Trenching and Excavation Stats and Facts



FACTS

1. **Cave-ins:** The most prevalent danger, where walls of a trench collapse, burying workers under soil.
2. **Falls:** Workers or equipment can fall into unprotected trenches, leading to injuries or fatalities.
3. **Falling Loads:** Materials or equipment positioned too close to the edge can fall into the excavation, striking workers below.
4. **Hazardous Atmospheres:** Accumulation of toxic gases or lack of oxygen in trenches can lead to asphyxiation or poisoning.
5. **Mobile Equipment:** Nearby operating machinery can inadvertently cause soil vibrations, leading to collapses, or can strike workers if not properly managed.
6. **Water Accumulation:** Unexpected water ingress can destabilize trench walls and pose drowning risks.
7. **Underground Utilities:** Accidental contact with electrical lines, gas pipes, or other utilities can result in explosions, electrocutions, or other serious injuries.

STATS

- The Occupational Safety and Health Administration (OSHA) reported that in 2022, 39 workers died from trenching or excavation work, a 160% increase from the previous year.
- From 2011 to 2021, construction workers accounted for 85% of all trench-related fatalities.
- The Bureau of Labor Statistics (BLS) found that excavation and trenching work is 112% more hazardous than general construction work.
- The National Institute for Occupational Safety and Health (NIOSH) reported that 80% of trench collapse fatalities occurred in trenches less than 10 feet deep.
- WorkSafeBC reported that in a five-year period, over 20 workers were seriously injured or killed in trench collapses due to inadequate protective systems.
- A study by the Ontario Ministry of Labour found that 70% of excavation-related fatalities involved unprotected trenches deeper than 4 feet.