



## Outdoor/Indoor Heat Illness Prevention and Management Plan

**Purpose:** The Heat Illness Prevention and Management Plan is developed to protect our community in accordance with the UMD Heat Safety Program, which includes parameters identified by the Occupational Safety and Health Administration as well as the Maryland Occupational Safety Administration (MOSH). This plan must be implemented when staff, students or faculty are to work in areas where conditions equal or exceed a heat index of 80 degrees Fahrenheit (80°F) and where work is performed for more than 15 consecutive minutes per hour. Additional provisions are required for when the heat index in the work area reaches or exceeds 90°F where the work is being performed.

**Guidance:** Use the UMD Heat Safety program, as well as the Reference Section included as guidance to enable you to complete your Heat Illness Prevention and Management Plan. To determine heat index and forecast data, use tools such as the [NIOSH Heat Safety Tool App](#) or the [National Weather Service HeatRisk Map](#).

<b>Department:</b>		<b>Unit/School:</b>	
<b>Department Head:</b>		<b>Department Head Title:</b>	
<b>Unit Supervisor:</b>		<b>Unit Supervisor Title:</b>	

### Days When the Heat Index is above 80°F

1. Have all unit supervisors and employees completed the UMD Heat Safety training?

Yes    No

- *Note: For any personnel identified as not having completed the Heat Safety Training, enroll them in the training via the UMD Training Management system.*

2. Are all procedures included in this plan communicated such that all employees fully understand?

Yes    No



3. How will sufficient amounts of cool, potable water in work areas be provided?

4. How will employees be provided frequent opportunities and encouragement to stay hydrated by drinking water?

5. Have the employees received training in Heat Illness Prevention, and have expressed understanding of recognizing heat-related illness, including heat exhaustion and heat stroke for themselves and others?

Yes  No

6. How have you made employees aware of emergency procedures (e.g., contacting responders) in line with Heat Stress training?



7. How will employees be provided sufficient space to rest in a shaded or cool climate-controlled area where heat-affected employees may cool off and recover from when signs and symptoms of heat-related illness are recognized?

8. How are work/rest schedules communicated and implemented (refer to *References* section for work/rest schedules\*)?

- *Note: Add 5° F to the Heat Index when wearing PPE.*

9. Are acclimatization procedures in place to include:

- Observing employees for symptoms of heat-related illnesses for 14 days when the heat index in the work area is 80°F:
  - When employees are newly assigned to work?  
 Yes  No



- When employees return to work after 7 or more consecutive days of absence?

Yes  No

- When a ‘heat wave’\* occurs at the geographical location (e.g. College Park, Queenstown, Beltsville, Salisbury, California Maryland) of the worksite?

Yes  No

- Understanding the effects of clothing and personal protective equipment adding to the heat burden?

Yes  No

- The personal and environmental risk factors that put employees at a higher risk of heat-related illness?

Yes  No

- The use and maintenance of cooling systems (e.g., water-cooled or air-cooled garments, cooling vests)?

Yes  No

\* “Heat Wave” means a period of time when the predicted high heat index temperature is at least 80 degrees and is at least 10 degrees higher than the average high temperature in the preceding 5 days.



10. How are the acclimatization procedures communicated to employees in your unit?

11. Are documented procedures in place for:

- Responding to signs and symptoms of possible heat-related illness or heat stress?

Yes  No

- Monitoring of employees exhibiting signs of heat-related illness or heat stress?

Yes  No

- Communications at the worksite to enable each employee to contact a supervisor or emergency medical services if needed?

Yes  No

- Supervisor contact of emergency services and, if necessary, transporting employees to a location accessible to emergency medical services?

