

NOTICE!

The following procedure is currently under revision.

If you need to refer to this procedure and have questions regarding applicability, please contact the Safety Office at 425.388.3549.

HEARING CONSERVATION

I. PURPOSE

This procedure will ensure that all employees who are exposed to noise levels of 85 decibels (dBA) or greater are provided with protective equipment, engineering controls, and educational information to prevent a hearing disability due to prolonged exposure to high noise levels.

II. PERMISSIBLE EXPOSURE LIMITS

A. Table 12-1 shows the permissible noise exposure limits as set by the Department of Labor and Industries.

Table 12-1

PERMISSIBLE NOISE EXPOSURES

<u>DURATION PER DAY, HOURS</u>	<u>SOUND LEVEL dBA SLOW RESPONSE</u>
16	85
8	90
6	92
4	95
3	97
2	100
1-1/2	102
1	105
3/4	107
1/2	110
1/4 or less	115

B. These permissible exposure limits refer to sound pressure levels that represent conditions under which it is believed that nearly all workers may be repeatedly exposed without adverse effect on their ability to hear and understand normal speech.

C. When an employee's duration per day has reached 50% of that listed in Table 12-1, then that employee will be part of the Hearing Conservation Program.

- D. No employee should be exposed to impulsive or impact noise in excess of 140 dBA peak sound pressure level.
- E. Continued exposure to loud noises may result in permanent impairment to hearing which may impact upon the work efficiency of an employee or result in a physical disability recognized under State and Federal laws. This disability can be prevented in most cases. Permanent hearing loss is frequently not recognized by the individual because it affects hearing of sounds higher in frequency than those necessary in speech communication.

III. REQUIREMENTS

- A. All employees that are part of the Hearing Conservation Program will:
 - 1. Receive an annual audiogram.
 - 2. Receive hearing protectors appropriate for their job and noise exposure.
 - 3. Receive annual training as outlined in Section VII.
- B. The County Safety Office will:
 - 1. Monitor work sites for noise hazards upon request from the supervisor or as deemed necessary.
 - 2. Provide a method of annual training for all employees in the Hearing Conservation Program.
 - 3. Assist supervisors in developing solutions to noise hazard problems.
- C. Supervisors will:
 - 1. Inform the County Safety Office of any high noise hazards that may require monitoring.
 - 2. Ensure all provisions of this procedure are adhered to.

IV. MONITORING

- A. When reasonable information indicates that an employee's exposure may equal or exceed an 8-hour time-weighted average of 85 dBA, the supervisor shall issue a request for monitoring to the County Safety Office.
- B. The County Safety Office will monitor the requested area and/or personnel involved.
- C. After monitoring, if the noise exposure equals or exceeds that referenced in Table 12-1, the supervisor of the affected employee will be notified of the results, and the supervisor will notify the employee of the results. The employee and/or job identified will be included in the Hearing Conservation Program. The supervisor will then schedule audiometric tests for the involved employees.
- D. Prior to or within 180 days after an employee's first exposure to noise at or above a time-weighted average of 85dBA, the employee will be given an audiogram to establish a baseline level of hearing. This applies to those jobs in a classification that is covered by the hearing conservation program.
- E. Any affected employee or their representative may be provided with an opportunity to observe any measurements of employee noise exposure.
- F. Whenever employee noise exposures equal or exceed an 8-hour time-weighted average of 85 dBA, or is exposed to noise above 115 dBA, feasible administrative or engineering controls shall be implemented by the supervisor, with assistance from the County Safety Office.
- G. Whenever engineering methods cannot reduce noise to safe levels or employees cannot be excluded from noisy areas, all employees exposed to loud noise will be required to wear personal protective devices designed to attenuate the ambient noise in the ear. Employees shall be given the opportunity to select their hearing protectors from at least two different types (i.e. molded, self-molded, custom molded, or ear muffs) of suitable hearing protectors.

V. AUDIOMETRIC TESTING

- A. All employees whose exposures equal or exceed an 8-hour time-weighted average of 85 decibels will have an audiometric test.

NOTE: Supervisors may elect to have audiograms completed for employees not addressed by this procedure.

- B. Audiometric tests will be performed in accordance with this policy by a company approved by the County Safety Office. All audiometric test results will be given to and maintained by the County Safety Office or designee.

- C. All employees or work groups identified to come under the Hearing Conservation Program will be tested within 180 days of being identified, and annually thereafter for as long as the employee is qualified.

D. Evaluations

1. Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if a standard threshold shift has occurred. This comparison may be made by a certified audiometric technician.
2. If the annual audiogram indicates that an employee has suffered a standard threshold shift, they will be retested within 30 days and the results of the retest will be considered as the annual audiogram.
3. An audiologist, otolaryngologist or other qualified physician shall review audiograms that indicate a standard threshold shift to determine whether there is a need for further evaluation.

E. Follow-up

1. If a comparison of the annual audiogram to the baseline audiogram indicates a significant threshold shift, the County Safety Office will ensure that the following steps are taken:
 - a. Inform the employee and his/her Supervisor and/or Manager in writing within 21 days of the determination.

- b. Refer the employee for a clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary or if the County Safety Office suspects that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.
 - c. Inform the employee of the need for an otological examination if a medical pathology of the ear, which is unrelated to the use of hearing protectors, is suspected.
 - d. Upon notification by the County Safety Office, the supervisor/ or their designee of the affected employee will ensure that the following steps are taken:
 - i. The employee is fitted with hearing protectors, trained in their use and care, and is required to use them.
 - ii. An employee already using hearing protectors shall be refitted and retrained in the use of hearing protectors offering greater attenuation if necessary.
2. If an employee continues to have a significant threshold shift, as determined from previous audiometric tests, the Manager and/or Department Head will be notified and a reasonable attempt will be made to place the employee in a job he/she is qualified to do where the noise exposure does not exceed an 8-hour time-weighted average of 85 decibels.

VI. HEARING PROTECTORS

- A. Supervisors shall make hearing protectors available to all employees exposed to a time-weighted average of 85 dBA or greater at no cost to the employees. Hearing protectors shall be replaced as necessary.
- B. Supervisors shall ensure that hearing protectors are worn:
 1. By any employee who is exposed to an 8-hour time-weighted average of 85 dBA or greater; or
 2. By any employee who is exposed to noise above 115 dBA; or

3. By any employee who is exposed to any impulsive or impact noise measured at or above 140 dBA peak using an impulse sound level meter set to either the linear or C-scale.
- C. Employees shall be given the opportunity to select their hearing protectors from at least two different types (i.e. molded, self-molded, custom molded or earmuffs).

VII. TRAINING

- A. Employees exposed to noise at or above a time-weighted average of 85 dBA will be trained annually, by the County Safety Office or designee, in the following items:
1. The effects of noise on hearing.
 2. The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use and care.
 3. The purpose of audiometric testing, and an explanation of the test procedures.
- B. Attendance records of Hearing Conservation training will be retained by the County Safety Office and appropriate department.