

RISK SERVICES

EMPLOYEE SAFETY UPDATE

PPE—Strategies to beat the heat

When it's hot outside, it may be tempting to remove your personal protective equipment (PPE) to cool down for a moment. However, you need to remember that PPE is the last line of defense protecting you from workplace hazards. Removing any piece of required PPE, even for a short time, can increase your risk of injury or illness and put you and your company at risk of Occupational Safety and Health Administration (OSHA) violations.

Here are some tips that will help you beat the heat while staying safe:

- Wear PPE that addresses the hazards caused by sun and heat exposure. These items include vented hard hats, sweat liners for your hard hats or gloves, ventilated gloves, and anti-fogging goggles. PPE that's made from breathable materials and lighter colors is also available and can help reflect the heat. Heat-protective gloves or sleeves can help you manage materials that have become hot from the sun.
- You can also choose to wear sunscreen, sunglasses, and clothing designed to protect you from harmful UV rays to give yourself additional relief from the sun.
- Make sure you take water breaks throughout the day to avoid dehydration.
- Set up a buddy system so you and your coworkers can be on the lookout for signs or symptoms of heat-related illness or dehydration in each other.
- Wear accessories beneath or attached to your PPE to protect against the heat and sun. Cooling items, such as tank tops, vests, bandanas, and towels disperse heat. There are also neck shade attachments available for hard hats.



Machine guarding — Protect against amputations

Every day, several workers in the manufacturing industry lose fingers, hands, feet, and other parts of the body when using machines and equipment without guarding devices or other safeguards in place. Most amputations involve fingertips. The most common machine-related hazards that can cause amputations are cutting, compression, crushing or getting caught between or hit by objects.

Keep an eye out for potential amputation hazards. When it comes to stationary machines (i.e., machines that are too large or heavy or not meant to be moved), amputations happen most commonly when workers are setting them up, threading, preparing, adjusting, cleaning, lubricating, performing maintenance or clearing jams. These are the times when the guards aren't in place and the machines are supposed to be shut down and locked out. For portable machines, many amputations happen during normal operations such as slicing, drilling and sawing.

The following machine parts are the likely sources of amputation hazards:

- **Point of operation** — the area of a machine where it performs work on material;
- **Power-transmission parts** — flywheels, pulleys, belts, chains, couplings, spindles and other machine components that transmit energy; and
- **Other moving parts that move during machine operation**, such as reciprocating (i.e., back and forth like a jigsaw motion) and rotating, and “transverse” moving parts, such as a powered wheel turning a belt.

Make sure machine guards and other safeguards are in place to keep you safe. The best way to prevent amputations is with machine guards and other safeguarding devices. Keep an eye out for the following safety devices and make sure they're properly connected to the machine before you start work. Guards are physical barriers that prevent any part of your body from contacting the hazardous areas or parts of machines. **There are four basic types of machine guards:**

- **Fixed guards** are attached permanently to equipment and can only be removed with considerable effort.
- **Interlocked guards** can be removed or opened to allow access to the hazard zone — for example, to insert or remove material from the point of operation.
- **Adjustable guards** allow a machine to manage a wide variety of material sizes while still protecting the unused portion of the blade or the point of operation.
- **Self-adjusting guards**, like the one on a circular saw, are pushed away from the point of operation when material is fed into the machine.

Safeguarding devices help prevent contact with points of operation and may replace or supplement guards.

Examples are:

- Restraints and pull-back devices that use a wire, cable or strap attached to your hand, wrist or arm that prevent you from putting your hand in the danger zone.
- Pressure-sensitive devices, such as mats, bars, and trip wires, function as emergency stops when activated.
- Chutes, plungers, and sticks that let you feed materials into the machine without putting your hands at risk.

Make sure the devices don't create their own hazards or interfere with normal machine operation and that they're secure, tamper-resistant, and durable.

Report any guards or safeguards that are preventing you from doing your normal work with a machine or are defective and develop their own hazards; don't try to bypass them. If a guard itself causes a hazard, like sharp edges or another defect, report it. It may be tempting to remove or disable a guard if you're in a hurry to meet production goals, but that greatly increases the chance of an amputation.



World Environment Day 2023

Each year on June 5, [World Environment Day](#) is celebrated by millions across the globe, with participation from over 150 countries. This event has been led by the United Nations Environment Program (UNEP) since its inception in 1973. The day aims to raise awareness on environmental action and the power of governments, businesses, and individuals to create a more sustainable world. Each year, World Environment Day provides a theme to advocate for specific environmental causes. The theme for 2023 is #BeatPlasticPollution.

More than 400 million tons of plastic are produced every year — half of which is single-use plastic products. Of that, less than 10% is recycled. An estimated 19 – 23 million tons of plastic end up in lakes, rivers and seas. Additionally, plastic pollution clogs landfills and is combusted into toxic gas, making it a dangerous threat to the planet.

Plastic pollution is problematic for many reasons. Plastics don't biodegrade; instead, they break down over time into ever smaller pieces known as microplastics and nanoplastics, which can have countless adverse impacts. Impacts to marine life range from physical or chemical harm to individual animals to wider effects on biodiversity and ecosystem functioning. Pieces of plastic have been found in the digestive system of many aquatic organisms, including in every marine turtle species and nearly half of all surveyed seabird and marine mammal species. Humans are also at risk from marine plastic pollution. New research shows that people are inhaling microplastics through the air, consuming them through food and water, and even absorbing them through the skin. Personal care products such as facial scrubs, toothpastes, and body washes are a major source of microplastics, specifically microbeads.

