

Employees who work in noisy environments or around certain chemicals are at risk of Occupational Hearing Loss. This hearing loss is similar to hearing loss due to aging, where soft sounds may be hard to hear and loud sounds may be unclear or muffled.

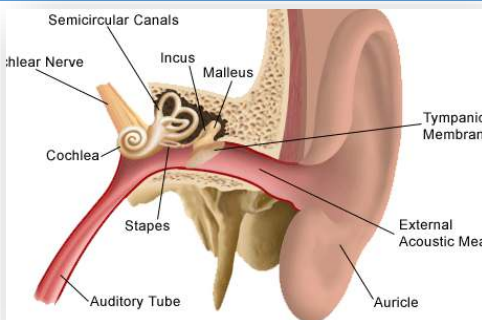
Hearing Loss

A short-term exposure (one-time events) can also cause temporary changes to hearing that go away quickly, but repeated exposures to loud noises can eventually result in permanent hearing loss. You may lose your ability to:

- Hear high-frequency sounds (such as children’s voices or the letter ‘S’),
- Understand speech (words can become unclear), and
- Communicate effectively (you may not be able to understand your own speech)



How does it happen?



Noise waves travel through our ears to the eardrum. The eardrum vibrates and sends vibrations through the tiny bones inside your ear, which in turn causes fluid in your cochlea to vibrate. These vibrations ripple along hair-like cells called cilia, which creates the nerve signal that tells you that you are hearing sounds.

Loud noises can damage your cilia. These cells are not able to repair themselves or grow back, so once they are damaged or die, they are gone for good. Very loud noises (such as explosions or gunshots) can also damage your eardrums or the bones in your ear.

Definitions

Audiogram:

A hearing test that identifies what volumes and frequencies of sounds you can hear. Workplaces with hearing conservation programs will conduct audiograms at an employee’s hire date to use as a baseline, and use annual audiograms to determine if an employee may have occupational hearing loss.

Cilia:

The cells in your middle ear that register sounds of different frequencies. Loud noises can damage these cells.

Ototoxicant:

A chemical that can cause nerve damage that may lead to hearing loss, like carbon monoxide or lead.

Presbycusis:

Natural hearing loss due to aging. This kind of hearing loss is gradual and affects your ability to hear high-pitched sounds.

Tinnitus:

The perception of hearing sounds when no noise is present. Tinnitus can be a symptom of hearing loss or other injuries to the