**Follow These Guidelines to Ensure Excavating and Trenching Safety**

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One of the more common tasks our employees perform on a frequent basis involves excavating and trenching. These are among our most dangerous scopes of work, as many hazards can be present during the excavating and trenching process that may lead to serious injuries or, in some instances, death.

It is imperative that every employee exposed to this work receive the proper safety training, tools and equipment to protect against the hazards associated with excavating and trenching.

This article will reference OSHA’s CFR 1926 Subpart P and provide general but vital information about trenching and excavating safety. Although OSHA does not govern public entities in Florida, its standards have been widely adopted in safety programs throughout the state.

**What Exactly is an Excavation or Trench?**

OSHA defines an excavation as any man-made cut, cavity, trench or depression formed by earth removal. A trench is defined as a narrow underground excavation that is deeper than it is wide, and is no wider than 15 feet.

**What Are Some Hazards Associated With This Kind of Work?**

They are many. Here are some of the most common:

* Exposure to energized sources such as utility lines.
* Trenching collapse.
* Engulfment by water.
* Exposure to harmful atmospheres.
* Heat exhaustion.
* Incidents involving vehicles and other mobile equipment.
* Falls into trenches or excavations.
* Tripping over equipment, debris and spoils.
* Excavated material or other objects falling on workers.
* Unstable adjacent structures.

**How Can We Protect Employees?**

The first line of defense is proper OSHA excavation safety training or excavation competent person training. The training should include the following:

* Classification of soils (Types A, B and C).
* Types of protective systems based on soil classifications (benching, sloping, shielding, etc.).
* Locating utility lines.
* Atmospheric testing.
* Pre-work excavation safety inspections.
* Safe access and egress.

In addition, the following would help reduce exposure:

* Trained heavy equipment operators
* Trained spotters.
* Barricading or traffic controls.
* Pedestrian safety measures (during and after work).

**What Are Some Things to Definitely Stay Away From?**

We have compiled pictures that will illustrate hazardous conditions:

|  |  |
| --- | --- |
|  | * Missing protective systems for employees
* Missing protective barriers for vehicles and equipment
* Missing safe egress
 |
|  | * Missing protective systems for pedestrians
* Exposed utilities
* Fall hazard present
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|  | * Utility lines present
* Missing safe egress
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|  | * Utility lines present
* Spoils present within 2 feet of the excavation
* Aluminum ladder (conducts electricity)
* Unprotect excavation work (after work hours)
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**Are There any quick reference guides available?**

OSHA has provided a “Quick Card” to help employers provide general information about excavating and trenching safety. This information, although useful, is no substitute for safety training. The Quick Card should be used only for quick reference.



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