

HEARING CONSERVATION PROGRAM

- AUTHORITY:** California Code of Regulations, Title 8, General Industry Safety Orders Sections 5096 - 5100 and Article 105
CEO/Risk Management Safety and Loss Prevention Resource Manual Item, Number 107, Hearing Conservation & Noise Control
- RESCINDS:** Procedure Manual Item 1-4-120, dated 06/02/14
- FORMS:** None
- PURPOSE:** To provide guidelines for the Hearing Conservation Program, which prevents hearing impairment as a result of exposure to noise and reduce personal injury.

I. GENERAL INFORMATION

To provide a Hearing Conservation Program that meets or exceed those standards set forth by the Federal and State Occupational Safety and Health Administrations.

- A. The program addresses the following elements of a comprehensive hearing program:
1. Evaluation of noise exposures.
 2. Audiometric testing.
 3. Hearing protection.
 4. Training program.
 5. Record keeping.
 6. Auditing of the program.

II. PROCEDURE

- A. The Department Safety **and Training Officer** is responsible for ensuring the Hearing Conservation Program meets or exceeds that as specified by law, and is maintained for the protection of all range staff and armed deputies while on the range.
- B. The Rangemaster/Range Safety Officers are responsible for:
1. Ensuring hearing protection is available and worn properly on the range and in required areas.

2. Notifying the Department Safety **and Training Officer** when there is a change in the process or when a condition or piece of equipment is modified, causing increased noise levels.
 3. Maintaining equipment processes and conditions to prevent excessive noise.
- C. Armed deputies are responsible for wearing hearing protection in accordance with instructions and training received on the range and in those areas designated as required hearing protection.
- D. Hearing Conservation Evaluation of Noise Exposures
1. Noise Measurements are conducted to:
 - a. Identify work areas that meet or exceed an eight-hour time-weighted average sound level of 85 decibels (dB).
 - b. Determine existing noise levels so priorities for corrective action could be established.
 - c. Identify areas where hearing protective devices are required.
 2. Noise **Measuring** Equipment:

Orange County Probation uses in-house or contracted services to perform the required noise surveys. The provider uses, at its discretion, sound level meters that conform to the requirements of sound level meters described in ANSI SI.4-1971 (specifications for sound level meters) and dosimeters that meet the requirements of ANSI SI.25-1978 (specifications for dosimeters).
- E. Audiometric Testing Using an Outside Vendor
- In order to maintain a hearing conservation program, audiometric testing is a requirement. Audiometric testing is the means of measuring the ability of the individual to hear in both ears. This establishes if and to what degree a hearing loss exists. Annual tests can then be compared to a baseline to determine if a change or shift in hearing exists.
1. Frequency and Scheduling: All Rangemasters and Range Officers shall receive **a baseline audiometric examination prior to their assignment and at least annually thereafter.**
 2. Test Evaluation: If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift, Orange County Probation must fulfill the requirements specified in OSHA Standard 29 CCR Title 8, section 5097 (c)
 3. The Rangemaster will schedule the yearly audiometric examination for all Range Officers through **Employee Health Services (EHS).**
- F. Hearing Protection

Hearing Protection Devices: there are two basic types of hearing protectors used by most industries, EARPLUGS and EARMUFFS. Both protectors serve the same function; that is, to serve as a barrier between the noise and the inner ear where hearing damage may occur. Where appropriate, Orange County Probation fits and trains employees on the proper use of hearing protection devices.

1. Selection of Hearing Protection Devices: attenuation characteristics, acceptance by employees, durability, as well as environmental, medical and legal considerations all play a major role in the selection of hearing protection at Orange County Probation. The Hearing Conservation Program Coordinator must approve hearing protectors prior to purchase of hearing protectors.
2. Effectiveness of Hearing Protectors: the ability of a hearing protector to reduce the noise in dB (decibels) before it reaches the inner ear is referred to as attenuation. This ability is different for ear plugs and muffs, and is also highly dependent on the frequency components of the noise. At Orange County Probation, the effectiveness of each hearing protector is evaluated for the specific noise environments in which the protector will be used.
3. Usage of Hearing Protectors: in areas classified as high noise areas, hearing protection is required. All personnel working in these areas are required to properly wear hearing protection devices. Disciplinary action is to be taken if employees do not follow the policy.

G. Training and Education

1. The Department Safety **and Training Officer** or the designated vendor is responsible for the development of a training program that covers:
 - a. The effects of noise on hearing.
 - b. The purpose of hearing protection, the advantages, disadvantages, attenuation of various types and instructions on selection, fitting, use and care.
 - c. The purpose of audiometric testing and an explanation of the test procedures.
2. Training is repeated annually for each employee in the Hearing Conservation Program. Information provided in the training program is updated to be consistent with changes in protective equipment and work processes.

H. Recordkeeping

The documentation and maintenance of records are important aspects of the hearing conservation program. Proper recordkeeping enhances the efficiency of the program along with meeting specified governmental requirements.

Records of exposure monitoring and noise measuring equipment calibrations are maintained by the Department Safety **and Training Officer**. The Safety **and Training Officer** or a designated vendor will maintain background noise levels of the audiometric test booth.

I. Auditing of the Program

The Hearing Conservation Program is to be evaluated on an annual basis by the Department Safety **and Training Officer**.

J. Training Program

1. The program will use verbal and/or video material, with optional written material.
2. The program will include presentation of the following:
 - a. The effects of noise on hearing.
 - b. The purpose of hearing protection; advantages, disadvantages and attenuation.
 - c. Instruction on selection, fitting, uses and care.
 - d. Purpose of audiometric testing and an explanation of the test procedure.
3. Posting of hearing conservation posters, communiqués, etc.

K. All range staff, armed deputies, as well as any visitors are expected to wear hearing protection while on the range as directed.

L. Staff are responsible for wearing hearing protection in accordance with instructions and training received on the range and in those areas designated as requiring hearing protection.

M. Clean non-disposable hearing protection as often as needed to maintain them in a hygienically safe condition.

N. Report all problems concerning the hearing protection devices to the Rangemaster/range safety officers immediately and secure replacements as needed.

O. Wear only selected or approved hearing protection devices.

REFERENCES:

County of Orange Safety and Loss Prevention Resource Manual number: 107, "Hearing Conservation and Noise Control".

The Industrial Environment - Its Evaluation and Control, U.S. Department of Health and Human Services, National Institute of Occupational Safety and Health, 1973.

OSHA - General Industry Standards, 29 CCR Title 8, sections 5096 and 5097.

KOSH - Standard Interpretation Directive No. 24, March, 1977.

Fundamentals of Industrial Hygiene, National Safety Council, 1981.

In Defense of Hearing, Billion International Ltd., 1979.

"Hearing Conservation - Implementing An Effective Program," Professional Safety, October 1981.

"Employee Education - Key to Effective Hearing Conservation," Sound and Vibration, January, 1978.

A Program for Hearing Conservation, MSA, 1981.

Hearing Conservation Program, Travelers Insurance Companies, Engineering Division, 1973.

Atlantic Richfield Company Occupational Noise Control and Hearing Conservation Guideline, November 24, 1982.

M. Redwood

APPROVED BY: