

Preventing Trench Collapse

It's a simple matter of physics—trench walls want to collapse. When they do, it happens quickly and the results can be fatal. It doesn't take much dirt to trap and crush a worker, which is why it is important that you take the proper precautions during excavations that require a trench deeper than 5 feet.

Keep the Surface Clean

Trench collapse occurs when the trench walls can no longer contain the large amount of pressure put on them by the surrounding soil. While this can be a problem at any depth, it is made worse when excavated materials are piled at the edge of the trench. To reduce some of the pressure put on trench walls:

- Pile all excavated materials at least 2 feet back from the edge of the trench. If there is not enough room to allow at least 2 feet, remove excavated materials from the immediate location.
- Do not work around the edge of the trench when others are below.
- Keep equipment away from the trench edge. Not only can it cause cave-ins but there is also a chance that it could fall on those working below.

Slope for Stability

Another way to reduce the pressure put on trench walls is to use a sloping or benching system.

 Sloped Walls – A 34-degree slope should be used when digging to prevent a section near the top from giving out and burying the bottom of the trench. Benching – When there is enough space available, benching allows a trench to be dug in a series of steps that slowly descend to the deepest point.

Reinforce Trench Walls

Once a trench has been dug, the walls should be braced in a way that will protect those working in the area if a cave-in does occur.

- Construct a support system made with posts, beams, shores or planking and hydraulic jacks.
- Never excavate more than 2 feet past the bottom of the support system.
- Make sure there is always a safe exit route within 25 feet of where you are working in the trench.

Trench Boxes

A trench box can be used as a convenient alternative to building a support system directly into a trench. However, for it to provide the proper protection it must be used properly.

- Always place the trench box before entering the trench.
- Enter directly into the box.
- Never move the box while workers are in the trench.
- Never perform work in the trench outside of the box.

Trench collapses can happen quickly and have fatal results. Always institute the proper safety procedures before entering a trench.



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Roadside Traffic Controls

Even when you and your crew think you are safe, some drivers can make working on the roadside potentially deadly. If a motorist is confused, not paying attention or driving recklessly, you could be in grave danger while on a job site.

When a worksite involves moving traffic, it is up to the roadside workers to protect the public and themselves from dangerous accidents. Remember these safety tips while you are on the job.

Plan Ahead

Traffic controls should be implemented prior to the start of the roadwork by driving through the proposed traffic pattern.

- This dry run will allow you to make changes to the route so that it makes sense to motorists.
- If you notice any obstacles or areas that may be confusing, change them before beginning the work.

Signs

- Follow the Manual on Uniform Traffic Control Devices provided from the U.S. Department of Transportation found at http://mutcd.fhwa.dot.gov and your local and state regulations regarding proper signage and barricading.
- Place warning signs at least 1,000 feet before the start of the work zone.
- Signs should be highly visible and in good working order.

Barricades

- Place space cones, barrels and other devices used to guide traffic close together throughout the construction site.
 - Motorists should not be able to deviate from the path you feel is safest for them to travel.

Safety Gear

 Wear hard hats, Day-Glo® or orange vests during the day and light-reflective strips at night.

Flagging Duties

At least one employee should act as the traffic control person.

- Control traffic with a highly visible sign paddle during the daytime.
- Flaggers should carry two-way radios to communicate with other employees.
- Alert motorists of the presence of flaggers by placing signage at least 500 feet from the beginning of the work zone.

Vehicle Specifications

- All vehicles must have backing alarms, two-way radios and signs indicating "Slow Moving."
- All vehicle operators should be properly trained on how to operate the equipment.
- Place cones around vehicles parked on

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the side of the road to warn motorists to slow down and watch out for them.

Take Extra Precautions at Night

- Increase warning distances for signage.
- Flaggers should use orange-cone flashlights to guide traffic.
- Place flashing lights on barricades.
- Tape off excavation site access.



