

MP3 listening now could lead to hearing loss later

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Gianni Lee, 19, listens to an iPod at The Gallery in Philadelphia.

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They're called the iPod Generation — all those kids wired to earbuds and MP3 players this holiday season as they hunker down to endure long road trips or relatives that visit even longer. But they're at risk of becoming the "Huh? What?" Generation.

You've heard of BlackBerry Thumb? Now there's iPod Ear.

With the increasing popularity of MP3 players — and the loud, long listening habits of today's youth — millions of children and teens are at a newfound risk of noise-induced hearing loss. Doctors around the country say they are seeing younger and younger patients with hearing loss symptoms that typically don't occur before middle age. Many of them blame constant use of iPods and other players that blare music directly into ears.

Similar concerns were raised with Sony's Walkman in the 1980s, but the difference is that the latest portable stereos hold thousands of songs and have longer-lasting batteries. Because hearing damage is directly related to the duration of exposure — not just volume — one fear is that steady, long-term exposure to even moderately loud music could result in premature hearing loss.

"Once these things became portable and full-time usable, we really started noticing more noise-induced hearing loss problems in younger children," said Dr. Robert Fifer, director of Audiology and Speech Pathology at the University of Miami's Mailman Center for Child Development.

"We're seeing the same kind of hearing loss we used to see in older people who worked in factories for years."

Hearing specialists say the cases they're seeing may be only the beginning for this generation because accumulated noise damage can take years before it causes noticeable problems. And The Centers for Disease Control and Prevention reports that 13 percent of American children between 6 and 19 — more than 5 million young people — have some form of noise-induced hearing loss.

At peak volume, iPods can hit close to 120 decibels — a level between a jackhammer and a jet engine. Hearing experts say 85 decibels — the sound of city traffic — is safe. An MP3 player's range is usually 60 to 110 decibels. But too many people are going beyond the recommended limits, especially when they're on the street or in crowded places and crank the volume to drown outside noise.

Another alarming trend: Toy manufacturers are marketing MP3 players to children as young as 3. These devices — Bratz Liptunes, the Disney Mix Stick — produce sound well above 85 decibels, according to an analysis by the American Speech-Language-Hearing Association, which says this is like “plugging virtual rock concerts” into toddlers' ears.

Hearing specialists say the cases they're seeing now may be only the start of trouble for this generation because accumulated noise damage develops slowly and insidiously. A 15-year-old who regularly cranks the volume on his player for hours at a time may not experience any noticeable problems until he or she is in their mid- to late-20s.

Noise-induced hearing loss makes it difficult to understand what is being said in restaurants and other places with background noise. Conversations sound muffled, as if coming through a hotel room wall. It also becomes difficult to hear high-frequency, soft consonants, such as “s,” “t,” “f,” “h” and the “sh” sound.

“In English, those sounds comprise more than one-third of what we speak, so you're talking about misunderstanding key words,” Fifer said.

Dennis Burrows, a vice president with the American Speech-Language-Hearing Association, calls noise-induced hearing loss a “quality of life issue.”

Sufferers tend to withdraw, their health often deteriorates and they can encounter problems communicating at work.

“Think of the older person with hearing loss; he's the one alone in the corner who is all crabby, but if people lose their hearing at an earlier age, these flaws are going to kick in earlier,” Burrows said.

Noise-induced hearing loss happens when loud sounds stress and damage the delicate hair cells in the inner ear that convert mechanical vibrations in the air into electrical signals the brain interprets as sound. If exposed to loud noises for a long time, the hair cells can die, producing hearing loss.

Audiologists tell listeners to subscribe to two basic rules: keep the volume down (a good guide is to set the volume level at half) and limit listening time (to give your hearing a break).

“If you can't hear someone speaking to you and that person is just an arm's length away, then your iPod is too loud,” Burrows said. “You don't have to understand every word being said, but you have to know someone is talking.”

Many hearing specialists also recommend replacing standard earbuds with more expensive noise-canceling headphones or “canalphones.” And Sony, Panasonic, Etymotic Research, Shure and Bose produce sets that aim to block out background noise, so you can hear the music better at lower volumes.

But don't rely on just specialized earphones for safety.

“The problem is that no matter how you put the sound in, loud is loud is loud,” said Burrows, 54. “...The real key is to watch your volume and limit your time.