

## Doctor, Please Explain

### Hearing Loss

#### Five minute hearing test

- How does the hearing sense work?
- What can I do to improve my hearing?
- Tips to maintain hearing health

You may have hearing loss, and not even be aware of it. People of all ages experience gradual hearing loss, often due to the natural aging process or long exposure to loud noise. Other causes of hearing loss include viruses or bacteria, heart conditions or stroke, head injuries, tumors, and certain medications. Treatment for hearing loss will depend on your diagnosis.

#### How does the hearing sense work?

The aural or hearing-sense is a complex and intricate process. The ear is made up of three sections: the outer ear, the middle ear, and the inner ear. These parts work together so you can hear and process sounds. The outer ear, or pinna (the part you can see), picks up sound waves and the waves then travel through the outer ear canal.

When the sound waves hit the eardrum in the middle ear, the eardrum starts to vibrate. When the eardrum vibrates, it moves three tiny bones in your ear. These bones are called the hammer (or malleus), anvil (or incus), and stirrup (or stapes). They help sound move along on its journey into the inner ear.

The vibrations then travel to the cochlea, which is filled with liquid and lined with cells that have thousands of tiny hairs on their surfaces. The sound vibrations make the tiny hairs move. The hairs then change the sound vibrations into nerve signals, so your brain can interpret the sound.

#### Test your hearing

Answer the following questions then calculate your score. To calculate your score, give yourself 3 points for every “Almost always” answer, 2 points for every “Half the time” answer, 1 point for every “Occasionally” answer, and 0 for every “Never.” Please note: If hearing loss runs in your family, add an additional 3 points to your overall score.

The American Academy of Otolaryngology—Head and Neck Surgery recommends the following:

0-5 points—Your hearing is fine. No action is required.

6-9 points—Suggest you see an ear, nose, and throat (ENT) specialist.

10+ points—Strongly recommend you see an ear, nose, and throat (ENT) specialist.

1. I  have a  problem hearing over the telephone.

**3 points** Almost  always **1 points** Occasionally  
**2 points** Half the time  **0 points** Never

2. I  have trouble  following the conversation when two or more people are talking at the same time.

**3 points** Almost  always **1 points** Occasionally  
 **2 points** Half the time  **0 points** Never

3. People complain that I turn the TV volume too high.

**3 points** Almost  always  
 **2 points** Half the time  **0 points** Never

**1 points** Occasionally

4. I have to strain to understand conversations.

**3 points** Almost  always  
 **2 points** Half the time  **0 points** Never

**1 points** Occasionally

5. I miss hearing some common sounds like the phone or doorbell ring.

**3 points** Almost  always  
 **2 points** Half the time  **0 points** Never

**1 points** Occasionally

6. I have trouble hearing conversations in a noisy background, such as a party.

**3 points** Almost  always  
 **2 points** Half the time  **0 points** Never

**1 points** Occasionally

7. I get confused about where sounds come from.

**3 points** Almost  always  
 **2 points** Half the time  **0 points** Never

**1 points** Occasionally

8. I misunderstand some words in a sentence and need to ask people to repeat themselves.

**3 points** Almost  always  
 **2 points** Half the time  **0 points** Never

**1 points** Occasionally

9. I especially have trouble understanding the speech of women and children.

**3 points** Almost  always  
 **2 points** Half the time  **0 points** Never

**1 points** Occasionally

10. I have worked in noisy environments (such as assembly lines, construction sites, or near jet engines).

**3 points** Almost  always  
 **2 points** Half the time  **0 points** Never

**1 points** Occasionally

11.  Many people  I talk to seem to mumble, or don't speak clearly.

**3 points** Almost  always **1 points** Occasionally  
**2 points** Half the time **0 points** Never

12.  People get  annoyed because I misunderstand what they say.

**3 points** Almost  always **1 points** Occasionally  
**2 points** Half the time **0 points** Never

13. I  misunderstand what others are saying and make inappropriate responses.

**3 points** Almost  always **1 points** Occasionally  
**2 points** Half the time **0 points** Never

14. I  avoid social  activities because I cannot hear well and fear I'll make improper replies.

**3 points** Almost  always **1 points** Occasionally  
**2 points** Half the time **0 points** Never

15.  Ask a family  member or friend to answer this question: Do you think this person has a hearing loss?

**3 points** Almost  always **1 points** Occasionally  
 **2 points** Half the time  **0 points** Never

What can I do to improve my hearing?

- Eliminate or lower unnecessary noises around you.
- Let friends and family know about your hearing loss and ask them to speak slowly and more clearly.
- Ask people to face you when they are speaking to you, so you can watch their faces and see their expressions.
- Utilize sound amplifying devices on phones.
- Use personal listening systems to reduce background noise.

Tips to maintain hearing health

- If you work in noisy places or commute to work in noisy traffic or construction, choose quiet leisure activities instead of noisy ones.
- Develop the habit of wearing earplugs when you know you will be exposed to noise for a long time.
- Earplugs quiet about 25 dB of sound and can mean the difference between a dangerous and a safe level of noise.
- Try not to use several noisy machines at the same time.
- Try to keep television sets, stereos and headsets low in volume.