

YCPARMIA Safety Journal

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13 Hazard Categories

Which ones do you face on the job?

According to occupational safety and health experts, there are 13 categories of workplace hazards. Here they are in alphabetical order:

1. **Acceleration.** When you speed up or slow down too quickly, or when you move at high speed, you risk an injury.
2. **Biologicals.** Some bacteria, viruses, fungi, and molds can be hazardous. Infectious diseases are most commonly transmitted through airborne and bloodborne exposure. Some diseases, including flu, can be transmitted by contact with contaminated surfaces.
3. **Chemical reactions.** Chemical reactions can release toxic vapors or cause fires and explosions. Some chemicals, like corrosives, can react with your skin and cause serious burns.
4. **Electrical hazards.** Electrical hazards include shock, burns, fires, and unexpected start-up of machinery.
5. **Ergonomics.** When work involves repetitive motion, force, awkward postures, heavy lifting, pushing, pulling, or twisting, muscle strains and injury to joints and nerves can result.
6. **Explosions.** Most explosions in the workplace are caused by flammable gases. Other causes include combustible dusts and explosive compounds.
7. **Fires.** For combustion to take place, you need fuel, oxygen, and an ignition source. Workplace fires occur because all these elements are frequently present.
8. **Heat.** Excessive temperatures can serve as ignition sources and start fires. High temperatures can also overheat your body and make you sick, or cause burns.
9. **Mechanical hazards.** Tools, equipment, machinery, and any object that contains pinch points, sharp points or edges, weight, or rotating parts can cause injuries.
10. **Pressure.** Increased pressure in hydraulic and pneumatic systems can lead to ruptures, causing serious damage and injuries. Even the air pressure in a vehicle tire can be deadly.
11. **Radiation.** Ultra-violet light can cause burns and skin cancer. Ionizing radiation can destroy body tissue and cause cancer.
12. **Toxics.** Toxic substances can be inhaled or swallowed accidentally and cause injury to internal organs. They can also be absorbed through the skin or eyes.
13. **Vibration/Noise.** Over time, vibrations and loud noises can cause injury to unprotected workers.

YOUR ROLE IN HAZARD DETECTION

Your role in identifying and eliminating workplace hazards can be described by these concepts:

1. **Ownership.** Take responsibility for identifying job hazards and eliminating or reporting them.
2. **Leadership.** Set an example for co-workers. Take all required precautions to avoid hazards and prevent accidents.
3. **Understanding.** Make the effort to understand the rules and regulations that protect you from workplace hazards.
4. **Commitment.** Make safety your priority.
5. **Goals.** Understand and work to achieve required safety standards.
6. **Competence.** Get the most from safety training so that you have the information and skills you need to work safely and avoid accidents.
7. **Feedback.** Talk to your supervisor and co-workers about safety problems and listen to their feedback.
8. **Involvement.** Get involved in workplace safety and accident prevention. Offer suggestions for how to improve safety.
9. **Responsiveness.** Respond promptly to identified hazards and take immediate action to correct them.
10. **Persistence.** Remember that accident prevention is an ongoing challenge. It's something you have to focus on every day, always alert to hazards, always looking for ways to eliminate them.

June is National Safety Month. Take a close look at your job and your work area to make sure you've identified possible hazards and done what you can to eliminate them.

Materials Handling PPE

Personal protection from head to toe

Wear the right personal protective equipment (PPE) when you move materials.

- **Wear a hard hat** if there is a danger of objects falling from above where you're working.
- **Wear safety glasses** when necessary to keep out flying particles or to avoid getting poked in the eye by protruding objects.
- **Wear gloves** made of tough, durable fabric or leather.
- **Check objects for splinters**, rough or pointed edges, and slippery surfaces before handling.
- **Keep fingers and hands away from pinch points.**
- **Use handles**, holders, etc., whenever possible.
- **Wear steel-toed safety shoes** to protect feet and toes against falling objects.
- **Make sure soles are made of nonskid material.**
- **Keep feet clear of heavy moving objects.**

If you're not sure what type of PPE you need, ask your supervisor before you start the job. Make sure you have the protection you need to prevent injuries.

PLAN BEFORE YOU LIFT

Using safe lifting techniques is essential to prevent sprains and strains. But there's more to safe lifting than technique. You also need to *plan* your lifts.

Before lifting and carrying, examine the load to make sure:

- The weight is stable and won't shift
- There are no rough spots or sharp edges
- You can handle it alone (if not, get help)
- You can see over the load while carrying

Also plan your route:

- Map out the easiest route, which is not necessarily the shortest.
- Move objects in your path to avoid bumping into or tripping over them.
- Look for places to stop and rest if necessary.
- Make sure you can unload easily and safely.

Chemical Spills

Prevention and Response

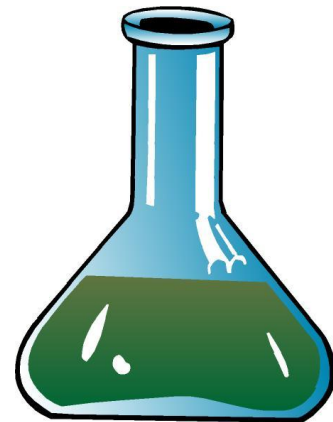
Spills and leaks of hazardous chemicals can cause fires and explosions, release deadly vapors, contaminate water supplies, damage plants and animals in the area, and threaten the health and safety of workers and the public. That's why you need to know how to prevent and respond to spills and leaks.