Fortunately, many regional and national groups and businesses are helping reduce the flow of plastic into the ocean — for example, by implementing bans on single-use plastics; business commitments to reduce, redesign and reuse plastics; community cleanups; curbside initiatives; and municipal bag bans.

You can participate in World Environment Day and join the effort to beat plastic pollution by doing one or more of the following:

- **Clean a beach or river.** If you live close to a body of water, join a beach or river cleanup in your area. You can also start your own and ask friends and family to participate.
- **Shop sustainably.** Next time you're out shopping, choose food with no plastic packaging, carry a reusable bag, buy local products and refill containers.
- **Try a zero-waste lifestyle.** Invest in sustainable, environmentally friendly products, including reusable water bottles, food containers, bamboo toothbrushes and shampoo bars.
- **Choose plastic-free personal care products.** Look for plastic-free face wash, body wash, makeup, deodorant, shampoo and other products. [Click here](#) to see if your product contains microplastics.



Green alternatives to pesticides

Floral and vegetable gardens alike inevitably attract insect pests, and many people immediately think to use chemical pesticides to remove them. However, pesticides can be harmful to pollinators (e.g., bees and butterflies), other animals, and humans. Fortunately, there are organic gardening techniques to protect your plants from pests.

Use the following eco-friendly tips to maintain a garden that's safe for pollinators and other animals.

Predators. Adding some pest predators is an effective way to safely remove pests. Ladybird larvae are hungry and will destroy aphid infestations quickly. The adults are also good at eating aphids but only consume approximately one-third as much compared with when they're larvae. Additionally, frogs and toads will eat slugs, snails, and some insect pests. Birds are also great predators of insect pests, specifically blackbirds, which will eat a wide variety of insects.

Companion planting. Planting certain types of plants will keep some pests away. Allium species such as onions, chives, and garlic are great to plant around vegetables and roses. They help repel aphids, slugs, and Japanese beetles. Petunias repel aphids, tomato hornworms, leafhoppers, and squash bugs. Lavender repels fleas, flies, and mosquitoes.

"Soft" chemicals. Soap diluted to less than 2 percent can be used in gardens to prevent pests. Household soaps will often suffice, but many garden centers have a suitable soap spray for plants that may be sensitive to household soap. Plant oils such as rosemary, eucalyptus, lavender, and lemongrass can be applied in a small residential garden to repel pests.



Table saw safety — Preventing kickback

- The first thing to do when a machine jams, is to shut off the power supply. If you can't do that yourself, notify a supervisor or someone in charge who can shut it down. Never put yourself in danger by exposing your body to moving machinery parts, including the point of operation. Never reach around a guard or try to remove a guard to fix a machine.
- Once the machine is turned off, make sure other workers who may be affected by the shutoff are aware. If you aren't authorized and trained to lock out or tag out machines, ask your supervisor or another person in charge of your operation what needs to be done next once the power supply is shut off.
- The next step, which should be done only by an employee who's authorized to do so, is to lock, block, or tag out the shutoff/restart device so it's completely isolated from its source of energy so someone can't inadvertently restart the machine. Keep in mind that control devices integrated into the machine, such as push buttons, selector switches, and other control circuit-type devices, aren't isolating devices for the energy source.
- For those who are authorized and trained by the company to lock out and tag out machines, follow all the safety procedures for shutdown, lockout/tagout, clearing the jam, and restarting after the jam is cleared.
- The authorized person in charge of lockout and tagout will notify you and other affected workers that the machine is going to be locked out for service or repair. Stay clear of a machine when it's locked out and never tamper with a lock or attempt to start a machine that's locked out.
- Wait for authorized employees to tell you it's okay before using equipment.
- Verify the machine is safe to operate after servicing or repairs have been completed and locks and tags have been removed.



Chemical Spotlight

Epibromohydrin

Epibromohydrin is a clear, yellow liquid. It's used as a sporicide and flame retardant.

Epibromohydrin isn't compatible with oxidizing agents, strong acids, strong bases, sodium, zinc, and aluminum and magnesium and their alloys. Store the chemical in tightly closed containers in a cool, dark, well-ventilated area away from heat in a building without sprinklers. Never allow epibromohydrin to have any contact with water during storage. Sources of ignition are prohibited where epibromohydrin is used, handled, or stored.

If epibromohydrin is spilled or leaked, avoid breathing vapors, mist, or gas and ensure adequate ventilation. Remove all sources of ignition and evacuate personnel to safe areas. Use personal protective equipment (PPE),

including goggles or safety glasses, gloves, flame-retardant protective clothing, and respiratory protection.

Prevent further leakage or spillage if safe to do so, and don't let the product enter drains, sewers, underground or confined spaces, groundwater, or waterways or discharge into the environment. Absorb liquids in vermiculite, dry sand, earth, or a similar material, and deposit in sealed containers. Ventilate and wash the area after cleanup is complete. It may be necessary to contain and dispose of epibromohydrin as a hazardous waste. Contact the federal Environmental Protection Agency (EPA) and local environmental regulatory agency for specific recommendations.