

HEAT ILLNESS PREVENTION FACT SHEET

This fact sheet provides guidance for preventing heat illness for all Church workers. When the human body is unable to maintain a normal temperature, heat illness can occur and may result in death. Specific information about the heat illness prevention standards in California and Washington are included.

EMPLOYEE TRAINING

Annual documented training on heat illness prevention is required in California and Washington for employees with risk of heat illness. Types of work that may expose workers to this risk include agriculture, construction, landscaping, and material handling. Training should include the following:

- The employer's heat-illness prevention plan and procedures
 - This written plan must include high-heat, emergency response, acclimatization, and shade access procedures, as well as ways to provide sufficient water to employees.
- The types of heat illness and the signs and symptoms of these illnesses
- The necessity of immediately reporting and employers responding to symptoms
- The importance of acclimatization and hydration
- Environmental and personal risk factors that could lead to heat illnesses

For further information regarding heat illness prevention standards, visit these resources:

- California: <https://www.dir.ca.gov/dosh/etools/08-006/index.htm>
- Washington: www.lni.wa.gov/safety-health/safety-training-materials/workshops-events/beheatsmart
- General: <https://www.osha.gov/heat>

WHAT IS HEAT ILLNESS?

Heat illness is a broad term for several heat-related illnesses. The following are some of the more common heat illnesses:

- **Heat rash**, also known as prickly heat, usually occurs when sweat from the body is not readily removed from the surface of the skin by evaporation. Heat rash can be a relatively mild irritant or be the cause of greater discomfort.
- **Heat cramps** are painful spasms of the muscles. These cramps are caused by a lack of electrolytes within the body.

- **Heat exhaustion** is caused by a lack of hydrating fluids that need to be replaced during heavy exertion. Heat exhaustion can cause an increase in core body temperature and lead to heatstroke.
- **Heatstroke** is the most serious heat-related problem and is life threatening. When a person has heatstroke, their body loses the capability to regulate core body temperature, which may rise to dangerous levels. Many times, a person's body will stop sweating prior to the occurrence of heatstroke. This condition requires immediate medical assistance.

RISK FACTORS FOR HEAT ILLNESS

- Heavy exertion/physical labor
- High temperatures and/or humidity
- Low liquid consumption
- Direct exposure to the sun
- No wind or breeze
- Wearing bulky clothing or protective equipment
- Indoor environments with poor ventilation or cooling
- Persons new to a warm climate or returning to one that have not acclimatized are particularly at risk of heat illness.
- Medical conditions, such as diabetes, high blood pressure, or heart disease
- Use of certain medications, such as diuretics (water pills) and some psychiatric or blood pressure medicines

INITIAL SYMPTOMS OF HEAT ILLNESS

Victims may experience one or more symptoms of heat illness. If you suspect that you or the people around you have any of the symptoms below, do not ignore them. Treat them immediately.

- Initial symptoms may include heat cramps, heavy sweating, tiredness, weakness, dizziness, headache, nausea, and fainting.
- Life-threatening symptoms include convulsions, confusion, hot dry skin, and high body temperature.

PREVENTING HEAT ILLNESS

It is best to prevent heat illness so that it does not occur. Consider the following preventative measures:

- During hot weather, actively drink water. Increase fluid intake, regardless of activity level. Urine should be clear or lightly colored. Avoid drinks with sugar and caffeine.
- Provide drinking water in convenient, visible locations to drink often and as needed. One quart (one liter) per hour per person is the minimum that a person should drink in an environment where heat illness may occur.
- Keep sufficient first aid supplies available to treat dehydration and heatstroke.
- Use shaded or cooled areas for rest periods. The warmer the temperature and the harder the exertion, the more frequent the rest periods should be. Preventive rest periods should be made available whenever someone feels in need.
- Use air-conditioning (AC) and ventilation when working inside.
- Pace your work. Do not do too much too fast. Take time to acclimatize if you are new to the climate.
- Try to accomplish the hardest activities in the cooler temperatures of the day.
- Wear the right protective clothing for the activity.
- Wear clothing that is light colored, loose fitting, and made from cotton/breathable fabric.
- Actively monitor for and immediately take action when heat illness-related symptoms are present.
- Teach workers or activity participants about the prevention and treatment of heat illness.
- Remember that infants and children, people 65 years of age and older, people who are overweight, and people who are ill or on certain medications are at the greatest risk for heat-related illness.

TREATING HEAT ILLNESS

Heat illness symptoms can generally be treated by moving an individual to a cooler location and taking measures to cool them down. In addition, consider the following treatments for specific symptoms:

- **Heat Rash** - keep the affected area of skin dry.
- **Heat Cramps** - provide the affected individual with water or sports drinks and encourage them to continue to rest even after cramps stop. If the cramps last over an hour, seek medical attention.

- **Heat Exhaustion** - provide the individual with water or sports drinks and take further measures to cool them down, such as with ice packs, cool water, or a shower. If their condition does not improve after an hour, seek medical attention.
- **Heat Stroke** - seek immediate medical attention. Call 911 or emergency medical responders first. Move the person to a cooler environment and help them cool down by loosening/removing heavy exterior clothing, soaking clothes in cool water, spraying them with cool water, using ice packs, or fanning their body. If possible, move them to water like a pool or lake. Never immerse the individual in cold water, like an ice bath, to lower their body temperature. Doing so can send the individual into thermal shock.

REFERENCES

- California Department of Industrial Relations. "Heat Illness Prevention eTool." www.dir.ca.gov/dosh/etools/08-006/index.htm
- California Department of Industrial Relations. "Heat Illness Prevention" www.dir.ca.gov/dosh/heatillnessinfo.html
- Centers for Disease Control and Prevention: "Frequently Asked Questions (FAQ) about Extreme Heat." www.cdc.gov/disasters/extremeheat/faq.html
- Learning Center Training: Heat Stress (FRD_VIV_VLS5867)
- OSHA Fact Sheet: "Protecting Workers from the Effects of Heat." www.osha.gov/OshDoc/data/Hurricane_Facts/heat_stress.pdf
- OSHA Safety and Health Topics: "Heat." www.osha.gov/SLTC/heatstress/
- OSHA Safety and Health Topics. "Heat Illness Prevention Campaign." www.osha.gov/heat
- Washington State Department of Labor & Industries. "Be Heat Smart." www.lni.wa.gov/safety-health/safety-training-materials/workshops-events/beheatsmart

For more information about this topic, call the Risk Management Division:

- 1-801-240-4049
- 1-800-453-3860, ext. 2-4049 (toll free in the United States and Canada)

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