

Toolbox Talks are intended to facilitate health and safety discussions. Find more Toolbox Talks on the [Occupational Safety web page](#).

General Information

When you are exposed to loud noises over long periods of time, you are at an increased risk of losing your ability to hear. Once the nerves of the inner ear are destroyed or damaged from exposure to excessive noise, the damage is permanent. It does not matter where you are exposed to excessive loud noise – it can occur at work, at home, or at play. Power tools, recreational equipment, musical bands or headphones can all generate excessive noise.

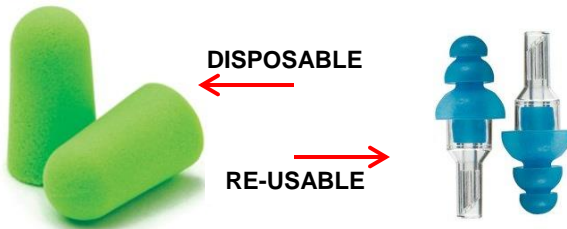
How to Reduce Sound Levels

- Sound is additive. Reducing the number of noise sources will reduce exposure to noise.
- Sound levels can sometimes be reduced by installing sound absorption materials or by reducing the amount of vibration of equipment.

Types of Hearing Protection Devices

Never use cotton, stereo headsets, or other makeshift hearing protectors. They do not protect your ears from noise. Use one of the following:

- **Earplugs:** Insert into the ear canal to seal out noise. Be sure to follow the manufacturer's instructions. They may be disposable or reusable.



- **Earmuffs:** Earmuffs are the best protectors. They have a headband with cushioned plastic cups that cover each ear. However, they may feel bulky or uncomfortable in hot weather.



Discussion Date:

Supervisor:

Participants:

Canal Caps: Cover and seal the ear canal entrance with soft flexible pads on a lightweight headband. Though comfortable, they provide the least protection.



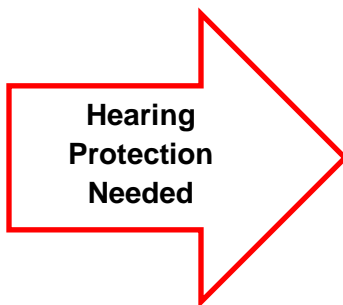
Earmuffs and Earplugs: In combination may be needed in some high-noise areas.

Allowable Exposure Limits

Noise Level	Allowable Exposure Time
85 dB	16 hours
90 dB	8 hours
95 dB	4 hours
100 dB	2 hour
105 dB	1 hour
110 dB	30 minutes
115 dB	15 minutes or less

Sound Comparison Chart

Noise Source	Decibel Level	Affects
Breathing	10	Barely audible
Rustling leaves	20	
Bird calls	40	1/8 as loud as 70 dB
Normal conversation	55	1/2 as loud as 70 dB
Vacuum cleaner	70	
	85	
Lawn mower	90	Light damage if exposed for 8 hours
Farm tractor	100	
Rock concert	115	
Chain saw	120	Painful, 32 times louder than 70 dB
Jet taking off	150	Eardrum rupture



Discussion Topics

- What is the primary source of noise in your work area?
- What action can be taken to reduce the level of noise in your work area?
- Where can you find hearing protection and what type is available to you?
- Does your hearing protection properly fit?