • deprived of or extended periods of light (bright sunshine/UV rays), dark, extreme heat and severe cold • airborne particulates • airborne and contact allergens • fumes, gases • burning materials, natural and manmade • blood borne pathogens • hazardous chemicals • snakes and reptiles • threatening wild or domestic, large or small animals • insects/ticks • poisonous plants • falling rocks and trees • close quarters with other officers or the public for extended periods • high noise exposure, including impact/impulse • uncooperative suspects

Time/Work Volume	Physical Requirements	Environment	Physical Exposures
<i>(Continued) May include:</i>			
	<ul style="list-style-type: none"> • working with limited/disrupted sleep • working with hunger/irregular meals and dehydration • flying in helicopters and fixed wing airplanes • driving for long periods of time • driving under pursuit, evasive, and emergency situations • using boats, airboats, snowmobiles, ATVs, bicycles, horseback, and motorcycle • immersion in water that is over the head when standing • using specialized visual equipment (e.g. night vision goggles, night cameras, infrared) • wearing a variety of heavy PPE on a daily basis (e.g. bulletproof vests, boots, eyewear, 30# gun belt) • wearing respirators and weapons of mass destruction PPE to provide rescue or evacuation assistance 	<ul style="list-style-type: none"> • with no ready access to medical help • areas of natural disaster (e.g. flood, hurricane, tornado, fire) • areas of terrorist attack • non-compliant, combative, and violent persons • large metropolitan setting with heavy vehicle traffic and high volumes of people • extensive interaction with the public • extensive crowds at large events including large scale protests 	

**The employee may be required to perform all of the listed Physical Requirements during intensive rigorous training of a repetitive nature for an extended period of time which may exceed three months, in addition to performing these tasks on a regular and recurring basis as part of their regular duties.*

Medical Evaluation Components for Commissioned Law Enforcement Officer Examinations

(**Note:** in response to program requirements and operational efficiencies, these evaluation components have been coordinated with those for Structural Firefighters and Divers; if this type of coordination is not applicable to your agency, adjustments should be made accordingly.)

Services - By Category

Histories

General Medical and Occupational History

Examination Items

General Physical Examination

General Appearance and Vital Signs

Special Attention To:

- Eyes, Ears, Nose, Mouth, and Throat
- Central Nervous System
- Peripheral Nervous System, including sensation, reflexes, and proprioception
- Back & Musculoskeletal System, including strength, ROM, flexibility
- Cardiovascular System
- Genitourinary System
- Gastrointestinal System
- Respiratory System
- Skin
- Thyroid
- Endocrine and Metabolic System

Diagnostic Tests/Procedures

- **Audiogram:** 500, 1000, 2000, 3000, 4000, 6000, 8000 Hertz in both ears - (done annually for Firearms Instructors; recorded in decibels at each frequency)
- **Vision - Far Vision Acuity-** (uncorrected and corrected, each eye separately as well as both together, recorded in Snellen units)
- **Vision - Near Vision Acuity** (best vision with both eyes, with or without correction)
- **Peripheral Vision** (nasal and temporal, recorded in degrees; each eye measured separately)
- **Depth Perception** (recorded in seconds of arc, with a clinical assessment to confirm normal functional depth perception if stereopsis is less than 100 sec of arc)
- **Color Discrimination:** Ishihara (minimum of 14 plates) or Farnsworth D-15, AND confirmed ability to distinguish red / green / yellow (amber)
- **Pulmonary Function Test/Spirometry**
- **Electrocardiogram**, Resting TB (Mantoux) skin test (baseline only)
- **Chest X-Ray**, PA and lateral (baseline only)

Laboratory

- Lab Panel
- Complete Blood Count (CBC)
- Urinalysis

- Chemistry panel, including liver function tests and lipid profile

Vision Standard

The selectee/incumbent must be able to see well enough to safely and efficiently carry out the requirements of the job. This requires binocular vision, far visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by:

- **Uncorrected far vision equal to or better than 20/100 in each eye;** and (*Note: successful users of long-wear soft contact lenses who meet the corrected far vision standard are considered to have met the “uncorrected” vision guideline.*)
- **Far vision that is correctable to 20/20 in each eye;** and
- **Near vision that is correctable to 20/30 with both eyes;** and (*Note: contact lenses and glasses are acceptable for correction of both near and far vision acuity, but the user must be able to demonstrate that the corrective device(s) can be worn safely and for extended periods of time without significant maintenance, as well as being worn with any necessary personal protective equipment.*) (*Note: orthokeratology, the temporary reduction in myopia by the programmed application of rigid gas-permeable contact lenses, is acceptable for meeting the corrected vision standard as long as individuals wear their lenses according their prescribed schedule and meet the above visual acuity requirements for corrected vision.*)
- **Normal depth perception;** and
- **Peripheral vision that is normal** (generally considered to be 70-85 degrees in the temporal direction in each eye); and
- **Color vision that is sufficient to pass the Ishihara 14 plate series color vision test, or the Farnsworth D-15 color vision test** (X-Chrome lenses are not acceptable as a means for correcting color deficiencies), and able to identify red, green, and amber (yellow); and
- **Having no ophthalmologic condition that would increase ophthalmic sensitivity** to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. Any **OPHTHALMOLOGIC CONDITIONS** which causes an individual to be particularly susceptible to environmental exposures, such as sunlight, dusts, fumes, and various volatile compounds.
2. **REFRACTIVE SURGICAL PROCEDURES (e.g., LASIK, Radial Keratotomy, Photorefractive surgery, Keratoplasty, etc.).** These operative procedures may be considered acceptable as long as the individual’s vision meets the above standards post-operatively and the operation was performed **AT LEAST** 6 months (for radial keratotomy or photorefractive surgery) or 3 months (for LASIK) before performing in an LEO position. The individual must be free of post-operative complications. The results of an eye examination by a board-certified Ophthalmologist will be required to insure that vision is not impeded due to post-operative complications such as infection, glare, or contrast-sensitivity.
3. **CHRONIC CONJUNCTIVITIS.** Due to the possible visual impairment and/or

increased susceptibility to environmental exposures which could interfere with the job performance, this condition may result in a medical disqualification.

4. **CORNEAL ULCERS.** This condition generally is disqualifying since essential duties of the position could further exacerbate the condition, in addition to the condition causing impairments of visual acuity. This condition must be treated and cleared by an Ophthalmologist before any further consideration is given.
5. **KERATITIS.** Any visual impairment associated with keratitis that is likely to interfere with job performance generally is disqualifying.
6. **RETINAL DETACHMENT.** This condition generally is disqualifying due to the serious visual obstruction and the risk of sudden incapacitation.
7. **RETINITIS PIGMENTOSA.**
8. **GLAUCOMA.** This condition, if confirmed by an ophthalmologist, generally is disqualifying if there is any impairment of peripheral vision.
9. **NIGHT BLINDNESS**
10. **OCULAR LENS IMPLANTATION** may be acceptable following an adequate post-surgical recovery period and if visual acuity meets the Vision Standards.
11. **ANY OTHER VISION CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated generally is disqualifying.

Hearing Standard

The selectee/incumbent must be able to hear well enough to safely and efficiently carry out the requirements of the job (the use of a hearing aid or aids to meet these standards is *not* permitted). The standards require binaural hearing (to localize sounds) and auditory acuity, which may be demonstrated by:

- A current pure tone, air conduction audiogram, using equipment and a test setting which meet American National Standards Institute standards (see 29 CFR 1910.95); and
- Documentation of hearing thresholds of no greater than 30 dB at 500, 1000, and 2000 Hz in either ear; and
- Documentation of hearing thresholds of no greater than 40 dB at 3000 Hz in either ear; and
- No evidence by physical examination and medical history of ear conditions (external, middle, or internal) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MENIERE'S DISEASE**

2. **VESTIBULAR NEURONITIS**
3. **VERTIGO & PAROXYSMAL POSITIONAL VERTIGO**
4. **ACOUSTIC NEUROMA**
5. **WEGENER S GRANULOMATOSIS**
6. **OTOSCLEROSIS**
7. **COCHLEAR IMPLANTATION**
8. Any **OTHER DISEASE OR DEFECT** of the ear which adversely affects hearing or equilibrium and which may interfere with the safe and efficient job performance generally is disqualifying.

Head, Nose, Mouth, Throat and Neck Standard

The selectee/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
 - normal flexion, extension, and rotation of the neck; and
 - open nasal and oral airways; and
 - unobstructed Eustachian tubes; and
 - no structural abnormalities that would prevent the normal use of personal protective equipment, including eyewear; and
 - Normal conversational speech; and
 - No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ANOSMIA**
2. **ARTIFICIAL LARYNX OR ESOPHAGEAL SPEECH**
3. **NECK MASSES, LYMPHADENOPATHY, OR TRACHEOSTOMY**
4. Any **OTHER CHRONIC DISEASE OR CONDITION** which significantly interferes with speech or breathing and bears the potential to render the person suddenly incapacitated is generally disqualifying.

Dermatologic Standard

The selectee/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the requirements of the function. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ALBINISM**
2. **SKIN CANCER** (including melanoma and severe or poorly controlled basal cell or squamous cell carcinoma)
3. **KAPOSI'S SARCOMA**
4. **SEVERE CHRONIC DERMATITIS**
5. Any **OTHER DERMATOLOGIC CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated is generally disqualifying.

Central and Peripheral Nervous Systems Standard
--

The selectee/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:

- intact cranial nerves, I-XII; and
- normal vibratory sense in the hands and feet; and
- normal proprioception of the major joints; and
- normal sensation of hot and cold in the hands and feet; and
- normal sense of touch in the hands and feet; and
- normal reflexes of the upper and lower extremities; and
- normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and
- normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ATAXIA**
2. **CHOREOATHETOSIS**
3. **HUNTINGTON'S CHOREA**

4. **MULTIPLE SCLEROSIS**
5. **MUSCULAR DYSTROPHY**
6. **NARCOLEPSY**
7. **NEUROFIBROMATOSIS**
8. **PARKINSON S DISEASE**
9. **CEREBROVASCULAR ACCIDENT (STROKE)**
10. **TRANSIENT ISCHEMIC ATTACKS**
11. **SENSORY DYSFUNCTION** (smell, touch, taste).
12. **MIGRAINE CEPHALGIA**
13. Any **OTHER NERVOUS SYSTEM CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated is generally disqualifying
14. **SEIZURES OR EPILEPSY**

An individual with a history of one or more seizures must provide the following written information from a physician who is board certified in neurology. This information is to be provided on the physician's own letterhead, and must include:

- i. the physician's printed or typed name (i.e., legible), signature, and date;
- ii. confirmation that the physician has reviewed and is familiar with the requirements of the job, as presented in the Essential Functions And Work Conditions Of A Commissioned Law Enforcement Officer;
- iii. a summary of all current medications, along with any known side effects experienced or expected to be experienced by the officer;
- iv. the known or suspected triggers or factors that may lead to seizure activity for the officer;
- v. the results of the most recent diagnostic testing, such as an EEG
- vi. the officer's overall medical prognosis, related to his/her seizure disorder; and
- vii. the estimated risk or likelihood of future seizure activity the officer might experience, of any degree of severity.

Psychiatric / Psychological Function Standard
--

The selectee/incumbent must have judgment, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the requirements of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric or psychological conditions (including alcohol or substance dependence) considered likely to interfere with efficient job performance, present a safety risk to the individual or others, or to worsen as a result of carrying out the essential functions of the job.

Disorders which affect safe and efficient job performance may be disqualifying, and consideration must be given to the individual's history of treatment and control of the condition(s). All diagnoses must be consistent with the diagnostic criteria as established by the most recent version of the *Diagnostic and Statistical Manual of Mental Disorders*. Any condition not listed here shall be considered on a case-by-case basis.

Conditions Which May Result in Disqualification Include, But Are Not Limited To:

1. **AXIS I DISORDERS**
2. **AXIS II DISORDERS**
3. Any **OTHER PSYCHIATRIC** or **PSYCHOLOGICAL CONDITION** which significantly or potentially interferes with normal function or bears the potential to render the person suddenly incapacitated.

Cardiovascular System Standard

The selectee/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
- blood pressure of less than or equal to 140 mmHg systolic and 90 mmHg diastolic; and
- a normal electrocardiogram at each scheduled exam, as required (minor, asymptomatic arrhythmias may be acceptable); and
- no pitting edema in the lower extremities, and
- normal cardiac exam; and
- No evidence by physical examination and medical history of cardiovascular conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **PACEMAKERS**
2. **PROSTHETIC VALVES** or any other condition or post-surgical management that requires the use of Coumadin or other anti-coagulants may be disqualifying.
3. **CORONARY ARTERY DISEASE.**
4. **HYPERTENSION** that requires the use of any medication to stabilize the blood pressure may be disqualifying.
5. **LEFT BUNDLE BRANCH BLOCK.**
6. **MYOCARDITIS/ ENDOCARDITIS/ PERICARDITIS** (Active or recently resolved cases). A past history of these diseases may require additional testing to determine the current capabilities.
7. History of **MYOCARDIAL INFARCTION.**

8. History of **CARDIAC SURGERY** (depending on the procedure and when it was performed).
9. **VALVULAR HEART DISEASE** such as mitral valve stenosis, mitral valve regurgitation, aortic stenosis, mitral valve prolapse, etc.
10. **DYSRHYTHMIAS** such as ventricular tachycardia or fibrillation, Wolff-Parkinson-White syndrome, Paroxysmal Atrial Tachycardia with or without block.
11. **ANGINA PECTORIS** or chest pain of unknown etiology.
12. **CARDIOMYOPATHY** from any cause.
13. **CONGESTIVE HEART FAILURE**
14. **MARFAN'S SYNDROME**
15. **CONGENITAL ANOMALIES**
16. **PACEMAKERS or PROSTHETIC VALVES** are generally disqualifying. Any other condition or post-surgical management that requires the use of Coumadin or other anti-coagulants generally is disqualifying.
17. **IMPLANTED CARDIAC DEFIBRILLATORS**, devices that may, as a result either of their normal operation or a malfunction, render the individual suddenly or subtly incapacitated, generally are disqualifying.
18. Any **OTHER CARDIAC DISEASE OR CONDITION** which significantly interferes with normal cardiac function and bears the potential to render the person suddenly incapacitated is generally disqualifying.

Peripheral Vascular System Standard

The peripheral vascular system involves the veins and arteries of the extremities. The selectee/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
 - no evidence of phlebitis or thrombosis; and
 - no evidence of venous stasis or edema; and
 - no evidence of arterial insufficiency; and
 - No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**
4. Any **OTHER CHRONIC DISEASE OR CONDITION** which significantly compromises the vascular system and bears the potential to render the person suddenly incapacitated generally is disqualifying.

Chest and Respiratory System Standard

The selectee/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- A pulmonary function test (PFT) showing:
 - forced vital capacity (FVC) of at least 70% of the predicted value; and
 - forced expiratory volume at 1 second (FEV₁) of at least 70% of the predicted value; and
 - the ratio FEV₁/FVC of at least 70%; and
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **SIGNIFICANT OBSTRUCTIVE OR RESTRICTIVE DISORDER.**
2. **ASTHMA** after the age of 12 years must be considered on a case-by-case basis. A person may be requested to submit documentation of a diagnostic assessment prior to making final recommendations.
3. **ACTIVE PULMONARY TUBERCULOSIS (TB):** A history of confirmed TB that has been treated for longer than 6 months is acceptable provided that documentation supports the treatment history, confirms that the person has been rendered non-communicable, and the other provisions of the Chest and Respiratory System Standard have been met.
4. **HISTORY OF CHRONIC BRONCHITIS ASSOCIATED WITH DECREASED PFT RESULTS.**
5. **LUNG ABSCESS**
6. **PULMONARY EMBOLISM** (within the past six months or if there is a recurrent history or use of anticoagulants)
7. **SPONTANEOUS PNEUMOTHORAX** (if recurrent, or recent)
8. **EMPHYSEMA**
9. **SARCOIDOSIS** (if associated with an impaired pulmonary function)
10. **PULMONARY INFARCTION**
11. **TUMORS OF THE LUNG**
12. **PNEUMONECTOMY** (if FEV₁ less than 70%)
13. Any **OTHER RESPIRATORY DISEASE OR CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated is generally disqualifying.

Note: The requirement to use an inhaler (such as for asthma) requires agency review, and further information may be required related to the individual's history, the causes of bronchospastic episodes or exacerbations, and the response to medications.

Gastrointestinal System Standard

The selectee/incumbent must have a gastrointestinal tract that is sufficient for the individual to safely and efficiently carry out the requirements of the job. The gastrointestinal (GI) tract should be considered normal from the mouth to the anus by the examining physician. The standard may be demonstrated by:

- A physical exam and evaluation of the mouth, abdomen, anus, and rectum that is within the range of normal variation; and
- Normal liver function and blood chemistry laboratory tests; and
- No evidence by physical examination (including laboratory testing) and medical history of gastrointestinal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ACUTE AND CHRONIC ACTIVE HEPATITIS**
2. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS or IRRITABLE BOWEL SYNDROME** (Satisfactory control or management of these conditions with surgical and/or medical treatments will be considered on a case-by-case basis.)
3. **COLOSTOMIES**
4. **ILEITIS** (recurrent or chronic)
5. **CHOLECYSTITIS or CHOLELITHIASIS** (symptomatic or asymptomatic)
6. **DIVERTICULITIS** (symptomatic)
7. **DYSPHAGIA** from any cause. Severity, treatment, and current status of these conditions will be reviewed on a case-by-case basis.
8. **CIRRHOSIS OF THE LIVER** (depending upon the degree of severity, the etiology, and the prognosis)
9. **INTESTINAL OBSTRUCTION** from any cause, until the condition has fully resolved
10. **PANCREATITIS**
11. **ACTIVE GASTRIC OR DUODENAL ULCER**
12. **GASTRIC OR BOWEL RESECTION**, if there is any evidence (historical or physical) of pain, hemorrhages, fainting episodes or dietary restrictions that could interfere with the performance of the job.
13. An **UNTREATED (and clinically-significant) INGUINAL, INCISIONAL, or VENTRAL HERNIA**.
14. Any **OTHER GASTROINTESTINAL DISEASE OR CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated is generally disqualifying.

Genitourinary System Standard

In general, any dysfunction of the genitourinary or reproductive system that has the capability of interfering with the required tasks or rendering the person suddenly incapacitated may be considered disqualifying. The selectee/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. Compliance with the standard may be demonstrated by:

- A normal clean catch urinalysis; and
- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **POLYCYSTIC KIDNEY DISEASE**
2. **ACUTE or CHRONIC RENAL FAILURE**
3. **NEPHROTIC SYNDROME**
4. **SYMPTOMATIC URINARY CALCULI**
5. **NEUROGENIC BLADDER**
6. **BERGER'S DISEASE**
7. **HISTORY OF RENAL VEIN THROMBOSIS**
8. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
9. **RENAL TOXICITY**
10. **RENAL TRANSPLANTATION** may be considered disqualifying unless the selectee is not taking immunosuppressive drugs and is cleared medically by the surgeon who performed the operation (or the successor surgical consultant for the individual) to participate in strenuous activities, and to withstand blunt trauma to his/her flanks without a greater than normal risk of harm.
11. Any **OTHER GENITOURINARY DISEASE OR CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated is generally disqualifying.

Musculoskeletal System Standard

The selectee/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the functional requirements of the job. Any condition that adversely impacts an individual's movement, range of motion, agility, flexibility, strength, dexterity, coordination or the ability to accelerate, decelerate and change directions quickly and easily may be considered disqualifying. A healthy musculoskeletal system may be demonstrated by:

- A physical exam of the upper and lower extremities (including all digits), neck, and back that is within the range of normal variation, including strength, flexibility, range of motion, and joint stability; and

- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ARTHRITIS** (any etiology) if there is limited joint motion and/or pain.
2. **AMPUTATIONS** of one or more digits if it directly affects the ability to grip and handle weapons or other required equipment and tools efficiently.
3. **AMPUTATIONS OF ANY EXTREMITY.**
4. **ANKYLOSING SPONDYLITIS.**
5. **SCOLIOSIS**, if the lateral curve is 20 degrees or more, or if there is any demonstrable loss of normal and pain-free function.
6. **MUSCULAR DYSTROPHY**
7. **LUMBOSACRAL INSTABILITY**, including pain or limitations of flexibility and strength that limits the individual's ability to stand, bend, stoop, carry heavy objects or sit for long periods of time.
8. **DEGENERATIVE DISC DISEASE** that is symptomatic.
9. **FIXED LORDOSIS OR KYPHOSIS** which limits mobility and skeletal strength.
10. **FRACTURES:** these may require orthopedic evaluation to determine whether functional limitations currently exist. A recent fracture that requires immobilization (or for which limb immobilization is indicated, such as casting, bracing, etc.), and that prevents the safe and efficient performance of the full range of law enforcement duties, will require deferment of the clearance until the injury has healed sufficiently for the treating physician to be able to document that immobilization is no longer required, that no physical limitations are present, and no restrictions are required.
11. **SCIATICA OR OTHER NEUROPATHIES**
12. **CHRONIC LOW BACK PAIN** (by medical history), with or without demonstrable pathology, may be considered disqualifying. Each case will be reviewed in the context of the etiology, the response to therapeutic regimens, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences, combined with the current clinical presentation.
13. A history of a **CHRONIC SPRAIN OR STRAIN OF THE NECK** that limits mobility or causes recurring cephalgia (headaches) may be disqualifying.
14. Evidence of a **CERVICAL RIB, SUBLUXATION, TORTICOLLIS, SYMPTOMATIC THORACIC OUTLET SYNDROME** or a **BRACHIAL CLEFT CYST**
15. Any evidence of a **CERVICAL NEUROPATHY**, including numbness, tingling or loss of motor strength in the upper extremities, may be disqualifying.
16. Any medical condition, congenital or acquired, which interferes with agility, dexterity, the lifting of heavy objects, or the ability to perform the full range of law enforcement duties may be disqualifying.
17. A condition may be disqualifying if there is evidence that the general body symmetry may directly interfere with the safe utilization of issued standard and specialty equipment, including but not limited to handguns, shotguns, handcuffs, motor vehicles, personal protective equipment, etc.

Endocrine and Metabolic Systems Standard

Any excess or deficiency in hormone production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The selectee/incumbent must have endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- Normal fasting blood sugar level; and
- Normal blood chemistry results; and
- No evidence by physical examination (including laboratory testing) and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ADRENAL DYSFUNCTION** (such as Addison's Disease or Cushing's Syndrome).
2. **THYROID DISEASE** that is uncontrolled or associated with complications.
Hypothyroidism adequately controlled by hormone replacement may be considered acceptable.
3. **PITUITARY DYSFUNCTION**
4. **DIABETES MELLITUS**
5. **HYPERGLYCEMIA**
6. **DIABETES INSIPIDUS**
7. Any **OTHER ENDOCRINE CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated generally is disqualifying.

Hematopoetic System Standard

The selectee/incumbent must have a hematopoietic (blood and blood-producing) system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- A complete blood count (including at least hemoglobin, hematocrit, platelets, and white blood count, with differential) that is within the normal range; and
- No evidence by physical examination (including laboratory testing) and medical history of hematopoietic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ANEMIA**
2. **INHERITED CLOTTING DISORDERS (ex. HEMOPHILIA)** generally are disqualifying
3. **CHRONIC LYMPHANGITIS**
4. **THROMBOCYTOPENIA OR CLOTTING DISORDER**
5. **SICKLE CELL ANEMIA**
6. **SPLENOMEGALY**
7. Any **OTHER HEMATOPOETIC CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated is generally disqualifying.

Prosthetics, Transplants, and Implants Standard

The presence or history of organ transplantation or use of prosthetics or implants are not of themselves disqualifying. However, the selectee/incumbent must be able to safely and efficiently carry out the requirements of the job despite these factors. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Note: For individuals with transplants, prosthetics, or implanted pumps or electrical devices, the examinee will be required to provide for agency review satisfactory documentation from his/her surgeon or physician that the individual (and, if applicable, his/her prosthetic or implanted device) is considered to be fully cleared and compatible with the specified functional requirements of the job.

Infectious Disease / Immune System / Allergic Disorders Standard

The selectee/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions in order to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A general physical exam of all major body systems that is within the range of normal variation, including:
 - no evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the requirements of the job; and
 - no evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
- Normal complete blood count, including white blood count and differential; and
- No evidence by physical examination and medical history of infectious disease, immune system, or allergy conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **HEREDITARY ANGIOEDEMA**
2. **GOODPASTURE’S SYNDROME**
3. **AUTOIMMUNE HEMOLYTIC ANEMIA**
4. **VASCULITIS**
5. **HASHIMOTO’S THYROIDITIS**
6. **MYASTHENIA GRAVIS**
7. **SYSTEMIC LUPUS ERYTHEMATOSUS**
8. **STINGING INSECT ALLERGY**
9. Any **OTHER INFECTIOUS DISEASE, IMMUNE SYSTEM, OR ALLERGIC CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated is generally disqualifying.

Medication Standard

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications that are likely to present a safety risk or to worsen as a result of carrying out the specified functional requirements. Each of the following points should be considered:

1. Medication(s) (type and dosage requirements)
2. Potential drug side effects
3. Drug-drug interactions
4. Adverse drug reactions
5. Drug toxicity or medical complications from long-term use
6. Drug-environmental interactions
7. Drug-food interactions
8. History of patient compliance

All medication requirements will be evaluated to ensure that safe and efficient job performance will not be affected adversely by their use. Medications such as narcotics, sedative hypnotics, barbiturates, amphetamines, or any drug with the potential for addiction or a reduction in attentiveness that are taken for extended periods of time (usually beyond 10 days) or are prescribed for a persistent or recurring underlying condition generally would be considered disqualifying. Cases will be reviewed on a case-by-case basis.

The Condition of Pregnancy

If a selectee or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the selectee’s obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Medical Review Officers

These Standards Are Applicable to Positions Requiring

Wildland Firefighters

The Wildland Firefighter Medical Standards Team, as chartered by the Federal Fire and Aviation Leadership Council, has developed specific, validated medical standards for wildland firefighters. The specific examination topics, the periodicity of evaluations and medical examinations, and the expected results when considering whether an individual is medically and physically qualified for wildland firefighting, are available from the National Interagency Fire Center (NIFC) at http://www.nifc.gov/medical_standards/. Because of the wealth of information available through these Departmental sources, and to avoid redundancy or inconsistencies, the standards are no longer duplicated within this *Handbook*.

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Medical Review Officers

These Standards Are Applicable to Positions Requiring

Divers

General Background

Under 5 CFR Part 339 (Medical Qualifications Determinations), medical standards may be established for positions with duties that are arduous or hazardous in nature. The medical standards described in this section have been established because of the recognized arduous and hazardous occupational, functional and environmental requirements of the position covered by these standards. These medical standards, which establish the minimum requirements for medical fitness that are considered necessary for the safe and efficient performance of the full range of essential functions of divers, are provided to aid the agency reviewing medical officer (RMO), the [...agency...] Medical Standards Program Manager, other agency officials, and covered selectees and incumbent employees in identifying those medical problems that may hinder an individual's ability to perform their job satisfactorily and without undue risk to self or others. They also are to be used to ensure consistency and uniformity in the application of medical expectations to selectees and incumbents. Executive Order 11478 (as amended) prohibits discrimination in federal employment because of race, color, religion, sex, national origin, handicap, age, or sexual orientation.

These standards and their application will be guided by the considerations set forth in 5 CFR Part 339. This document presents both minimal expectations and examples of medical conditions and/or physical impairments that may be incompatible with safe and efficient job performance and, as a result, be disqualifying. However, no medical condition may be considered to be disqualifying automatically in its own right. Individualized assessments must be made on a case-by-case basis to determine an individual's ability to meet the requirements of the position covered by these standards and their ability to perform his or her duties in a safe and efficient manner, with or without reasonable accommodation, despite any medical condition that may be present. Final agency consideration of an RMO's medical qualification recommendation may require additional medical information and/or testing that is not routinely required during either the baseline or periodic medical examination.

These medical standards are intended to serve as a general guideline for the safe placement into and the continued working in a hazardous and arduous job position within the [...agency...] diving program. Each of the medical standards listed in this document is subject to clinical interpretation and application by the agency RMO who will incorporate into the review of each case his/her knowledge of the job requirements and environmental conditions in which employees may be expected to work.

The medical standards in this document are not listed in order of importance. They are listed in an order that approximates the sequence in which an examination might be carried out, and the resulting pieces of medical information assembled and reviewed by the RMO, but their order is not pertinent. The only pertinent issues are the content of the standards and the context in which they are applied.

The standards and guidelines have been developed using many references and resources, many of which are listed here:

1. 5 CFR 339 (Medical Qualifications Determinations)
2. 29 CFR 1910, Subpart T, Appendix B: Guidelines for Scientific Diving
3. NPS Reference Manual #4: Diving Management
4. U.S. Fish and Wildlife Service Transmittal Sheet: Part 241 FW 10: Safety Operations, Diving Safety
5. U.S. Fish and Wildlife Service SCUBA Diving Medical Examination Form
6. U.S. Navy: Manual of the Medical Department (NAVMED P-117): Chapter 15, Section III: Standards for Enlistment and Commissioning; and Article 15-102: Diving Duty Examinations and Standards
7. National Oceanic and Atmospheric Administration (NOAA) Diving Medical Evaluation Criteria
8. The American Academy of Underwater Sciences (AAUS): Standards for Scientific Diving
9. Executive Order 11478 (1969), as amended by Executive Order 13087 (1998)

Rationale for Medical Evaluation and Review of Diving Positions

The job requirements for employees of the DOI who dive are by their nature arduous and hazardous, and they are performed under variable and unpredictable working conditions. Due to these job requirements and working conditions, the DOI and [...agency...] have developed an occupational safety and health program that includes medical standards for positions that require diving in order to insure the following:

1. Personnel who dive will be able to perform the full range of duties safely and efficiently under the conditions under which those duties must be performed.
2. Existing/preexisting medical conditions of personnel who dive will not be exacerbated, aggravated, accelerated, or permanently worsened as a result of the essential functions of the job.
3. Adherence to DOI's strong commitment to public safety and to maintaining the integrity of mission accomplishment.

The implementation of the DOI occupational safety and health program insures the uniformity, consistency, and defensibility of the DOI medical personnel management decision-making process.

Periodicity of Medical Evaluations

In response to program requirements and operational efficiencies, the periodicity of evaluations for divers is coordinated with those for structural firefighters and law enforcement officers. However, medical standards apply to all selectees and all incumbent divers on a 24 hour-a-day / 7 day-a-week basis, not just at the time of their scheduled examinations and clearance reviews. The schedule for medical evaluations of selectee and incumbent divers in order periodically to assess compliance with these standards is as follows:

<u>Selectees:</u>	Baseline exam: after the job offer, but prior to placement
<u>Incumbents:</u>	Periodic exams: every 3 years
	Exit exam: within a month of separation from a diving position

In addition, the RMO may determine and recommend that, due to health or safety factors, the medical evaluation of an individual employee may require a different schedule, an increased frequency, or additional components for the exam in order to evaluate the medical fitness of an individual to perform the full range of functional requirements of the job.

Essential Functions and Work Conditions of a

Diver

Time/Work Volume	Physical Requirements	Environment	Physical Exposures
<i>May include:</i>			
<ul style="list-style-type: none"> • long hours (up to 12 hour shifts) • irregular hours • shift work • time zone changes • multiple and consecutive assignments • conduct up to 3 hour dives • swim 75 feet totally underwater, then swim 1,200 feet, each without swim aids, with a combined time of 15 minutes or less • tread water without swim aids for 10 minutes 	<ul style="list-style-type: none"> • lift and carry more than 50# • lift and load heavy equipment • drive or ride for many hours • work on small and large teams • arduous exertion • extensive climbing, swimming • kneeling, stooping, twisting, bending • put on and wear wet suits or dry suits • put on, carry, and use 35# tanks • fine manipulation of tools and equipment • wear full face mask, to allow for underwater communications or for excessively cold water work • work on various floating platforms, including skiffs, 18-26' boats, 22-45' landing-type crafts, and other boats • climb into and out of floating boats and platforms, even when nearly exhausted • use a snorkel • dive to 100' or more • provide rescue or evacuation assistance 	<ul style="list-style-type: none"> • uneven terrain • rocky, loose, wet, or muddy ground surfaces • wet leaves/grasses • varied climates (cold/hot/wet/dry/humid/ snow/rain) • varied light conditions, including dim light or darkness, above and below water • high altitudes • very rough roads • natural and manmade bodies of water • isolated/remote sites • no ready access to medical help • under water vegetation, trees, and other entanglement hazards • marine environment • live boats (unanchored) • rough wave conditions • swells on open water • confined spaces, both above and below water • deep water (>100 feet) • under water currents 	<ul style="list-style-type: none"> • light (bright sunshine, UV) • extreme heat (>100°F) • extreme cold • extreme and rapid temperature variations • variations in pressure, ranging from 1 to 4 atmospheres • loud noises • poisonous or hazardous aquatic plants and animals • boats and other large equipment • close quarters, large numbers of other workers • hunger/irregular meals • dehydration • under water rock hazards • falls • hazardous petroleum products

Medical Evaluation Components for Diver Examinations

(**Note:** in response to program requirements and operational efficiencies, these evaluation components have been coordinated with those for Structural Firefighters and Law Enforcement Officers)

Services, By Category

Histories

- General Medical and Occupational History
- Noise Exposure History

Examination Items

- General Appearance and Vital Signs
- General Physical Examination

Special Attention To:

- Skin
- Head, Eyes, Ears (including TM movement), Nose, Mouth, and Throat
- Thyroid
- Endocrine and Metabolic System
- Cardiovascular System, including peripheral vasculature
- Respiratory System
- Central Nervous System
- Peripheral Nervous System, including sensation, reflexes, and proprioception
- Back & Musculoskeletal System, including strength, ROM, flexibility, stability
- Genitourinary System, including inguinal ring
- Gastrointestinal System, including umbilicus and abdominal wall

Diagnostic Tests/Procedures

- **Audiogram:** 500, 1000, 2000, 3000, 4000, 6000, 8000 Hertz in both ears
- **Vision** - Far Vision Acuity (uncorrected and corrected, each eye separately as well as both together, recorded in Snellen units)
- **Vision** - Near Vision Acuity (best vision, using both eyes)
- **Peripheral Vision** (nasal and temporal, recorded in degrees; each eye separately)
- **Depth perception** (recorded in seconds of arc, with a clinical assessment to confirm normal functional depth perception if stereopsis is less than 40 sec of arc)
- **Color Discrimination** (baseline only)
- **Electrocardiogram, Resting**
- **Pulmonary Function Test/Spirometry**
- **Chest X-Ray**, PA and lateral (baseline only)
- **PPD** (tuberculosis skin test) (baseline only)

Laboratory

- **Lab Panel**
 - Complete Blood Count (CBC)
 - Urinalysis
 - Chemistry panel, including fasting glucose, electrolytes, renal function liver function, and cardiac risk factor assessment
 - Blood type and Group (baseline only)

Vision Standard

The selectee/incumbent must be able to see well enough to safely and efficiently carry out the requirements of the job. This requires binocular vision, far visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by:

- Uncorrected far vision equal to or better than 20/50 in each eye (successful users of long-wear soft contact lenses who meet the corrected far vision standard are considered to have met the “uncorrected” vision guideline); and
- Far vision that is correctable to 20/25 or better in each eye; and
- Near vision that is correctable to 20/40 or better with both eyes together (contact lenses and glasses are acceptable for correction of both near and far vision acuity, but the user must be able to demonstrate that the corrective device(s) can be worn safely and for extended periods of time without significant maintenance, as well as being worn with any necessary personal protective equipment); and
- Normal depth perception; and
- Peripheral vision that is normal (generally considered to be 70 degrees or greater in the temporal direction in each eye); and
- Color vision sufficient to identify red, green, and amber (yellow); and
- Having no ophthalmologic condition, including recent ocular surgery, that would increase susceptibility to sudden incapacitation.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **REFRACTIVE SURGICAL PROCEDURES (e.g., LASIK, Radial Keratotomy, Photorefractive surgery, Keratoplasty, etc.)**
These operative procedures may be considered acceptable as long as the individual has been cleared for diving by a board-certified Ophthalmologist, vision screening meets the above standards, and the operation was performed **AT LEAST** 6 months (for radial keratotomy or photorefractive surgery) or 3 months (for LASIK) before performing in a diving position
2. **OCULAR LENS IMPLANTATION** may be acceptable following an adequate post-surgical recovery period if visual acuity meets the Vision Standards, and if the diver has been cleared by his Ophthalmologist for diving
3. **CHRONIC CONJUNCTIVITIS**
Due to the possible visual impairment and/or increased susceptibility to environmental exposures which could interfere with the job performance, this condition may result in a medical disqualification
4. **CORNEAL ULCERS**
This condition generally is disqualifying since essential duties of the position could further exacerbate the condition, in addition to the condition causing impairments of visual acuity; this condition must be treated, and the diver cleared by an Ophthalmologist before an agency clearance decision is made
5. **GLAUCOMA**, if inadequately treated, or if there is any impairment of peripheral vision,

- may be disqualifying
6. **ANY OTHER VISION CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly or subtly incapacitated generally is disqualifying

Hearing Standard

The selectee/incumbent must be able to hear well enough to safely and efficiently carry out the requirements of the job. The standards require auditory acuity, which may be demonstrated by:

- A current pure tone, air conduction audiogram, using equipment and a test setting which meet American National Standards Institute standards (see 29 CFR 1910.95); and
- Documentation of hearing thresholds of no greater than 30 dB at 500, 1000, and 2000 Hz in either ear; and no greater than 45 dB at 3000 Hz in either ear; and no greater than 55 dB at 4000 Hz in either ear; and
- No evidence by physical examination and medical history of ear conditions (external, middle, or internal) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MENIERE'S DISEASE**
2. **VESTIBULAR NEURONITIS**
3. **VERTIGO & PAROXYSMAL POSITIONAL VERTIGO**
4. **ACOUSTIC NEUROMA**
5. **OTOSCLEROSIS**
6. **CHOLESTEATOMA**
7. **STAPEDECTOMY OR MIDDLE EAR RECONSTRUCTIVE SURGERY**
8. **CURRENT TYMPANIC MEMBRANE PERFORATION (FULLY HEALED PERFORMATIONS MAY BE ACCEPTABLE)**
9. **OBSTRUCTED EUSTACHIAN TUBE**
10. **ACUTE OR CHRONIC EAR INFECTIONS (INTERNAL, MIDDLE, OR EXTERNAL)**
11. **MASTOIDITIS OR SURGERY**
12. **CERUMEN OBSTRUCTION OF THE EXTERNAL CANAL**
13. Any **OTHER DISEASE OR DEFECT** of the ear which adversely affects hearing or equilibrium and which may interfere with the safe and efficient job performance generally is disqualifying

Head, Nose, Mouth, Throat and Neck Standard

The selectee/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
 - normal flexion, extension, and rotation of the neck; and
 - open nasal and oral airways; and
 - unobstructed Eustachian tubes; and
 - no structural abnormalities that would prevent the normal use of self-contained underwater breathing apparatus; and
- Normal conversational speech; and
- No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result In Disqualification Include, But Are Not Limited To, The Following Examples:

1. **NECK MASSES, LYMPHADENOPATHY, TRACHEOSTOMY, OR TRACHEAL FISTULA**
2. **ACUTE OR CHRONIC SINUSITIS**
3. **HEAD INJURY WITH SEQUELAE**
4. **ACUTE OR CHRONIC DENTAL DISEASE, INCLUDING CARIES AND PERIODONTITIS**
5. **ACUTE OR CHRONIC SOFT TISSUE INFECTION OR DISEASE**
6. Any **OTHER CHRONIC DISEASE OR CONDITION** which significantly interferes with speech or breathing and bears the potential to render the person suddenly incapacitated is generally disqualifying

Dermatologic Standard

The selectee/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the requirements of the function. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result In Disqualification Include, But Are Not Limited To, The Following Examples:

1. **SKIN CANCER** (including melanoma and severe or poorly controlled basal cell or squamous cell carcinoma)

2. **SEVERE, CHRONIC, OR CONTACT DERMATITIS (IF DUE TO MATERIALS LIKELY TO BE ENCOUNTERED IN PPE OR SCUBA)**
3. **ANY OPEN SKIN LESIONS, UNTIL WELL HEALED**
4. Any **OTHER DERMATOLOGIC CONDITION** which significantly interferes with normal function or bears the potential to render the person suddenly or subtly incapacitated, or to be aggravated by prolonged exposure to water or occlusive coverings, generally is disqualifying

Central and Peripheral Nervous Systems Standard
--

The selectee/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
 - intact cranial nerves, I-XII; and
 - normal vibratory sense in the hands and feet; and
 - normal proprioception of the major joints; and
 - normal sensation of hot and cold in the hands and feet; and
 - normal sense of touch in the hands and feet; and
 - normal reflexes of the upper and lower extremities; and
 - normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and
- Normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **HISTORY OF NEUROLOGICAL DECOMPRESSION ILLNESS WITH RESIDUAL DEFICIT**
2. **HEAD INJURY WITH SEQUELAE**
3. **ATAXIA**
4. **MUSCULAR DYSTROPHY**
5. **NARCOLEPSY**
6. **SYNCOPE (FAINTING SPELLS)**
7. **PARKINSON S DISEASE**
8. **CEREBROVASCULAR ACCIDENT (STROKE), OR FIXED NEUROLOGICAL DEFICIT**
9. **INTRACRANIAL TUMOR, ANEURYSM, HEMORRHAGE, OR VASCULAR MALFORMATION** until at least 3 months after surgical correction, and with clearance by surgeon
10. **TRANSIENT ISCHEMIC ATTACKS OR RECURRING NEUROLOGICAL DISORDERS**
11. **SENSORY DYSFUNCTION** (smell, touch, taste).
12. **MIGRAINE HEADACHES, IF ACCOMPANIED BY AURA, SENSORY**

IMPAIRMENT, PHOTOPHOBIA, OR NAUSEA AND VOMITING

13. ORGANIC BRAIN DISEASE

14. History of or current CENTRAL NERVOUS SYSTEM SHUNT

15. Any **OTHER NERVOUS SYSTEM CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated is generally disqualifying

16. EPILEPSY OR SEIZURES OF ANY TYPE

An individual with a history of one or more seizures must provide the following written information from a physician who is board certified in neurology. This information is to be provided on the physician's own letterhead, and must include:

- the physician's printed or typed name (i.e., legible), signature, and date;
- confirmation that the physician has reviewed and is familiar with the requirements of the job, as presented in the Essential Functions And Work Conditions of a National Park Service Diver;
- a summary of all current medications, along with any known side effects experienced or expected to be experienced by the diver;
- the known or suspected triggers or factors that may lead to seizure activity for the diver;
- the results of the most recent diagnostic testing, such as an EEG
- the diver's overall medical prognosis, related to his/her seizure disorder; and
- the estimated risk or likelihood of future seizure activity the diver might experience, of any degree of severity

Psychiatric / Psychological Function Standard

The selectee/incumbent must have judgment, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the requirements of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric or psychological conditions (including untreated or unsuccessful treatment for alcohol or substance abuse) considered likely to interfere with efficient job performance, present a safety risk to the individual or others, or to worsen as a result of carrying out the essential functions of the job.

