Heat Illness Safety Precautions



When the body is unable to cool off by sweating, heat-induced illnesses such as **heat exhaustion** and **heat stroke** can occur. These illnesses are very serious, and can sometimes result in death.

High temperatures, humidity, direct sun or heat, limited air movement, physical exertion, poor physical condition, some medications, and inadequate tolerance for hot workplaces or areas can all contribute to heat stress.

To control this hazard, take precautions, be able to recognize the symptoms of heat exhaustion and heat stroke, and know what to do in the event of a heat-related illness.

Common Symptoms of Heat Illness

Heat exhaustion:

- Headaches
- Dizziness, lightheadedness, or fainting
- Extreme weakness
- Profuse sweating
- Irritability
- Nausea or vomiting
- Cramps

Heat stroke:

- Dry, hot skin with no sweating
- Strong, rapid pulse
- Dizziness and nausea
- Confusion or irrational behavior
- Seizures or convulsions
- Loss of consciousness

Planning and Monitoring

- Have a written emergency action plan:
- Determine a means of effective communication between supervisors and employees.

- Establish procedures for contacting emergency response services and administering first aid and train employees on them.
- Monitor for weather events or major changes in temperature throughout the work day.
- Establish and maintain communications between employees and supervisors.
- Close monitoring by supervisors should be supplemented by peer monitoring by employees.
- If the temperature reaches or exceeds **95°F**, additional steps must be taken to monitor employees for water intake and symptoms of heat illness.
- Closely observe new employees during their first 14 days of employment in high heat areas as they acclimatize.
- Always staff the work area with at least one person capable of administering first aid.

General Controls

- Provide shaded areas large enough to accommodate all employees during meal, rest, or recovery periods. This can be achieved through rotation of employee breaks.
- Locate shaded areas and drinking water as close as feasible to the areas where employees are working.
- Provide employees with one quart of water minimum per hour for the entirety of shift.
- If any employee feels the need for protection from overheating, allow a rest period of at least five minutes.
- Encourage employees to stay in the shaded areas during rest periods.
- Acclimatize employees by having them work for short periods of time in the heat and gradually increase their time in the heat over a two-week period.
- Use cooling fans or air-conditioning if possible.
- Employees should wear lightweight, light-colored, and loose-fitting clothes.
- Employees should avoid alcohol, caffeinated drinks, and heavy meals.

Control Requirements for High-Risk Temperatures

In addition to general heat illness prevention measures, employers must establish the following controls for heat waves and extreme heat conditions:

Heat Wave Conditions

Temperatures equal to or exceeding 80˚F or anytime the temperature is 10˚F higher than normal

Extreme Heat Conditions

Temperatures equal to or exceeding 95˚F

Shaded Break Periods

- Provide shaded areas large enough to accommodate all employees during meal, rest, or recovery periods. This can be achieved through rotation of employee breaks.
- Locate shaded areas as close as feasible to the areas where employees are working.

- The provision of seating is recommended.

In addition to heat wave controls:

- Institute a mandatory 10-minute break period after every two hours worked.
- Supervisors must remind employees to rest.

Fluid Intake

- General controls apply.

In addition to general controls:

Require supervisors to remind employees to drink water.

Employee Monitoring

In addition to general controls:

Increase the number of supervisors to provide adequate close observation and monitoring of employees.

In addition to heat wave controls:

Assure failsafe communication methods between supervisors and employees.

Employee Right-to-Know

All employees working in high heat conditions must know their rights:

- Freedom to exercise their rights to a heat stress-free workplace without retaliation
- Access to first aid and emergency response procedures
- The employer’s responsibility to provide water, shade, cool-down rests, and access to first aid
- The employer’s use of acclimatization methods and principles

Responding to Heat-Related Illnesses

- **Never** order employees back to work if they exhibit symptoms of a heat illness.
- Notify a supervisor or appropriate individual with first aid training.
- For heat stroke, follow the emergency procedure in the heat stress prevention plan.
- The individual giving care must:
- Move the affected person to a cool, shaded area.
- Loosen or remove any heavy clothing.
- Provide cool (but not cold) drinking water.
- Fan and mist the person with water.