


KAUST Health and Safety Toolbox Talk	Toolbox Talk Number	HSE/RF/TBT/006	 جامعة الملك عبد الله للعلوم والتقنية King Abdullah University of Science and Technology
	Title	Heat Illness Prevention: Symptoms & Treatment	
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The following are the normal responses to excess body heat:

- Reddened skin.
- Body surface temperature increases slightly.
- Sweating increases to provide evaporative cooling.
- Acclimatization occurs over a few weeks.

Typical symptoms and treatment guidelines for the more serious conditions of Heat Stroke, Heat Exhaustion, Heat Cramps, Heat Rash and Fainting are given here:

Heat Related Condition	Typical Symptoms	Treatment Guidelines
Heat Stroke The most serious heat illness. Heat stroke can be fatal and requires prompt medical attention.	<ul style="list-style-type: none"> • High body temperature. • No sweating. • Hot dry skin. • Very rapid, weak pulse. • Confused/ irrational behavior. • Loss of consciousness, coma. 	<ul style="list-style-type: none"> • Immediately call for emergency medical assistance: 911 from a KAUST landline, or 012 8080911 from a mobile. • Place person in a cool, shady area and do not leave them alone. • Cool person rapidly with running water, or rapid fanning. • Provide cool drinking water if the person is alert and can sip small amounts quickly.
Heat Exhaustion Results when there is loss of salt and water through excessive sweating and failure to either drink sufficient fluids, take enough salt or both.	<ul style="list-style-type: none"> • Excessive sweating. • Extreme weakness, fatigue. • Pale, cold clammy skin. • Dizziness, headaches. • Nausea, vomiting. • Muscle cramps, usually abdominal. • Fast, shallow breathing. • Loss of consciousness. 	<ul style="list-style-type: none"> • Place person in a cool shady area and do not leave them alone. • Cool person rapidly with running water, or rapid fanning. • Get medical attention immediately when there is a loss of consciousness.
Heat Cramps Heat cramps are painful spasms of the muscles that occur when workers drink large quantities of water but fail to replace their bodies' electrolyte loss through sweating.	<ul style="list-style-type: none"> • Muscle spasms, usually in the lower extremities, abdomen or both. • Cool, moist skin. • Rapid pulse. • Remains alert. • Normal body temperature. 	<ul style="list-style-type: none"> • Stop work and move the person to a cool, shady resting place. • Give enough cool drinking water, juice or oral rehydration solution. • Let the patient rest, and consult a medical professional to determine rest hours.
Heat Rash Also known as "prickly heat".	<ul style="list-style-type: none"> • Heat rashes exhibit as red spots on the skin that cause a prickling sensation during heat exposure. 	<ul style="list-style-type: none"> • In most cases, heat rashes will disappear when the affected individual returns to a cooler climate. • Get medical attention if condition persists.
Heat Collapse (Fainting) This condition is caused by prolonged standing, particularly in one spot.	<ul style="list-style-type: none"> • Fainting, collapse. 	<ul style="list-style-type: none"> • Immediately call for emergency medical assistance: 911 from a KAUST landline, or 012 8080911 from a mobile.

MOST IMPORTANTLY, do not let schedule or productivity influence awareness or caution in high heat weather. Pressure from Supervisors or Persons in Charge or self-induced pressure is the most dangerous hazard. **NEVER IGNORE ANYONE'S SYMPTOMS DESPITE YOUR MEASUREMENTS!**

For more information, please contact rf.safety@KAUST.EDU.SA