Disorders which affect safe and efficient job performance may be disqualifying, and consideration must be given to the individual's history of treatment and control of the condition(s). All diagnoses must be consistent with the diagnostic criteria as established by the most recent version of the Diagnostic and Statistical Manual of Mental Disorders. Any condition not listed here shall be considered on a case-by-case basis.

Conditions Which May Result In Disqualification Include, But Are Not Limited To:

1. **AXIS I DISORDERS (PSYCHIATRIC CLINICAL DISORDERS)**
2. **AXIS II DISORDERS (PERSONALITY DISORDERS)**

With particular attention to:

4. **CLAUSTROPHOBIA OR OTHER PERTINENT PHOBIAS**
5. **SUICIDAL IDEATION, GESTURES, OR ATTEMPTS**
6. **UNTREATED OR INADEQUATELY TREATED DEPRESSION OR ANXIETY DISORDER**
7. Any **OTHER PSYCHIATRIC** or **PSYCHOLOGICAL CONDITION** which significantly or potentially interferes with normal function or bears the potential to render the person suddenly or subtly incapacitated.

Cardiovascular System Standard

The selectee/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
 - blood pressure of less than or equal to 140 mmHg systolic and 90 mmHg diastolic; and
 - a normal electrocardiogram at baseline and at each scheduled exam after age 40 (minor, asymptomatic arrhythmias may be acceptable); and
 - no pitting edema in the lower extremities, and
 - normal cardiac exam; and
- No evidence by physical examination and medical history of cardiovascular conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result In Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CORONARY ARTERY DISEASE**
2. **LEFT BUNDLE BRANCH BLOCK**
3. **MYOCARDITIS/ ENDOCARDITIS/ PERICARDITIS** (Active or recently resolved cases) A past history of these diseases may require additional testing to determine the current capabilities
4. History of **MYOCARDIAL INFARCTION**
5. History of **CARDIAC SURGERY**, depending on the time that has been allowed for recovery, the recovery of aerobic fitness (13 METS or greater is recommended), and a clearance by the treating surgeon or cardiologist to return to unrestricted diving
6. **SYMPTOMATIC VALVULAR HEART DISEASE (INCLUDING MITRAL VALVE PROLAPSE)**
7. **ATRIAL SEPTAL DEFECT** (note: while screening for the condition is not required for a diving medical clearance, the known presence of a **PATENT FORAMEN**

OVALE, or **PFO**, does not preclude a clearance so long as the diving officer has been notified regarding the need to avoid diving circumstances where the risk of bubble formation is increased)

8. **DYSRHYTHMIAS** such as ventricular tachycardia or fibrillation, Wolff-Parkinson-White syndrome, Paroxysmal Atrial Tachycardia with or without block
9. **ANGINA PECTORIS** or chest pain of unknown etiology
10. **CARDIOMYOPATHY** from any cause
11. **CONGESTIVE HEART FAILURE**
12. **PACEMAKERS** generally are disqualifying, depending on the reason for the pacemaker; individuals considered for clearance must be able to document that their pacemaker is capable of withstanding (and operating normally) under conditions expected to be encountered while diving (e.g., pressures associated with dives of 100 feet or more, and rapid changes in pressure)
13. **PROSTHETIC VALVES**, depending on the time that has been allowed for recovery, the recovery of aerobic fitness (13 METS or greater is recommended), and a clearance by the treating surgeon or cardiologist to return to unrestricted diving; any other condition or post-surgical management that requires the use of Coumadin or other anti-coagulants generally is disqualifying unless the individual documents that the anticoagulation is regularly monitored, stable, and within INR targets prescribed by the treating physician
14. **IMPLANTED CARDIAC DEFIBRILLATORS**, devices that may, as a result either of their normal operation or a malfunction, render the individual suddenly or subtly incapacitated, generally are disqualifying
15. Any **OTHER CARDIAC DISEASE OR CONDITION** which significantly interferes with normal cardiac function and bears the potential to render the person suddenly incapacitated is generally disqualifying

Peripheral Vascular System Standard

The peripheral vascular system involves the veins and arteries of the head, neck, and upper and lower extremities. The selectee/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the vasculature of the head, neck, and upper and lower extremities that is within the range of normal variation, including:
 - no evidence of phlebitis or thrombosis; and
 - no evidence of venous stasis or edema; and
 - no evidence of arterial insufficiency; and
- No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ARTERITIS**
2. **CHRONIC VENOUS INSUFFICIENCY**
3. **DEEP VEIN THROMBOSIS**
4. **CHRONIC THROMBOPHLEBITIS**
5. **SYMPTOMATIC VARICOSE VEINS**
6. **RAYNAUD'S DISEASE**
7. Any **OTHER CHRONIC DISEASE OR CONDITION** which significantly compromises the vascular system and bears the potential to render the person suddenly incapacitated generally is disqualifying; any condition that requires the use of Coumadin or other anti-coagulants generally is disqualifying unless the individual documents that the anticoagulation is regularly monitored, stable, and within INR targets prescribed by the treating physician

Chest and Respiratory System Standard
--

The selectee/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- A pulmonary function test (PFT) showing:
 - forced vital capacity (FVC) of at least 70% of the predicted value; and
 - forced expiratory volume at 1 second (FEV₁) of at least 70% of the predicted value; and
 - the ratio FEV₁/FVC of at least 70%; and
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **SIGNIFICANT OBSTRUCTIVE OR RESTRICTIVE DISORDER**
2. **ASTHMA** after the age of 12 years must be considered on a case-by-case basis; individuals whose asthma is stable, well controlled, and does not preclude normal lung function, may be cleared; documentation of a current diagnostic assessment prior to making final recommendations may be necessary
3. **ACTIVE PULMONARY TUBERCULOSIS (TB):** A history of confirmed TB that has been treated for longer than 6 months is acceptable provided that documentation supports the treatment history, confirms that the person has been rendered non-communicable, and the other provisions of the Chest and Respiratory System Standard have been met
4. **HISTORY OF CHRONIC OR RECURRENT BRONCHITIS ASSOCIATED WITH DECREASED PFT RESULTS.**
5. **LUNG ABSCESS, EMPYEMA, BLEBS, OR CYSTS**

6. **PLEURISY WITH EFFUSION**
7. **PULMONARY EMBOLISM** within the past six months; any condition that requires the use of Coumadin or other anti-coagulants generally is disqualifying unless the individual documents that the anticoagulation is regularly monitored, stable, and within INR targets prescribed by the treating physician
8. History of **SPONTANEOUS PNEUMOTHORAX**
9. History of **PULMONARY BAROTRAUMA** (e.g., mediastinal or subcutaneous emphysema) resulting from a dive in which there were no known procedural violations, or any **SUBSEQUENT CASE OF PULMONARY BAROTRAUMA**, regardless of circumstances
10. History of **TRAUMATIC PNEUMOTHORAX** (if recurrent, or recent)
11. **GENERALIZED OR BULLOUS EMPHYSEMA**
12. **ACUTE OR CHRONIC UPPER RESPIRATORY INFECTION**
13. **PNEUMONECTOMY OR LOBECTOMY** (if FEV₁ less than 70%)
14. **OTHER OPEN CHEST SURGERY** until fully recovered and cleared by the surgeon or pulmonologist to confirm a lack of air trapping
15. Any **OTHER RESPIRATORY DISEASE OR CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated is generally disqualifying

Note: The requirement to use an inhaler (such as for asthma) requires agency review, and further information may be required related to the individual's history, the causes of bronchospastic episodes or exacerbations, and the response to medications.

Gastrointestinal System Standard

The selectee/incumbent must have a gastrointestinal (GI) tract that is sufficient for the individual to safely and efficiently carry out the requirements of the job. The standard may be demonstrated by:

- A physical exam and evaluation of the GI tract, including the mouth, throat, abdomen, rectum, and anus, that is within the range of normal variation; and
- Normal liver function and blood chemistry laboratory tests; and
- No evidence by physical examination (including laboratory testing) and medical history of GI conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ACUTE OR CHRONIC ACTIVE HEPATITIS**
2. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS or IRRITABLE BOWEL SYNDROME** (Satisfactory control or management of these conditions with surgical and/or medical treatments will be considered on a case-by-case basis)
3. **COLOSTOMY**

4. **SYMPTOMATIC CHOLECYSTITIS or CHOLELITHIASIS**
5. **DIVERTICULITIS** (symptomatic)
6. **CIRRHOSIS OF THE LIVER** (depending upon the degree of severity, the etiology, and the prognosis)
7. **GASTRIC OR INTESTINAL OBSTRUCTION** from any cause, until the condition has fully resolved
8. History of **GASTRIC OR BOWEL RESECTION**, until symptom-free and fully and successfully recovered from surgery
9. History of **GASTRIC BYPASS SURGERY**
10. **ACTIVE GASTRIC OR DUODENAL ULCER**
11. **SYMPTOMATIC GASTRO-ESOPHAGEAL REFLUX DISEASE**
12. Clinically-significant or bowel encompassing **INGUINAL, INCISIONAL, HIATAL, or VENTRAL HERNIA**
13. **ACHALASIA**
14. **ACTIVE (BLEEDING, LARGE, OR SYMPTOMATIC) HEMORRHOIDS**
15. Any **OTHER GASTROINTESTINAL DISEASE OR CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated is generally disqualifying

Genitourinary System Standard

In general, any dysfunction of the genitourinary or reproductive system that has the capability of interfering with the required tasks or rendering the person suddenly incapacitated may be considered disqualifying. The selectee/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. Compliance with the standard may be demonstrated by:

- A normal clean catch urinalysis; and
- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **POLYCYSTIC KIDNEY DISEASE**
2. **ACUTE or CHRONIC RENAL FAILURE**
3. **NEPHROTIC SYNDROME**
4. **SYMPTOMATIC URINARY CALCULI**
5. **NEUROGENIC BLADDER**
6. **HISTORY OF RENAL VEIN THROMBOSIS**
7. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
8. History of **ENURESIS OR URINARY INCONTINENCE** (after age 13)
9. Any **OTHER GENITOURINARY DISEASE OR CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly incapacitated is generally disqualifying

Musculoskeletal System Standard

The selectee/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the functional requirements of the job. Any condition that adversely impacts an individual's movement, range of motion, agility, flexibility, strength, dexterity, or coordination may be incompatible with the activities inherent with diving. A healthy musculoskeletal system may be demonstrated by:

- A physical exam of the upper and lower extremities (including all digits), neck, and back that is within the range of normal variation, including strength, flexibility, range of motion, and joint stability; and
- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ARTHRITIS** (any etiology) if there is limited joint motion and/or pain
2. **OSTEONECROSIS, IF IT INVOLVES ANY ARTICULAR SURFACE**
3. **AMPUTATIONS** of one or more phalanges or digits if it directly affects the ability to grip and handle any required equipment or tools efficiently
4. **AMPUTATIONS OF ANY EXTREMITY**
5. **ANKYLOSING SPONDYLITIS OR ANY INFLAMMATORY OR SYMPTOMATIC SPONDYLOPATHY**
6. **SCOLIOSIS**, if a lumbar curve is 20 degrees or more, or if a thoracic curve is 30 degrees or more, or if there is any demonstrable loss of normal and pain-free function.
7. **LUMBOSACRAL INSTABILITY**, including pain or limitations of flexibility and strength that limits the individual's ability to stand, bend, stoop, carry heavy objects or sit for long periods of time
8. **DEGENERATIVE DISC DISEASE** that is symptomatic
9. **FIXED LORDOSIS OR KYPHOSIS** which limits mobility and skeletal strength
10. **SURGICAL FUSION OF SPINAL VERTEBRAE**
11. **FRACTURES**: these may require orthopedic evaluation to determine whether functional limitations currently exist; a recent fracture that requires immobilization (or for which limb immobilization is indicated, such as casting, splinting, bracing, etc.), and that prevents the safe and efficient performance of the full range of diving duties, will require deferment of the clearance until the injury has healed sufficiently for the treating physician to be able to document that immobilization is no longer required, that no physical limitations are present, and no restrictions are required
12. **SCIATICA OR OTHER NEUROPATHIES**
13. **CHRONIC LOW BACK PAIN** (by medical history), with or without demonstrable pathology, may be considered disqualifying; each case will be reviewed in the context of the etiology, the response to therapeutic regimens, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences, combined with the current clinical presentation
14. A history of a **CHRONIC SPRAIN OR STRAIN OF THE NECK** that limits mobility

- or causes recurring cephalgia (headaches) may be disqualifying
15. Evidence of a **CERVICAL RIB, SUBLUXATION, TORTICOLLIS, SYMPTOMATIC THORACIC OUTLET SYNDROME** or a **BRACHIAL CLEFT CYST**
 16. Any evidence of a **CERVICAL NEUROPATHY** that is associated with numbness, tingling or loss of motor strength in the upper extremities may be disqualifying
 17. Any medical condition, congenital or acquired, which interferes with agility, dexterity, the lifting of heavy objects, or the ability to perform the full range of diving duties may be disqualifying
 18. A condition may be disqualifying if there is evidence that the general body symmetry may directly interfere with the safe utilization of issued standard and specialty diving equipment

Endocrine and Metabolic Systems Standard

Any excess or deficiency in hormone production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The selectee/incumbent must have endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- Normal fasting blood sugar level; and
- Normal blood chemistry results; and
- No evidence by physical examination (including laboratory testing) and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ADRENAL DYSFUNCTION** (such as Addison's Disease or Cushing's Syndrome)
2. **THYROID DISEASE** that is uncontrolled or associated with complications; hypothyroidism adequately controlled by hormone replacement may be considered acceptable
3. **PITUITARY DYSFUNCTION**
4. **DIABETES MELLITUS**, unless documented to be stable and well controlled on a regimen that is compatible with the work schedule and physical demands of the diving assignment, and with no history of symptomatic hypoglycemic events during the preceding two years
5. **DIABETES INSIPIDUS**
6. Any **OTHER ENDOCRINE CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly or subtly incapacitated generally is disqualifying

Hematopoietic System Standard

The selectee/incumbent must have a hematopoietic (blood and blood-producing) system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- A complete blood count (including at least hemoglobin, hematocrit, platelets, and white blood count, with differential) that is within the normal range; and
- No evidence by physical examination (including laboratory testing) and medical history of hematopoietic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ANEMIA, HEREDITARY OR ACQUIRED (AND NOT CURABLE)**
2. **INHERITED COAGULATION DEFECTS (e.g., HEMOPHILIA, VON WILLEBRAND'S DISEASE, IDIOPATHIC THROMBOCYTOPENIA)** generally are disqualifying
3. **AGRANULOCYTOSIS OR LEUKOPENIA**
4. **CHRONIC LYMPHANGITIS**
5. **SPLENOMEGALY OR SPLENECTOMY** (unless due to trauma)
6. Any **OTHER HEMATOPOETIC CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly or subtly incapacitated is generally disqualifying

Prosthetics, Transplants, and Implants Standard

The presence or history of organ transplantation or the use of prosthetics or implants are not of themselves disqualifying. However, the selectee/incumbent must be able to safely and efficiently carry out the requirements of the job despite these factors. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Note: For individuals with transplants, prosthetics, or implanted pumps or electrical devices, the examinee may be required to provide for agency review satisfactory documentation from his/her surgeon or physician that the individual (and, if applicable, his/her prosthetic or implanted device) is considered to be fully cleared and compatible with the specified functional requirements of the job.

Infectious Disease / Immune System / Allergic Disorders Standard

The selectee/incumbent must be free of communicable diseases, have a healthy immune system,

and be free of significant allergic conditions in order to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A general physical exam of all major body systems that is within the range of normal variation, including:
 - no evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the requirements of the job; and
 - no evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
- Normal complete blood count, including white blood count and differential; and
- No evidence by physical examination and medical history of infectious disease, immune system, or allergy conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **VASCULITIS**
2. **HASHIMOTO’S THYROIDITIS**
3. **MYASTHENIA GRAVIS**
4. **SYSTEMIC FUNGAL INFECTIONS**
5. **SYSTEMIC LUPUS ERYTHEMATOSUS**
6. **MULTIPLE SCLEROSIS**
7. **POSITIVE PPD (TUBERCULOSIS SKIN TEST)**, unless the individual has completed a full course of prophylactic treatment
8. Any **OTHER INFECTIOUS DISEASE, IMMUNE SYSTEM, OR ALLERGIC CONDITION** which significantly interferes with normal function and bears the potential to render the person suddenly or subtly incapacitated is generally disqualifying

Medication Standard

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications that are likely to present a safety risk or to worsen as a result of carrying out the specified functional requirements. Each of the following points should be considered:

Medication(s) (type and dosage requirements)	Potential drug side effects
Drug-drug interactions	Adverse drug reactions
Drug toxicity or medical complications from long-term use	Drug-environmental interactions
Drug-food interactions	History of patient compliance

All medication requirements will be evaluated to ensure that safe and efficient job performance will not be affected adversely by their use. Medications such as narcotics, sedative hypnotics, barbiturates, amphetamines, or any drug with the potential for addiction or a reduction in attentiveness that are taken for extended periods of time (usually beyond 10 days) or are prescribed for a persistent or recurring underlying condition generally would be considered disqualifying. Cases will be reviewed on a case-by-case basis.

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Medical Review Officers

These Standards Are Applicable to Positions Requiring

Inspectors

The Department of the Interior has several job categories that involve the inspection of facilities, structures, and environments. While each job has unique aspects, there are sufficient similarities to allow some generalizations to be valid for certain groups of jobs. For purposes of this *Handbook*, medical standards for two job groups have been developed: those that involve inspection of land-based features, and those that involve travel and inspection work in an off-shore environment that requires air travel. Both sets of standards were developed by multi-disciplinary teams involving DOI, Public Health Service, and Office of Personnel Management representatives who conducted field evaluations to assure that the resulting standards reflected actual work practices and requirements.

Before any agency uses either set of medical standards, careful consideration should be given to the applicability of the standards to the functions and working conditions of the jobs the agency wishes to cover. Reference should be made to the job description tables contained in the respective sets of standards, and adjustments in both the tables and the resulting standards may need to be made accordingly.

The first set of inspector standards is for employees who conduct inspections of remote land-based features, such as mine sites or terrain in which mines have existed in the past. The second set of inspector standards is for employees who conduct inspections of structures and environmental conditions in off-shore locations requiring air and boat travel for access.

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Agency Medical Officers

These Standards Are Applicable to the Following Function:

Land-Based Inspectors

Employees Who Conduct Inspections in Remote Locations Involving Exposure to Heavy Equipment and Uneven Terrain

General Background

Under 5 CFR 339, Medical Qualifications Determinations, medical standards may be established for positions with duties that are arduous or hazardous in nature. The medical standards described in this chapter are required because of the arduous and hazardous occupational, functional, and environmental requirements of these inspectors. The medical standards are provided to aid the examining physician, the agency medical officer, and agency officials in determining what medical problems may hinder an individual's ability to safely and efficiently perform the functional requirements of the position without undue risk to himself/herself or others. They are also intended to ensure consistency and uniformity in the medical evaluation of selectees and incumbent employees.

Each of the medical standards described in the chapter is subject to clinical interpretation by the agency's medical officer, who will incorporate his or her knowledge of the job requirements under and the environmental conditions in which bureau employees must work. The AMO will make specific assessments on a case-by-case basis to determine each given individual's ability to meet the performance related requirements of his or her position. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the replacement or the periodic medical-examination processes.

Rationale for Medical Evaluation and Review of These Inspectors

The job requirements for these employees are by their nature arduous and hazardous. These jobs, and those of similar positions, are performed under variable and unpredictable working conditions. For these reasons, the Medical Standards Review Team has developed the standards that follow for these positions. Our goal here has been to help ensure that:

- Personnel will be able to perform the full range of functional requirements of their position duties under the conditions in which those duties must be performed;
- Existing/preexisting medical conditions of personnel and selectees will not be aggravated or accelerated; and
- The agency's strong commitment to public and employee health and safety, as well as to the accomplishment, with integrity, of its mission will remain unimpaired.

Periodicity of Medical Evaluations

Medical evaluations of selectees are to be conducted before the selectee is placed (this is the so-called “preplacement exam”). Evaluations of incumbents are to be conducted every 3 years thereafter. The AMO may recommend that, owing to health and safety risks, a given individual’s medical evaluation should be conducted more frequently.

The medical evaluation is to consist of those services summarized in table II-1. The evaluation is to be conducted by a qualified health care provider (see Tab 5, “Medical Services Providers,”), who should use the DOI Standard Medical History and Examination Form to record and report the results of the exam. The AMO will provide the final recommendation to a designated agency official as to whether or not an examined individual has been deemed capable of meeting the full range of position functional requirements.

An individual who is unable to obtain and maintain a driver’s license for any medical reasons will not be considered for an inspector position until such time as the medical condition is resolved and a driver’s license has been issued. Regardless of the reissuance of a driver’s license, the selectee must still meet the medical standards outlined in this chapter.

Essential Functions and Work Conditions

Time/Work Volume	Physical Requirements	Environment	Physical Exposures
May include:			
<p><i>up to:</i></p> <ul style="list-style-type: none"> • 3-4 inspections/day • about 25 per month <p><i>and:</i></p> <ul style="list-style-type: none"> • long hours • irregular hours 	<ul style="list-style-type: none"> • steep terrain • rocky, loose, or muddy ground surfaces • thick vegetation • down/standing trees • wet leaves/grasses • falling rocks • open water, still or flowing • mostly outdoors • varied climates (cold/hot/wet/dry/humid/snow/rain) • heights • open holes/drop offs • very rough roads • isolated/remote sites 	<ul style="list-style-type: none"> • dim light or darkness • bright sunshine/UV • burning materials • caustic materials • explosives • airborne particulates • fumes • fuel vapors • allergens • loud noises • snakes • insects/ticks • large animals • large equipment 	<ul style="list-style-type: none"> • inspect field sites • work independently • use PPE (may include hard hat, steel toed shoes, and eyewear) • read maps • change tires • arduous exertion • carry 10# • use shovel and soil probe • drive for many hours • fly in helicopters and fixed wing airplanes • extensive walking • kneeling • stooping • loading boxes/equipment • speak/meet with the public
<p>Land Based Inspectors</p> <p>Employees Who Conduct Inspections in Remote Locations Involving Exposure to Heavy Equipment and Uneven Terrain</p>			

Medical Evaluation Components for Inspector Examinations

Services, By Category

Histories:

General Medical History and Occupational History

Examination items:

General Appearance and Vital Signs

General Physical Examination

Special Attention To:

- Overall physical fitness
- Skin
- Eyes, ears, nose, mouth, and throat
- Neck
- Thyroid
- Endocrine and metabolic system
- Respiratory system
- Cardiovascular system
- Back and musculoskeletal system
- Extremities
- Peripheral vascular system
- Abdomen
- Gastrointestinal system
- Genitourinary system
- Central nervous system
- Peripheral nervous system
- Mental status evaluation

Diagnostic tests/procedures:

- **Audiogram** (including 500, 1,000, 2,000, 3,000, 4,000, 6,000, and 8,000 Hertz [Hz] in both ears)
- **Vision**, including: Far and near vision acuity (uncorrected and corrected)
- **Peripheral vision**
- **Depth perception**
- **Color discrimination** (red/green/yellow; baseline exam only)
- **Chest X-Ray** (baseline exam and as determined to be necessary)
- **Pulmonary Function Test / Spirometry** (baseline exam and as determined to be necessary)
- **Electrocardiogram**, resting (baseline exam)

Laboratory:

- Complete blood count (including hemoglobin, hematocrit, platelets, and white blood count, with differential)
- Clean-catch dipstick urinalysis (baseline exam)
- Liver function tests (LDH, SGOT, SGPT, GGT, and bilirubin; baseline exam)
- Cardiac risk profile (total cholesterol, LDL, HDL, and triglycerides)
- Fasting blood sugar

Clearances: All medical clearances must be provided by the AMO.

Vision Standard

The selectee/incumbent must be able to see well enough to safely and efficiently carry out the functional requirements of the position. This requires binocular vision, near and far visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by meeting all of the following standards:

- Distant visual acuity of at least 20/200 in each eye without correction;
- Distant visual acuity of at least 20/40 in each eye, with or without correction;
- Near visual acuity, with or without correction, of at least 20/25 (Jaeger equivalent No. 2);
- Color vision sufficient to distinguish at least red, green, and amber (yellow);
- Peripheral vision of at least 70° laterally in each eye;
- Normal depth perception; and
- No ophthalmologic condition that would increase ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Any vision condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis

Hearing Standard

The selectee/incumbent must be able to hear well enough to safely and efficiently carry out the functional requirements of the position. This requires binaural hearing (to localize sounds) and auditory acuity, which may be demonstrated by meeting all of the following standards:

- A current pure tone, air conduction audiogram, using equipment and a testing room which meet the standards of the American National Standards Institute (see 29 CFR 1910.95);
- Documentation of hearing thresholds of no greater than 40 decibels at 500, 1,000, 2,000, and 3,000 Hz in each ear, with or without a pre-fitted personal hearing aid;
- No evidence by physical examination or medical history of ear conditions (external, middle, or internal) likely to progress and/or pose problems with carrying out the functional requirements of the position.
- If a hearing aid is used, it must be of a type unlikely to be dislodged or damaged while the user performs the regular functional requirements of the position

Any ear or hearing condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Head, Nose, Mouth, Throat, and Neck Standard

The selectee/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are normal or otherwise sufficient for the individual to safely and efficiently carry out

the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:

- normal flexion, extension, and rotation of the neck;
- open nasal and oral airways;
- unobstructed Eustachian tubes;
- no structural abnormalities that would prevent the normal use of a hard hat and protective eyewear;
- normal sense of smell; and
- normal conversational speech; and
- No evidence by physical examination or medical history of head, nose, mouth, throat, or neck conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any head, nose, mouth, throat, or neck condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Peripheral Vascular System Standard

The selectee/incumbent must have peripheral vasculature that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:

- no evidence of phlebitis or thrombosis;
- no evidence of venous stasis; and
- no evidence of arterial insufficiency; and
- No evidence by physical examination or medical history of peripheral vasculature conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any vascular condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Cardiovascular System Standard

The selectee/incumbent must have a cardiovascular system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

A physical exam of the cardiovascular system that is within the range of normal variation, including:

- blood pressure of less than or equal to 160 mmHg systolic and 90 mmHg diastolic, whether treated or untreated (if treated, please see the Medication Standard);
- a normal baseline electrocardiogram (minor, asymptomatic arrhythmias may be acceptable); and
- no pitting edema in the lower extremities; and
- No evidence by physical examination or medical history of cardiovascular conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any cardiovascular condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Chest and Respiratory System Standard

The selectee/incumbent must have a respiratory system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This requires may be demonstrated by meeting all of the following standards:

- A physical exam of the respiratory system that is within the range of normal variation;
- A pulmonary function test (on the baseline exam) showing:
 - forced vital capacity (FVC) of at least 70 percent of the predicted value;
 - forced expiratory volume at 1 second (FEV1) of at least 70 percent of the predicted value; and
 - the ratio FEV1/FVC of at least 70 percent of the predicted value; and
- No evidence by physical examination or medical history of respiratory conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any chest or respiratory condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Gastrointestinal System Standard

The selectee/incumbent must have a gastrointestinal tract that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam and evaluation of the gastrointestinal tract that is within the range of normal variation;

- Normal liver function tests (baseline exam); and
- No evidence by physical examination, laboratory, or medical history of gastrointestinal conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any gastrointestinal condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Genitourinary System Standard

The selectee/incumbent must have a genitourinary system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam and evaluation of the genitourinary system that is within the range of normal variation;
- A normal clean catch urinalysis (baseline exam); and
- No evidence by physical examination or medical history of genitourinary conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any genitourinary condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Endocrine and Metabolic Systems Standard

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The selectee/incumbent must have endocrine and metabolic functions that are normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation;
- Normal fasting blood sugar level; and
- No evidence by physical examination, laboratory, or history of endocrine/metabolic conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any endocrine or metabolic condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Musculoskeletal System Standard

The selectee/incumbent must have a musculoskeletal system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for:
 - strength;
 - flexibility;
 - range of motion; and
 - joint stability; and
- No evidence by physical examination or medical history of musculoskeletal conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any musculoskeletal condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Hematopoietic System Standard

The selectee/incumbent must have a hematopoietic (blood and blood-producing) system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam of the skin that is within the range of normal variation;
- A complete blood count (including hemoglobin, hematocrit, platelets, and white blood count, with differential) that is within the normal range; and
- No evidence by physical examination, laboratory tests, or medical history of hematopoietic conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any hematopoietic condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Immune System/Allergic Disorders Standards

The selectee/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions in order to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A general physical exam of all major body systems that is within the range of normal variation, including:

- no evidence of current communicable disease that would be expected to interfere
- with the safe and effective performance of the functional requirements of the job;
- no evidence of current communicable disease that would be expected to pose a
- threat to the health of any co-workers or the public; and
- normal nasal mucus membranes and major sinus cavities of the face;
- Normal complete blood count, including white blood count and differential; and
- No evidence by physical examination or medical history of infectious disease, immune system, or allergy conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any immune system or allergic condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Central and Peripheral Nervous Systems/Vestibular System Standard

The selectee/incumbent must have a nervous system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam of the cranial and peripheral nerves and the vestibular system that is within the range of normal variation, including:
 - intact cranial nerves, I-XII;
 - normal vibratory sense in the hands and feet;
 - normal proprioception in the wrists, elbows, ankles, and knees;
 - normal sensation of hot and cold in the hands and feet;
 - normal sense of touch in the hands and feet;
 - normal reflexes of the upper and lower extremities; and
 - normal balance (i.e., heel-toe walk; Romberg; balance on one foot);
 - normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination or medical history of nervous or vestibular system conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Psychiatric Disorders Standard

The selectee/incumbent must have judgement, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the functional requirements of the position. This may be demonstrated by meeting the following standard:

- No evidence by physical examination or medical history of psychiatric conditions or behaviors (including alcohol or substance abuse) likely to progress and/or pose problems with carrying out the functional requirements of the position.

Please note that current drug addiction and use of illegal drugs is disqualifying. Individuals who have successfully completed a substance abuse treatment program may be found to be disabled under provisions of the Americans with Disabilities Act and may be eligible for accommodation consideration. Any psychiatric condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Dermatology Standard

The selectee/incumbent must have skin that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting both the following standards:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination or medical history of dermatologic conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any dermatologic condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

Organ Transplantation and Prosthetics Standard

The presence or history of organ transplantation or use of prosthetics are not of themselves disqualifying. However, the selectee/incumbent must be able to safely and efficiently carry out the functional requirements of the position. There must be no evidence by physical examination, laboratory tests, or medical history that the transplant, the prosthesis, or the conditions that led to the need for transplant or prosthesis are likely to worsen and/or pose problems with carrying out the functional requirements of the position.

For individuals with transplants, it will be necessary for the AMO to receive and review documentation from the transplant surgeon or his/her representative that the individual is considered to be fully cleared to engage in the specified activities of the position, and under the conditions likely to be encountered.

Medication Standard

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications that are likely to progress and/or pose problems with carrying out the functional requirements of the position. Each of the following will be considered when making recommendations regarding the use of medications:

1. Medication(s) (type and dosage requirements)	2. Potential drug side effects
---	--------------------------------

3. Drug-drug interactions	4. Adverse drug reactions
5. Drug toxicity or medical complications from long-term use	6. Drug-environmental interactions
7. Drug-food interactions	8. History of patient compliance

The Condition of Pregnancy

If a selectee or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the selectee's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Agency Medical Officers

These Standards Are Applicable to the Following Function:

Off-Shore Inspectors

Employees Who Conduct Inspections in Remote Locations, Requiring Over-Water Helicopter Flight

General Background

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for functions with duties that are arduous or hazardous in nature. The medical standards described in this section are required because of the arduous and hazardous occupational, functional and environmental requirements of inspectors who work offshore (hereinafter referred to as “Inspector”). Please refer to the table beginning on page 3 of this Attachment. The medical standards are provided to aid the examining physician, the designated agency medical officer(s), and officials of other involved government agencies (e.g., OPM). They are to be used when determining whether there are medical conditions present that may affect an individual’s ability to safely and efficiently perform the requirements of an Inspector without undue risk to himself/herself or others. The results of such determinations are to be used by an agency-based team (e.g., safety, personnel, management, peers, and medical) to consider whether waivers or reasonable accommodation may be appropriate when an individual is found to not meet a specified standard. In this way, the standards are intended to help insure consistency and uniformity in the medical evaluation of all selectees and incumbents.

Each of the medical standards listed in this document are subject to clinical interpretation by an appropriate agency medical officer (AMO) who will incorporate his/her knowledge of the essential job functions and the environmental conditions under which an employee may work. Listed with the standards are examples of medical conditions and/or physical impairments that may be incompatible with safe and efficient performance of duties. Individualized assessments will be made on a case-by-case basis to determine the individual’s ability to meet the performance-related requirements of the Inspector’s job. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the pre-placement or periodic medical examination process.

Rationale for Medical Evaluation and Review of These Inspectors

The essential functions of these Inspectors are by nature arduous and hazardous. These functions are performed under variable and unpredictable working conditions. In response, an interagency team has developed these standards in order to help insure the following:

- Inspectors will be able to perform the full range of essential functions of their jobs under the conditions under which those functions may be performed.
- Existing/preexisting medical conditions of Inspectors and selectees will not be aggravated, accelerated, exacerbated, or permanently worsened as a result of carrying out the functions of the job.
- Demonstration of the strong commitment of the agency to public and employee health and safety, and a strong commitment to maintaining the integrity of mission accomplishment.

Periodicity of Medical Evaluations

Medical evaluations are to be conducted both as a *pre-placement* exam for all individuals who are to be assigned to roles that involve the duties of Inspectors, and every three years thereafter. The AMO may determine that, due to health and safety risks, interval changes in health status, and possible medically-related performance concerns, the medical evaluation of individual Inspectors should be conducted more frequently.

The medical evaluation is to consist of those services summarized in the table on page 5 of this Attachment. The evaluation is to be conducted by a qualified health care provider using the DOI Standard Medical History and Examination Form (or another form that provides similar information). For assistance in arranging for physician services, please refer to Tab 5 of this *Handbook*. The AMO will review the results of all examinations and provide the final medical recommendation to the agency.

Essential Functions and Work Conditions

Time/Work Volume	Physical Requirements	Environment	Physical Exposures
May include:			
<ul style="list-style-type: none"> ▪ normal day of 8-10 hours ▪ up to 16-hour shifts (2-3 times per year) ▪ up to 12 days in a row at work ▪ up to 2 weeks in a row on board the platforms ▪ inspection trips conducted up to 150 days per year ▪ may be expected to take inspection trips every day ▪ over 95% of trips are out and back in one day <p>(Alaska Only) over 95 percent of trips are out for more than 1 day</p> <ul style="list-style-type: none"> ▪ work normally conducted during daylight hours (flight dependent; no flying at night) <p>(Alaska Only) work normally conducted during daylight hours, but flying at night is routine</p> <ul style="list-style-type: none"> ▪ one day or less per year unable to return home after inspection, due to weather or equipment problems (in Alaska region only, it could be one day or more) ▪ potential for emergency problems resulting in spending one or more days on the platform ▪ inspector sets own work pace 	<ul style="list-style-type: none"> ▪ put on and wear safety gear (e.g., hard hat, steel toed shoes, hearing protection, flight helmet) ▪ lift and carry briefcase, laptop computer, and duffel bag (about #25) ▪ (Alaska Only) lift and carry briefcase, laptop computer, and arctic survival gear (about #75) ▪ lift & carry ice chests w/drilling mud (about #20) ▪ drive to take off point, or to on-shore inspection sites, 30 minutes to 4 hours ▪ climb into and out of helicopters with small- (e.g., 2-person) to medium- (e.g., 6-person) sized cabins. In Alaska, they could be large cabins (20 person) ▪ fly in helicopters, including over water and for up to 1-2 hours at a time. In Alaska, 4-6 hours. ▪ read and manipulate small avionics devices ▪ hear flight intercom for communications ▪ manipulate certain aircraft doors, shoulder harnesses ▪ speak clearly (be understood by public, and co-workers) ▪ climb and descend stairs and ladders (sometimes several flights, and often open-grated and over water) ▪ see and step over obstacles and raised doorways ▪ kneel, stoop, bend over, and push and pull objects ▪ work in confined, tight spaces ▪ land on helipads, sometimes with hard landings ▪ walk on open-grated walkways, sometimes without railings, and at great heights 	<ul style="list-style-type: none"> ▪ airports and helicopter take-off points ▪ offshore/ocean locations ▪ slick metal and wooden surfaces ▪ uneven surfaces ▪ open gratings, over water ▪ exposed heights (up to 200 feet on structures) ▪ altitudes (up to 3000 feet in helicopters) ▪ confined work areas ▪ close living/working quarters ▪ heat, cold, wet, dry (all with extremes) ▪ high wind ▪ high waves ▪ fog ▪ wildlife (e.g., birds, sea lions) ▪ major industrial environment (e.g., drilling, production, and pumping equipment) ▪ moving materials and heavy equipment ▪ high ladders, steep stairs, swing ropes, man-baskets ▪ high pressure devices 	<ul style="list-style-type: none"> ▪ high voltages ▪ extreme heat and cold ▪ extreme noise (>107dB) ▪ sea life (marine and avian biota) ▪ gases, particulates, fumes, including hydrogen sulfide gas ▪ sleep disruption ▪ falling objects, including bird droppings ▪ combustibles, corrosives, solvents, and other chemicals, including hydrofluoric acid and other acids ▪ bright sun, high UV light ▪ welding fumes and light ▪ open flame ▪ dehydration
<h3>Off-Shore Inspectors</h3> <p>Employees Who Conduct Inspections in Remote Locations, Requiring Over-Water Helicopter Flight</p>			

CONTINUED			
Time/Work Volume	Physical Requirements	Environment	Physical Exposures
May include:			
	<ul style="list-style-type: none"> ▪ look in all directions ▪ listen for and respond to alarm signals ▪ hold clip board, write with pen or pencil ▪ read documents and maps ▪ use computer keyboard and laptop or personal ▪ read gauges ▪ see and correctly interpret colored warning lights (red, yellow, and green) ▪ swing holding onto a rope ▪ climb into small, unsteady boats ▪ climb into or onto personnel baskets and be suspended 100 feet or more above the water ▪ untie small and large ropes ▪ be continuously and clearly aware of surroundings ▪ climb into emergency devices, escape pods ▪ don, wear, and use self-contained breathing apparatus (SCBA, escape style only) ▪ work independently and on small teams ▪ enter and exit emergency equipment and helicopters quickly ▪ be able to complete and pass a helicopter underwater egress and marine survival training course. This includes being submerged and overturned quickly while in a confined space, becoming reoriented, and escaping from the training device and reaching the surface and treading water. 	<ul style="list-style-type: none"> ▪ gases, at high pressures and temperatures ▪ isolated, remote sites ▪ long distances from support or medical help ▪ emergency evacuation craft (confined spaces) ▪ confined aircraft cabins ▪ uncooperative or potentially hostile contact with company personnel and the public ▪ variable light conditions 	
<p>Off-Shore Inspectors Employees Who Conduct Inspections in Remote Locations, Requiring Over-Water Helicopter Flight</p>			

Medical Evaluation Components for Inspectors Examinations

Services, By Category

Histories

General Medical and Occupational History

Examination Items

General Appearance and Vital Signs (height, weight, blood pressure, heart rate)

General Physical Examination

Special Attention To:

- Overall Physical Fitness
- Habitus (obesity)
- Skin
- Eyes, Ears (including eardrum mobility), Nose, Mouth, and Throat
- Neck (including flexibility and rotation)
- Thyroid
- Respiratory System
- Cardiovascular System
- Back & Musculoskeletal System (including flexibility)
- Extremities (including strength, range of motion, and joint stability)
- Peripheral Vascular System
- Abdomen
- Gastrointestinal System
- Genitourinary System
- Central Nervous System (including cranial nerves I-XII, and cerebellar function)
- Peripheral Nervous System (including reflexes, sensation, and position sense)
- Mental Status Evaluation

Diagnostic Tests/Procedures

- Audiogram (including 500, 1000, 2000, 3000, 4000, 6000, 8000 Hertz in both ears)
- Visual Acuity, best near and far vision, corrected or uncorrected
- Peripheral Vision
- Depth perception
- Color Discrimination (including red, green, blue, and yellow) (baseline/exit exam)
- Pulmonary Function Test-Spirometry (baseline/exit exam)
- Chest X-Ray, PA & Lateral (baseline/exit exam)
- Electrocardiogram-Resting (baseline/exit exam)
- TB (Mantoux) skin test (baseline/exit exam)
- Tetanus vaccination (to maintain as current)

Laboratory

- CBC (hemoglobin, hematocrit, platelets, white blood count with differential)
- Dipstick urinalysis (baseline/exit exam only)
- Blood chemistries:
 - LDH, SGOT/AST, SGPT/ALT, GGT, bilirubin [baseline/exit exam only]
 - Total cholesterol, LDL-C, HDL-C, triglycerides, blood sugar [each exam]

Clearances

- Medical Clearance for Inspectors

Psychiatric Standard

The selectee/incumbent must have judgement, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric conditions (including alcohol or substance abuse) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result In Disqualification Include, But Are Not Limited To, The Following Examples:

All diagnoses must be consistent with the diagnostic criteria as established by the most recent version of the *Diagnostic and Statistical Manual of Mental Disorders*.

