Policy No.: OS010	Approved by: Mike Liberty
Title: Heat Illness Prevention Program	Date: 7/28/2022
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Prepared by: Katherine Root, CIH, CSP	
EH&S Department Use Only: Yes X No	UR Website: X Public Restricted

## I. PURPOSE

This procedure establishes the University of Rochester's (UR) program to prevent heat related illness.

#### II. PERSONNEL AFFECTED

UR employees who work outdoors and may be exposed to elevated temperatures during certain months of the year, employees who work in hot indoor environments, as well as employees who work in environments with radiant heat sources (such as: ovens, kilns, sterilizing equipment, environmental chambers, generators, furnace, boilers, steam lines), shall be covered under this program.

Examples include, but are not limited to:

- Grounds keeping
- Central Utilities
- Areas where encapsulating PPE is required
- Radiant heat sources (ovens, kilns, environmental chambers, generators, furnace, boilers, steam lines)
- Sterile Processing
- Any high exertion physical labor in warm environments
- Construction
- Automotive repair
- Parking
- Public Safety
- Fire Safety

#### III. DEFINITIONS

Heat-Related Illness	Symptoms and Signs
Heat rash	<ul> <li>Clusters of red bumps on skin</li> <li>Often appears on neck, upper chest, and skin folds</li> </ul>

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Heat cramps	<ul> <li>Muscle spasms or pain</li> <li>Usually in legs, arms, or trunk</li> </ul>
Heat exhaustion	<ul> <li>Fatigue</li> <li>Irritability</li> <li>Thirst</li> <li>Nausea or vomiting</li> <li>Dizziness or lightheadedness</li> <li>Heavy sweating</li> <li>Elevated body temperature or fast heart rate</li> </ul>
Heat stroke	<ul> <li>Confusion</li> <li>Slurred speech</li> <li>Unconsciousness</li> <li>Seizures</li> <li>Heavy sweating or hot, dry skin</li> <li>Very high body temperature</li> <li>Rapid heart rate</li> </ul>
Heat syncope	<ul><li>Fainting</li><li>Dizziness</li></ul>
Rhabdomyolysis (muscle breakdown)	<ul> <li>Muscle pain</li> <li>Dark urine or reduced urine output</li> <li>Weakness</li> </ul>

**Acclimatization** – A process by which a person gradually increases their exposure time to hot environmental conditions, causing beneficial physiological changes by properly regulating body temperature that minimizes heat-related illness.

**Heat Index** According to the National Weather Service, is given in degrees Fahrenheit and is a measure of how hot it really feels when relative humidity is factored in with the actual temperature.

**Heat Priority day** – When the heat index for the day is expected to be greater than 80°F

**Heat Advisory** – A notification issued by the National Weather Service. Criteria for New England and New York State: Heat Index values of 95-104 degrees for 2 or more consecutive hours.

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**Excessive Heat Warning** – A notification issued by the National Weather Service. Criteria: Heat index values in excess of 105 degrees for 2 or more consecutive hours

#### IV. RESPONSIBILITIES

## **Environmental Health and Safety:**

EH&S is responsible for administration of the Heat Illness Prevention Program. This includes:

- Maintenance of the written program document
- Assisting supervisors in identification of work activities, locations and work tasks that put employees at risk for heat illness
- Maintaining and making available Heat Stress training (EHS Temperature Extremes 2022 Cold & Heat) available in Mypath
- At the request of supervisors, assist in identifying employees at risk of heat illness, as well as control strategies, work practices and personal protective equipment to mitigate risk.

#### **Supervisors:**

Supervisors are responsible for identifying employees at risk of heat illness. Some examples of work areas / tasks that may pose this risk are listed above, however, only supervisors are familiar with the particular conditions in each job task and location. At the request of the supervisor, Environmental Health & Safety (EH&S) is available to assist in evaluating conditions and identifying employees at risk.

In addition, supervisors are responsible for:

- Ensuring all covered employees under their supervision receive Heat Stress training annually (EHS Temperature Extremes 2022 Cold & Heat) – available in Mypath
- Providing for acclimatization of new employees, as well as employees returning from extended absence (>2 weeks). Increase workloads gradually, allowing for frequent breaks, as the employee acclimatizes to the ambient conditions and monitor them for signs of heat illness. Consider similar procedures at the start of a new heat season.
- Making cool drinking water readily available for heat exposed workers.
   Encourage exposed workers to drink water even when not thirsty.

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- Providing scheduled rest breaks, ideally in a shaded, cool or airconditioned location.
- Recognize Heat Priority days (heat index greater than 80°F) and plan work accordingly. Administrative controls may include scheduling strenuous work for earlier, cooler part of the day, and employee / job rotation to limit heat exposure.

## **Employees:**

- Complete Heat Stress training (EHS Temperature Extremes 2022 Cold & Heat) available in Mypath annually.
- Utilize the "Buddy System" to look out for fellow employee who may experience heat illness symptoms. Heat exhaustion can impair mental functioning and the individual may not recognize the situation is becoming serious.
- Hydrate before, during and after work in hot environments. Thirst is not always a reliable indicator of dehydration.
- If possible, take breaks in the shade or other cool area.
- Avoid excessive caffeinated beverages (coffee, soda) and alcohol as these can contribute to dehydration.
- If you suspect someone has heat stroke, immediately call x13 or 911 or transport to a hospital. This is a life threatening condition and immediate cooling and medical attention are required. Any delay in seeking medical help can be fatal. While waiting for medical assistance move the person to a cool area and begin cooling first aid.

#### V. PROCEDURES

Plan and carry out work in accordance with the responsibilities outlined in this document. Supervisors and workers should become familiar with the heat symptoms. When any of these symptoms is present, promptly provide first aid. Do not try to diagnose which illness is occurring. Diagnosis is often difficult because symptoms of multiple heat-related illnesses can occur together. Time is of the essence. These conditions can worsen quickly and result in fatalities.

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## VI. REFERENCES

- OSHA Heat Illness Prevention <a href="https://www.osha.gov/heat/">https://www.osha.gov/heat/</a>
- National Weather Service:
  - o Heat Safety Tips and Resources <a href="https://www.weather.gov/safety/heat">https://www.weather.gov/safety/heat</a>
  - o Heat Safety brochure <a href="https://www.weather.gov/media/safety/Heat-brochure17.pdf">https://www.weather.gov/media/safety/Heat-brochure17.pdf</a>
- UR Heat Stress Guidelines https://www.safety.rochester.edu/ih/guidelines/pdf/HeatStress.pdf

## VII. APPENDICES/FORMS

N/A

## VIII. REVISION HISTORY

Date	Revision No.	Description
7/28/2022	New	New policy