Don’t Let A Trench Be Your Grave

Danny Meggison was an experienced trench worker, but he made a big mistake that left his eight-year-old son without a father.

The 43-year-old worker was in a narrow ditch replacing a sewer line when a wall of dirt collapsed and buried him. The trench, which was nine feet deep, was not properly sloped.

This tragedy sounds all too familiar, and as usual was easily preventable. Workers should know that trenches five feet deep or greater require a protective system to prevent cave-ins. Unprotected trenches should never be entered, regardless of what any supervisor says.

You think you can survive a trench collapse? Well that’s what many workers thought, and they’re dead. Remember, just one square yard of dirt weighs about 3,000 pounds. Try breathing with that kind of weight against your chest.

The hazards
A cave-in is the most common hazard that excavation workers should be aware of. Cave-ins are caused by:

- Weak soil that doesn’t hold tightly together
- Previously disturbed soil
- Vibration from heavy equipment or traffic
- Water leaking into the trench, weakening the walls
- Soil or heavy equipment placed too close to the edge

Another hazard is toxic gases that can be released during excavation. If you suspect “bad air,” stay out of a trench until the air can be tested. Low oxygen levels can quickly render you unconscious in an excavation.

Electrocution is also a hazard if a worker comes in contact with underground utility lines that haven’t been shut off.

Explosions from damaged natural gas lines are also a killer of

excavation workers.

Trenches should be inspected daily by a competent person before any work is performed. Inspections should be done at the start of each shift and following a rainstorm. Don’t forget you need a stairway or ladder as a safe means of entering and exiting a trench.

Protective systems
The dozens of workers who die every year in trench collapses could be saved by protective systems, including:

- Sloping – cutting back the trench wall at an angle away from the excavation.
- Shoring – supporting the walls of the trench by installing wood or metal cross-braces to prevent the soil from caving in.
- Shielding – using trench boxes placed in the excavation to prevent the sides from collapsing.

Don’t become entrenched in poor excavation practices. They could lead to your premature burial.