

CHAPTER 18

HEARING CONSERVATION AND NOISE ABATEMENT

1801. Discussion. The goal of the Navy Hearing Conservation Program is to prevent occupational noise-related hearing loss. The COMNAVREG SW Safety Office Hearing Conservation Program includes the following elements:

a. Work environments shall be surveyed to identify potentially hazardous noise levels and personnel at risk.

b. Environments containing, or equipment producing hazardous noise should, when technologically and economically feasible, be modified to reduce noise to acceptable levels. Where engineering controls are not feasible, administrative controls or the use of hearing protective devices shall be employed.

c. Periodic hearing testing shall be conducted to monitor the effectiveness of the Hearing Conservation Program. Early detection of temporary threshold shifts allows further protective action to be taken before permanent hearing loss occurs. Employees exhibiting a significant threshold shift shall be informed in writing within 21 days.

d. Education is vital to overall success of a hearing conservation program. An understanding of the permanent nature of noise-induced hearing loss, the Hearing Conservation Program and the individuals own responsibilities must be achieved. Employees shall be encouraged to separately obtain their own non-government hearing protective devices to use when they are exposed to hazardous noise levels during off-duty activities e.g., from lawnmowers, chainsaws, firearms, etc.

e. All personnel shall receive a baseline-hearing test prior to being assigned duty in a noise hazardous environment. Hearing tests shall be conducted annually or as needed thereafter for as long as the employee remains in a noise hazardous environment.

f. Military personnel shall receive a hearing test upon termination of Navy service. Civilian personnel who have been routinely exposed to hazardous noise or have previously demonstrated a significant threshold shift, shall receive a hearing test upon termination of employment. Additionally, all personnel dropped from the hearing testing program due to removal from hazardous noise duties will have a termination test to document auditory status at the time of reassignment.

1802. Noise Measurements. To effectively control noise, it is necessary that the noise levels are accurately measured according to standard procedures and the measurements are properly evaluated against accepted criteria. This will normally be done by the cognizant industrial hygienists in conjunction with assistance from the Safety Office.

1803. Exposure Assessment

a. Time-Weighted Average (TWA) noise exposure assessments shall be determined for all personnel routinely working in hazardous noise areas and performing hazardous noise operations. These assessments are complex tasks that shall be performed by an IH or other person that an IH or audiologist judges to be competent.

b. The exposure assessment will identify which work areas, processes, and equipment produce hazardous levels of noise, determine the type of hearing protection necessary, and identify personnel at risk so they can be included in the hearing conservation program.

1804. Labeling of Hazardous Noise Areas and Equipment.

Designated hazardous noise areas and equipment that produce sound levels greater than 84dB(A), or 140dB peak sound pressure level, shall be appropriately labeled in accordance with reference 18-1.

a. Posting an entire building, as a hazardous noise environment is not recommended, unless all areas within the building are designated hazardous noise areas.

b. Military combatant equipment is excluded from this requirement.

1805. Personal Hearing Protective Devices

a. All personnel shall wear hearing protective devices when they enter or work in an area where operations generate noise levels:

- (1) Greater than 84dB(A) sound level, or
- (2) 140dB-peak sound pressure level or greater.

b. A combination of insert type and circumaural (earmuff) type hearing protective devices (double protection) shall be worn in all areas where noise levels exceed 104dB(A) unless an occupational audiologist, industrial hygienist, or occupational

medicine physician has determined that single protection is adequate for the anticipated duration of exposure.

c. All personnel exposed to gunfire in a training situation, or to artillery or missile firing, under any circumstances, shall wear hearing protective devices.

d. Determination of hearing protective device or combination of devices suitable for use in each situation is the responsibility of cognizant industrial hygienists and COMNAVREG SW Safety Office professionals. Every effort shall be made to issue personal hearing protective devices suited to the task. Personal hearing protective devices shall reduce effective sound levels to less than 84dB(A) or 140dB peak. Appendix 18-A lists recommended hearing protective devices available through the navy Supply system. The Navy Environmental Health Center (NAVENVIRHLTHCEN) web site at <http://www-nehc.med.navy.mil/> identifies additional hearing protectors that have been tested by DOD activities and are approved for open purchase. Activities desiring to use hearing protective devices not specified in Appendix 18-A or cited by NAVENVIRHLTHCEN shall submit a sample of the device with a request for evaluation to the Chief, Bureau of Medicine and Surgery (BUMED).

e. In case hearing protective devices do not provide sufficient attenuation to reduce an employee's effective exposure level below 84dB(A), administrative controls of exposure time will be necessary.

