

## Hearing Loss Prevention

### *Hearing Protection is a Sound Investment*

There are lots of tiny fibers in your ear that help you hear. Over time, loud noise can damage these fibers, and once they are damaged, they cannot be fixed. According to the National Institute for Occupational Safety and Health, 22 million workers are exposed to potentially damaging noise at work each year.

If you operate power tools or noisy equipment or enter loud spaces, you have the potential for noise induced hearing loss (NIHL). Operating table saws, riding lawnmowers, or spending extended time near running generators are some activities where NIHL can occur. If you believe you work in an area with hazardous noise levels, contact Risk Management to request a noise assessment.

Risk Management has developed a [Hearing Conservation Program](#) to aid in the prevention of NIHL. As part of this program, employees exposed to a time-weighted average (TWA) of 85 dBA or more must participate in the following:

- Noise monitoring
- Annual training
- Annual hearing tests

Though not required, any employee exposed to an area above 85 dBA should wear hearing protection. Both plugs and muffs (double protection) should be worn in areas with 100 dBA noise exposure, such as rooms with operating generators or fire pumps. Signs should be posted in these areas.

### *No Need to Fear if You Protect Your Ear*

NIHL is 100% preventable but once acquired, hearing loss is irreversible. In order to protect yourself from NIHL, wear your hearing protection in noisy areas. To be effective, hearing protection must be worn correctly. Below are some tips to make sure you are getting a proper fit:



**Foam Earplugs:** Plugs must be inserted properly. Squeeze tightly as you roll it into a cylinder between your forefinger and thumb. Pull your ear up and back with the hand on the opposite side. Insert the earplug into the ear canal.



**Earmuffs:** Wear muffs in the same direction as the ear, making sure there is an air-tight seal over the ear. Effectiveness can be reduced by long hair, glasses, hats, or any other object that interrupts the seal of the muff.

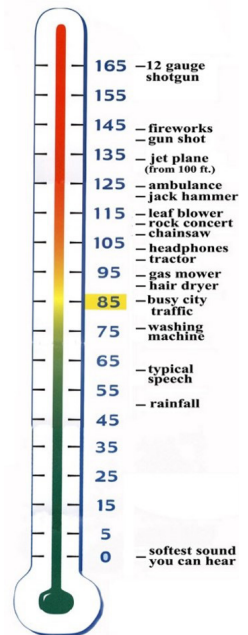
By age 25 the average carpenter has the same hearing as someone who is 50 years old and has worked in a quiet job! Most people don't feel any warning signs, like pain or ringing in the ears, until their hearing is already damaged. And if you think your ears can just get used to the noise, think again. If loud noises don't bother you as much as they used to, that means you've already lost some of your hearing.

If you already have hearing loss, it's important to protect the hearing you have left. Loud noises can continue to damage your hearing, making it even more difficult to communicate at work and with your family and friends.

### *Rule of Thumb... or Arm*

If you have to raise your voice when speaking to someone within arm's length, you are likely in a high noise area above 85 dBA. Bring out the earplugs or go somewhere quieter!

**Do your part:** *Hearing Loss Prevention* training is available at [learn.northwestern.edu](http://learn.northwestern.edu).



Noise level chart in dBA, decibels to reflect the ear's response to sound

## Tips for Success When Talking to Your Team

- **Preparation is Key:** Keep the topic relevant to your work. With your team, review commonly used noisy equipment in your department that may require the use of hearing protection.
- **Stay Positive:** Keep the focus on what can be done to create a safe workplace, instead of focusing on what has gone wrong in the past.
- **Share a Story, Ask for a Story:** Storytelling is a powerful method to convey information. Stories from your employees make the topic even more relatable.

## Safety at Home – Listen Up!

**Did you know?** Approximately 15% of American adults (37.5 million) report some trouble hearing. Men are almost twice as likely as women to have hearing loss between the ages of 20 and 69. Prevent harmful exposure to yourself and your family by following these tips:

- Purchase volume-limiting headphones to prevent noise-induced hearing loss in your child. 5 out of 10 young people listen to music or other audio too loudly. An iPhone's earbuds can average 105 dB at full volume. Experts recommend a max volume of 85 dB for no more than 60min/day for children.
- Many loud venues sell earmuffs for kids, but it's best to be prepared and bring your own when you know you are attending a loud event. 4 out of 10 young people are near dangerously loud noises during events like concerts or sports games.
- Look for noise ratings to purchase quieter appliances, power tools, and small electric devices. Hair dryers, kitchen blenders, and food processors can have noise levels of 80-90 dB.

## For Additional Information

Please contact [Gwen Butler](mailto:Gwen.Butler@northwestern.edu), Director of Environmental Health and Safety, at 847.491.4936 with any questions.