



# Summer of Safety

## Safety Moment of the Week

### Heat Stress Safety: Prepare for Hot Weather!

As the hot weather approaches, it's important to recognize that some workers will be exposed to excessive heat, which poses unique hazards to their safety and health. Knowing the warning signs and what to do if heat stress occurs can help mitigate potential dangers.

Adapting to and controlling these factors can reduce the likelihood of heat stress. Your body can adjust to working in a warm environment through acclimatization. Consult with your company's safety personnel to learn the proper way to acclimatize yourself. The acclimatization process involves gradually increasing the amount of time you spend working in a hot environment, allowing your body to adjust to the heat properly.

### Signs of Trouble

As temperatures rise, the body experiences increased stress. The first signs of trouble may include symptoms such as:

- Fatigue
- Thirst
- Discomfort
- Lightheadedness

Symptoms of heat exhaustion include:

- Pale or flushed appearance
- Moist, clammy skin
- Weakness
- Dizziness
- Headache
- Nausea



### Heat Stress

Simple heat stress, however, can quickly become heat exhaustion if early symptoms are ignored.





## Preventing or Controlling Heat-Related Illnesses:

- Drink water: Consume small amounts of water frequently, about a cup (8 ounces), every 15-20 minutes. Avoid alcohol, as it increases the loss of body fluids.
- Limit exposure time and temperature: Schedule hot jobs for cooler times of the day or cooler seasons of the year if possible. Take rest breaks in cool areas and consider adding more workers to reduce workload or workday.
- Acclimatization: Gradually adapting to heat will reduce the severity of heat stress.
- Engineering controls: Mechanize heavy jobs or increase air movement with fans or coolers.
- Wear loose, lightweight clothing: Clothing can impact heat buildup.
- Avoid salt tablets: Do not use salt tablets, as they can raise blood pressure, cause stomach ulcers, and seriously affect workers with heart disease.

## Contact SOCMA

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To learn more about SOCMA's Summer of Safety, visit [www.socma.org/summer-of-safety](http://www.socma.org/summer-of-safety)

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### Using Safety Signs in the Workplace

Companies are required to follow OSHA regulations to keep employees safe from a variety of hazards. One of those methods is through the use of Safety Signs. Safety signs are **symbols or messages intended to warn or inform individuals about hazards or requirements.**

They are used to ensure safety by guiding behaviors, conveying rules, and providing essential information to prevent accidents and injuries. There are different types of safety signs, such as prohibition signs, warning signs, mandatory signs, danger signs, fire signs, emergency signs, and restriction signs. Each type of sign has a specific color, shape and meaning.

Safety signs are essential for communicating hazard information using colors, words, and pictures. They help to indicate the location of hazards and provide guidance on how to protect against them. It's important to understand the meanings of these signs and to follow their instructions to ensure safety.

Many accidents occur due to workers ignoring warning signs, and others are injured because of the absence of proper signage. By taking a straightforward and common-sense approach to warning signs, many accidents can be prevented.

### Communicating Safety with Color

#### Red = Danger

Red signs identify immediate hazards that will cause severe injury or death. Red also indicates the location of fire equipment and emergency exits.

#### Orange = Warning

Orange signs point to hazards that could cause severe injury or even death if you fail to take safety precautions.

#### Yellow = Caution

Yellow is linked to physical hazards that could cause minor or moderate injury. It's often used to mark hazards that could cause someone to slip, trip, or fall.

#### Green = Location

Green indicates the location of safety equipment, such as eyewash stations, emergency showers, and first-aid kits.

#### Blue = Information

Blue signifies general information, such as notices about safety rules and procedures.

#### Black = Instruction

Black and white are used to give housekeeping instructions or to mark boundaries such as traffic aisles, stairways, and directional signs.