1806. Training

a. All personnel included in the hearing conservation program, their supervisory personnel, and employee representatives shall be provided training in accordance with reference 18-1 prior to being assigned to a noise hazardous environment.

b. Personnel identified for inclusion in the hearing conservation program shall receive a thorough initial briefing from qualified Naval Medical Clinic personnel or Site Safety Office training specialists concerning requirements of the program and refresher training, as needed. Records of training shall be made a part of the individual's OSH training records per Chapter 6 of this instruction.

1807. Responsibilities

a. Supervisors shall:

(1) Ensure that all personnel (including visitors) exposed to noise hazards wear approved hearing protective devices. Appendix 18-A lists recommended hearing protective devices available through the Navy Supply System. The Navy Environmental Health Center (NAVENVIRHLTHCEN) web site at <http://www-nehc.med.navy.mil/> identifies additional hearing protectors that have been tested by DOD activities and are approved for open purchase.

(2) Ensure that all hearing protective devices are maintained in a clean and fully operational condition.

(3) Schedule, attend, and ensure personnel attend required annual hearing examinations and annual and refresher hearing conservation training prior to being assigned in a noise hazardous environment.

(4) Provide, semi-annually, an updated roster of personnel placed in the Hearing Conservation Program to the Safety Office

b. Personnel shall:

(1) Wear the required hearing protection when entering or working in noise hazard areas or engaged in noise hazard operations.

(2) Maintain hearing protective devices in a clean and fully operational condition.

(3) Report for required annual hearing examinations, when scheduled.

(4) Attend required hearing conservation training, when scheduled prior to being assigned to a noise hazardous environment.

c. Safety Office shall:

(1) Ensure that a survey is conducted of all work areas, processes, and occupations to determine those with hazardous noise environments requiring hearing protection. Create and maintain a listing of identified areas.

(2) Provide hearing conservation training and education for personnel.

(3) Semi-annually update the roster of personnel exposed to hazardous levels of noise in the Hearing Conservation Program.

CHAPTER 18

REFERENCES

- 18-1.1 OPNAVINST 5100.23 (Series), Navy Occupational Safety and Health (NAVOSH) program Manual Ashore

Appendix 18-A
Hearing Protective Devices

Manufacturer's Nomenclature/NSN	Type of Protector	Federal Nomenclature
Ear Defender V-51R 6515-00-442-4765 6515-00-467-0085 6515-00-467-0089 6515-00-442-4807 6515-00-442-4813	Insert Earplug (sized) 24's (sized) 24's (sized) 24's (sized) 24's (sized) 24's	Plug, Ear, Noise Protection (X-Small) (White) (Small) (Green) (Medium) (Int'l Orange) (Large) (Blue) (X-Large) (Red)
Comfit, Triple Flange Protection 6515-00-467-0092 6515-00-442-4818 6515-00-442-4821	Insert Earplug (sized) 24's (sized) 24's (sized) 24's	Plug, Ear, Noise (Large) (Blue) (Regular) (Orange) (Small) (Green)
Silaflex (Blister Pack) Protection 6515-00-133-5416	Non-Hardening Silicone	Plug, Ear, Noise Cylindrical, Disposable 200's
EAR or Deci-Damp 6515-00-137-6345	Foam Plastic Insert	Plug, Ear, Noise Protection Universal Size, Yellow 200 pr
Straightaway Muffs 4240-00-759-3290 4240-00-674-5379 4240-00-979-4040	High Performance Circumaural Muffs For 9 AN/2 For 9 AN/2	Aural Protector Sound 372-9 AN/w Replacement Filter, Dome Replacement Seal, Dome
Ear Plug Cases 6515-01-212-9452 6515-01-100-1674	 Non-reflective	Case, Earplug 12's Case, Earplug 20's
Sound-Ban 6515-00-392-0726	Headband, Earcaps	Plug, Ear, Hearing Protection, Universal Size
Circumaural Muff 4240-99-691-5617	Type I Overhead Headband	Aural Protector, Sound
Circumaural Muff 4240-00-022-2946	Type II Napeband (for use with hard hat)	Aural Protector, Sound