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.
- 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.**
Caught In/Between Toolbox Talk # 1

Preventing Excavation/Trench Cave-ins (cont.)

The unfortunate reality — *37 workers* lost their lives during calendar year 2016 as a result of excavation/trenching cave-ins. **This statistic has nearly tripled since calendar year 2014.** 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***

*Source: Bureau of Labor Statistics, 2016 Annual Fatality Data Report*