

YCPARMIA Safety Journal

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HazMat Safety

Follow these 10 chemical safety rules

All around the country, hazardous materials accidents are placing workers at risk. Here are just a few incidents that occurred this year:

- ☒ In Texas, 40 employees were hospitalized after a worker accidentally punctured a 55-gallon drum of corrosive acid.
- ☒ In New Jersey, an accidental chemical reaction at a polyurethane manufacturing plant created a gas cloud, sending 9 workers to the hospital and forcing the evacuation of 75 others.
- ☒ In Nebraska, a brief power outage led to a leak of anhydrous ammonia from a fertilizer manufacturing plant.
- ☒ In California, 14 people were hospitalized and several others were treated at the scene with oxygen when a chemical leaked at a metal works plant.
- ☒ In Alabama, a worker using a cleaning chemical to clean out an empty chemical container was overcome when the cleaner reacted with the chemicals in the container to create a poisonous gas.

To prevent hazardous substance spills, exposures, and other accidents involving dangerous chemicals, follow these 10 basic safety rules:

1. **Read container labels** and materials safety data sheets (MSDSs) before working with any chemical.
2. **Follow established job procedures** exactly as you've been instructed.
3. **Know which personal protective equipment (PPE)** you need to wear to protect yourself from chemical hazards.
4. **Wash thoroughly** after working with hazardous materials, and never eat, drink, or smoke in any area where chemicals are used or stored.
5. **Obey all warning signs**, and ask questions about any hazards or precautions you don't understand.
6. **Store hazardous materials** safely in tightly closed containers.
7. **Check containers regularly** for leaks or damage.
8. **Always dispose of hazardous substances** and any materials contaminated with them properly.
9. **Know first-aid procedures** for treating hazardous substance exposures.
10. **Know what to do in case of a spill.**

FLAMMABLE AND COMBUSTIBLE LIQUIDS CAN BE DEADLY

Many substances we use every day, such as gasoline, kerosene, alcohol, and solvents, are flammable or combustible. Even though these substances are common, they can be very dangerous, causing fires or explosions that can result in property damage, injuries, and death.

Make sure you know the liquid's *flash point*:

- The flash point is the lowest temperature at which the vapors from a liquid are concentrated enough to ignite.
- Flammable liquids have a flash point below 100 degrees F.
- Combustible liquids have a flash point at 100 degrees F or higher.
- The lower the flash point, the more hazardous the liquid.
- It's the *vapors* from the liquid that can catch fire, even at low temperatures.
- Consult the MSDS to find out what the flash point of a liquid is.

Follow these safety rules for working with flammable and combustible liquids:

1. Keep all ignition sources away (open flames, cigarettes, sparks, etc.).
2. Use only approved fireproof containers for storage or transfer.
3. Take only the amount of liquid you need for the job.
4. Keep containers closed when not in use.
5. Follow all warning signs, instructions on labels and MSDSs, as well as company rules, for working with flammable and combustible liquids.

If you have safety questions about these substances, ask your supervisor.

What's for Thanksgiving Dinner?

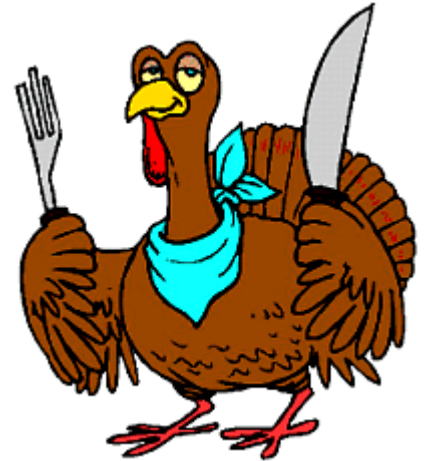
Follow these food safety tips

Improperly cooked, served, or stored food can make you sick. Follow these tips:

- Wash your hands before you prepare food and after handling meat, poultry, or eggs.
- Thaw meat completely before cooking it. Frozen or partially frozen meat may not cook properly all the way through.
- Cook foods thoroughly. The U.S. Department of Agriculture recommends using a thermometer and cooking foods until they reach these temperatures:

Whole turkey or chicken	180 degrees F (minimum)
Ground turkey or chicken	165 degrees F (minimum)
Casseroles or stuffing	165 degrees F (minimum)
Pork	160 degrees F (minimum)
Ground meat or egg dishes	160 degrees F (minimum)
All other meat products	145 degrees F (minimum)

- Don't let perishable food sit out at room temperature for more than 2 hours. After 2 hours either refrigerate it, reheat it, or throw it away.
- Keep hot foods hot and cold foods cold. Put on the table only the food you can use immediately; keep the rest of the food hot or cold until you serve it.
- Refrigerate leftovers right away; don't leave them out on the counter to cool.
- Reheat all leftovers to at least 165 degrees F.



