



Trenching and Excavating Operations

1. The sides of excavations of five (5) feet or more in depth shall be supported against cave-in or shall be sloped to the angle of repose; trenches of four (4) feet or more in depth shall be similarly treated.
2. Ladders for entrance or exit to and from excavations and trenches over five (5) feet in depth shall be provided and shall extend to at least three (3) feet above the ground level.
3. Excavated or other material shall not be stored nearer than two (2) feet from the edge of the excavation or trench and shall be so stored and retained as to prevent its falling or sliding into the excavation or trench.
4. Safety hats shall be worn by all workers in areas where there is potential danger of being struck by objects or of material falling on the worker.
5. When excavations are made in the vicinity of underground installations of pipes or other utilities, their locations shall be determined, marked, manually dug out, and properly supported and protected.
6. Where pedestrians or vehicular traffic is to be near excavations or trenches, proper safeguards shall be provided, such as walkways, bridges, guardrails, barricades, warning flags, lights or illumination. (In no case shall open holes be left overnight without proper warning lights.)
7. All persons in charge of excavation and/or trenching operations shall observe all these requirements and recognized good practices for safety in their areas.



Stand up to back injuries

Back injuries are very common—and account for more days away from work than any other sickness, besides the common cold. These injuries can result in a lifetime of pain, and an initial injury increases the likelihood of reinjury.

Some of the most common types of back injury that occur include:

- Strain—injury of a muscle or tendon caused by overstretching or tearing
- Sprain—injury of a ligament caused by overstretching or tearing
- Herniated disk—when a disk begins to leak the cushioning fluid

There are many factors that contribute to back injuries, including poor posture when sitting or standing, being overweight, age, and underlying medical conditions. Exercising and doing muscle strengthening exercise can help prevent back injuries. However, even if your back is in good physical condition, using poor lifting techniques can likely lead to injury.

Have a plan

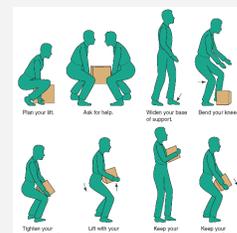
Before lifting anything, assess the load. Try to estimate how much it weighs and determine if you will be able to grip it, if you will be able to see over it, and if it requires a team lift. Never attempt to lift anything that is too heavy or awkward for you to carry. It is important to make sure your path is clear before carrying the load, and you should also have a plan as to how you will unload safely.

Lifting technique

There are different lifting techniques depending on the type, size, and shape of the item. For a box, first stand close to the object with feet shoulder-width apart and your toes pointing outward. Bend at the knees and hips and try to maintain your body's natural curve. Pull the load close to you, tighten your stomach, and grip the box firmly. Finally, when you're ready to lift, use your legs and keep your back straight. If you are lifting a box with another person, designate the leader who will announce all directions. Team members should lift simultaneously and keep the load level (even if you are going up or down stairs).

Lifting equipment

Lifting equipment can be helpful in preventing injury—but you must be careful to select the right equipment for the job and use it properly. Some equipment that may be available to use include forklifts, powered carts, and electric pallet jacks. Only use this equipment if you have been properly trained and are authorized to do so. Hand trucks are useful for many situations but should never be loaded too high or with more weight than you can safely manage. Push the hand truck instead of pulling and let the truck carry the weight so you only have to push and steer.



Feeling thirsty? What you need to know about dehydration

Summer is here and that means you may be spending your days working in hot weather conditions. While fluid intake required to keep your body functioning varies with each person, the National Academies of Sciences, Engineering, and Medicine recommends that males drink 3.7 liters (about 15.6 cups) and females drink 2.7 liters (about 11.4 cups) of water each day. Our bodies need water for many critical functions, including regulating body temperature, lubricating joints, and getting rid of waste.

