CHAPTER 4. OCCUPATIONAL HEALTH

A. Scope. This chapter provides requirements and guidance to promulgate policy, standards, and guidelines for implementing the Coast Guard Occupational Health Program. The occupational health program pertains to all Coast Guard active duty and civilians on any Coast Guard facility, aircraft, or vessel or during any Coast Guard-related activities on a non-Coast Guard facility, aircraft, or vessel. Sections 3 and 4 also apply to contractors and visitors.

B. Background. Occupational health is a science devoted to the anticipation, evaluation and control of various environmental factors that arise in living or working environments that may lead to impaired health. The primary goal of occupational health is to ensure unit members are provided with working conditions free of known hazards. To be effective, occupational health programs must be proactive, e.g., conducting training and inspections, verses reactive, e.g., determining what caused an occupational illness or injury. One of the best proactive methods is to educate all hands on occupational health hazards and methods of prevention. The following program areas of occupational health will be covered by this chapter:

1. Occupational Medical Surveillance and Evaluation Program (OMSEP).

2. Industrial Hygiene

3. Hearing Conservation

4. Thermal Stress

C. Responsibilities.

1. Maintenance and Logistics Command (kse).

   a. Provide assistance, funding, equipment, training and references to Safety and Environmental Health Officers to ensure they are able to provide services needed by units in their AOR.

   b. Evaluate units regarding compliance with this instruction during routine unit visits.

2. Safety and Environmental Health Officer (SEHO).

   a. Maintain equipment and references to provide services needed by units in their AOR.

   b. Provide assistance to units regarding the contents of this instruction.

3. Group Commanders or Commanding Officers shall.

a. Ensure that the contents of this instruction are enforced at their unit(s).

b. Contact the local SEHO for assistance with any requirements that are beyond the abilities and training of personnel assigned to the unit.

D. Occupational Health Standards.

1. Occupational Medical Surveillance and Evaluation Program.

a. Reference.

(1) Medical Manual, COMDTINST M6000.1 (series), Chapter 12.

b. Background. The OMSEP is a physical examination program designed to identify work-related diseases at a stage when modifying the exposure or providing medical intervention may potentially arrest disease progression or prevent recurrences. This program provides exposure-specific physical examinations. It does not prevent adverse health effects. The primary role of the OMSEP is to provide initial, periodic, acute exposure and exit/separation physical examinations. Detailed information on the OMSEP program can be found in reference (1).

c. Responsibilities.

(1) Commandant (G-WKS).

(a) Provide program oversight and make policy decisions.

(b) Responsible for Safety and Environmental Health (SEH) policy as well as exposure assessment oversight.

(c) Provide policy oversight on Chapter 12 of the Medical Manual; maintains database on diagnosed occupational health disorders; determines need for long-term population based epidemiological studies; and provides training and support.

(2) Maintenance and Logistics Commands (MLC's).

(a) Maintain and manage the OMSEP centralized database.

(b) Provide OMSEP physical examination oversight.

(3) Safety and Environmental Health Officers (SEHO's).

(a) Perform workplace evaluations.

(b) Provide support and training on OMSEP related matters.

(c) Interact with OMSEP coordinator on final enrollment recommendations.

(d) Approve enrollment entries into the centralized database.

(4) Group Commanders or Commanding Officers.

(a) Must appoint a unit OMSEP coordinator.

(b) Ensure members comply with all established preventive safety practices.

(c) Request assistance from MLC (kse) for program support.

(5) OMSEP Coordinator.

(a) Maintain unit tracking report.

(b) Update database concerning enrollment and exam status for unit members.

(c) Interact with SEHO regarding enrollment recommendations/approvals/disapprovals.

(d) Ensure physical examinations occur as required.

(6) Medical Officers / Clinic Administrators.

(a) Ensure all physical examinations are appropriately conducted and recorded. Eligibility of enrollment in the OMSEP program must be verified utilizing the online OMSEP database.

(b) Provide oversight to contract providers and Independent Duty Technicians (IDTs) within their area of responsibility.

(c) Make diagnosis in accordance with the ICD-9 coding process.

(d) Provide patient notification on physical examination results and laboratory/radiological findings, including examinations conducted upon termination of employment/end of exposure and Exit/Separation Letter.

d. Required Program Elements.

(1) Each unit must name an OMSEP coordinator, typically the Unit Safety Coordinator or the Safety and Health Coordinator (SOHC) to coordinate the unit OMSEP program with the SEHO and medical clinic;

(2) Requirements for entry into OMSEP can be found in reference (1). Members must be recommended by their OMSEP coordinator and approved by the SEHO to be placed in the OMSEP database. Entry into the database is required prior to receiving an OMSEP examination.

