Sweat acts like our natural air conditioner. As sweat evaporates from our skin, it cools us off. Our personal cooling system can fail, though, if we overexert ourselves on hot and humid days. When this happens, our body heat can climb to dangerous levels. This can results in heat exhaustion or a heat stroke which is life-threatening.

Heat exhaustion takes time to develop. Fluids and salt are vital for health. They are lost as children and adults sweat a lot during exercise or other strenuous activities. It is very important to drink lots of liquids before, during and after exercise in hot weather. As strange as it seems, people suffering from heat exhaustion have low, normal or only slightly elevated body temperatures.

Signs and Symptoms of heat exhaustion include:

- Cool, clammy, pale skin
- Sweating
- Dry mouth
- Fatigue, weakness
- Dizziness
- Headache
- Nausea, sometimes vomiting
- Muscle cramps
- Weak and rapid pulse

Heat stroke, unlike heat exhaustion, strikes suddenly, with little warning. When the body's cooling system fails, the body's temperature rises fast. This creates an emergency condition. Signs of heat stroke include:

- Very high temperature (104 degrees F or higher)
- Hot, dry, red skin
- No sweating
- Deep breathing and fast pulse - then shallow breathing and weak pulse
- Dilated pupils
- Confusion, delirium, hallucinations
- Convulsions
- Loss of consciousness

Chronic medical conditions such as diabetes, use of alcohol, and vomiting or diarrhea can put children and adults at risk for a heat stroke during very hot weather. Heat stroke in children is not only due to high temperatures and humidity, but also to not drinking enough fluids.
Prevention

Heat exhaustion and heat stroke can be prevented with this advice:

- Do not stay in or leave anyone in closed, parked cars during hot weather.
- Take caution when you must be in the sun. At the first signs of heat exhaustion, get out of the sun or your body temperature will continue to rise.
- Do not exercise vigorously during the hottest times of the day. Instead, run, jog or exercise closer to sunrise or sunset. If the outside temperature is 82 degrees F or above and the humidity is high, do your activity for a shorter time.
- Wear light, loose-fitting clothing, such as cotton, so sweat can evaporate. And, put on a wide-brimmed hat with vents.
- Drink lots of liquids, especially if your urine is a dark yellow, to replace the fluids you lose from sweating. Thirst is not a reliable sign that your body needs fluids. When you exercise, it is better to sip rather than gulp the liquids.
- Drink water or water with salt added if you sweat a lot. (Use 1/2 teaspoon salt in 1 quart of water.) Sport drinks such as Gatorade, All Sport and PowerAde are good too.
- If you feel very hot, try to cool off. Open a window, use a fan or turn on an air conditioner.
- Limit your stay in hot tubs or heated whirlpools to 15 minutes. Don't use them when you are alone.
- Do not drink alcohol or beverages with caffeine because they speed up fluid loss.
- Stay out of the sun if you are taking water pills, mood altering or antispasmodic medications. Check which ones are safe with your doctor.
- Do not bundle a baby in blankets or heavy clothing. Infants don't tolerate heat well because their sweat glands are not well-developed.
- Some people perspire more than others. Those who do should drink as much fluid as they can during hot, humid days.
- Know the signs of heat stroke and heat exhaustion and don't ignore them.
**Questions to Ask**

<table>
<thead>
<tr>
<th>Are any signs of heat stroke present?</th>
<th>Get Emergency Care. Give first aid for heat stroke before emergency care:</th>
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<tbody>
<tr>
<td>• Body temperature 104 degrees F or higher</td>
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<tr>
<td>• Skin that is red, dry and/or hot</td>
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<tr>
<td>• Pulse that is rapid and then gets weak</td>
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<tr>
<td>• No sweating</td>
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<tr>
<td>• Confusion, hallucinations or loss of consciousness or convulsions</td>
<td>• Do CPR if the person is not breathing and has no pulse. (See &quot;CPR&quot;.)</td>
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<td>• Do rescue breathing if the person is not breathing, but does have a pulse. (See &quot;Airway and Breathing&quot;.)</td>
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<td>• Until emergency care arrives, it is important to lower the body temperature. To do this:</td>
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<td>o Move the person to a cool place indoors or under a shady tree. Place the feet higher than the head.</td>
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<td>o Remove the clothing and either wrap the person in a cold, wet sheet; sponge the person with towels or sheets that are soaked in cold water; or spray the person with cool water. Fan the person. If using an electric fan, use caution. Make sure your hands are dry when you plug the fan in and turn it on. Keep the person with wet items far enough away from the fan so as not to cause electric shock.</td>
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<td>o Put ice packs or cold compresses to the neck, under the armpits and to the groin area.</td>
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<td>o Immerse a child in cold water if he or she is unconscious.</td>
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<td>• Place the person in the recovery position once his or her temperature reaches 101 degrees F.</td>
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Is the person too dizzy or weak to stand or does he or she have non-stop vomiting?

| Yes |  |
| Get Emergency Care and give first aid for heat exhaustion before emergency care”.

| No |  |
| Get Emergency Care and give first aid for heat exhaustion before emergency care”.

Are two or more of these signs of heat exhaustion present?

- Skin that is pale, cool and clammy
- Sweating
- Dry mouth
- Dizziness
- Fatigue and weakness
- Headache
- Nausea, vomiting
- Weak and rapid pulse
- Muscle cramps

| Yes |  |
| Give first aid for heat exhaustion and See Doctor.

|  |
| Give first aid for heat exhaustion and See Doctor.

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**First Aid for Heat Exhaustion**

(These apply to you or anyone else who has heat exhaustion)

- Move to a cool place indoors or in the shade.
- Loosen clothing.
- Take fluids such as cool or cold water. If available, add 1/2 teaspoon of salt to a quart of water and sip it or drink sport drinks such as Gatorade, All Sport or PowerAde.
- Have salty foods such as saltine crackers, if tolerated.
- Lie down in a cool, breezy place.