



Noise: Keeping It Down at Home

Help protect your tween's hearing for a lifetime. Teach him or her about the sources of excessive noise in and around your house that can lead to noise-induced hearing loss (NIHL), and how to help keep it down.

Every day, we hear a variety of sounds in our homes. These sounds range from the gentle hum of a refrigerator to a blaring fire engine passing by. Most household sounds are at safe noise levels. Sometimes, however, we operate several noisy devices at the same time or raise the volume on the television so that we can hear it over the vacuum cleaner. When we take these actions, we raise the overall noise level in our homes without even realizing it.

Noises in our homes can reach a level that is uncomfortable or even harmful to our hearing. Some common devices, such as power lawn mowers, are noisy enough that hearing protectors are recommended for even short exposures. Make your home a peaceful place. The result will be good for your hearing and your health!

What noise levels cause NIHL?

Sound is measured in units called decibels, just as height is measured in feet or inches. Because people can't hear all frequencies, or pitches of sound, A-weighted decibels (dBA) can be used to describe sound based on what human ears can actually hear. For comparison, a whisper measures 30 dBA, and a normal conversation measures 60-70 dBA. While sounds at or under 70 dBA are generally considered safe, prolonged exposure to noises that are at or above 85 dBA can damage tiny sensory hair cells in our ears, causing NIHL.

NIHL occurs when our hearing is exposed for too long to sounds that are too loud. The higher the decibel level, the shorter the time before damage may occur. How close we are to the sound also matters. Sounds get louder as we move closer to the source and softer as we move away. Limiting the number of noise sources in operation at any one time, particularly when you and family members are nearby, will help maintain a safe and comfortable noise level.

For more information on safe and unsafe noise levels, read the fact sheet *How Loud Is Too Loud? How Long Is Too Long?* at <https://www.noisyplanet.nidcd.nih.gov/info/Pages/howloud.aspx>.

Tips for creating a quiet home

You can create a quiet home in three ways:

1. Reduce noises at the source.
2. Avoid competing noises in the same area.
3. Make your family aware of noise sources, noise levels, and how to avoid unsafe noise levels.

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Here are some practical tips for creating a quiet home:

- Set your television, video games, and music to the lowest volume at which they can be heard clearly.
- If someone in the room has trouble hearing, consider turning on your television captioning rather than turning up the volume.
- Create ways to muffle the noise of chores. An example is to close the door between family members and appliances in use, such as those in a workshop or laundry room.
- Buy quiet toys. If you buy electronic toys, choose those with volume controls, and use only the lowest volume setting. This will both lower your household noise levels and help protect your child from NIHL.
- When buying certain appliances, such as a fan, range hood, or dishwasher, ask about its noise rating. Some ratings are given in "sones": the lower the sone number, the quieter the unit.
- If your home is in a particularly noisy location, work to keep outdoor noises outdoors. Caulk cracks around windows and doors. Insert putty or expanding foam around pipes and wires where they enter the house.
- Close windows and doors against potentially harmful sounds, such as leaf blowers, lawn mowers, power tools, and sirens.
- Use soft furnishings to soften noise indoors. The more cushions, curtains, and wall coverings you have, the more noise will be absorbed.
- Place carpets and area rugs over hard flooring to help soak up sound. Thicker rugs are more effective at reducing noises that bounce off of hard surfaces.

By taking just a few simple steps, you can achieve a home that is filled with only safe, peaceful sounds.

The Noisy Planet logo is a registered trademark of the U.S. Department of Health and Human Services (HHS).

The National Institute on Deafness and Other Communication Disorders (NIDCD) sponsors *It's a Noisy Planet. Protect Their Hearing.*® This national public education campaign is designed to increase awareness among parents of children ages 8 to 12 (twens) about the causes and prevention of noise-induced hearing loss (NIHL). With this information, parents and other adults can encourage children to adopt healthy hearing habits before and during the time that they develop listening, leisure, and working habits. To find out more about how to protect your hearing and that of your family, visit the Noisy Planet website at <https://www.noisyplanet.nidcd.nih.gov>.

For more information about your hearing and hearing loss, contact:

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