



## Hearing Loss and Noise in Children

Approximately 12 percent of all children ages 6–19 have noise-induced hearing loss.

Noise-induced hearing loss is permanent and is almost always preventable!

Hearing loss can happen at any age. A growing number of teens and kids are damaging their hearing by prolonged exposure to loud noise.

Noise-induced hearing loss is caused by damage to the hair cells that are found in our inner ear. Hair cells are small sensory cells that convert the sounds we hear (sound energy) into electrical signals that travel to the brain. Once damaged, our hair cells cannot grow back, causing permanent hearing loss.

**The loudness of sound is measured in units called decibels (dB). Noise-induced hearing loss can be caused by prolonged exposure to any loud noise over 85dB.**

60 dB Normal conversations or dishwashers

80 dB Alarm clocks

90 dB Hair dryers, blenders, and lawnmowers

100 dB  
MP3 players at full volume

110 dB  
Concerts (any music genre), car racing, and sporting events

120 dB  
Jet planes at take off

130 dB  
Ambulances

140 dB  
Gun shots, fireworks, and custom car stereos at full volume

### How to protect your child's hearing:

- Monitor the noise levels to which children are exposed. If you have to shout for your child to hear you over his or her recreational activities, the noise is TOO LOUD!
- Wear the proper hearing protection (earmuffs or earplugs) when in noisy environments (concerts, sporting events, fireworks displays, car races). Hearing protection comes in

a variety of sizes and textures to provide optimum fit. Custom-made earplugs can be obtained from an audiologist.

- Purchase personal stereos or earphones with volume limiters.
- Listen to toys prior to purchase. Visit [www.toysafety.net](http://www.toysafety.net) as a safety resource.
- Be a good role model. Use hearing protection yourself when exposed to hazardous noise.
- Make sure your child's school has a hearing loss prevention program for music, shop and other noisy classes.
- Have your child's hearing tested yearly if they participate in noisy activities or if you suspect a hearing loss.
- Be aware of hearing loss warning signs a child may have such as ringing in the ears, speech sounding muffled, and difficulty understanding speech
- Turn down the volume. (Visit [www.TurnItToTheLeft.com](http://www.TurnItToTheLeft.com))
- Walk away from loud noise.

#### **Childhood noise risks include:**

Noisy toys  
Sporting events  
Band class  
Motorbikes  
Farm equipment  
Movie theaters  
Shop class  
Arcades  
Concerts  
Firearms  
Firecrackers and fireworks  
Power tools  
MP3 players

To help your child learn more about hearing, hearing loss, and hearing protection, download these educational worksheets and games.

#### **Noise Rules**

E = Earplugs/Earmuffs

A = Avoid Loud Sounds

R = Reduce the volume

S = Shorten the time in noise