Safety Matters

Now Hear This

A ccording to the National Institute for Occupational Safety and Health (NIOSH), "approximately 30 million Americans are exposed to hazardous noise on the job and an additional 9 million are at risk for hearing loss from other agents such as solvents and metals." For the construction industry, this accounts for 500,000 workers a year; many of whom accept the loss as part of the job.

Because "noise-induced hearing loss is one of the most common occupational diseases and the second most self-reported occupational illness or injury," as NIOSH reports, it is important to take a proactive stance to preserve your hearing and prevent future, permanent damage.

Intensity and duration

Hearing loss is caused by loud noises that damage the delicate hair cells in the inner ear. The degree of damage an individual experiences on the job depends on the intensity and duration of the hazardous sounds. Immediate hearing loss may result from a short, intense sound such an explosion. Prolonged exposure to loud noises-a more common scenario for concrete construction workers-can affect hearing over time. Unfortunately, the damage done is unnoticeable until later when sounds become muffled or distorted, or in extreme cases, results in tinnitus-a condition described as a constant ringing or roaring sound in the ear.

Noise-induced hearing loss cannot be undone or fixed. Unlike other cells in the body that regenerate and heal, the cells of the inner ear do not grow back. Once the damage is done, the hearing is lost forever.

Know your surroundings

Although you may not be able to

undo any damage that has been done in the past from years on the job or simple activities such as listening to loud music, you can help prevent further damage. The first step is to take note of the loud noises around you and to understand how hazardous they are to your hearing.

The National Institute on Deafness and Other Communication Disorders cites 85 decibels (dB) or higher as the threshold for hazardous sounds. To give you an idea where that falls in the range of everyday

noises, normal conversation comes in around 60 dB, a lawn mower creates 90 dB, and your basic hand drill generates 98 dB. Most of the tools and machinery concrete construction workers come in contact with get even louder than that. And extensive exposure to these types of noises takes its toll.

If you're not sure if the environmental sounds on the jobsite are damaging your hearing, NIOSH recommends you ask yourself the following questions:

■ Is the noise at my workplace so loud that I have to raise my voice significantly for someone an arm's length away to hear me?

■ When I leave work and am in a quieter environment, do my ears feel plugged? Or do I hear a mild ringing or whooshing noise that goes away after an hour or two?

Keep what you have

Hearing protection devices (HPDs) come in all shapes and sizes for any construction worker's preferences.



From expandable foam plugs to premolded reusable plugs, canal caps and earmuffs, there are a number of HPDs that are comfortable to wear and appropriate for the work at hand. The most important thing to remember when picking out an HPD is to choose the one you are most likely to use.

Another thing you can do to remain proactive is to monitor hearing loss with an annual audiogram. Urge your employer to add this to its OSHArequired hearing conservation program. These programs should include noise assessments, engineering controls, audiometric monitoring of workers' hearing, appropriate use of hearing protectors, worker education, recordkeeping, and program evaluation.

Remember, hearing loss doesn't have to be a part of your job. Protecting your ears will ensure that you will be more effective on the jobsite by continuing to clearly hear your coworkers and what else is going on around you.

- Kate Hamilton