

Hearing loss is a serious problem for workers in the construction industry, with three out of every four construction workers being overexposed to noise on a jobsite. If you are exposed to too much noise, you can lose your hearing - and possibly your life.

On the job, too much noise can distract you; you may not hear warnings. Noise damages the nerves in the inner ears, and those nerves cannot be repaired.

In time, overexposure to high decibel sound decreases our ability to hear. Older workers might confuse work-related hearing loss with hearing loss due to aging. If you do not wear hearing protection you can look forward to asking people to repeat what they have said to you, or not hearing certain sounds of speech which results in missing important information. Once you reach this point, it can be very frustrating to communicate.

It is possible to slow down or stop noise-induced hearing loss by taking precautions.

It is important to know that overexposure to noise does not necessarily take a long time. Short periods of very high noise can cause overexposure.

For example, working for only 15 minutes with a gas-powered quick-cut saw will lead to overexposure and the damage has been done.

Noise is generally measured in [decibels \(dB\)](#). The scale commonly used to measure noise that may harm human hearing is the A scale. Decibels on the A scale are therefore described as dBA.

**You are required to wear hearing protection if you are exposed to noise levels such as:**

- More than 85 dBA for 8 hours
- More than 88 dBA for 4 hours
- More than 91 dBA for 2 hours

**Most power tools and equipment used in construction operate well over these levels.**

It is difficult to reduce noise levels on site, the next best choice is hearing protection.

The two main types of hearing protection are muffs and plugs. They each have advantages and disadvantages, but generally earmuffs provide better protection when they are over your ears and not around your hard hat or neck.

## Earmuffs

- Useful for intermittent noisy work as they are quick and easy to put on and take off.
- Do not last forever. Their protection and comfort decrease over time. Muff cushions must be replaced when they lose flexibility or are damaged.
- Tension in the headband needs to be just right: too loose – they do not give enough protection; too tight – they are uncomfortable.

## Ear Plugs

- Are light and comfortable for most users but must be put in properly to work right. Your hands must be clean to insert them.
- Come in single-use or multiple-use types. Multiple-use types should be replaced often when working in contaminated environments.

Plugs and muffs will have a Noise Reduction Rating (NRR) printed on the packaging. This is the reduction the protection will provide in an ideal situation.

## Remember Hearing Loss is:

**Painless!** Loud noise even intermittently kills the nerves (hair cells) in the inner ear.

**Progressive!** The longer the ear is exposed, the more cells are destroyed.

**Permanent!** Once the damage is done the nerves (hair cells) cannot be repaired.

**Preventable!!!**

## Toolbox Talk Presenter Ideas

- Review any special requirements for hearing protection on the site
- Is hearing protection being worn when required?
- Identify some equipment that require hearing protection on the project

APP for phone to measure noise exposure:

**Decibel X: dB, dBA Noise Meter**