1. **AMNESTIC** disorders
2. **DELIRIUM** (depending upon etiology and duration)
3. **DEMENTIAS** (depending upon etiology and duration)
4. **DISSOCIATIVE DISORDERS**
5. **KLEPTOMANIA**
6. **PANIC DISORDER** and **OTHER ANXIETY DISORDERS** (including claustrophobia and acrophobia, depending upon etiology, duration and severity of clinical expression)
7. **DEPRESSIVE, BIPOLAR, or OTHER MOOD DISORDERS** (depending upon clinical course and status of current treatment and response)
8. **PYROMANIA**
9. **SCHIZOPHRENIA** (Exceptions may be may in cases of a single episode of schizophrenic reactions associated with an acute illness or toxic exposure capable of causing such reaction.)
10. **ANTISOCIAL, PARANOID, or SCHIZOID PERSONALITY DISORDER**
11. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Prosthetics, Transplants, and Implants Standard

The presence or history of organ transplantation or use of prosthetics or implants are not of themselves disqualifying. However, the selectee/incumbent must be able to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Note: In general, hand or arm amputations (with or without a prosthesis) are incompatible with the functional requirements of the job. For individuals with any transplant, prosthetic, or implanted pump or electrical device, the examinee will have to provide documentation for

agency review from his/her surgeon or physician that the examinee (and, if applicable, his/her prosthetic or implanted device) is considered to be fully compatible with the specified essential functions of the job.

Immune System/Allergic Disorders Standard

The selectee/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions in order to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A general physical exam of all major body systems that is within the range of normal variation, including:
- No evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the essential functions of the job; and
- No evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
- Normal nasopharynx, major sinuses, Eustachian tube, and pulmonary exam
- Normal complete blood count, including white blood count and differential; and
- Current vaccination status for tetanus; and
- No evidence by physical examination and medical history of infectious disease, immune system, or allergy conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job. Individuals with a history of anaphylaxis or major allergy problems may be required to carry a personal anaphylaxis kit (injectable epinephrine).

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **TUBERCULOSIS:** A history of TB that has been appropriately treated for longer than 6 months is not disqualifying, provided that documentation supports the treatment history and the person has a current chest x-ray showing no active disease. A person with a positive PPD or Mantoux skin test will be required to have a Chest X-ray and, if indicated, a sputum culture.
2. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Medication Standard

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications if that impairment is likely to present a safety risk or to worsen as a result of carrying out the specified essential functions of the job, under the conditions in which those functions must be carried out.

Each of the following points should be considered:

1. Medication(s) (type and dosage requirements)	2. Potential drug side effects
3. Drug-drug interactions	4. Adverse drug reactions
5. Drug toxicity or medical complications from long-term use	6. Drug-environmental interactions
7. Drug-food interactions	8. History of patient compliance

Eye / Vision Standard

The selectee/incumbent must be able to see well enough to safely and efficiently carry out the essential functions of the job . This requires binocular vision, near and far visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by:

- Far visual acuity of at least 20/40 in each eye; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Near visual acuity of at least 20/30 (Snellen equivalent) at 16 inches; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Color vision sufficient to distinguish at least red, green, blue, and amber (yellow); and
- Peripheral vision of at least 85° laterally in each eye; and
- Normal depth perception; and
- No ophthalmologic condition that would increase ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Note: Contact lenses are acceptable for correction of visual acuity, but the user must be able to demonstrate that the corrective device(s) can be worn safely and for extended periods of time without significant maintenance, as well as being worn with any necessary personal protective equipment.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CHRONIC CONJUNCTIVITIS**
2. **CORNEAL ULCERS**
This condition must be treated and cleared by an Ophthalmologist before a medical clearance can be granted.
3. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Head, Nose, Mouth, Throat and Neck Standard

The selectee/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:

- normal flexion, extension, and rotation of the neck; and
- open nasal and oral airways; and
- unobstructed Eustachian tubes; and
- no structural abnormalities that would prevent the normal use of a hard hat and protective eyewear; and
- Normal conversational speech; and
- No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MUTISM/APHONIA**
2. **NASAL POLYPS THAT SIGNIFICANTLY OBSTRUCT BREATHING**
3. **RESTRICTED RANGE OF MOTION IN THE NECK**
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Ear / Hearing Standard

The selectee/incumbent must be able to hear well enough to safely and efficiently carry out the essential functions of the job. This requires binaural hearing (to localize sounds) and auditory acuity, which may be demonstrated by:

- A current pure tone, air conduction audiogram, using equipment and a test setting which meet the standards of the American National Standards Institute (see 29 CFR 1910.95); and
- Documentation of hearing thresholds of no greater than 40 dB at 500, 1000, 2000, and 3000 Hz in each ear; and
- No evidence by physical examination and medical history of ear conditions (external, middle, or internal) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Note: The use of a hearing aid(s) to meet this standard is *not* permitted.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MENIERE’S DISEASE**
2. **RUPTURED OR PERFORATED EAR DRUM**
3. **ACUTE OR CHRONIC OTITIS MEDIA OR EXTERNA**
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Dermatology Standard

The selectee/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ALBINISM**
2. **CHRONIC DERMATITIS**
3. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Vascular System Standard

The selectee/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

1. A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
2. no evidence of phlebitis or thrombosis; and
3. no evidence of venous stasis; and
4. no evidence of arterial insufficiency; and
5. No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**
4. **INTERMITTENT CLAUDICATION**
5. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Cardiac Standard

The selectee/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
- Blood pressure of less than or equal to 140 mmHg systolic and 90 mmHg diastolic; and

- A normal baseline electrocardiogram (minor, asymptomatic arrhythmias may be acceptable); and
- No pitting edema in the lower extremities, and normal cardiac exam.
- No evidence by physical examination and medical history of cardiovascular
- No conditions likely present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **PACEMAKERS or PROSTHETIC VALVES** may be disqualifying. Documentation from the individual’s cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions, will be necessary before a clearance can be granted.
2. **CORONARY ARTERY DISEASE** Documentation from the individual’s cardiologist that the physician understands the essential functions of the job and the work conditions, and considers the individual to be capable of safely and efficiently performing them, may allow a clearance despite this diagnosis.
3. **HYPERTENSION** that cannot be controlled to a level of 160/90 or less, or requires the use of any medication that affects the ability of the individual to safely and effectively carry out the essential functions of the job, may be disqualifying.
4. History of **MYOCARDIAL INFARCTION**. Documentation from the individual’s cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions, will be necessary before a clearance can be considered.
5. **VALVULAR HEART DISEASE** such as mitral valve stenosis, symptomatic mitral valve regurgitation, aortic stenosis etc. Documentation from the individual’s cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified conditions and without aggravating the condition, will be necessary before a clearance can be considered.
6. **DYSRHYTHMIAS**: Documentation from the individual’s cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions and without aggravating the condition, will be necessary before a clearance can be considered.
7. **ANGINA PECTORIS** or chest pain of unknown etiology.
8. **CONGESTIVE HEART FAILURE**
9. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Chest and Respiratory System Standard
--

The selectee/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- A pulmonary function test (baseline exam) showing:
- Forced vital capacity (FVC) of at least 70% of the predicted value; and

- Forced expiratory volume at 1 second (FEV1) of at least 70% of the predicted value; and the ratio FEV1/FVC of at least 70% of the predicted value; and\
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **SIGNIFICANT OBSTRUCTIVE or RESTRICTIVE PULMONARY DISEASE.**
2. **ASTHMA** must be considered on a case-by-case basis.
3. **ACTIVE PULMONARY TUBERCULOSIS (TB):** Please see the Immune System/Allergic Disorders Standard for specific guidance on TB.
4. **HISTORY OF CHRONIC BRONCHITIS ASSOCIATED WITH DECREASED PULMONARY FUNCTION**
5. **SPONTANEOUS PNEUMOTHORAX** (if recurrent)
6. **PNEUMONECTOMY** (if associated with impaired pulmonary function)
7. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Endocrine and Metabolic System Standard
--

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The selectee/incumbent must have endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- Normal fasting blood sugar level; and
- No evidence by physical examination (including laboratory testing) and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ADRENAL DYSFUNCTION** (e.g., Addison's Disease or Cushing's Syndrome).
2. **THYROID DISEASE** (uncontrolled or associated with current complications).
3. **INSULIN DEPENDENT DIABETES MELLITUS**
4. **HYPERGLYCEMIA** without a history of diabetes will require additional tests including but not limited to a glycohemoglobin (or hemoglobin A_{1c}) and fasting glucose before a final medical determination is made.
5. **DIABETES INSIPIDUS.**
6. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

The Condition of Pregnancy

If a selectee or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the selectee's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

Hematopoietic System Standard

The selectee/incumbent must have a hematopoietic (blood and blood-producing) system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- A complete blood count (including hemoglobin, hematocrit, platelets, and white blood count, with differential) that is within the normal range; and
- No evidence by physical examination (including laboratory testing) and medical history of hematopoietic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ANEMIA**
2. **HEMOPHILIA**
3. **CHRONIC LYMPHANGITIS**
4. **SICKLE CELL ANEMIA**
5. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Musculoskeletal System Standard

The selectee/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for strength, flexibility, range of motion, and joint stability; and
- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ARTHRITIS** (any etiology) if there is a limitation of major joint motion, and/or pain that

- prevents the full range of required performance activities.
2. **AMPUTATIONS OF DIGITS** will be evaluated on a case-by-case basis.
 3. **ANKYLOSING SPONDYLITIS.**
 4. **LUMBOSACRAL INSTABILITY:** pain or limitation of flexibility and/or strength adversely affecting the ability to stand, bend, stoop, carry heavy objects or sit for long periods of time.
 5. **SCIATICA OR OTHER NEUROPATHIES**
 6. **CHRONIC LOW BACK PAIN** (by medical history) without demonstrable pathology must be considered on a case-by-case basis. Each case will be reviewed in context of the original history or etiology, the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation.
 7. A history of a **CHRONIC SPRAIN OR STRAIN OF THE NECK** limiting mobility or causing recurring cephalgia (headaches)
 8. Any evidence of a **CERVICAL NEUROPATHY**, including numbness, tingling or loss of motor strength in the upper extremities
 9. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Central and Peripheral Nervous System Standard, and Vestibular System Standard

The selectee/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
 - intact cranial nerves, I-XII; and
 - normal proprioception of the major joints; and
 - normal sensation of hot and cold in the hands and feet; and
 - normal sense of touch in the hands and feet; and
 - normal reflexes of the upper and lower extremities; and
 - normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and
 - normal basic mental status evaluation (e.g., person, place, time, current events); and
 - No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ATAXIA** from any etiology
2. **VESTIBULAR NEURONITIS**
3. **VERTIGO**
4. **PHYSIOLOGIC VERTIGO (MOTION SICKNESS)**
5. **CEREBROVASCULAR ACCIDENT** or **TRANSIENT ISCHEMIC ATTACKS.**
6. **EPILEPSY** (See the seizure standard, below)

7. **NARCOLEPSY**
8. **SENSORY DYSFUNCTION** (smell, touch, proprioception)
9. **MIGRAINE**
10. **SEIZURES***
11. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Gastrointestinal System Standard

The selectee/incumbent must have a gastrointestinal tract that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam and evaluation of the gastrointestinal tract that is within the range of normal variation; and
- Normal liver function tests (baseline exam); and
- No evidence by physical examination (including laboratory testing) and medical history of gastrointestinal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ACUTE AND CHRONIC ACTIVE HEPATITIS.**
2. **ACUTE VIRAL HEPATITIS** (After being asymptomatic for three (3) months an selectee may be re-evaluated).
3. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS/SPRUE or IRRITABLE BOWEL SYNDROME** (these conditions, if controlled with surgical, dietary, and/or medication treatments, will be reviewed on a case-by-case basis.)
4. **COLOSTOMIES**, unless the precipitating condition has stabilized and the selectee/incumbent demonstrates successful management of the colostomy, considering the requirements of the function and the work conditions.
5. **ILEITIS**, either recurrent or chronic.
6. **CHOLECYSTITIS** (chronic or recurring).
7. **DIVERTICULITIS** (symptomatic).
8. **CIRRHOSIS OF THE LIVER** (depending upon the degree of severity and the etiology).
9. **INTESTINAL OBSTRUCTION** from any cause.
10. **ESOPHAGEAL VARICES**
11. **PANCREATITIS**
12. **UNTREATED (OR UNSUCCESSFULLY TREATED) INGUINAL, INCISIONAL OR VENTRAL HERNIA** that is associated with symptoms
13. **ACTIVE GASTRIC OR DUODENAL ULCER**
14. **GASTRIC OR BOWEL RESECTION**, if there is any evidence (historical or physical) of post-treatment, current pain, hemorrhage, fainting episodes or dietary restrictions that could interfere with the performance of the job.

15. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Genitourinary System Standard

The selectee/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

1. A normal clean catch urinalysis (baseline exam); and
2. No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **POLYCYSTIC KIDNEY DISEASE**
2. **ACUTE or CHRONIC RENAL FAILURE**
3. **NEPHROTIC SYNDROME**
4. **SYMPTOMATIC URINARY CALCULI**
5. **NEUROGENIC BLADDER**
6. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
7. **RENAL TOXICITY FROM ANY CAUSE**
8. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Agency Medical Officers

These Standards Are Applicable to the Following Function:

Tower Climbers

General Background

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for functions with duties that are arduous or hazardous in nature. The medical standards described in this section are required because of the hazardous occupational and environmental aspects of the function of tower climber [hereinafter referred to as “climber”] (please refer to the table beginning on page 3). The medical standards are provided to aid the examining physician, the designated agency medical officer(s), and officials of other involved government agencies (e.g., the Office of Personnel Management, or OPM). They are to be used when determining whether there are medical conditions present that may affect an individual’s ability to safely and efficiently perform the requirements of a climber without undue risk to himself/herself or others. The results of such determinations are to be used by an agency-based team (e.g., safety, personnel, management, peers, and medical) to consider whether waivers or reasonable accommodation may be appropriate when an individual is found to not meet a specified standard. In this way, the standards are intended to help insure consistency and uniformity in the medical evaluation of all selectees and incumbents.

Each of the medical standards listed in this document are subject to clinical interpretation by an appropriate agency medical officer (AMO) who will incorporate his/her knowledge of the essential job functions and the environmental conditions under which an employee may work. Listed with the standards are examples of medical conditions and/or physical impairments that may be incompatible with safe and efficient performance of duties, or that may be aggravated by performing those duties. Individualized assessments will be made on a case-by-case basis to determine the individual’s ability to meet the performance-related requirements of the climber’s job. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the pre-placement or periodic medical examination process.

Rationale for Medical Evaluation and Review of Climbers

The essential functions of climbers in supporting departmental and bureau missions are by nature hazardous. Also, these functions are performed under variable and unpredictable working conditions. In response, an interagency team has developed these standards in order to help insure the following:

- Climbers will be able to perform the full range of essential functions of their jobs under

the conditions under which those functions may be performed.

- Existing/preexisting medical conditions of climbers and selectees will not be aggravated, accelerated, exacerbated, or permanently worsened as a result of carrying out the functions of the job.
- Demonstration of the strong commitment of the agency to public and employee health and safety, and a strong commitment to maintaining the integrity of mission accomplishment.

Periodicity of Medical Evaluations

Medical evaluations are to be conducted both as a *pre-placement* exam for all individuals who are to be assigned to roles that involve the duties of climbers, and every three years thereafter. The AMO may determine that, due to health and safety risks, interval changes in health status, and possible medically-related performance concerns, the medical evaluation of individual climbers should be conducted more frequently.

The medical evaluation is to consist of those services summarized in the table on page 4. The evaluation is to be conducted by a qualified health care provider using the DOI Standard Medical History and Examination Form (or an alternative form that provides similar information). For assistance in arranging for physician services, please refer to Tab 5, “*Medical Services Providers*”. The AMO will review the results of all examinations and provide the final medical recommendation to the agency.

Note: Consistent with the above discussion, these medical standards do not address *physical fitness* or *job performance*. Assessment of these factors would involve separate procedures and are governed by separate regulations.

Essential Functions and Work Conditions

Time/Work Volume	Physical Requirements	Environment	Physical Exposures
<i>May include:</i>			
<ul style="list-style-type: none"> ▪ up to 10 climbs per day ▪ climbs conducted up to 100 days per year ▪ may be expected to make climbs every day ▪ 75% of climbing trips are out and back in one day ▪ work conducted during daylight hours; no climbing at night) ▪ routine climbs allow resting as needed ▪ climbs in support of fire suppression activities may limit the opportunity for rests ▪ climbs to conduct personnel rescue work require rapid ascent and descent 	<ul style="list-style-type: none"> ▪ read documents and maps ▪ drive to work sites or trail heads, 30 minutes to 2 hours ▪ operate crane, trucks, or other motor vehicles ▪ lift and carry gear bags and safety equipment (up to #45 or more) ▪ put on and use personal protective, fall prevention, and fall arrest equipment ▪ manipulate small and large devices, including 2-step carabiners and hooks, plus buckles and other small items ▪ climb and descend ladders and tower structures, with 10-21+ inch risers ▪ work at extreme heights (towers/ladders 10-1000+ feet tall) ▪ be continuously and clearly aware of surroundings ▪ walk, stand, kneel, stoop, and bend ▪ use small and large hand and power tools ▪ reach and use tools above shoulders and head ▪ push and pull objects ▪ read gauges, dials, and equipment 	<ul style="list-style-type: none"> ▪ slippery surfaces ▪ uneven surfaces ▪ heights (up to 1000 feet or more on structures) ▪ altitudes (up to 12000 feet) ▪ heat, cold, wet, dry (all with extremes) ▪ wind ▪ fog ▪ high noise levels ▪ variable lighting conditions ▪ moving and stationery heavy equipment, machines, vehicles ▪ wildlife (e.g., birds, bears, insects) ▪ long distances from support or medical help ▪ isolated, remote sites ▪ hostile personnel/public ▪ close living/working quarters ▪ exposed, protruding bolts, braces ▪ sharp metal objects 	<ul style="list-style-type: none"> ▪ high voltages ▪ extreme heat and cold ▪ noise ▪ wildlife (e.g., birds, bears, insects) ▪ gases, particulates, fumes ▪ sleep disruption ▪ falling objects, including bird droppings, tools, equipment ▪ combustibles, corrosives, solvents, and other chemicals ▪ bright sun, high UV light ▪ welding fumes and light ▪ open flame ▪ dehydration ▪ vibration
Tower Climber			

Medical Evaluation Components for Tower Climbers

Services, By Category

Histories

General Medical History and Occupational History

Examination items:

General Appearance and Vital Signs (height, weight, blood pressure, heart rate)

General Physical Examination

Special Attention To:

- Skin
- Eyes, Ears (including TM mobility), Nose, Mouth, and Throat
- Neck (including flexibility and rotation)
- Thyroid
- Respiratory System
- Cardiovascular System
- Back & Musculoskeletal System (including flexibility)
- Extremities (including strength, range of motion, and joint stability)
- Peripheral Vascular System
- Abdomen
- Gastrointestinal System
- Genitourinary System
- Central Nervous System (including cranial nerves I-XII, and cerebellar function)
- Peripheral Nervous System (including reflexes, sensation, and position sense)
- Mental Status Evaluation

Diagnostic Tests/Procedures

- Audiogram (including 500, 1000, 2000, 3000, 4000, 6000, 8000 Hertz in both ears)
- Visual Acuity, best near and far vision, corrected or uncorrected
- Peripheral Vision
- Depth perception
- Color Discrimination (including red, green, and yellow) (baseline/exit exam)
- Pulmonary Function Test-Spirometry (baseline/exit exam)
- Chest X-Ray, PA & Lateral (baseline/exit exam)
- Electrocardiogram-Resting (baseline/exit exam)
- TB (Mantoux) skin test (baseline/exit exam)
- Tetanus vaccination (to maintain as current)

Laboratory:

- CBC (hemoglobin, hematocrit, platelets, white blood count with differential)
- Dipstick urinalysis (baseline/exit exam only)
- Blood chemistries:
 - LDH, SGOT/AST, SGPT/ALT, GGT, bilirubin [baseline/exit exam only]
 - Total cholesterol, LDL-C, HDL-C, triglycerides, blood sugar [each exam]

Clearances: Medical Clearance for Climbers

Psychiatric/Psychologic Standard

The selectee/incumbent must have judgement, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric conditions (including alcohol or substance abuse) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

Note; All diagnoses must be consistent with the diagnostic criteria as established by the most recent version of the *Diagnostic and Statistical Manual of Mental Disorders*.

1. **AMNESTIC** disorders
2. **DELIRIUM** (depending upon etiology and duration)
3. **DEMENTIAS** (depending upon etiology and duration)
4. **DISSOCIATIVE DISORDERS**
5. **KLEPTOMANIA**
6. **PANIC DISORDER** and **OTHER ANXIETY DISORDERS** (including claustrophobia and acrophobia, depending upon etiology, duration and severity of clinical expression)
7. **DEPRESSIVE, BIPOLAR, or OTHER MOOD DISORDERS** (depending upon clinical course and status of current treatment and response)
8. **PYROMANIA**
9. **SCHIZOPHRENIA** (Exceptions may be may in cases of a single episode of schizophrenic reactions associated with an acute illness or toxic exposure capable of causing such reaction.)
10. **ANTISOCIAL, PARANOID, or SCHIZOID PERSONALITY DISORDER**
11. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Prosthetics, Transplants, and Implants Standard

The presence or history of organ transplantation or use of prosthetics or implants are not of themselves disqualifying. However, the selectee/incumbent must be able to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Note: In general, hand or arm amputations (with or without a prosthesis) are incompatible with

the functional requirements of the job. For individuals with any transplant, prosthetic, or implanted pump or electrical device, the examinee will have to provide documentation **for agency review** from his/her surgeon or physician that the examinee (and, if applicable, his/her prosthetic or implanted device) is considered to be fully compatible with the specified essential functions of the job.

Immune System/Allergic Disorders Standard

The selectee/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions in order to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A general physical exam of all major body systems that is within the range of normal variation, including:
 - no evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the essential functions of the job; and
 - no evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
 - normal nasopharynx, major sinuses, Eustachian tube, and pulmonary exam
- Normal complete blood count, including white blood count and differential; and
- Current vaccination status for tetanus; and
- No evidence by physical examination and medical history of infectious disease, immune system, or allergy conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job . Individuals with a history of anaphylaxis or major allergy problems may be required to carry a personal anaphylaxis kit (injectable epinephrine).

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **Myasthenia gravis**
2. **Systemic lupus erythematosus**
3. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Medication Standard

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications if that impairment is likely to present a safety risk or to worsen as a result of carrying out the specified essential functions of the job, under the conditions in which those functions must be carried out. Each of the following points should be considered:

1. Medication(s) (type and dosage requirements)	2. Potential drug side effects
3. Drug-drug interactions	4. Adverse drug reactions

5. Drug toxicity or medical complications from long-term use	6. Drug-environmental interactions
7. Drug-food interactions	8. History of patient compliance

Eye / Vision Standard

The selectee/incumbent must be able to see well enough to safely and efficiently carry out the essential functions of the job. This requires binocular vision, near and far visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by:

- Far visual acuity of at least 20/20 in each eye; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Near visual acuity of at least 20/25 (Snellen equivalent) at 16 inches; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Color vision sufficient to distinguish at least red, green, and amber (yellow); and
- Peripheral vision of at least 70° laterally in each eye; and
- Normal depth perception; and
- No ophthalmologic condition that would increase ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Note: Contact lenses are acceptable for correction of visual acuity, but the user must be able to demonstrate that the corrective device(s) can be worn safely and for extended periods of time without significant maintenance.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CHRONIC CONJUNCTIVITIS**
2. **CORNEAL ULCERS.** This condition must be treated and cleared by an Ophthalmologist before a medical clearance can be granted.
3. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Head, Nose, Mouth, Throat and Neck Standard

The selectee/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
 - normal flexion, extension, and rotation of the neck; and
 - open nasal and oral airways; and
 - unobstructed Eustachian tubes; and

- no structural abnormalities that would prevent the normal use of a hard hat and protective eyewear; and
- Normal conversational speech; and
- No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MUTISM/APHONIA**
2. **NASAL POLYPS THAT SIGNIFICANTLY OBSTRUCT BREATHING**
3. **RESTRICTED RANGE OF MOTION IN THE NECK**
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Ear / Hearing Standard

The selectee/incumbent must be able to hear well enough to safely and efficiently carry out the essential functions of the job. This requires binaural hearing (to localize sounds) and auditory acuity, which may be demonstrated by:

- A current pure tone, air conduction audiogram, using equipment and a test setting which meet the standards of the American National Standards Institute (see 29 CFR 1910.95); and
- Documentation of hearing thresholds of no greater than 40 dB at 500, 1000, 2000, and 3000 Hz in each ear; and
- No evidence by physical examination and medical history of ear conditions (external, middle, or internal) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Note: The use of a hearing aid(s) to meet this standard is permitted.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MENIERE’S DISEASE**
2. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Dermatology Standard

The selectee/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and

- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ALBINISM**
2. **XERODERMA PIGMENTOSUM**
3. **CHRONIC DERMATITIS** (if it affects ability to use PPE and fall prevention and fall arrest gear)
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Vascular System Standard

The selectee/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
 - No evidence of phlebitis or thrombosis; and
 - No evidence of venous stasis; and
 - No evidence of arterial insufficiency; and
- No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**
4. **INTERMITTENT CLAUDICATION**
5. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Cardiac Standard

The selectee/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
 - blood pressure of less than or equal to 140 mmHg systolic and 90 mmHg diastolic;

- and
- a normal baseline electrocardiogram (minor, asymptomatic arrhythmias may be acceptable); and
- no pitting edema in the lower extremities, and
- normal cardiac exam.
- No evidence by physical examination and medical history of cardiovascular conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **PACEMAKERS or PROSTHETIC VALVES** may be disqualifying. Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions, will be necessary before a clearance can be granted.
2. **CORONARY ARTERY DISEASE**
3. **HYPERTENSION** that cannot be controlled to a level of 160/90 or less or requires the use of any medication that affects the ability of the individual to safely carry out the essential functions of the job, may be disqualifying.
4. History of **MYOCARDIAL INFARCTION**
5. **VALVULAR HEART DISEASE** such as mitral valve stenosis, symptomatic mitral valve regurgitation, aortic stenosis etc.
6. **DYSRHYTHMIAS:** Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions and without aggravating the condition, will be necessary before a clearance can be considered.
7. **ANGINA PECTORIS** or chest pain of unknown etiology.
8. **CONGESTIVE HEART FAILURE**
9. **CARDIOMYOPATHY**
10. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Chest and Respiratory System Standard
--

The selectee/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- A pulmonary function test (baseline exam) showing:
 - forced vital capacity (FVC) of at least 70% of the predicted value; and
 - forced expiratory volume at 1 second (FEV1) of at least 70% of the predicted value; and
 - the ratio FEV1/FVC of at least 70%; and

- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **SIGNIFICANT OBSTRUCTIVE or RESTRICTIVE PULMONARY DISEASE.**
2. **ASTHMA**
3. **ACTIVE PULMONARY TUBERCULOSIS (TB)**
4. **HISTORY OF CHRONIC BRONCHITIS ASSOCIATED WITH DECREASED PULMONARY FUNCTION**
5. **SPONTANEOUS PNEUMOTHORAX** (if recurrent)
6. **PNEUMONECTOMY** (if associated with impaired pulmonary function)
7. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Endocrine and Metabolic System Standard
--

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The selectee/incumbent must have endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- Normal fasting blood sugar level; and
- No evidence by physical examination (including laboratory testing) and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ADRENAL DYSFUNCTION** (e.g., Addison's Disease or Cushing's Syndrome).
2. **THYROID DISEASE** (uncontrolled or associated with current complications).
3. **INSULIN DEPENDENT DIABETES MELLITUS**
4. **HYPERGLYCEMIA** without a history of diabetes will require additional tests, including but not limited to a glycohemoglobin (or hemoglobin A_{1c}) and fasting glucose before a final medical determination is made.
5. **DIABETES INSIPIDUS.**
6. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

The Condition of Pregnancy

If a selectee or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the selectee's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

Hematopoietic System Standard

The selectee/incumbent must have a hematopoietic (blood and blood-producing) system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- A complete blood count (including hemoglobin, hematocrit, platelets, and white blood count, with differential) that is within the normal range; and
- No evidence by physical examination (including laboratory testing) and medical history of hematopoietic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ANEMIA**
2. **THROMBOCYTOPENIA** or **CLOTTING DISORDER**
3. **HEMOPHILIA**
4. **CHRONIC LYMPHANGITIS**
5. **SICKLE CELL ANEMIA**
6. **SPENOMEGALY**
7. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Musculoskeletal System Standard

The selectee/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for strength (including grip strength), flexibility, range of motion, and joint stability; and
- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ARTHRITIS** (any etiology) if there is a limitation of major joint motion, and/or pain that prevents the full range of required activities.
2. **AMPUTATIONS** (loss of digits will be evaluated on a case-by-case basis)
3. **ANKYLOSING SPONDYLITIS.**
4. **LUMBOSACRAL INSTABILITY:** pain or limitation of flexibility and/or strength adversely affecting the ability to stand, bend, stoop, carry heavy objects or sit for long periods of time.
5. **SCIATICA OR OTHER NEUROPATHIES**
6. **CHRONIC LOW BACK PAIN** (by medical history) without demonstrable pathology must be considered on a case-by-case basis. Each case will be reviewed in context of the original history or etiology, the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation.
7. A history of a **CHRONIC SPRAIN OR STRAIN OF THE NECK** limiting mobility or causing recurring cephalgia (headaches)
8. Any evidence of a **CERVICAL NEUROPATHY**, including numbness, tingling or loss of motor strength in the upper extremities
9. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Central and Peripheral Nervous System Standard, and Vestibular System Standard

The selectee/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
 - intact cranial nerves, I-XII; and
 - normal proprioception of the major joints; and
 - normal sense of touch in the hands and feet; and
 - normal reflexes of the upper and lower extremities; and
 - normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and
 - normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ATAXIA** from any etiology
2. **VESTIBULAR NEURONITIS**

3. **VERTIGO**
4. **PHYSIOLOGIC VERTIGO (MOTION SICKNESS)**
5. **CEREBROVASCULAR ACCIDENT or TRANSIENT ISCHEMIC ATTACKS.**
6. **EPILEPSY** (See the seizure standard, below)
7. **NARCOLEPSY**
8. **SENSORY DYSFUNCTION** (smell, touch, proprioception)
9. **MIGRAINE**
10. **SEIZURES***
11. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Gastrointestinal System Standard

The selectee/incumbent must have a gastrointestinal tract that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the abdomen that is within the range of normal variation; and
- Normal liver function tests (baseline exam); and
- No evidence by physical examination (including laboratory testing) and medical history of gastrointestinal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ACUTE AND CHRONIC ACTIVE HEPATITIS.**
2. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS / SPRUE / IRRITABLE BOWEL SYNDROME** (these conditions, if controlled with surgical, dietary, and/or medical treatments, may be compatible with the job, and will be reviewed on a case-by-case basis.)
3. **COLOSTOMIES**, unless the precipitating condition has stabilized and the selectee/incumbent demonstrates successful management of the colostomy, considering the requirements of the function and the work conditions.
4. **ILEITIS** (chronic or recurring).
5. **CHOLECYSTITIS** (chronic or recurring).
6. **DIVERTICULITIS** (symptomatic).
7. **CIRRHOSIS OF THE LIVER** (depending upon the degree of severity and the etiology).
8. **INTESTINAL OBSTRUCTION** from any cause.
9. **ESOPHAGEAL VARICES**
10. **PANCREATITIS**
11. **UNTREATED (OR UNSUCCESSFULLY TREATED) INGUINAL, INCISIONAL OR VENTRAL HERNIA** that is associated with symptoms
12. **ACTIVE GASTRIC OR DUODENAL ULCER**
13. **GASTRIC OR BOWEL RESECTION**, if there is any evidence (historical or physical)

of post-treatment (current) pain, hemorrhage, fainting episodes or dietary restrictions that could interfere with the performance of the job.

14. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Genitourinary System Standard

The selectee/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A normal clean catch urinalysis (baseline exam); and
- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **POLYCYSTIC KIDNEY DISEASE**
2. **ACUTE or CHRONIC RENAL FAILURE**
3. **NEPHROTIC SYNDROME**
4. **SYMPTOMATIC URINARY CALCULI**
5. **NEUROGENIC BLADDER**
6. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
7. **RENAL TOXICITY FROM ANY CAUSE**
8. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Medical Review Officers

These Standards Are Applicable to Positions Requiring

Drill Rig Operator/Helper Duties

General Background

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for functions with duties that are arduous or hazardous in nature. The medical standards described in this section are required because of the hazardous occupational and environmental aspects of the Drill Rig Operator/Helper position. The medical standards are provided to aid the examining physician, the designated agency medical review officer(s) (if applicable), and officials of other involved government agencies (e.g., the Office of Personnel Management, or OPM). They are to be used when determining whether there are medical conditions present that may affect an individual's ability to safely and efficiently perform the requirements of a Drill Rig Operator/Helper without undue risk to himself/herself or others. The results of such determinations are to be used by an agency-based team (e.g., safety, personnel, management, peers, and medical) to consider whether a waiver or reasonable accommodation may be appropriate when an individual is found to not meet one or more specified standards. In this way, the standards are intended to help ensure consistency and uniformity in the medical evaluation of all applicants and incumbents.

Each of the medical standards listed in this document are subject to clinical interpretation by the examining physician or an appropriate reviewing medical officer (RMO) (if applicable) who will incorporate his/her knowledge of the essential job functions and the environmental conditions under which an employee may work. Listed with the standards are examples of medical conditions and/or physical impairments that may be incompatible with safe and efficient performance of duties, or that may be aggravated by performing those duties. These listed conditions do NOT represent automatic disqualifications. Individualized assessments must be made on a case-by-case basis to determine an individual's ability to meet the performance-related requirements of a Drill Rig Operator/Helper. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the pre-placement or periodic medical examination process.

Rationale for Medical Evaluation of Drill Rig Operator/Helper

The essential functions of employees performing Drill Rig Operator/Helper duties in supporting the Departmental and Bureau missions have hazardous and arduous components. Also, these functions are performed under variable and unpredictable working conditions. In response, these standards have been developed in order to help ensure the following:

- Individuals with Drill Rig Operator/Helper duties will be able to perform the full range of essential functions of their jobs under the conditions in which those functions may be performed.
- Existing/preexisting medical conditions of incumbent Drill Rig Operator/Helpers and applicants will not be aggravated, accelerated, exacerbated, or permanently worsened as a result of carrying out the functions of the job.
- Demonstration of the strong commitment of the agency to public and employee health and safety, and a strong commitment to maintaining the integrity of mission accomplishment.

Note:

- Because the positions of drill rig operator/helper require a commercial driver’s license (CDL), these medical standards have incorporated the Federal Motor Carrier Safety Administration (FMCSA) Medical Standards for Commercial Drivers, “*Medical Advisory Criteria for Evaluation under 49 CFR 391.41.*” This document can be found at www.fcmsa.dot.gov.
- An individual may apply for an exemption from the FMCSA diabetes and vision standard by utilizing the Driver Exemption programs. Information regarding these programs can be found at <http://www.fmcsa.dot.gov/rules-regulations/topics/medical/exemptions.htm>. The FCMSA programs are separate from the Drill Rig Operator/Helper standards, thus exemptions from FCMSA standards do not automatically result in exemption from the Drill Rig Operator/Helper medical standards. Exemptions, waivers, and restrictions will be evaluated on a case-by-case basis.

Periodicity of Medical Evaluations

Medical evaluations for clearance purposes are to be conducted both as a *pre-placement* exam for all individuals who are to be assigned to roles that involve Drill Rig Operator/Helper duties and conducted on a periodic basis at least every 2 years, in conjunction with the required medical examination for commercial driver fitness determination. The examining physician or RMO may determine that, due to health and safety concerns, interval changes in health status, and possible medically-related performance reasons, the medical evaluation of individual employees should be conducted more frequently.

The medical evaluation is to consist of those services summarized in the table beginning on page five. The evaluation is to be conducted by a qualified health care provider. In the event of a non-clearance, the RMO and/or medical review board will convene to address the situation on a case-by-case basis.

Note: These medical standards do not address *physical fitness* or *job performance*. Assessment of these factors involves separate procedures and is governed by separate regulations.

Essential Functions and Work Conditions

Time/Work Volume	Physical Requirements	Environment	Physical Exposures
<i>May include:</i>			
<ul style="list-style-type: none"> ▪ 20-30 consecutive days on duty ▪ irregular work schedule ▪ work at night ▪ driving truck/tractors up to 10 hours ▪ 12 hours strenuous activity 	<ul style="list-style-type: none"> ▪ walk, stand, kneel, stoop, crouch, and bend ▪ push and pull objects ▪ standing for long periods ▪ maintain balance/work on uneven surfaces/obstacles ▪ read documents, maps, gauges, dials, and computer screens ▪ high levels of concentrations required for up to 12 hours ▪ carry/lay down drill pipe on elevated trailer ▪ dig pits/shovel/transfer dirt ▪ carry/move/pour 50-100 lbs of materials ▪ move 150 lb drill bits ▪ work at heights/climb 40 ft mast with tools ▪ lift/reach overhead 20+ lbs ▪ climb/descend stairs and ladders ▪ meet requirements/operate 80,000 lb tractor/trailer (CDL required) ▪ operate crane/control objects hanging from cranes 	<ul style="list-style-type: none"> ▪ isolated, remote sites ▪ heat, cold, wet, dry (all with extremes) ▪ heights ▪ constant noise up to 90+ dB ▪ high altitude locations ▪ wildlife (e.g., birds, ticks, flies, biting insects, reptiles) ▪ long distance from support or medical help ▪ dust and wind ▪ variable lighting condition ▪ uneven surfaces ▪ vibration ▪ high pressure devices/hoses 	<ul style="list-style-type: none"> ▪ extreme heat and cold ▪ wildlife (e.g., birds, ticks, flies, biting insects, reptiles), poisonous vegetation ▪ bright sun, high UV light ▪ extreme noise ▪ airborne and contact allergens ▪ dehydration ▪ high voltages ▪ sleep disruption ▪ engine exhaust fumes (vehicles and generators) ▪ contact with combustibles, corrosives, solvents and other chemicals – alkali, silica ▪ welding fumes and light
Drill Rig Operator / Helper			

Medical Evaluation Components for Drill Rig Operator/Helpers

Services, By Category

Histories

- General Medical and Occupational History
- Current Medications (including over-the-counter medications)

Examination Items

General Appearance and Vital Signs (height, weight, blood pressure, heart rate)

General Physical Examination, including:

- Eyes, Ears, Mouth, Nose, and Throat
- Head (including face, hair, and scalp)
- Speech
- Heart (size, rate, rhythm, function)
- Vascular System
- Respiratory tract
- Abdomen
- Skin and Lymph Nodes
- Genitourinary system (hernia check)
- Extremities (including strength, range of motion)
- Back (special consideration for positions involving heavy lifting and other strenuous duties)
- Neurological (including reflexes, sensation) and mental health

Diagnostic Tests/Procedures

- Basic hearing assessment: Forced Whispered Voice Test or Audiogram (including 500, 1000, 2000Hertz in both ears) –*note: the medical standards qualification is separate from a hearing conservation program*
- Visual Acuity, best far vision, corrected and uncorrected
- Horizontal Field of Vision
- Color Discrimination (including red, green, and yellow)
- Urinalysis including protein, blood, sugar, and specific gravity
- Glucose (fingerstick or serum), if applicable and if required by examining physician

Clearances: Medical Clearance for Drill Rig Operator/Helper Duties

Eye / Vision Standard

The applicant/incumbent must be able to see well enough to safely and efficiently carry out the essential functions of the job. This requires binocular vision, far visual acuity, peripheral vision, and color vision, which may be demonstrated by:

- A physical exam of the eyes that is within the range of normal variation (including evaluation of pupillary equality, reaction to light and accommodation, ocular motility, ocular muscle imbalance, extraocular movement, nystagmus, and exophthalmos); and
 - Distant visual acuity of at least 20/40 in each eye without corrective lenses or visual acuity separately corrected to 20/40 or better with corrective lenses (corrective lenses include contact lenses or spectacles); and
 - Distant binocular acuity of at least 20/40 in both eyes with or without corrective lenses; and
 - Color vision sufficient to distinguish at least red, green, and amber (yellow); and
 - Horizontal field of vision at least 70 degrees in each eye; and
- No ophthalmologic condition that would increase ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Note: Contact lenses are acceptable for correction of visual acuity, but the user must be able to demonstrate that the corrective device(s) can be worn safely and for extended periods of time without significant maintenance. Per the FMCSA Medical Standards: Use of a contact lens in one eye for distant visual acuity and another lens in the other eye for near vision is not acceptable, nor are telescopic lenses acceptable for driving commercial motor vehicles.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MONOCULAR VISION** (per the FMCSA Medical Standards, some drivers with monocular vision may be able to be certified if otherwise medically fit for duty and are granted a Federal vision exemption certificate)
2. **CHRONIC CONJUNCTIVITIS**
3. **CORNEAL ULCERS**
4. **MACULAR DEGENERATION OR MACULAR DETACHMENT**
5. **DIABETIC AND/OR HYPERTENSIVE RETINOPATHY**
6. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Head, Nose, Mouth, Throat and Neck Standard

The applicant/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
 - normal flexion, extension, and rotation of the neck; and
 - open nasal and oral airways; and
 - unobstructed Eustachian tubes; and
- Normal conversational speech; and
- No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MUTISM/APHONIA**
2. **NASAL POLYPS OR OTHER CONDITION THAT SIGNIFICANTLY OBSTRUCTS BREATHING**
3. **RESTRICTED RANGE OF MOTION IN THE NECK**
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Ear / Hearing Standard

The applicant/incumbent must be able to hear well enough to safely and efficiently carry out the essential functions of the job, which may be demonstrated by:

- A physical exam that is within the range of normal variation (at a minimum should include checking for scarring of the tympanic membrane, occlusion of the external canal, and perforated eardrums);
- A normal “whisper test”(examiner stands not less than five feet behind the seated patient and whispers a combination of numbers and letters and then asks the patient to repeat the sequence). Each ear is tested individually. If the patient responds correctly, he/she passes the test and does not need additional testing;

If whisper test is abnormal,

- conduct audiogram, using equipment and a test setting which meet the standards of the American National Standards Institute (see 29 CFR 1910.95); testing at the following thresholds: 500Hz, 1000Hz, and 2000Hz.

