Policy:

To protect workers from the effects of noise overexposure. All workers who are subjected to a noise at or above 85 decibels (dB) averaged over 8 working hours, or an 8-hour time-weighted average (TWA) are to be included in a Hearing Conservation Program as specified by law.

Definitions:

**Action Level:** Employee exposure to occupational noise that triggers the implementation of the Hearing Conservation Program (workplace noise levels that is equal to or exceeds an 8-hour Time Weighted Average [TWA] of 85dBA).

**Standard Threshold Shift [STS]:** A change in the employee’s hearing threshold of an average of 10 decibels [dB] or more at 2000, 3000, and 4000 hertz [Hz] in either ear, relative to the baseline audiogram.

Procedures:

A. Monitoring

1. All workplaces suspected of having noise levels that may exceed the action level are to be monitored by the Department of Environmental Health and Safety to accurately identify employees who receive daily noise doses at or above the action level.

   a. Noise levels must be re-measured whenever any change relating to noise production is suspected of increasing exposures to the extent that additional employees may receive at or above the action level, or the attenuation provided by the selected hearing protectors is rendered inadequate.
b. Noise levels must also be remeasured to determine the effectiveness of any engineering controls that are installed.

c. Monitoring may be accomplished by an area survey technique in which sound level meter readings are combined with estimates of the length of exposure of individuals to particular sound levels in order to calculate an 8 hour Time Weighted Average (TWA), or may be measured by personal sampling method by the use of noise dosimeters.

### Average Sound Exposure Levels Needed to Reach the Maximum Allowable Daily Dose of 100%

<table>
<thead>
<tr>
<th>Time to reach 100% noise dose</th>
<th>Exposure level per NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 hours</td>
<td>85 dB(A)</td>
</tr>
<tr>
<td>4 hours</td>
<td>88 dB(A)</td>
</tr>
<tr>
<td>2 hours</td>
<td>91 dB(A)</td>
</tr>
<tr>
<td>60 minutes</td>
<td>94 dB(A)</td>
</tr>
<tr>
<td>30 minutes</td>
<td>97 dB(A)</td>
</tr>
<tr>
<td>15 minutes</td>
<td>100 dB(A)</td>
</tr>
</tbody>
</table>

### B. Audiometric Testing

1. All employees must have a baseline audiogram taken within six months of their first exposure at or above the action level. Employees with continuing exposures at or above the action level are to have annual audiograms.

   a. Baseline audiograms must be preceded by 14 hours without exposure to workplace noise; however, hearing protection may be used as a substitute for this requirement.

   b. Annual audiograms must be obtained during paid working hours.

### C. Hearing Protection

1. Hearing Protectors must be made available to all workers exposed at or above the action level. The use of hearing protectors is mandatory for those exposed at or above the Permissible Exposure Limit (PEL), and for those exposed at or above the action level who either incur an STS (Standard Threshold Shift) or who have been exposed in excess of six months without having had a baseline audiogram.

   a. Hearing protectors must reduce exposure to 90 dBA, or to 85 dBA for those exhibiting an STS (see section E).
b. The employee's department must provide a variety of suitable hearing protection from which employees may choose. This requires the availability of at least one type of plug and one type of muff.

c. The hearing protectors are to be supplied to employees at no cost, and replaced as necessary. The University is not expected to pay for an unlimited supply of protectors or to replace devices that are lost or damaged due to employee negligence.

D. Training

1. Employees exposed at or above the action level will be trained at least annually regarding the effects of noise; the purpose, advantages, disadvantages and attenuation of hearing protection being offered; the selection, fitting, and care of protectors; and the purpose and procedures of audiometric testing.

E. Recordkeeping

1. Noise exposure records must be retained for two years, but data older than two years should not be discarded unless remonitoring has been performed. Audiometric test records are to be retained for the duration of the employee's service at the University.

2. Changes in employees hearing acuity that exceed an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear, relative to the baseline audiogram, are considered to be a Standard Threshold Shift (STS). Any STS is to reported on a CS-13 form and DOSH 900 (OSHA Form 200).

F. Noise Reduction

1. The reduction or elimination of noise producing sources and/or employee exposure should be sought through administrative (e.g., modified work schedule) and/or engineering controls.

G. Responsibilities

1. The Department of Environmental Health and Safety will be responsible for the coordination of the overall program, with specific responsibility for:

   a. Assessing the need for hearing protection and identifying those employees who should be included in the Hearing Conservation Program through monitoring.
b. Selection of the types of hearing protection to be provided to University employees.
c. Providing initial training and written instructions for care, use and maintenance of hearing protection.
d. Conducting periodic inspections and evaluation to determine the continued effectiveness of the program.
e. Maintain copies of all records relating to workplace monitoring and audiometric testing. Audiograms will be held in those employee records maintained by the Department of Environmental Health and Safety for forty years.

2. Departmental Responsibilities

   a. Actual implementation of the program is the responsibility of the individual department in which exposed employees work. These responsibilities include:
      1) Establish an employee audiometric testing program through a medical provider.
      2) Supplying copies of audiometric testing results to the Department of Environmental Health and Safety.
      3) Purchase of hearing protection devices as recommended by the Department of Environmental Health and Safety.
      4) Coordination of employee training schedules with the Department of Environmental Health and Safety.
      5) Enforcement of the proper care and usage of assigned hearing protection.

3. Employee Responsibility

   a. To use the hearing protection provided in accordance with the instructions and training received.

Forms:

Policy Cross Reference: NA

Relevant Standards/Codes/Rules/Regulations/Statutes:

29 CFR 1910.95 Occupational Noise Exposure

References and Resources: NA