### (i) FACT SHEET

## **Noise Exposure**

OAR 437 • Division 2/G • Division 3/D Division 4/G • Division 7/D



## Can you hear me now?

Do your employees have to raise their voices or shout to be heard above the background noise? This is an indicator of too much noise. The following is a summary of the major requirements of the Occupational Noise Exposure rules.

# A hearing conservation program

Employers must have an effective hearing conservation program whenever employee noise exposures equal or exceed an 8-hour time weighted average (TWA-8) of 85 decibels measured on the A-scale (dBA). This 85 dBA action level corresponds to a dose of noise that is 50 percent of the permissible exposure limit (PEL) TWA-8 of 90 dBA. There are five basic components to an effective hearing conservation program:

- Noise exposure monitoring
- Audiometric testing
- Hearing protection
- Recordkeeping
- Employee training

## Noise exposure monitoring

Conduct monitoring to determine if employees are exposed to noise exceeding the 85 dBA action level. Noise dosimetry is a method used to measure individual noise exposure. While not all employees need to be monitored, noise dosimetry must represent each affected employee's job or activities. Notify all affected employees of monitoring results that exceed the action level. These employees must be included in your hearing conservation program.

If noise levels exceed TWA-8 of 90 dBA, you must use all feasible engineering, administrative, or workpractice controls to reduce the noise exposure to or below the PEL. If these controls are insufficient to reduce exposure below the PEL, then you must provide personal protective equipment along with other controls to reduce exposures to the lowest achievable level.



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## **Audiometric testing**

A licensed or certified audiologist, otolaryngologist, other physician, or a technician who is certified by the Council for Accreditation in Occupational Hearing Conservation must perform and evaluate annual testing for all employee exposures over 85 dBA. Baseline audiograms must occur within six months of the date of an employee's first exposure to noise above the action level. Compare subsequent annual audiograms to their baseline to determine if hearing loss has occurred. If the comparison shows a standard threshold shift, you must either accept the results or retest the employee within 30 days. Employees should avoid any activities that would expose them to high levels of noise for 14 hours prior to the test.

#### Standard threshold shift

A standard threshold shift is a significant change or loss in hearing compared to the baseline in either ear. Employees who show a standard threshold shift and are exposed to a TWA-8 of 85 dBA or above must wear hearing protectors on the job.

#### **Follow-up procedures**

If any audiogram shows a standard threshold shift, notify the employee in writing within 21 days of receiving the report and record the results on your OSHA 300 Log. Employees with a documented hearing loss must be fitted with hearing protectors, trained in their use and care, and required to use them. Employees who were already using hearing protectors must be refitted and retrained. Some employees may need to be referred to a qualified specialist for additional evaluation.

## Resources

- Oregon OSHA's Noise topic page Occupational Noise Exposure Rules and related information
- Hearing protection fact sheet

## **Hearing protection**

See Hearing protection fact sheet.

## Recordkeeping

Maintain all records, including employee exposure measurements and audiograms. Audiometric test records must include the following:

- 1. Name and job classification of the employee
- 2. Date of the audiogram
- 3. Name of the examiner
- 4. Date of the last calibration of the audiometer, including information on the background noise level of the audiometric test booth
- 5. Employee's most recent noise exposure measurement
- 6. If the audiometric test shows a standard threshold shift, record it on your OSHA 300 Log.

Noise exposure measurements must be kept for at least two years and audiometric test records for the duration of the affected employee's employment. Provide access to these records to employees and their representatives upon request.

#### **Employee training**

Train all employees in your hearing conservation program annually. Include the following information:

- 1. Effects of noise on hearing
- 2. Purpose of hearing protection
- 3. Advantages and disadvantages of various types of hearing protection
- 4. Selection, use, and care of hearing protection
- 5. Purpose of annual audiometric testing

Provide the applicable Occupational Noise Exposure rule to employees and their representatives upon request.

The Technical Section of Oregon OSHA produced this fact sheet to highlight health and safety programs and rules. The information is intended to supplement the rules and provide best practices to employers.



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