Frequency responses for each ear are averaged. Average hearing loss in must be 40 decibels or less in best ear; and

- No evidence by physical examination and medical history of ear conditions (external, middle, or internal) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Note: The use of a hearing aid(s) to meet this standard is permitted. However, the individual will likely need to go to an audiologist for testing with appropriate equipment because the audiometer use in most non-ear-specialty practices is not designed to test a person who is wearing a hearing aid.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MENIERE’S DISEASE**
2. **ACOUSTIC NEUROMA**
3. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Cardiac Standard

The applicant/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
 - no pitting edema in the lower extremities,
 - normal pulse (rate, strength, and rhythm);
 - blood pressure of less than or equal to 140 mmHg systolic or 90 mmHg diastolic;
 - normal cardiac exam; and
- No evidence by physical examination and medical history of cardiovascular conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.
- No current clinical diagnosis of myocardial infarction, angina pectoris, coronary insufficiency, thrombosis, medical therapy that requires monitoring, or any other cardiovascular disease of a variety known to be accompanied by syncope, dyspnea, collapse, or congestive cardiac failure.
- No current symptoms of chest pain; chest pressure or ache with exertion; pain, pressure or dyspnea at rest or with exertion; recurrent and/or severe palpitations; pre-syncope (dizziness, light-headedness) or true syncope (loss of consciousness).

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **IMPLANTED PACEMAKERS or IMPLANTABLE DEFIBRILLATORS**
2. **PROSTHETIC VALVE**
3. **CORONARY ARTERY DISEASE**
4. **HYPERTENSION** that cannot be controlled to a level of 140 mmHg systolic or 90 mmHg diastolic or less or requires the use of any medication that affects the ability of the individual to safely carry out the essential functions of the job, may be disqualifying.
5. History of **MYOCARDIAL INFARCTION**
6. **VALVULAR HEART DISEASE** such as mitral valve stenosis, symptomatic mitral valve regurgitation, aortic stenosis etc.
7. **DYSRHYTHMIAS**
8. **ANGINA PECTORIS** or chest pain of unknown etiology.
9. **CONGESTIVE HEART FAILURE**
10. **CARDIOMYOPATHY**
11. **HISTORY OF CABG, PTCA, or STENT**
12. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Vascular System Standard

The applicant/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
 - no evidence of phlebitis or thrombosis; and
 - no evidence of venous stasis; and
 - no evidence of arterial insufficiency; and
- No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**
4. **INTERMITTENT CLAUDICATION**
5. **HISTORY OF AORTIC ANEURYSM, ABDOMINAL, or THORACIC**
6. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Chest and Respiratory System Standard

The applicant/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **SIGNIFICANT OBSTRUCTIVE or RESTRICTIVE PULMONARY DISEASE.**
2. **ACTIVE PULMONARY TUBERCULOSIS (TB)**
3. **HISTORY OF CHRONIC BRONCHITIS OR EMPHYSEMA**
4. **SPONTANEOUS PNEUMOTHORAX** (if recurrent)
5. **PNEUMONECTOMY** (if associated with impaired pulmonary function).
6. **ASTHMA**
7. **SLEEP DISORDERS**
8. **CARCINOMA**
9. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Endocrine and Metabolic System Standard

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The applicant/incumbent must have endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- No evidence by physical examination and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job
- No established medical history or clinical diagnosis of diabetes mellitus currently requiring insulin for control.

Conditions Which May Result in Disqualification Include, But Are Not Limited To,

The Following Examples:

1. **ADRENAL DYSFUNCTION** (e.g., Addison's Disease or Cushing's Syndrome).
2. **THYROID DISEASE** (uncontrolled or associated with current complications).
3. **INSULIN DEPENDENT DIABETES MELLITUS or HISTORY OF DIABETIC KETOACIDOSIS**
4. **DIABETES INSIPIDUS.**
5. **HYPOGLYCEMIA**
6. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

The Condition of Pregnancy

If an applicant or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the applicant's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

Hematopoietic System Standard

The applicant/incumbent must have a hematopoietic system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin, lymph nodes, and extremities that is within the range of normal variation; and
- No evidence by physical examination and medical history of hematopoietic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ANEMIA**
2. **THROMBOCYTOPENIA or CLOTTING DISORDER**
3. **HEMOPHILIA**
4. **SICKLE CELL ANEMIA**
5. **SPENOMEGALY**
6. **CHRONIC LYMPHANGITIS**
7. **LYMPHEDEMA**
8. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Gastrointestinal System Standard

The applicant/incumbent must have a gastrointestinal tract that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the abdomen that is within the range of normal variation; and
- No evidence by physical examination and medical history of gastrointestinal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ACUTE AND CHRONIC ACTIVE HEPATITIS.**
2. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS / SPRUE / IRRITABLE BOWEL SYNDROME**
3. **COLOSTOMIES**
4. **ILEITIS** (chronic or recurring).
5. **CHOLECYSTITIS** (chronic or recurring).
6. **DIVERTICULITIS** (symptomatic).
7. **CIRRHOSIS OF THE LIVER or ESOPHAGEAL VARICES**
8. **INTESTINAL OBSTRUCTION** from any cause.
9. **HISTORY OF GASTROINTESTINAL MALIGNANCY WITHIN THE LAST 5 YEARS**
10. **PANCREATITIS**
11. **UNTREATED (OR UNSUCCESSFULLY TREATED) INGUINAL, INCISIONAL OR VENTRAL HERNIA** that is associated with symptoms
12. **HISTORY OF GASTROINTESTINAL BLEEDING, ACTIVE GASTRIC OR DUODENAL ULCER**
13. **GASTRIC OR BOWEL RESECTION**
14. **HISTORY OF LIVER TRANSPLANT**
15. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Genitourinary System Standard

The applicant/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To,

The Following Examples:

1. **POLYCYSTIC KIDNEY DISEASE**
2. **ACUTE or CHRONIC RENAL FAILURE**
3. **NEPHROTIC SYNDROME**
4. **SYMPTOMATIC URINARY CALCULI**
5. **NEUROGENIC BLADDER**
6. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
7. **RENAL TOXICITY FROM ANY CAUSE**
8. **RENAL DIALYSIS or HISTORY OF RENAL TRANSPLANT**
9. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Dermatology Standard

The applicant/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ALBINISM**
2. **XERODERMA PIGMENTOSUM**
3. **CHRONIC DERMATITIS**
4. **COLLAGEN VASCULAR DISEASES**
5. **HISTORY OF MALIGNANT SKIN TUMORS WITHIN THE PAST 5 YEARS**
6. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Immune System/Allergic Disorders Standard

The applicant/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions in order to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A general physical exam of all major body systems that is within the range of normal variation, including:
 - no evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the essential functions of the job; and

- no evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
- normal nasopharynx, major sinuses, and pulmonary exam
- No evidence by physical examination and medical history of infectious disease, immune system, or allergy conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job. Individuals with a history of anaphylaxis or major allergy problems may be required to carry a personal anaphylaxis kit (injectable epinephrine).

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MYASTHENIA GRAVIS**
2. **SYSTEMIC LUPUS ERYTHEMATOSIS**
3. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Musculoskeletal System Standard
--

The applicant/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for strength (including grip strength), flexibility, range of motion, and joint stability;
- No loss of a foot, a leg, a hand, or an arm;
- No impairment of a hand or finger which interferes with prehension or power grasping;
- No arm, foot, or leg, or any other significant limb defect or limitation which interferes with the ability to perform normal tasks associated with the job.
- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ARTHRITIS** (any etiology) if there is a limitation of major joint motion, and/or pain that prevents the full range of required activities.
2. **AMPUTATIONS** (loss of digits will be evaluated on a case-by-case basis)
3. **ANKYLOSING SPONDYLITIS.**
4. **LUMBOSACRAL INSTABILITY:** pain or limitation of flexibility and/or strength adversely affecting the ability to stand, bend, stoop, carry heavy objects or sit for long periods of time.

5. **SCIATICA OR OTHER NEUROPATHIES**
6. **CHRONIC LOW BACK PAIN** (by medical history) without demonstrable pathology must be considered on a case-by-case basis. Each case will be reviewed in context of the original history or etiology, the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation.
7. A history of a **CHRONIC SPRAIN OR STRAIN OF THE NECK** limiting mobility or causing recurring cephalgia (headaches)
8. Any evidence of a **CERVICAL NEUROPATHY**, including numbness, tingling or loss of motor strength in the upper extremities
9. **PROGRESSIVE ATROPHY** of any muscles
10. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Central and Peripheral Nervous System Standard, and Vestibular System Standard

The applicant/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
 - intact cranial nerves, I-XII; and
 - normal proprioception of the major joints; and
 - normal sense of touch in the hands and feet; and
 - normal reflexes of the upper and lower extremities; and
 - normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and
 - Normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job; and
- No established medical history or clinical diagnosis of epilepsy or any other condition which is likely to cause loss of consciousness or any loss of ability to control a commercial motor vehicle or perform the essential functions of the job;

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ATAXIA** from any etiology
2. **VESTIBULAR NEURONITIS**
3. **PHYSIOLOGIC VERTIGO (MOTION SICKNESS)**
4. **CEREBROVASCULAR ACCIDENT** or **TRANSIENT ISCHEMIC ATTACKS.**
5. **EPILEPSY**

6. **NARCOLEPSY, SLEEP APNEA, OR OTHER SLEEP DISORDERS**
7. **SENSORY DYSFUNCTION** (smell, touch, proprioception)
8. **MIGRAINE**
9. **DEMENTIA, ALZHEIMER'S DISEASE**
10. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Psychiatric Standard

The applicant/incumbent must have judgement, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric conditions (including alcohol or substance abuse) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job; and
- No current use of a controlled substance identified in 21 CFR 1308.11 Schedule I, an amphetamine, a narcotic, or any other habit-forming drug.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

Note: All diagnoses must be consistent with the diagnostic criteria as established by the most recent version of the *Diagnostic and Statistical Manual of Mental Disorders*.

1. **AMNESTIC** disorders
2. **DELIRIUM** (depending upon etiology and duration)
3. **DEMENTIAS** (depending upon etiology and duration)
4. **DISSOCIATIVE DISORDERS**
5. **KLEPTOMANIA**
6. **PANIC DISORDER** and **OTHER ANXIETY DISORDERS** (depending upon etiology, duration and severity of clinical expression)
7. **DEPRESSIVE, BIPOLAR, or OTHER MOOD DISORDERS** (depending upon clinical course and status of current treatment and response)
8. **SCHIZOPHRENIA**
9. **ANTISOCIAL, PARANOID, or SCHIZOID PERSONALITY DISORDER**
10. **CURRENT DIAGNOSIS OF ALCOHOLISM**
11. **CURRENT DIAGNOSIS OF SUBSTANCE ABUSE**
12. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Prosthetics, Transplants, and Implants Standard

The presence or history of organ transplantation or use of prosthetics or implants is not automatically disqualifying. However, the applicant/incumbent must be able to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the

prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Per the FMCSA Medical Standards, the applicant/incumbent must have no impairment of: **(i)** A hand or finger which interferes with prehension or power grasping; or **(ii)** An arm, foot, or leg which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or any other significant limb defect or limitation which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or has been granted a skill performance evaluation certificate pursuant to [§ 391.49](#)

Note: In most cases, hand, arm, and leg amputations (with or without a prosthesis) are incompatible with the functional requirements of the job. For individuals with any transplant, prosthetic, or implanted pump or electrical device, the examinee will have to provide documentation ***for agency review*** from his/her surgeon or physician that the examinee (and, if applicable, his/her prosthetic or implanted device) is considered to be fully compatible with the specified essential functions of the job.

Medication Standard

The applicant/incumbent must have judgment, mental functioning, and experience no negative effects of medication use that could affect the safe and efficient performance of the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of medication use, including over-the-counter medications, likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.
- No current use of a controlled substance identified in 21 CFR 1308.11 Schedule I, an amphetamine, a narcotic, or any other habit-forming drug.

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications if that impairment is likely to present a safety risk or to worsen as a result of carrying out the specified essential functions of the job, under the conditions in which those functions must be carried out. Each of the following points should be considered:

1. Medication(s) (type and dosage requirements)	2. Potential drug side effects
3. Drug-drug interactions	4. Adverse drug reactions
5. Drug toxicity or medical complications from long-term use	6. Drug-environmental interactions
7. Drug-food interactions	8. History of patient compliance

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Medical Review Officers

These Standards Are Applicable to Positions Requiring

Crewmember Duties

Aboard Vessels Greater Than 26 Feet

General Background

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for functions with duties that are arduous or hazardous in nature. The medical standards described in this section are required because of the hazardous occupational and environmental aspects of the crewmember duties. The medical standards are provided to aid the examining physician, the designated agency medical review officer(s) (if applicable), and officials of other involved government agencies (e.g., the Office of Personnel Management, or OPM). They are to be used when determining whether there are medical conditions present that may affect an individual's ability to safely and efficiently perform the requirements of a crewmember without undue risk to himself/herself or others. The results of such determinations are to be used by an agency-based team (e.g., safety, personnel, management, peers, and medical) to consider whether a waiver or reasonable accommodation may be appropriate when an individual is found to not meet one or more specified standards. In this way, the standards are intended to help insure consistency and uniformity in the medical evaluation of all applicants and incumbents.

Each of the medical standards listed in this document are subject to clinical interpretation by the examining physician or an appropriate reviewing medical officer (RMO) (if applicable) who will incorporate his/her knowledge of the essential job functions and the environmental conditions under which an employee may work. Listed with the standards are examples of medical conditions and/or physical impairments that may be incompatible with safe and efficient performance of duties, or that may be aggravated by performing those duties. These listed conditions do NOT represent automatic disqualifications. Individualized assessments must be made on a case-by-case basis to determine an individual's ability to meet the performance-related requirements of a crewmember. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the pre-placement or periodic medical examination process.

Rationale for Medical Evaluation of Crewmembers

The essential functions of employees performing crewmember duties in supporting these

Departmental and Bureau missions have hazardous and arduous components. Also, these functions are performed under variable and unpredictable working conditions. In response, an interagency team has developed these standards in order to help insure the following:

- Individuals with crewmember duties will be able to perform the full range of essential functions of their jobs under the conditions in which those functions may be performed.
- Existing/preexisting medical conditions of incumbent crewmembers and applicants will not be aggravated, accelerated, exacerbated, or permanently worsened as a result of carrying out the functions of the job.
- Demonstration of the strong commitment of the agency to public and employee health and safety, and a strong commitment to maintaining the integrity of mission accomplishment.

Periodicity of Medical Evaluations

Medical evaluations for clearance purposes are to be conducted both as a *pre-placement* exam for all individuals who are to be assigned to roles that involve crewmember duties and conducted on a periodic basis at least every 5 years. The examining physician or RMO may determine that, due to health and safety concerns, interval changes in health status, and possible medically-related performance reasons, the medical evaluation of individual employees should be conducted more frequently.

The medical evaluation is to consist of those services summarized in the table beginning on page 4. The evaluation is to be conducted by a qualified health care provider using the DOI Standard Medical History and Examination Form (or an alternative form that provides similar information). In the event of a non-clearance, the RMO and/or medical review board will convene to address the situation on a case-by-case basis.

Note: These medical standards do not address *physical fitness* or *job performance*. Assessment of these factors involves separate procedures and is governed by separate regulations.

Essential Functions and Work Conditions

Time/Work Volume	Physical Requirements	Environment	Physical Exposures
<i>May include:</i>			
<ul style="list-style-type: none"> ▪ long and variable hours ▪ work at night ▪ long (multiple hour) trips including overnight 	<ul style="list-style-type: none"> ▪ walk, stand, kneel, stoop, crouch, and bend ▪ maintain balance ▪ climb/descend vertical ladders and stairways ▪ stand watch on feet for up to four hours with minimal rest period ▪ work independently as well as on small teams ▪ communicate clearly with coworkers ▪ load and unload, carry heavy equipment and supplies (over 50 lbs) ▪ lift and maneuver large nets or objects in water ▪ participate in emergency drills ▪ don personal flotation device, exposure and immersion suit without assistance ▪ line handling 	<ul style="list-style-type: none"> ▪ slippery, wet, uneven, unstable surfaces ▪ heat, cold, wet, dry (all with extremes) ▪ humidity ▪ work aboard vessel ▪ variable lighting conditions ▪ wildlife (e.g., birds, insects) ▪ long distance from support or medical help ▪ isolated, remote sites ▪ work in office setting, labs, or shops ▪ stay on vessel for lodging ▪ unprotected drop-offs of 10 feet or more 	<ul style="list-style-type: none"> ▪ extreme heat and cold ▪ wildlife (e.g., birds, ticks, flies, biting insects) ▪ sleep disruption ▪ close living/working quarters ▪ bright sun, high UV light ▪ noise ▪ seasickness
<p>Drill Rig Operator / Helper Aboard Vessels Greater Than 26 Feet</p>			

Medical Evaluation Components for These Crewmembers

Services, By Category

Histories

- General Medical and Occupational History
- Current Medications

Examination Items

- General Appearance and Vital Signs (height, weight, blood pressure, heart rate)
- General Physical Examination

Special Attention To:

- Eyes, Ears, Nose, and Throat
- Abdomen
- Head and Back (including face, hair, and scalp)
- Peripheral Blood Vessels
- Speech
- Extremities (including strength, range of motion)
- Skin and Lymph Nodes
- Respiratory tract
- Heart (size, rate, rhythm, function)
- Back (special consideration for positions involving heavy lifting and other strenuous duties)
- Neurological (including reflexes, sensation) and mental health

Diagnostic Tests/Procedures

- Basic hearing assessment [whisper test] and if abnormal, Audiogram (including 500, 1000, 2000, 3000 Hertz in both ears)
- Visual Acuity, best far vision, corrected and uncorrected
- Peripheral Vision
- Color Discrimination (including red, green, and yellow)

Clearances: Medical Clearance for Crewmember Duties

Psychiatric Standard

The applicant/incumbent must have judgment, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric conditions (including alcohol or substance abuse) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

Note: All diagnoses must be consistent with the diagnostic criteria as established by the most recent version of the *Diagnostic and Statistical Manual of Mental Disorders*.

1. **AMNESTIC** disorders
2. **DELIRIUM** (depending upon etiology and duration)
3. **DEMENTIAS** (depending upon etiology and duration)
4. **DISSOCIATIVE DISORDERS**
5. **KLEPTOMANIA**
6. **PANIC DISORDER** and **OTHER ANXIETY DISORDERS** (depending upon etiology, duration and severity of clinical expression)
7. **DEPRESSIVE, BIPOLAR, or OTHER MOOD DISORDERS** (depending upon clinical course and status of current treatment and response)
8. **SCHIZOPHRENIA**
9. **ANTISOCIAL, PARANOID, or SCHIZOID PERSONALITY DISORDER**
10. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Prosthetics, Transplants, and Implants Standard

The presence or history of organ transplantation or use of prosthetics or implants is not automatically disqualifying. However, the applicant/incumbent must be able to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Note: In most cases, hand or arm amputations (with or without a prosthesis) are incompatible with the functional requirements of the job. For individuals with any transplant, prosthetic, or implanted pump or electrical device, the examinee will have to provide documentation for agency review from his/her surgeon or physician that the examinee (and, if applicable, his/her prosthetic or implanted device) is considered to be fully compatible with the specified essential functions of the job.

Immune System/Allergic Disorders Standard

The applicant/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions in order to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A general physical exam of all major body systems that is within the range of normal variation, including:
 - no evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the essential functions of the job; and

- no evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
- normal nasopharynx, major sinuses, and pulmonary exam
- No evidence by physical examination and medical history of infectious disease, immune system, or allergy conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job. Individuals with a history of anaphylaxis or major allergy problems may be required to carry a personal anaphylaxis kit (injectable epinephrine).

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MYASTHENIA GRAVIS**
2. **SYSTEMIC LUPUS ERYTHEMATOSIS**
3. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Medication Standard

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications if that impairment is likely to present a safety risk or to worsen as a result of carrying out the specified essential functions of the job, under the conditions in which those functions must be carried out. Each of the following points should be considered:

Medication(s) (type and dosage requirements)	Potential drug side effects
Drug-drug interactions	Adverse drug reactions
Drug toxicity or medical complications from long-term use	Drug-environmental interactions
Drug-food interactions	History of patient compliance

Eye / Vision Standard

The applicant/incumbent must be able to see well enough to safely and efficiently carry out the essential functions of the job. This requires binocular vision, far visual acuity, peripheral vision, and color vision, which may be demonstrated by:

- Correctable far visual acuity of at least 20/40 in one eye and uncorrected vision of at least 20/200 in the same eye (corrective lenses include contact lenses or spectacles); and
- Color vision sufficient to distinguish at least red, green, and amber (yellow); and
- Horizontal field of vision at least 100 degrees in each eye; and
- No ophthalmologic condition that would increase ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Note: Contact lenses are acceptable for correction of visual acuity, but the user must be able to demonstrate that the corrective device(s) can be worn safely and for extended periods of time without significant maintenance.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

- **CHRONIC CONJUNCTIVITIS**
- **CORNEAL ULCERS**
- **MACULAR DEGENERATION OR MACULAR DETACHMENT**
- **DIABETIC AND/OR HYPERTENSIVE RETINOPATHY**
- Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Head, Nose, Mouth, Throat and Neck Standard

The applicant/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
 - normal flexion, extension, and rotation of the neck; and
 - open nasal and oral airways; and
 - unobstructed Eustachian tubes; and
- Normal conversational speech; and
- No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MUTISM/APHONIA**
2. **NASAL POLYPS THAT SIGNIFICANTLY OBSTRUCT BREATHING**
3. **RESTRICTED RANGE OF MOTION IN THE NECK**
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Ear / Hearing Standard

The applicant/incumbent must be able to hear well enough to safely and efficiently carry out the essential functions of the job, which may be demonstrated by:

- A normal “*whisper test*” (examiner stands arm's length behind the seated patient and whispers a combination of numbers and letters and then asks the patient to repeat the sequence. If the patient responds correctly, hearing is considered normal; if the patient responds incorrectly, the test is repeated using a different number/letter combination. The patient is considered to have passed the screening test if they repeat at least three out of a possible six numbers or letters correctly. Each ear is tested individually.)

- if whisper test is abnormal,
 - conduct audiogram, using equipment and a test setting which meet the standards of the American National Standards Institute (see 29 CFR 1910.95); testing at the following thresholds: 500Hz, 1000Hz, 2000Hz, and 3000Hz. Frequency responses for each ear are averaged. Documentation of hearing threshold of no 30 decibels or less in best ear; and/or
 - speech discrimination test carried out at a level of 55 decibels. Demonstration of functional speech discrimination of at least 80%.
- No evidence by physical examination and medical history of ear conditions (external, middle, or internal) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Note: The use of a hearing aid(s) to meet this standard is permitted.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MENIERE’S DISEASE**
2. **ACOUSTIC NEUROMA**
3. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Dermatology Standard

The applicant/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ALBINISM**
2. **XERODERMA PIGMENTOSUM**
3. **CHRONIC DERMATITIS**
4. **COLLAGEN VASCULAR DISEASES**
5. **HISTORY OF MALIGNANT SKIN TUMORS WITHIN THE PAST 5 YEARS**
6. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Vascular System Standard

The applicant/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
 - no evidence of phlebitis or thrombosis; and
 - no evidence of venous stasis; and
 - no evidence of arterial insufficiency; and
- No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**
4. **INTERMITTENT CLAUDICATION**
5. **HISTORY OF AORTIC ANEURYSM, ABDOMINAL, or THORACIC**
6. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Cardiac Standard

The applicant/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
 - blood pressure of less than or equal to 160 mmHg systolic or 100 mmHg diastolic; and
 - no pitting edema in the lower extremities, and
 - normal cardiac exam.
- No evidence by physical examination and medical history of cardiovascular conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **IMPLANTED PACEMAKERS or IMPLANTABLE DEFIBRILLATORS**
2. **PROSTHETIC VALVE**
3. **CORONARY ARTERY DISEASE**
4. **HYPERTENSION** that cannot be controlled to a level of 160 mmHg systolic or 100

mmHg diastolic or less or requires the use of any medication that affects the ability of the individual to safely carry out the essential functions of the job, may be disqualifying.

5. History of **MYOCARDIAL INFARCTION**
6. **VALVULAR HEART DISEASE** such as mitral valve stenosis, symptomatic mitral valve regurgitation, aortic stenosis etc.
7. **DYSRHYTHMIAS**
8. **ANGINA PECTORIS** or chest pain of unknown etiology.
9. **CONGESTIVE HEART FAILURE**
10. **CARDIOMYOPATHY**
11. **HISTORY OF CABG, PTCA, or STENT**
12. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Chest and Respiratory System Standard

The applicant/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **SIGNIFICANT OBSTRUCTIVE or RESTRICTIVE PULMONARY DISEASE.**
2. **ACTIVE PULMONARY TUBERCULOSIS (TB)**
3. **HISTORY OF CHRONIC BRONCHITIS ASSOCIATED WITH DECREASED PULMONARY FUNCTION**
4. **SPONTANEOUS PNEUMOTHORAX** (if recurrent)
5. **PNEUMONECTOMY** (if associated with impaired pulmonary function).
6. **ASTHMA SYMPTOMS REQUIRING EMERGENCY TREATMENT**
7. **SLEEP DISORDERS**
8. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Endocrine and Metabolic System Standard

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The applicant/incumbent must have endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- No evidence by physical examination and history of endocrine/metabolic conditions

likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ADRENAL DYSFUNCTION** (e.g., Addison's disease or Cushing's syndrome).
2. **THYROID DISEASE** (uncontrolled or associated with current complications).
3. **INSULIN DEPENDENT DIABETES MELLITUS or HISTORY OF DIABETIC KETOACIDOSIS**
4. **DIABETES INSIPIDUS.**
5. **HYPOGLYCEMIA**
6. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

The Condition of Pregnancy

If an applicant or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the applicant's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

Hematopoietic System Standard

The applicant/incumbent must have a hematopoietic system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin, lymph nodes, and extremities that is within the range of normal variation; and
- No evidence by physical examination and medical history of hematopoietic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ANEMIA**
2. **THROMBOCYTOPENIA or CLOTTING DISORDER**
3. **HEMOPHILIA**
4. **SICKLE CELL ANEMIA**
5. **SPENOMEGALY**
6. **CHRONIC LYMPHANGITIS**
7. **LYMPHEDEMA**
8. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Musculoskeletal System Standard

The applicant/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for strength (including grip strength), flexibility, range of motion, and joint stability; and
- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ARTHRITIS** (any etiology) if there is a limitation of major joint motion, and/or pain that prevents the full range of required activities.
2. **AMPUTATIONS** (loss of digits will be evaluated on a case-by-case basis)
3. **ANKYLOSING SPONDYLITIS.**
4. **LUMBOSACRAL INSTABILITY:** pain or limitation of flexibility and/or strength adversely affecting the ability to stand, bend, stoop, carry heavy objects or sit for long periods of time.
5. **SCIATICA OR OTHER NEUROPATHIES**
6. **CHRONIC LOW BACK PAIN** (by medical history) without demonstrable pathology must be considered on a case-by-case basis. Each case will be reviewed in context of the original history or etiology, the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation.
7. A history of a **CHRONIC SPRAIN OR STRAIN OF THE NECK** limiting mobility or causing recurring cephalgia (headaches)
8. Any evidence of a **CERVICAL NEUROPATHY**, including numbness, tingling or loss of motor strength in the upper extremities
9. **PROGRESSIVE ATROPHY** of any muscles
10. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Central and Peripheral Nervous System Standard, and Vestibular System Standard

The applicant/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
 - intact cranial nerves, I-XII; and
 - normal proprioception of the major joints; and
 - normal sense of touch in the hands and feet; and
 - normal reflexes of the upper and lower extremities; and
 - normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and

- Normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ATAXIA** from any etiology
2. **VESTIBULAR NEURONITIS**
3. **PHYSIOLOGIC VERTIGO (MOTION SICKNESS)**
4. **CEREBROVASCULAR ACCIDENT** or **TRANSIENT ISCHEMIC ATTACKS.**
5. **EPILEPSY**
6. **NARCOLEPSY, SLEEP APNEA, OR OTHER SLEEP DISORDERS**
7. **SENSORY DYSFUNCTION** (smell, touch, proprioception)
8. **MIGRAINE**
9. **DEMENTIA, ALZHEIMER'S DISEASE**
10. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Gastrointestinal System Standard

The applicant/incumbent must have a gastrointestinal tract that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the abdomen that is within the range of normal variation; and
- No evidence by physical examination and medical history of gastrointestinal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ACUTE AND CHRONIC ACTIVE HEPATITIS.**
2. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS / SPRUE / IRRITABLE BOWEL SYNDROME**
3. **COLOSTOMIES**
4. **ILEITIS** (chronic or recurring).
5. **CHOLECYSTITIS** (chronic or recurring).
6. **DIVERTICULITIS** (symptomatic).
7. **CIRRHOSIS OF THE LIVER** or **ESOPHAGEAL VARICES**
8. **INTESTINAL OBSTRUCTION** from any cause.
9. **HISTORY OF GASTROINTESTINAL MALIGNANCY WITHIN THE LAST 5 YEARS**
10. **PANCREATITIS**
11. **UNTREATED (OR UNSUCCESSFULLY TREATED) INGUINAL, INCISIONAL OR VENTRAL HERNIA** that is associated with symptoms
12. **HISTORY OF GASTROINTESTINAL BLEEDING, ACTIVE GASTRIC OR**

DUODENAL ULCER

13. GASTRIC OR BOWEL RESECTION

14. HISTORY OF LIVER TRANSPLANT

15. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Genitourinary System Standard

The applicant/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **POLYCYSTIC KIDNEY DISEASE**
2. **ACUTE or CHRONIC RENAL FAILURE**
3. **NEPHROTIC SYNDROME**
4. **SYMPTOMATIC URINARY CALCULI**
5. **NEUROGENIC BLADDER**
6. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
7. **RENAL TOXICITY FROM ANY CAUSE**
8. **RENAL DIALYSIS or HISTORY OF RENAL TRANSPLANT**
9. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Agency Medical Officers

These Standards Are Applicable to the Following Function:

Rope Access Technicians

General Background

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for functions with duties that are arduous or hazardous in nature. The medical standards described in this section are required because of the hazardous occupational and environmental aspects of the function of rope access technician (please refer to the table on page 3). The medical standards are provided to aid the examining physician, the designated agency medical officer(s), and officials of other involved government agencies (e.g., the Office of Personnel Management, or OPM). They are to be used when determining whether there are medical conditions present that may affect an individual's ability to safely and efficiently perform the requirements of a rope access technician without undue risk to himself/herself or others. The results of such determinations are to be used by an agency-based team (e.g., safety, personnel, management, peers, and medical) to consider whether waivers or reasonable accommodation may be appropriate when an individual is found to not meet a specified standard. In this way, the standards are intended to help ensure consistency and uniformity in the medical evaluation of all applicants and incumbents.

Each of the medical standards listed in this document are subject to clinical interpretation by an appropriate agency medical officer (AMO) who will incorporate his/her knowledge of the essential job functions and the environmental conditions under which an employee may work. Listed with the standards are examples of medical conditions and/or physical impairments that may be incompatible with safe and efficient performance of duties, or that may be aggravated by performing those duties. Individualized assessments will be made on a case-by-case basis to determine the individual's ability to meet the performance-related requirements of the rope access technician's job. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the pre-placement or periodic medical examination process.

Rationale for Medical Evaluation of Rope Access Technicians

The essential functions of rope access technicians in supporting departmental and bureau missions are by nature arduous and hazardous. Also, these functions are performed under variable and unpredictable working conditions. In response, an interagency team has developed these standards in order to help ensure the following:

- Rope access technicians will be able to perform the full range of essential functions of their jobs under the conditions under which those functions may be performed.
- Existing/preexisting medical conditions of technicians and applicants will not be aggravated, accelerated, exacerbated, or permanently worsened as a result of carrying out

the functions of the job.

- Demonstration of the strong commitment of the agency to public and employee health and safety, and a strong commitment to maintaining the integrity of mission accomplishment.

Periodicity of Medical Evaluations

Medical evaluations are to be conducted both as a *pre-placement* exam for all individuals who are to be assigned to roles that involve the duties of rope access technicians, and every three years thereafter. The AMO may determine that, due to health and safety risks, interval changes in health status, and possible medically-related performance concerns, the medical evaluation of individual technicians should be conducted more frequently.

The medical evaluation is to consist of those services summarized on page 4. The evaluation is to be conducted by a qualified health care provider using the DOI Standard Medical History and Examination Form (or an alternative form that provides similar information). The AMO will review the results of all examinations and provide the final medical recommendation to the agency.

Note: Consistent with the above discussion, these medical standards do not address *physical fitness or job performance*. Assessment of these factors would involve separate procedures and are governed by separate regulations.

Essential Functions and Work Conditions

Rope Access Technician (Rat)

Time/Work Volume	Physical Requirements	Environment	Physical Exposures
<i>May include:</i>			
<ul style="list-style-type: none"> ▪ up to 10 ascents and/or descents per day ▪ jobs conducted up to 50 days per year ▪ may be expected to work multiple days in succession ▪ may be expected to work longer than 8 hours per day ▪ work conducted during all hours; may include working at night and in spaces without natural light ▪ work will involve being suspended in full-body rope access harness ▪ all jobs include rescue planning and may require a RAT to perform a variety of high angle rescues where time is of the essence 	<ul style="list-style-type: none"> ▪ read documents, drawings, and maps ▪ drive to work sites, 30 minutes to 10 hours (per day) ▪ lift and carry gear bags and safety equipment (up to 60 lbs.) ▪ put on and use personal protective and rope access equipment ▪ install anchor systems including slings, 3-step carabiners, rope grabs, pulleys, and lowering devices ▪ ascend ropes using mechanical devices up to 200+ feet in length, while suspended from full-body, rope access harness ▪ descend by rappelling using mechanical devices, up to 600 feet ▪ work at extreme heights (structures/rock slopes 10-1000+ feet tall) ▪ be continuously and clearly aware of surroundings ▪ walk, stand, kneel, stoop, and bend for prolonged periods of time ▪ use small and large hand and power tools ▪ reach and use tools above shoulders and head ▪ push and pull objects ▪ read gauges, dials, and equipment ▪ tie and untie ropes ▪ work on small or large teams ▪ use writing implements, as well as computer keyboard and personal computer ▪ communicate clearly with public and co-workers, including the use of hand-held radios ▪ promptly perform high angle rescue in a variety of scenarios which may involve: lifting, dragging, pushing, pulling for up to one hour. 	<ul style="list-style-type: none"> ▪ slippery surfaces ▪ uneven surfaces ▪ heights (up to 1000 feet or more on structures or rock slopes) ▪ altitudes (up to 12000 feet) ▪ heat, cold, wet, dry (all with extremes) ▪ wind ▪ fog ▪ high noise levels ▪ variable lighting conditions ▪ moving and stationary heavy equipment, machines, vehicles ▪ wildlife (e.g., birds, bats, snakes, bears, insects) ▪ long distances from support or medical help ▪ isolated, remote sites ▪ close living/working quarters ▪ exposed, protruding bolts, braces ▪ sharp metal objects and jagged concrete surfaces ▪ steep and/or vertical slopes with loose/unstable rock ▪ confined spaces ▪ electrical lines 	<ul style="list-style-type: none"> ▪ extreme heat and cold ▪ noise ▪ wildlife and feces (e.g., birds, rodents, bears, insects) ▪ gases, particulates, fumes, dust ▪ sleep disruption ▪ falling objects, including concrete and rock, tools, equipment ▪ bright sun, high UV light ▪ dehydration ▪ cold water (e.g., rain, snow, leaking gates)
Rope Access Technician (Rat)			

Medical Evaluation Components for Rope Access Technicians

Services, By Category

Histories

- General Medical and Occupational History
- Current Medications

Examination Items

- General Appearance and Vital Signs (height, weight, blood pressure, heart rate)
- General Physical Examination

Special Attention To:

- Skin
- Eyes, Ears (including TM mobility), Nose, Mouth, and Throat
- Neck (including flexibility and rotation)
- Thyroid
- Respiratory System
- Cardiovascular System
- Back & Musculoskeletal System (including flexibility)
- Extremities (including strength, range of motion, and joint stability)
- Peripheral Vascular System
- Abdomen
- Gastrointestinal System
- Genitourinary System
- Central Nervous System (including cranial nerves II-XII, and cerebellar function)
- Peripheral Nervous System (including reflexes, sensation, and position sense)
- Mental Status Evaluation

Diagnostic Tests/Procedures

- Audiogram (including 500, 1000, 2000, 3000, 4000, 6000, 8000 Hertz in both ears)
- Visual Acuity, best near and far vision, corrected or uncorrected
- Peripheral Vision
- Depth perception
- Color Discrimination (red, green, and yellow) (baseline exam)
- Pulmonary Function Test-Spirometry (baseline/exit exam)
- Electrocardiogram-Resting (baseline/exit exam)
- TB (Mantoux) skin test (baseline/exit exam)
- Tetanus vaccination (to maintain as current)

Laboratory

- CBC (hemoglobin, hematocrit, platelets, white blood count)
- Blood chemistry:
 - LDH, AST, ALT, GGT, bilirubin, total cholesterol, LDL, HDL, triglycerides, blood sugar
- Dipstick urinalysis

Clearances: Medical Clearance for Rope Access Technicians

Psychiatric Standard

The applicant/incumbent must have judgment, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric conditions (including alcohol or substance abuse) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

Note: All diagnoses must be consistent with the diagnostic criteria as established by the most current version of the *Diagnostic and Statistical Manual of Mental Disorders*.

1. **AMNESTIC** disorders
2. **DELIRIUM** (depending upon etiology and duration)
3. **DEMENTIAS** (depending upon etiology and duration)
4. **DISSOCIATIVE DISORDERS**
5. **KLEPTOMANIA**
6. **PANIC DISORDER** and **OTHER ANXIETY DISORDERS** (including claustrophobia and acrophobia, depending upon etiology, duration and severity of clinical expression)
7. **DEPRESSIVE, BIPOLAR, or OTHER MOOD DISORDERS** (depending upon clinical course and status of current treatment and response)
8. **PYROMANIA**
9. **SCHIZOPHRENIA** (Exceptions may be may in cases of a single episode of schizophrenic reactions associated with an acute illness or toxic exposure capable of causing such reaction.)
10. **ANTISOCIAL, PARANOID, or SCHIZOID PERSONALITY DISORDER**
11. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Prosthetics, Transplants, and Implants Standard

The presence or history of organ transplantation or use of prosthetics or implants are not of themselves disqualifying. However, the applicant/incumbent must be able to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

Note: In general, hand or arm amputations (with or without a prosthesis) are incompatible with the functional requirements of the job. For individuals with any transplant, prosthetic, or implanted pump or electrical device, the examinee will have to provide documentation for agency review from his/her surgeon or physician that the examinee (and, if applicable, his/her prosthetic or implanted device) is considered to be fully compatible with the specified essential

functions of the job.

Immune System/Allergic Disorders Standard

The applicant/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions in order to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A general physical exam of all major body systems that is within the range of normal variation, including:
 - no evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the essential functions of the job; and
 - no evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
 - normal nasopharynx, major sinuses, Eustachian tube, and pulmonary exam
- Normal complete blood count, including white blood count and differential; and
- Current vaccination status for tetanus; and
- No evidence by physical examination and medical history of infectious disease, immune system, or allergy conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3). Individuals with a history of anaphylaxis or major allergy problems may be required to carry a personal anaphylaxis kit (injectable epinephrine).

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **Myasthenia gravis**
2. **Systemic lupus erythematosus**
3. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Medication Standard

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications if that impairment is likely to present a safety risk or to worsen as a result of carrying out the specified essential functions of the job, under the conditions in which those functions must be carried out (see page 3). Each of the following points should be considered:

1. Medication(s) (type and dosage requirements)	2. Potential drug side effects
3. Drug-drug interactions	4. Adverse drug reactions
5. Drug toxicity or medical complications from long-term use	6. Drug-environmental interactions
7. Drug-food interactions	8. History of patient compliance

Eye / Vision Standard

The applicant/incumbent must be able to see well enough to safely and efficiently carry out the essential functions of the job. This requires binocular vision, near and far visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by:

- Far visual acuity of at least 20/40 in each eye; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Near visual acuity of at least 20/25 (Snellen equivalent) at 16 inches; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Color vision sufficient to distinguish at least red, green, and amber (yellow); and
- Peripheral vision of at least 85° laterally in each eye; and
- Normal depth perception; and
- No ophthalmologic condition that would increase ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Note: Contact lenses are acceptable for correction of visual acuity, but the user must be able to demonstrate that the corrective device(s) can be worn safely and for extended periods of time without significant maintenance.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CHRONIC CONJUNCTIVITIS**
2. **CORNEAL ULCERS**, this condition must be treated and cleared by an Ophthalmologist before a medical clearance can be granted.
3. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Head, Nose, Mouth, Throat and Neck Standard

The applicant/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
 - normal flexion, extension, and rotation of the neck; and
 - open nasal and oral airways; and
 - unobstructed Eustachian tubes; and
 - no structural abnormalities that would prevent the normal use of a hard hat and protective eyewear; and
- Normal conversational speech; and
- No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result In Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MUTISM/APHONIA**
2. **NASAL POLYPS THAT SIGNIFICANTLY OBSTRUCT BREATHING**
3. **RESTRICTED RANGE OF MOTION IN THE NECK**

4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Ear / Hearing Standard

The applicant/incumbent must be able to hear well enough to safely and efficiently carry out the essential functions of the job. This requires binaural hearing (to localize sounds) and auditory acuity, which may be demonstrated by:

- A current pure tone, air conduction audiogram, using equipment and a test setting which meet the standards of the American National Standards Institute (see 29 CFR 1910.95); and
- Documentation of hearing thresholds of no greater than 40 dB at 500, 1000, 2000, and 3000 Hz in each ear; and
- No evidence by physical examination and medical history of ear conditions (external, middle, or internal) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Note: The use of a hearing aid(s) to meet this standard is permitted.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MENIERE'S DISEASE**
2. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Dermatology Standard

The applicant/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ALBINISM**
2. **XERODERMA PIGMENTOSUM**
3. **CHRONIC DERMATITIS** (if it affects ability to use PPE and fall prevention and fall arrest gear)
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Vascular System Standard

The applicant/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
 - no evidence of phlebitis or thrombosis; and
 - no evidence of venous stasis; and
 - no evidence of arterial insufficiency; and
- No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

Conditions Which May Result In Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**
4. **INTERMITTENT CLAUDICATION**
5. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Cardiac Standard

The applicant/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
 - blood pressure of less than or equal to 140 mmHg systolic and 90 mmHg diastolic; and
 - a normal baseline electrocardiogram (minor, asymptomatic arrhythmias may be acceptable); and
 - no pitting edema in the lower extremities, and
 - normal cardiac exam.
- No evidence by physical examination and medical history of cardiovascular conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **PACEMAKERS or PROSTHETIC VALVES** may be disqualifying. Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions, will be necessary before a clearance can be granted.
2. **CORONARY ARTERY DISEASE**
3. **HYPERTENSION** that cannot be controlled to a level of 160/90 or less, or requires the

use of any medication that affects the ability of the individual to safely carry out the essential functions of the job, may be disqualifying.

