Too Loud! For Too Long!
Loud noises damage hearing

Hearing loss is the third most common chronic health condition in the US. Almost twice as many people report hearing loss as report diabetes or cancer. Noise exposure away from your job can damage your hearing just as much as working in a noisy place. Being around too much loud noise—like using a leaf blower or going to loud concerts—can cause permanent hearing loss. And once it’s gone, you can’t get it back! You can have hearing loss before you even notice you’re having problems. Noise is measured in what are called decibels (dB). Over time, listening to loud sounds at high dB levels can cause hearing loss—or other hearing problems like a ringing sound in your ear that won’t go away. The louder a sound is, and the longer you are exposed to it, the more likely it will damage your hearing. The more often you are exposed to loud sounds over time, the more damage occurs. It’s important for healthcare providers to ask about hearing and to screen those who are at risk.

Healthcare providers can:
- Ask patients about exposure to loud noise and trouble hearing, and examine hearing as part of routine care.
- Provide hearing tests when patients show or report hearing problems, or refer them to a hearing specialist.
- Explain how noise exposure can permanently damage hearing.
- Counsel patients on how to protect hearing.

Want to learn more? www.cdc.gov/vitalsigns/HearingLoss
Many people are exposed to noise that damages their hearing.

Hearing gets worse over time the more often people are exposed to loud sounds.
- About 53% of people ages 20-69 who have hearing damage from noise report no on-the-job exposure.
- About 24% of people ages 20-69 who report having excellent hearing have measurable hearing damage.
- About 20% of adults with no job exposure to loud sounds have hearing damage.

Hearing loss often gets worse for years before anyone notices or diagnoses it.
- People may not know that activities away from work can damage hearing just as much as noise on the job.
- People delay reporting hearing loss because they don’t know or won’t admit they have a problem.
- Less than half (46%) of adults who reported trouble hearing had seen a healthcare provider for their hearing in the past 5 years.

Hearing loss causes many problems.
- Continual exposure to noise can cause stress, anxiety, depression, high blood pressure, heart disease, and many other health problems.
- Some people are at higher risk for hearing loss, including those who:
  - are exposed to loud sounds at home and in the community.
  - work in noisy environments (especially noise of 85 dB or more for 8 hours or longer).
  - take medicines that increase their risk.
  - are male.
  - are age 40 or older.

Hearing loss is costly.
The cost for the first year of hearing loss treatment in older adults is projected to increase more than 500% from $8 billion in 2002 to an estimated $51 billion in 2030.

SOURCE: Journal of the American Geriatrics Society, 2010

Hearing loss from loud noise can be prevented.
About 70% of people exposed to loud noise never or seldom wear hearing protection.

How hearing loss occurs.

Common noises can be loud.

- **85 dB** is the approximate point at which extended exposure can cause hearing damage.
- **80 dB** is traffic noise inside a car.
- **70 dB** is the approximate point at which extended exposure can cause hearing damage.
- **90 dB** is leaf blower noise.
- **100 dB** is sporting event noise.
- **110 dB** is rock concert noise.
- **120 dB** is siren noise.

How noise causes permanent hearing damage.

- **Healthy hair cells**.
- **Damaged hair cells**.

Sound vibrates the eardrum and tiny bones in the ear which in turn vibrate the hair cells in the inner ear. Exposure to loud noises over time can permanently damage the hair cells, causing hearing loss.

Hearing trouble muffles other people's speech.

**What was said:**
"I asked Skip if he felt sick."

**What was heard:**
"I a____i_i_ e_eI_i__._."

SOURCE: CDC Vital Signs, February 2017
What Can Be Done?

The Federal government is

- Monitoring the health of the nation and setting targets for improvement through the Healthy People 2020 hearing objectives.
- Raising public awareness about the health effects of noise-induced hearing loss and how to prevent it.
- Tracking hearing loss and establishing standards to protect hearing in places such as mines, factories, and airports.
- Providing information to healthcare providers about effective counseling on the effects of noise exposure and correct use of hearing protection.
- Supporting research on the extent of hearing loss in America, contributing factors, and the most effective prevention strategies.

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Questions healthcare providers can ask patients.

- Do you find it difficult to follow a conversation if there is background noise?
- Can you usually hear and understand what someone says in a normal tone of voice when you can’t see that person’s face?
- Do you feel frustrated with your hearing when talking to family or friends?
- Are you often exposed to loud sounds, either at work or away from work?

Everyone can

- Avoid noisy places whenever possible.
- Use earplugs, protective ear muffs, noise-canceling headphones when near loud noises.
- Keep the volume down when watching TV, listening to music, and using earbuds or headphones.
- Ask your doctor for a hearing checkup and how to protect your hearing from noise.