

SAFETY TALK

What is the Heat Index?

We've all heard that it isn't the heat but the humidity that makes you so uncomfortable in the hot weather. There's actually quite a bit of truth behind that statement. How hot you actually feel is a result of both air temperature and the humidity. The U.S. National Oceanographic and Atmospheric Administration or NOAA developed the Heat Index as a single value that takes both temperature and humidity into account to determine the apparent temperature. This is how hot the weather will actually feel to you.

A valid question at this point is; why does humidity affect how hot I feel? The answer comes down to sweat! Humidity is a measure of how much moisture (water) is in the air. Warmer air can hold more moisture. Your body cools itself when overheated by producing sweat. However, it's not the act of sweating that cools your body; it's the evaporation of the sweat from your body that does the trick. In moist air (humid air), sweat does not evaporate as quickly as it does in drier (less humid) air. This very effectively reduces your body's ability to cool itself, making you feel hotter than the air temperature alone would make you feel. The opposite can be equally problematic. Sweat evaporates very quickly in hot, dry climates, so quickly you may not even realize that you're sweating. This can cause you to become severely

dehydrated, very quickly if you aren't drinking enough water through the day.

Here is the chart developed by NOAA to determine the heat index. You'll see that you need both the air temperature as well as the relative humidity in your area to determine the heat index for where you are. You can clearly see that how warm you feel increase quickly with increasing humidity.

Extreme heat advisories are a regular occurrence in the warm weather months and are typically announced during local weather broadcasts on both TV and radio. These advisories are issued by NOAA to indicate when there will be excessive, extended heat in an area. They are based on the predicted heat index values. The following are NOAA's categories for such advisories:

	Temperature (°F)																
	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	
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

- Excessive Heat Outlook would be issued when the potential exists for extended excessive heat (heat index of 105-110 °F) over the next 3- 7 days. This gives you time to check on supplies like extra water coolers.
- Excessive Heat Watch would be issued when excessive heat could occur with the next 24 to 72 hours, but the timing is uncertain.
- Excessive Heat Warning is issued when the heat index will be high enough to be life threatening in the next 24 hours. This warning indicates that the excessive heat is imminent or has a very high probability of occurring.
- Excessive Heat Advisory is similar to an Excessive Heat Warning but less serious. This is issued when the heat index could be uncomfortable or inconvenient but not life threatening if proper precautions are taken

Following these advisories could be the difference between life and death and need to be adhered to while not on the job as well to keep you and your family through the warm weather months.

DISCUSSION QUESTIONS

What is used to figure out the Heat Index?

Why does humid air make you feel warmer faster than drier air?





MEETING / TRAINING

Attendance Roster

COMPANY: _____

_____ SAFETY MEETING

JOB/DEPT: _____

_____ SAFETY TRAINING

DATE: ___/___/___

TIME: _____

TOPICS ADDRESSED: _____

EMPLOYEE'S SIGNATURES:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

EMPLOYEE SUGGESTIONS AND RECOMMENDATIONS: _____

ACTION TAKEN: _____

Supervisor's Signature

___/___/___
Date

Safety Coordinator's Signature

___/___/___
Date