Recognizing and Preventing On-site Violence

Although we do our best at to keep the workplace safe, violence by an outsider or between employees remains a serious safety and health issue. It can occur inside or outside the workplace, and can range from threats and verbal abuse to physical assaults and homicide. In fact, according to the U. S. Department of Labor (DOL), workplace violence is consistently a top five cause of fatal occupational injury in our country.

Tempers can flare and lead to violent behavior at any time. Construction and contracting workplaces are particularly hazardous because of the dangerous conditions that are inherently a part of the work environment, including working at height and power tools, which can ultimately be used as weapons.

Your safety is our top priority. As we emphasize in our Workplace Violence Prevention Program, we do not tolerate threats, bullying, harassment or any other form of violence. Help us keep you safe by understanding your risk and taking steps to protect yourself.

Identifying Your Risk

Workplace violence can include actions or words that endanger or harm you, or result in other workers believing that they may be in danger, including:

- · Verbal or physical harassment
- Verbal or physical threats
- Assaults or other violence

 Any other behavior that causes you to feel unsafe (bullying or sexual harassment)

Staying Safe

Nothing can guarantee that you will not become a victim of workplace violence, but you do have the right to expect a workplace that promotes safety from violence, threats and harassment. We have taken steps to help prevent violence in the workplace. Contribute to the safety measures and other efforts that we have in place as follows:

- Become aware of and report violent or threatening behavior by co-workers or other warning signs.
- Take all threats seriously.
- Follow procedures established by our Workplace Violence Prevention Program, including those for reporting incidents.
- Learn how to recognize, avoid or diffuse potentially violent situations by attending personal safety training programs.
- Alert supervisors to any concerns about safety or security, and report all incidents immediately in writing.
- Avoid traveling alone to unfamiliar locations or being in unusual situations whenever possible.

Stay Alert

It is of utmost importance to stay alert and aware of any potentially dangerous behavior.

While on the job, staying aware, recognizing potential hazards and staying effectively trained in conflict resolution can help keep you and your coworkers safe.



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Make sure that you are effectively trained in conflict resolution and methods of handling a potentially dangerous situation. Adhere to all of our policies and be aware of hazards to reduce your risk of being involved in volatile situations that could escalate to dangerous physical violence.



Safety Tips for Forklift Drivers

Forklifts, also called powered industrial trucks, help us perform essential tasks at the job site, but they are also quite dangerous. Driving a forklift is a serious responsibility and should not be taken lightly. Forklift drivers at must be properly trained and follow all safety procedures and precautions.

Below are some of the basic safety practices that we expect our forklift drivers to observe.

Maintenance

- Each day, check that the truck is ready for the day's work and perform any necessary maintenance before operating.
- Report any malfunction or poor performance to your supervisor immediately.

Loading

- Use reverse when going down inclines and go forward up inclines.
- Do not travel with the load elevated, and keep the load stable and as close to the floor as possible.
- Avoid raising or lowering a load while the truck is moving.
- Always keep the load tilted back towards the carriage while raising and lowering.
- Make sure the load is balanced and is within the capacity of the truck.
- Never use the forks as a personnel

elevator unless properly equipped.

Driving

- Always make sure your driving path is clear.
- Slow down for corners, blind spots and doorways.
- Drive defensively by always being aware of your surroundings and watching for the unexpected.
- Be aware of ground conditions and always take the smoothest possible path.
- Never try to turn on an incline.
- Cross tracks diagonally and slow down for uneven surfaces.
- Keeps legs, arms, feet, hands and head inside the truck.
- Be aware of others around the job site, in case they do not see you.
- Always give those on foot the right of way.
- Stay out from under forks and loads.
- Never show off or use the machine for anything other than your specified job tasks.
- Never give anyone a ride or allow anyone who is untrained to operate the forklift.

For the safety of everyone on the job site, please observe all proper safety precautions when operating a forklift.



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In order to ensure your safety and the safety of everyone in our workplace, it is important that all forklift drivers operate their machinery responsibly and with safety in mind.