

Heat Related Illnesses

Although it is not summer yet, since we had one heat-related illness during the CERT Rodeo that led to the net going to emergency traffic only, I decided to cover heat related illnesses early.

In order for the National Weather Service and others to convey the possible effects of heat, the Heat Index was created. The Heat Index is based on both the temperature and humidity. Please remember that the Heat Index that is published by the NWS is based on temperatures measured in the shade and the temperature in the sun can be 15 degrees Fahrenheit or higher than the shade temperature. The effects that will be described next are based on a healthy person since certain medical conditions and medications affect the ability of the body to control heat. Between a Heat Index of 80 to 90, fatigue is possible with prolonged exposure and physical activity. If the Heat Index is in the range of 91 to 105, sunstroke, heat cramps and heat exhaustion are possible. If the Heat Index is in the range of 106 to 130, sunstroke, heat cramps, and heat exhaustion are likely. A Heat Index of 131 or greater means that heat stroke is likely with continued exposure.

In order to prevent heat related illnesses, the following steps should be taken. The first is to respect the heat. Keep an eye to the weather and try to keep out of the heat in the hottest part of the day. The second is to avoid dehydration. The recommendation is to drink one pint of water before the activity and $\frac{1}{2}$ cup every 20 minutes during the exposure. Also avoid caffeine and alcohol since they impair the cooling mechanism of the body. The third step is to wear light colored loose fitting clothing. The fourth step is to allow proper time (8-11 days) for the body to adjust to the heat. The fifth step is to recognize your personal tolerance to heat and your medical status. As stated above, there are medical conditions and medications that reduce the tolerance to heat exposure. The sixth and seventh steps are to become familiar with the symptoms and signs of heat illnesses and to stop activities at the first sign of heat illness.

The first heat related illness is heat cramps. As the name suggests, the symptoms are cramping of the affected muscles. The treatment is to both stop activities immediately and to rehydrate since this is a sign of dehydration.

The second heat related illness is heat exhaustion. This is a further sign of dehydration. The symptoms are headache, fainting, dizziness, nausea, a weak and rapid pulse, cold and clammy skin, and heavy sweating. The treatment is to immediately stop the activity, get out of the heat, and rehydrate. The third heat related illness is heat stroke, which is also known as sunstroke. The symptoms are red, hot, and usually dry skin, little or no sweating, dizziness, confusion, and a strong, rapid pulse. Heat stroke means that the body can no longer regulate its temperature and the body temperature has reached critical levels. **THIS IS A MEDICAL EMERGENCY!** Immediate medical attention by physicians and EMTs is necessary to save life. Immediate action is necessary to cool the patient's body.