

Heat stroke and what to do about it

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Heat stroke is a form of hyperthermia, an abnormally elevated body temperature with accompanying physical and neurological symptoms. Unlike heat cramps and heat exhaustion, two forms of hyperthermia that are less severe, heat stroke is a true medical emergency that can be fatal if not properly and promptly treated.

The body normally generates heat as a result of metabolism, and is usually able to dissipate the heat by either radiation of heat through the skin or by evaporation of sweat. However, in extreme heat, high humidity, or vigorous exertion under the sun, the body may not be able to dissipate the heat and the body temperature rises, sometimes up to 106°F (41.1°C) or higher. Another cause of heat stroke is dehydration. A dehydrated person may not be able to sweat fast enough to dissipate heat, which causes the body temperature to rise.

Symptoms of heat stroke can sometimes mimic those of heart attack or other conditions. Sometimes a person experiences symptoms of heat exhaustion before progressing to heat strokes.

Symptoms of heat exhaustion include:

- Nausea
- vomiting
- fatigue
- weakness
- headache
- muscle cramps and aches
- dizziness

However, some individuals can develop symptoms of heat stroke suddenly and rapidly without warning.

Different people may have different symptoms and signs of heat stroke. But common symptoms and signs of heat stroke include:

- high body temperature
- the absence of sweating, with hot red or flushed dry skin
- rapid pulse
- difficulty breathing
- strange behavior (harder to notice on GWRRA members)
- hallucinations
- confusion

agitation
disorientation
seizure
coma

Victims of heat stroke must receive immediate treatment to avoid permanent organ damage. First and foremost, cool the victim.

Get the victim to a shady area, remove clothing, apply cool or tepid water to the skin (for example you may spray the victim with cool water from a garden hose), fan the victim to promote sweating and evaporation, and place ice packs under armpits and groin.

Monitor body temperature with a thermometer and continue cooling efforts until the body temperature drops to 101-102°F (38.3-38.8°C).

Always notify emergency services (911) immediately. If their arrival is delayed, they can give you further instructions for treatment of the victim.

The most important measures to prevent heat strokes are to avoid becoming dehydrated and to avoid vigorous physical activities in hot and humid weather.

If you have to perform physical activities in hot weather, drink plenty of fluids (such as water and sports drinks), but avoid alcohol, caffeine, and tea which may lead to dehydration.

Your body will need replenishment of electrolytes (such as sodium) as well as fluids if you sweat excessively or perform vigorous activity in the sunlight for prolonged periods.

Take frequent breaks to hydrate yourself. Wear hats and light-colored, lightweight, loose clothes.

Bike Tips

- Take water with you and drink it often. You need to replace all of the fluids you are losing. Stop often if you need to.
- Cool ties around the neck. As the water evaporates, it absorbs heat creating a cooling effect.
- Cool vests under your jacket. They work the same way, but cool a greater area,
- Soak a long sleeve shirt in water and wear it under your jacket. This works really well and can keep you cool for a long time. And, all you need is water.
- Hose yourself down when you stop for gas. Most stations usually have a water hose somewhere. You might even start to freeze if you use too much water.
- Don't ride in the extreme heat of the day. Leave early or ride late if you have to.

- Take plenty of breaks in the shade. Drink something cold. Eat ice cream. You can locate all DQs on their website in advance.
- Keep your skin covered. The sun makes it worse by drying it out and turning it into leather. Use sunblock on your face, but not over your eyes. Sweat can make it run into your eyes blinding you. This is not a fun experience.
- Carry a spray bottle of water to keep your clothing wet.

If all else fails, find a sympathetic grocer that will let you spend a few minutes in their walk in freezer.