HEARING CONSERVATION PROGRAM

April 2017
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Hearing Conservation Program

Section 1. Introduction

The OSHA standard for Occupational Noise Exposure, 29 CFR 1910.95, addresses the requirements of a hearing conservation program for employees exposed to hazardous noise levels. The standard also addresses requirements for measurement of noise exposure, measurement of noise reduction from types of hearing protection, and audiometric testing.

Section 2. Purpose

The purpose of this Hearing Conservation program is to protect employees from the risk of noise induced hearing loss or damage by ensuring that areas with potentially hazardous noise levels are identified and adequate procedures are established to prevent employee exposure. If engineering and administrative controls are unable or not feasible in reducing sound levels below a time weighted average (TWA) of 85 decibels, hearing protection must be provided and enforced to reduce the sound to acceptable levels.

Employees that may be exposed to hazardous noise levels are required to comply with this written program.

Section 3. Roles and Responsibilities

Specific responsibilities for carrying out this program are identified by position below.

Provosts:
- Support and provide resources for the overall program.

Campus Safety Officers:
- Review the written program annually and recommend necessary updates.
- Assist with evaluating the overall effectiveness of the program.
- Maintain a list of hazardous noise environments and evaluate/update as needed if there are changes in equipment, process, etc.
- Maintain noise exposure measurement records (see Recordkeeping below).

NHED Safety Administrator:
- Ensure annual review, evaluation, and necessary updates to program.
- Ensure that employee training records and non-medical related program required records are maintained.
- Ensure monitoring is completed to identify areas or tasks that may cause overexposure.
NHED Human Resources Department:
- Maintain audiometric testing records (see Recordkeeping below).
- Provide access to records based on regulatory requirements.

Deans/Supervisors:
- Oversee the program for their departments/work areas.
- Oversee employee training.
- Identify areas or tasks resulting in an 8 hour TWA of 85 dB or greater.
- Notify employees exposed to an 8 hour TWA above 85 decibels of the results of the monitoring.
- Ensure that new equipment, processes, etc. are assessed.
- Provide engineering controls if deemed necessary for noise reduction in hazardous noise areas.
- Provide resources for audiometric testing and hearing protection equipment.
- Provide appropriate hearing protection and makes it available to exposed employees.
- Supervise staff to ensure that the Hearing Conservation program is followed.
- Oversee and ensure proper use of hearing protection.
- Assist with evaluating the overall effectiveness of the program.

Employees:
- Comply with this written program if exposed to an 8 hour TWA equal to or greater than 85 decibels.
- Understand the hazards and safe work practices for their work areas.
- Wear hearing protection necessary to perform tasks safely and prevent hearing loss.
- Attend required training sessions.

Section 4. Monitoring

When information indicates that an employee’s exposure may equal to or exceed an 8 hour TWA of 85 decibels, a monitoring program is to be implemented to identify possible overexposure and, if necessary, determine the criteria for selecting proper hearing protection. Monitoring is to be completed in accordance with the OSHA standard for Occupational Noise Exposure, 29 CFR 1910.95, and affected employees or their representatives are to have the opportunity to observe monitoring conducted.

Results from the monitoring conducted at each campus are to be documented and maintained.

Section 5. Audiometric Testing

Annual audiometric (hearing) testing must be made available to employees whose exposures are equal to or greater than an 8-hour TWA of 85 decibels in accordance with 29 CFR 1910.95 and its appendices. Test results are to be made available to employees.
Section 6. Hearing Protection

Hearing protection must be provided to employees exposed to an 8-hour TWA of 85 decibels or greater at no cost to the employee. The hearing protection selected must reduce employee exposure to levels acceptable under 29 CFR 1910.95.

A common method to estimate the Noise Reduction Rating (NRR) for hearing protection based on A-weighted data is as follows:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Determine the noise exposure level the employee is working in.</td>
<td>For this example = 90 dB</td>
</tr>
<tr>
<td>2.</td>
<td>Locate the NRR on the package or box of the hearing protection.</td>
<td>NRR = 29 dB</td>
</tr>
<tr>
<td>3.</td>
<td>Subtract 7 dB correction factor from the NRR.</td>
<td>29 dB – 7 dB = 22 dB</td>
</tr>
<tr>
<td>4.</td>
<td>Subtract the resulting number from the noise exposure level employee is working in.</td>
<td>90 dB – 22 dB = 68 dB</td>
</tr>
</tbody>
</table>

A common method to estimate the NRR for dual hearing protection (*ear muffs and ear plugs used simultaneously*) based on A-weighted data is as follows:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Determine the noise exposure level the employee is working in.</td>
<td>For this example = 90 dB</td>
</tr>
<tr>
<td>2.</td>
<td>Locate the NRR on the package or box of the higher rated hearing protection.</td>
<td>NRR_h = 29 dB</td>
</tr>
<tr>
<td>3.</td>
<td>Subtract 7 dB correction factor from the NRR_h and add 5 dB.</td>
<td>(29 dB – 7 dB) + 5 = 27 dB</td>
</tr>
<tr>
<td>4.</td>
<td>Subtract the resulting number from the noise exposure level employee is working in.</td>
<td>90 dB – 27 dB = 63 dB</td>
</tr>
</tbody>
</table>

Section 7. Training

All employees covered under this program are to receive hearing conservation training annually. The training content includes:

1. The effects of noise on hearing.
2. The purpose of hearing protection and the advantages, disadvantages, and attenuation of various types.
3. The selection, fitting, use, and care of the hearing protection selected.
4. The purpose of audiometric testing and an explanation of the test procedures.
5. The location of program information and training materials.
Records of training are to be documented and retained for a minimum of 3 years. Training documentation includes:

1. Date and location of training.
2. Names of employees attending and their signatures.
3. Name and title of person conducting the training.
4. Brief summary of material covered.

Section 8. Recordkeeping

The campus Safety Officer is to maintain noise exposure measurement records for 2 years. Medical records are to be maintained based on regulatory requirements. NHED Human Resources Department is to maintain records of audiometric test results for the duration of the affected employee's employment. Audiometric test records must include the employee's name and job classification, date, examiner's name, date of the last acoustic or exhaustive calibration, measurements of the background sound pressure levels in audiometric test rooms, and the employee's most recent noise exposure measurement.

Section 9. Program Review

Annual reviews of the Hearing Conservation program are to be conducted and documented, including any changes or additions to the program or other related documents.