

## Trenching and Excavation: No Protective System



### Am I In Danger?

All excavations are hazardous because they are inherently unstable. If they are restricted spaces they present the additional risks of oxygen depletion, toxic fumes, and water accumulation. If you are not using protective systems or equipment while working in trenches or excavations at your site, you are in danger of suffocating, inhaling toxic materials, fire, drowning, or being crushed by a cave-in.

### How Do I Avoid Hazards?

Pre-job planning is vital to accident-free trenching; safety cannot be improvised as work progresses. The following concerns must be addressed by a competent person:

Evaluate soil conditions [[29 CFR 1926 Subpart P Appendix A](#)] and select appropriate protective systems [[29 CFR 1926 Subpart P Appendix F](#)].

Construct protective systems in accordance with the standard requirements [[29 CFR 1926.652](#)].

Preplan; contact utilities (gas, electric) to locate underground lines, plan for traffic control if necessary, determine proximity to structures that could affect choice of protective system.

Test for low oxygen, hazardous fumes and toxic gases, especially when gasoline engine-driven equipment is running, or the dirt has been contaminated by leaking lines or storage tanks. Insure adequate ventilation or respiratory protection if necessary.

Provide safe access into and out of the excavation.

Provide appropriate protections if water accumulation is a problem.

Inspect the site daily at the start of each shift, following a rainstorm, or after any other hazard-increasing event.

Keep excavations open the minimum amount of time needed to complete operations.



**This worker is in a trench with no protective system, that is not sloped or benched and has no means of egress.**

