Hear Today, Gone Tomorrow

Did you know that loud noise—not aging—is the most common cause of hearing loss?

An estimated 17% of teenagers and up to 40 million Americans under age 70 have irreversible hearing loss, due to noise. Even everyday sounds like a leaf blower, music on your headphones, or construction work can be dangerously loud. While you can’t turn down the volume on the world around you, you can protect your ears by being aware of the risk and taking some simple precautions.

What is “too” loud?

Sounds less than 75 decibels (dB) are considered safe for human ears. To put that into perspective, conversation in a restaurant is about 60 dB, a garbage disposal runs at about 80 dB, and a jet engine takeoff can rupture your eardrum at 150 dB.

Hearing loss or a constant ringing in the ears (called tinnitus) can be caused by a single event with sounds above 75 dB, like a music concert, fireworks, or a balloon popping at close range. Continued exposure to sounds at or above 85 dB, like a motorcycle, jackhammer, or lawnmower, can permanently injure the delicate hair cells of the inner ear that make hearing possible.

How to protect your hearing

“If you encounter a sudden, unexpected, loud noise—like a siren or fire alarm—it’s best to quickly cover your ears with your hands, as you will likely not have hearing protection handy,” recommends Dr. Alicia Restrepo, an audiologist with the University of Miami Health System.

When you anticipate being in noisy environments, wear ear protection like ear plugs
or noise-canceling headphones. You can also give your ears a break by moving farther away from the source of the sound and taking breaks in a quieter place, if possible.

“If you’re frequently exposed to loud noises at work, it may be worth it to invest in a set of custom-fit ear plugs,” says Dr. Restrepo. “Because these hearing protection products are molded to the unique shape of your ear, they tend to be more comfortable. Non-custom ear plugs are a more economical solution and can be purchased at most pharmacies or online.”

If you’ve ever had an MRI, you probably can still hear its repetitive clanking in your head. Modern MRI machines are powerful, and their sound can peak at 125.7 to 130.7 dB. Some medical diagnoses and research studies require patients to get frequent MRI scans, which raises the risk for noise-induced hearing loss. While most MRI centers offer hearing protection, Dr. Restrepo points out that “it’s important for you to read the instructions to ensure that the ear plugs are inserted properly. Improper insertion makes hearing protection less effective.”

Similarly, you may assume that your headphones or earbuds are designed to protect your ears. But, when you crank up the volume, they can potentially release up to 105 decibels (dB) of sound, which falls within the danger zone. “There’s nothing wrong with using headphones,” Dr. Restrepo says. “However, it is crucial to limit the volume and length of exposure time to reduce the risk of permanent damage.” It’s recommended that you reduce the volume to 60 percent or less of the max or use the volume-limiting feature (sometimes called the “smart volume” feature) on your mobile phone or music player. Don’t turn up the volume to overcome environmental noise, limit headphone use to one hour per day, and take regular breaks.

“Here’s a simple test to determine if your or your kid’s headphones are too loud,” said Dr. Dana Libman, a UHealth audiologist specializing in hearing conservation.
“Stand arm’s length away from the person wearing headphones and ask them a question. If they can’t hear you—or if you can hear the music coming from the headphones—then the volume is too loud and unsafe for the ears. And it’s time to take a break from listening and turn down the volume when they pick up the headphones again.”

**Don’t ignore the early signs of hearing loss, even for children and teenagers.**

“Following exposure to loud noise, if you feel like your hearing has declined or if you experience ringing, buzzing, or a sensation of fullness in the ears, it’s recommended that you have a hearing test as soon as possible,” says Dr. Restrepo. Request a hearing test from a physician if you’re having trouble hearing conversations and consistently need to turn up the volume.

---

*Dana Kantrowitz is a contributing writer for UMiami Health News.*