



# OCCUPATIONAL HEARING AND CONSERVATION



**Approximately 22 million workers** are exposed annually to hazardous sound levels, while upward of 9 million workers are at risk for hearing loss from other hazards, such as solvents and metals. Additionally, nearly 20 percent of people (48 million) in the United States suffer from some form of hearing loss.





Significant hearing loss impairs an employee's ability to understand speech, hear warning signals and notice audio alarms.



## Hearing Loss Classification

00 to 15 dBA.....Normal Limits  
16 to 25 dBA.....Slight (H) Loss  
26 to 40 dBA.....Mild (H) Loss  
56 to 70 dBA.....Moderate (H) Loss  
71 to 90 dBA.....Severe (H) Loss  
91 + dBA.....Profound (H) Loss

## What is Audiometric Testing

-  Pure tone air-conducted hearing test
-  Test frequencies: 500, 1K, 2K, 3K, 4K, 6K, and 8K in each ear
-  Available to all employees exposed to sound level at, or above, the 85 dBA over a TWA period.
-  Identifies hearing levels and a sensitivity to the exposed sound



## OSHA Regulation 29CFR 1910.95

Employees exposed to sound levels at, or above, 85 dBA for an eight-hour time-weight average must be provided with some means to mitigate their exposure to the hazard.

## Methods Used

- ✓ Hearing Conservation Program
- ✓ Audiometric Testing
- ✓ Providing Employees with a Variety of Personal Protective Equipment (PPE).

- OSHA mandates an action level and permissible exposure limit for employees exposed to occupational noise
- Hearing conservation program implemented at, or above, a TWA of 85 dBA

Sound Level (dBA)	Allowable Duration (Hours)
85	16
90	8
95	4
100	2
105	1
110	.5
115	.25 or less

## How Sound is Measured

- Sound level or volume is measured in decibels.
- Sound, pitch or tone can be increased by adding or raising the volume, or dBA.