It is important to know that when it is hot outside and/or you are exerting yourself physically, you need more liquid to avoid dehydration and to ensure that your body maintains proper functioning. You should drink small amounts of water frequently, and drink even when you don't feel thirsty. The Occupational Safety and Health Administration (OSHA) has recommended that in high risk conditions (when the heat index is 103°F to 115°F), workers should drink 4 cups of water every hour). In higher humidity climates, the heat index can soar even when the measured temperature is more moderate. For instance, in 65 percent humidity, a temperature of only 90°F has a heat index (i.e., "feels like") 103°F.

If you work in direct sunlight or during the hottest hours of the day, you must remember to keep hydrated because you are at increased risk for heat-related illness.

Habit Forming

Make safety a full-time habit

Good safety practices help protect you and your coworkers from injury or illness on the job. Because of that, we take safety very seriously here—and that means that you should consider working safely an important part of your job responsibilities.

- **Know the hazards** of your job.
- **Always follow safety rules** and procedures.
- **Use all personal protective equipment (PPE)** that's assigned to you—every time, all the time.
- **Pay attention to safety training** and apply what you learn on the job.
- **Keep on the lookout for hazards** and keep asking yourself what could go wrong while you work.
- **Eliminate or report any hazards** you see right away.
- **Pay attention to warning signs** and do what they tell you.
- **Be aware when you might be exposed to hazardous chemicals** and take appropriate steps to protect yourself.
- **Read labels**, warnings, safety data sheets (SDSs), and other safety information before you start a job.
- **Practice good housekeeping** at all times
- **Report any injury**, illness, accident, or near-miss to your supervisor immediately.

And remember when it comes to safety, there's no such thing as a dumb question. If you're not sure about a potential hazard or how to do your job safely, ask your supervisor. Don't perform a task unless you know how to perform it safely!

Back injury: Quiz

1. According to the National Institutes of Health (NIH), about 80 percent of adults experience low back pain at some point in their lifetime. TRUE or FALSE.
2. Back pain is considered chronic if it lasts more than ___ months.
A. 3
B. 6
C. 12
3. Lifting a box always requires a team lift. TRUE or FALSE.

ANSWERS

1. TRUE. Back pain is very common, and injuries can occur at home or in the workplace. Always make sure that you use proper lifting and reaching techniques, and never push yourself beyond your physical ability. 2. A. Chronic pain can last as little as 3 months or for a lifetime. About 20 percent of people with acute low back pain end up developing persistent chronic pain. 3. FALSE. You must assess the load before picking it up, and if it is not too heavy, long, or awkwardly shaped, you may attempt to lift the load yourself.

Avoiding Ticks

Ticks are arachnids that are usually 3–5 millimeters (mm) long that can transmit diseases that result in a range of mild symptoms to severe infections requiring hospitalization. Each year, there are about 30,000 reported cases of Lyme disease, one painful disease transmitted through tick bites.

You can be exposed to ticks year-round if you spend time near grassy areas or woods where they live. Ticks are most active during warmer months, so this summer, follow these guidelines from the Centers for Disease Control and Prevention (CDC) to keep yourself safe:

- Treat clothing with permethrin (it will remain protective even after several washes) and use insect repellent containing DEET, picaridin, IR3535, Oil of Lemon Eucalyptus (OLE), para menthane diol (PMD), or 2-undecanone.
- Get in the routine of thoroughly examining your clothing and body for ticks (including hidden places like in hair, around the ears, and under the arms) after potential exposure. Taking a shower within 2 hours of coming indoors may remove unattached ticks.
- If you find a tick attached to your skin, act quickly. Use fine-tipped tweezers to grab hold of the tick as close to the skin as possible (this helps to remove the entire tick). Pull upward with a steady motion (do not twist because the tick may break). Once it is removed, clean the bitten area thoroughly with soap and water.
- Early detection is important—if you develop a distinctive rash or fever, or experience stiffness or joint pain, you should get checked out by your healthcare provider. Symptoms may appear within days after the bite or may take months to appear.

For more information on preventing tick bites and what to do if you are exposed, check out the CDC's [resource center](#).

