

The Facts

On Heat Stress



OCCUPATIONAL AND ENVIRONMENTAL SAFETY

For anyone working outdoors or in hot indoor environments, heat can lead to serious medical conditions. If the human body is unable to maintain a normal body temperature, heat-related illness can occur and may result in death. Health effects include heat rash, heat cramps, heat exhaustion, and heat stroke. Faculty, students, and staff should take preventive measures to avoid heat stress.

Heat Stroke

Most serious heat-related health problem. Occurs when the body's temperature regulating system fails and body temperature rise to critical levels (greater than 104°F). Heat stroke is a medical emergency that may result in death.

Signs:

- Confusion
- Loss of consciousness.
- Seizures
- High body temperature (greater than 104°F).
- Hot, dry skin. No sweating.

What to Do:

- Get medical help.
- Move worker to a cool/shady area.
- Use wet/cold cloths on body.

Heat Exhaustion

Second most serious heat related health problem.

Signs:

- Headache
- Nausea
- Dizziness
- Weakness
- Irritability
- Confusion
- Thirst
- Heavy sweating
- Body temperature greater than 100°F

What to Do:

- Remove worker from hot area
- Drink plenty of water
- Use cold compress
- Seek medical help if needed.

Heat Cramps

Muscle pains typically caused by loss of body salts and fluids during sweating.

Signs:

- Painful, brief muscle cramps in muscles that are fatigued from heavy work (calves, shoulders, thighs)

What to Do:

- Replace fluid loss by drinking water every 15 to 20 minutes

Heat Rash

Common problem in hot work environments caused by sweating.

Signs:

- Looks like red clusters of pimples or small blisters. Typically appears on neck, upper chest, groin, under breasts, in elbow creases.

What to Do:

- Keep rash dry, do not use ointments or creams, powders may be applied to increase comfort.

Tips to Prevent Heat Stress

- Provide workers with **water, rest, and shade**.
- Allow new or returning workers to gradually increase workloads and take more frequent breaks as they acclimatize or build a tolerance for working in the heat.
- Keep hydrated. Drink plenty of water even if you are not thirsty.
- Avoid sugary drinks and caffeine.
- Wear light colored, light weight clothing.
- Take frequent breaks in the shade.
- Plan for emergencies and train workers on prevention.
- Monitor workers for signs of illness.
- Notify your supervisor immediately if you notice heat stress signs in you or a coworker.

