Fact Sheet

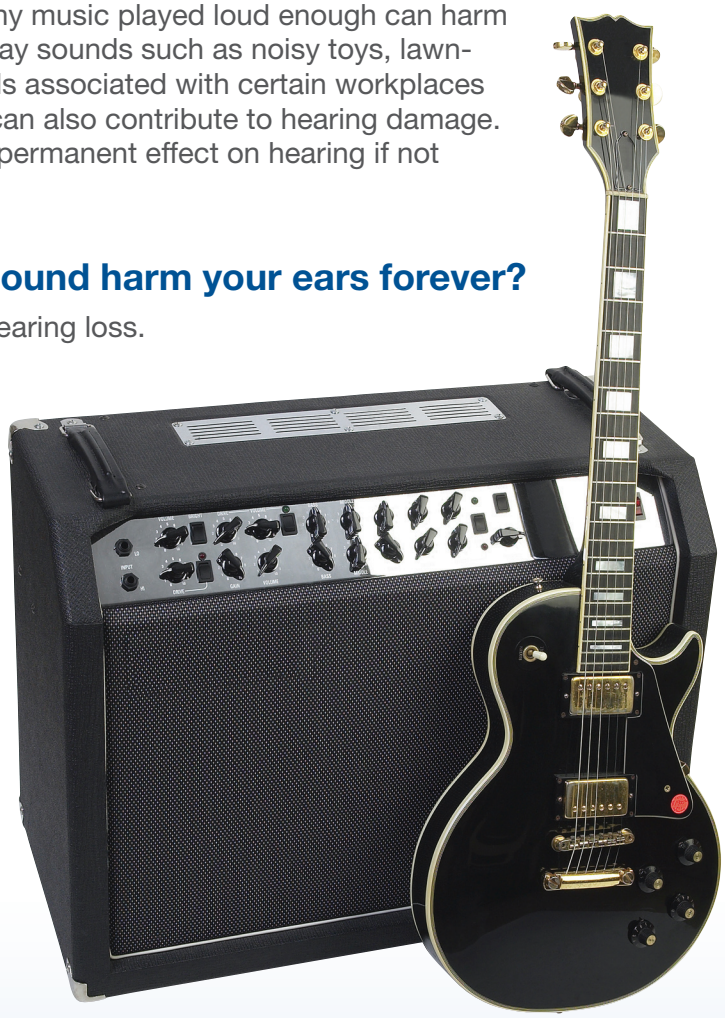
What Is Noise?

Noise can be defined as any unwanted sound and when loud enough, can damage your hearing permanently. Noise can range from a shotgun blast to recreational music that you would listen to at home or in your car. There is a general trade off between the loudness and the length of time exposed to the noise. The louder the sound, the shorter the time you should be around that noise before it causes damage.

Aside from destroying your hearing, noise can be a source of tinnitus, annoyance, stress, and can interfere with communication. Tinnitus can become constant and permanent.

Most people think of a gun blast as loud, but can classical music damage hearing?

Any sound, if loud enough, can damage your hearing. Whether you are a fan of easy-listening, hard-rock, or classical any music played loud enough can harm your hearing permanently. Other everyday sounds such as noisy toys, lawnmowers, and televisions or those sounds associated with certain workplaces such as factories or construction sites can also contribute to hearing damage. All sounds have the potential to have a permanent effect on hearing if not properly controlled.



Can one exposure to a loud sound harm your ears forever?

There are three types of noise-related hearing loss. Temporary damage is done slowly and will often come back after a rest from the noise. Often people who have attended a loud rock concert have experienced this type of hearing loss.

Temporary hearing loss can progress to a permanent loss over time if the noise/music is loud enough and the exposure time is long enough. The damage sustained is cumulative, so each new exposure can add to hearing loss.

Finally, there can be a sudden permanent hearing loss if there is exposure to a brief but very intense sound.

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How loud is too loud?

Sound is measured in units called decibels (dB). While there are laws guiding the amount of noise a person can be exposed to in the workplace, noise is considered too loud if the sound is over 85 dB. To put noise in context the wind in the trees can be 20 dB; a person when talking can be 55 dB; a chainsaw can be measured at 95 dB; and a single handgun blast can be as much as 160 dB.

As a rule of thumb, if you have to raise your voice over the noise, you should be wearing hearing protection. No person should be exposed to sounds over 120 dB for even very short periods of time without hearing protection. Levels over 120 dB can cause permanent damage even after one brief exposure.

How can I tell if I have been exposed to loud sounds?

Generally, after a loud exposure to sound you may feel as if your hearing is dulled, your ears may seem full and/or you may get tinnitus.

How can I protect myself from noise?

The best protection is to avoid exposure to any loud sounds. If that is not an option, wear some form of hearing protection such as earplugs or muffs. Under the law, any person exposed to noise over a certain level on the job must have hearing protection available on site. Companies which follow these laws have noise programs that monitor the noise as well as the employees hearing on a regular basis.

At home you should have a set of earplugs in your workshop or carry a set of earplugs in your jacket. If you can control the loudness or volume of the noise, your best approach is to turn down the volume.

What about playing music on my car stereo. Can this be damaging?

Most certainly the noise levels obtained from most car stereos can reach levels which are damaging to your hearing, especially with the windows up. Some high end car stereos can reach levels which exceed 130-160 dB. Even short exposures can permanently damage your hearing.

The best advice is to turn the volume down. Once your hearing is damaged or you develop constant tinnitus it cannot be repaired. The best action is prevention.

What can I do if I suspect a hearing loss, if I develop tinnitus, or I have any questions about hearing and noise?

If you suspect that you have a hearing loss, or if you have tinnitus, consult your family physician who will refer you to an audiologist. An audiologist is a professional who is trained to test your hearing and give you advice about hearing loss or tinnitus as well as give advice on prevention of hearing loss, especially from noise exposure.