

Hearing Conservation Policy

Description

OBJECTIVE

To establish for University of Florida employees the following procedures, requirements, organizational responsibilities, guidance, safety and health precautions governing tasks involving personal and/or occupational exposure to noise.

The hearing conservation program shall apply whenever employee noise exposures equal or exceed an 8-hour time-weighted (TWA) sound level of 85 decibels measured on the A scale (slow response) or, equivalently, a dose of fifty percent as measured by noise dosimeters.

AUTHORITY

By authority delegated from the University President, the Vice-President for Business Affairs is responsible for the safety of all University facilities. Under this authority, policies are developed to provide a safe teaching, research, service, housing and recreational environment.

POLICY

It is the policy of the University of Florida to reduce noise exposure in the workplace to the extent that it is reasonably practicable. In those situations where it is not feasible to reduce noise exposure by suitable engineering means, during exposure evaluation periods, and during implementation of engineering controls, either administrative controls or personal hearing protectors shall be used to ensure the protection of employees.

The Occupational Safety and Health Administration (OSHA) has promulgated regulations limiting employee exposure to noise. These regulations have been adopted by the State of Florida. The American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH) have instituted more stringent guidelines which are adopted by UF.

RESPONSIBILITIES

[su_spoiler style="fancy" icon="chevron" title=" Environmental Health and Safety (EH&S) "] EH&S is responsible for the administration of the Hearing Conservation Program

Determines the need for hearing protection through conduction of noise surveys

Provides initial and annual training

Provides audiograms to participants outside the Gainesville area

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Departments "] Assist EH&S in identifying employees who are required to participate in the Hearing Conservation Program by identifying potential areas of concern in their units

Document work in areas of excessive noise in PeopleSoft for positions with a number and on the INOP form for individuals not on positions

Inform personnel that a baseline and annual audiograms and participation in a training program are required for all future appointments to this position

Schedule preplacement health assessments and baseline and annual audiograms for their employees

Provide a choice of hearing protection devices to those employees requiring them and insures that they are being worn.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Speech and Hearing Clinic "] Provides audiograms for all participants in the Gainesville area

Provides a copy of the audiogram

- to the employee and
- to the UF OCCMED Clinic for filing in the person's medical record.

Notifies EH&S if excessive losses are detected.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" UF Occupational Medicine Clinic "] Performs preplacement evaluation and evaluation of baseline and annual audiograms

Maintains all medical records associated with this program

Enters the review status in myUFL

Provides monitoring:

a) Initial clinical evaluation of standard threshold shift;

b) Referral coordination for ENT evaluation of threshold shift to determine if it is noise induced.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Employee "] The employee is responsible for complying with all requirements of this Program once it is established that he or she must participate. The employee must:

- Attend all scheduled audiogram appointments to avoid disciplinary actions,
- Wear any required hearing protection
- Attend the required initial and annual training

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PROCEDURES

When employee noise exposures equal or exceed an 8-hour time-weighted average (TWA) sound level of 85 dBA, feasible administrative or engineering controls shall be utilized. If such controls fail to

reduce 8-hour TWA exposures to less than 85 dBA, personal protective equipment shall be provided and used to reduce the exposure levels. Protective equipment shall also be used to lower exposures to less than 85 dBA TWA until feasible administrative or engineering controls are implemented.

A hearing conservation program shall be implemented whenever employee noise exposures equal or exceed an 8-hour TWA sound level of 85 dBA.

[su_spoiler style="fancy" icon="chevron" title=" Monitoring "] When information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 dBA, a monitoring program shall be implemented to identify employees for inclusion in the hearing conservation program and to enable the proper selection of hearing protectors.

Where circumstances as high worker mobility, significant variations in sound level, or a significant component of impulse noise make area monitoring generally inappropriate, representative personal sampling shall be used to comply with the monitoring requirements of this paragraph.

Monitoring shall be repeated whenever a change in production, process equipment, or controls increases noise exposures.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Employee Notification "] Each employee, whose noise exposure is monitored, shall be notified of the results of the monitoring.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Audiometric Testing Program "] All employees whose exposures are equal to or exceed an 8-hour TWA of 85 dBA shall be included in an audiometric examination program.

A baseline audiogram shall be performed within 6 months of an employee's first exposure at or above 85 dBA TWA.

Annual audiometric testing shall be performed for each employee exposed at or above an 8-hour TWA of 85 dBA and in accordance with 29 CFR 1910.95.

The audiometric test data shall be evaluated in accordance with 29 CFR 1910.95.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Hearing Protectors "] Hearing protectors shall be provided to all employees who are exposed to an 8-hour TWA of 85 dBA. Employees should be required to use hearing protectors in areas where noise levels exceed 85 dBA (8 hour TWA).Hearing protectors shall be worn as required by Section e.1.

Hearing protectors shall be worn by any employee who is exposed to an 8-hour time weighted average of 85 dBA or greater, and who:

- has not yet had a baseline audiogram established or has experienced a standard threshold shift.

Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Hearing Protectors Attenuation "] University of Florida shall evaluate hearing protection attenuation for the specific noise environments in which the protector will be used in accordance with 29 CFR 1910.95 {Appendix B and Section (i)}.

