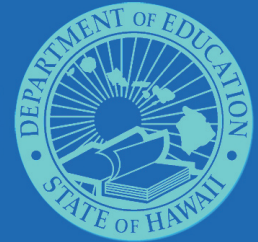


FACTSHEET

# Heat guidelines



Please use these guidelines provided by the Hawaii State Department of Education and Hawaii State Department of Health in identifying and addressing heat-related illness.

ILLNESS	DESCRIPTION	SIGNS/SYMPTOMS	FIRST AID / WHAT TO DO
<b>Early Heat Stress</b>	Occurs during prolonged exposure to high ambient temperatures and humidity, direct sun, and without sufficient rest and fluids.  When children feel thirsty, they may already be dehydrated. A child may lose greater than 2% of their body weight as sweat before they feel thirsty.	<ul style="list-style-type: none"> <li>• Tired</li> <li>• Headache</li> <li>• Confusion/anxiety</li> <li>• Normal body temperature</li> <li>• Sweating, may be excessive</li> <li>• Nosebleeds</li> <li>• Dry lips, tongue</li> <li>• Nausea</li> <li>• Heat rash</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor and assist as necessary.</li> <li>• Send to a cooler location.</li> <li>• Have them sit or lie down and rest, keep calm.</li> <li>• Encourage drinking generous amounts of water.</li> <li>• Loosen or remove excess clothing.</li> <li>• Apply cool compresses, or cool water.</li> </ul> <p><i>Monitor for cessation of sweating:</i></p> <ul style="list-style-type: none"> <li>• <b>If symptoms persist, escort student to health room.</b></li> <li>• <b>School health aide (SHA) will monitor temperature and notify parent or guardian in accordance with the SHA manual.</b></li> </ul>
<b>Heat Cramps</b>	Occurs during or after intense exercise.  Athlete will experience acute, painful, involuntary muscle contractions typically in the arms, legs, or abdomen.	<ul style="list-style-type: none"> <li>• Muscle cramps along with the symptoms listed above</li> </ul> <p><i>May include:</i></p> <ul style="list-style-type: none"> <li>• Thirst</li> <li>• Dehydration</li> <li>• Fatigue</li> <li>• Sweating</li> </ul>	<ul style="list-style-type: none"> <li>• Stop all activity and sit quietly in a cool place.</li> <li>• Drink water or a sports drink.</li> <li>• Do not engage in exercise/strenuous activity for a few hours after cramps subside.</li> <li>• Muscle massage may assist the cramping muscles.</li> <li>• <b>If symptoms persist, escort student to health room.</b></li> </ul>
<b>Heat Syncope</b>	Occurs as result of exposure to high temperatures. Typically occurs during the first 5 days of acclimation to physical activity in the heat. May also occur after a long period of standing after physical activity.	<ul style="list-style-type: none"> <li>Any of the above, AND</li> <li>• Dizziness</li> <li>• Lightheadedness</li> <li>• Fainting</li> </ul> <p><i>May include:</i></p> <ul style="list-style-type: none"> <li>• Pale or sweaty skin</li> <li>• Decreased pulse rate</li> </ul>	<ul style="list-style-type: none"> <li>• Lie down in a cool place.</li> <li>• Drink sips of water or a sports drink.</li> <li>• <b>If symptoms persist, escort student to health room.</b></li> <li>• <b>Seek medical attention if symptoms persist or are severe, or if the student has existing heart problems or high blood pressure.</b></li> </ul>
<b>Heat Exhaustion</b>	The inability to continue exercising that is associated with heavy sweating, dehydration, and salt loss.  Frequently occurs in hot, humid conditions.	<ul style="list-style-type: none"> <li>Any of the above, AND</li> <li>• Inability to continue exercising</li> <li>• Profuse sweating</li> </ul> <p><i>May include:</i></p> <ul style="list-style-type: none"> <li>• Normal or elevated body-temp (97°-104°F)</li> <li>• Weak pulse</li> <li>• Nausea/Vomiting/Diarrhea</li> <li>• Chills, cool/clammy skin</li> </ul>	<ul style="list-style-type: none"> <li>• If possible, attempt to cool the student by applying cool wet compresses or shower/bath/sponge bath.</li> <li>• If possible, use fan and/or move to an air conditioned or cooler environment.</li> <li>• Loosen clothing, allow student to rest.</li> <li>• Give sips of water or a sports drink.</li> <li>• <b>If symptoms persist, escort student to health room</b></li> <li>• <b>Monitor student closely, if rapid response does not occur, call 911.</b></li> </ul>
<b>Heat Exhaustion</b>	<b>Medical Emergency:</b> Life-threatening unless promptly recognized and treated. Occurs as a result of prolonged heat exposure while engaging in physical activity. Symptoms are a result of the body shutting down when it is no longer able to regulate body temperature naturally.	<ul style="list-style-type: none"> <li>Same symptoms as heat exhaustion, AND</li> <li>• High body-temp (&gt;104°F)</li> <li>• Altered mental state</li> <li>• Mood swing (apathy, irrational)</li> <li>• Severe headache</li> <li>• Confusion</li> <li>• Unconsciousness possible</li> <li>• Shallow breathing</li> <li>• Increased pulse rate</li> <li>• Pulse may be faint</li> <li>• Hot and wet or dry skin</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Summon emergency medical assistance or get the victim to a hospital immediately</b></li> <li>• <b>Delay can be fatal. CALL 911.</b></li> <li>• Move the victim to a shady area.</li> <li>• If possible cool the student rapidly using whatever is available: use iced cloths or cool water, spray the student with cool water from the hose, sponge the student with cool water; fan the student. Continue to until temperature drops to 101-102°F.</li> <li>• CPR may be necessary.</li> <li>• Continue first aid until medical professionals arrive and take over.</li> </ul>

Adapted from American Academy of Pediatrics (2011). Policy Statement—Climatic Heat Stress and Exercising Children and Adolescents. Pediatrics. 128 (3) 741-7. National Federation of State High School Associations. April 2012; "Heat Acclimatization and Heat Illness Prevention Position Statement. National Collegiate Athletic Association (NCAA); Guideline 2c," "Prevention of Heat Illness," Revised June 2010.