Hearing Loss: Are You at Risk?

I recently gave a program on Noise Induced Hearing Loss (NIHL) to a group of farmers, gardeners, and business people. The surveys completed after the program showed that most people were not concerned about Noise Induced Hearing Loss prior to the program. After the program most were concerned and planned to take action to prevent NIHL.

Every day, we experience sound in our environment, such as the sounds from television and radio, household appliances, and traffic. Normally, we hear these sounds at safe levels that do not affect our hearing. Sound is measured in decibels. Normal conversation is 60 decibels (dB) and anything over 85 dB for long periods of time could cause hearing loss. Sensitive structures in our inner ear can be damaged, causing noise-induced hearing loss. These sensitive structures, called hair cells, are small sensory cells that convert sound energy into electrical signals that travel to the brain. Once damaged, our hair cells cannot grow back.

NIHL can be caused by a one-time exposure to an intense “impulse” sound, such as an explosion, gunfire, or fireworks, or by continuous exposure to loud sounds over an extended period of time, such as noise generated in a woodworking shop, the lawnmower, chainsaw, tractor or any other powered tool.

Impulse sound can result in immediate hearing loss that may be permanent. This kind of hearing loss may be accompanied by tinnitus—a ringing, buzzing, or roaring in the ears or head—which may subside over time. Hearing loss and tinnitus may be experienced in one or both ears, and tinnitus may continue constantly or occasionally throughout a lifetime.

Continuous exposure to loud noise also can damage the structure of hair cells, resulting in hearing loss and tinnitus, although the process occurs more gradually than for impulse noise.
When a person is exposed to loud noise over a long period of time, symptoms of NIHL will increase gradually. Over time, the sounds a person hears may become distorted or muffled, and it may be difficult for the person to understand speech. Many people are not aware of any loss, but it can be detected with a hearing test.

People of all ages, including children, teens, young adults, and older people, can develop NIHL. Approximately 15 percent of Americans between the ages of 20 and 69—or 26 million Americans—have high frequency hearing loss that may have been caused by exposure to loud sounds or noise at work or in leisure activities.

Leisure activities include target shooting and hunting, snowmobile riding, woodworking and other hobbies, such as playing in a band, and attending rock concerts. Harmful noises at home may come from lawnmowers, leaf blowers, and shop tools.

NIHL is 100 percent preventable. All individuals should understand the hazards of noise and how to practice good hearing health every day.

To protect your hearing:
* Know which noises can cause damage (those at or above 85 decibels).
* Wear earplugs or other hearing protective devices when involved in a loud activity (special earplugs and earmuffs are available at hardware and sporting goods stores).
* Be alert to hazardous noise in the environment.
* Protect the ears of children who are too young to protect their own.
* Make family, friends, and colleagues aware of the hazards of noise.
* If you suspect hearing loss, have a medical examination by an otolaryngologist (a physician who specializes in diseases of the ears, nose, throat, head, and neck) and a hearing test by an audiologist (a health professional trained to measure and help individuals deal with hearing loss).

NIHL can be prevented if we heed the warning signs. Noise is too loud when:
* You have to raise your voice to be understood by someone standing nearby.
* The noise hurts your ears.
* You develop a buzzing or ringing sound in your ears, even temporarily.
* You don’t hear as well as you normally do until several hours after you get away from the noise.

Prevention methods most effective are to:
* Block the noise
* Avoid the noise
* Turn down the noise

Blocking the noise can be done by simply wearing ear protection. There are several different sources and kinds of hearing protection available on the market today. Earplugs and earmuffs can come in many forms.

Earplugs are soft foam or plastic inserts that fit directly into the ear canal. They are less expensive than earmuffs and come in both disposable and re-usable types. Earmuffs look like wireless headphones. The part that fits over the ear is often filled with fluid, foam or both to make sure that the earmuffs fit comfortably and closely. Earmuffs cost more than earplugs, but they are easier to put on correctly.

Avoid loud noises by simply walking away or staying away from the noise. The easiest way to avoid hearing loss due to noise in our home is to turn it down. Talk in a lower voice, turn down our electronic devices and remind others to do so also. By taking some basic safety precautions and being a positive role model, you can help prevent hearing loss in yourself and your children.

Remember NIHL is Painless, Progressive and Permanent but it is also Preventable. The key is prevention - NIHL is preventable. It is never too late, act today to prevent further loss.

For more information about nutrition, food safety or health please stop by the Wildcat District Office in Independence, KS at 410 Peter Pan or call Holly Miner, Nutrition, Food Safety and Health Agent at haminer@ksu.edu, 620-331-2690.

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