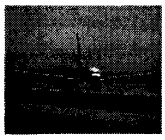

Medical Surveillance

A Valuable Tool for the Prevention of Occupational Disease

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Prevention Of Occupational Illness

- Primary

Identify & remove hazards, by engineering controls, work procedures, or personal protective equipment

- Secondary

Identify early evidence of exposure, physiologic changes, or subclinical disease, and intervene to prevent clinical illness

- Tertiary

Treatment and recovery from clinical illness

Medical Surveillance

- The goal of medical surveillance is to safeguard employees' health by anticipating and identifying physiological changes in employees related to workplace exposures so that preventive measures can be taken, as well as identifying occupationally induced diseases prior to incapacitating illness.
- Should be based upon a Job Hazard Assessment of the workplace, including environmental monitoring

Medical Surveillance

- The FAA has committed to conduct medical surveillance as required by the Occupational Safety and Health Administration.
- Medical surveillance requirements may be based upon job duties or potential exposure to recognized work environment hazards.
- The FAA may also provide additional medical monitoring where OSHA medical surveillance requirements are absent.

ORDER 3900.19B
OCCUPATIONAL SAFETY & HEALTH PROGRAM
4/29/99

http://www.aee.faa.gov/aee-200/Order3900/order.htm

Medical Surveillance Requirements

Asbestos. The OSHA asbestos standards, 29 CFR 1910.1001 (29 CFR 1926.1101 for construction) require full medical monitoring for asbestos workers, including operations and maintenance workers whose job tasks entail the disturbance of asbestos-containing materials for 30 or more days each year. Asbestos workers must wear respiratory protection and must have had respirator clearance examinations prior to use.

Medical Surveillance Requirements

Noise. The OSHA standard 29 CFR 1910.95 requires that workers exposed to noise levels over 85 decibels on the A-weighted scale (dBA) as an 8-hour time weighted average (TWA) must be included in a hearing conservation program. This includes preplacement and annual audiometric examinations. FAA Order 3910.4, Hearing Conservation Program, details the elements of a comprehensive hearing loss prevention program.

Medical Surveillance Requirements

Noise. Workers who may be candidates for the program include:

- Employees who routinely work in airport operating areas, including AF technicians, Flight Standards, and Security;
- AF technicians who maintain and operate emergency engine generators and building heating, ventilation, and air conditioning equipment;
- Field maintenance personnel who operate machinery and road equipment;
- Flight Standards employees who inspect and fly in aircraft; and
- Certain employee groups like metalworkers at the Aeronautical and Technical Centers.

Medical Surveillance Requirements

Lead. The OSHA standards for lead (29 CFR 1910.1025 for general industry and 1926.62 for construction) require that medical surveillance be provided to all employees exposed to levels over the action level of 30 micrograms per cubic meter of air (ug/m 3) calculated as an 8-hour TWA for more than 30 days per year. The paint used on outdoor steel support structures for the radar and antenna systems usually has a high percentage of lead. Where FAA workers perform lead-based paint removal or other activities that disturb lead-based paint and who may be exposed to lead in excess of the OSHA limits, the employee must be included in a medical surveillance program.

Medical Surveillance Requirements

Bloodborne Pathogens. OSHA Standard 29 CFR 1910.1030 includes medical surveillance requirements for employees potentially exposed to bloodborne pathogens. Materials considered potentially infectious are unfixed human tissue and body fluids, e.g., blood, semen, pericardial fluid, peritoneal fluid, fluid visibly contaminated with blood and cerebrospinal fluid. FAA employee categories that fall under the BBP requirements include aircraft accident investigators, health care workers, laboratory technicians, and designated first aid/emergency healthcare responders.

Medical Surveillance Requirements

Clearance for Respirator Use. OSHA standards 29 CFR 1910.134 and 29 CFR 1926.103 mandate medical clearance for workers wearing any type of respirator. Factors to be considered in medical approval include the circumstances of respirator use, such as frequency and duration of use, the type of respirator required, and the workers' baseline medical condition. OSHA has specified an employee-completed questionnaire for initial evaluation; the medical reviewer may request additional information.

Medical Surveillance Requirements

Clearance for Respirator Use. Physiologic issues related to respirator use may include increased resistance to breathing and decrease in ventilation due to respirator dead space, increased cardiovascular work load, facial deformities, perforated eardrum, psychological factors, and dermatological effects from local skin irritation.

FAA workers who may be required to wear a respirator include asbestos operations and maintenance workers, workers disturbing or removing paint containing lead, aircraft painters and aerospace engineering technicians, hazardous waste and emergency response workers, and certain ATCS.

Medical Surveillance Requirements

Hazardous Waste or Emergency Response Workers. OSHA standard 29 CFR 1910.120 requires that hazardous waste workers receive medical surveillance examinations when exposed to hazardous substances or wear a respirator 30 or more days per year, and receive an annual medical examination without regard to frequency of exposure.

Respirator clearance medical examinations are required per 29 CFR 1910.134.

Note: This does not apply to persons responsible for conducting regulatory inspections to determine compliance with regulations on the safe transport of hazardous materials.

NATIONAL OCCUPATIONAL MEDICINE SURVEILLANCE PROGRAM OVERSIGHT TEAM (NOMSPOT)

- NOMSPOT provides a mechanism for consultation, technical assistance, quality assurance, and as a central point of contact for FAA region or center medical surveillance issues
- Core membership includes representatives from the AAM, AAF, AHL & AEE
- Non-member participants at meetings may include FAA region or center safety and health professionals and bargaining unit representatives
- Meetings are held as needed
- Requests for review may be initiated by sending a memorandum to AEE, describing the nature of the concern
- NOMSPOT is to make every effort to handle medial surveillance-related issues expeditiously

Sentinel Events

Examples of Sentinel Events

- Environmental contamination episodes or allegations
- Employee reports or statistical evidence of possible disease clusters
- Accidents

It is best practice to ensure a timely site visit and follow-up of sentinel events by a team including a Certified Safety Professional, Certified Industrial Hygienist, and OM Physician.

Site visits yield information on what happened, how to avoid recurrences, and appropriate medical follow-up

Model Programs

- NASA Kennedy Space Center
- Boeing Aircraft
- American College of Occupational & Environmental Medicine Corporate Health Achievement Award

Medical Surveillance Is an Investment, Rather Than an Expenditure

Summary

- Ensuring the Safety and Health of FAA employees is a central part of each of our jobs.
- Medical surveillance is an important tool.
- We should aim for excellence.