

## Draft 2/4/18, High-heat control measures and heat index FAQs

Additional draft language for subsections in (e)(1) and (e)(2) [or subsections (f)(1) and (f)(2)] on high-heat control measures:

**“The heat index shall be measured by using a heat index monitor or by using the heat index chart in Appendix A and rounding up to the nearest temperature and nearest relative-humidity value shown on the chart.”**

Draft FAQs:

### **What is the heat index?**

For people working in hot environments, both the temperature and relative humidity affect the risk of heat illness. The "heat index" is a single value that takes both temperature and relative humidity into account.

### **Why is relative humidity taken into account in the heat index?**

Sweat does not evaporate as quickly when the air is humid as it does in a drier environment. Evaporation of sweat from the skin is an important way the human body cools itself when overheated, so high humidity reduces the ability of the body to cool itself.

### **Why is the heat index used in the indoor heat regulation?**

The heat index is a better indicator of heat illness risk than the temperature alone.

### **How do I measure the heat index for an indoor work environment?**

You can measure the heat index for an indoor work environment using any of the following methods:

1. Measure the heat index directly with a heat index monitor. A heat index monitor displays the heat index similar to how a thermometer displays the air temperature. Inexpensive heat index monitors can be purchased from retailers.
2. Measure the temperature with a thermometer and the relative humidity with a hygrometer and use the heat index chart in Appendix A of [the regulation]. Inexpensive thermometers and hygrometers can be purchased from retailers.
3. If the indoor temperature and humidity are the same as outdoors—for example, because the indoor area is open to the outdoors, is not crowded, and does not contain anything that produces or gives off water—you can use the outdoor heat index for your location available from the National Weather Service (<https://www.weather.gov/>) or websites like the Weather Channel ([www.weather.com](http://www.weather.com)) or Weather Underground ([www.wunderground.com](http://www.wunderground.com)).

### **In what situations can I use the temperature and not measure the heat index?**

1. Whenever the temperature is 81 degrees Fahrenheit or lower, you will not be required to implement subsections (f)(1) and (f)(2) because it will be impossible for the heat index to reach 95 degrees Fahrenheit.
2. Whenever the temperature is 103 degrees Fahrenheit or above, you must implement subsections (f)(1) and (f)(2) because the heat index will always be 95 degrees Fahrenheit or higher.
3. If the temperature is greater than 81 degrees Fahrenheit and less than 103 degrees Fahrenheit, you can measure the relative humidity and use the heat index chart in Appendix A of [the regulation]. If the heat index is 95 degrees Fahrenheit or higher, you must implement subsections (f)(1) and (f)(2).