TEA BREAK, ANYONE?

New research suggests that compounds found in regular tea and other foods can help prevent ovarian and breast cancers. *WebMD Medical News* reported two studies.

The first study, conducted by Harvard doctoral student Margaret Gates, found that consumption of tea, broccoli, and kale—all of which contain a compound known as kaempferol—lower the chance of ovarian cancer. The researchers recommend 10 to 12 milligrams of kaempferol a day, the amount found in four cups of tea or two cups of broccoli.

The second study, conducted by University of North Carolina doctoral candidate Brian Fink, also gave the thumbs-up to tea. Researchers found that post-menopausal women who consumed the most of a compound known as flavonoids were 46 percent less likely to develop breast cancer. As well as tea, green salad, tomatoes, and apples are other good sources of the compound.

Housekeeping Habits

Good habits prevent accidents

To many people, good housekeeping in the workplace means sweeping up at the end of the shift. But it involves much more than that. Developing good housekeeping habits will protect you and your co-workers from injuries on the job.

To begin with, make time for housekeeping tasks on a daily basis. Set aside a little time during the workday and at the end of your shift for housekeeping. Also:

- ✦ **Evaluate your workspace** before starting work. Look for hazards such as slip, trip, and fall hazards, fire hazards, machine hazards, and cut hazards.
- ✦ **Remove those hazards** before starting work. Clean up spills. Put away tools and electrical cords you don't need. Close drawers. Clean up waste materials and dispose of them properly.
- ✦ **Don't leave equipment running** when you leave the work area. Turn it off and clean it up so that it is ready for the next time it's used.
- ✦ **Clean up as you go.** Put away tools and equipment throughout the day. Once you're done with them, put them back in their proper place. Waiting until the end of the shift exposes you and others to trip hazards all day.

Finally, take responsibility for hazards even if you didn't create the hazard or it's not in your work area. Eliminate or report all hazards.

HazMat Spills

Would you know what to do?

Hazardous substance spills have to be safely contained and cleaned up right away before the chemicals can cause serious harm. To find out how much you know about spill containment, take the following true/false test.

1. Chemical spills are hazardous only to people in the immediate area. T F
2. The first step in containing a chemical spill is to use absorbent materials to soak up the spill or solidify it. T F
3. The MSDS for a chemical often gives information about the proper way to clean up or contain a spill or leak. T F
4. Some chemicals can become hazardous when they spill or leak if they come in contact with an incompatible substance. T F
5. It is safe to ignore very small chemical leaks or spills. T F
6. If you notice a chemical spill, report it at the end of your shift. T F



Answers:

- (1) False. A major spill can release toxic chemicals into the air and water and be hazardous to the inhabitants of the area surrounding the location of the spill.
- (2) False. The first step in containment is to try to stop the source of the leak.
- (3) True
- (4) True. Incompatible chemicals can react together to produce more hazardous substances, or high temperatures that could cause a fire.
- (5) False. Even the smallest leak or spill should be reported and cleaned up or contained.
- (6) False. Always report a spill or leak immediately.

Stacking & Storage

Don't create hazards

Follow these safety steps to stack and store materials without creating hazards:

- Always stack materials so that they're stable and secure and don't create any kind of hazard—including a fire hazard.
- Check labels and material safety data sheets (MSDSs) for handling and storage information for all hazardous substances. For example, chemicals that might react with one another and burn, explode, or release toxic vapors should not be stored near one another.
- Keep flammable and combustible materials away from heat and ignition sources.
- Store items so that people working nearby won't bump into them and so that they won't fall down on someone passing underneath.
- Verify that shelves and racks are sturdy, in good condition, and can bear the weight of the materials you are storing on them.
- Stack all materials on a flat base.
- Place heavier objects close to the floor and lighter/smaller objects higher.
- Avoid stacking items so high that they block sprinklers or come into contact with overhead pipes or lights.
- Use materials handling equipment or a ladder to place items into storage or remove them from storage instead of standing on a rack, boxes, or a chair.



