HEARING CONSERVATION AND OCCUPATIONAL NOISE EXPOSURE

29 CFR 1910.95

General Requirements:

This OSHA noise standard limits noise levels to 90 decibels (dBA) averaged over an eight-hour day, although hearing damage can begin at levels as low as 80 dBA over an eight-hour day. No worker may be exposed to noise in excess of 115 dBA without protection which will reduce the exposure below 115 dBA.

The following chart shows allowable exposure levels at various decibel levels, dBA, which are all equivalent to a 90 dBA eight-hour average. For example, someone exposed to 95 dBA of noise could only be exposed for 4 hours.

Permissible Noise Levels	
Duration of Exposure (hours per day)	Allowable dBA Level
8	90
6	92
4	95
3	97
2	100
1-1/2	102
1	105
1/2	110
1/4 or less	115

The standard requires that all areas suspected to be over 85 dBA be monitored in order to identify employees who are exposed to noise at or above 85 dBA. This monitoring must be performed during a typical work situation and should be repeated when changes in production, process, or controls increase noise exposure. If noise levels are above 90 dBA, the employer must first attempt to use engineering controls to bring noise levels down below 90 dBA. If such controls are not feasible, the employer may utilize personal protective equipment to reduce worker exposure to noise. Employees are entitled to observe the monitoring procedures and must be notified of the results of the exposure monitoring.

Hearing Tests:

If a worker's exposure exceeds 85 dBA averaged over eight hours, the OSHA standard requires the employer to provide that worker with annual hearing tests and a choice of free hearing protection. The employer must establish and maintain an audiometric (hearing) testing program. The program must include:

- a baseline audiogram;
- annual audiograms;
- training; and,
- follow-up procedures.

This testing must be provided at no cost to those employees who are exposed to noise at or above 85 dBA.

Baseline Audiograms:

These tests serve as references against which all future audiograms are compared on an individual basis. The baseline-hearing test must be provided within 6 months of the employee's first exposure to noise at or above 85 dBA. *Exception:* If mobile test vans are used by the employer, the employees must have their baseline hearing test performed within one year of their first exposure, however the employees must be provided with and required to wear hearing protectors for that time exceeding 6 months after their first exposure until the baseline test is performed. Employees should not be exposed to occupational noise for at least 14 hours prior to the baseline test unless they are provided with and use hearing protection.

Annual Audiograms:

These tests must be performed annually with the first conducted within one year of the baseline audiogram. A comparison against the baseline audiogram will help to identify

any deterioration in an individual's hearing ability. Early identification of hearing loss allows corrective and preventive action to be taken.

Employees are entitled to get a copy of their test results, and must be informed of any hearing loss within 21 days from the determination that the hearing test indicates a loss.

Hearing Protectors:

The employer must make hearing protectors available to all workers exposed to noise at or above 85 dBA for an 8-hour time weighted average. This ensures that employees will have access to hearing protection *before* they experience a hearing loss. Hearing protectors must be worn by:

- employees for any period exceeding 6 months from the time of their first exposure to noise until they receive their baseline exams;
- employees who have exhibited a hearing loss, since it appears that they might be susceptible to noise; and,
- employees exposed over the permissible exposure limit of 90 dBA over an 8-hour time weighted average.

The hearing protectors provided must reduce employee exposures to at least 90 dBA, or 85 dBA when they have already suffered a hearing loss. The workers must be provided a choice of hearing protectors and must be shown how to use and properly care for their protectors. The employer is responsible for ensuring that the workers continue to wear them correctly.

Training:

Workers exposed to noise at or above an 8-hour time weighted average of 85 dBA must be trained at least annually on:

- the effects of noise;
- the purpose, advantages, and disadvantages of various types of hearing protectors;
- the selection, fit, and care of protectors; and,
- the purpose and procedures of audiometric testing.

Recordkeeping:

The employer must keep noise exposure measurement records for at least 2 years. Audiometric test results must be maintained for the duration of the worker's employment.

For More Information:

- Please refer to the IBT Safety and Health Department Fact Sheet entitled "Noise".
- Contact the IBT Safety and Health Department.