Iowa Department of Public Health
Division of Environmental Health

Heat Related Illness: A Prevention Guide to Promote Your Personal Health and Safety

Overview: Extreme heat events can occur when temperatures are substantially hotter and/or more humid than average for that location at that time of year. People can suffer heat-related illnesses, especially when their bodies are unable to properly cool themselves. This fact sheet provides guidance for preventing, recognizing and treating heat-related health problems.

Who is at risk: Although anyone at any time can suffer from heat-related illness, some people are at greater risk than others. This includes:

- People 65 years of age or older
- Infants and young children
- Overweight individuals
- People who are performing manual labor or exercising outdoors
- People who are physically ill, especially those with heart disease or high blood pressure, or who take certain medications, such as for depression, insomnia, or poor circulation

Even young and healthy individuals can have a heat related illness if they participate in strenuous physical activities during hot weather.

Prevention: To protect your health when temperatures and humidity are high, remember to keep cool and use common sense. The following tips are important:

- **Stay Cool Indoors** – Visit air conditioned areas or take a cool shower
- **Drink Plenty of Fluids** – Increase fluid intake, regardless of your activity level
- **Replace Salt and Minerals** – Drink replacement beverages such as sports drinks
- **Wear Appropriate Clothing and Sunscreen** – Choose lightweight, light-colored, loose-fitting clothing
- **Schedule Outdoor Activities Carefully** – Plan outdoor activity for morning and evening hours
- **Pace Yourself** – Work slowly if you are not used to working or exercising in a hot and humid environment
- **Use a Buddy System** – Watch others for heat-induced illness, since some people can become confused or lose consciousness
- **Do Not Leave Children or Animals in Cars** - Even in cool temperatures, cars can heat up to dangerous temperatures very quickly

Revised 5-20-2013

Heat related illnesses:

Heat related illnesses can vary in severity, and can include all of the following:

Heat rash and **sunburn** primarily affect the skin and usually do not require medical assistance.

- **Sunburns** are identified by red, painful, and abnormally warm skin after sun exposure and can be treated by using moisturizing lotion, avoiding additional sun exposure, and keeping the skin cool with cold compresses or cool water. Sunburns that are severe or affect infants younger than 1 year of age may require medical attention.
- **Heat rash** appears as a cluster of red pimples or small blisters and can be treated by keeping the skin cool and dry.

Heat cramps are muscle pains or spasms, and can occur in association with strenuous activity as the body loses salts and fluids via sweating due to high temperatures. Heat cramps can be a symptom of heat exhaustion, and should be treated by stopping all activities for at least a few hours and drinking water plus juice or a sports beverage. If symptoms do not resolve in 1 hour, seek medical attention.

Heat exhaustion and **heat stroke** are more severe heat related illnesses.

- People with **heat exhaustion** can experience heavy sweating, tiredness, weakness, dizziness, headaches, nausea, vomiting, have pale skin or faint. Treatment of heat exhaustion includes drinking cool, nonalcoholic beverages, taking a cool shower, bath, or sponge bath, getting rest, moving to an air-conditioned environment and changing into lightweight clothing. If symptoms are severe, worsen, do not resolve after an hour, or if the person has heart problems or high blood pressure, seek medical attention. If heat exhaustion is left untreated, and the person continues the activities, it may progress to heat stroke.
- **Heat stroke** occurs when the body is unable to cool down. It is characterized by high body temperature (above 103°F, orally), red, hot, and dry skin (no sweating), rapid, strong pulse, throbbing headache, dizziness, nausea, confusion or unconsciousness. If a person is experiencing heat stroke, seek medical assistance immediately and begin to cool the individual. Cooling efforts should continue until medical assistance arrives. Cool the person by getting them into shade, having them take a cool shower, bath or sponge bath, or wrap the person in a cool, wet sheet and fan him or her vigorously.

Source: http://www.bt.cdc.gov/disasters/extremeheat/heat_guide.asp