

# safety matters

Construction  
Toolbox Talks for

From your safety partners at Cool Insuring Agency, Inc.

## Excavation Site Safety Practices

Each year, trench collapses are one of the leading causes of injury and death on construction sites. Of these incidents, most of the victims were new employees who lacked training and guidance prior to entering the job site. Sadly, most accidents were preventable.

Whether you are new or a seasoned employee, it is essential that you adhere to Occupational Safety and Health Administration (OSHA) regulations to ensure the safety of the entire work crew.

### Trench Requirements

- Trenches 5 feet or more in depth require a protective system.
- Trenches that are 4 feet or more require a safe means of entrance and exit.
- Trenches that are 20 feet or more require an exit system designed by a registered professional engineer.

### Protective Systems

The designated competent person should inspect the area and determine which protective system will suit the job site and soil most effectively. This is essential, as equipment movement, underground utilities and vibrations can cause a surcharge load on the sides of the trench, forcing it to cave in on the workers inside. The following are the most commonly used protective systems:

- **Sloping:** Protects workers by cutting back the trench wall at an angle inclined away from the excavation
- **Shoring:** Protects workers by installing

aluminum hydraulic supports to prevent soil movement

- **Shielding:** Protects workers by using trench boxes to prevent cave-ins

In addition to one of these three safety measures, a low-traffic zone must be designated around the trench allowing only essential equipment to enter. This will minimize the amount of vibration to which the trench is exposed.

### Avoiding Accidents

Excavation accidents can occur if the underground utilities are not located and removed prior to digging a trench. Contact your local one-call system to locate all of the utility lines. Then, label or remove them to prevent injury.

Trench accidents can also happen if safe entrance and exit routes are not present or adequate for the situation. Workers may slip back into the trench as they are trying to climb up a ladder if it is unsupported, placed on a steep slope or is poorly built.

To prevent injury while entering and exiting a trench, only the designated competent person should approve the structural device used. Workers should also place the ladder in a trench shield while trying to enter and exit to avoid a cave-in.

By complying with OSHA regulations and following these safety precautions, the risk of injury at your job site will be greatly reduced. We want everyone on our team to keep safety in mind!

**Do not enter a trench without inspecting it at the start of a shift or after a rain shower to ensure that all safety precautions are still in place.**

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