## Healthy You

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# Sound advice for protecting your hearing

By Teddi Dineley Johnson

isten up: One of the most dangerous and subtle toxins in our environment is excessive noise, and noise is invisible. "Noise is a toxic pollutant that we don't pay attention to because we can't see it, taste it or smell it," says Pam Mason, MEd, a certified audiologist with the American Speech-Language-Hearing Association.

You wouldn't drink a glass of murky, dark water, but because noise is not recognized as a pollutant, people often put themselves in excessively noisy environments, which can cause hearing loss as well as tinnitus, or ringing in the ears.

The sound of your dog barking — or any other source of sound — is simply vibrations



or sound waves traveling into your ear and striking your ear drum, causing it to vibrate. The vibrations continue to the tiny bones of your middle ear. The energy from the little

bones activates the hair cells in your inner ear, which transfer the information up to your brain to be interpreted as your pet's bark.

The loudness of sound is measured in units called decibels. The soothing tones of a whisper are measured at about 30 decibels, normal office chit-chat comes in at 60 decibels and vacuum cleaners can assault your ears at 70 decibels. The alarm clock that woke you up this morning, as well as the sound of the traffic on your way to work, could easily have packed a whopping 80 decibels. Jackhammers and jet engines emit sounds ranging from 130 decibels to 140 decibels,

### Move away from the noise

You don't have to be right in front of the stage to enjoy a concert. You can have just as much fun in seats that are far from the stage, even in the upper deck, and you'll save a bundle of money on ticket prices. You don't have to sit right beside



giant speakers, either. Always maintain a safe distance from the source of loud noise. According to the National Institutes of Health, a good rule of thumb is to avoid noises that are too loud, too close or last too long.



and rock music can peak at 150 decibels. MP3 players are capable of producing sound levels ranging anywhere from 60 decibels to 120 decibels. Beware of sounds louder than 85 decibels, which are considered potentially hazardous to your hearing.

"Even using a hair dryer every day can damage your hearing," says Mason, who urges consumers to purchase dryers touted by manufacturers as "quiet."

About 30 million Americans suffer from some degree of hearing loss and at least one in three of them can pin the damage — at least in part — on noise. But protecting your hearing can be as simple as heeding some sound advice.

#### Keep it down

Who isn't walking around these days without a digital music player glued to their ear? But some MP3 players turned all the way up produce sound levels so loud that you can only safely enjoy one song, Mason says.

"It is wonderful, high-fidelity music and so convenient, but those ear buds in your ears are funneling and intensifying the loudness right down into your ear canal, and it's not like a speaker that you can just walk away from," Mason says. "If you're going to listen to your music for long periods of time, don't set it above 50 percent volume."

And when you're cheering for your favorite sports team on TV, resist the temptation to turn the volume all the way up. The intensity of the sound won't change the outcome of the game, but it might change the

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outcome of your future hearing health.

#### Plug it up

Power tools. Lawn mowers. Loud bands. These are all part of a normal life, and the noise can damage the sensitive structures in your inner ear. Your local drug store sells inexpensive foam

earplugs that can protect you from hearing loss. They are also good for air travel. If you are going to be on a long flight, the plugs will protect your ears from the jet noise, and as an added bonus, from the screaming baby in the row behind you.

Many nightclubs and concert venues sell



a real audiophile or musician, you might want to invest in musician earplugs, available online for as little as \$20. For more bucks, an audiologist can custom

foam earplugs. But if you're

mold a pair for you. Musician earplugs reduce the sound to a safe level but still allow full enjoyment of the music.

#### Protect your head

Head injuries can cause tinnitus, or ringing in one or both ears. A bang to the head can also cause hearing loss and auditory processing disorders. Wearing a helmet during recreational activities such as biking, skiing, inline skating or snowboarding is not only cool but responsible.

#### Start it early

Many hospitals now screen newborns for hearing loss. Of every 1,000 babies born in the United States, between two and three are deaf or hard of hearing. Your newborn should have a hearing screening within the first month of life.

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