

## Noise-Induced Hearing Loss in Young People

While many types of hearing loss are associated with the aging process in adults, it is not commonly known that noise-induced hearing loss (NIHL) in children and young adults is on the rise and can be the cause of "significant premature hearing loss."<sup>1</sup>

A national study estimated that approximately 12 percent of all children, age 6 to 19, have NIHL. According to the National Hearing Conservation Association, "ears never stop working."<sup>2</sup> Children are exposed to loud noise just as much as adults.

Approximately 30 million Americans are exposed to harmful noise levels on a regular basis.<sup>3</sup> Of the 28 million people with some degree of hearing loss, approximately one-third said that their hearing loss was caused partially by noise.<sup>3</sup> Moreover, approximately 5.2 million children have NIHL, and boys are more affected by loud noise than girls.<sup>4</sup>

In addition, of the 30 million Americans that are exposed to dangerous noise levels, teenagers are reportedly at a greater risk because this age group listens to music at "extremely loud levels for hours at a time."<sup>5</sup>

### Causes and Effects of NIHL

In general, the louder the sound, the less time it will take for that sound to affect a person's hearing. NIHL can be caused by a sudden loud sound (for example, one-time exposure like an explosion or gunshot), or the hearing loss can be caused by continuous ex-



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posure to various levels of harmful sounds.<sup>3</sup>

Repeated and unprotected exposure to loud noises and environments such as noisy toys, farm equipment, rock concerts or lawnmowers can damage a young person's hearing permanently.<sup>2</sup>

### Various Symptoms

Because loud sounds can damage the hair cells in the inner ear that send sound to the brain, a person's ability to understand speech can be affected. Symptoms of NIHL may be distorted or muffled sounds, ringing in the ears and/or difficulty hearing in the classroom or at home.

### Tests and Treatment

Parents should consider having a child's hearing tested if they are having difficulty hearing in school and at home, or if the child constantly requests for things to be repeated. An audiologist can test your child.

If hearing loss is present, a hearing aid may help.

### Prevention

Education programs in your child's school may be the most effective way to prevent and reduce the incidence of NIHL.<sup>5</sup>

Some recommendations for prevention of NIHL are to:

- Use earplugs made for noisy environments.
- Establish quiet time during the day, especially after a noisy activity.
- Test toys before buying them. If they hurt your ears, then it will definitely hurt your child's.<sup>6</sup>

### References

1. American Academy of Audiology News Room. Audiologists Offer Sound Advice for a Safer July 4<sup>th</sup> Celebration. Accessed via <http://www.audiology.org/about/newsroom/20020701.php>
2. National Hearing Conservation Association Public Education. Crank It Down Campaign. Accessed via [http://www.hearingconservation.org/resources/CrankItDown\\_brochure.pdf](http://www.hearingconservation.org/resources/CrankItDown_brochure.pdf)
3. National Institute on Deafness and Other Communication Disorders. Noise-Induced Hearing Loss. Accessed via <http://www.nidcd.nih.gov/health/hearing/noise.asp>
4. Nursing on About.com. Did You Know—About Noise-Induced Hearing Loss. Accessed via <http://www.nursing.about.com/library/1999/bldyk070701.htm?terms=decibels>
5. Self Help for Hard of Hearing People. "Variations and Pitfalls of Noise-Induced Hearing Loss." Accessed via <http://www.shhh.org/advocacy/noise.cfm>
6. League for the Hard of Hearing. Noise Center Page. Accessed via <http://www.lhh.org/noise/children/index.htm>

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### For More Information

American Academy of Audiology  
[www.audiology.org](http://www.audiology.org)

League for the Hard of Hearing  
[www.lhh.org](http://www.lhh.org)

National Hearing Conservation Association  
[www.hearingconservation.org](http://www.hearingconservation.org)

National Institute on Deafness and Other  
Communication Disorders  
[www.nidcd.nih.gov/health/hearing/noise.asp](http://www.nidcd.nih.gov/health/hearing/noise.asp)