## Why should I care?

- Once your hearing is damaged, you cannot fix it.
- NIHL reduces your ability to hear high-pitched sounds, so you won't be able to hear female and children's voices, birds singing, or music properly.
- NIHL makes communicating with others harder.
- NIHL can cause your ears to ring constantly. This cannot be cured.

## How can I protect my hearing?

You can use hearing protectors to protect your hearing. There are three types of hearing protectors:

*Ear plugs.* These are made from foam or soft plastic. They are inserted into your ear canal and work by blocking the sound from going in. The foam kind are disposable. The soft plastic kind (pre-molded plugs) can be cleaned and reused. Both provide good protection.

*Semi-inserts/canal caps.* These are protectors that go into your ear and are mounted on a headband and so are easy to take on and off. They are good for noise that stops and starts, but they do not provide as much protection as plugs or earmuffs.

### Earmuffs. Earmuffs are like

headphones that make a seal over your ears. They are generally easy to use and wear, and provide good protection if you wear them correctly.

### How do I know if I am wearing my hearing protectors correctly?

- Your voice will sound deeper and louder
- You will not hear a difference in the loudness of the noise when you cover your ears.

### **Other Resources**

Hearing Loss Association of America www.hearingloss.org

**American Tinnitus Association** www.ata.org

Better Hearing Institute www.betterhearing.org

American Speech Hearing Language Association www.asha.org/public/

#### National Institute on Deafness and Other Communication Disorders www.nidcd.nih.gov/health/hearing

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# Hearing Conservation

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Veterans Health Administration VA Portland Health Care System At least 30 million people in the U.S. have hearing loss. About a third of all hearing loss is caused by exposure to loud noise. Hearing loss caused by exposure to loud sounds is called "Noise-Induced Hearing Loss" or NIHL for short. NIHL can occur after just one extremely loud sound, such as a gunshot or explosion, but it more typically happens after repeated exposure to fairly loud sounds, such as loud music or power tools.

NIHL is almost always *preventable*.

# How does noise damage hearing?

Noise damages hearing by damaging the hair cells in the cochlea. When healthy, hair cells send intact information to the brain. When they are damaged, the signal sent to the brain gets distorted so you can't hear clearly.

Undamaged hair cells

Damaged hair cells

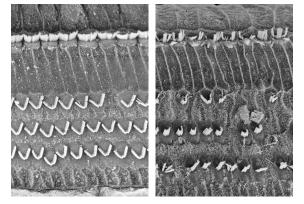


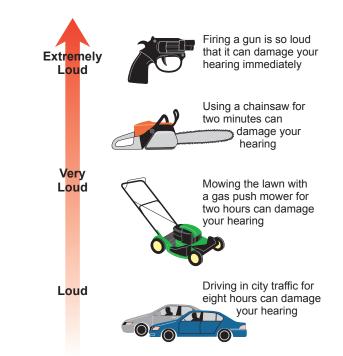
Photo courtesy of David J. Lim, MD, House Ear Institute, Los Angeles, CA.

### What are symptoms of NIHL?

Symptoms of NIHL include tinnitus (ringing in your ears) and sounds being dulled, muffled or distorted. At first, these symptoms go away, but, after more noise exposure they do not.

### Facts about loud sound

- The louder the sound, the less time it takes to damage your hearing.
- The loudness or intensity of a sound is measured in decibels (dB).
- Sounds are probably damaging your hearing if you cannot hear someone three feet away, or if you need to shout for them to hear you.
- You can listen to sounds of 85 dB for about 8 hours before causing damage.
- Common sounds that are loud enough to damage your hearing are music, power tools, guns and motorcycles.
- Remember that even pleasant sounds can damage your hearing if they are too loud.



# What can I do to protect my hearing?

- Turn down music if it is loud
- Move away from loud sounds
- Wear hearing protection when around loud sounds that cannot be avoided.
- Spend as little time as possible in noisy places. Take a break and find a quiet place.
- If you have tinnitus (ringing in your ears) or sounds are muffled, have your hearing tested.