To prevent spills and leaks:

- ☞ Know about the chemicals you work with and how to handle them safely.
- ☞ Read labels and material safety data sheets (MSDSs), and follow their instructions.
- ☞ Regularly inspect chemical containers for damage, corrosion, or leaks.
- ☞ Report any problems to a supervisor right away.
- ☞ Don't leave containers open, and close containers tightly after use.
- ☞ Take only the amount of a chemical substance you need for the job.

To respond to a spill or leak:

- ☞ Report the problem immediately.
- ☞ Provide as much information about the chemical and the problem as possible.
- ☞ Evacuate the area and warn others to evacuate.
- ☞ Don't attempt to clean up a hazardous chemical spill unless you have been specially trained and are properly equipped.
- ☞ Stay away from the area until you are told that it is safe to return.



Summer Insect Dangers

Protect yourself from bugborne disease

Lyme Disease —

Lyme Disease is caused by bites from infected ticks.

Symptoms: bull's-eye rash, flu-like symptoms such as fever, lymph node swelling, stiff neck, fatigue, headaches, migrating joint aches, or muscle aches

Precautions:

- ⊗ Wear light-colored clothes to see ticks more easily.
- ⊗ Wear long sleeves; tuck pant legs into socks or boots in tick-infested areas.
- ⊗ Wear high boots or closed shoes that cover your feet completely.
- ⊗ Wear a hat and use tick repellants, but not on your face.
- ⊗ Shower after being outdoors. Wash and dry your clothes at high temperature.
- ⊗ Examine your body for ticks after working or playing outside.
- ⊗ Remove any attached ticks promptly with fine-tipped tweezers.



West Nile Virus —

West Nile Virus is caused by mosquito bites.

Mild symptoms: fever, headache, and body aches, occasionally with a skin rash on the trunk of the body and swollen lymph glands

Severe symptoms: high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, and paralysis

Prevention:

- ⊗ Apply insect repellent with DEET to exposed skin.
- ⊗ Spray clothing with repellents containing DEET or permethrin.
- ⊗ Wear long sleeves, long pants, and socks.
- ⊗ Be extra careful at dusk and dawn when mosquitoes are most active.



DEET alternatives:

Picaridin has been used for years in Europe, Australia, Latin America and Asia and “evidence indicates that it works very well, often comparable with DEET products of similar concentration.”

According to the CDC, oil of lemon eucalyptus (also known as p-menthane 3,8-diol or PMD) is, “a plant-based mosquito repellent that provided protection time similar to low concentration DEET products in two recent studies.”

Both of these chemicals are currently recommended as substitutes for DEET for those who do not like the smell or feel of DEET on their skin.

Bad Safety Habits?

You have the power to prevent accidents

By definition, accidents are unintentional. They happen by chance or by mistake. But is it really an accident if someone knowingly takes a risk and gets hurt?

The fact is that most job accidents are the result of preventable causes, such as carelessness, risk-taking, fatigue, or disregard for safety rules. Do you have any of these bad safety habits? Do you ever:

1. Work without concentrating because you've done a job so often?
2. Come to work tired from too little sleep?
3. Think that you don't have to pay attention to safety rules?
4. Think that nobody else is affected by your actions?
5. Get angry or upset about things or bring personal problems to work with you?
6. Fail to pay attention at safety meetings and training sessions?
7. Disregard warning signs or safety-related instructions?
8. Skip steps in job procedures?
9. Rush through your tasks faster than you know is safe?

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If you answered "yes" to any of these questions, you are increasing your risk of having a preventable accident on the job.



Don't Overlook Hazards

Take a second look at everyday tasks

Safety training often focuses on how to identify and protect against specific, regulated substance, equipment, and task hazards. But your everyday routines and habits can also pose potential hazards, although you may not be as likely to notice the risks in simple tasks you perform all the time. That's why it's especially important to take a second look at the "small stuff" of your job, the stuff you do all the time with hardly a thought.

For example, when was the last time you really examined your work area and workstation for hazards? If it wasn't yesterday, you could be in for trouble today. Every day, when you start your shift, take a couple of minutes to look around carefully to make sure that no new or previously unrecognized hazards have crept up on you.

If you want to remain accident-free, it's also a good idea to review the specific steps involved in routine tasks. As you review, identify any hazards associated with each step. For example, if you grab your personal protective equipment at the start of your shift and slap it on without first inspecting it, you've missed a potential hazard. The PPE could be damaged or worn and therefore fail to protect you later when you need it.

STATISTICS TELL THE TALE

Ladder accidents can generally be classified into one of three categories:

1. The wrong ladder was used
2. The ladder was in poor condition
3. The ladder was used improperly

Findings of a government study :

- ⇒ **57 percent** of accident victims were holding objects with one or both hands while climbing or descending a ladder.
- ⇒ **30 percent** of those who fell had wet, greasy, or oily shoes.
- ⇒ **53 percent** of straight ladders were not secured or braced at the bottom, and **61 percent** were not secured at the top.
- ⇒ **66 percent** of accident victims didn't know how to inspect a ladder for defects before use, and **73 percent** didn't know basic ladder safety rules.