



U. S. Department of Labor MSHA's Accident Prevention Safety Alert **Excavation/Trench Safety**



Workers who dig or excavate trenches are at risk of death if they enter an unprotected trench and the walls collapse. However, hazards associated with trench work and excavations are well defined and preventable.

There is no reliable warning when a trench fails. The walls can collapse suddenly, and workers will not have time to move out of the way. Even though small amounts of dirt may not seem treacherous, a single cubic yard of dirt can weigh more than 3,000 pounds, which can fatally crush or suffocate workers. Even small, solid pieces of dirt can cause serious injuries.

From 2000–2009, 350 workers died in trenching or excavation cave-ins, an average of 35 fatalities per year. Three of these fatalities occurred at Metal/Nonmetal mines. An analysis of recent data showed that 64% of fatalities in trenches occurred at depths of less than 10 feet.

Workers should never enter a trench that does not have a protective system in place. This system should be designed and installed by a competent person who is capable of identifying existing and predictable hazards in surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures.

When working in trench excavations, consider the following Best Practices:

- Ensure trench walls are either supported for the full height or sloped to a safe angle.
- Carefully examine ground conditions prior to performing tasks near excavated embankments, trenches, or ditches.
- Identify hazards associated with the task to be performed and review those hazards with all personnel involved.
- Implement measures to ensure persons are properly protected.

If you have a tip you would like to pass on, you can e-mail it
to zz-MSHA-MinersTips@dol.gov.

If your tip is selected, you will receive credit in this space.

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