EMPLOYEE SAFETY NEWSLETTER

July 2019

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 103ºF to 115ºF), 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 90ºF has a heat index (i.e., "feels like") 103ºF.

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.

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.

Combustible dust

Not all dusts are combustible, but those that are pose a risk to workers because certain types of powdered material can, in high enough concentration, result in a flash fire or explosion. A secondary explosion may also occur if the first explosion disturbs more dust, creating a very dangerous situation.

Combustible dusts are present in many different workplaces, including grain elevators, chemical plants, coal power plants, and woodworking facilities. You should be aware if you work with any combustible dusts, or if any of the processes you use may create dust, such as cutting, grinding, or polishing. Combustible dusts include many agricultural products that are powdered (e.g., malt, cornmeal, flour), chemical dusts (e.g., calcium acetate, adipic acid), metal dusts (e.g., aluminum, magnesium), and plastic dusts (e.g., epoxy resin, (poly)acrylamide).

There should be dust control measures in your work area to ensure that no fugitive dusts can accumulate. Work areas should be also be cleaned frequently to prevent the accumulation.

Back injuries: 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 repellant 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.