



It's A Noisy Planet

PROTECT THEIR HEARING



Noise: Keeping It Down at Home

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. In addition, some common devices around or outside the house, such as lawnmowers, are noisy enough that hearing protectors are recommended for even short exposures. Too much noise can cause stress, headaches, and fatigue as well as noise-induced hearing loss (NIHL). Make your home a peaceful place. The result will be good for your hearing and your health!

Typical household noise levels

The intensity, or loudness, of sound is measured in decibels. The softest sound that healthy ears can hear is 0 decibels — near total silence. By comparison, a whisper measures 30 decibels, and normal conversation measures 60 decibels. The chart lists decibel levels for common objects in and around our homes.

Average Decibel Levels of Sounds in and Around the Home

Sound	Decibel Level	Sound	Decibel Level
Refrigerator	45	Table saw	95
Clothes dryer	60	Circular saw	100
Washing machine	65	Hand drill	100
Vacuum cleaner	70	Diesel truck	100
Busy traffic	75	Gas engine mower	105
Blowdryer	80-90	Chain saw	110
Electric shaver	85	Car horn	120
Passing motorcycle	90	Siren	120



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Noises that are 85 decibels and above can damage tiny, sensory cells in our inner ear, causing NIHL. These cells, called hair cells, convert sound energy into electrical signals that travel to the brain. Once damaged, our hair cells cannot grow back. Don't be concerned, though, that using the washing machine (65 decibels) and the dryer (60 decibels) at the same time might damage hearing. Decibel levels do not simply add up, but combine according to a logarithmic scale. In this example, the combined decibel level is only a few units higher than 65 decibels.

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.



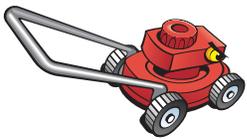
Tips for creating a quiet home

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.*

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. Use only one item at a time within one room. If possible, listen only to a television or stereo that is in the same room with you, rather than turning up the volume so you can hear from another room.
- If someone in the room has trouble hearing, turn 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 a new appliance, such as a dishwasher, bathroom fan, or stove vent, ask about its noise rating. Ratings are given in “sones”: the lower the sone number, the quieter the unit.

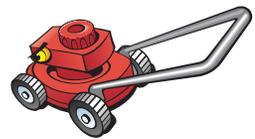


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- If your home is in a particularly noisy location, work to keep outdoor noises outdoors. Caulk cracks around windows and doors. Insert putty or expanding foam around pipes and wires where they enter the house.
- Close windows and doors against potentially harmful sounds, such as leafblowers, lawnmowers, 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. Curtains on the windows also help to block outdoor noises.
- Place carpets and area rugs over hard flooring to help soak up sound. Thicker rugs are more effective at reducing noises, which 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 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 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 Web site at www.noisyplanet.nidcd.nih.gov.

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