Yes  No

12. How are emergency procedures communicated to employees in your unit?



**Additional Provisions for Days When the Heat Index is at or above 90° F**

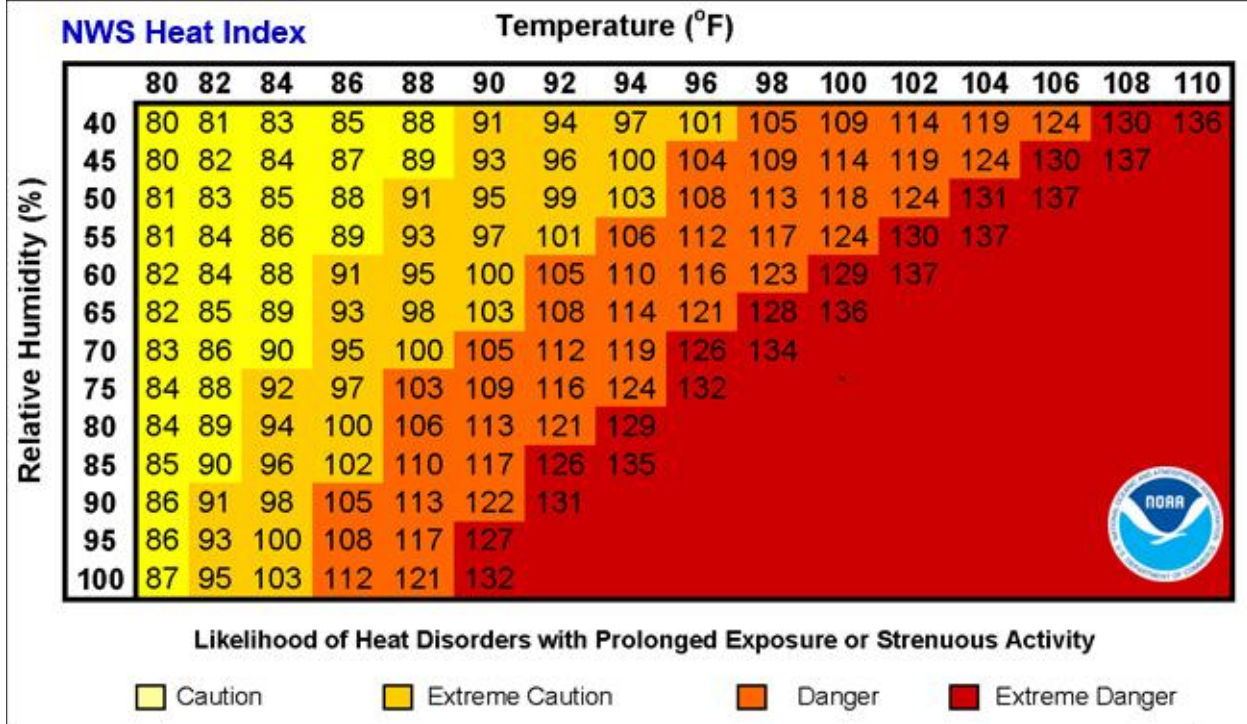
13. How are work/rest arrangements made when conditions are anticipated to include a heat index above 90° F (See *References* section)?

14. Procedures in place to monitor exposed employees for signs of heat-related illnesses with regular communication via:

- phone
- radio
- buddy system
- other means of observation (specify below)



