Types of Heat Stress

 Symptoms and Treatment
Heat Rash Symptoms/First Aid

- Clusters of red bumps on skin
- Often appears on neck, upper chest, folds of skin

- Try to work in a cooler, less humid environment when possible
- Keep the affected area dry
Heat Cramps Symptoms/First Aid

**Heat cramps**
- Muscle spasms
- Pain
- Usually in abdomen, arms, or legs

- Have worker rest in shady, cool area
- Worker should drink water or other cool beverages
- Wait a few hours before allowing worker to return to strenuous work
- Have worker seek medical attention if cramps don't go away
Heat Exhaustion Symptoms/First Aid

Heat exhaustion
- Cool, moist skin
- Heavy sweating
- Headache
- Nausea or vomiting
- Dizziness
- Light headedness
- Weakness
- Thirst
- Irritability
- Fast heart beat

First Aid
- Have worker sit or lie down in a cool, shady area
- Give worker plenty of water or other cool beverages to drink
- Cool worker with cold compresses/ice packs
- Take to clinic or emergency room for medical evaluation or treatment if signs or symptoms worsen or do not improve within 60 minutes.
- Do not return to work that day
# Heat Stroke Symptoms/First Aid

<table>
<thead>
<tr>
<th>Heat stroke</th>
<th>First Aid</th>
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<tbody>
<tr>
<td>Confusion</td>
<td>Call 911</td>
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<tr>
<td>Fainting</td>
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<tr>
<td>Seizures</td>
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<tr>
<td>Excessive sweating or red, hot, dry skin</td>
<td>While waiting for help:</td>
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<tr>
<td>Very high body temperature</td>
<td>Place worker in shady, cool area</td>
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<td>Loosen clothing, remove outer clothing</td>
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<td>Fan air on worker; cold packs in armpits</td>
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<td>Wet worker with cool water; apply ice packs, cool compresses, or ice if</td>
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<td>available</td>
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<td>Provide fluids (preferably water) as soon as possible</td>
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<td>Stay with worker until help arrives</td>
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</table>
HEAT EXHAUSTION OR HEAT STROKE

- Faint or dizzy
- Excessive sweating
- Cool, pale, clammy skin
- Nausea or vomiting
- Rapid, weak pulse
- Muscle cramps

- Throbbing headache
- No sweating
- Body temperature above 103°
- Red, hot, dry skin
- Nausea or vomiting
- Rapid, strong pulse
- May lose consciousness

CALL 9-1-1

- Get to a cooler, air conditioned place
- Drink water if fully conscious
- Take a cool shower or use cold compresses
- Take immediate action to cool the person until help arrives

Weather.gov/socialmedia
Weather.gov/heat

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SacramentoReady.org
How to Prevent Heat Illness
Acclimation

- Gradually increase workers’ time in hot conditions over 7 to 14 days.
- For new workers:
  - The schedule should be no more than 20% of the usual duration of work in the heat on day 1 and no more than 20% increase on each additional day.
- For workers with previous experience:
  - The schedule should be no more than 50% of the usual duration of work in the heat on day 1, 60% on day 2, 80% on day 3, and 100% on day 4.
- Closely supervise new employees for the first 14 days or until they are fully acclimatized.
- Non-physically fit workers require more time to fully acclimatize.
- Acclimatization can be maintained for a few days of non-heat exposure.
- Taking breaks in air conditioning will not affect acclimatization.
Hydration

• If in the heat <2 hours and involved in moderate work activities, drink 1 cup (8 oz.) of water every 15–20 minutes.
• During prolonged sweating lasting several hours, drink sports drinks containing balanced electrolytes.
• Avoid alcohol and drinks with high caffeine or sugar.
• Generally, fluid intake should not exceed 6 cups per hour.
Rest Breaks

- Encourage co-workers to take appropriate rest breaks in order to cool down and hydrate.
- Permit rest and water breaks when a worker feels heat discomfort.
- Modify work/rest periods to give the body a chance to get rid of excess heat.
- Assign new and unacclimatized workers lighter work and longer, more frequent rest periods.
- Shorten work periods and increase rest periods:
  - As temperature, humidity, and sunshine increase.
  - When there is no air movement.
  - If protective clothing or equipment is worn.
  - For heavier work.