4. History of **MYOCARDIAL INFARCTION**
5. **VALVULAR HEART DISEASE** such as mitral valve stenosis, symptomatic mitral valve regurgitation, aortic stenosis etc.
6. **DYSRHYTHMIAS**: Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions and without aggravating the condition, will be necessary before a clearance can be considered.
7. **ANGINA PECTORIS** or chest pain of unknown etiology.
8. **CONGESTIVE HEART FAILURE**
9. **CARDIOMYOPATHY**
10. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Chest and Respiratory System Standard

The applicant/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- A pulmonary function test (baseline exam) showing:
 - forced vital capacity (FVC) of at least 70% of the predicted value; and
 - forced expiratory volume at 1 second (FEV1) of at least 70% of the predicted value; and
 - the ratio FEV1/FVC of at least 70% of the predicted value; and
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

Conditions Which May Result In Disqualification Include, But Are Not Limited To, The Following Examples:

1. **SIGNIFICANT OBSTRUCTIVE or RESTRICTIVE PULMONARY DISEASE.**
2. **ASTHMA**
3. **ACTIVE PULMONARY TUBERCULOSIS (TB)**
4. **HISTORY OF CHRONIC BRONCHITIS ASSOCIATED WITH DECREASED PULMONARY FUNCTION**
5. **SPONTANEOUS PNEUMOTHORAX** (if recurrent)
6. **PNEUMONECTOMY** (if associated with impaired pulmonary function)
7. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Endocrine and Metabolic System Standard

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The applicant/incumbent must have

endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- Normal fasting blood sugar level; and
- No evidence by physical examination (including laboratory testing) and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ADRENAL DYSFUNCTION** (e.g., Addison's Disease or Cushing's Syndrome).
2. **THYROID DISEASE** (uncontrolled or associated with current complications).
3. **INSULIN DEPENDENT DIABETES MELLITUS**
4. **HYPERGLYCEMIA** without a history of diabetes will require additional tests, including but not limited to a glycohemoglobin (or hemoglobin A_{1c}) and fasting glucose before a final medical determination is made.
5. **DIABETES INSIPIDUS.**
6. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

The Condition of Pregnancy

If an applicant or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the applicant's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

Hematopoietic System Standard

The applicant/incumbent must have a hematopoietic (blood and blood-producing) system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- A complete blood count (including hemoglobin, hematocrit, platelets, and white blood count, with differential) that is within the normal range; and
- No evidence by physical examination (including laboratory testing) and medical history of hematopoietic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ANEMIA**
2. **THROMBOCYTOPENIA** or **CLOTTING DISORDER**
3. **HEMOPHILIA**
4. **CHRONIC LYMPHANGITIS**
5. **SICKLE CELL ANEMIA**

6. **SPENOMEGALY**

7. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Musculoskeletal System Standard

The applicant/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for strength (including grip strength), flexibility, range of motion, and joint stability; and
- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ARTHRITIS** (any etiology) if there is a limitation of major joint motion, and/or pain that prevents the full range of required activities.
2. **AMPUTATIONS** (loss of digits will be evaluated on a case-by-case basis)
3. **ANKYLOSING SPONDYLITIS.**
4. **LUMBOSACRAL INSTABILITY:** pain or limitation of flexibility and/or strength adversely affecting the ability to stand, bend, stoop, carry heavy objects or sit for long periods of time.
5. **SCIATICA OR OTHER NEUROPATHIES**
6. **CHRONIC LOW BACK PAIN** (by medical history) without demonstrable pathology must be considered on a case-by-case basis. Each case will be reviewed in context of the original history or etiology, the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation.
7. A history of a **CHRONIC SPRAIN OR STRAIN OF THE NECK** limiting mobility or causing recurring cephalgia (headaches)
8. Any evidence of a **CERVICAL NEUROPATHY**, including numbness, tingling or loss of motor strength in the upper extremities
9. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Central and Peripheral Nervous System Standard, and Vestibular System Standard

The applicant/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
 - intact cranial nerves, I-XII; and
 - normal proprioception of the major joints; and

- normal sense of touch in the hands and feet; and
- normal reflexes of the upper and lower extremities; and
- normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and
- Normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ATAXIA** from any etiology
2. **VESTIBULAR NEURONITIS**
3. **VERTIGO**
4. **PHYSIOLOGIC VERTIGO (MOTION SICKNESS)**
5. **CEREBROVASCULAR ACCIDENT** or **TRANSIENT ISCHEMIC ATTACKS.**
6. **EPILEPSY/SEIZURES**
7. **NARCOLEPSY**
8. **SENSORY DYSFUNCTION** (smell, touch, proprioception)
9. **MIGRAINE**
10. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Gastrointestinal System Standard

The applicant/incumbent must have a gastrointestinal tract that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the abdomen that is within the range of normal variation; and
- Normal liver function tests (baseline exam); and
- No evidence by physical examination (including laboratory testing) and medical history of gastrointestinal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ACUTE AND CHRONIC ACTIVE HEPATITIS.**
2. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS / SPRUE / IRRITABLE BOWEL SYNDROME** (these conditions, if controlled with surgical, dietary, and/or medical treatments, may be compatible with the job, and will be reviewed on a case-by-case basis.)
3. **COLOSTOMIES**, unless the precipitating condition has stabilized and the applicant/incumbent demonstrates successful management of the colostomy, considering the requirements of the function and the work conditions.
4. **ILEITIS** (chronic or recurring).
5. **CHOLECYSTITIS** (chronic or recurring).
6. **DIVERTICULITIS** (symptomatic).
7. **CIRRHOSIS OF THE LIVER** (depending upon the degree of severity and the

etiology).

8. **INTESTINAL OBSTRUCTION** from any cause.
9. **ESOPHAGEAL VARICES**
10. **PANCREATITIS**
11. **UNTREATED (OR UNSUCCESSFULLY TREATED) INGUINAL, INCISIONAL OR VENTRAL HERNIA** that is associated with symptoms
12. **ACTIVE GASTRIC OR DUODENAL ULCER**
13. **GASTRIC OR BOWEL RESECTION**, if there is any evidence (historical or physical) of post-treatment (current) pain, hemorrhage, fainting episodes or dietary restrictions that could interfere with the performance of the job.
14. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Genitourinary System Standard

The applicant/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A normal clean catch urinalysis (baseline exam); and
- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

- 1. POLYCYSTIC KIDNEY DISEASE**
- 2. ACUTE or CHRONIC RENAL FAILURE**
- 3. NEPHROTIC SYNDROME**
- 4. SYMPTOMATIC URINARY CALCULI**
- 5. NEUROGENIC BLADDER**
- 6. UNCORRECTED OBSTRUCTIVE UROPATHIES**
- 7. RENAL TOXICITY FROM ANY CAUSE**
8. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Agency Medical Officers

These Standards Are Applicable to the Following Function:

Crane Operators

General Background

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for functions with duties that are arduous or hazardous in nature. The medical standards described in this section were established because of the hazardous occupational and environmental aspects of the function of crane operator. The medical standards are provided to aid the examining physician, the designated agency medical officer(s), and officials of other involved government agencies (e.g., the Office of Personnel Management, or OPM). They are to be used when determining whether there are medical conditions present that may affect an individual's ability to safely and efficiently perform the requirements of a crane operator without undue risk to himself/herself or others. The results of such determinations are to be used by an agency-based team (e.g., safety, personnel, management, peers, and medical) to consider whether waivers or reasonable accommodation may be appropriate when an individual is found to not meet a specified standard. In this way, the standards are intended to help insure consistency and uniformity in the medical evaluation of all selectees and incumbents.

These standards are based on those used by the U.S. Navy, and the State of Washington. They are to be considered drafts or working models by agencies wishing to establish formal standards for use in that agency. Each of the medical standards listed in this document are subject to clinical interpretation by an appropriate agency medical officer (AMO) who will incorporate his/her knowledge of the essential job functions and the environmental conditions under which an employee may work. Listed with the standards are examples of medical conditions and/or physical impairments that may be incompatible with safe and efficient performance of duties, or that may be aggravated by performing those duties. Individualized assessments will be made on a case-by-case basis to determine the individual's ability to meet the performance-related requirements of the crane operator's job. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the pre-placement or periodic medical examination process.

Rationale for Medical Evaluation and Review of Crane Operators

The essential functions of crane operators in supporting departmental and bureau missions are by nature hazardous, both for the worker directly, as well as co-workers and possibly the public. The intent of these standards is to help insure the following:

- Crane operators will be able to perform the full range of essential functions of their jobs under the conditions under which those functions may be performed.
- Existing/preexisting medical conditions of crane operators and selectees will not be

aggravated, accelerated, exacerbated, or permanently worsened as a result of carrying out the functions of the job.

- Demonstration of the strong commitment of the agency to public and employee health and safety, and a strong commitment to maintaining the integrity of mission accomplishment.

Periodicity of Medical Evaluations

Medical evaluations are to be conducted both as a *pre-placement* exam for all individuals who are to be assigned to roles that involve the duties of crane operators, and every three years thereafter. The AMO may determine that, due to health and safety risks, interval changes in health status, and possible medically-related performance concerns, the medical evaluation of individual crane operators should be conducted more frequently.

The medical evaluation is to consist of those services summarized in the table on page 3. The evaluation is to be conducted by a qualified health care provider using the DOI Standard Medical History and Examination Form (or an alternative form that provides similar information). For assistance in arranging for physician services, please refer to Tab 5, “*Medical Services Providers*”. The AMO will review the results of all examinations, and provide the final medical recommendation to the agency.

Medical Examination Components for Crane Operators

Services, By Category

Histories

- General Medical and Occupational History
- Current Medications

Examination Items

- General Appearance and Vital Signs (height, weight, blood pressure, heart rate)
- General Physical Examination

Special Attention To:

- Eyes, Ears, Nose, Mouth, and Throat
- Neck (including flexibility and rotation)
- Respiratory System
- Cardiovascular System
- Back & Musculoskeletal System (including flexibility)
- Extremities (including strength, range of motion, and joint stability)
- Peripheral Vascular System
- Central Nervous System (including cranial nerves I-XII, and cerebellar function)
- Peripheral Nervous System (including reflexes, sensation, and position sense)
- Mental Status Evaluation

Diagnostic Tests/Procedures

- Audiogram (including 500, 1000, 2000, 3000, 4000, 6000, 8000 Hertz in both ears)
- Visual Acuity, best near and far vision, corrected or uncorrected
- Peripheral Vision
- Depth perception

- Color Discrimination (including red, green, and yellow) (baseline/exit exam)

Laboratory

- CBC (hemoglobin, hematocrit, platelets, white blood count with differential)
- Dipstick urinalysis (baseline/exit exam only)
- Blood chemistries:
 - LDH, SGOT/AST, SGPT/ALT, GGT, bilirubin [baseline/exit exam only]
 - Total cholesterol, LDL-C, HDL-C, triglycerides, blood sugar [each exam]

Clearances: Medical Clearance for Crane Operators

Psychiatric / Psychologic Standard

The selectee/incumbent must have judgment, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric conditions (including alcohol or substance abuse) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

Note: All diagnoses must be consistent with the diagnostic criteria as established by the most recent edition of the *Diagnostic and Statistical Manual of Mental Disorders*.

1. **AMNESTIC** disorders
2. **DELIRIUM** (depending upon etiology and duration)
3. **DEMENTIAS** (depending upon etiology and duration)
4. **DISSOCIATIVE DISORDERS**
5. **PANIC DISORDER** and **OTHER ANXIETY DISORDERS** (including claustrophobia and acrophobia, depending upon etiology, duration and severity of clinical expression)
6. **DEPRESSIVE, BIPOLAR, or OTHER MOOD DISORDERS** (depending upon clinical course and status of current treatment and response)
7. **SCHIZOPHRENIA** (Exceptions may be made in cases of a single episode of schizophrenic reactions associated with an acute illness or toxic exposure capable of causing such reaction.)
8. **ANTISOCIAL, PARANOID, or SCHIZOID PERSONALITY DISORDER**
9. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Prosthetics, Transplants, and Implants Standard
--

The presence or history of organ transplantation or use of prosthetics or implants are not of themselves disqualifying. However, the selectee/incumbent must be able to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the

prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Note: For individuals with any transplant, prosthetic, or implanted pump or electrical device, the examinee will have to provide documentation for agency review from his/her surgeon or physician that the examinee (and, if applicable, his/her prosthetic or implanted device) is considered to be fully compatible with the specified essential functions of the job.

Medication Standard

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications if that impairment is likely to present a safety risk or to worsen as a result of carrying out the specified essential functions of the job, under the conditions in which those functions must be carried out. Each of the following points should be considered:

Medication(s) (type and dosage requirements)	Potential drug side effects
Drug-drug interactions	Adverse drug reactions
Drug toxicity or medical complications from long-term use	Drug-environmental interactions
Drug-food interactions	History of patient compliance

Eye / Vision Standard

The selectee/incumbent must be able to see well enough to safely and efficiently carry out the essential functions of the job. This requires binocular vision, visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by:

- Far visual acuity of at least 20/30 in one eye, and 20/50 in the other eye; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Color vision sufficient to distinguish at least red, green, and amber (yellow); and
- Peripheral vision of at least 70° laterally in each eye; and
- Normal depth perception.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CHRONIC CONJUNCTIVITIS**
2. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Head, Nose, Mouth, Throat and Neck Standard

The selectee/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
 - normal flexion, extension, and rotation of the neck; and
 - no structural abnormalities that would prevent the normal use of a hard hat and protective eyewear; and
- Normal conversational speech; and
- No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **MUTISM/APHONIA**
2. **RESTRICTED RANGE OF MOTION IN THE NECK**
3. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Ear / Hearing Standard

The selectee/incumbent must be able to hear well enough to safely and efficiently carry out the essential functions of the job. This requires binaural hearing (to localize sounds) and auditory acuity, which may be demonstrated by:

- Documentation of hearing thresholds of no greater than 40 dB at 500, 1000, and 2000 Hz in each ear, based on a pure tone, air conduction audiogram, using equipment and a test setting which meet the standards of the American National Standards Institute (see 29 CFR 1910.95).

Note: The use of a hearing aid(s) to meet this standard **is** permitted.

Dermatology Standard

The selectee/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The

Following Examples:

1. **CHRONIC DERMATITIS** (if it affects ability to use PPE)
2. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Vascular System Standard

The selectee/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
 - no evidence of phlebitis or thrombosis; and
 - no evidence of venous stasis; and
 - no evidence of arterial insufficiency; and
 - no evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Cardiac Standard

The selectee/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
 - blood pressure of less than or equal to 140 mmHg systolic and 90 mmHg diastolic; and
 - a normal baseline electrocardiogram (minor, asymptomatic arrhythmias may be acceptable); and
 - no pitting edema in the lower extremities, and
 - normal cardiac exam.
- No evidence by physical examination and medical history of cardiovascular conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **PACEMAKERS or PROSTHETIC VALVES** may be disqualifying. Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions, will be necessary before a clearance can be granted.
2. **HYPERTENSION** that cannot be controlled to a level of 140/90 or less, or requires the use of any medication that affects the ability of the individual to safely carry out the essential functions of the job, may be disqualifying.
3. History of **MYOCARDIAL INFARCTION** may be disqualifying. Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions, will be necessary before a clearance can be granted.
4. **DYSRHYTHMIAS**: Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions and without aggravating the condition, will be necessary before a clearance can be considered.
5. **ANGINA PECTORIS** or chest pain of unknown etiology.
6. **CONGESTIVE HEART FAILURE**
7. **CARDIOMYOPATHY**
8. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Chest and Respiratory System Standard

The selectee/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result In Disqualification Include, But Are Not Limited To, The Following Examples:

1. **SIGNIFICANT OBSTRUCTIVE or RESTRICTIVE PULMONARY DISEASE.**
2. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Endocrine and Metabolic System Standard

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The selectee/incumbent must have endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- Normal fasting blood sugar level; and
- No evidence by physical examination (including laboratory testing) and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result In Disqualification Include, But Are Not Limited To, The Following Examples:

1. **INSULIN DEPENDENT DIABETES MELLITUS**
2. **HYPERGLYCEMIA** without a history of diabetes will require additional tests, including but not limited to a glycohemoglobin (or hemoglobin A_{1c}) and fasting glucose before a final medical determination is made.
3. **DIABETES INSIPIDUS.**
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

The Condition of Pregnancy

If a selectee or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the selectee's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

Musculoskeletal System Standard
--

The selectee/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for strength (including grip strength), flexibility, range of motion, and joint stability; and
- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result In Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ARTHRITIS** (any etiology) if there is a limitation of major joint motion, and/or pain that prevents the full range of required activities.
2. **AMPUTATIONS** (loss of digits will be evaluated on a case-by-case basis)
3. **LUMBOSACRAL INSTABILITY:** pain or limitation of flexibility and/or strength adversely affecting the ability to stand, bend, stoop, carry heavy objects or sit for long periods of time.

4. **SCIATICA OR OTHER NEUROPATHIES**
5. **CHRONIC LOW BACK PAIN** (by medical history) without demonstrable pathology must be considered on a case-by-case basis. Each case will be reviewed in context of the original history or etiology, the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation.
6. Any evidence of a **CERVICAL NEUROPATHY**, including numbness, tingling or loss of motor strength in the upper extremities
7. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Central and Peripheral Nervous System Standard, and Vestibular System Standard

The selectee/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
 - intact cranial nerves, I-XII; and
 - normal proprioception of the major joints; and
 - normal sense of touch in the hands and feet; and
 - normal reflexes of the upper and lower extremities; and
 - normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and
- Normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ATAXIA** from any etiology
2. **VESTIBULAR NEURONITIS**
3. **VERTIGO**
4. **PHYSIOLOGIC VERTIGO (MOTION SICKNESS)**
5. **CEREBROVASCULAR ACCIDENT** or **TRANSIENT ISCHEMIC ATTACKS.**
6. **EPILEPSY** (See the seizure standard, below)
7. **NARCOLEPSY**
8. **SENSORY DYSFUNCTION** (smell, touch, proprioception)
9. **SEIZURES***
10. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Gastrointestinal System Standard

The selectee/incumbent must have a gastrointestinal tract that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the abdomen that is within the range of normal variation; and

- Normal liver function tests (baseline exam); and
- No evidence by physical examination (including laboratory testing) and medical history of gastrointestinal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS / SPRUE / IRRITABLE BOWEL SYNDROME** (these conditions, if controlled with surgical, dietary, and/or medical treatments, may be compatible with the job, and will be reviewed on a case-by-case basis.)
2. **ILEITIS** (chronic or recurring).
3. **CHOLECYSTITIS** (chronic or recurring).
4. **DIVERTICULITIS** (symptomatic).
5. **CIRRHOSIS OF THE LIVER** (depending upon the degree of severity and the etiology).
6. **INTESTINAL OBSTRUCTION** from any cause.
7. **PANCREATITIS**
8. **UNTREATED (OR UNSUCCESSFULLY TREATED) INGUINAL, INCISIONAL OR VENTRAL HERNIA** associated with symptoms
9. **ACTIVE GASTRIC OR DUODENAL ULCER**
10. **GASTRIC OR BOWEL RESECTION**, if there is any evidence (historical or physical) of post-treatment (current) pain, hemorrhage, or fainting episodes that could interfere with the performance of the job.
11. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

Genitourinary System Standard

The selectee/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A normal clean catch urinalysis (baseline exam); and
- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Conditions Which May Result in Disqualification Include, But Are Not Limited To, The Following Examples:

1. **ACUTE or CHRONIC RENAL FAILURE**
2. **NEPHROTIC SYNDROME**
3. **SYMPTOMATIC URINARY CALCULI**
4. **NEUROGENIC BLADDER**
5. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
6. **RENAL TOXICITY FROM ANY CAUSE**
7. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-case basis.

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Medical Review Officers

These Standards Are Applicable to Positions Requiring

Hazardous Waste Workers

General Background

The regulations presented in 29 CFR 1910.120(f) specify that medical examinations for members of a HAZMAT team “*shall include a medical and work history (or updated history if one is in the employee’s file) with special emphasis on symptoms related to the handling of hazardous substances and health hazards, and to fitness for duty including the ability to wear any required PPE under conditions (i.e., temperature extremes) that may be expected at the work site.*” The following document provides more specific information regarding the recommended content and scheduling of examinations for hazardous waste workers. In general, examinations are required on a pre-placement and a periodic basis, as well as at other times depending on exposures and possible exposure-related illnesses.

Definitions

Hazardous Materials Response Team (per [29 CFR 1910.120](#)): An organized group of employees, designated by the employer, who are expected to perform work to handle and control actual or potential leaks or spills of hazardous substances requiring possible close approach to the substance. The team members perform responses to releases or potential releases of hazardous substances for the purpose of control or stabilization of the incident.

Permissible Exposure Level (per [29 CFR 1910.120](#)): The exposure limits published in ‘NIOSH Recommendations for Occupational Health Standards’ dated 1986 incorporated by reference, or if none is specified, the exposure limits published in the standards specified by the American Conference of Governmental Industrial Hygienists in their publication ‘Threshold Limit Values and Biological Exposure Indices for 1987-88’ dated 1987 incorporated by reference.”

Post Emergency Response (per [29 CFR 1910.120](#)): That portion of an emergency response performed after the immediate threat of a release has been stabilized or eliminated and clean-up of the site has begun.

Employee (per [29 CFR 1910.1020](#)): A current employee, a former employee, or an employee being assigned or transferred to work where there will be exposure to toxic substances or harmful physical agents. In the case of a deceased or legally incapacitated employee, the employee’s legal representative may directly exercise all the employee’s rights.

Employees covered by this protocol are further specified by [29 CFR 1910.120\(f\)\(2\)](#), and include:

- (i) all employees who are or may be exposed to hazardous substances or health hazards at or above the permissible exposure limits or, if there is no permissible exposure limit,

- above the published exposure levels for these substances, without regard to the use of respirators, for 30 days or more a year;
- (ii) all employees who wear a respirator for 30 days or more a year or as required by 29 CFR 1910.134 [Respiratory protection];
 - (iii) all employees who are injured, become ill or develop signs or symptoms due to possible overexposure involving hazardous substances or health hazards from an emergency response or hazardous waste operation; and
 - (iv) members of HAZMAT teams.

Employee Exposure Record (per [29 CFR 1910.1020](#)): A record containing any of the following kinds of information:

- Environmental (workplace) monitoring or measuring of a toxic substance or harmful physical agent
- Biological monitoring results which directly assess the absorption of a toxic substance or harmful physical agent by body systems [e.g., laboratory tests]
- Material safety data sheets
- a chemical inventory or any other record which reveals where and when used and the identity (e.g., chemical, common, or trade name) of a toxic substance or harmful physical agent

Employee Medical Record (per 29 CFR 1910.120): A record concerning the health status of an employee which is made or maintained by a physician, nurse, or other health care personnel or technician.

Assessment of Risks for Employees

The performance of appropriate medical surveillance and respirator clearance services first requires a determination of the nature of an employee's workplace tasks, and exposures and potential exposures to toxic materials and physical stressors. Information to contribute to this determination may come from several sources. Any approach may be augmented significantly by the involvement of industrial hygienists who are familiar with the work sites, and the work tasks of the employees.

Material Safety Data Sheets should be made available to the employees for any known chemicals or potentially toxic materials used or encountered in the course of the employee carrying out his/her duties. The appropriate MSDS forms also should be made available to the examining physician as part of the post-emergency response when an employee is suspected or known to have been exposed to an identified toxic material.

Because of the risk of exposure to bloodborne pathogens, either as a result of contact with contaminated materials in the work place or as a result of providing emergency first responder medical services to co-workers or the public, consideration of this important potential risk must be incorporated into program planning.

Job Descriptions may provide information regarding the exposures that an employee could experience in carrying out their duties, including their assignment to the HAZMAT Team. Also, the job description should cover any personal protective equipment (PPE) that is to be used by employees in the specified position, and any known or anticipated significant environmental or

ergonomic stressors. Actual employee exposures will depend on the nature of the incidents to which the Team responds, the tasks the individual employee carries out, the conditions under which the tasks are carried out, and the adequacy of PPE that is used. Because of variability in the adequacy of PPE and the consistency and accuracy of its use, however, medical monitoring is necessary in response to environmental exposures that exceed the permissible exposure level, regardless of the use of PPE. In general, job descriptions are useful only for a preliminary categorization of groups of employees who: 1) need further quantification of potential exposure; or 2) are not likely to require further assessment or surveillance services.

Employee **Occupational Histories** may provide further information if accurately and completely prepared. They may be prepared individually by or for each employee, or by the employer for groups of employees who are known to carry out similar tasks and face similar potential toxic exposures or physical stressors. Reference should be made to Attachment D 2 (b), (c), and D 3 of this *Handbook* for examples of forms that may be used.

In addition, a current medical history must be made available to the examining physician, allowing a consideration of symptoms that might be related to exposure to hazardous materials, and to fitness of the employee both for carrying out the expected duties at the work site and for using any personal protective equipment that may be necessary for the specific work sites and duties. The DOI Standard Medical History and Examination Form may be used for this purpose (see Attachment D 3).

Services to Be Provided

As a minimum, a general medical examination should be provided to all HAZMAT team members. Information obtained through the history and exposure review process described above is used to tailor further medical history questions, emphasize specific portions of the examination, and conduct further laboratory studies to assure the evaluation of organ systems most likely to demonstrate health effects of known or potential toxic exposures. In this way, expensive tests that do not need to be carried out are avoided, and those that are mandated by known or suspected exposures are not left out inadvertently.

OSHA Mandated Services are described in federal regulations, and include both the **frequency** of types of examinations and the **toxic agents** requiring medical surveillance. A list of these agents is provided in 29 CFR 1910 Subpart Z, which has been summarized in Tab 8 of this *Handbook*. The list includes the Federal Register locations of the regulations that apply to each listed agent. The content of the regulations for each specific agent are not reproduced here. However, 29 CFR 1910.120(f) provides the applicable regulations for the general category of “Hazardous waste operations and emergency response.”

As covered by 29 CFR 1910.1030 (Bloodborne Pathogens), employees whose job duties include the provision of services that involve significant potential for exposure must be offered training in blood borne pathogens, and offered the three shot hepatitis B immunization series. A model plan and a guide to a blood borne pathogens program are available from the OHS as companion documents to this *Handbook*. As part of the program for preventing injury and illness, and responding to untoward events when they occur, each DOI bureau/area/program should assure that an appropriate plan is in place for any employees with potential exposure.

Recommended Examination Components and Periodicity of Medical Evaluations

The regulations presented in 29 CFR 1910.120(f) specify that medical examinations for the HAZMAT team “shall include a medical and work history (or updated history if one is in the employee’s file) with special emphasis on symptoms related to the handling of hazardous substances and health hazards, and to fitness for duty including the ability to wear any required PPE under conditions (i.e., temperature extremes) that may be expected at the work site.” The content of the exam itself “shall be determined by the attending physician.” At the end of this section is a general listing of appropriate services that may be provided to members of the HAZMAT team, with the recognition that additional tests, procedures, or foci of attention may be necessary, depending on individual employee variation in documented or anticipated exposures.

The CFR specifies the **periodicity** of exams for HAZMAT team members, according to the purpose of the exam:

- **prior to assignment** to a position on the HAZMAT team, an exam is to be provided to the proposed team member (as governed by provisions of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, these should be approached as “pre-placement” exams, rather than “pre-employment” exams). The pre-placement exam allows the establishment of a baseline for subsequent comparisons, and provides for the identification of medical conditions that may impact the actual assignment of an employee to duties that might be contraindicated by those conditions;
- at least once **every twelve months**, unless determined by a physician to be necessary only every other year (the exams may be no less frequent than every other year);
- at the **termination of employment or reassignment** to a situation where the employee would not be covered by these requirements;
- **following the development of signs or symptoms** indicating possible overexposure to hazardous substances or health hazards, or if the employee has been injured or known to have been exposed above the permissible exposure limits or published exposure levels; or
- at **more frequent times**, if the physician determines this to be necessary. It should be added here that specific requirements for medical surveillance for some of the hazards identified in 29 CFR 1910 may require more frequent evaluations, including examinations and/or laboratory tests. An example would be an employee found to have elevated blood lead levels (covered by 29 CFR 1910.1025), in which case several repeat tests may be necessary before the employee can be cleared to return to work in the setting where exposures occurred.

Medical Evaluation Components for Hazardous Waste Workers

Services, By Category

Histories

- General Medical and Occupational History
- Current Medications

Examination Items

- General Appearance and Vital Signs (height, weight, blood pressure, heart rate)
- General Physical Examination

Special Attention To:

- Central Nervous System

- Peripheral Nervous System
- Back & Musculoskeletal System
- Cardiovascular System
- Eyes
- Respiratory System
- Skin
- Thyroid
- Metabolic System
- Habitus (obesity)
- Overall Physical Fitness

Diagnostic Tests/Procedures

- Vision Test, Best Far Vision Acuity
- Vision Test, Best Near Vision Acuity
- Vision Test, Color Discrimination
- Chest X-Ray, PA and Lateral (if indicated)
- Pulmonary Function Test-Spirometry
- Electrocardiogram-Resting (if indicated)
- Exercise Stress Test (requires AMO clearance)

Laboratory

- Lab Panel (CBC, UA, Chemistry Panel)
- Cholinesterase-RBC and Plasma
- Heavy Metal Screen (24 Hour Urine, Quantitative, As, Pb, Hg, Cd)
- Other, depending on known or potential exposures

Clearances

- Respirator Medical Clearance
- Cartridge Respirator Clearance
- Powered Air Respirator Medical Clearance
- Self-Contained Breathing Apparatus Clearance
- Medical Clearance for Lifting or Heavy Exertion
- Medical Clearance to Work in Moisture Impermeable Clothing

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

Pilots / Aviators

Individuals whose essential job functions include piloting aircraft for the Department must meet the Medical Standards and Certification requirements of the Federal Aviation Administration (FAA) regulations, as presented in [14 CFR 67](#). These regulations (with amendments) are contained in the document below.

[Note: The following constitutes the Medical Standards and Certification requirements of the Federal Aviation Regulations, as presented in [14 CFR 67](#). These regulations, with amendments, became effective September 16, 1996. They were revised effective January 1, 2008.]

TITLE 14--AERONAUTICS AND SPACE

PART 67 MEDICAL STANDARDS AND CERTIFICATION--Table of Contents

Subpart A General

Sec.

67.1 Applicability.

67.3 Issue.

67.7 Access to the National Driver Register.

Subpart B First-Class Airman Medical Certificate

67.101 Eligibility.

67.103 Eye.

67.105 Ear, nose, throat, and equilibrium.

67.107 Mental.

67.109 Neurologic.

67.111 Cardiovascular.

67.113 General medical condition.

67.115 Discretionary issuance.

Subpart C Second-Class Airman Medical Certificate

67.201 Eligibility.

67.203 Eye.

67.205 Ear, nose, throat, and equilibrium.

67.207 Mental.

67.209 Neurologic.

67.211 Cardiovascular.

67.213 General medical condition.

67.215 Discretionary issuance.

Subpart D Third-Class Airman Medical Certificate

- 67.301 Eligibility.
- 67.303 Eye.
- 67.305 Ear, nose, throat, and equilibrium.
- 67.307 Mental.
- 67.309 Neurologic.
- 67.311 Cardiovascular.
- 67.313 General medical condition.
- 67.315 Discretionary issuance.

Subpart E Certification Procedures

- 67.401 Special issuance of medical certificates.
- 67.403 Applications, certificates, logbooks, reports, and records:
 - Falsification, reproduction, or alteration; incorrect statements.
- 67.405 Medical examinations: Who may give.
- 67.407 Delegation of authority.
- 67.409 Denial of medical certificate.
- 67.411 Medical certificates by flight surgeons of Armed Forces.
- 67.413 Medical records.
- 67.415 Return of medical certificate after suspension or revocation.

Authority: 49 U.S.C. 106(g), 40113, 44701-44703, 44707, 44709-44711, 45102-45103, 45301-45303.

Source: Docket No. 27940, 61 FR 11256, Mar. 19, 1996, unless otherwise noted.

Sec. 67.1 Applicability.

This part prescribes the medical standards and certification procedures for issuing medical certificates for airmen and for remaining eligible for a medical certificate.

Sec. 67.3 Issue.

Except as provided in Sec. 67.5, a person who meets

Sec. 67.7 Access to the National Driver Register.

At the time of application for a certificate issued under this part, each person who applies for a medical certificate shall execute an express consent form authorizing the Administrator to request the chief driver licensing official of any state designated by the Administrator to transmit information contained in the National Driver Register about the person to the Administrator. The Administrator shall make information received from the National Driver Register, if any, available on request to the person for review and written comment.

Subpart B First-Class Airman Medical Certificate

Sec. 67.101 Eligibility.

To be eligible for a first-class airman medical certificate, and to remain eligible for a first-class

airman medical certificate, a person must meet the requirements of this subpart.

Sec. 67.103 Eye.

Eye standards for a first-class airman medical certificate are:

- (a) Distant visual acuity of 20/20 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/20 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.
- (b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses. If age 50 or older, near vision of 20/40 or better, Snellen equivalent, at both 16 inches and 32 inches in each eye separately, with or without corrective lenses.
- (c) Ability to perceive those colors necessary for the safe performance of airman duties.
- (d) Normal fields of vision.
- (e) No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.
- (f) Bifoveal fixation and vergence-phoria relationship sufficient to prevent a break in fusion under conditions that may reasonably be expected to occur in performing airman duties. Tests for the factors named in this paragraph are not required except for persons found to have more than 1 prism diopter of hyperphoria, 6 prism diopters of esophoria, or 6 prism diopters of exophoria. If any of these values are exceeded, the Federal Air Surgeon may require the person to be examined by a qualified eye specialist to determine if there is bifoveal fixation and an adequate vergence-phoria relationship. However, if otherwise eligible, the person is issued a medical certificate pending the results of the examination.

Sec. 67.105 Ear, Nose, Throat, and Equilibrium.

Ear, nose, throat, and equilibrium standards for a first-class airman medical certificate are:

- (a) The person shall demonstrate acceptable hearing by at least one of the following tests:
 - (1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.
 - (2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.
 - (3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969 (11 West 42d Street, New York, NY 10036):

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db)	35	30	30	40
Poorer ear (Db)	35	50	50	60

- (b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that--

- (1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or
- (2) Interferes with, or may reasonably be expected to interfere with, clear and effective speech communication.
- (c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

Sec. 67.107 Mental.

Mental standards for a first-class airman medical certificate are:

- (a) No established medical history or clinical diagnosis of any of the following:
 - (1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.
 - (2) A psychosis. As used in this section, "psychosis" refers to a mental disorder in which:
 - (i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or
 - (ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.
 - (3) A bipolar disorder.
 - (4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. As used in this section--
 - (i) "Substance" includes: Alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and
 - (ii) "Substance dependence" means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by--
 - (A) Increased tolerance;
 - (B) Manifestation of withdrawal symptoms;
 - (C) Impaired control of use; or
 - (D) Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.
- (b) No substance abuse within the preceding 2 years defined as:
 - (1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;
 - (2) A verified positive drug test result, an alcohol test result of 0.04 or greater alcohol concentration, or a refusal to submit to a drug or alcohol test required by the U.S. Department of Transportation or an agency of the U.S. Department of Transportation; or
 - (3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds--
 - (i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No other personality disorder, neurosis, or other mental condition that the Federal Air

Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--

- (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
- (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.109 Neurologic.

Neurologic standards for a first-class airman medical certificate are:

- (a) No established medical history or clinical diagnosis of any of the following:
 - (1) Epilepsy;
 - (2) A disturbance of consciousness without satisfactory medical explanation of the cause; or
 - (3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause.
- (b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.111 Cardiovascular.

Cardiovascular standards for a first-class airman medical certificate are:

- (a) No established medical history or clinical diagnosis of any of the following:
 - (1) Myocardial infarction;
 - (2) Angina pectoris;
 - (3) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;
 - (4) Cardiac valve replacement;
 - (5) Permanent cardiac pacemaker implantation; or
 - (6) Heart replacement;
- (b) A person applying for first-class medical certification must demonstrate an absence of myocardial infarction and other clinically significant abnormality on electrocardiographic examination:
 - (1) At the first application after reaching the 35th birthday; and
 - (2) On an annual basis after reaching the 40th birthday.
- (c) An electrocardiogram will satisfy a requirement of paragraph (b) of this section if it is dated no earlier than 60 days before the date of the application it is to accompany and was performed and transmitted according to acceptable standards and techniques.

Sec. 67.113 General Medical Condition.

The general medical standards for a first-class airman medical certificate are:

- (a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin

or any other hypoglycemic drug for control.

- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds--
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.115 Discretionary issuance.

A person who does not meet the provisions of Sec. Sec. 67.103 through 67.113 may apply for the discretionary issuance of a certificate under Sec. 67.401.

Subpart C Second-Class Airman Medical Certificate

Sec. 67.201 Eligibility.

To be eligible for a second-class airman medical certificate, and to remain eligible for a second-class airman medical certificate, a person must meet the requirements of this subpart.

Sec. 67.203 Eye.

Eye standards for a second-class airman medical certificate are:

- (a) Distant visual acuity of 20/20 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/20 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.
- (b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses. If age 50 or older, near vision of 20/40 or better, Snellen equivalent, at both 16 inches and 32 inches in each eye separately, with or without corrective lenses.
- (c) Ability to perceive those colors necessary for the safe performance of airman duties.
- (d) Normal fields of vision.
- (e) No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.
- (f) Bifoveal fixation and vergence-phoria relationship sufficient to prevent a break in fusion under conditions that may reasonably be expected to occur in performing airman duties. Tests for the factors named in this paragraph are not required except for persons found to have more than 1 prism diopter of hyperphoria, 6 prism diopters of esophoria, or 6 prism diopters of exophoria. If any of these values are exceeded, the Federal Air Surgeon may require the

person to be examined by a qualified eye specialist to determine if there is bifoveal fixation and an adequate vergence-phoria relationship. However, if otherwise eligible, the person is issued a medical certificate pending the results of the examination.

Sec. 67.205 Ear, Nose, Throat, and Equilibrium.

Ear, nose, throat, and equilibrium standards for a second-class airman medical certificate are:

- (a) The person shall demonstrate acceptable hearing by at least one of the following tests:
 - (1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.
 - (2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.
 - (3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969:

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db)	35	30	30	40
Poorer ear (Db)	35	50	50	60

- (b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that--
 - (1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or
 - (2) Interferes with, or may reasonably be expected to interfere with, clear and effective speech communication.
- (c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

Sec. 67.207 Mental.

Mental standards for a second-class airman medical certificate are:

- (a) No established medical history or clinical diagnosis of any of the following:
 - (1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.
 - (2) A psychosis. As used in this section, "psychosis" refers to a mental disorder in which:
 - (i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or
 - (ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.
 - (3) A bipolar disorder.
 - (4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the

substance(s) for not less than the preceding 2 years. As used in this section--

- (i) "Substance" includes: Alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and
 - (ii) "Substance dependence" means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by--
 - (A) Increased tolerance;
 - (B) Manifestation of withdrawal symptoms;
 - (C) Impaired control of use; or
 - (D) Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.
- (b) No substance abuse within the preceding 2 years defined as:
- (1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;
 - (2) A verified positive drug test result, an alcohol test result of 0.04 or greater alcohol concentration, or a refusal to submit to a drug or alcohol test required by the U.S. Department of Transportation or an agency of the U.S. Department of Transportation; or
 - (3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds--
 - (i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No other personality disorder, neurosis, or other mental condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
- (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

[Doc. No. 27940, 61 FR 11256, Mar. 19, 1996, as amended by Amdt. 67-19, 71 FR 35764, June 21, 2006]

Sec. 67.209 Neurologic.

Neurologic standards for a second-class airman medical certificate are:

- (a) No established medical history or clinical diagnosis of any of the following:
 - (1) Epilepsy;
 - (2) A disturbance of consciousness without satisfactory medical explanation of the cause; or
 - (3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause;
- (b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the

Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--

- (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
- (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.211 Cardiovascular.

Cardiovascular standards for a second-class medical certificate are no established medical history or clinical diagnosis of any of the following:

- (a) Myocardial infarction;
- (b) Angina pectoris;
- (c) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;
- (d) Cardiac valve replacement;
- (e) Permanent cardiac pacemaker implantation; or
- (f) Heart replacement.

Sec. 67.213 General medical condition.

The general medical standards for a second-class airman medical certificate are:

- (a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.
- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds--
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.215 Discretionary issuance.

A person who does not meet the provisions of Sec. Sec. 67.203 through 67.213 may apply for the discretionary issuance of a certificate under Sec. 67.401.

Subpart D Third-Class Airman Medical Certificate

Sec. 67.301 Eligibility.

To be eligible for a third-class airman medical certificate, or to remain eligible for a third-class airman medical certificate, a person must meet the requirements of this subpart.

Sec. 67.303 Eye.

Eye standards for a third-class airman medical certificate are:

- (a) Distant visual acuity of 20/40 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/40 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.
- (b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses.
- (c) Ability to perceive those colors necessary for the safe performance of airman duties.
- (d) No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

Sec. 67.305 Ear, Nose, Throat, and Equilibrium.

