

# Children and teenagers at risk for noise-induced hearing loss

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Children and teenagers are frequently exposed to potentially damaging noise levels in schools, at home, and in sports, but there has been little reported on their risk for noise-induced hearing loss. In fact, three million children under the age of 18 have some hearing loss, and one factor is external noises.

A recent survey by the American Academy of Otolaryngology - Head and Neck Surgery (AAO - HNS), which represents ear, nose and throat doctors, found that 4 in 5 Americans are concerned about [hearing loss](#) due to ear buds. The survey showed that hearing loss is a top medical concern among parents, higher than concerns about asthma, food allergies, or exposure to [tobacco smoke](#). More than 90 percent of parents are very concerned about hearing loss in their children.

Nationwide, 10 million Americans suffer from irreversible noise-induced hearing loss, with 30 million more exposed to dangerous noise levels each day. For children and teenagers, one of the simplest - and most preventable - ways that they can acquire noise-induced hearing loss is by listening to loud music.

"It's important to be aware of the intensity of sound around you in order to protect your hearing," said Marcella Bothwell, MD, a pediatric otolaryngologist--head and neck surgeon at Rady Children's Hospital in San Diego, CA, and chair of the AAO-HNS Board of Governors public relations committee. "Children and teenagers are not always able to recognize when surrounding noises have reached dangerous levels, and

that's why parents and caretakers need to be aware, in order to teach them how to avoid permanent damage."

In recognition of Better Hearing and Speech Month, which is celebrated in May, the AAO-HNS recommends these tips to ensure that parents know how to protect their families from noise-induced hearing loss:

- Encourage your children to take breaks from long periods of listening to music.
- Give your child ear plugs or ear muffs if they are involved in a loud activity.
- Remind your child to turn down the sound of their music.
- Teach your child to avoid the noise (walk away) if they feel it is too loud.

Sound is measured in decibels (dB). A whisper is measured at 30 decibels and a normal conversation is 60 decibels. Eighty-five decibels is equal to listening to your stereo loudly but you are able to hear your friends in a conversation easily. However, the sound from a personal mp3 player at maximum level has been measured at 115 decibels—higher than the noise from a power saw (110 decibels).

According to ENT doctors and government occupational safety standards, people should wear ear plugs if they are exposed to any noise over 85 decibels for at least eight hours. If the noise is louder, the length of time needed to damage hearing will shorten. For example, 100 decibels may only take 15 minutes to permanently damage your hearing. Hearing loss is sneaky and adds up over the years. It starts in the high frequencies that humans don't notice much until they begin to lose understanding of words.

For children and teenagers, some activities that can risk damaging hearing include: playing with noisy toys, band instruments, and video

games; listening to personal music players and stereos at high volumes; attending concerts and movies; operating lawn mowers, leaf blowers, and power tools; and riding off-road vehicles and snowmobiles. As a general rule, noise may damage your hearing if you are at arm's length from it, or have to shout to make yourself heard.

Source: American Academy of Otolaryngology -- Head and Neck Surgery

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