

Excavation Hazard Alert

In little over a month's time there have been two trench collapses here in Houston. Fortunately there were no serious injuries. However, they could have resulted in serious or fatal injuries. OSHA's priority goal is reducing trench related hazards and we can only do that if everyone does their part to spread the word on safe trench practices and ensure that trenching related practices are followed.



February 2019

Workers removed the upper braces from between the plywood shoring and entered the trench to remove the lower braces when a section of wall about 35' in length collapsed. The dirt pushed one side of the shoring over forming a tee pee shape and the workers were able to crawl out without serious injury



March 2019

A section of trench collapsed and the workers continued working. OSHA inspectors arrived and another section of the trench collapsed. Fortunately the workers were now out of the trench.



Some Important Excavation Safety Rules Include:

- Trenches 5' deep or greater require a protective system unless the excavation is made entirely in stable rock. If less than 5' deep, a Competent Person may determine that a protective system is not required. For excavations greater than 5' the competent person determines the type of protective system to be used.
- Trenches 20' deep or greater require the protective system to be designed by a registered professional engineer or be based on tabulated data prepared and/or approved by a registered professional engineer.
- Employers must have a Competent Person inspect trenches daily prior to work and as conditions change to ensure elimination of excavation hazards. Safe access and egress for all excavations, including ladders, steps, ramps, or other safe means of exit for employees working in trench excavations 4' or deeper. They must be located within 25' of all workers.
- Keep heavy equipment away from trench edges.
- Identify other sources that might affect trench stability. Keep excavated soil (spoils) and other materials at least 2' from trench edges.
- Know where underground utilities are located before digging.
- A Competent Person must test for atmospheric hazards such as low oxygen, hazardous fumes and toxic gases when > 4' deep.
- Inspect trenches at the start of each shift and following a rainstorm or other water intrusion.
- Ensure work does not occur under suspended or raised loads and materials.
- Inspect trenches after any occurrence that could have changed conditions in the trench.
- Ensure that personnel wear high visibility or other suitable clothing when exposed to vehicular traffic.

A Competent Person is an individual who is capable of identifying existing and predictable hazards or working conditions that are hazardous, unsanitary, or dangerous to workers, soil types and protective systems required, **and** who is authorized to take prompt corrective measures to eliminate these hazards and conditions.

One cubic yard of soil can weigh up to 3,000 pounds which would be like having a car fall on top of you!

Additional resources:

	<p>NUCA Trench Safety Stand Down Webpage</p> <p>http://www.nuca.com/tssd</p> <p>Tools and resources on excavation safety that can be used to for a safety stand down. A certificate of participation can also be obtained.</p>
	<p>OSHA Trenching and Excavation Publications</p> <p>https://www.osha.gov/pls/publications/publication.athruz?pType=Industry&pID=213 and https://www.osha.gov/video/</p>
	<p>OSHA Trenching and Excavation Safety and Health Topic Page</p> <p>https://www.osha.gov/SLTC/trenchingexcavation/index.html</p> <p>Excavation and trenching hazards and safety information</p>
	<p>OSHA Technical Manual Trenching and Excavations</p> <p>https://www.osha.gov/dts/osta/otm/otm_v/otm_v_2.html</p> <p>Information on trenching and excavation</p>

Safety doesn't have shortcuts. You might save a minute but may lose your life.

Let's send everyone home safely at the end of the day.

This information has been developed by an OSHA Compliance Assistance Specialist and is intended to assist employers, workers, and others as they strive to improve workplace health and safety. While we attempt to thoroughly address specific topics [or hazards], it is not possible to include discussion of everything necessary to ensure a healthy and safe working environment in a presentation of this nature. Thus, this information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer's legal obligations, which are defined by statute, regulations, and standards. Likewise, to the extent that this information references practices or procedures that may enhance health or safety, but which are not required by a statute, regulation, or standard, it cannot, and does not, create additional legal obligations. Finally, over time, OSHA may modify rules and interpretations in light of new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, you can visit OSHA's website at www.osha.gov. For questions contact Jim Shelton at the Houston North OSHA office: Shelton.james@dol.gov