

DANGEROUS TEMPERATURES WHY YOU NEED TO KNOW ABOUT HEAT ILLNESS

Heat illness is a serious issue that affects many workers. More and more people are at risk of experiencing heat exhaustion, heat stroke, and other related conditions. These illnesses can be debilitating and even life-threatening in some cases, making it imperative for employers to take steps to prevent them from occurring.

In this article, we will explore the importance of awareness when it comes to heat illness in the workplace. We will look at (1) signs and symptoms of heat illness, (2) risk factors, and (3) how heat illness can be prevented in the workplace and measures employers can take to keep their workers safe in hot weather conditions. By understanding the risks associated with working in hot environments and taking proactive steps to mitigate them, employers can create a safer work environment for everyone involved.

RISK FACTORS

- Heat illness can affect anyone, regardless of age or physical condition.
- New and returning workers need to build tolerance to working in heat (*acclimatization*).
- Occupational factors that may contribute to heat illness include warm or hot and humid conditions, lack of access to water, heavy physical activity, direct sun exposure or indoor radiant heat sources, limited air movement, and use of bulky protective clothing and equipment.
- Workers should know their personal risk factors that make them more susceptible to heat illness.
- Personal risk factors include medical conditions (obesity, diabetes, high blood pressure, and heart disease), lower levels of physical fitness, low fluid consumption, alcohol use, drug use (opioids, methamphetamine, or cocaine), and use of certain medications.

SIGNS AND SYMPTOMS

Heat illness can worsen quickly into a medical emergency that may result in death.

Signs and symptoms include:

- Abnormal thinking or behavior
- Seizures
- Slurred speech
- Loss of consciousness

Signs of heat illness include:

- Tiredness or weakness
- Dizziness or lightheadedness
- Headache, thirst, or decreased urine output
- Nausea or vomiting
- Heavy sweating, or hot, dry skin

Note: A person with heat illness may not experience all the signs and symptoms listed.

FIRST AID

Take these actions for heat illness symptoms:

1. Give the worker cool water to drink, move to a cooler area, and remove unnecessary clothing
2. Cool the worker with ice, a fan, or water
3. Do not leave the worker alone
4. If symptoms worsen, call **911 and get help immediately**

PREVENTION

- Learn heat illness symptoms, response procedures, and prevention measures. Take note of your personal and occupational risk factors on a regular basis.
- Provide sufficient rest, a cooler or shaded space for breaks, and fluids.
- Ensure proper hydration (e.g., drinking 1 cup of water every 15–20 minutes).
- Monitor yourself and others for heat illness.
- Acclimatize workers: new and returning workers need to build tolerance and take frequent breaks.
- Follow the **20% rule**:
 - Begin with a 20% workload on the first day, increasing by no more than 20% each following day.
 - Full acclimatization may take up to 14 days or longer.
- Reduce indoor heat stress with air conditioning and increased ventilation. Use controls such as redirecting radiant heat with reflective shields and insulating hot surfaces. Reduce humidity by sealing steam leaks and keeping floors dry.
- Modify work schedules and shifts as needed to avoid heat risks. Reschedule non-essential work for days with a reduced heat index, shift physically demanding work to be earlier in the day, or rotate workers, add extra workers, or split shifts to reduce exposure and ensure adequate workloads and breaks. Stop work if needed.

EMPLOYER RESPONSIBILITY

- Under HIOSH law, employers are responsible for providing workplaces free of known safety hazards, including protecting workers from extreme heat.
- Employers should create a heat illness prevention plan to protect workers from heat-related illnesses by:
 - Providing workers with water, rest, and a shady or cool space.
 - Ensuring new or returning workers to gradually increase workloads and acclimatize using the 20% rule.
 - Planning for heat emergencies for each worksite and communicating the plan to supervisors and workers.
 - Training workers to recognize heat hazards and heat illness symptoms.
 - Establishing a monitoring system for the signs and symptoms of heat illness.
 - Creating a procedure for reporting work-related injuries and illnesses and informing employees of this procedure. Note: It must not deter or discourage an employee from accurate reporting.
- Workers who develop symptoms should stop working and should receive evaluation for possible heat illness.

WORKER RIGHTS AND PROTECTIONS

The Hawaii Occupational Safety and Health Law entitles employees to a safe workplace. You have the right to speak up about hazards (e.g. heat) without fear of retaliation.

If you believe working conditions are unsafe, contact the Hawaii Occupational Safety and Health (HIOSH) office at (808) 586-9092 or email DLIR.HIOSH.complaints@hawaii.gov

Stay Informed of Workers Rights: [OSHA.GOV/WORKERS](https://www.osha.gov/workers)



For more information, please contact HIOSH at:
dlir.hiosh.ct@hawaii.gov or 808-586-9100



Auxiliary aids and services are available upon request to individuals with disabilities.
TDD/TTY Dial 711 then ask for (808) 586-9116.