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### Near Miss: The One that Almost Happened

A “near miss” or accident without injury is often easy to dismiss and forget, but it’s important to take these incidents seriously. When a “near miss” occurs, it should serve as a warning sign that something went wrong, was unplanned, and could happen again. Ignoring these warnings could lead to serious damage, injury, or even death in the future.

#### What is Near Miss?

Near misses are a red flag - a warning that something is very wrong and requires immediate attention. According to the National Safety Council, as many as 75 percent of all accidents are preceded by one or more near misses. The difference between a near miss and a serious injury might be a fraction of inches or mere moments.

#### Please remember the following guidelines regarding reporting near misses before they escalate into accidents:

- Immediately report any near miss to a leader on site as the potential for such incidents exists throughout the workplace, and all employees, not just supervisors, should help identify them.
- If the near miss is caused by an unsafe condition, do not continue working under that condition. Wait until the issue has been resolved and you receive approval from your leaders to proceed.
- If the incident is the result of unsafe acts, ensure that everyone involved has been made aware of their actions before continuing with the job.

### Accident prevention starts from near miss prevention

#### How to React

- Acknowledge the near miss and consider how the situation could have resulted in a much worse outcome.
- Inform your colleagues about the near miss so that everyone can be vigilant and help prevent similar incidents.
- Discuss with your supervisor what actions can be taken to address and rectify the causes of the near miss, to create a safe work environment.
- Remember that reporting a near miss will not lead to any negative consequences.



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### Safety in Pressure Vessels

Pressure vessels are critical in the specialty chemical manufacturing industry, but they pose significant risk due to the high-pressure conditions in which they operate. These large containers store liquids or gases at pressures significantly higher than the surrounding environment, and if not properly monitored, they can lead to severe, even fatal, accidents. To mitigate these risks, strict adherence to safety protocols is essential. Below are key safety guidelines for operating and handling pressure vessels.

#### **Know the Equipment**

Fully Understand the specific pressure vessel you're working with. Familiarize yourself with its design specifications, capacity, and intended use. Always review the manufacturer's documentation and adhere to relevant safety guidelines.

#### **Qualified Personnel**

Ensure that only trained and qualified personnel operate or handle pressure vessels. Proper training in the safe operation and maintenance of this equipment is crucial.

#### **Regular Inspections**

Conduct regular inspections to identify potential issues such as corrosion, leaks, or structural damage. Inspections should be carried out by qualified personnel according to a predefined schedule.

#### **Pressure Relief Devices**

Equip pressure vessels with properly functioning pressure relief devices, including relief valves, rupture disks, or safety valves. These devices are critical for protecting against overpressure situations.

#### **Pressure Testing**

Before initial use and following significant maintenance or repairs, perform pressure tests to verify the vessel's integrity. Adhere to industry standards for pressure testing to ensure safety.

#### **Operating Parameters**

Operate the pressure vessel strictly within its designed parameters, including temperature and pressure limits. Never exceed these limits to avoid over-pressurizing or overheating the vessel.

#### **Emergency Procedures**

Develop and clearly communicate emergency procedures for handling pressure vessel incidents, such as leaks, fires, or overpressure events. Ensure all personnel are familiar with these procedures.

#### **Proper Ventilation**

Maintain proper ventilation in areas where pressure vessels are stored to prevent the accumulation of hazardous gases or fumes. This is especially important for vessels containing toxic or flammable substances.

#### **Corrosion Control**

Implement a corrosion control program, which may include coatings, cathodic protection, or regular inspections, to prevent or mitigate corrosion within the vessel.

#### **Documentation**

Keep accurate records of all inspections, maintenance, and repairs. This documentation is crucial for tracking the pressure vessel's history and ensuring compliance with safety standards.

#### **Emergency Contact Information**

Post emergency contact information, including numbers for emergency services and technical support, near the pressure vessel for quick access in case of an incident.

#### **Isolation and Lockout/Tagout**

When performing maintenance or repairs, implement isolation and lockout/tagout procedures to prevent accidental start-up and ensure safety.