(3) OMSEP data must be entered and maintained in the member's medical record; OMSEP records, data and related material, including the medical record jacket, must be clearly marked "OMSEP";

(4) MLCA (kse) will maintain the OMSEP centralized database in accordance with privacy act regulations. The database must be updated and readily accessible to the various levels of the OMSEP organization;

(5) OMSEP examinations, laboratory results, radiological findings and consultations must be discussed with the member, and all discrepancies explained before filing into the medical record;

(6) Members must receive a summary result of their OMSEP examination findings at the completion of their initial or periodic evaluations;

(7) Members separating from the OMSEP at end of exposure or at termination of employment must be provided with an Exit/ Separation Letter, accounting for all their known exposures and surveillance protocols;

(8) Members recommended for enrollment must meet the enrollment criteria;

2. Industrial Hygiene Program.

a. References.

(1) 29 CFR 1910, Occupational Safety and Health Standards

(2) American Conference of Governmental Industrial Hygienists' Threshold Limit Values.

b. Background. Industrial hygiene as a specialty is concerned with solving industrial health problems by anticipating, recognizing, evaluating and controlling potential health hazards in the occupational environment. As such, it is devoted to the recognition, evaluation and control of those environmental hazards - chemical, physical, biologic and ergonomic - that may cause sickness, impaired health or significant discomfort. Occupational health hazards are conditions that may potentially cause legally compensable occupational illness or any condition in the work place that impairs the health of employees sufficiently to make them lose time from work or work at less than full efficiency.

c. Responsibilities.

(1) Maintenance and Logistics Commands (MLCs) and detached Safety and Environmental Health Officers (SEHOs).

(a) Maintain industrial hygiene equipment to be prepared to conduct exposure monitoring as requested by Coast Guard units.

(b) During Risk Assessment Surveys, identify, measure, and evaluate personnel exposures to hazardous chemical or physical agents.

(c) Assist units in selecting engineering and administrative controls and personal protective equipment and clothing.

(2) Group Commanders or Commanding Officers.

(a) Ensure unit personnel are not overexposed to chemical and physical hazards.

(b) Request assistance from the cognizant SEHO or MLC to evaluate exposures.

d. Occupational Exposure Limits.

(1) The more stringent of reference (a) and (b) will be used when evaluating exposures to chemical hazard, including 8-hour time

weighted averages (TWAs), short term exposure limits (STELs) and ceiling limits.

(2) Engineering and/or administrative controls will be put into place when exposure levels exceed the occupational exposure limit.

(3) Personal protective equipment will be used as a last resort or during implementation of engineering controls.

e. Industrial Hygiene Equipment. All industrial hygiene equipment will be maintained according to manufacturer's specifications.

f. Record Keeping. All industrial hygiene evaluations and sampling results shall be maintained for no less than 40 years.

3. Hearing Conservation.

a. Reference.

(1) Medical Manual, COMDTINST M6000.1 (series)

b. Background. The Coast Guard working and living environments contain many high intensity noise sources. Exposure of Coast Guard personnel to high intensity noise damages their hearing, causing a major health and economic impact.

c. Responsibilities.

(1) Maintenance and Logistics Commands (MLCs) and detached Safety and Environmental Health Officers (SEHOs).

(a) Maintain noise monitoring equipment to be prepared to conduct exposure monitoring as requested by Coast Guard units.

(b) During Risk Assessment Surveys, identify, measure, and evaluate personnel exposures to noise sources.

(c) Assist units in selecting engineering and administrative controls and hearing protective devices.

(2) Group Commanders or Commanding Officers.

(a) Ensure unit personnel are not overexposed to noise hazards.

(b) Ensure that personnel exposed to hazardous noise receive initial and refresher training in hearing conservation.

(c) Ensure that all noise areas and sources are properly labeled and posted.

(d) Request assistance from the cognizant SEHO or MLC to evaluate noise sources and exposures.

d. Program Requirements. To reduce the impact of noise on personnel, the Coast Guard has implemented a hearing conservation program requiring the accomplishment of the following six action elements:

(1) Identify, assess, and post hazardous noise sources.

(2) Determine extent and disposition of personnel exposed.

(3) Engineer methods to abate noise.

(4) Provide and require the use of hearing protectors for all personnel exposed to hazardous noise (fit personnel with hearing protection devices as necessary).

(5) Educate and advise personnel concerning hearing conservation.

