

TOOLBOX TALK #8

PROTECTING WORKERS' HEARING

Is the noise at your workplace harming your hearing? The Center for Disease Control and Prevention (CDC) estimates that 22 million workers are exposed to hazardous noise on the job every year. OSHA's permissible exposure limit is 90 decibels averaged over 8 working hours, and the standard uses a 5 dbA exchange rate. This means that when the noise level is increased by 5 dbA, the amount of time a person can be exposed to a certain noise level to receive the same dose is cut in half.

OSHA also cautions that your workplace may be too loud if you hear ringing or humming in your ears after leaving work, have to shout to be heard by a co-worker who's an arms-length away, or experience temporary hearing loss when leaving work. So how can employers protect workers' hearing?

Solutions

Controlling excessive noise exposure should be an employer's first line of defense against work-related hearing loss. Two strategies are engineering controls and administrative controls.

- **Engineering controls:** This method involves modifying or replacing loud equipment or making changes at the source of the noise or along its transmission path. Some changes can be costly, so OSHA points to some inexpensive, yet effective, engineering controls to consider:
 - Enclosing or isolating the source of the noise
 - Choosing low-noise options when purchasing new equipment
 - Using sound walls or curtains around loud equipment
 - Keeping equipment maintained and well-lubricated
- **Administrative controls:** These types of controls involve making changes in the workplace that reduce or eliminate a worker's exposure to noise. Employers can implement administrative controls by:
 - Running noisy equipment during shifts in which the fewest amount of workers are exposed
 - Reducing the amount of time a worker spends near the source of the noise. In open space, for every doubling of the distance between the source of noise and the worker, the noise is decreased by 6 dbA
 - Creating or allowing access to quiet areas where workers can retreat to avoid hazardous noise sources

The use of these controls should aim to reduce the hazardous exposure to the point where the risk to hearing is eliminated or minimized.