



Basic Excavation Safety Talk

According to the Bureau of Labor Statistics there were 250 excavation related fatalities from 2000 to 2009. Excavations are common on construction sites all across the United States, but they can be made safe by following basic safety guidelines. Some major hazards of excavations:

- Cave in and collapses
- Water accumulation (drowning)
- **Falls into the excavation**
- Utility strikes
- Poisonous gases collecting in an excavation

Ways to Mitigate Excavation Hazards

- **Follow OSHA's guidelines** for protective systems to protect employees entering the excavation. Oftentimes the soil being excavated is referred to "Type C which is the most hazardous for employees to enter. Excavations or trenches over 5ft should be sloped back 1.5 to 1. Trench boxes and shoring are other options to protect employees entering the excavation.
- Prohibit equipment and other employees from working above anyone working in the trench or excavation.
- Keep water out of the excavation. Use pumps to remove water from the excavation and do not allow employees to be in any excavation or trench that has water accumulating in it. Water affects the integrity of the excavation.
- Never leave the excavation open when work is not being performed in the area. Use barricades, fencing, and signage to protect both employees and anyone passing by from falling into the excavation or driving into it.
- Always use the 811 service to ensure there are no utilities in proposed excavation areas or have utilities properly marked prior to digging. Look at as built drawings when they are available for the area the excavation is occurring.
- When there is a chance for a hazardous atmosphere in and excavation ensure gas testing is done including any low points where gases can collect.

Discussion points:

-Has anyone experienced a trench collapse or cave-in at another job? -What are some other hazards excavation operations create onsite?

-How can we further protect ourselves from the hazards that excavation operations create?