Ear, nose, throat, and equilibrium standards for a third-class airman medical certificate are:

- (a) The person shall demonstrate acceptable hearing by at least one of the following tests:
 - (1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.
 - (2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.
 - (3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969:

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db)	35	30	30	40
Poorer ear (Db)	35	50	50	60

- (b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that--
 - (1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or
 - (2) Interferes with clear and effective speech communication.
- (c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

Sec. 67.307 Mental.

Mental standards for a third-class airman medical certificate are:

- (a) No established medical history or clinical diagnosis of any of the following:
 - (1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.
 - (2) A psychosis. As used in this section, "psychosis" refers to a mental disorder in which--
 - (i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or
 - (ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.
 - (3) A bipolar disorder.
 - (4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. As used in this section--
 - (i) "Substance" includes: alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and
 - (ii) "Substance dependence" means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by--
 - (A) Increased tolerance;
 - (B) Manifestation of withdrawal symptoms;
 - (C) Impaired control of use; or
 - (D) Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.
- (b) No substance abuse within the preceding 2 years defined as:
 - (1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;
 - (2) A verified positive drug test result, an alcohol test result of 0.04 or greater alcohol concentration, or a refusal to submit to a drug or alcohol test required by the U.S. Department of Transportation or an agency of the U.S. Department of Transportation; or
 - (3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds--
 - (i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.
- (c) No other personality disorder, neurosis, or other mental condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

- (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

[Doc. No. 27940, 61 FR 11256, Mar. 19, 1996, as amended by Amdt. 67-19, 71 FR 35764, June 21, 2006]

Sec. 67.309 Neurologic.

Neurologic standards for a third-class airman medical certificate are:

- (a) No established medical history or clinical diagnosis of any of the following:
 - (1) Epilepsy;
 - (2) A disturbance of consciousness without satisfactory medical explanation of the cause; or
 - (3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause.
- (b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.311 Cardiovascular.

Cardiovascular standards for a third-class airman medical certificate are no established medical history or clinical diagnosis of any of the following:

- (a) Myocardial infarction;
- (b) Angina pectoris;
- (c) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;
- (d) Cardiac valve replacement;
- (e) Permanent cardiac pacemaker implantation; or
- (f) Heart replacement.

Sec. 67.31 General medical condition.

The general medical standards for a third-class airman medical certificate are:

- (a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.
- (b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
 - (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those

privileges.

- (c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds--
- (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
 - (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.315 Discretionary issuance.

A person who does not meet the provisions of Sec. Sec. 67.303 through 67.313 may apply for the discretionary issuance of a certificate under Sec. 67.401.

Subpart E Certification Procedures

Sec. 67.401 Special issuance of medical certificates.

- (a) At the discretion of the Federal Air Surgeon, an Authorization for Special Issuance of a Medical Certificate (Authorization), valid for a specified period, may be granted to a person who does not meet the provisions of subparts B, C, or D of this part if the person shows to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety during the period in which the Authorization would be in force. The Federal Air Surgeon may authorize a special medical flight test, practical test, or medical evaluation for this purpose. A medical certificate of the appropriate class may be issued to a person who does not meet the provisions of subparts B, C, or D of this part if that person possesses a valid Authorization and is otherwise eligible. An airman medical certificate issued in accordance with this section shall expire no later than the end of the validity period or upon the withdrawal of the Authorization upon which it is based. At the end of its specified validity period, for grant of a new Authorization, the person must again show to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety during the period in which the Authorization would be in force.
- (b) At the discretion of the Federal Air Surgeon, a Statement of Demonstrated Ability (SODA) may be granted, instead of an Authorization, to a person whose disqualifying condition is static or nonprogressive and who has been found capable of performing airman duties without endangering public safety. A SODA does not expire and authorizes a designated aviation medical examiner to issue a medical certificate of a specified class if the examiner finds that the condition described on its face has not adversely changed.
- (c) In granting an Authorization or SODA, the Federal Air Surgeon may consider the person's operational experience and any medical facts that may affect the ability of the person to perform airman duties including--
- (1) The combined effect on the person of failure to meet more than one requirement of this part; and
 - (2) The prognosis derived from professional consideration of all available information regarding the person.

- (d) In granting an Authorization or SODA under this section, the Federal Air Surgeon specifies the class of medical certificate authorized to be issued and may do any or all of the following:
 - (1) Limit the duration of an Authorization;
 - (2) Condition the granting of a new Authorization on the results of subsequent medical tests, examinations, or evaluations;
 - (3) State on the Authorization or SODA, and any medical certificate based upon it, any operational limitation needed for safety; or
 - (4) Condition the continued effect of an Authorization or SODA, and any second- or third-class medical certificate based upon it, on compliance with a statement of functional limitations issued to the person in coordination with the Director of Flight Standards or the Director's designee.
- (e) In determining whether an Authorization or SODA should be granted to an selectee for a third-class medical certificate, the Federal Air Surgeon considers the freedom of an airman, exercising the privileges of a private pilot certificate, to accept reasonable risks to his or her person and property that are not acceptable in the exercise of commercial or airline transport pilot privileges, and, at the same time, considers the need to protect the safety of persons and property in other aircraft and on the ground.
- (f) An Authorization or SODA granted under the provisions of this section to a person who does not meet the applicable provisions of subparts B, C, or D of this part may be withdrawn, at the discretion of the Federal Air Surgeon, at any time if--
 - (1) There is adverse change in the holder's medical condition;
 - (2) The holder fails to comply with a statement of functional limitations or operational limitations issued as a condition of certification under this section;
 - (3) Public safety would be endangered by the holder's exercise of airman privileges;
 - (4) The holder fails to provide medical information reasonably needed by the Federal Air Surgeon for certification under this section; or
 - (5) The holder makes or causes to be made a statement or entry that is the basis for withdrawal of an Authorization or SODA under Sec. 67.403.
- (g) A person who has been granted an Authorization or SODA under this section based on a special medical flight or practical test need not take the test again during later physical examinations unless the Federal Air Surgeon determines or has reason to believe that the physical deficiency has or may have degraded to a degree to require another special medical flight test or practical test.
- (h) The authority of the Federal Air Surgeon under this section is also exercised by the Manager, Aeromedical Certification Division, and each Regional Flight Surgeon.
- (i) If an Authorization or SODA is withdrawn under paragraph (f) of this section the following procedures apply:
 - (1) The holder of the Authorization or SODA will be served a letter of withdrawal, stating the reason for the action;
 - (2) By not later than 60 days after the service of the letter of withdrawal, the holder of the Authorization or SODA may request, in writing, that the Federal Air Surgeon provide for review of the decision to withdraw. The request for review may be accompanied by supporting medical evidence;
 - (3) Within 60 days of receipt of a request for review, a written final decision either affirming or reversing the decision to withdraw will be issued; and
 - (4) A medical certificate rendered invalid pursuant to a withdrawal, in accordance with paragraph (a) of this section, shall be surrendered to the Administrator upon request.
- (j) No grant of a special issuance made prior to September 16, 1996, may be used to obtain a

medical certificate after the earlier of the following dates:

- (1) September 16, 1997; or
- (2) The date on which the holder of such special issuance is required to provide additional information to the FAA as a condition for continued medical certification.

Sec. 67.403 Applications, Certificates, Logbooks, Reports, and Records: Falsification, Reproduction, or Alteration; Incorrect Statements.

- (a) No person may make or cause to be made--
 - (1) A fraudulent or intentionally false statement on any application for a medical certificate or on a request for any Authorization for Special Issuance of a Medical Certificate (Authorization) or Statement of Demonstrated Ability (SODA) under this part;
 - (2) A fraudulent or intentionally false entry in any logbook, record, or report that is kept, made, or used, to show compliance with any requirement for any medical certificate or for any Authorization or SODA under this part;
 - (3) A reproduction, for fraudulent purposes, of any medical certificate under this part; or
 - (4) An alteration of any medical certificate under this part.
- (b) The commission by any person of an act prohibited under paragraph (a) of this section is a basis for--
 - (1) Suspending or revoking all airman, ground instructor, and medical certificates and ratings held by that person;
 - (2) Withdrawing all Authorizations or SODA's held by that person; and
 - (3) Denying all applications for medical certification and requests for Authorizations or SODA's.
- (c) The following may serve as a basis for suspending or revoking a medical certificate; withdrawing an Authorization or SODA; or denying an application for a medical certificate or request for an authorization or SODA:
 - (1) An incorrect statement, upon which the FAA relied, made in support of an application for a medical certificate or request for an Authorization or SODA.
 - (2) An incorrect entry, upon which the FAA relied, made in any logbook, record, or report that is kept, made, or used to show compliance with any requirement for a medical certificate or an Authorization or SODA.

Sec. 67.405 Medical Examinations: Who May Give.

- (a) First-class. Any aviation medical examiner who is specifically designated for the purpose may give the examination for the first-class medical certificate. Any interested person may obtain a list of these aviation medical examiners, in any area, from the FAA Regional Flight Surgeon of the region in which the area is located.
- (b) Second- and third-class. Any aviation medical examiner may give the examination for the second- or third-class medical certificate. Any interested person may obtain a list of aviation medical examiners, in any area, from the FAA Regional Flight Surgeon of the region in which the area is located.

Sec. 67.407 Delegation of Authority.

- (a) The authority of the Administrator under 49 U.S.C. 44703 to issue or deny medical certificates is delegated to the Federal Air Surgeon to the extent necessary to--

- (1) Examine selectees for and holders of medical certificates to determine whether they meet applicable medical standards; and
 - (2) Issue, renew, and deny medical certificates, and issue, renew, deny, and withdraw Authorizations for Special Issuance of a Medical Certificate and Statements of Demonstrated Ability to a person based upon meeting or failing to meet applicable medical standards.
- (b) Subject to limitations in this chapter, the delegated functions of the Federal Air Surgeon to examine selectees for and holders of medical certificates for compliance with applicable medical standards and to issue, renew, and deny medical certificates are also delegated to aviation medical examiners and to authorized representatives of the Federal Air Surgeon within the FAA.
- (c) The authority of the Administrator under 49 U.S.C. 44702, to reconsider the action of an aviation medical examiner is delegated to the Federal Air Surgeon; the Manager, Aeromedical Certification Division; and each Regional Flight Surgeon. Where the person does not meet the standards of Sec. Sec. 67.107(b)(3) and (c), 67.109(b), 67.113(b) and (c), 67.207(b)(3) and (c), 67.209(b), 67.213(b) and (c), 67.307(b)(3) and (c), 67.309(b), or 67.313(b) and (c), any action taken under this paragraph other than by the Federal Air Surgeon is subject to reconsideration by the Federal Air Surgeon. A certificate issued by an aviation medical examiner is considered to be affirmed as issued unless an FAA official named in this paragraph (authorized official) reverses that issuance within 60 days after the date of issuance. However, if within 60 days after the date of issuance an authorized official requests the certificate holder to submit additional medical information, an authorized official may reverse the issuance within 60 days after receipt of the requested information.
- (d) The authority of the Administrator under 49 U.S.C. 44709 to re-examine any civil airman to the extent necessary to determine an airman's qualification to continue to hold an airman medical certificate, is delegated to the Federal Air Surgeon and his or her authorized representatives within the FAA.

<p>Sec. 67.409 Denial of Medical Certificate.</p>
--

- (a) Any person who is denied a medical certificate by an aviation medical examiner may, within 30 days after the date of the denial, apply in writing and in duplicate to the Federal Air Surgeon, Attention: Manager, Aeromedical Certification Division, AAM-300, Federal Aviation Administration, P.O. Box 26080, Oklahoma City, Oklahoma 73126, for reconsideration of that denial. If the person does not ask for reconsideration during the 30-day period after the date of the denial, he or she is considered to have withdrawn the application for a medical certificate.
- (b) The denial of a medical certificate--
- (1) By an aviation medical examiner is not a denial by the Administrator under 49 U.S.C. 44703.
 - (2) By the Federal Air Surgeon is considered to be a denial by the Administrator under 49 U.S.C. 44703.
 - (3) By the Manager, Aeromedical Certification Division, or a Regional Flight Surgeon is considered to be a denial by the Administrator under 49 U.S.C. 44703 except where the person does not meet the standards of Sec. Sec. 67.107(b)(3) and (c), 67.109(b), or 67.113(b) and (c); 67.207(b)(3) and (c), 67.209(b), or 67.213(b) and (c); or 67.307(b)(3) and (c), 67.309(b), or 67.313(b) and (c).
- (c) Any action taken under Sec. 67.407(c) that wholly or partly reverses the issue of a medical certificate by an aviation medical examiner is the denial of a medical certificate under

paragraph (b) of this section.

- (d) If the issue of a medical certificate is wholly or partly reversed by the Federal Air Surgeon; the Manager, Aeromedical Certification Division; or a Regional Flight Surgeon, the person holding that certificate shall surrender it, upon request of the FAA.

Sec. 67.411 Medical Certificates by Flight Surgeons of Armed Forces.

- (a) The FAA has designated flight surgeons of the Armed Forces on specified military posts, stations, and facilities, as aviation medical examiners.
- (b) An aviation medical examiner described in paragraph (a) of this section may give physical examinations for the FAA medical certificates to persons who are on active duty or who are, under Department of Defense medical programs, eligible for FAA medical certification as civil airmen. In addition, such an examiner may issue or deny an appropriate FAA medical certificate in accordance with the regulations of this chapter and the policies of the FAA.
- (c) Any interested person may obtain a list of the military posts, stations, and facilities at which a flight surgeon has been designated as an aviation medical examiner from the Surgeon General of the Armed Force concerned or from the Manager, Aeromedical Education Division, AAM-400, Federal Aviation Administration, P.O. Box 26082, Oklahoma City, Oklahoma 73125.

Sec. 67.413 Medical records.

- (a) Whenever the Administrator finds that additional medical information or history is necessary to determine whether an selectee for or the holder of a medical certificate meets the medical standards for it, the Administrator requests that person to furnish that information or to authorize any clinic, hospital, physician, or other person to release to the Administrator all available information or records concerning that history. If the selectee or holder fails to provide the requested medical information or history or to authorize the release so requested, the Administrator may suspend, modify, or revoke all medical certificates the airman holds or may, in the case of a selectee, deny the application for an airman medical certificate.
- (b) If an airman medical certificate is suspended or modified under paragraph (a) of this section, that suspension or modification remains in effect until the requested information, history, or authorization is provided to the FAA and until the Federal Air Surgeon determines whether the person meets the medical standards under this part.

Sec. 67.415 Return of Medical Certificate after Suspension or Revocation.

The holder of any medical certificate issued under this part that is suspended or revoked shall, upon the Administrator's request, return it to the Administrator.

THE UNITED STATES DEPARTMENT OF INTERIOR MEDICAL STANDARDS

And Review Criteria for Medical Review Officers

These Standards Are Applicable to Positions Requiring

Laboratory Workers

General Background

The Department of the Interior has many settings, within many bureaus and offices, in which laboratory analyses of various kinds are carried out. While each laboratory has unique aspects, there are sufficient similarities to allow generalizations in the approach to services that should be considered for the protection of the involved employees.

Before any DOI organizational unit establishes a medical program for its laboratory workers, careful consideration should be given to the types of work that are carried out by employees, and the types of exposures that are possible. Managers also should be familiar with the provisions of applicable federal regulations regarding laboratory workers, and pertinent guidance that has been promulgated by other federal agencies for worker protection. This document will assist in providing the manager with this important information.

While the possibility of exposure of laboratory employees to agents harmful to human health is real, in most DOI laboratory settings there are no industrial procedures or occupational exposures that are sufficiently repetitive or of an intensity, frequency, and duration to warrant a conventional medical surveillance program. In those settings where exposures may warrant medical surveillance services, please refer to Chapter 2 of this *Handbook*. Significant, high-risk exposures in DOI laboratories are more likely to be related to sudden or unexpected incidents for which an urgent, medically-appropriate response may be necessary. Chronic, low-level exposures to known agents (e.g., solvents or noise), or exposures to agents that have not yet been identified by the lab, also may result in health effects for which an appropriate medical response may be necessary.

The work done in most laboratories does not fall within the scope of “arduous or hazardous,” as defined by 5 CFR 339.202 (Medical Standards), which might call for a program of periodic clearance examinations. Also, the inherent screening process through which scientists and technicians demonstrate their ability to perform the requirements of their jobs, and the established quality assurance program involving regular performance appraisals and proficiency testing, may make a requirement for medical standards and a program of periodic medical clearances to perform laboratory jobs unnecessary.

While medical surveillance services, and a medical clearance program, may not be necessary for most DOI laboratory workers, the highly variable nature of potential exposure to a wide variety of potentially harmful agents makes it prudent to provide certain preventive measures for employees, and to have current medical information available to assist care-givers in the event an identifiable high risk exposure or an unexplained illness occurs. For these reasons, and to protect

both the employees and the agency, it is recommended that safety and basic medical programs be implemented for all laboratory employees, and that the medical program should be considered mandatory for full-time employees. As part of this program, it is particularly important that employees be appropriately informed of the potential hazards of the laboratory, and the information, emergency resources, and medical services available to them, as required by regulation (29 CFR 1910.1450 (f)).

The following is an outline of a recommended program, including Safety Training, Hazardous Materials Documentation, Clinical Services, Community Emergency Medical Services Linkages, Medical Records Management, and Data Analysis. A list of applicable references is provided at the end of this Attachment.

Recommended Program

1. SAFETY TRAINING

A comprehensive safety training program should be in place, addressing such issues as fire safety, security, control of access to non-public areas, hazardous materials handling, food handling, personal hygiene, emergency notification and response within the facility, CPR and first aid training, and notification of local emergency services personnel (fire, police, medical, hazardous materials) and their access to the facility.

Excellent references for specific guidance in the area of laboratory safety may be found in section 7 of this Attachment.

2. HAZARDOUS MATERIALS DOCUMENTATION

A complete set of Material Safety Data Sheets (MSDSs) for agents stored or in use at the laboratory must be readily available in the facility. It is recommended that summary lists of these MSDSs be prepared: a primary list with a summary of all chemicals used anywhere in the laboratory, plus secondary lists for each distinct area or section of the laboratory. These secondary lists should include all chemicals used in those specific areas or sections. These lists would facilitate the rapid identification of possible chemicals involved in exposure incidents so the appropriate MSDS forms can be identified and pertinent information can be provided to emergency response personnel and treating physicians. All employees must be made aware of the availability and location of the MSDSs and the summary lists.

Similarly, it is recommended that summary lists be prepared of any infectious agents known to have been encountered (or that have a reasonable risk of being encountered) in the laboratory, so that emergency response personnel and treating physicians are aware of potential agents, both to allow appropriate personal protective equipment to be used and to provide assistance when diagnoses are uncertain.

3. CLINICAL SERVICES

Services to be provided to employees should consist of focused medical examinations, clinical procedures, and specified laboratory tests (see below). These services should be conducted for the primary purpose of assuring that current medical status information is

readily available to both treating physicians and medical investigative personnel in the event of exposure incidents or the development of unexplained medical conditions. This clinical program would provide periodically-updated “baseline” information for such comparison purposes. In order for health and laboratory information to be sufficiently current and of value for the purposes specified, the clinical services should be provided on a periodic basis of every three to five years. These periodic assessments could be done more frequently, depending on recommendations of the agency’s reviewing physician and interim findings or significant laboratory events.

An additional purpose of these periodic clinical services is to provide clinical data for trend analysis and health effects pattern recognition, facilitating both therapeutic intervention for individual employees and modifications in laboratory operations, in case unanticipated health effects are experienced by laboratory personnel.

Clinical services may be provided by local, qualified medical and health care personnel under local or national agency contracts.

Baseline Clinical Services

- Should be provided to all full time employees at the time of employment. The following services are recommended:

Services, By Category

Histories

Medical History using the *DOI Standard Medical History and Examination Form* and

Examination Items

General Physical Examination

General Appearance and Vital Signs (height, weight, blood pressure, heart rate)

Special Attention To:

- Eyes, Ears, Nose, Mouth, and Throat
- Thyroid
- Central Nervous System (including cranial nerves II-XII and cerebellar function)
- Peripheral Nervous System (including reflexes, sensation, and position sense)
- Mental Status Evaluation
- Back & Musculoskeletal System
- Extremities (including strength and range of motion)
- Cardiovascular System
- Genitourinary System
- Gastrointestinal System
- Respiratory System
- Skin
- Lymphatics
- Endocrine and Metabolic System

Diagnostic Tests/Procedures

- Audiogram – recorded for 500, 1000, 2000, 3000, 4000, 6000, and 8000 Hz, both ears
- Vision - Far and Near Vision Acuity, (uncorrected and corrected, each eye separately, plus together)

- Peripheral Vision (nasal and temporal, each eye separately measured)
- Color Vision
- Chest X-Ray, PA & Lateral
- Pulmonary Function Test (Spirometry: FVC, FEV₁, FEV₁/FVC)
- Electrocardiogram-Resting

Laboratory

- Complete Blood Count, with differential WBC
- Chemistry Panel (to include at least glucose, SGOT/AST, SGPT/ALT, GGT, bilirubin, creatinine, BUN)
- Serum, 5cc, labeled, frozen, and stored
- Urinalysis

Optional Laboratory (depending on exposure potential)

- Blood Lead (for employees using or testing firearms)
- Zinc Protoporphyrin (for employees using or testing firearms)
- Cholinesterase, RBC and Plasma (baseline tests for organophosphate pesticide exposure, i.e., averages of two sets of results, drawn approximately one week apart, during period of known non-exposure)

Immunizations and Screens which may be offered to employees, depending on the type of analyses done and the actual exposure potential in the particular laboratory, and if not currently immune or contraindicated.

- **Anthrax** Vaccine: primary series given at 0, 2, and 4 weeks, and 6, 12, and 18 months, with annual booster
- **Tetanus** and Diphtheria Toxoid: booster doses every 10 years
- **Influenza** Vaccine: given annually
- **Botulinum** Toxoid (pentavalent): primary series given at 0, 2, and 12 weeks, and first booster at week 52, with boosters at 2 year intervals depending upon titers
- **Hepatitis A** Vaccine: series given at 0 and 6 or 12 months
- **Hepatitis B** Vaccine: series given at 0, 1, and 6 months
- **Rabies** Vaccine: primary series given at 0, 7, and 21 or 28 days, with booster schedule depending on level of risk
- **Plague** Vaccine: [not currently available]
- **Q Fever** vaccine: [not currently available]
- **TB** Testing (PPD)

Periodic Clinical Services - should be provided to all full time employees every three to five years during the period of their employment, and upon retirement or separation from the laboratory, if the preceding examination was more than 6 months before retirement. The following services are recommended:

Histories

Medical History using the *DOI Standard Medical History and Examination Form* and

Examination Items

General Physical Examination

General Appearance and Vital Signs (height, weight, blood pressure, heart rate)

Examination Items

General Appearance and Vital Signs (height, weight, blood pressure, heart rate)

General Physical Examination

Special Attention To:

- Eyes, Ears, Nose, Mouth, and Throat
- Thyroid
- Central Nervous System (including cranial nerves II-XII and cerebellar function)
- Peripheral Nervous System (including reflexes, sensation, and position sense)
- Mental Status Evaluation
- Back & Musculoskeletal System
- Extremities (including strength and range of motion)
- Cardiovascular System
- Genitourinary System
- Gastrointestinal System
- Respiratory System
- Skin
- Lymphatics
- Endocrine and Metabolic System

Diagnostic Tests/Procedures

- Audiogram – recorded for 500, 1000, 2000, 3000, 4000, 6000, and 8000 Hz, both ears
- Vision - Far and Near Vision Acuity, (uncorrected and corrected, each eye separately, plus together)
- Peripheral Vision (nasal and temporal, each eye separately measured)
- Pulmonary Function Test (Spirometry: FVC, FEV₁, FEV₁/FVC)

Laboratory

- Complete Blood Count, with differential WBC
- Chemistry Panel (to include at least glucose, SGOT/AST, SGPT/ALT, GGT, bilirubin, creatinine, BUN)
- Serum, 5cc, labeled, frozen, and stored
- Urinalysis

Optional Laboratory (depending on exposure potential)

- Blood Lead (for employees using or testing firearms)
- Zinc Protoporphyrin (for employees using or testing firearms)
- Cholinesterase, RBC and Plasma (baseline tests for pesticide exposure, i.e., averages of two sets of results, drawn approximately one week apart, during period of known non-exposure)

Immunizations and Screens which may be offered to employees, depending on the type of analyses done and the actual exposure potential in the particular laboratory, and if not currently immune or contraindicated)

- **Anthrax** Vaccine: annual booster
- **Tetanus** and Diphtheria Toxoid: booster doses every 10 years
- **Influenza** Vaccine: given annually

- **Botulinum** Toxoid (pentavalent): boosters at 2 year intervals depending upon titers
- **Rabies** Vaccine: booster schedule depending on level of risk
- **Plague** Vaccine: [not currently available]
- **Q Fever** vaccine: [not currently available]
- **Other** vaccine from the “baseline” list, if not given previously and the need is subsequently determined to be appropriate
- **TB** Testing (PPD)

Incident- and Symptom-related Clinical Services should be available to any employee whenever that employee develops signs or symptoms that may be due to exposures, or when monitoring indicates that exposures exceed OSHA-established action levels or permissible exposure limits, or when there is a work place event in which a hazardous exposure is likely to have occurred. The specific clinical services to be provided will depend on the nature of the exposure and any symptoms or signs experienced by the employee(s), and should be determined by the responding physician(s), based on exposure information provided by the agency. OSHA regulations (29 CFR 1910.1450(g)(iii)(3)) require that the physician be provided “the identity of the hazardous chemical,” “a description of the conditions under which the exposure occurred,” and “a description of the signs and symptoms” experienced by the exposed employee(s). The agency is required to obtain from the physician “any recommendation for further medical follow-up,” “the results of the medical examination and any associated tests,” “any medical condition which may be revealed in the course of the examination which may place the employee at increased risk as a result of exposure to a hazardous chemical,” and “a statement that the employee has been informed by the physician of the results of the consultation or medical examination and any medical condition that may require further examination or treatment.”

4. **COMMUNITY EMERGENCY MEDICAL SERVICES LINKAGES**

Because of the potential for both large scale and obscure medical emergencies involving laboratory employees, it is recommended that a relationship with the local hospital and emergency medical system (EMS) be established and/or maintained. This relationship should seek to assure that these second-line emergency services entities are prepared to respond, with the assistance of agency information resources, to individual cases of unusual medical conditions, outbreaks of unusual symptoms among staff, and potentially-hazardous incidents that could involve exposure of emergency services personnel to biological agents. These service linkages should be documented and included in training provided to pertinent staff.

5. **MEDICAL RECORDS MANAGEMENT**

Medical records created as a result of the clinical services provided (see section 3., above) should be reviewed by a competent medical authority, acting as an agent of the agency. The purpose of such a non-clearance, non-medical surveillance review is to assure that the quality of information gathered meets agency program needs, significant findings are managed appropriately, and trend and pattern analysis can be performed when appropriate.

All medical records obtained through this process are part of the DOI employee medical file system, which is governed by such laws and regulations as:

- Privacy Act of 1974 (5 USC 552a)
- 5 CFR Part 293 (Employee Medical File System)
- 5 CFR Part 297 (Privacy Provisions for Personnel Records)
- OPM/GOVT-10 (Office of Personnel Management EMFS Notice)
- 29 CFR 1910.1020, Access To Employee Exposure and Medical Records (previously codified at 29 CFR 1910.20)
- Freedom of Information Act (5 USC 552)
- 45 CFR Part 5 (Freedom of Information Regulations)

The records belong to the Office of Personnel Management, and are managed by the employing agency, but may be under the custodianship of a health care provider or organization on behalf of the agency when clinical services are provided by that health care entity. Records must be maintained in a manner that ensures their confidentiality, their safety and integrity, and their use only for official purposes. When records are stored by a non-agency custodian (e.g., a local medical clinic or hospital), the contract for services between the agency and that health care entity must specify that such records storage is custodial in nature only, and that the original records will be transferred to the custody of the agency upon termination of the service arrangements provided for by the contract.

Information contained in these medical records is to be considered highly confidential, and is to be used by the agency for official purposes only. Questions regarding the appropriate use or handling of these records may be directed to the DOI employee medical file system manager within the Occupational Health and Medical Programs division, Office of Occupational Safety and Health.

U.S. Department of the Interior
Office of Occupational Safety and Health
Occupational Health and Medical Programs Division
1 Denver Federal Center
PO Box 25007, D-115
Building 25, Suite 2400
Denver, CO 80225

Office of Occupational Safety and Health contact information can be found at:
<https://safetynet.doi.gov/contacts/index.html#ohs>

6. DATA ANALYSIS

In order to facilitate the recognition of significant changes or trends in individual employee health findings, or the findings for groups of employees carrying out similar tasks or working in similar areas of the lab, it is recommended that medical history, examination, and laboratory test data be entered into a longitudinal data base. Data analysis should be conducted by individuals knowledgeable in occupational health, and familiar with the nature of the work carried out at the laboratory. Summary reports of this analysis should be made available to agency management, along with recommendations for any action that may be indicated.

References

Most of the following references are easily accessible through the Internet, and are representative of the variety of documents pertinent to laboratories that are readily available.

- [29 CFR 1910.1450](#) (Occupational exposure to hazardous chemicals in laboratories)
- [32 CFR 627.7](#) (Department of the Army, Biological Defense Safety Program “Goal of a laboratory safety program”)
- Control of Communicable Diseases Manual, 16th ed. Benenson AS (ed.). American Public Health Association, Washington, D.C. 1995
- Biosafety Documents (a Centers for Disease Control and Prevention (CDC) site, serving as a “home page” for biosafety, with multiple listings and hot links)
<https://www.cdc.gov/biosafety/>
- [Biosafety in Microbiological and Biomedical Laboratories, Fifth Edition, December 2009](#) (from the [CDC](#) and the [National Institutes of Health](#); a comprehensive guide)

The medical standards prescribed in this part, based on medical examination and evaluation of the person's history and condition, is entitled to an appropriate medical certificate.

Appendix

Forms:

DI-7001	Medical Surveillance Introduction Letter to Employee
DI-7002	Industrial Hygiene Interview Form
DI-7003	Occupational/Work History Form
DI-7004	DOI Standard Medical History and Examination Form
DI-7005	Privacy Act Notification Form
DI-7006	Authorization for Disclosure of Information
DI-7007	Request for Respirator Clearance
DI-7008	Respirator Clearance Questionnaire
DI-7009	Respiratory Medical Recommendation Form

DI-7001 – Medical Surveillance Introductory Letter to Employees (Example)

The form starting on the following page is an example of a letter that can be used to introduce the medical surveillance program to employees.

Dear Employee,

Introduction to the Medical Surveillance Program

Because of the nature of your job, you have been designated by your employer to participate this year in the medical surveillance program provided by this agency. This examination and review program is provided to assure that you are able to meet the various requirements of your job, to comply with federal regulations, and to help safeguard both you and your co-workers from preventable illnesses and injuries. Though you retain the right to refuse to participate, and you may accept or withdraw from any or all of the program components that are offered, it is important that you understand that complete recommendations and medical clearances for your job can only be provided if the examination has been carried out. In some cases, these clearances depend on an employee meeting specific agency policies or federal regulations, such as those for law enforcement officers, firefighters, or drivers of commercial vehicles.

Important Forms to Be Completed

The **Notice to Patients** form conveys information on the Privacy Act of 1974, which governs the collection, storage, and use of confidential medical information. All information gathered as part of the medical surveillance program is considered confidential and, in general, no information about the results of your exam can be released to anyone else without your written consent, except as provided for and explained by this Notice to Patients form.

When properly completed and signed, the **Authorization for Disclosure of Information** form allows the examining facility to share summary, work-related information with your supervisor. Medical information that is not related to work will not be released to your supervisor without an additional, specific written consent from you. *We cannot provide any medical surveillance services to you unless we have your consent to release summary information to your supervisor.*

There are several types of **medical history** forms that you may be asked to complete. These are intended to provide information to assist the examining physician and the Agency Medical Officer as they evaluate your health and the effects of your job. Pursuant to 29 C.F.R. 1635.8(b)(i)(B): The Genetic Information Nondiscrimination Act of 2008 (GINA) prohibits employers and other entities covered by GINA Title II from requesting or requiring genetic information of an individual or family member of the individual, except as specifically allowed by this law. To comply with this law, we are asking that you not provide any genetic information when responding to this request for medical information. 'Genetic information' as defined by GINA, includes an individual's family medical history, the results of an individual's or family member's genetic tests, the fact that an individual or an individual's family member sought or received genetic services, and genetic information of a fetus carried by an individual or an individual's family member or an embryo lawfully held by an individual or family member receiving assistive reproductive services.

Preparation for Your Examination

You will be given instructions that are very important to follow in preparation for having lab tests done, to be sure the results are accurate. These primarily involve fasting for 12 hours before you have your blood drawn, and following a specific diet if you are to have your stools checked for blood. If you do not receive these instructions, please ask the nurse or call this office.

The Components of Your Exam

Your examination may involve one or more of the following components.

General Physical Examination -- This is a complete physical examination of the major body systems. You may be asked to disrobe for parts of the exam to allow the physician to see you fully as he or she conducts the examination. The examiner will pay particular attention to specified body systems, organs, or physical signs that may indicate harmful effects of the exposures identified in your occupational history. A brief or limited exam may be carried out if, for example, all you need is to have your hearing evaluated, or a clearance to wear a respirator.

Audiogram -- Baseline and periodic audiograms are carried out using equipment and test locations that meet the criteria established by the Occupational Safety and Health Administration (OSHA) and the Council for Accreditation in Occupational Hearing Conservation (CAOHC). A hearing booth is not required and may or may not be available for your exam, but accurate audiogram results can be obtained as long as background noise has been kept below specified levels during the testing period. For at least 14 hours prior to your audiogram you should avoid all loud noises, or be sure to use effective hearing protection if noise cannot be avoided.

Vision Tests (Color, Best Near and Far, Depth, and/or Peripheral) -- Both corrected (with glasses or contacts) and uncorrected vision (without glasses or contacts) are usually checked in each eye and with both eyes combined. If you use contacts, be sure to bring any necessary containers and cleaning solutions you will need for holding them during the exam and reinserting them afterwards.

Chest X-Ray -- Such a test may be required to establish a baseline for certain jobs, to help evaluate clinical findings or medical history information, or if you have current or recent job-related asbestos or silica exposure. X-ray tests usually are done by referral to an outside radiographic facility.

Pulmonary Function Test (Spirometry) -- A pulmonary function test (PFT) may be conducted to evaluate your ability to work safely while using a respirator, to assess your lung capacity and respiratory reserve, and/or to look for evidence of lung or breathing problems. This test involves blowing into a tube as hard as you can while a machine records the results.

Electrocardiogram -- An electrocardiogram may be conducted to help evaluate the health of your heart.

Laboratory Tests -- These tests should be obtained following a 12 hour fast (consuming only water and prescribed medications). Routine blood tests include a complete blood count (CBC) and a chemistry panel, including glucose, BUN, creatinine, electrolytes, protein, calcium, phosphorus, liver function tests (liver enzymes, bilirubin), cholesterol, HDL-cholesterol, LDL-cholesterol, and triglycerides. A urinalysis also is done routinely. Other lab tests may be ordered, depending on your occupational history and any pertinent, identified exposures.

24 Hour Urine Test -- A 24 hour collection of urine may be ordered to check for exposure to certain heavy metals or other potentially toxic materials that you may have been exposed to in the course of your work.

Follow-up

Following your examination, a complete review of your histories, laboratory results, and examination findings will be carried out by an occupational health physician, and you will be sent a confidential summary of all your findings. Much of what you will find in the summary will be information of a strictly confidential nature. It is for your use, and we hope you will read it carefully and share it with your personal physician. Recommendations for follow up testing will be found in this letter, as well as clearances or recommended modifications in your work, if applicable. Because we want you to have full access to all of your own health information, you also will receive a copy of the summary that is sent to your supervisor. This supervisor summary only contains recommendations regarding medical clearances for work; if work restrictions are needed; and/or if you have evidence of health problems from any work place exposures. No other confidential medical information is included in the supervisor's letter without your knowledge and consent.

If you have questions about your medical surveillance exam, please contact your supervisor.

DI-7002 – Industrial Hygienist Interview Form Example

The form starting on the following page is an example of a form that may be used to record the results of an industrial hygienist's interview with an employee as part of identifying potentially significant occupational exposures.

**DOI INDUSTRIAL HYGIENE INTERVIEW SUMMARY
EMPLOYEE DATA FOR DEPARTMENT OF THE INTERIOR
MEDICAL SURVEILLANCE PROGRAM**

Employee Information:

Date of Interview: _____

Last: _____
First: _____
Middle: _____

Date of Birth: _____
Sex: M F
SSN: _____

Agency: _____

Subunit: _____

Job Title: _____

Work Phone: _____

Name of Supervisor: _____

Work Address: _____

Home Phone: _____

Home Address: _____

Currently in Medical Surveillance Monitoring Program for:

(Circle) **ASBESTOS** **NOISE** **OTHER** (Specify): _____

Year of First Asbestos Exposure with This Agency (): _____

Year of Your Prior First Asbestos Exposure (Before this Agency): _____

Clearances Necessary (Circle as appropriate):

Diver **Driver (CDL)** **Drive-for-Work (non-CDL)** **OTHER** (Specify):

Respirator User: Y / N Type of Respirator (Air Purifying/Supplied Air/SCBA)

Exposure Information Summary:

(For each item, circle entry for both Frequency and Severity)

CODES:

Exposure Frequency

0 - 12 (one day/month or less) = Low
12 - 52 (one day/week or less) = Medium
52+ (more than one day/week) = High

Exposure Severity

I = Incidental (Process and/or products are used nearby.
pass through the area or may conduct short inspection.
Worker is not involved with job that is producing
the potential exposure.
L = Low (Less than 1/2 the PEL or TLV.)
M = Medium (From 1/2, up to the full PEL or TLV.)
H = High (Greater than the PEL or TLV.)

Exposure

Frequency

Severity

Physician's Notes (Sign)

NOISE L M H I L M H

Industrial Hygienist's Notes:

ASBESTOS L M H I L M H

Industrial Hygienist's Notes:

HEAVY METALS L M H I L M H

(Arsenic, Mercury, Welding Fumes, Other-- Please Specify)

Industrial Hygienist's Notes:

<u>Exposure</u>	<u>Frequency</u>	<u>Severity</u>	<u>Physician's Notes (Sign)</u>
LEAD	L M* H	I L M* H	

* > 30 days/year at Action Level

Industrial Hygienist's Notes:

CADMIUM	L M* H	I L M* H	
---------	--------	----------	--

* > 30 days/year at Action Level

Industrial Hygienist's Notes:

[prior exposure > 60 months? Y / N]

SOLVENTS	L M H	I L M H	
----------	-------	---------	--

(Please Specify Type)

Industrial Hygienist's Notes:

FORMALDEHYDE	L M H	I L M H	
--------------	-------	---------	--

(And Other Aldehydes)

Industrial Hygienist's Notes:

DUSTS	L M H	I L M H	
-------	-------	---------	--

(Specify Type, e.g., wood, silica, etc.)

Industrial Hygienist's Notes:

PESTICIDES	L M H	I L M H	
------------	-------	---------	--

Industrial Hygienist's Notes:

Other Significant Exposures Which Should Prompt Examination:

(Please circle, as appropriate, and provide any necessary clarifying comments)

HEAVY LIFTING L M H (Over 50 lbs)

Industrial Hygienist's Notes:

VIBRATION	L M H		
-----------	-------	--	--

Industrial Hygienist's Notes:

CORROSIVES	L M H	I L M H	
------------	-------	---------	--

[i.e.: Acid, base, quick lime]

Industrial Hygienist's Notes:

Heat Stress	L M H	I L M H	
-------------	-------	---------	--

[ie: Tyvek Suit]

Industrial Hygienist's Notes:

OTHER (Specify)	L M H	I L M H	
-----------------	-------	---------	--

[i.e.: PCBs, Ozone, EMF, Fiberglass]

Industrial Hygienist's Notes:

Industrial Hygiene Interviewer

Date

Agency Representative

Date

DI-7003 – Occupational/Work History Form (Example)

The form starting on the following page is an example of one that may be used by employees to record their occupational/work history, as part of identifying potentially significant occupational exposures.

**U.S. DEPARTMENT OF THE INTERIOR
 OCCUPATIONAL HEALTH DIVISION
 MEDICAL SURVEILLANCE
 OCCUPATIONAL/WORK HISTORY**

1. NAME (Last, First Middle Initial)	2. SOCIAL SECURITY NUMBER	3. DATE OF BIRTH (MMDDYY)	4. JOB TITLE
5. WORK ADDRESS (Building, Street)	6. WORK ADDRESS (City, State, Zip)	7. SEX (x one) <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	8. TELEPHONE NUMBER (Please include area code)

This Occupational Work History form is to be completed first by the employee and then reviewed by the Supervisor and Safety Officer. Finally, it will be reviewed by the agency or national Medical Review Officer and forwarded to the examining physician.

EMPLOYEE :	Date Form Received	Date sent to Supervisor	Signature
-------------------	--------------------	-------------------------	-----------

SUPERVISOR :	Date Form Received	Date Sent to the MRO	Signature
---------------------	--------------------	----------------------	-----------

	Comments by Supervisor (if any): [Check certification exams needed:] <input type="checkbox"/> Respirator <input type="checkbox"/> Diver <input type="checkbox"/> Commercial Driver's License Work-Related Driving Ability <input type="checkbox"/> Other (specify) <input type="checkbox"/> Other (specify)
--	--

PLEASE READ THE FOLLOWING EXPLANATORY COMMENTS:

The Occupational/Work History is used to refine the medical surveillance evaluation to include those agents not usually considered when dealing with only your job description. It is also helpful to the examining physician in gathering more information regarding individual exposures. Attached is a list of agents or chemicals that you may have worked with on your job. Also included are some particular work conditions or "tasks." The presence of a chemical or work task on the list does not mean that you *have* or *will* come into contact with that item, but only serves as a checklist of some things you might otherwise forget.

The Occupational Work History does not serve as evidence for or against actual exposure (that is, actual entrance of a chemical into the body or actual biological effect from a physical agent).

Please do not include those exposures which may be "incidental" or "casual." For example, walking by the area where painting is taking place, but not actually participating in the painting operation, supervising the activity, or spending substantial time in the area for another reason, should not usually be included as a potential exposure.

