

# Emphasis on Confined Space Stats and Facts



## FACTS

1. A Confined space fatality occurs every four days on average in workplaces across the United States. (US Department of Labor)
2. Toxic gases present 2 risks: chemical asphyxiation (smothering) and irritation to the human respiratory system, skin and eyes.
3. 4 dangers of confined spaces are oxygen deficiency or oxygen enrichment; fire/explosion; the potential to drown in liquids or solids; and toxic atmospheres.
4. 10 examples of confined spaces are vessels, tanks, storage bins, silos, vaults, pits, manholes, sewers, septic systems and pipelines.
5. Accidents and rescue operations related to a toxic atmosphere typically pose a great risk for the rescuers. There are numerous cases where rescuers entering a confined space lost consciousness, making the entire rescue operation riskier and more complex.
6. Flammable atmospheric hazards refer to injuries resulting from fires and explosions in a confined space.
7. Engulfment is the result of being immersed in a liquid, such as oil or water, which then leads to drowning or asphyxiation. Engulfment can also be caused by free-flowing solids, such as rocks or dirt.

## STATS

### Findings Of the NIOSH Investigations of Confined Space Incidents:

- 85% of the time a SUPERVISOR was present.
- 29% of the dead were SUPERVISORS.
- 31% had WRITTEN Confined Space Entry PROCEDURES.
- 0% used the WRITTEN PROCEDURES.
- 15% had Confined Space TRAINING.
- 0% had a RESCUE PLAN.
- 60% of "WOULD-BE" RESCUERS died.
- 95% were AUTHORIZED by supervision.
- 0% of the spaces were TESTED prior to entry.
- 0% were VENTILATED.
  - 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.
  - And out of 217 confined space deaths that were investigated, the two most common types of gases in confined spaces, hydrogen sulfide and carbon

monoxide.