

# Extreme Temperature Precautions

## Administrative Safety & Health Manual

**Policy Purpose:** Assist GTC associates in understanding the consequences of working in hot and humid weather, and to develop and implement procedures to prevent extreme temperature-related illness and overexposure while working at GTC work sites. To learn more about the Extreme Temperature Precaution Policy, refer to the ASH Manual.

### Heat Exhaustion and Heat Stroke

*Heat exhaustion* results in heavy sweating, cool moist skin, weak pulse, feeling tired and weak, nausea, vomiting, and extreme thirst. **This is life threatening.**



*Heat stroke* results in high internal body temperature, which could cause weakness, confusion, emotional or strange behavior, hot and dry red skin, a fast pulse, a headache, or dizziness. **This is life threatening.**

Treatment:

- Call 911 and obtain medical aid.
- Move to a cool area and remove or loosen clothing.
- If conscious, give associate cool water sprinkled with salt.

### Heat Rash

*Heat rash* is a heat induced condition that results in a red bumpy rash with severe itching.

Treatment:

- Change into dry clothes, avoid hot environments, rinse skin with cool water.
- Wash regularly with water to keep skin clean and dry.



### Sunburn

*Sunburn* results from an overexposure to the sun that results in red, painful, or blistering and peeling skin.

Treatment:

- If there is blistering, seek medical attention.
- Use lotions/sunscreen with at least 15 SPF and work in the shade!



### Heat Cramps

*Heat cramps* result in painful cramps in the arms, legs, or stomach, which occur suddenly at work or later at home.

Treatment includes resting in a cool area, loosening clothing, and drinking cool water.

### Dehydration

Extreme heat and hard physical labor can increase the rate at which our bodies lose water, depleting our hydration levels and posing a health and safety risk. If you are experiencing extreme thirst, you need to avoid caffeinated and alcoholic beverages. Be sure to drink plenty of water!



For more information regarding heat illness prevention, view [OSHA's Heat Illness Prevention poster](#).

### It's Not the Heat. It's the Humidity.

The heat index, also known as the apparent temperature, is what the temperature feels like to the human body when relative humidity is combined with the air temperature. The human body feels warmer in humid conditions. As the air temperature and relative humidity increase, the heat index increases, and vice versa.

In order to determine the heat index using the chart to the right, you need to know the air temperature and the relative humidity. For example, if the air temperature is 100°F and the relative humidity is 55%, the heat index will be 124°F.

| NWS Heat Index        |    | Temperature (°F) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----------------------|----|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                       |    | 80               | 82  | 84  | 86  | 88  | 90  | 92  | 94  | 96  | 98  | 100 | 102 | 104 | 106 | 108 | 110 |
| Relative Humidity (%) | 40 | 80               | 81  | 83  | 85  | 88  | 91  | 94  | 97  | 101 | 105 | 109 | 114 | 119 | 124 | 130 | 136 |
|                       | 45 | 80               | 82  | 84  | 87  | 89  | 93  | 96  | 100 | 104 | 109 | 114 | 119 | 124 | 130 | 137 |     |
|                       | 50 | 81               | 83  | 85  | 88  | 91  | 95  | 99  | 103 | 108 | 113 | 118 | 124 | 131 | 137 |     |     |
|                       | 55 | 81               | 84  | 86  | 89  | 93  | 97  | 101 | 106 | 112 | 117 | 124 | 130 | 137 |     |     |     |
|                       | 60 | 82               | 84  | 88  | 91  | 95  | 100 | 105 | 110 | 116 | 123 | 129 | 137 |     |     |     |     |
|                       | 65 | 82               | 85  | 89  | 93  | 98  | 103 | 108 | 114 | 121 | 128 | 136 |     |     |     |     |     |
|                       | 70 | 83               | 86  | 90  | 95  | 100 | 105 | 112 | 119 | 126 | 134 |     |     |     |     |     |     |
|                       | 75 | 84               | 88  | 92  | 97  | 103 | 109 | 116 | 124 | 132 |     |     |     |     |     |     |     |
|                       | 80 | 84               | 89  | 94  | 100 | 106 | 113 | 121 | 129 |     |     |     |     |     |     |     |     |
|                       | 85 | 85               | 90  | 96  | 102 | 110 | 117 | 126 | 135 |     |     |     |     |     |     |     |     |
| 90                    | 86 | 91               | 98  | 105 | 113 | 122 | 131 |     |     |     |     |     |     |     |     |     |     |
| 95                    | 86 | 93               | 100 | 108 | 117 | 127 |     |     |     |     |     |     |     |     |     |     |     |
| 100                   | 87 | 95               | 103 | 112 | 121 | 132 |     |     |     |     |     |     |     |     |     |     |     |

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution    
  Extreme Caution    
  Danger    
  Extreme Danger