Any ill effects which were noted at the time of a potential exposure or which you believe are connected to a particular chemical, physical agent, or task, should be indicated on the history form. Also, the type of protective equipment worn, if any, should be noted.

Feel free to make comments or notes where further explanation is deemed necessary.

**BASELINE OCCUPATIONAL/WORK HISTORY
PRIOR WORK HISTORY**

(Complete this page if this is your first DOI Medical Surveillance examination, or if previously submitted information requires updating.)

NAME :

Please list all *previous jobs* starting with the *most recent* (include only jobs prior to your current job):

Agency/Company	Dates	Specific Hazards*	Job Duties

* "Hazards" include but are not limited to: chemicals, dusts, gases fumes, radiation, vibration, cold, heat, intense light, repetitive motion, and loud noise.

Asbestos Exposure History

Please list the year and place where you first had exposure to asbestos without the benefit of personal protective equipment. (Examples: shipyard work, home remodeling, various hobbies). This question is important for you to answer as the date of exposure to asbestos is needed to determine the best way to screen for any asbestos related disease.

The potential exposures/agents listed below refer to your *current* job. (Use blank lines to write in other chemicals/agents.)

Potential Exposure or Work Condition	Frequency (check one) D = Daily W = Weekly M = Monthly S = Seasonal				Duration (check one) Average use in Hours			Intensity of any ill effects (check one) N = None MI = Mild (e.g. headache) MA = Major (e.g. slow recovery; need medical care)			Protective Equipment (check one) R = Respirator G = Gloves E = Eye Protection P = Protective Clothing				Physician Comments
	D	W	M	S	1	1-4	4-8	N	MI	MA	R	G	E	P	

Dusts or Fumes - Usual Route of Exposure: Inhalation

Aluminum															
Silica															
Carbon Dust															
Chromium															
Iron															
Lead															
Mercury Metal															
Cadmium															
Nickel															
Zinc															
Asbestos															
Cement Dust															
Fibrous Glass															
Plastic Fumes															
Welding Fumes															
Wood Dust(s)															
Beryllium															

Solvents - Usual Route of Exposure: Inhalation and Skin

Alcohols															
Acetone															
Methylene Chloride															
Paint (epoxy)															
Paint (oil based)															
Paint (urethane)															
Toluene															
xylene															
Stoddard Solvent															
Hexane															
Benzene															
Trichloroethylene															
Other (specify)															

The potential exposures/agents listed below refer to your *current* job. (Use blank lines to write in other chemicals/agents.)

Potential Exposure or Work Condition	Frequency (check one) D = Daily W = Weekly M = Monthly S = Seasonal				Duration (check one) Average use in Hours			Intensity of any ill effects (check one) N = None MI = Mild (e.g. headache) MA = Major (e.g. slow recovery, need medical care)			Protective Equipment (check one) R = Respirator G = Gloves E = Eye Protection P = Protective Clothing				Physician Comments
	D	W	M	S	1	1-4	4-8	N	MI	MA	R	G	E	P	

Other Chemicals

Acids															
Oil Mists															
PCB's															
Caustics (Bases)															
Pesticides															
(Organophosphate)															
(Other)															
Wood Preservatives															
Dioxins/Furans															
Pentachlorophenol															
Other Chemicals (specify)															

Other Potential Exposures or Work Tasks

Noise over 85 dBA															
Vibrating Tools															
Heavy Equipment (Cranes, forklifts, etc)															
Drive light vehicles															
Sewage samples															
Other Biological Hazards (Specify)															
work in confined area															
work in high places															
Carpentry															
Lifting over 50 lbs.															
Firearm use															
Hyperbaric Pressure															

Additional Comments - Please list any other chemicals or hazards to which you may be exposed, but which have not already been covered.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

NAME:

The protective equipment listed below refer to your *current* job. (Use blank lines to write in other equipment.)

Type of Equipment	Frequency (check one) D = Daily W = Weekly M = Monthly S = Seasonal E = Emergencies ONLY					Duration (check one) Average use in Hours			Intensity of work effort while wearing equipment (check one) S = Sedentary L = Light to Moderate (e.g. walking, climbing/no load) H = Heavy (e.g. walking, climbing with more than 20 lbs.)			Physician Comments
	D	W	M	S	E	0-1	1-4	4-8	S	L	H	
Negative Pressure Respirators:												
Half Mask Cartridge												
Full Mask Cartridge												
Powered Air-Purifying Respirators:												
Half Mask												
Full Mask												
Air Supplied Respirators:												
Self-Contained (SCBA)												
Air-Line (Half Mask)												
Air-Line (Full Mask)												
Protective Clothing:												
Cloth overalls												
Tyvek type suits												
Firefighter turnout gear												
Vibration dampening gloves												

This section may be used for any additional explanations or comments:

DI-7004 – DOI Standard Medical History and Examination Form

Following this page is the updated DOI Standard Medical History and Examination Form that may be used for pre-placement exams, medical surveillance exams, or specified clearance exams. It may be used independently, or in conjunction with an additional occupational history form. If used with an occupational history form, the input of that form may be incorporated into the additional tests or clearances that are indicated on the examination form.

Some programs use different forms in order to meet specific needs. Examples include those used for most law enforcement and wildland firefighter exams, as well as some types of inspectors.

DEPARTMENT OF THE INTERIOR
STANDARD MEDICAL HISTORY AND EXAMINATION FORM (DI-7004)

***** CAUTION *****

WHEN COMPLETED, THIS DOCUMENT CONTAINS CONFIDENTIAL MEDICAL INFORMATION

DOI Occupational Health Services Program Manager: Please: 1) check the box on page 3 to indicate if this is a pre-placement / baseline / exit exam, or a periodic exam, and check all Function and Clearance boxes that apply (page 3); 2) enter the three addresses in the spaces below; 3) indicate by checking the correct box (below) for the one to receive the forms once the exam is complete; and 4) deliver the form to the person who is to receive the examination. Also, if the examinee is a new-hire, and a compensated disabled veteran, he/she is to be informed that the following documents must be attached to this form at the time of the examination, and will become part of this record: copies of a) the Rating Sheet; b) the Medical Exam for Disability Evaluation (VA-21-2545) or Rating Decision (VA-21-6796b) or detailed documentation on the diagnosis, treatment, and evaluation of his/her compensated disability; and c) any disability-related specialist reports. Similarly, if the examinee responds "Yes" to question H. on page 5 ("Have you ever received, is there pending, or have you applied for a pension or compensation for a disability?"), supporting and explanatory documentation of the disability must be provided before a medical clearance determination can be made.

Person to Receive the Examination (Examinee): Please see the Privacy Act Notice on page 2 of this form, and note that your signature is required on pages 2 and 10 or the form cannot be processed further. Prior to your examination appointment, please complete ALL of the shaded portions of the following pages of this form, and take the entire packet directly to the EXAMINING PHYSICIAN/CLINIC at the address noted below on the day of your scheduled examination. All positive entries in the medical history sections of the form should be explained fully, and may require further information from your personal physician(s). Incomplete forms, or those missing information, may result in a delay in clearing you for your assigned functions. This includes question H. on page 5 ("Have you ever received, is there pending, or have you applied for a pension or compensation for a disability?"). If the answer is "Yes," supporting and explanatory documentation of the disability must be provided before a medical clearance determination can be made. This examination does not substitute for periodic health evaluations conducted by your personal health care provider. It is being conducted for occupational purposes only. It is important, however, that you share all of the results of this examination with your personal physician for ongoing care.

Note #1: If you are a new-hire, and a compensated disabled veteran, you must attach the following documents to this form at the time of the examination: copies of a) the Rating Sheet; b) the Medical Exam for Disability Evaluation (VA-21-2545) or Rating Decision (VA-21-6796b) or detailed documentation on the diagnosis, treatment, and evaluation of your compensated disability; and c) any disability-related specialist reports.

Note #2: You should arrive for your examination in a fasting condition (e.g., no food or drink other than prescribed medications during the 12 hours prior to having your blood drawn at the examination site).

Examining Physician: Please complete all of the double-lined portions of the following form, through page 10. Note: Please provide full explanations or clarifying information for all findings that are not completely normal, and assure that the DOI or agency Medical Review Officer is provided all available information so that he/she can carry out DOI's occupational health review function. When complete, please return this form and any associated forms and reports to the recipient checked below.

<input type="checkbox"/> DOI OHS PROGRAM MANAGER	<input type="checkbox"/> MEDICAL REVIEW OFFICER	<input type="checkbox"/> EXAMINING PHYSICIAN/CLINIC
_____	_____	_____
_____	_____	_____
_____	_____	_____

PRIVACY ACT INFORMATION

The information obtained in the completion of this form is used to help determine whether an individual assigned to a job with duties that may be considered arduous or hazardous can carry out those duties in a safe and efficient manner that will not unduly risk aggravation, acceleration, exaggeration, or permanently worsening a pre-existing medical condition(s). The collection and use of this information is consistent with the provisions of 5 USC 552a (the Privacy Act of 1974), 5 USC 3301 (Civil Service examination, certification, and appointment), 5 CFR 339 (Medical Qualification Determinations), and Executive Orders 12107 (authorities for personnel folders) and 12564 (Drug Free Federal Workplace).

This form, along with any attached or associated information, will be placed in your Employee Medical File, and is to be used only for official purposes, as explained and published annually in the Federal Register under OPM/GOVT-10, the Office of Personnel Management system of records notice. Your submission of this information is **voluntary**. If you do not wish to provide the information, you are not required to do so. However, your assignment to perform duties that are considered arduous or hazardous depends on the availability of complete, accurate, and current occupational health records. Failure to complete this form according to instructions, or to have the indicated medical examination, may result in a delay in processing or an inability to assign you to, or continue your assignment in, certain job functions.

REGULATORY AUTHORITY TO REQUEST ADDITIONAL MEDICAL INFORMATION (e.g., from examinee's personal physician)

5 CFR 339.104 Definitions.

For purposes of this part--

Medical documentation or documentation of a medical condition means a statement from a licensed physician or other appropriate practitioner which provides information the agency considers necessary to enable it to make a employment decision. To be acceptable, the diagnosis or clinical impression must be justified according to established diagnostic criteria and the conclusions and recommendations must not be inconsistent with generally accepted professional standards. The determination that the diagnosis meets these criteria is made by or in coordination with a physician or, if appropriate, a practitioner of the same discipline as the one who issued the statement. An acceptable diagnosis must include the following information, or parts identified by the agency a necessary and relevant:

- (a) The history of the medical conditions, including references to findings from previous examinations, treatment, and responses to treatment;
- (b) Clinical findings from the most recent medical evaluation, including any of the following which have been obtained: Findings of physical examination; results of laboratory tests; X-rays; EKG's and other special evaluations or diagnostic procedures; and, in the case of psychiatric evaluation or psychological assessment, the findings of a mental status examination and the results of psychological tests, if appropriate;
- (c) Diagnosis, including the current clinical status;
- (d) Prognosis, including plans for future treatment and an estimate of the expected date of full recovery;
- (e) An explanation of the impact of the medical condition on overall health and activities, including the basis for any conclusion that restrictions or accommodations are or are not warranted, and where they are warranted, an explanation of their therapeutic or risk avoiding value;
- (f) An explanation of the medical basis for any conclusion which indicates the likelihood that the individual is or is not expected to suffer sudden or subtle incapacitation by carrying out, with or without accommodation, the tasks or duties of a specific position;
- (g) Narrative explanation of the medical basis for any conclusion that the medical condition has or has not become static or well stabilized and the likelihood that the individual may experience sudden or subtle incapacitation as a result of the medical condition. In this context, "static or well-stabilized medical condition" means a medical condition which is not likely to change as a consequence of the natural progression of the condition, specifically as a result of the normal aging process, or in response to the work environment or the work itself. "Subtle incapacitation" means gradual, initially imperceptible impairment of physical or mental function whether reversible or not which is likely to result in performance or conduct deficiencies. "Sudden incapacitation" means abrupt onset of loss of control of physical or mental function.

.....
Physician means a licensed Doctor of Medicine or Doctor of Osteopathy, or a physician who is serving on active duty in the uniformed services and is designated by the uniformed service to conduct examinations under this part.

Practitioner means a person providing health services who is not a medical doctor, but who is certified by a national organization and licensed by a State to provide the service in question.

I certify that all of the information I have provided on this form is complete and accurate to the best of my knowledge. I acknowledge that incomplete forms or missing information may result in a delay in processing of my medical clearance to perform my designated work duties. I further acknowledge that submitting information that is incomplete, misleading, or untruthful may result in termination, criminal sanctions, or failure to receive a clearance to perform my job. I authorize the release to my employing agency and authorized agency representatives (e.g., the agency medical review officer) all information contained on this examination form and all other forms or documents generated by or gathered in relation to this examination (e.g., laboratory, spirometry, vision, and audiometry test results, any history forms completed by me, or other information submitted by me or at my request). All such information is to be used strictly for official purposes, as outlined in the Privacy Act Information notice, above.

Examinee's Signature:

Date:

DOI Occupational Health Services Program – Standard Medical History and Examination Form (DI-7004)

The individual to be examined is to complete the shaded medical history portions of this form prior to his/her appointment.

The examining physician/clinic is to attach to this form any hard copies of screening, diagnostic, and/or laboratory tests, and send them as a package to the addressee checked on page 1 of this form.

Name, address, and phone number (including fax) of physician/ health center performing examination:		New Applicants ONLY: Your Current Occupation: Your Current Employer: Time in Current Position (in years/months):
Name of Agency:		
Examinee's Name:	Position/Job Title:	SS#
Address:	Work Location:	Region:
	Home Phone:	Work Phone:
Date of Scheduled Exam:	Date of Birth:	Gender: Male <input type="checkbox"/> Female <input type="checkbox"/>
DOI OHS PROGRAM MANAGER	EXAMINING PHYSICIAN (Please Note - Core Exam Must <i>Always</i> be Completed, Plus All Function-Specific Services Shown on Following Page)	
TYPE OF EXAMINATION <input type="checkbox"/> Pre-placement/Baseline/Exit <input type="checkbox"/> Periodic SPECIFY FUNCTION AND/OR CLEARANCES REQUESTED (Check ALL That Apply) <input type="checkbox"/> Respirator User [requires completion of the <i>Request for Respirator Clearance</i> form] <input type="checkbox"/> Law Enforcement (Note #1: A different form for LE officers may be required. Contact the Office of Occupational Health and Safety if you have questions) (Note #2: If indicated, check the box in the lower right corner of page 7 to request these special assessments.) <input type="checkbox"/> Diver <input type="checkbox"/> Commercial Drivers License <input type="checkbox"/> Hazardous Waste Worker <input type="checkbox"/> Inspector (Off-Shore or Land-Based) <input type="checkbox"/> Tower Climber <input type="checkbox"/> Laboratory Worker <input type="checkbox"/> Other (specify)	PRE-PLACEMENT/BASELINE/EXIT CORE EXAM Required Services: (Check those services completed) <input type="checkbox"/> General Medical History <input type="checkbox"/> General Physical Examination <input type="checkbox"/> Chemistry Panel (including Glucose, Bilirubin (total), Cholesterol, HDL-C, LDL-C, Triglycerides, GGTP, LDH, SGOT, SGPT), Complete Blood Count, and Urinalysis <input type="checkbox"/> Audiometry (including noise exposure history) <input type="checkbox"/> Electrocardiogram <input type="checkbox"/> Spirometry <input type="checkbox"/> Vision Screening (Corrected and Uncorrected Near and Far; Color; Peripheral; Depth Perception) <input type="checkbox"/> Plus other Function or Clearance-required services (see the following page)	PERIODIC CORE EXAM Required Services: (Check those services completed) <input type="checkbox"/> General Medical History <input type="checkbox"/> General Physical Examination <input type="checkbox"/> Chemistry Panel (including Glucose, Bilirubin (total), Cholesterol, HDL-C, LDL-C, Triglycerides, GGTP, LDH, SGOT, SGPT), Complete Blood Count, and Urinalysis <input type="checkbox"/> Plus other Function or Clearance-required services (see the following page) Note: For Respirator User exams (see page 4), the General Physical Examination may be a brief, limited exam or a more extensive exam, depending on the health of the examinee and the judgement of the examiner. Also, laboratory tests (e.g., chemistry panel, blood count, and urinalysis) and procedures (e.g., electrocardiograms) are intended to be at the discretion of the examiner, rather than required services. Refer to the DOI Occupational Health Program Handbook for further guidance. For all Respirator User exams, completion of the DOI <i>Request for Respirator Clearance</i> form must precede this exam and be attached to this exam form when completed.

FUNCTION AND CLEARANCE-SPECIFIC EXAMINATION COMPONENTS

Respirator User

Pre-Placement/Baseline/Exit Core Exam Services, plus:

DOI Request for Respirator Clearance form

(May be a Limited Exam)

(Use above for any Respirator User exam)

Law Enforcement

Pre-Placement/Baseline/Exit Core Exam Services, plus:

Tuberculosis skin test (PPD, Mantoux)

Chest X-Ray – PA or PA/Lat (Baseline and Exit Only)

Blood lead and Zinc protoporphyrin (Firearms Inst. Only)

Periodic Core Exam Services, plus:

Vision (Cor. and Uncor. Near/Far; Color; Peripheral; Depth)

Audiometry (including noise exposure history)

Electrocardiogram (Age 40 and higher, and Exit)

Blood lead and Zinc protoporphyrin (Firearms Inst. Only)

Tower Climber

Pre-Placement/Baseline/Exit Core Exam Services, plus:

Chest X-Ray - PA/Lat

Tuberculosis skin test (PPD, Mantoux)

Tetanus booster (if needed)

Periodic Core Exam Services, plus:

Vision (Cor. and Uncor. Near/Far; Peripheral; Depth)

Audiometry (including noise exposure history)

Diver

Pre-Placement/Baseline Core Exam Services, plus:

Tuberculosis skin test (PPD, Mantoux)

Chest X-Ray (PA/Lat)

Blood Type and Rh

Sickle Cell Prep

Periodic Core Exam Services, plus:

Audiogram (every 5 years) (including noise exposure history)

Vision (Cor. and Uncor. Near and Far)

Electrocardiogram (every year after age 40, and Exit)

Commercial Driver's License

Periodic Core Exam Services, plus:

Audiometry (including noise exposure history)

Vision (Corr. and Uncorr. Near/Far; Color; Peripheral; Depth)

Inspector (Off-Shore or Land-Based)

Pre-Placement/Baseline/Exit Core Exam Services, plus:

Chest X-Ray - PA/Lat

Tuberculosis skin test (PPD, Mantoux) (Offshore Only)

Tetanus booster (if needed) (Offshore Only)

Periodic Core Exam Services, plus:

Vision (Cor. and Uncor. Near/Far; Peripheral; Depth)

Audiometry (including noise exposure history)

Tetanus booster (if needed) (Offshore Only)

Hazardous Waste Worker

Pre-Placement/Baseline/Exit Core Exam Services, plus:

Chest X-ray (PA/Lat)

Cholinesterase (RBC/Plasma)

Periodic Core Exam Services, plus:

Vision (Cor. and Uncor. Near/Far; Color; Peripheral; Depth)

Chest X-ray (PA/Lat) (prn)

Spirometry

Audiometry (including noise exposure history)

Cholinesterase (RBC/Plasma)

24 hour Urine Heavy Metal Screen

Laboratory Worker

Pre-Placement/Baseline/Exit Core Exam Services, plus:

Chest X-Ray – PA/Lat

Blood lead and Zinc Protoporphyrin (for firearms users)

Cholinesterase (RBC/Plasma)

Serum, 5cc, labeled, frozen, and stored

Immunizations and Screening (see *DOI Handbook*)

Periodic Core Exam Services, plus:

Vision (Cor. & Uncor. Near/Far; Color; Peripheral; Depth)

Spirometry

Audiometry (including noise exposure history)

Serum, 5cc, labeled, frozen, and stored

Cholinesterase (RBC/Plasma)

Blood lead and Zinc Protoporphyrin (for firearms users)

Immunizations and Screening (see *DOI Handbook*)

PAST MEDICAL HISTORY

(Please complete this page if this is your first time using this form, or if you are unsure if you have completed it before.)

- A. Have you ever been treated for a mental or emotional condition? (If Yes, specify when, where, and give details.) Yes No
- B. Have you had or have you been advised to have any operation? (If Yes, specify when, and give details.) Yes No
- C. Have you ever been a patient in any type of hospital after infancy? (If Yes, specify when, where, and give details.) Yes No
- D. Have you ever been treated with an organ transplant, prosthetic device (e.g., artificial hip), or an implanted pump (e.g., for insulin) or electrical device (e.g., cardiac defibrillator)? (If Yes, please describe fully, and provide copies of pertinent medical records.) Yes No
- E. Have you ever had any other serious illness/injury? (If yes, specify when, where, and give details.) Yes No
- F. Have you consulted or been treated by clinics, physicians, healers, or other practitioners within the past year for other than minor illness? (If Yes, specify when, where, and give details.) Yes No
- G. Have you ever been rejected for military service or discharged from military service because of physical, mental, or other health reasons? (If Yes, give date and reason for rejection.) Yes No
- H. Have you ever received, is there pending, or have you applied for a pension or compensation for a disability? (If Yes, specify what kind, granted by whom, what amount, when, and why.) Yes No

Every item checked "Yes" must be explained below or on the back of this form.

Smoking History

- Never Former Current
- Years since quitting _____
- Number of cigarettes per day _____
- Number of cigars per day _____
- Number of pipe bowls per day _____
- Total years you have smoked _____

Alcohol Use

- Have you ever been diagnosed with or treated for alcoholism or alcohol dependence? **Yes** **No**

If "Yes," Date(s): _____
Current status: _____

- Have you ever been in rehabilitation? **Yes** **No**

If "Yes," when? _____
Details: _____

Drug Use

- Have you ever been diagnosed as being dependent on illegal drugs or treated for drug abuse? **Yes** **No**

If "Yes," Date(s): _____
Current status: _____

- Have you ever been in rehabilitation? **Yes** **No**

If "Yes," when? _____
Details: _____

RESPIRATOR CLEARANCE QUESTIONS

Have you ever used a respirator? Yes No

Will you use one in the coming year? Yes No
(If no, please skip the rest of this section.)

What hazards may be present during your use of a respirator?

- High altitude Temperature extremes Confined spaces

Have you ever had, or do you now have any of the following?

Yes No

- Persistent cough or shortness of breath
- Unexplained general weakness or fatigue
- Asbestosis or silicosis
- Lung cancer
- Broken ribs or chest injury
- Chest pain on deep inspiration
- Sensation of smothering when using a respirator
- Heat exhaustion or heat stroke
- Trouble smelling odors
- Difficulty squatting
- Difficulty climbing stairs or ladder carrying 25# weight
- Other conditions that might interfere with respirator use or result in limited work activity
(Discuss all "Yes" responses with the examining physician.)

Fully explain all medical problems identified in Respirator Clearance Questions section.

MEDICATIONS

List all medications (prescription and over-the-counter) you are currently taking.

Describe Your Physical Activity or Exercise Program(check one)

Intensity: Low _____ Moderate _____ High _____

Duration, in Minutes per Session _____

Describe activity _____

Frequency _____ Days per week _____

MEDICAL HISTORY	DIAGNOSTIC AND PHYSICAL FINDINGS																																																												
<p style="text-align: center;">VASCULAR</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:80%;"></td> <td style="width:5%; text-align: center;">Yes</td> <td style="width:15%; text-align: center;">No</td> </tr> <tr> <td>Do you have any vascular (blood vessel) disease?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Enlarged superficial veins, phlebitis, or blood clots?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Anemia?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Hardening of the arteries?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>High Blood Pressure?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Heart failure?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Stoke or Transient Ischemic Attack (TIA)?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Aneurysms (Dilated arteries)?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Poor circulation or swelling of the hands or feet?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>White fingers with cold or vibration?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>		Yes	No	Do you have any vascular (blood vessel) disease?	<input type="checkbox"/>	<input type="checkbox"/>	Enlarged superficial veins, phlebitis, or blood clots?	<input type="checkbox"/>	<input type="checkbox"/>	Anemia?	<input type="checkbox"/>	<input type="checkbox"/>	Hardening of the arteries?	<input type="checkbox"/>	<input type="checkbox"/>	High Blood Pressure?	<input type="checkbox"/>	<input type="checkbox"/>	Heart failure?	<input type="checkbox"/>	<input type="checkbox"/>	Stoke or Transient Ischemic Attack (TIA)?	<input type="checkbox"/>	<input type="checkbox"/>	Aneurysms (Dilated arteries)?	<input type="checkbox"/>	<input type="checkbox"/>	Poor circulation or swelling of the hands or feet?	<input type="checkbox"/>	<input type="checkbox"/>	White fingers with cold or vibration?	<input type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">Cardio/Pulmonary</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;"></td> <td style="width:15%; text-align: center;">Normal</td> <td style="width:15%; text-align: center;">Abnormal</td> <td style="width:55%;"></td> </tr> <tr> <td><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Lungs/Chest</td> </tr> <tr> <td><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Heart (thrill, murmur)</td> </tr> <tr> <td><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Vascular (varicosities, stasis, insufficiency)</td> </tr> <tr> <td><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Electrocardiogram - Attach with interpretation, if done</td> </tr> <tr> <td><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Stress EKG - Bruce Protocol, attach with interpretation, if exam requires</td> </tr> </table> <hr/> <p>Pulmonary Function Testing: (Attach Copy)</p> <p>Calibration Date _____ (Should be same day as test) Machine Brand _____</p>					Normal	Abnormal		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lungs/Chest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Heart (thrill, murmur)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vascular (varicosities, stasis, insufficiency)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Electrocardiogram - Attach with interpretation, if done	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Stress EKG - Bruce Protocol, attach with interpretation, if exam requires
	Yes	No																																																											
Do you have any vascular (blood vessel) disease?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Enlarged superficial veins, phlebitis, or blood clots?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Anemia?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Hardening of the arteries?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
High Blood Pressure?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Heart failure?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Stoke or Transient Ischemic Attack (TIA)?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Aneurysms (Dilated arteries)?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Poor circulation or swelling of the hands or feet?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
White fingers with cold or vibration?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
	Normal	Abnormal																																																											
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lungs/Chest																																																										
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Heart (thrill, murmur)																																																										
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vascular (varicosities, stasis, insufficiency)																																																										
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Electrocardiogram - Attach with interpretation, if done																																																										
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Stress EKG - Bruce Protocol, attach with interpretation, if exam requires																																																										
<p style="text-align: center;">RESPIRATORY</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:80%;"></td> <td style="width:5%; text-align: center;">Yes</td> <td style="width:15%; text-align: center;">No</td> </tr> <tr> <td>Do you have any respiratory (lung/airway) disease?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Asthma (including exercise induced asthma)? (Do you use an inhaler?)</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Bronchitis?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Emphysema?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Acute or chronic lung infections?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Persistent or recurring coughing or wheezing?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Wind pipe or lung surgery?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Collapsed lung?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Scoliosis (curved spine) with breathing limitations?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>History of Tuberculosis?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Previous positive TB skin test? Date: _____</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>		Yes	No	Do you have any respiratory (lung/airway) disease?	<input type="checkbox"/>	<input type="checkbox"/>	Asthma (including exercise induced asthma)? (Do you use an inhaler?)	<input type="checkbox"/>	<input type="checkbox"/>	Bronchitis?	<input type="checkbox"/>	<input type="checkbox"/>	Emphysema?	<input type="checkbox"/>	<input type="checkbox"/>	Acute or chronic lung infections?	<input type="checkbox"/>	<input type="checkbox"/>	Persistent or recurring coughing or wheezing?	<input type="checkbox"/>	<input type="checkbox"/>	Wind pipe or lung surgery?	<input type="checkbox"/>	<input type="checkbox"/>	Collapsed lung?	<input type="checkbox"/>	<input type="checkbox"/>	Scoliosis (curved spine) with breathing limitations?	<input type="checkbox"/>	<input type="checkbox"/>	History of Tuberculosis?	<input type="checkbox"/>	<input type="checkbox"/>	Previous positive TB skin test? Date: _____	<input type="checkbox"/>	<input type="checkbox"/>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%; text-align: center;">Actual FVC</td> <td style="width:15%; text-align: center;">Actual FEV1</td> <td style="width:15%; text-align: center;">Actual FEV1/FVC</td> <td style="width:15%; text-align: center;">Actual FEF 25-75</td> </tr> <tr> <td style="text-align: center;">%Predicted FVC</td> <td style="text-align: center;">%Predicted FEV1</td> <td style="text-align: center;">%Predicted FEV1/FVC</td> <td style="text-align: center;">%Predicted FEF 25-75</td> </tr> </table> <p>Comments/Findings on Vascular / Respiratory / Heart sections</p>				Actual FVC	Actual FEV1	Actual FEV1/FVC	Actual FEF 25-75	%Predicted FVC	%Predicted FEV1	%Predicted FEV1/FVC	%Predicted FEF 25-75	<p style="text-align: center;">CHEST X-RAY</p> <p>Last PA Chest X-ray: Date _____ Result: <input type="checkbox"/> Normal <input type="checkbox"/> Abnormal</p> <p>Comments: _____</p> <p>TB Mantoux (PPD) Date: _____ mm Induration: _____</p> <p style="text-align: center;">VITAL SIGNS</p> <p>Height _____ (inches) Weight _____ (pounds)</p> <p>Blood Pressure _____ / _____ mm/hg</p> <p>Pulse _____ /MIN (Conduct vital sign measurements while sitting; if elevated, repeat in 15 min.)</p>												
	Yes	No																																																											
Do you have any respiratory (lung/airway) disease?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Asthma (including exercise induced asthma)? (Do you use an inhaler?)	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Bronchitis?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Emphysema?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Acute or chronic lung infections?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Persistent or recurring coughing or wheezing?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Wind pipe or lung surgery?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Collapsed lung?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Scoliosis (curved spine) with breathing limitations?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
History of Tuberculosis?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Previous positive TB skin test? Date: _____	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Actual FVC	Actual FEV1	Actual FEV1/FVC	Actual FEF 25-75																																																										
%Predicted FVC	%Predicted FEV1	%Predicted FEV1/FVC	%Predicted FEF 25-75																																																										
<p style="text-align: center;">HEART</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:80%;"></td> <td style="width:5%; text-align: center;">Yes</td> <td style="width:15%; text-align: center;">No</td> </tr> <tr> <td>Do you have any heart disease?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Heart pain (Angina)?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Heart rhythm disturbance or palpitations (irregular beat)?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>History of Heart Attack?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Organic heart disease (including prosthetic heart valves, mitral stenosis, heart block, heart murmur, mitral valve prolapse, pacemakers, Wolf Parkinson White (WPW) Syndrome, etc.)?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Heart surgery?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Sudden loss of consciousness?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Other (specify)?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>		Yes	No	Do you have any heart disease?	<input type="checkbox"/>	<input type="checkbox"/>	Heart pain (Angina)?	<input type="checkbox"/>	<input type="checkbox"/>	Heart rhythm disturbance or palpitations (irregular beat)?	<input type="checkbox"/>	<input type="checkbox"/>	History of Heart Attack?	<input type="checkbox"/>	<input type="checkbox"/>	Organic heart disease (including prosthetic heart valves, mitral stenosis, heart block, heart murmur, mitral valve prolapse, pacemakers, Wolf Parkinson White (WPW) Syndrome, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	Heart surgery?	<input type="checkbox"/>	<input type="checkbox"/>	Sudden loss of consciousness?	<input type="checkbox"/>	<input type="checkbox"/>	Other (specify)?	<input type="checkbox"/>	<input type="checkbox"/>	<p>Respirations _____ /MIN Temp(if indicated) _____</p> <p style="text-align: center;">IMMUNIZATIONS</p> <p>Last Tetanus (Td) Shot (Date): _____ Given today? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Has client received Hepatitis B Vaccine? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Declined <input type="checkbox"/> Not Applicable</p> <p>Hep B series complete? <input type="checkbox"/> Yes <input type="checkbox"/> No When? _____ Date Immunization #1: _____ #2: _____ #3: _____</p> <p>Has client received Hepatitis A Vaccine? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Declined <input type="checkbox"/> Not Applicable</p> <p>Hep A series complete? <input type="checkbox"/> Yes <input type="checkbox"/> No Date Immunization #1: _____ #2: _____</p>																																	
	Yes	No																																																											
Do you have any heart disease?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Heart pain (Angina)?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Heart rhythm disturbance or palpitations (irregular beat)?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
History of Heart Attack?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Organic heart disease (including prosthetic heart valves, mitral stenosis, heart block, heart murmur, mitral valve prolapse, pacemakers, Wolf Parkinson White (WPW) Syndrome, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Heart surgery?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Sudden loss of consciousness?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Other (specify)?	<input type="checkbox"/>	<input type="checkbox"/>																																																											
<p style="text-align: center;">HEART</p> <p>Cardiac Risk Profile (record here, or attach report)</p> <p>Chol _____ HDL _____ LDL _____ Trig _____ Gluc _____</p> <p>Attach copy of complete blood count (CBC) report, including differential</p>					<p style="text-align: center;">CORONARY RISK FACTORS</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:80%;"></td> <td style="width:5%; text-align: center;">Yes</td> <td style="width:15%; text-align: center;">No</td> </tr> <tr> <td>Blood Pressure \geq 145/90</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Fasting Glucose \geq 120 mg/dl</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Total Cholesterol \geq 200 mg/dl</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Obesity</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>No regular exercise program</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Currently smoking or \geq pack/yr history</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>						Yes	No	Blood Pressure \geq 145/90	<input type="checkbox"/>	<input type="checkbox"/>	Fasting Glucose \geq 120 mg/dl	<input type="checkbox"/>	<input type="checkbox"/>	Total Cholesterol \geq 200 mg/dl	<input type="checkbox"/>	<input type="checkbox"/>	Obesity	<input type="checkbox"/>	<input type="checkbox"/>	No regular exercise program	<input type="checkbox"/>	<input type="checkbox"/>	Currently smoking or \geq pack/yr history	<input type="checkbox"/>	<input type="checkbox"/>																															
	Yes	No																																																											
Blood Pressure \geq 145/90	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Fasting Glucose \geq 120 mg/dl	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Total Cholesterol \geq 200 mg/dl	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Obesity	<input type="checkbox"/>	<input type="checkbox"/>																																																											
No regular exercise program	<input type="checkbox"/>	<input type="checkbox"/>																																																											
Currently smoking or \geq pack/yr history	<input type="checkbox"/>	<input type="checkbox"/>																																																											

MEDICAL HISTORY			DIAGNOSTIC AND PHYSICAL FINDINGS																																																																																																		
<p style="text-align: center;">ENDOCRINE</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 5%; text-align: center;">Yes</th> <th style="width: 15%; text-align: center;">No</th> </tr> </thead> <tbody> <tr><td>Do you have any endocrine (hormone) disease?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Diabetes (insulin requiring; units per day _____)? (Year of diagnosis _____)</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Diabetes (non-insulin requiring)? (Year of diagnosis _____)</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Childhood Onset Diabetes?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Thyroid Disease?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Obesity?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Unexplained weight loss or gain?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> </tbody> </table>		Yes	No	Do you have any endocrine (hormone) disease?	<input type="checkbox"/>	<input type="checkbox"/>	Diabetes (insulin requiring; units per day _____)? (Year of diagnosis _____)	<input type="checkbox"/>	<input type="checkbox"/>	Diabetes (non-insulin requiring)? (Year of diagnosis _____)	<input type="checkbox"/>	<input type="checkbox"/>	Childhood Onset Diabetes?	<input type="checkbox"/>	<input type="checkbox"/>	Thyroid Disease?	<input type="checkbox"/>	<input type="checkbox"/>	Obesity?	<input type="checkbox"/>	<input type="checkbox"/>	Unexplained weight loss or gain?	<input type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">OBSTETRIC</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 10%; text-align: center;">Yes</th> <th style="width: 10%; text-align: center;">No</th> <th style="width: 20%; text-align: center;">NA*</th> </tr> </thead> <tbody> <tr><td>Are you currently pregnant?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> </tbody> </table> <p>*Male; question not applicable</p>		Yes	No	NA*	Are you currently pregnant?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Comments/Findings (Attach copy of blood chemistry panel report.)</p>																																																																			
	Yes	No																																																																																																			
Do you have any endocrine (hormone) disease?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Diabetes (insulin requiring; units per day _____)? (Year of diagnosis _____)	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Diabetes (non-insulin requiring)? (Year of diagnosis _____)	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Childhood Onset Diabetes?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Thyroid Disease?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Obesity?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Unexplained weight loss or gain?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
	Yes	No	NA*																																																																																																		
Are you currently pregnant?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																		
<p style="text-align: center;">MENTAL HEALTH</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 5%; text-align: center;">Yes</th> <th style="width: 15%; text-align: center;">No</th> </tr> </thead> <tbody> <tr><td>Do you have any psychiatric or mental health problems?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>History of psychosis?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Psychiatric/psychological consultation?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Difficulty dealing with stress?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Panic attacks, hyperventilation, or anxiety or phobia disorder?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Periods of uncontrollable rage?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Claustrophobia?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Diagnosed depression, personality disorder, or neuroses?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> </tbody> </table>		Yes	No	Do you have any psychiatric or mental health problems?	<input type="checkbox"/>	<input type="checkbox"/>	History of psychosis?	<input type="checkbox"/>	<input type="checkbox"/>	Psychiatric/psychological consultation?	<input type="checkbox"/>	<input type="checkbox"/>	Difficulty dealing with stress?	<input type="checkbox"/>	<input type="checkbox"/>	Panic attacks, hyperventilation, or anxiety or phobia disorder?	<input type="checkbox"/>	<input type="checkbox"/>	Periods of uncontrollable rage?	<input type="checkbox"/>	<input type="checkbox"/>	Claustrophobia?	<input type="checkbox"/>	<input type="checkbox"/>	Diagnosed depression, personality disorder, or neuroses?	<input type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">DERMATOLOGY/ALLERGY</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 10%; text-align: center;">Yes</th> <th style="width: 10%; text-align: center;">No</th> </tr> </thead> <tbody> <tr><td>Do you have any skin or allergy diseases?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Sun sensitivity?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Allergic dermatitis to rubber or latex?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>History of chronic dermatitis?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Active skin disease or infections?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Moles that have changed in size or color?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Allergies, including hay fever? (If so, to what?)</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> </tbody> </table>		Yes	No	Do you have any skin or allergy diseases?	<input type="checkbox"/>	<input type="checkbox"/>	Sun sensitivity?	<input type="checkbox"/>	<input type="checkbox"/>	Allergic dermatitis to rubber or latex?	<input type="checkbox"/>	<input type="checkbox"/>	History of chronic dermatitis?	<input type="checkbox"/>	<input type="checkbox"/>	Active skin disease or infections?	<input type="checkbox"/>	<input type="checkbox"/>	Moles that have changed in size or color?	<input type="checkbox"/>	<input type="checkbox"/>	Allergies, including hay fever? (If so, to what?)	<input type="checkbox"/>	<input type="checkbox"/>	<p>Comments/Findings</p>																																																
	Yes	No																																																																																																			
Do you have any psychiatric or mental health problems?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
History of psychosis?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Psychiatric/psychological consultation?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Difficulty dealing with stress?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Panic attacks, hyperventilation, or anxiety or phobia disorder?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Periods of uncontrollable rage?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Claustrophobia?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Diagnosed depression, personality disorder, or neuroses?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
	Yes	No																																																																																																			
Do you have any skin or allergy diseases?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Sun sensitivity?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Allergic dermatitis to rubber or latex?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
History of chronic dermatitis?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Active skin disease or infections?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Moles that have changed in size or color?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Allergies, including hay fever? (If so, to what?)	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
<p style="text-align: center;">MUSCULOSKELETAL</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 5%; text-align: center;">Yes</th> <th style="width: 15%; text-align: center;">No</th> </tr> </thead> <tbody> <tr><td>Do you have any muscle or bone disease?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Moderate to severe joint pain, arthritis, tendonitis?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Amputations?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Loss of use of arm, leg, fingers, or toes?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Loss of sensation?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Loss of strength in hands, arms, legs or feet?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Loss of coordination?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Back injury?</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Chronic back pain? (back pain associated with neurological deficit or leg pain)</td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Are you RIGHT <input type="checkbox"/> or LEFT <input type="checkbox"/> handed? (check one)</td><td></td><td></td></tr> </tbody> </table>		Yes	No	Do you have any muscle or bone disease?	<input type="checkbox"/>	<input type="checkbox"/>	Moderate to severe joint pain, arthritis, tendonitis?	<input type="checkbox"/>	<input type="checkbox"/>	Amputations?	<input type="checkbox"/>	<input type="checkbox"/>	Loss of use of arm, leg, fingers, or toes?	<input type="checkbox"/>	<input type="checkbox"/>	Loss of sensation?	<input type="checkbox"/>	<input type="checkbox"/>	Loss of strength in hands, arms, legs or feet?	<input type="checkbox"/>	<input type="checkbox"/>	Loss of coordination?	<input type="checkbox"/>	<input type="checkbox"/>	Back injury?	<input type="checkbox"/>	<input type="checkbox"/>	Chronic back pain? (back pain associated with neurological deficit or leg pain)	<input type="checkbox"/>	<input type="checkbox"/>	Are you RIGHT <input type="checkbox"/> or LEFT <input type="checkbox"/> handed? (check one)			<p style="text-align: center;">MUSCULOSKELETAL</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 15%; text-align: center;">Normal</th> <th style="width: 15%; text-align: center;">Abnormal</th> <th style="width: 55%;"></th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Upper extremities (strength)</td></tr> <tr><td><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Upper extremities (range of motion)</td></tr> <tr><td><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Lower extremities (strength)</td></tr> <tr><td><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Lower extremities (range of motion)</td></tr> <tr><td><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Feet</td></tr> <tr><td><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Hands</td></tr> <tr><td><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Spine, other musculoskeletal</td></tr> <tr><td><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Flexibility of neck, back, spine, hips, knees</td></tr> </tbody> </table> <p>Comments/Findings</p>		Normal	Abnormal		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Upper extremities (strength)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Upper extremities (range of motion)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lower extremities (strength)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lower extremities (range of motion)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Feet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Spine, other musculoskeletal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flexibility of neck, back, spine, hips, knees	<p>Please assess the following, if box is checked: <input type="checkbox"/></p> <p><u>Medically cleared to perform the following:</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%; text-align: center;">Yes</th> <th style="width: 10%; text-align: center;">No</th> <th style="width: 80%;"></th> </tr> </thead> <tbody> <tr><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Vigorous aerobic exercise program 3 hr/wk</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Push ups</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Pull ups</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Sit ups</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>One and one half mile (1 1/2) timed run</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>3-mile timed walk</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Squat/rise w/o holding on; hold squat 45 sec.</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Kneel on one knee, arms extended for 7 sec.</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td style="text-align: center;"><input type="checkbox"/></td><td>Assume a 1 then 2 knee kneeling position within 2 seconds, rise without assistance, repeat</td></tr> </tbody> </table> <p>Comments/Findings</p>	Yes	No		<input type="checkbox"/>	<input type="checkbox"/>	Vigorous aerobic exercise program 3 hr/wk	<input type="checkbox"/>	<input type="checkbox"/>	Push ups	<input type="checkbox"/>	<input type="checkbox"/>	Pull ups	<input type="checkbox"/>	<input type="checkbox"/>	Sit ups	<input type="checkbox"/>	<input type="checkbox"/>	One and one half mile (1 1/2) timed run	<input type="checkbox"/>	<input type="checkbox"/>	3-mile timed walk	<input type="checkbox"/>	<input type="checkbox"/>	Squat/rise w/o holding on; hold squat 45 sec.	<input type="checkbox"/>	<input type="checkbox"/>	Kneel on one knee, arms extended for 7 sec.	<input type="checkbox"/>	<input type="checkbox"/>	Assume a 1 then 2 knee kneeling position within 2 seconds, rise without assistance, repeat
	Yes	No																																																																																																			
Do you have any muscle or bone disease?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Moderate to severe joint pain, arthritis, tendonitis?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Amputations?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Loss of use of arm, leg, fingers, or toes?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Loss of sensation?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Loss of strength in hands, arms, legs or feet?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Loss of coordination?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Back injury?	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Chronic back pain? (back pain associated with neurological deficit or leg pain)	<input type="checkbox"/>	<input type="checkbox"/>																																																																																																			
Are you RIGHT <input type="checkbox"/> or LEFT <input type="checkbox"/> handed? (check one)																																																																																																					
	Normal	Abnormal																																																																																																			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Upper extremities (strength)																																																																																																		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Upper extremities (range of motion)																																																																																																		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lower extremities (strength)																																																																																																		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lower extremities (range of motion)																																																																																																		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Feet																																																																																																		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hands																																																																																																		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Spine, other musculoskeletal																																																																																																		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flexibility of neck, back, spine, hips, knees																																																																																																		
Yes	No																																																																																																				
<input type="checkbox"/>	<input type="checkbox"/>	Vigorous aerobic exercise program 3 hr/wk																																																																																																			
<input type="checkbox"/>	<input type="checkbox"/>	Push ups																																																																																																			
<input type="checkbox"/>	<input type="checkbox"/>	Pull ups																																																																																																			
<input type="checkbox"/>	<input type="checkbox"/>	Sit ups																																																																																																			
<input type="checkbox"/>	<input type="checkbox"/>	One and one half mile (1 1/2) timed run																																																																																																			
<input type="checkbox"/>	<input type="checkbox"/>	3-mile timed walk																																																																																																			
<input type="checkbox"/>	<input type="checkbox"/>	Squat/rise w/o holding on; hold squat 45 sec.																																																																																																			
<input type="checkbox"/>	<input type="checkbox"/>	Kneel on one knee, arms extended for 7 sec.																																																																																																			
<input type="checkbox"/>	<input type="checkbox"/>	Assume a 1 then 2 knee kneeling position within 2 seconds, rise without assistance, repeat																																																																																																			