Set the Scene for Safety

Five steps you can take today



- 1. Conduct a personal job hazard analysis.**
 - ☑ Identify any hazards that could cause accidents.
 - ☑ Identify equipment and materials that could be hazardous.
 - ☑ Identify the precautions you need to take to prevent injuries.
 - ☑ Think about safer ways to work and share your ideas with your supervisor and co-workers.
- 2. Keep alert while you work.**
 - ☑ Pay attention to your work, and watch for what could go wrong.
 - ☑ Apply the skills and information you've learned in safety meetings.
- 3. Conduct safety inspections regularly.**
 - ☑ Use a checklist so that you don't overlook anything.
 - ☑ Inspect your workstation, equipment, PPE, etc., daily.
 - ☑ Correct or report any safety problems immediately.
- 4. Follow safety rules and regulations.**
 - ☑ Identify all safety rules that apply to your job and work area.
 - ☑ Ask your supervisor about any that you don't understand.
 - ☑ Wear appropriate PPE whenever required.
- 5. Report any near misses and accidents promptly.**
 - ☑ Never ignore a near miss—it's an early warning of things to come.
 - ☑ Tell your supervisor even if nobody was hurt.
 - ☑ Identify what went wrong and what you can do to prevent a repeat.

Slips & Trips & Falls

Oh, My!

Slips, trips, and falls injure or kill over 250,000 American workers a year and account for 17 percent of all nonfatal workplace injuries. Many injuries occur when people trip. Here's how to eliminate trip hazards:

- ⇒ Keep your work area neat and tidy.
- ⇒ Pick up items from the floor, even if you didn't put them there.
- ⇒ Step over or around obstructions, not on them.
- ⇒ Walk slowly and change directions slowly.
- ⇒ Watch for changes in floor level—such as a few steps or a ramp.
- ⇒ Report inadequate lighting or burned-out bulbs right away.
- ⇒ Don't leave boxes, bags, tools, or other materials and equipment on the floor or blocking walkways.
- ⇒ Don't leave cords or power cables in walkways.
- ⇒ Don't place anything on stairs.
- ⇒ Don't leave drawers open.

Many other falls are the result of slips. Follow these tips about slips:

- ⇒ Clean up or report spills, drips, and leaks immediately.
- ⇒ Wear sensible shoes with nonskid soles, and wipe your feet when you come inside if they're wet from outside.
- ⇒ Walk slowly on wet or slippery surfaces, and slide your feet.

ARE YOU READY TO QUIT SMOKING?

November 16 is the **Great American Smokeout**. Here's helpful information for anyone who wants to quit.

Think about how smoking harms you:

- ⊛ Increases risk of cancer, heart attack, and stroke
- ⊛ Causes coughing, shortness of breath, and risk of bronchitis and emphysema
- ⊛ Reduces resistance to colds and other illnesses
- ⊛ Causes harm to nonsmokers around you (especially your family)

Think about the benefits of quitting:

- ⊛ Immediate and steady reduction of damage to lungs and heart
- ⊛ Reduced risk to people you care about
- ⊛ More energy and a longer, healthier life
- ⊛ More money to spend for important enjoyable things

Set a date to quit. When it arrives:

- ⊛ Get rid of all smoking materials.
- ⊛ Find substitutes, such as exercise, deep breathing, and drinking water.
- ⊛ Spend free time with nonsmokers in nonsmoking areas.
- ⊛ Try using a nicotine patch or join a support group.
- ⊛ Remember that urges to smoke only last a short time and will go away.
- ⊛ Remind yourself that you are getting healthier every day.

If you can't stop smoking now:

- ⊛ Smoke fewer cigarettes per day.
- ⊛ Buy cigarettes by the pack, and keep switching brands.
- ⊛ Imagine you already are a nonsmoker and think about what that would be like.
- ⊛ Remind yourself that you're never too old and it's never too late to stop smoking.