## References



### Sources for determination of heat index forecasts:

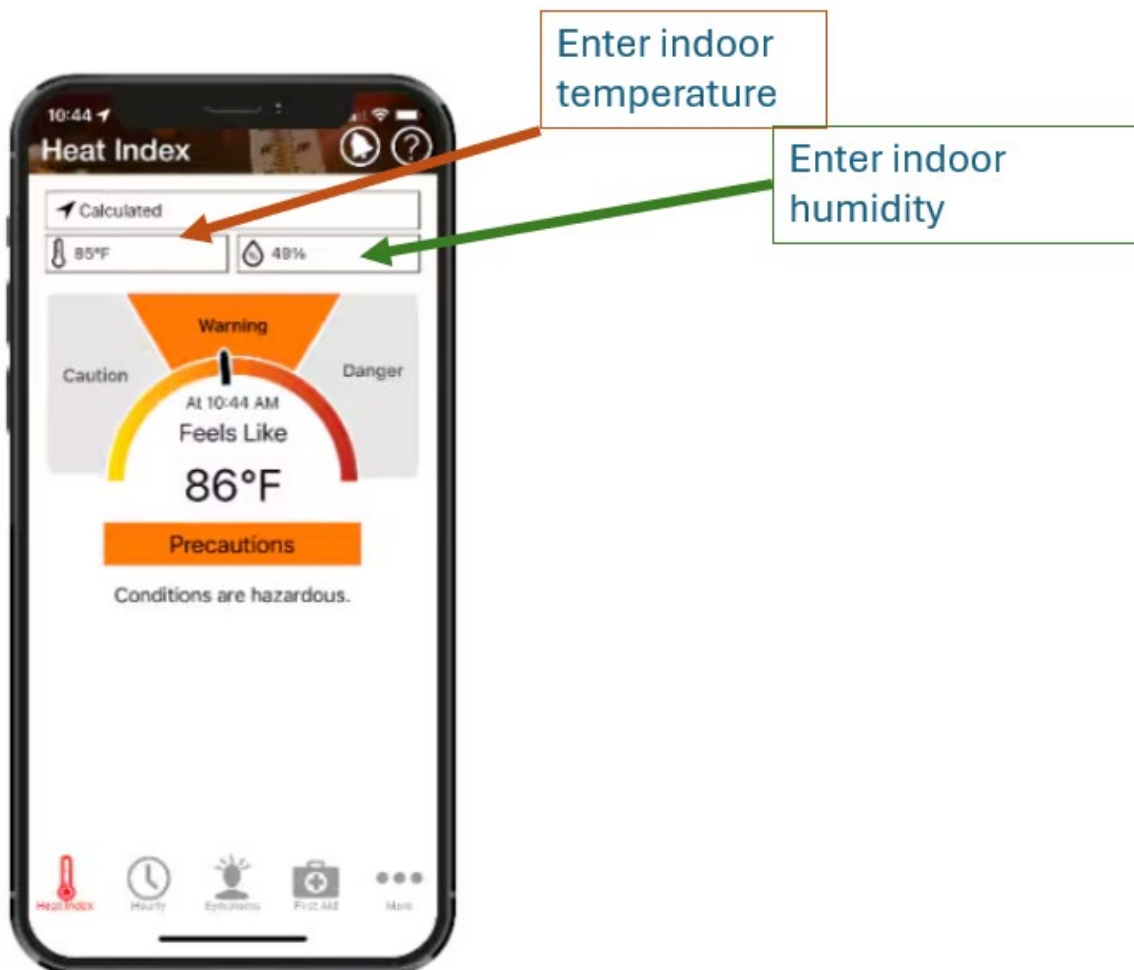
- [Local Forecast \(Enter zipcode for local forecast\)](#)
- [National Weather Service HeatRisk Map](#)
- [The OSHA-NIOSH Heat Safety Tool App](#) which can be installed on your Android and iPhones
- **Real time heat monitoring data when available**



## References

Calculation Guidance using OSHA-NIOSH Heat Safety Tool Indoors:

By using an instrument with a humidity/temperature capabilities (thermometer/hygrometer) obtain the readings for both. Using the app, key in the temperature and humidity levels:







## References

### Examples of Light Work, Moderate Work, and Heavy Work

Light Work	Moderate Work	Heavy Work
Travel by conveyances	Landscaping	Climbing
Inspection work	Using hand tools (e.g., sawing, drilling, shoveling)	Using hand tools for extended periods
Walking on flat, level ground	Carrying equipment/supplies weighing 20-40 pounds	Carrying equipment/supplies weighing 40 pounds or more

## Work/Rest/Fluid Intake Guidance

### Work/Rest Times and Fluid Replacement Guide

The guidance provided here is for a fit, acclimated employee. If it is determined that the employee does not fit that category, longer rest times and increased hydration may be necessary. Rest means minimal physical activity (sitting or standing) in the shade if possible. When adding PPE (e.g. Tyvek suit, respiratory), add at least 5°F to the heat index.

Heat Category	Heat Index (°F)	Light Work		Moderate Work		Heavy Work	
		Work/Rest (minutes)	Fluid Intake (quarts/hr)	Work/Rest (minutes)	Fluid Intake (quarts/hr)	Work/Rest (minutes)	Fluid Intake (quarts/hr)
1	80 – 84.9°F	No Limit	½	No Limit	¾	50/10	¾
2	85 – 89.9°F	No Limit	½	No Limit	¾	50/10	1
3	90 – 100°F	No Limit	½	50/10	¾	40/20	1
4	>100 °F	No Limit	¾	40/20	1	35/25	1 ½

**Hourly fluid intake should not exceed 1½ quarts. Daily fluid intake should not exceed 12 quarts.**