

# By the Numbers: Confined Spaces



## DID YOU KNOW?

About 2.1 million workers enter permit confined spaces annually. According to the National Institute for Occupational Safety and Health (NIOSH), approximately 60 percent of confined space fatalities are rescuers. The Occupational Safety and Health Administration reported that when multiple deaths occur during a rescue, the majority of the victims are “would-be” rescuers.

## NIOSH reports:

- Out of 100 deaths that were investigated, the main reasons the workers entered the confined space were to perform their work functions of routine maintenance, repairs, and inspections of the confined space.
- Out of 670 confined space deaths, the most common types of hazards were atmospheric hazards and loose materials.
- Out of 217 confined spaces deaths that were investigated, the two most common types of gases in confined were spaces, hydrogen sulfide and carbon monoxide.

## KEEP IN MIND

A confined space can be a street manhole, or, a country silo. If you are not positive that you can exit safely from a confined space, your safety is in peril if you enter.

You should never enter a confined space without training. Written procedures and an entry permit system are essential.

- Take atmospheric precautions. The atmosphere should be tested before you enter – by trained people. The confined space should be ventilated until it tests safe. If this is not possible, the right respiratory protection should be worn.
- Lock out energy sources. Lines carrying gases, liquids or solids should be disconnected or blocked off before you enter. Valves and electrical circuits should be locked out and tagged.
- Remove possible sources of ignition. Use non-sparking tools and lighting devices in a potentially flammable atmosphere.
- Be fully prepared before entry. Make sure you are wearing the required personal protective equipment (PPE) including a hardhat, safety-toed

footwear, gloves and your breathing apparatus.

- Wear a lifeline. The lifeline should be connected from your body harness to a winch outside the confined entrance so you can be pulled out in case of emergency.
- Have trained and equipped personnel standing by outside the confined space, for communication and rescue if necessary.

