

## **Heat Illness Prevention Plan - Appendix E: Heat Illnesses – Signs, Symptoms and Responses**

**Heat Cramps** – Painful cramps and/or spasms, often in the calves, arms, stomach muscles, and back resulting from the loss of salt and fluids due to heavy sweating. Heat cramps are characterized by muscle cramps, sweating, and headache.

Have the person rest and cool off; Have the person drink cool water; Apply a bag of ice and water wrapped in a towel to the cramping area for 20 minutes, if the person can tolerate it.

**Heat Exhaustion** – A disruption in the body’s ability to cool itself, resulting from fluid loss and inadequate replacement. Heat exhaustion is characterized by profuse perspiration, pale clammy skin, decreased and dark colored urine, a weak or fast pulse, weakness and fatigue, nausea/vomiting, muscle cramps blurred vision, headache, dizziness, irritability, mood changes, light-headedness, and fainting (both of which should be treated as medical emergency). Heat exhaustion can rapidly progress to heat stroke if not treated.

Call Public Safety or 911; Move the person to a cool, shaded area; Do not leave the person alone; If the person is dizzy or lightheaded, lay them on their back and raise legs 6-8 inches; If the person is sick to their stomach, lay them on their side; Loosen and remove heavy clothing; Have the person drink cool water (a small cup every 15 min) if not sick to their stomach, Attempt to cool the person by fanning them; Cool the skin with a cool spray mist of water or wet cloth.

**Heat Rash** – An uncomfortable and painful rash characterized by redness, bumps, and severe itching resulting from plugged sweat glands after/during exposure to hot, humid environments. Heat rash is the most common health problem in hot work environments. Heat rash usually appears on parts of the body that overlap or rub other parts of the body, such as the groin area, under the arms or breasts, and in knee or elbow creases.

Provide a cooler, less humid work environment, if possible. Advise the person to keep the area dry and not to use ointments and creams that make the skin warm or moist, which can make the rash worse.

**Heat Stroke** – The complete inability of the body to cool itself, resulting from fluid loss and inadequate replacement, typically after working in a high heat environment. Heat stroke is more likely to occur in older adults with chronic illnesses. Heat stroke is characterized by confusion, mood changes, irritability, fainting, seizures, hot, dry or red skin (resembling sunburn); absence of perspiration, weakness, fast pulse and a body temperature increase above 104°F. **Heat stroke is life threatening and requires an immediate response.**

Call Public Safety or 911; Move the person to a cool, shaded area; Do not leave the person alone. If the person is having seizures, lay them on their back and remove

nearby obstacles; If the person is sick to their stomach, lay them on their side; Remove heavy and outer clothing; Have the person drink cool water (a small cup every 15 min) if alert enough to do so and not feeling sick to their stomach; Attempt to cool the person by fanning them; Cool the skin with a cool spray mist of water or a wet cloth/sheet; If ice is available, place ice packs in armpits and groin area.

**Heat Syncope** Fainting and loss of consciousness resulting from the dilation of blood vessels and a reduction in blood pressure causing body fluids to collect in the legs by gravity.

Call Public Safety or 911; Provide shade; Position person on their back and elevate legs 6-8 inches; Provide small amounts of water only if conscious.

**When to Call:** You should always call Public Safety or 911 for heat-related illnesses. Stay on the line until the dispatcher tells you it's OK to hang up, or your life is in danger. Program Public Safety's number in your cell phone as a contact.

**Who to Call:** You should call Public Safety for heat-related illnesses at any of the 4 PCC campuses (Cascade, Rock Creek, Southeast and Sylvania) as well as the Willow Creek center; Public Safety will in turn call 911. You should call 911 for heat-related illnesses at any other PCC location.

Not every case of heat-related illness will exhibit all of the signs and symptoms listed above. The reader is urged to take first aid training offered by the American Heart Association, the American Red Cross or other recognized provider.