Heat Illness

Exposure to heat can cause illness and possibly death. The most serious heat illness is heat stroke. Other heat illnesses, such as heat exhaustion, heat cramps and heat rash, should also be avoided. Take precautions any time temperatures are high and you are outside performing physical activities.

Risk Factors for Heat Illness
- High temperature and humidity, direct sun exposure, no breeze or wind
- Heavy physical labor
- No recent exposure to hot workplaces
- Low liquid intake
- Waterproof clothing

Symptoms of Heat Exhaustion
- Headache, dizziness, or fainting
- Weakness and wet skin
- Irritability or confusion
- Thirst, nausea, or vomiting

Symptoms of Heat Stroke
- May be confused, unable to think clearly, pass out, collapse, or have seizures (fits)
- May stop sweating

To Prevent Heat Illness
- Review Caltech’s Heat Illness Prevention Program located on the EHS website
- Receive training about the hazards leading to heat stress and how to prevent them
- Keep cool water on hand - at least one pint of water per hour is needed
- Modify outdoor activities and arrange frequent rest periods with water breaks in shaded or air-conditioned areas
- Gradually increase outdoor activities and allow for more frequent breaks if new to the heat or have been mostly indoors to adapt to working in the heat
- Designate a responsible person to monitor conditions and protect people who are at risk of heat stress
- Consider protective clothing that provides cooling features

Protective Measures
- Know the signs and symptoms of heat illnesses
- Monitor yourself
- Use a buddy system
- Block out direct sun and other heat sources
- Drink plenty of fluids. Drink often and BEFORE you are thirsty. Drink water every 15 minutes
- Avoid beverages containing alcohol or caffeine
• Wear lightweight, light colored, loose-fitting clothes

**What if Someone is Ill from the Heat?**
• Call a Supervisor for help. If the Supervisor is not available, call Campus Security x5000 or (626) 395-5000
• Have someone stay with the person until help arrives
• Move the person to a cooler/shaded area.
• Remove outer clothing
• Fan and mist the person with water; apply ice (ice packs, ice bags, or ice towels)
• Provide cool drinking water, if able to drink

**IF A PERSON IS NOT ALERT OR SEEMS CONFUSED**
this may be a heat stroke
**CALL x5000 or 626-395-5000 IMMEDIATELY**
and apply ice as soon as possible

**IN SUMMARY... Four steps to prevent heat illness**
1. Training: Learn about heat illness prevention
2. Water: Consume fresh water - drink at least 1 quart or four 8 oz. glasses of water per hour
3. Rest: Modify outdoor activities and arrange frequent rest periods with water breaks in shaded or air-conditioned areas
4. Shade: Access shade and take a cool-down rest in the shade for at least 5 minutes. *Do not wait until you feel sick to cool down.*

Refer to Caltech’s [Heat Illness Prevention Program](#) located on the EHS website.