Hearing protector attenuation must be evaluated for specific noise environments. Hearing protectors must attenuate employee noise exposures at least to a TWA of 85 decibels and to 85 decibels or

below for employees who have experienced a standard threshold shift (STS). It is recommended that, if possible, all hearing protectors be selected to attenuate noise below 85 dBA.

Hearing protection must be worn by all employees who are exposed to noise above 85dBA. The hearing protector should reduce the noise level below an 8-hr TWA of 85 dBA. All hearing protectors are assigned a noise reduction rating (NRR) which can be found on the individual package or box the hearing protectors came in. This NRR is based on a dBC scale, although most sound measurements are given in a dBA scale. To account for this difference, the NRR number must be reduced by a value of 7 to determine how much protection it will afford in the work environment.

- The equation is as follows: $dBA' = dBA - (NRR - 7)$
where: dBA' = effective noise level for the hearing protector
 dBA = measured A-weighted noise level (sound level meter readings)
NRR = noise reduction rating obtained on package
- If the noise of a piece of equipment is measured at 96 dBA, a hearing protector with a NRR of at least 18 would be needed:
 $dBA' = dBA - (NRR - 7)$
 $85 = 96 - (NRR - 7)$
 $NRR - 7 = 96 - 85,$
 $NRR = 11 + 7$
 $NRR = 18.$
- In a case where the hearing protector does not offer enough protection, earmuffs and plugs can be worn together. In this case, determine the effective NRR of the plugs and then add 5dBA. This number is then subtracted from the 8-hr TWA to determine the actual exposure at the employee's ear. Again, this number should be less than 85dBA.
- Remember, hearing protectors must be worn properly to provide maximum protection.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Training Program "] A training program must be established for all employees who are exposed to noise at or above an 8-hour time-weighted average of 85 decibels. This training program must be repeated annually for each employee included in the hearing conservation program.

The employees must be informed of the following.

- The effects of noise on hearing
- Physical damage of cochlea
- Location of high noise areas
- Off the job hearing hazards such as air boating, chain saws, gun fire, etc.
- Purpose of hearing protection devices and how they work.
- Instructions on selection, fitting, use and care of hearing protectors.
- The types and styles of hearing protection devices available and attenuation of the various types.
- Where to obtain hearing protectors.
- The purpose of audiometric testing and an explanation of test procedures.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Posting "] Areas where the noise level exceeds 85 dBA, must be posted with a warning and a requirement for the use of hearing protection.
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Medical Monitoring Program

The Hearing Conservation Program's medical monitoring requirement is part of the University of Florida's Occupational Medicine Program. Please reference the [UF Employee Preplacement Health Assessments: Policies and Procedures](#) for the overall Program description.

Participation in the Hearing Conservation Program is based on UF employee job duties. When a department fills a designated position, the medical monitoring procedures are as follows.

- The department documents the "work in areas of excessive noise" in the position information
 - in the PeopleSoft position information for positions with a number OR
 - on the INOP form for individuals not on a position.
- After making a job offer,
 - Departments in the Gainesville area contact
 - the UF OCCMED Clinic for a preplacement health assessment and
 - the Speech and Hearing Clinic for a baseline audiogram.
 - Departments outside the Gainesville area contact
 - a local provider for the preplacement health assessment and
 - a local audiologist or the EH&S safety coordinator assigned to their area for the baseline audiogram.
- The Speech and Hearing Clinic establishes a baseline audiogram as part of the preplacement health assessment and provides a copy to the employee and to the UF OCCMED Clinic. (Note: The EH&S off-campus safety coordinator provides baseline and annual audiograms for participating employees outside the Gainesville area.)
- The UF OCCMED Clinic coordinates any required medical follow-up, keeps the audiogram on file in the individual's medical record and records the evaluation status and due date in PeopleSoft.
- Environmental Health and Safety monitors for compliance.
- The department checks PeopleSoft for evaluation status and schedules annual audiograms.
- The employee keeps all scheduled evaluation appointments or notifies the department in advance of the appointment for any required variations.
- Current UF employees who are added to the Hearing Conservation Program must have a baseline audiogram established
 - by UF's Speech and Hearing Clinic for those in the Gainesville area OR
 - by a local audiologist or the assigned EH&S safety coordinator for those outside the Gainesville areamay be referred by the UF OCCMED Clinic for clinician evaluation/examination based on medical questionnaire and/or baseline audiogram records.

Costs

The cost of testing and training is borne by the Employing Division. Hearing protection device costs are the responsibility of the department employing the worker.

[su_spoiler style="fancy" icon="chevron" title="References "] The Noise Manual, Revised 5th Edition, 2003, American Industrial Hygiene Association

NIOSH Criteria for a Recommended Standard, Occupational Noise Exposure, 1998, U.S. Department of Health and Human Services, Public Health Service, National Institute for Occupational Safety and Health.

U.S. Department of Labor, Occupational Safety and Health Administration. 29CFR1910.95, Occupational Noise Exposure Standard

Governor's Executive Order 2000-292

Rename this pdf/form to

Initial and Annual Audiogram Form

[Hearing Program Annual Medical Update Form](#)

[Noise Levels for Common Equipment](#)

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