

Hearing Conservation—What It Means to Employers

Hearing loss can happen slowly over a period of time, or it can happen instantly with exposure to a loud, sudden noise. Either way, it can affect you as an employer.

If your employees work in conditions where they have to shout to be heard, your company probably falls within OSHA guidelines with regard to hearing conservation. Effective April 1983, OSHA amended the requirements for occupational noise exposure. The Hearing Conservation Amendment reduced the allowable noise exposure for employees to 85 decibels per eight-hour period. Most machinery used in the lumber and logging industry ranges from 85 to 110 decibels.

If you have such noise levels, you should have a hearing conservation program in place. You might say, “I provide hearing protection, isn't that enough?” Not according to OSHA. A complete hearing conservation program consists of five areas:

- Sound level measurements
- Audiometric testing and evaluation
- Hearing protection
- Education
- Recordkeeping

Sound Level Measurements

You have to know how loud your equipment is to know if you should have a program. These measurements determine what type of hearing protection your employees should use. They also help determine who should be included in the program. Many insurance companies will measure your sound levels free of charge. The N.C. Department of Labor also has a program to measure noise levels for small businesses, although sometimes there's a waiting period. You can also take your own sound level measurements if you have a calibrated sound level meter. Most industrial audio logical companies can explain how to use this equipment. Some companies may allow you to borrow a sound level meter. These options can save your company money; however, certain criteria must be met.

Audiometric Testing

Hearing tests are conducted at least once each year. The first test is called the baseline test. This determines the employee's hearing threshold, the level at which they can just hear a tone presented at each frequency. Each year thereafter the employee is retested. The results are compared to the baseline to measure any changes in hearing. An audiologist or medical professional makes appropriate recommendations; a change in hearing protection, ensuring employees are wearing their protection correctly, medical referral. If there is a significant change at certain frequencies, known as a standard threshold shift (STS), the incident is recorded on the OSHA-300 forms.

Hearing Protection

Employees should be provided with adequate hearing protection. This can be in the form of formable, disposable ear plugs, hard rubber plugs, ear muffs, customized hearing protection, etc. There are a variety of different options. It's not enough, however, just to provide hearing protection. As an employer, it's also your responsibility to make sure that the hearing protection is worn and it is worn correctly. Hearing protection should be treated just like other protective devices. How do you handle an employee who doesn't wear safety glasses or an employee who doesn't wear safety boots?

Education

Education is considered to be one of the most important aspects of the hearing conservation program. NCDOL requires that specific topics be covered in safety sessions, which should be conducted each year. Employees are much more likely to wear their hearing protection if they see how it can protect them.

Recordkeeping

When NCDOL inspectors come into the workplace, one of the first things they request is documentation. Written documentation proves that testing and training were conducted. You should keep all employee test results, sound level measurements and records of educational sessions (who attended, topics covered). It is important not only to have a hearing conservation program to avoid OSHA citations, but also to protect the health and well-being of your employees. Hearing loss is painless, progressive, permanent and preventable!

Hearing Conservation Program

Protecting the hearing of employees is a priority. This operation will take the following steps to help prevent hearing loss:

1. All employees will wear hearing protection in areas where noise levels are above 85 decibels.
2. Noise levels can be expected to be in the following ranges at full power:
 - Chain saw (105-110 decibels)
 - Skidder (100-105 decibels)
 - Loader (100-105 decibels)
 - Chipper (100-110 decibels)
 - Grinder (100-110 decibels)
 - Feller buncher (100-110 decibels)

An annual noise level check, listed above, should be made to identify high noise areas.

3. Employee training will be conducted for those exposed to noise above 85 decibels. This will include:
 - A safety meeting on hearing conservation.
 - A discussion on proper types of protection and their uses.
 - Being told to wear hearing protection.
 - Documentation on a safety meeting record form.
4. Employees exposed to noise over 85 decibels will wear one of the following approved types of protection:
 - Moldable inserts,
 - Ear muffs attached to hardhats, or
 - Ear muffs attached to head band.