

Understanding Heat Stroke

With high temperatures trending in recent weeks, those spending time outside should know the signs that they are getting overheated and need to get out of the elements.

“There is about two and a half patients out of 100,000 that seek care for heat related illness,” said Dr. John Rinker, Chief Medical Officer, OSF HealthCare Saint James-John W. Albrecht Medical Center. “Certainly in the summer months it’s more common. You’ll see it a lot more surrounding people participating in high risk activities: people that play sports, so think high school kids who are otherwise healthy, but they’re doing two-a-day football practices or they’re playing baseball out in the summer. They are certainly at higher risk for heat exhaustion.”

According to Dr. John Rinker, Chief Medical Officer at OSF HealthCare Saint James-John W. Albrecht Medical Center in Pontiac, it’s important to not only recognize the risk factors and symptoms of heat-related illness and injury, but what to do if you start exhibiting them as well.

First, people should understand the differences between heat stroke and heat exhaustion. Heat exhaustion is the less serious of the two. When heat exhaustion is occurring, Dr. Rinker says you will feel faint, sweat excessively, feel nauseous, and have a rapid, weak pulse. If this happens to you or a family member, get to a cooler spot, drink water, and take a cool shower if possible.

An even more serious heat-related illness, heat stroke, is the result of being extremely overheated and dehydrated. The dehydration is so severe that it decreases circulation to the brain, causing neurological problems and eventual organ failure. Common signs include a throbbing headache, a rapid pulse, and loss of consciousness.

Another main difference between heat exhaustion and heat stroke – those suffering from heat stroke can stop sweating completely.

“Once your body temperature gets above a certain degree, those basic mechanisms to make you sweat excessively start to get bypassed and shut off,” Dr. Rinker explained. He continued, “By that time you’re probably exhibiting several other types of central nervous system deficits. Certainly keeping that in mind, you can check your temperature and take whatever steps necessary to start cooling yourself down.”

While everyone is susceptible to heat stroke, certain groups are more at risk. Children younger than four years old and adults age 65 and older are at an increased risk. However, Dr. Rinker says heat related illness is largely avoidable by taking the proper precautions.

“If you’re spending a lot of time out in a high temperature environment, take frequent breaks,” suggested Dr. Rinker. “If you’re trying to get a job done that takes an hour, break it up into segments of 15 minutes. Try to get time out of the heat. Certainly if you have access to air conditioning, try to get time in the shade. Take more breaks than you think you need. Certainly excessive hydration: fluids, fluids.”

If someone is suffering from heat exhaustion, they can recover by moving to a cool environment and hydrating.

If someone is the victim of heat stroke, call 9-1-1, as heat stroke can be fatal if not treated. While waiting, people can care for the victim until help arrives by trying to cool them off: move the person to shade, put him or her in an ice bath, or place bags of ice on the neck, armpits and groin.

Here are some additional tips to stay healthy in the heat:

- Stay hydrated (non-alcoholic and non-caffeinated beverages).
- Know the day's forecast (heat index and humidity).
- Plan around the heat; try doing outdoor activities earlier in the morning or later in the evening.
- Take steps to avoid sunburn. Sun-damaged skin is not able to go through the process of keeping the body cool.

For More Information

When it comes to extreme temperatures, play it safe. Know the warning signs of heat stroke, and take the proper steps to prevent it. For more information, please call one of our [OSF PromptCare locations](#).

Symptoms of Heat Exhaustion

- Profuse sweating
- Water depletion (causes extreme thirst)
- Weakness
- Dizziness
- Salt depletion (causes muscle cramps)
- Nausea
- Vomiting
- Fainting
- Headache

Symptoms of Heat Stroke

- Body temperature greater than 104° F (main sign)
- No sweating in hot weather
- Neurological problems such as confusion, unconsciousness, and seizures
- Rapid breathing
- Increased heart rate