

Toolbox Talks



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 manufacturers recommendations and remove damaged systems from service.
- Excavated material/other objects must be kept at least 2 feet from edge.

Understanding Soil Types

- Type "A" - most stable (clay, hardpan)
- Type "B" - next most stable (silt, loam, unstable dry rock)
- Type "C" - least stable (gravel, loamy sand)

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.

The unfortunate reality - From 2011 to 2021 there were at least **220 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

