

## OSHA Training Toolbox Talk: Working Safely Around Underground Utilities at Excavation Sites

[Reference 1926 Subpart P]

In the middle of the city, out in the suburbs, and perhaps even in the middle of nowhere, there is a pretty good chance that one or more utility line or other underground installation is buried beneath the surface. Striking a buried utility while excavating the soil can not only cause disruption of services to the general public, it could also result in someone getting seriously injured or killed. So today we will review some steps to help prevent striking underground utility installations at excavation sites.

- **Never dig until after all underground utilities have been marked.** We must first contact our state's One Call Notification Center, who will then notify their members to mark the approximate location of their buried utility lines at the excavation site. The amount of lead time we must allow for the lines to be marked varies is dictated by state law (*Visit <http://call811.com/811-your-state> to find your State law*). But we must usually allow at least two to three working days, excluding holidays and weekend, and then we must confirm the utilities have been marked before we start to excavate. Paint, stakes, or flags of various colors will be placed to identify the approximate location of the utilities buried at the site (*see handout*).
- **Locate any underground utilities that are present inside the "tolerance zone" by hand digging or utilizing other non-destructive digging measures approved by the Competent Person.** The tolerance zone is the area along each side of each existing utility line that has been marked (*see handout*). The tolerance zone varies from state to state, but usually ranges from 18 to 24 inches from each side of the utility line (*discuss what the required tolerance zone is for your state; that info is available at <http://call811.com/811-your-state>*). But in some States, believe it or not, the tolerance zone is as much as 30 to 36 inches from each side of the utility.
- **Support exposed utility lines, if necessary, so they do not collapse under their own weight.** This could require placing a heavy timber or pipe across the top of the trench, and then tying a rope from the timber or pipe to the utility line to support its weight.
- **Ease up when you get near the underground utility when digging with hand tools.** You want to avoid damaging the utility line as you are digging, so slow and easy does it!
- **Immediately report any damage you accidentally cause to a buried utility, no matter how minor, to your Supervisor or the Competent Person.** The same applies to any damage you discover that was caused during previous excavation operations. Damage to a buried utility that goes unrepaired could worsen over time and cause the line to crack, corrode, or rupture.
- **Use caution when back-filling near utility lines in excavations.** Dumping a large load of backfill soil directly onto an unsupported utility line could cause it to break. So firmly backfill the area beneath the utility line with soil before placing and compacting soil over the top.

If you are ever in doubt about these or other important procedures you should follow while digging near buried utility lines or installations, ask your Supervisor or the Competent Person for help. Better safe than sorry!

Does anyone have any additional tips to share for avoiding striking or damaging buried utility lines at an excavation site? Thank you for your participation, and please be sure to sign your name to the training certification form so you get credit for attending today's training session.



One free, easy call gets your utility lines marked AND helps protect you from injury and expense.

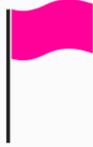
Safe Digging Is No Accident: Always Call 811 Before You Dig

Know what's below. Always call 811 before you dig. Visit [call811.com](http://call811.com) for more information.



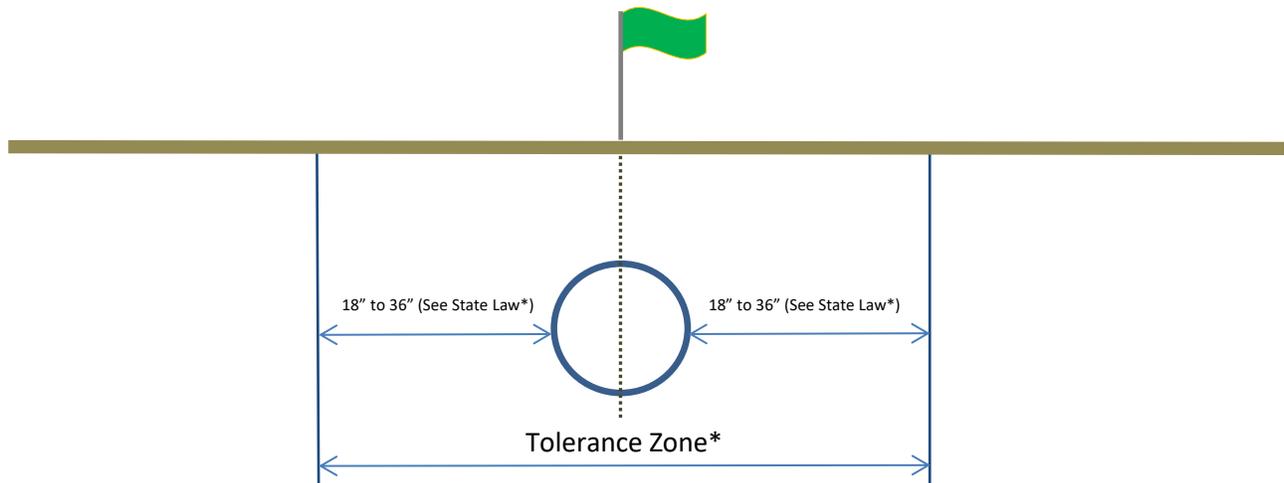
### Marking Color Code

For Marking Underground Utility Lines

 White Proposed excavation	 Pink Temporary survey markings	 Red Electric power lines, cables, conduit and lighting cables	 Yellow Gas, oil, steam, petroleum or gaseous materials
 Orange Communication, alarm or signal lines, cables or conduit	 Blue Potable water	 Purple Reclaimed water, irrigation and slurry lines	 Green Sewer and drain lines

## TOLERANCE ZONE

Locate any underground utilities that are present inside the “tolerance zone” by hand digging or other non-destructive digging measures specifically approved by the competent person.



\* Tolerance Zone distances vary by state, but are typically 18 inches or 24 inches from each side of utility line. But in some cases State law could require a tolerance zone of up to 36 inches from each side of the utility line. – Visit [www.call811.com](http://www.call811.com) to see state-specific requirements for establishing your tolerance zone.

