

Trenching and Excavation Safety

Are you subject to a NEP Inspection?

May 31, 2019, HIOSH adopted the Occupational Safety & Health Administration (OSHA) National Emphasis Program (NEP) on Trenching and Excavation.

Under the NEP, HIOSH Inspectors will initiate inspections whenever they observe an open trench or an open excavation, regardless of whether violations are readily observed. Inspections based on this NEP will begin **September 1, 2019**.

WHAT OTHER EXCAVATION HAZARDS DO EMPLOYERS NEED TO ADDRESS?

The primary hazards of trenching and excavation is employee injury from collapse. Additional hazards include:

- Working with heavy machinery;
- Manual handling of materials;
- Working in proximity to traffic;
- Electrical hazards from overhead and underground power-lines;
- Underground utilities, such as natural gas.

WHAT TYPES OF PROTECTIVE SYSTEMS CAN EMPLOYERS USE TO PROTECT WORKERS FROM CAVE-INS?

Benching means a method of protecting workers from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels. Benching cannot be done in Type C soil.

Sloping involves cutting back the trench wall at an angle inclined away from the excavation.

Shoring requires installing aluminum hydraulic or other types of supports to prevent soil movement and cave-ins.

Shielding protects workers by using trench boxes or other types of supports to prevent soil cave-ins. Designing a protective system can be complex because you must consider many factors: soil classification, depth of cut, water content of soil, changes caused by weather or climate, surcharge loads (e.g., spoil, other materials to be used in the trench) and other operations in the vicinity.

*Did you know?
Cave-in is the leading cause of death in excavation works and collapse is 18 times more likely result in death than common construction accidents.*

5 THINGS YOU SHOULD KNOW TO STAY SAFE IN A TRENCH

1. Ensure there's a safe way to entry and exit. See 1926.651(c)



2. Trenches must have cave-in protection. See 1926.652(a)



3. Keep Materials away from the edge of the trench. See 1926.651(j)



4. Look for standing water or other hazards. See 1926.651(h)



5. Never enter a trench unless it has been inspected. See 1926.651(k)

