



TOOLBOX TALKS

Caught In/Between Toolbox Talk # 1

Preventing Excavation/Trench Cave-ins

Ask the following questions and give time for answers.

What are the hazards? Bodily or equipment entrapment in soil.

What are the results? Broken or crushed limbs and bones, entrapment, suffocation, head injury, internal damage, and death.

What should we look for? Stable rock and soil type (A, B, C), depth of excavation, cave-ins, water in trench, weather conditions (rain, frost), water table, protective systems, competent person, operation of heavy equipment near excavation, barricades, and falling loads.

How do we prevent these results?

- * A competent person must evaluate excavations daily. Excavations should be re-evaluated after events such as rain.
- * Use shoring equipment, shielding, and/or sloping or benching systems for excavations greater than 5 feet in depth or less when deemed necessary by the competent person.
- * Examine protective systems in accordance with manufacturer's recommendations and remove damaged systems from service.
- * Understand soil types: "A"-most stable (clay, hardpan), "B"-next most stable (silt, loam, unstable dry-rock), "C"-least stable (gravel, loamy sand).
- * Excavated material/other objects must be kept at least 2 feet from edge.

Let's talk about this site now.

- * How can you prevent cave-ins? **Shoring, shielding, sloping, and/or benching**
- * At what depth is cave-in protection required? **5 feet or less depending on the assessment by a competent person.**
- * Name some conditions that can increase cave-ins. **Rain, heavy equipment, vibration, spoil piles, etc.**

This information has been developed by OSHA and its partners with the intent to assist employers, workers, and others as they strive to improve workplace health and safety. 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.





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Preventing Excavation/Trench Cave-ins (cont.)

The unfortunate reality— From 2011 to 2018 there were **157 trenching fatalities** across the United States. These fatality incidents were preventable with the use of a protective system, proper employee training, and implementation of a safety and health management system.

*****AN UNPROTECTED TRENCH IS AN EARLY GRAVE *****



Record questions below that you want to ask about this site.

**Source: Bureau of Labor Statistics, 2018 Annual Fatality Data Report*



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