Hearing & Voice Health Facts

From the American Academy Of Otolaryngology—Head and Neck Surgery

Unprotected, prolonged exposure to noise above 85–90 decibels can lead to hearing loss. You might consider using hearing protection if you are exposed to:

Decibels/Activity

100	subway train
107	lawn mower
110	baby crying
110	power saw
125	auto stereo
162	fireworks (at 3 feet)

For more information on protecting your hearing, visit: www.entnet.org.

Did You Know?

One in every ten (28 million) Americans has some form of hearing loss.

28 million adds up to more than all those suffering from heart disease, cancer, multiple sclerosis, blindness, tuberculosis, and kidney disease combined.

60% of people with hearing loss are between the ages of 21 and 65.

Among seniors, hearing loss is the third most prevalent, but treatable, disabling condition, behind arthritis and hypertension.

Hearing loss is the number 1 birth defect in America.

There are over 1,000 types and models of hearing aids to satisfy individual hearing loss needs.

May Is Better Hearing and Speech Month

Overheard: Some facts about hearing loss

More than 28 million Americans have some form of hearing loss. About a third of it is caused by noise, which damages hearing in a slow, cumulative process that most people don't recognize until it is too late. The loss is irreversible, but also preventable by using appropriate hearing protection. Hearing loss caused by noise develops when the auditory nerve or hair cells in the inner ear are damaged. It affects the ability to recognize sound, to understand speech, and to hear clearly. The noise exposure can be related to a person's occupation (such as using loud power tools in their work) or from simply listening to music too loudly. A new survey by the American Academy of Otolaryngology—Head and Neck Surgery found that four out of five Americans are concerned about hearing loss due to the use of ear buds or ear phones, worn with personal music players and gaming devices. Other things like age, medications, or trauma can lead to sensorineural hearing loss, but loud noise is a major source of such loss.

Hearing loss is a big problem for children as well. Approximately three of every 1,000 children in the United States are born deaf or hard of hearing. Studies have shown that early diagnosis of hearing loss is crucial to the development of speech, language, and cognitive and psychosocial abilities. One in every four children born with serious hearing loss does not receive a diagnosis until age 3 or older, making early hearing screening necessary for ensuring a child's healthy life.

Talk about it: What you should know about voice problems

Voice problems are often indicated by a change in the voice, often described as hoarseness, roughness, or a raspy quality. People with voice problems often notice changes in pitch, loss of voice, loss of endurance, and sometimes a sharp or dull pain associated with vocal use. Other voice problems may accompany a change in singing ability that is most noticeable in the upper singing range. A more serious problem is indicated by spitting up blood or when blood is present in the mucus. These require prompt attention by an otolaryngologist.

Keeping your voice healthy can be easy, if you follow these helpful tips:

- Drink plenty of water. Moisture is good for your voice. Hydration helps to keep thin secretions flowing to lubricate your vocal cords. Drink up to eight 8-ounce glasses is a good target of non-caffeinated, non-alcoholic beverages a day.
- Try not to scream or yell.
- Warm up your voice before heavy use. Warm-ups can be simple, such as gently gliding from low to high tones on different vowel sounds, doing lip trills (like the motorboat sound that kids make), or tongue trills.
- Don't smoke. It poses a potent risk for laryngeal (voice box) cancer, and inflammation and polyps of the vocal cords that can make the voice very husky, hoarse, and weak.
- Use good breath support to power the voice. Take time to fill your lungs before starting to talk, and don't wait until you are almost out of air before taking another breath.
- Use a microphone. When giving a speech or presentation, consider using a microphone to lessen the strain on your voice.

New Research Paves the Way for Treating Hearing and Speech Disorders

Better Hearing and Speech Month

Let's Talk about Speech!

Tongue-tie (Ankyloglossia)

Most of us think of tongue-tie as a situation in which we are too excited or nervous to speak. Actually, tongue-tie is the non-medical term for a relatively common physical condition that limits the use of the tongue, *ankyloglossia*.

Before we are born, a strong cord of tissue that guides development of mouth structures is positioned in the center of the mouth. It is called a frenulum. After birth, the lingual frenulum continues to guide the position of incoming teeth. As we grow, it recedes and thins. This frenulum is visible and easily felt if you look in the mirror under your tongue. In some children, the frenulum is especially tight or fails to recede and may cause tongue mobility problems.

The tongue is one of the most important muscles for speech and swallowing. For this reason, having tongue-tie can lead to eating or speech problems, which may be serious in some individuals. If you are concerned about a child having chronic tongue-tie, make an appointment with your local ENT doctor for a check-up.

Find your local ENT doctor through the AAO-HNS physician finder at www.entnet.org.

AMERICAN ACADEMY OF OTOLARYNGOLOGY–HEAD AND NECK SURGERY

New Research

Otolaryngologist—head and neck surgeons, commonly known as ENT doctors, are at the forefront of the latest research focusing on medical issues affecting hearing and speech. Each month, the American Academy of Otolaryngology—Head and Neck Surgery Foundation (AAO-HNSF) publishes a peer-reviewed medical journal (*Otolaryngology–Head and Neck Surgery*) that highlights specialty research.

In the past year, such discoveries have provided ENTs with better understanding of why people lose the ability to hear and speak, and how to treat patients when they do. This research also provides opportunities for these physician-surgeons to help their patients maintain the highest quality of life.

Speeding Could Be Bad for Your Hearing

One recent study by U.K. physicians indicates that riding in cars with the top down may impact your hearing. Researchers studied noise level exposures in seven different cars traveling at typical highway speeds, found drivers were exposed to 88 to 90 decibels of noise, above the 85 decibels at which hearing loss begins to occur. The researchers recommended further investigation to test hearing before and after a drive, and to gauge noise exposure to people who drive in enclosed cars with the windows rolled down.

Speak up!

Other new research finds that hoarseness is a common complaint among inner-city children at pediatric voice clinics. The study authors evaluated data from children (mean age, 7 years) who had visited a pediatric voice clinic from August 2003 to June 2008. Sixty-six percent of the 227 patients studied reported hoarseness as their main complaint. The most common causes of the hoarseness were vocal nodules, gastroestophageal reflux (GERD), over-use/abuse of the voice, velo-pharyngeal insufficiency, and swelling. However, some of the patients had no identifiable cause of the hoarseness and researchers suggested further study into how environmental factors in urban areas may impact children's voices.

Man-up to Hearing Loss

A new comprehensive study of the prevalence and risk factors for noise-induced hearing loss (NIHL) show that men, especially those who are white and married, are significantly more at risk than women. The study, which examined data from 5,290 people between the ages of 20 and 69 years, indicates that more than 13 percent of subjects suffer from NIHL, or approximately 24 million Americans suffering from the ailment. The strongest association to NIHL was of gender, where men are 2.5 times more likely to develop NIHL than women. Among that group, married, white (non-Hispanic) men represent the highest risk group for developing NIHL.

From the office of: