

NRMCA Monthly Safety Initiative

Volume 2, Issue 3



Now Hear This...

Ready Mixed Concrete Industry and Hearing Protection

Some ready mixed concrete industry employees may be subject to noise-levels at their work locations that require implementation of procedures to counter the danger of hearing loss. When frequencies of sound enter the ear canal and vibrate the ear drum, it is transported to the cochlea in the center of the ear. The cochlea contains liquid and very sensitive hair cells. These frequencies create waves in the liquid, picked up by the hair cells, which are transferred to the brain, which allows one to experience noise. Loud and excessive noise can damage the hair cells and eventually cause hearing loss.



What is "Too Loud"?

Most hearing loss occurs slowly. So slowly, in fact, that most people don't notice it occurring until it's too late and their hearing is gone. Sound is measured in units of decibels (dB). An average quiet room is about 20dB, a running belt conveyor is about 85dB, a cement blower is 100dB and an aggregate-hopper vibrator is around 105dB. In accordance with OSHA protocol, there must be hearing protection if one is subject to over 85dBA for 8 hours or more. Wear hearing protection always when the decibel level reaches 90. Workers likely need hearing-protection if someone talking 2 feet away and still difficult to hear. Follow company policies about hearing protection. There are two basic types of ear protection: ear plugs and earmuffs. Both provide a reduction of 15dB to 30dB if worn correctly. Ear plugs come in several styles: custom-molded, reusable, disposable roll-down foam, and canal caps. Earmuffs cover the entire ear and have a rubber strip that provides a seal when the muffs are worn correctly. Using both instead of one alone can provide an extra 5 to 10dB reduction in noise.

Think First and consider hearing protection when:

- Loading a mixer truck
- Filling cement or fly ash silos
- Near conveyor belts
- Operating a loader
- Using a grinder or cutting tools
- At a construction site
- In or near a block plant
- Working in a confined space
- Double hearing protection when chipping out a mixer drum



Resources

For more information on hearing loss prevention please follow the links below:

OSHA: [Hearing Conservation](#)

NRMCA: [Hearing Conservation Program](#)

Contacts

Gary Mullings: gmullings@nrmca.org | Kevin Walgenbach: kwalgenbach@nrmca.org

