Trenching and Excavation: How to Avoid an Early Grave

Safety Talk

What's at Stake?

Trenching and excavation work are among the most hazardous construction operations out there. On average, two workers are killed every month in trench collapses

What's the Danger?

Cave-ins, or collapses, pose the biggest risk to workers, as they are more likely than other excavation-related accidents to kill workers. Three reasons why a cave-in or collapse is dangerous:

1. They occur quickly and without warning.
2. The speed of the collapsing soil makes it almost impossible for anyone in its wake to escape.
3. Just one cubic yard of soil can weigh as much as a car. A trench collapse may contain three to five cubic yards of soil.

Even if you're only buried up to your waist or your head is out of the soil, your chance of survival is slim.

With each breath, the soil squeezes you tighter and presses down on your chest (with the weight of a car don't forget), making it harder, and then impossible to take another breath.

Other potential hazards include falls, falling loads, hazardous atmospheres, and being struck by mobile equipment.

How to Protect Yourself

Here are seven safety practices that can save your life.

1. Never enter an excavation that hasn't been sloped, shored, shielded, or otherwise offers protection.

- Excavations in solid rock, and those less than five feet deep in the U.S. and 1.2 meters deep in most jurisdictions in Canada, are possible exceptions to this rule.
- Always check with the safety person or competent person on site if you have concerns or questions.

2. Never enter an excavation until it has been inspected by a competent person.
3. Don’t start digging until underground utilities have been identified.
4. Remember that spoil piles of soil, rock, equipment, and other materials must be at least 2 feet away from the edge of the excavation. In some cases, this distance may be greater, depending on safety regulations in your area.
5. Always wear your hardhat, high-visibility clothing, and other required PPE.
6. Keep an eye out for moving equipment and falling objects hazards.
7. Check that a ladder(s) or means of entry/exit is in place.

- Check with your supervisor on the number and distance requirements for ladders.
- Exit the area immediately if you have concerns for your safety.

Final Word

Don’t let your work bury you. Practice excavation safety practices every single time you enter any type of excavation.