



Occupational hearing loss is one of the most common work-related illnesses, and it is permanent. Hearing loss is associated with:

- Communication difficulties, making it challenging to maintain relationships with others.
- Concerns for personal safety and the safety of others.
- Other health problems, including tinnitus (ringing in the ears), heart problems, high blood pressure (hypertension), cardiovascular disease, cognitive decline, and poor mental health.

The good news is that occupational hearing loss from noise is 100% preventable. Construction jobs often expose workers to unsafe levels of noise that may harm health and lead to permanent hearing loss. Your hearing can be damaged by regular 8-hour exposures to 85 decibels (dBA). When noise is as loud as 100 dBA (e.g. jackhammer, stud welder), it can take repeated exposures of as little as 1 hour per day to damage your hearing. For reference, a normal conversation clocks in at about 60 dBA, a belt sander is approximately 93 dBA, and a jackhammer is approximately 110 dBA.

To prevent exposure to unsafe levels of noise, employers should prioritize buying quieter tools and equipment and implementing engineering controls (e.g., isolation, barriers, dampeners) or administrative controls (e.g., rotating workers between hazardous tasks). However, when these controls are not feasible or are insufficient to reduce

harmful exposures, workers should wear appropriate hearing protection. To be effective, earplugs and earmuffs must be properly selected and fitted to each user.

When selecting the proper personal protective equipment (PPE), consider a variety of hearing protection options. Select hearing protectors that are comfortable and compatible with the job.

Options include:

Earplugs – devices which slide snugly into the ear canal

Earmuffs – devices which completely surround the outer ear and are held in place by a headband or attached to a hardhat

Canal caps – devices which cover the entrance to the ear canals and are held in place by a lightweight band.

Workers exposed to noise levels 100 dBA or greater, or impulse sounds exceeding 140 dB, should consider using hearing protection devices with adequate attenuation or wear double hearing protection (e.g. ear plugs and ear muffs).

Select a hearing protector that will provide adequate noise reduction. Consider these guidelines:

- Aim for just enough noise reduction to bring exposure down to 75-85 dBA.
- Avoid overprotection. Too much sound reduction can make workers less aware of their surroundings or they might take off their hearing protectors to hear properly.

Loud noise at work or during free time, like at concerts or fireworks shows, can cause hearing loss. Let your supervisor or management know if you have signs or symptoms of hearing damage from work activities.