# Heat Illness Chart

## Heat Illnesses and Their Symptoms

<table>
<thead>
<tr>
<th>Medical Condition</th>
<th>Symptom(s)</th>
<th>Causes</th>
<th>Safety Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heat rash</strong></td>
<td>• Red cluster of pimples&lt;br&gt;• Blisters&lt;br&gt;• Itching&lt;br&gt;• Red rash on the skin that usually occur on the neck, chest, breast and/or groin</td>
<td>Excessive sweating that blocks sweat ducts</td>
<td>Remove the affected person from heat. Minimize exposure of skin to sun. Keep the affected area dry. Seek medical attention if rash does not improve.</td>
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<tr>
<td><strong>Heat edema (swelling)</strong></td>
<td>• Swelling in the ankles, feet and hands&lt;br&gt;• Body temperature normal or elevated core temperature up to 104° F</td>
<td>• Occurs in persons who are not used to heat&lt;br&gt;• Increased blood flow to the skin in limbs</td>
<td>Elevate and apply compressive stockings to the affected limbs.</td>
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<tr>
<td><strong>Heat tetany (heat stress)</strong></td>
<td>• Respiratory problems, such as breathing difficulty&lt;br&gt;• Muscular problems, including spasms or numbness or tingling of muscles&lt;br&gt;• Body temperature normal or elevated core temperature up to 104° F</td>
<td>• Hyperventilation&lt;br&gt;• Respiratory alkalosis – the blood becomes basic</td>
<td>Remove the affected person from the heat and advise the person to breathe slowly.</td>
</tr>
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Chart courtesy of Minnesota Department of Health
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<tr>
<td>Heat cramps</td>
<td>• Muscle spasms</td>
<td>• Dehydration</td>
<td>Stop all activities, relocate to a cool location, rest and drink Electrolyte-containing fluids (sports drinks). Seek medical attention if symptoms persist.</td>
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<tr>
<td></td>
<td>• Muscles usually affected include the abdomen, calf, thighs and shoulder muscles</td>
<td>• Electrolyte deficiency</td>
<td></td>
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<tr>
<td></td>
<td>• Body temperature normal or elevated core temperature up to 104˚ F</td>
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<td></td>
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<tr>
<td>Heat exhaustion</td>
<td>• Profuse sweating</td>
<td>• Dehydration</td>
<td>Stop all activities, relocate to a cool location, rest and drink electrolyte containing fluids.</td>
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<tr>
<td></td>
<td>• Weakness</td>
<td>• Electrolyte deficiency</td>
<td></td>
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<td></td>
<td>• Rapid breathing</td>
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<td></td>
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<tr>
<td></td>
<td>• Dizziness</td>
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<td></td>
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<td>• Nausea/vomiting</td>
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<td></td>
<td>• Normal mentation</td>
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<td></td>
<td>• Body temperature normal or elevated core temperature up to 104˚ F</td>
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<tr>
<td>Heat stroke</td>
<td>• Oral body temperature of 104F and above</td>
<td>• Profound dehydration</td>
<td>Call 911 immediately if you see anyone with these symptoms and has a body temperature of 104F and above.</td>
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<td></td>
<td>• Often sudden onset of symptoms</td>
<td>• Profound electrolyte deficiency</td>
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<td></td>
<td>• Confusion or loss of consciousness</td>
<td>• Body is unable to maintain heat diffusion through the skin</td>
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<td>• Rapid and strong pulse</td>
<td>• Normal regulation of body</td>
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<td></td>
<td>• Hot, red and dry skin</td>
<td>temperature is no longer intact</td>
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<td></td>
<td>• Headache</td>
<td>• Mortality can be as high as 50%</td>
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<td><em>This is a life threatening condition due to extreme heat, usually occurring when the body temperature is greater than 104F.</em></td>
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