(6) Monitor employee hearing acuity using trained audiometric technicians in certified audiometric booths.

e. Noise Standard. Environments or equipment that produce continuous noise levels at or above 85 dB(A) time weighted average (TWA) and impact noises exceeding 140dB(A) are considered hazardous and protective measures must be taken to reduce exposure to personnel. Noise exposures shall be calculated using a 3 dB(A) exchange rate. See section 1.P.24 of this Manual for the definition of TWA.

f. Hearing Protection Devices.

(1) Hearing protective devices shall be worn by all personnel when they enter or work in an area where the operations generate noise levels of:

(a) Equal to or greater than 85 dB(A) continuous sound pressure level;

(b) 140 dB peak sound pressure level or greater.

(2) A combination of insert type and circumaural type hearing protective devices (double hearing protection) shall be worn in all areas where noise levels exceed 104 dB(A).

(3) In cases where hearing protective devices do not provide sufficient attenuation to reduce the individual's effective exposure level below 85 dB(A) and engineering controls are impractical, administrative control of exposure time will be necessary.

g. Training. All personnel exposed to hazardous noise shall receive a minimum of one hour of initial Hearing Conservation Training and appropriate refresher training annually thereafter. Documentation of such training (i.e., attendance logs) shall be made part of the command's training records. The following are the minimum requirements of hearing conservation program training:

(1) description of the symptoms, mechanism, and consequences of temporary and permanent hearing loss;

(2) elements of the hearing conservation program;

(3) proper selection, wearing, and maintenance of hearing protective devices;

(4) identification of hazardous noise sources at the command and safe work practices to be used to minimize exposure to hazardous noise;

(5) description of audiometric testing which will include explanation of audiometric test results and the procedures involved in testing.

h. Audiometric Testing. Shall be done in accordance with procedures in reference (1).

4. Thermal Stress

a. References.

(1) Preventing Heat Casualties, COMDTPUB P6200.12 (series)

(2) Cutter Heat Stress Program, COMDTINST M6260.17 (series),

(3) Sustaining Health an Performance in the Cold: Environmental Medicine Guidance for Cold Weather Operations, US Army Research Institute for Environmental Medicine http://www.vnh.org/refer/ColdWeatherOperations/depcold/toc.html

b. Background. Extreme heat and cold conditions may occur on Coast Guard cutters, at shore facilities, and during outdoor activities. It is important to evaluate environmental conditions and take preventive action to avoid adverse health effects to personnel.

c. Responsibilities.

(1) Maintenance and Logistics Commands (MLCs) and detached Safety and Environmental Health Officers (SEHOs).

(a) Provide assistance to units to evaluate thermal stress conditions and recommend preventive measures to avoid adverse health effects to personnel.

(b) Maintain equipment to evaluate extreme thermal stress conditions.

(2) Group Commanders or Commanding Officers.

(a) If onboard a cutter or in a location where heat or cold conditions are prevalent, initiate a thermal stress program to include training and an SOP to deal with extreme environmental conditions.

(b) Ensure that preventive measures are taken to prevent heat and cold stress disorders in unit personnel.

(b) Request assistance from the cognizant SEHO or MLC to evaluate environmental conditions and preventive measures.

d. Heat Stress. Heat stress conditions, medical disorders, and preventive measures are described in references (1) and (2). Particular attention must be paid to the following:

(1) Ensure personnel are aware of the symptoms of heat stress disorders and use the buddy system to watch out for these symptoms when working in hot environments.

(2) Measure hot environments to determine appropriate work-rest schedules to use to prevent heat stress disorders.

(3) Ensure personnel consume adequate amounts of fluids and eat three meals a day.

(4) Ensure new personnel are acclimatized to the environment prior to working in hot environments.

(5) Take efforts to reduce the heat load on personnel. This may include wearing lighter clothing and/or scheduling work during the cooler times of the day.

e. Cold stress. Cold stress conditions, medical disorders, and preventive measures are described in reference (3). Particular attention must be paid to the following:

(1) Ensure personnel are aware of the symptoms of cold stress, especially hypothermia, and use the buddy system to watch out for these symptoms when working in cold environments.

(2) Ensure personnel consume adequate amounts of fluids, eat three meals a day, and get plenty of rest.

(3) Have personnel dress in layers to help trap air for insulation. Do not overdress so as to cause excessive sweating. The clothing layer next to the skin should wick away moisture, and the outer layer should be wind resistant.

(4) Heat loss is higher in the extremities and particular attention should be paid to preventing heat loss through the feet, hands, and head.