MISSOURI SAFE@WORK SAFER TOGETHER

TOOLBOX TALK: EXCAVATION SAFETY

Don't Dig Your Own Grave

OSHA requires that we have someone who is capable of identifying hazards in or around excavations or trenches to be a "competent person." A competent person is any person capable of identifying existing and predictable hazards in the surrounding or working conditions that are unsanitary, hazardous, or dangerous to employees and has the authority to take prompt, corrective measures to eliminate them.

CAVE-INS ARE A SERIOUS RISK

The number one hazard that faces all excavations is collapse. Soil is very heavy. A person buried under only a couple of feet of soil will experience enough pressure on the chest area to prevent their lungs from expanding.

Soil is a unique blend of materials from all three phases of matter:

- Gas/Voids
- Liquids
- Solids

A cubic foot of typical soil weighs around 100 lbs.

A cubic yard of soil contains 27 cubic feet or 2,700 lbs. total (this is in unsaturated soil – when soil is wet, it can weigh up to 114 lbs. per cubic foot, that's as much as a small truck).

When you start digging greater than 5 feet in depth, the weight becomes such, that if a trench were to collapse, you wouldn't be able to get up or dig yourself out – thus causing a great safety concern. A 10 foot trench could weigh at least 1,000 lbs. per cubic foot.

In Missouri, the weather is always changing and the one guarantee is that every trench or excavation we dig will eventually collapse - it's just a matter of time.

Must Haves:

- Anytime a trench or excavation is deeper than 4 feet, a stairway, ladder, ramp, or other safe means of egress must be provided for getting in and out of the trench.
- At a depth 5 feet or greater, some sort of protective system must be in place if employees are allowed to enter the trench.
- A competent person must inspect the trench to eliminate hazards.
- All underground utilities must be marked.
- The spoil pile must be at least 2 two feet away from the edge of the trench so it doesn't provide additional weight to an already unstable trench.

Remember: Any exhaust could create an unsafe environment inside the trench.

I understand the information presented and the importance of excavation safety.

COMPANY: _____ DATE: _____

EMPLOYEE NAME:	EMPLOYEE SIGNATURE:

Learn more ways to keep your workplace safe.
Visit safeatwork.mo.gov.

DEPARTMENT OF LABOR & INDUSTRIAL RELATIONS