MEDICAL HISTORY			DIAGNOSTIC AND PHYSICAL FINDINGS					
<p align="center">NEUROLOGICAL</p> <p>Do you have any neurological disease? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Tremors, shakiness? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Seizures (recent or previous)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Spinal Cord Injury? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Numbness or tingling? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Head/spine surgery? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>History of head trauma with persistent deficits? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Chronic recurring headaches (migraine)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Brain tumor? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Loss of memory? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Insomnia (difficulty sleeping)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>			<p>NEUROLOGICAL</p> <p>Normal Abnormal</p> <p><input type="checkbox"/> <input type="checkbox"/> Cranial Nerves (I - XII)</p> <p><input type="checkbox"/> <input type="checkbox"/> Cerebellum</p> <p><input type="checkbox"/> <input type="checkbox"/> Motor/Sensory (include vibratory and proprioception)</p> <p><input type="checkbox"/> <input type="checkbox"/> Deep Tendon reflexes</p> <p><input type="checkbox"/> <input type="checkbox"/> Mental Status Exam</p>			Comments/Findings		
<p align="center">GASTROINTESTINAL</p> <p>Do you have any stomach or intestinal disease? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Hernias? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Colostomy? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Persistent stomach/abdominal pain or heartburn? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Active ulcer disease? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Hepatitis or other liver disease? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Irritable bowel syndrome? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Rectal bleeding? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Vomiting blood? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>			<p>GASTROINTESTINAL</p> <p>Normal Abnormal</p> <p><input type="checkbox"/> <input type="checkbox"/> Auscultation</p> <p><input type="checkbox"/> <input type="checkbox"/> Palpation</p> <p><input type="checkbox"/> <input type="checkbox"/> Organo-megaly</p> <p><input type="checkbox"/> <input type="checkbox"/> Tenderness</p> <p><input type="checkbox"/> <input type="checkbox"/> Inguinal hernia</p> <p>Attach blood chemistry panel report</p>			Comments/Findings		
<p align="center">GENITOURINARY</p> <p>Do you have any disease of the urinary system or genitals? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Blood in urine? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Kidney Stones? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Difficult or painful urination? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Infertility (difficulty having children)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>			<p>GENITOURINARY</p> <p>Normal Abnormal</p> <p><input type="checkbox"/> <input type="checkbox"/> Urogenital exam</p> <p>(Attach urinalysis report, if done.)</p>			Comments/Findings		

MEDICAL HISTORY

VISION

	Yes	No
Do you have any vision problems or eye disease?	<input type="checkbox"/>	<input type="checkbox"/>
Frequent headaches?	<input type="checkbox"/>	<input type="checkbox"/>
Blurred vision?	<input type="checkbox"/>	<input type="checkbox"/>
Loss of vision in either eye?	<input type="checkbox"/>	<input type="checkbox"/>
Eye irritation when using a respirator or goggles?	<input type="checkbox"/>	<input type="checkbox"/>
Difficulty reading?	<input type="checkbox"/>	<input type="checkbox"/>
Eye disease, glaucoma?	<input type="checkbox"/>	<input type="checkbox"/>
Eyeglasses?	<input type="checkbox"/>	<input type="checkbox"/>
Contact lenses?	<input type="checkbox"/>	<input type="checkbox"/>
Cataracts?	<input type="checkbox"/>	<input type="checkbox"/>
Color blindness?	<input type="checkbox"/>	<input type="checkbox"/>
Have you had any type of eye surgery], (e.g., radial keratotomy, PRK [laser] cataract, etc.)? If "YES", please provide specific type and date of surgery:	<input type="checkbox"/>	<input type="checkbox"/>

HEARING

	Yes	No
Do you have any hearing problems or ear disease?	<input type="checkbox"/>	<input type="checkbox"/>
Exposure to loud, constant noise or music in the last 14 hours?	<input type="checkbox"/>	<input type="checkbox"/>
Exposure to loud, impact noise in past 14 hours?	<input type="checkbox"/>	<input type="checkbox"/>
Ringing in the ears?	<input type="checkbox"/>	<input type="checkbox"/>
Difficulty hearing?	<input type="checkbox"/>	<input type="checkbox"/>
Ear infections or cold in the last 2 weeks?	<input type="checkbox"/>	<input type="checkbox"/>
Dizziness or balance problems?	<input type="checkbox"/>	<input type="checkbox"/>
Eardrum perforation?	<input type="checkbox"/>	<input type="checkbox"/>
Do you use a hearing aide?	<input type="checkbox"/>	<input type="checkbox"/>
Are you in a Hearing Conservation Program?	<input type="checkbox"/>	<input type="checkbox"/>
Do you use protective hearing equipment?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, type(s): <input type="checkbox"/> foam <input type="checkbox"/> pre-mold/plugs <input type="checkbox"/> ear muffs		
Have you had prior Military Service?	<input type="checkbox"/>	<input type="checkbox"/>
Have you had prior ear surgery?	<input type="checkbox"/>	<input type="checkbox"/>
Have you had recurrent ear infections?	<input type="checkbox"/>	<input type="checkbox"/>

DIAGNOSTIC AND PHYSICAL FINDINGS

HEAD AND NECK

Normal	Abnormal	
<input type="checkbox"/>	<input type="checkbox"/>	Head, Face, Neck (thyroid), Scalp
<input type="checkbox"/>	<input type="checkbox"/>	Nose/Sinuses/Eustachian tube
<input type="checkbox"/>	<input type="checkbox"/>	Mouth/Throat
<input type="checkbox"/>	<input type="checkbox"/>	Pupils equal/reactive
<input type="checkbox"/>	<input type="checkbox"/>	Ocular Motility
<input type="checkbox"/>	<input type="checkbox"/>	Ophthalmoscopic Findings
<input type="checkbox"/>	<input type="checkbox"/>	Speech

Comments/Findings

EYES / VISION

Color Vision

Normal	Abnormal	Number Correct:
<input type="checkbox"/>	<input type="checkbox"/>	_____ of _____ tested
Can see Red/Green/Yellow?		<input type="checkbox"/> Yes <input type="checkbox"/> No

Type of test

<input type="checkbox"/> Ishihara plate	<input type="checkbox"/> Function test (Yarn, wire, etc.)
<input type="checkbox"/> Other (specify _____)	

Tonometry

Right _____ mm/Hg Left _____ mm/Hg

Visual Acuity

Corrected vision (Snellen Units)

Both Near 20/_____ Right Near 20/_____ Left Near 20/_____

Both Far 20/_____ Right Far 20/_____ Left Far 20/_____

Uncorrected vision (Snellen Units)

Both Near 20/_____ Right Near 20/_____ Left Near 20/_____

Both Far 20/_____ Right Far 20/_____ Left Far 20/_____

Peripheral Vision

Right	Nasal _____ degrees	Temporal _____ degrees
Left	Nasal _____ degrees	Temporal _____ degrees

Depth Perception (Type of test: _____)

_____ Seconds of Arc Number Correct: _____ of _____ tested

Interpretation:

<input type="checkbox"/> Normal	<input type="checkbox"/> Abnormal
---------------------------------	-----------------------------------

EARS

Right	Abnormal	
<input type="checkbox"/>	<input type="checkbox"/>	Canal/External ear
<input type="checkbox"/>	<input type="checkbox"/>	Tympanic Membrane
Left		
<input type="checkbox"/>	<input type="checkbox"/>	Canal/External ear
<input type="checkbox"/>	<input type="checkbox"/>	Tympanic Membrane

Comments/Findings:

HEARING

Audiogram: Type: Baseline Annual Termination With hearing aid? Yes No
(Attach current and baseline audiogram) (Note: The use of hearing aids is not acceptable for some
clearance examinations, such as for law enforcement.)
Calibration Method: Oscar Biological Date

Frequency	500Hz	1000Hz	2000Hz	3000Hz	4000Hz	6000Hz	8000Hz
Right ear							
Left ear							

Review/compare with baseline: No Change Mild Change Change of 10 dB ave. or more in 2000, 3000, and 4000 Hz
 Normal Abnormal Explain

PROFESSIONAL STAFF Please check all the topics you discussed during the diagnostic work-up or physical examination	EXAMINING PHYSICIAN: WORKPLACE EXPOSURE MONITORING	EXAMINING PHYSICIAN Summary of Abnormal Findings with Plan of Action/Referral
<input type="checkbox"/> Diet <input type="checkbox"/> Low-calorie <input type="checkbox"/> Low-fat <input type="checkbox"/> Low-salt <input type="checkbox"/> Cholesterol <input type="checkbox"/> Hypertension <input type="checkbox"/> Exercise <input type="checkbox"/> Obesity <input type="checkbox"/> Smoking Cessation <input type="checkbox"/> Avoid Sun Exposure/Sun Screen <input type="checkbox"/> Alcohol Use <input type="checkbox"/> Cancer Screening <input type="checkbox"/> Immunizations <input type="checkbox"/> Hearing Protection <input type="checkbox"/> Vision Referral <input type="checkbox"/> Other Personal Protective Equipment <input type="checkbox"/> Job Stressors <input type="checkbox"/> Referral(s) Others	Is workplace monitoring data or other exposure data for this employee or this position available for your review? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, what type of data is available? <input type="checkbox"/> Acute Exposure Data <input type="checkbox"/> Periodic Exposure Data <input type="checkbox"/> Ongoing Workplace Monitoring Data <input type="checkbox"/> Individual Dosimetry Data <input type="checkbox"/> Material Safety Data Sheets How was data made available? <input type="checkbox"/> Electronic Database <input type="checkbox"/> Hard Copy Report <input type="checkbox"/> Employee Self-Report If exposure data was available, please explain what changes, if any, were made in the examination due to this data: Based upon your knowledge of the physical demands of the position and/or the potential exposure to occupational hazards, please answer the following: Does the employee need to be in a medical surveillance program? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Cannot determine based on information available <input type="checkbox"/> Other	<u>Impressions:</u> <u>1)</u> <u>2)</u> <u>3)</u> <u>4)</u> <u>5)</u> <u>Plan:</u> <u>1)</u> <u>2)</u> <u>3)</u> <u>4)</u> <u>5)</u>

SIGNATURES

DATE

Nurse: _____

Examining Physician: _____

I have had the examination findings explained to me. I understand these explanations and recommendations, and understand that this examination does not substitute for periodic health evaluations conducted by my personal physician; it has been conducted for occupational purposes only. I have received a copy of the examination results to share with my personal physician: Yes No

Examinee (person having the examination): _____

PLEASE BE SURE ALL REQUIRED SECTIONS OF THIS FORM HAVE BEEN COMPLETED AND ARE LEGIBLE, AND ALL INDICATED SIGNATURES HAVE BEEN ENTERED, BEFORE RETURNING IT FOR REVIEW BY THE DESIGNATED AGENCY REVIEWING MEDICAL OFFICER. THANK YOU.

**Medical Review Officer's Qualification Statement
(to be completed only by the designated reviewing physician for this agency)**

Name of Examined Individual: _____

Physician/Clinic Address: _____

SS#: _____

Date of Birth: _____

Physician/Clinic Phone: _____

POSITION(S) OR FUNCTION(S) FOR WHICH CLEARANCE(S) HAVE BEEN REQUESTED
[please check all that apply]

<u>Functional Clearance Area</u>	<u>Pre-placement / Baseline / Exit</u>		<u>Periodic</u>	<u>Functional Clearance Area</u>	<u>Pre-placement / Baseline / Exit</u>	
<u>Periodic</u>						
Respirator Use	<input type="checkbox"/>	<input type="checkbox"/>		Hazardous Waste Work	<input type="checkbox"/>	<input type="checkbox"/>
Law Enforcement	<input type="checkbox"/>	<input type="checkbox"/>		Inspector	<input type="checkbox"/>	<input type="checkbox"/>
Diver	<input type="checkbox"/>	<input type="checkbox"/>		Tower Climber	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Worker	<input type="checkbox"/>	<input type="checkbox"/>		Other (specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>
Commercial Driver's License	<input type="checkbox"/>	<input type="checkbox"/>		Other (specify: _____)	<input type="checkbox"/>	<input type="checkbox"/>

This review is based on:

Report of Medical Examination, Dated: _____

Supplemental Medical Information, Dated: _____

Findings:

No Significant Findings - Individual meets the Department's medical standards for the function(s) / clearance(s) requested.

A Final Determination Cannot be Made Based on Available Medical Information – The following results were inconclusive and require further information or additional testing. Final recommendations cannot be made until this has been completed. The requested information should be provided within 30 days of the review date to the Medical Review Officer at the address noted at the bottom of this page.

Significant Medical Findings - The individual does not meet the Department's medical standards for the safe and efficient performance of the duties of the function(s) / clearance(s) requested.

Date of Initial Medical Review: _____

Reviewing Physician: _____

Date of Final Medical Review: _____

Signature: _____

Reviewer's Address: _____

DI-7005 – Privacy Act Notification Form

The following document is the two-page (front and back) DOI Privacy Act Notification Form. The DOI Standard Medical History and Examination Form contains a Privacy Act notice and a section to designate an authorization for release of information. If this DOI form is not used, the following Privacy Act Notification Form should be provided to employees who are to receive clinical services from which the agency will be receiving reports or summaries. While a signature on the Privacy Act Notification form is recommended, signing the form is not considered mandatory.

U. S. DEPARTMENT OF THE INTERIOR
PRIVACY ACT NOTIFICATION FORM (DI-7005)

The following information is provided in order to comply with the requirements of the Privacy Act of 1974, and is consistent with the provisions of 5 CFR 293, 5 USC 2951(2) and 3301, Executive Orders 12107 and 12564, and the Departmental Manual 370 DM 293.

The health services you receive related to your employment with the Department of the Interior result in the gathering and recording of information that is personal and may be highly confidential. Depending on the provider of services (i.e., Departmental, other federal agency, or private health services agency), original documents or copies will be placed in an Employee Medical Folder (EMF), which is a distinct part of your official personnel folder. The EMF is maintained within the Employee Medical File System (EMFS) of the employing Department, Bureau, or individual office. The categories of records contained in your EMF are: 1) occupational medical records; 2) employee exposure records; and 3) records resulting from the testing for use of illegal drugs.

The records may be maintained in a manual or electronic system. Regardless of location, the information these folders contain is yours, and is considered privileged. Protecting the physical security of your record, as well as the information it contains, is the responsibility ultimately of the Department's Director of Personnel, with delegations of responsibility to the heads of the employing bureau or office, and the personnel officer of the employing bureau or office. The provider of clinical services also is held responsible for the security of all confidential information for which they have records.

Unless it is with your written consent, the information in your EMF is only for official purposes as specified by law. Those purposes include the following:

- a. To ensure that records required to be retained on a long-term basis to meet the mandates of law, Executive order, or regulations (e.g., the Department of Labor's Occupational Safety and Health Administration (OSHA) and OWCP regulations), are so maintained.
- b. To provide data necessary for proper medical evaluations and diagnoses, to ensure that proper treatment is administered, and to maintain continuity of medical care.
- c. To provide an accurate medical history of the total health care and medical treatment received by the individual as well as job and/or hazard exposure documentation and health monitoring in relation to health status and claims of the individual.
- d. To enable the planning for further care of the patient.
- e. To provide a record of communications among members of the health care team who contribute to the patient's care.
- f. To provide a legal document describing the health care administered and any exposure incident.
- g. To provide a method for evaluating quality of health care rendered and job-health-protection including engineering protection provided, protective equipment worn, workplace monitoring, and medical exam monitoring required by OSHA or by good practice.
- h. To ensure that all relevant, necessary, accurate, and timely data are available to support any medically-related employment decisions affecting the subject of the records (e.g., in connection with fitness-for-duty and disability retirement decisions).
- i. To document claims filed with and the decisions reached by the OWCP and the individual's possible reemployment rights under statutes governing that program.
- j. To document employee's reporting of on-the-job injuries or unhealthy or unsafe working conditions, including the reporting of such conditions to the OSHA and actions taken by that agency or by the employing agency.
- k. To ensure proper and accurate operation of the agency's employee drug testing program under Executive Order 12564.

The "Routine Uses" of your EMF are summarized on the back of this page.

Your receipt of health services as part of your employment, and your submission of confidential information to your EMF, are **voluntary**. If you do not wish to participate in these services, or provide the requested information, you are not required to do so. However, your continued employment or assignment to specific duties may depend on the availability of complete and current occupational health records. Lacking such information, the Department may be required to take personnel action related to your employment.

ACKNOWLEDGMENT OF REVIEW OF PRIVACY ACT INFORMATION

I have reviewed the Department of the Interior Privacy Act Notification Form and understand the use of my confidential medical information within the Department's Employee Medical File System.

(Signature)

(Date)

ROUTINE USES ALLOWED FOR EMPLOYEE MEDICAL FILE SYSTEM RECORDS

- a. To disclose information to the Department of Labor, Department of Veterans Affairs, Social Security Administration, Federal Retirement Thrift Investment Board, or a national, State, or local social security type agency, when necessary to adjudicate a claim (filed by or on behalf of the individual) under a retirement, insurance, or health benefit program.
- b. To disclose information to a Federal, State, or local agency to the extent necessary to comply with laws governing reporting of communicable disease.
- c. To disclose information to another Federal agency, to a court, or a party in litigation before a court or in an administrative proceeding being conducted by a Federal agency when the Government is a party to the judicial or administrative proceeding.
- d. To disclose information to the Department of Justice, or in a proceeding before a court, adjudicative body, other administrative body before which the agency is authorized to appear, when:
 1. The agency, or any component thereof; or
 2. Any employee of the agency in his or her official capacity; or
 3. Any employee of the agency in his or her individual capacity where the Department of Justice or the agency has agreed to represent the employee; or
 4. The United States, where the agency determines that litigation is likely to affect the agency or any of its components, is a party to litigation or has an interest in such litigation, and the use of such records by the Department of Justice or the agency is deemed by the agency to be relevant and necessary to the litigation, provided, however, that in each case it has been determined that the disclosure is compatible with the purpose for which the records were collected.
- e. To disclose in response to a request for discovery or for appearance of a witness, information that is relevant to the subject matter involved in a pending judicial or administrative proceeding.
- f. To disclose pertinent information to the appropriate Federal, State, or local agency responsible for investigating, prosecuting, enforcing, or implementing a statute, rule, regulation, or order when the disclosing agency becomes aware of an indication of a violation or potential violation of civil or criminal law or regulation.
- g. To disclose information to the Office of Management and Budget at any stage in the legislative coordination and clearance process in connection with private relief legislation as set forth in OMB Circular No. A-19.
- h. To disclose information to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.
- i. To disclose information to the Merit System Protection Board or the Office of the Special Counsel, the Federal Labor Relations Authority and its General Counsel, the Equal Employment Opportunity Commission, arbitrators, and hearing examiners to the extent necessary to carry out their authorized duties.
- j. To disclose information to survey team members from the Joint Commission on Accreditation of Hospitals (JCAH) when requested in connection with an accreditation review, but only to the extent that the information is relevant and necessary to meet the JCAH standards.
- k. To disclose information to the National Archives and Records Administration in records management inspections and its role as Archivist.
- l. To disclose information to health insurance carriers contracting with the Office to provide a health benefits plan under the Federal Employees Health Benefits Program information necessary to verify eligibility for payment of a claim for health benefits.
- m. By the agency maintaining or responsible for generating the records to locate individuals for health research or survey response and in the production of summary descriptive statistics and analytical studies (e.g., epidemiological studies) in support of the function for which the records are collected and maintained. While published statistics and studies do not contain individual identifiers, in some instances the selection of elements of data included in the study might be structured in such a way as to make the data individually identifiable by inference.
- n. To disclose information to the Office of Federal Employees Group Life Insurance or Federal Retirement Thrift Investment Board that is relevant and necessary to adjudicate claims.
- o. To disclose information, when an individual to whom a record pertains is mentally incompetent or under other legal disability, to any person who is responsible for the care of the individual, to the extent necessary.
- p. To disclose to the agency-appointed representative of an employee, all notices, determinations, decisions, or other written communications issued to the employee, in connection with an examination ordered by the agency under--
 - (1) Medical evaluation (formerly Fitness for Duty) examinations procedures; or
 - (2) Agency-filed disability retirement procedures.
- q. To disclose to a requesting agency, organization, or individual the home address and other information concerning those individuals who it is reasonably believed might have contracted an illness or been exposed to or suffered from a health hazard while employed in the Federal workforce.
- r. To disclose information to a Federal agency, in response to its request or at the initiation of the agency maintaining the records, in connection with the retention of an employee, the issuance of a security clearance, the conducting of a suitability or security investigation of an individual, the classifying of jobs, the letting of a contract, or the issuance of a license, grant, or other benefit by the requesting agency; or the lawful, statutory, administrative, or investigative purpose of the agency, to the extent that the information is relevant and necessary to the requesting agency's decision on the matter.
- s. To disclose to any Federal, State, or local government agency, in response to its request or at the initiation of the agency maintaining the records, information relevant and necessary to the lawful, statutory, administrative, or investigatory purpose of that agency as it relates to the conduct of job related epidemiological research or the insurance of compliance with Federal, State, or local government laws on health and safety in the work environment.
- t. To disclose to officials of labor organizations recognized under 5 U.S.C. chapter 71, analyses using exposure or medical records and employee exposure records, in accordance with the records access rules of the Department of Labor's OSHA, and subject to the limitations at 29 CFR 1910.20(e)(2)(iii)(B).
- u. To disclose the results of a drug test of a Federal employee pursuant to an order of a court of competent jurisdiction where required by the United States Government to defend against any challenge against any adverse personnel action.
- v. To disclose information to contractors, grantees, or volunteers performing or working on a contract, service, grant, cooperative agreement or job for the Federal Government. Policies and practices of storing, retrieving, safeguarding, and retaining and disposing of records in the system

DI-7006 – Authorization for Disclosure of Information Form

What follows this page is the DOI Authorization for Disclosure of Information Form. It may be used by an employee who is authorizing the release of confidential information from his or her occupational medical record to any other recipient of such information, including management personnel in the employee's bureau, another DOI office, or any other person/program to whom the employee wishes to allow access to his/her confidential medical records. This form should be signed prior to any examination which is intended to result in clearances or job related actions. The form also may be used by an employee to authorize the release of information from his/her personal physician's medical records for the individual if such information is needed by the AMO for work-related purposes, though most physicians or the clinics in which they work have their own forms available which may be used for this purpose.

U. S. DEPARTMENT OF THE INTERIOR

AUTHORIZATION FOR DISCLOSURE OF INFORMATION FORM (DI-7006)

The following information is provided in order to comply with the requirements of the Privacy Act of 1974, and is consistent with the provisions of 5 CFR 293, 5 USC 2951(2) and 3301, Executive Orders 12107 and 12564, and the Departmental Manual 370 DM 293. The release of information about a patient who is treated or referred for treatment of alcohol or drug abuse, or the medical results of such abuse, is governed by the Confidentiality of Alcohol and Drug Abuse Patient Record Regulations, 42 CFR, Part 2. Any person who knowingly and willfully requests or obtains any record concerning an individual from a Federal agency under false pretenses shall be guilty of a misdemeanor and fined not more than \$5,000 (5 USC 552a(I)(3) and in the case of alcohol and drug abuse patient records a falsified authorization of disclosure is prohibited under 42 CFR 2.31(d) and is punishable by a fine of not more than \$500 for a first offense or a fine of not more than \$5,000 for a subsequent offense in accordance with 42 CFR 2.14.

TO: _____
(Name of Health Services Provider -- Custodian of the Records to be Released)

(Address)

You are hereby authorized to furnish information from the record of:

(Name of Subject Individual)

An employee (or prior employee) of: _____
(Bureau/Office/Agency)

The records are to be released to the following recipient:

(Name of Individual or Entity to Receive the Information)

(Address)

The inclusive dates for the information that is to be released, and the **specific information to be released**, are:

From _____ To _____

The release is for the following specific purpose:

- | | |
|--|---|
| <input type="checkbox"/> COMPENSATION CLAIM(S) | <input type="checkbox"/> INSURANCE CLAIM(S) |
| <input type="checkbox"/> PRIVATE PHYSICIAN | <input type="checkbox"/> ATTORNEY |
| <input type="checkbox"/> SELF | <input type="checkbox"/> OTHER |

If this authorization has not otherwise been revoked or has not expired in accordance with the terms of the duration statement provided above or has not been given for a longer period as set forth in the duration statement, it will terminate one year from the date of the signature.

Signature:	Date:
Signature of Parent or Guardian, if Subject is a Minor:	If the signer is other than the subject individual, indicate the relationship or authority for this request:

DI-7007 – Request for Respirator Clearance Form

The following form may be used to provide information to the examining physician about the use of a respirator. The form is to be filled out by a safety officer or supervisor.

**DEPARTMENT OF THE INTERIOR
REQUEST FOR RESPIRATOR CLEARANCE (DI-7007)**

Employee Name: _____ **SS# (last 4)** _____
Job Title: _____ **Work Phone Extension:** _____
Best Time to Phone: _____

Instructions to Safety Officer or Supervisor: Please check all respirators and other applicable items which apply to the employee's job functions, sign and print your name and the date of the request. **Forward** this form to the servicing examination facility such that a medical evaluation of the employee can be scheduled.

Request for NIOSH-approved respirator:

<input type="checkbox"/> single use, filter mask (four attachment points)	<input type="checkbox"/> half-faced cartridge-type, negative pressure
<input type="checkbox"/> full-faced cartridge-type, negative pressure	<input type="checkbox"/> half-faced powered cartridge-type (PAPR)
<input type="checkbox"/> full-faced powered cartridge-type (PAPR)	<input type="checkbox"/> self-contained breathing apparatus (SCBA)
<input type="checkbox"/> hood/helmet powered cartridge-type (PAPR) (not positive pressure)	<input type="checkbox"/> half faced/full faced/hood/helmet positive pressure airline respirator

Frequency of Use:

- daily weekly
 monthly yearly
 emergency use only
 other: _____

Duration of Use:

- < 30 min per work day
 30 - 60 min per work day
 1 - 4 hours per work day
 4 - 8 hours per work day, or more

Other Personal Protective Equipment (PPE) to be Used:

- barrier clothing (Tyvek, etc., coveralls, chemical splash suit) fully encapsulated suit
 safety glasses/splash goggles other: _____

Job Functions While the Employee Will be Wearing the Respirator (check all that apply) :

- regular job duties** require use of respirator; please refer to position description for these activities
 light physical activity (sitting or standing to control machines, performing hand or arm work)
 moderate physical activity (walking about with moderate lifting/carrying/pushing)
 heavy physical activities (lifting/carrying greater than 25 lbs, sustained effort requiring whole body movements)
 HAZMAT Team Activities: Level: A B C D (as per 29 CFR 1910.120)
 confined space activities or work in awkward small spaces
 solitary/isolated duty
 unusual environmental conditions (excessive heat, cold, humidity, high altitude, etc.)
 toxic substances (describe substance(s), and the exposure level, frequency, and duration):

 Signature of Requesting Safety Officer or Supervisor Date

 Printed Name of Requesting Safety Officer or Supervisor (phone # with area code)

Original of this document to remain with employee's occupational health record.
 DOI Respirator Medical Evaluation Questionnaire form, DI-7007

DI-7008 – Respirator Clearance Questionnaire

The following form must be filled out by the employee who requires a respirator clearance. This form reflects OSHA's Mandatory Questionnaire in Appendix C to 29 CFR 1910.134

U.S. DEPARTMENT OF THE INTERIOR

Respirator Medical Evaluation Questionnaire (DI-7008) (Reflects OSHA's Mandatory Questionnaire in Appendix C to 29 CFR 1910.134)

To the employer: Employees who are to use a respirator in the course of their official duties are to have an annual medical evaluation. The evaluation must either include a physical examination by a licensed health professional, or completion of this form by the employee and its review by an agency health care professional (see "Medical Clearance for Respirator Use – Clinical Protocol" in the DOI Occupational Health Program Handbook). Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination. However, certain responses, or patterns of response, may lead the reviewer to request further information, or a medical examination, in order to reach a conclusion regarding the employee's ability to safely use a respirator.

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Part A. Section 1. (Mandatory) The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date _____
2. Your name: _____
3. Your age (to nearest year): _____
4. Sex (circle one): Male/Female
5. Your height: _____ ft. _____ in.
6. Your weight: _____ lbs.
7. Your job title: _____
8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code): _____
9. The best time to phone you at this number: _____
10. Has your employer told you how to contact the health care professional who will review this questionnaire?
(Select one) Yes No
11. Check the type of respirator you will use (you can check more than one category; check all that apply):
 - a. _____ N, R, or P disposable respirator (filter-mask, non-cartridge type only).
 - b. _____ Other types: _____ half- or full-facepiece type; _____ powered-air purifying; _____ supplied-air; _____ self-contained breathing apparatus (SCBA).
12. Have you worn a respirator? (Select one) Yes No
If "yes," what type(s): _____

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please select “yes” or “no”).

1. **Do you currently smoke tobacco, or have you smoked tobacco in the last month?** Yes No
2. **Have you ever had any of the following conditions?**
- | | | |
|---|------------------------------|-----------------------------|
| a. Seizures (fits): | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| b. Diabetes (sugar disease): | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| c. Allergic reactions that interfere with your breathing: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| d. Claustrophobia (fear of closed-in places): | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| e. Trouble smelling odors: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
3. **Have you ever had any of the following pulmonary or lung problems?**
- | | | |
|--|------------------------------|-----------------------------|
| a. Asbestosis: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| b. Asthma: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| c. Chronic bronchitis: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| d. Emphysema: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| e. Pneumonia: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| f. Tuberculosis: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| g. Silicosis: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| h. Pneumothorax (collapsed lung): | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| i. Lung cancer: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| j. Broken ribs: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| k. Any chest injuries or surgeries: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| l. Any other lung problem that you've been told about: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
4. **Do you currently have any of the following symptoms of pulmonary or lung illness?**
- | | | |
|--|------------------------------|-----------------------------|
| a. Shortness of breath: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| c. Shortness of breath when walking with other people at an ordinary pace on level ground: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| d. Have to stop for breath when walking at your own pace on level ground: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| e. Shortness of breath when washing or dressing yourself: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| f. Shortness of breath that interferes with your job: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| g. Coughing that produces phlegm (thick sputum): | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| h. Coughing that wakes you early in the morning: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| i. Coughing that occurs mostly when you are lying down: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| j. Coughing up blood in the last month: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| k. Wheezing: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| l. Wheezing that interferes with your job: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| m. Chest pain when you breathe deeply: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| n. Any other symptoms that you think may be related to lung problems: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
5. **Have you ever had any of the following cardiovascular or heart problems?**
- | | | |
|---|------------------------------|-----------------------------|
| a. Heart attack: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| b. Stroke: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| c. Angina: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| d. Heart failure: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| e. Swelling in your legs or feet (not caused by walking): | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| f. Heart arrhythmia (heart beating irregularly): | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| g. High blood pressure: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| h. Any other heart problem that you've been told about: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
6. **Have you ever had any of the following cardiovascular or heart symptoms?**
- | | | |
|---|------------------------------|-----------------------------|
| a. Frequent pain or tightness in your chest: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| b. Pain or tightness in your chest during physical activity: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| c. Pain or tightness in your chest that interferes with your job: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| d. In the past two years, have you noticed your heart skipping or missing a beat: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| e. Heartburn or indigestion that is not related to eating: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

f. Any other symptoms that you think may be related to heart or circulation problems: Yes No

7. Do you currently take medication for any of the following problems?

- a. Breathing or lung problems: Yes No
- b. Heart trouble: Yes No
- c. Blood pressure: Yes No
- d. Seizures (fits): Yes No

8. If you've used a respirator, have you ever had any of the following problems? (If you've never used a respirator, check the following space and go to question 9)

- a. Eye irritation: Yes No
- b. Skin allergies or rashes: Yes No
- c. Anxiety: Yes No
- d. General weakness or fatigue: Yes No
- e. Any other problem that interferes with your use of a respirator: Yes No

9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire? Yes No

Questions 10 to 15 below must be answered by every employee who has been selected to use either a **full-facepiece** respirator *or* a **self-contained breathing apparatus (SCBA)**. For employees who have been selected to use other types of respirators, answering these questions is voluntary.

10. Have you ever lost vision in either eye (temporarily or permanently)? Yes No

11. Do you currently have any of the following vision problems?

- a. Wear contact lenses: Yes No
- b. Wear glasses: Yes No
- c. Color blind: Yes No
- e. Any other eye or vision problem: Yes No

12. Have you ever had an injury to your ears, including a broken ear drum? Yes No

13. Do you currently have any of the following hearing problems?

- a. Difficulty hearing: Yes No
- b. Wear a hearing aid: Yes No
- c. Any other hearing or ear problem: Yes No

14. Have you ever had a back injury? Yes No

15. Do you currently have any of the following musculoskeletal problems?

- a. Weakness in any of your arms, hands, legs, or feet: Yes No
- b. Back pain: Yes No
- c. Difficulty fully moving your arms and legs: Yes No
- d. Pain or stiffness when you lean forward or backward at the waist: Yes No
- e. Difficulty fully moving your head up or down: Yes No
- f. Difficulty fully moving your head side to side: Yes No
- g. Difficulty bending at your knees: Yes No
- h. Difficulty squatting to the ground: Yes No
- i. Climbing a flight of stairs or a ladder carrying more than 25 lbs: Yes No
- j. Any other muscle or skeletal problem that interferes with using a respirator: Yes No

Part B Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen? Yes No

If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: Yes No

2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals? Yes No

If "yes," name the chemicals if you know them: _____

3. Have you ever worked with any of the materials, or under any of the conditions, listed below?

a. Asbestos:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
b. Silica (e.g., in sandblasting):	Yes <input type="checkbox"/>	No <input type="checkbox"/>
c. Tungsten/cobalt (e.g., grinding or welding this material):	Yes <input type="checkbox"/>	No <input type="checkbox"/>
d. Beryllium:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
e. Aluminum:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
f. Coal (for example, mining):	Yes <input type="checkbox"/>	No <input type="checkbox"/>
g. Iron:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
h. Tin:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
i. Dusty environments:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
j. Any other hazardous exposures:	Yes <input type="checkbox"/>	No <input type="checkbox"/>

If "yes," describe these exposures: _____

4. List any second jobs or side businesses you have: _____

5. List your previous occupations: _____

6. List your current and previous hobbies: _____

7. Have you been in the military services? Yes No
If "yes," were you exposed to biological or chemical agents (either in training or combat): Yes No

8. Have you ever worked on a HAZMAT team? Yes No

9. Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications)? Yes No

If "yes," name the medications if you know them: _____

10. Will you be using any of the following items with your respirator(s)?

a. HEPA Filters:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
b. Canisters (for example, gas masks):	Yes <input type="checkbox"/>	No <input type="checkbox"/>
c. Cartridges:	Yes <input type="checkbox"/>	No <input type="checkbox"/>

11. How often are you expected to use the respirator(s) (select "yes" or "no" for all answers that apply to you)?:

- a. Escape only (no rescue): Yes No
- b. Emergency rescue only: Yes No
- c. Less than 5 hours per week: Yes No
- d. Less than 2 hours per day: Yes No
- e. 2 to 4 hours per day: Yes No
- f. Over 4 hours per day: Yes No

12. During the period you are using the respirator(s), what is your work effort?

Light (less than 200 kcal per hour): Yes No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.
Examples of a light work effort are sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines

Moderate (200 to 350 kcal per hour): Yes No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.
Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.

Heavy (above 350 kcal per hour): Yes No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.
Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator? Yes No

If "yes," describe this protective clothing and/or equipment: _____

14. Will you be working under hot conditions (with the temperature exceeding 77 degrees F)? Yes No

15. Will you be working under humid conditions? Yes No

16. Describe the work you'll be doing while you're using your respirator(s): _____

17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases): _____

18. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):

Name of Toxic Substance	Estimated maximum exposure level per shift	Duration of exposure per shift

--	--	--

Also list the name(s) of any other toxic substance(s) that you'll be exposed to while using your respirator:

19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security):

To the best of my knowledge, the information I have provided is true and accurate.

Employee Name

Date

Employee Signature

Deliver this form to the examiner or the reviewer who has been designated to complete the Summary and Recommendations form.

DI-7009 – Respirator Medical Evaluation Questionnaire Summary and Recommendations

The following form is to be filled out by the examining medical reviewer.

**Department of the Interior
RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE
SUMMARY AND RECOMMENDATIONS (DI-7009)**

To Be Completed By The Examiner or Designated Reviewer:

Employee name: _____ Age _____ Sex _____ Date of birth: _____
 Agency: _____ Work location: _____ Job Title: _____
 Supervisor's name: _____ Supervisor's phone: _____ Fax: _____
 Type of respirator use requested: ___disposable, ___ negative pressure (cartridge), ___PAPR,
 ___airline, ___SCBA

I. The recommendations/clearances provided here are based on a review of (check all that apply):

- Mandatory OSHA-based Respirator Medical Evaluation Questionnaire
- Records of a medical evaluation, including a physical exam, done on: _____
- Additional information supplied by employee's personal physician.
- Other information (specify): _____

II. Recommendations on medical clearance for respirator use: (Choose A, B or C below)

- A. The employee is given medical clearance to use the following respirator(s) under the conditions noted (choose all that apply)**

<input type="checkbox"/> N, R or P disposable respirator (filter-mask, non-cartridge type only)	<input type="checkbox"/> Supplied air (air line) respirator
<input type="checkbox"/> Half face negative pressure air-purifying cartridge-type respirator	<input type="checkbox"/> Powered air purifying respirator (PAPR) -- either half or full face
<input type="checkbox"/> Full face negative pressure air-purifying cartridge-type respirator	<input type="checkbox"/> Self-contained breathing apparatus (SCBA)

When using respirators, the employee is approved to perform the following (Choose one)

- Mild exertion /low heat stress
- Moderate exertion
- Heavy exertion
- Escape only
- Normal job duties
- Other Activity _____

Mild exertion (2-3 mets) e.g. lifting up to 10 lbs, extended walking on a flat surface, extended standing

Moderate exertion (4-5 mets) e.g, lifting 10 lbs, 5 lifts per min, fast walking (4 mph), gardening/digging, pushing, pulling

Heavy exertion (5-10 mets) e.g. jogging (10 min/mi), chopping wood, climbing hills, life-saving activities, fire fighting

This respirator clearance expires (circle one) 1 2 3 4 5 years from the date below (If not marked, clearance expires in 1 year)

- B. The employee is not given medical clearance for respirator use because more information is needed**

(Specify what is needed to make a decision)

- 1. A medical evaluation, including a physical exam, is needed to make a decision.
- 2. The following additional information is needed for review (specify what): _____

- C. The employee is not given medical clearance for respirator use because of the health problems as noted below (choose one below)**

- 1. A temporary health problem (which should be reevaluated in _____ months)
- 2. A health problem that appears permanent (routine re-evaluation is not needed)

Examiner / Reviewer Name (Print)

Phone number for questions

Examiner / Reviewer Signature

Date