

Safety in the Trenches

Safety Talk

What's at Stake?

Maintenance workers may be involved in new landscaping, plantings or playground equipment footings with the aid of a shovel or powered digging equipment. Digging also encompasses excavation and trenches. The former is a hole left in the ground as a result of removing material. The latter is an excavation in which the depth exceeds the width.

What's the Danger?

All digging whether it is confined to landscaping, plantings or to working in a trench has serious health and safety concerns. To start with, all digging including trenching and excavation work, is inherently dangerous work.

Studies show that excavation work is one of the most hazardous types of work done in the construction industry. Injuries from excavation work tend to be of a very serious nature and often result in fatalities. The risk of trench cave-ins is the most significant hazard.

Other hazards to working in excavations and trenches includes:

- Falling into the excavation or trench.
- Electrical shock from cable or wire contact.
- Exposure to gases, from pipeline damage or presence of natural gases.

How to Protect Yourself

Follow these safety precautions to protect yourself when doing excavation work.

- Watch your back.
 - Try not to work bent over and reaching away from your

body.

- Lift with the strength in your legs.
- Take shovel loads you can handle without back strain.
- Turn your feet instead of twisting your body when you deposit the dirt.
- Whenever you are doing physical work outdoors:
 - Drink water frequently to prevent heat stress.
 - Cover up and use sunscreen to prevent sunburn.
 - In cold weather, dress warmly but in layers so you can remove clothing if you get too warm.
- Locate utilities before you dig.
 - Contact the power and natural gas company so you can avoid contact with lines and pipes.
 - Workers have been killed by a shovel touching a buried electrical line or a backhoe hitting a natural gas pipe.
- Excavations must be planned for safety.
 - They should be supported and stabilized to prevent cave-ins.
 - This may be sloping the bank, shoring the banks with materials such as wood, installing a trench box or making steps in the sides of the excavation.
 - The possibility of cave-in depends on the size and depth of the hole, the type of soil, water content of the soil and the weather conditions of the day, such as wet or freezing weather.
 - Barricade excavations to keep unauthorized persons out.
- Gasoline-powered augers are also used for digging jobs.
 - These may be powered by tractors or operated separately.
 - Never refuel while the engine is hot.
 - Keep away from rotating equipment and don't wear loose-fitting clothing because of the danger of entanglement.
- Operate heavy equipment only if you are trained and authorized to do so.

- Use your seatbelt.
- Watch for fellow workers on foot.
- Watch for overhead power lines when operating digging equipment. Many electrocutions have occurred when heavy equipment hits a power line.
- Check the trench for poisonous spiders, snakes, rats or even larger animals each morning before beginning work. If you come across something, call your supervisor.

Final Word

Make safety the bedrock of your work when you are digging.