

TOOLBOX TALK #18

WHAT TO KNOW ABOUT OTOTOXIC CHEMICALS



Did you know? Exposure to certain chemicals at work can result in hearing loss. Those chemicals are called “ototoxicants.” Examples include solvents, nitriles, pesticides and asphyxiants. Workers may breathe them in during their day, consume food or drink something that has been exposed, or absorb them through the skin.

According to NIOSH, hearing loss caused by exposure varies based on these three elements: exposure frequency, the strength of the chemical and the duration of exposure.

“Once someone is exposed, chemicals can travel through the blood stream,” NIOSH says. “Then the chemicals injure the inner ear and damage the nerves that transmit information to the brain. Effects may be temporary or permanent, can affect hearing sensitivity, and result in a standard threshold shift.”

To prevent exposure, the first thing to know is if your workplace has any of these chemicals.

“One way to identify ototoxicants in the workplace is by reviewing Safety Data Sheets for ototoxic substances and/or chemicals, and ototoxic health hazards associated with ingredients in the product,” the agency says.

If ototoxicants are found in the workplace, employers should:

- Train employees on working safely with and around these chemicals
- Replace ototoxicants with a less toxic chemical
- Improve ventilation in the work environment
- Provide workers with protective clothing, such as chemical-protective gloves, arm sleeves and aprons
- Supply workers with a respirator and hearing protection