



EH&S Facts

Beat the Heat: Indoor Climate Control

Be Comfortable In Your Work Environment

A hot work environment is physically uncomfortable and can negatively affect both the quality and quantity of work. Students, faculty and staff feel the effects when heat waves occur, especially if located in a historic building without air conditioning. Physical and behavioral changes including headaches, fatigue and irritability can result when individuals work in excessively hot buildings for prolonged periods of time.

When Is It Too Hot?

Indoor temperatures above 80° F can be uncomfortable for many people. The thermometer is the first, but not the only measure of potential heat discomfort.

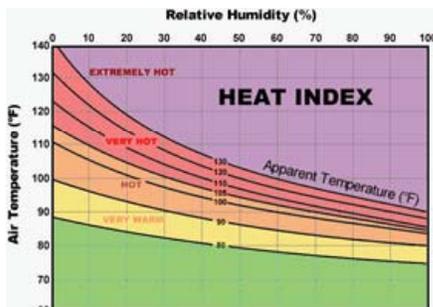
- High or low humidity levels, lack of air movement, and physical exertion can increase the effects of heat.
- Clothing, physical conditioning and acclimatization to heat affect individual heat tolerance.

The American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE) has identified factors that make indoor temperature levels acceptable to 80% or more of the occupants. The 2001 ASHRAE Standard recommends:

- Maintain indoor temperatures between 72° to 80° F in the summer.
- Keep relative humidity levels between 30% and 70%.
- Adjust temperatures based on humidity levels.
 - When the humidity is 30%, the air temperature is comfortable up to 82° F.
 - When the humidity level is as high as 60%, the upper temperature should be 78° F.

How Does Heat Affect Us?

The human body gives off heat and tries to keep a core temperature of 98.6° F. Hot and humid weather, objects such as computers in the workplace, and strenuous activities can also generate heat. A balance must be maintained between this temperature and the outside environment. Excessively hot weather, external heat sources, or strenuous work can alter the balance of heat exchange and lead to heat exhaustion.



How Can Office Workers "Beat the Heat"?

Here are some solutions employees can use to improve thermal comfort when heat waves occur:

- Wear light-weight, light colored, loose fitting clothing.
- Open windows if it is cooler outside or to get a breeze through the building.
- Close shades, blinds, and curtains to block direct sunlight.
- Use personal fans to increase air speed and evaporate perspiration.
- Relocate to cooler or air-conditioned areas of the building when possible.
- Revise work schedules by working in the cooler morning or evening hours, increasing breaks or reducing hours and activity levels.
- Drink cool water, up to two gallons per person per day. Avoid drinking alcohol or caffeinated drinks.
- Eat small meals and eat more often.
- Minimize strenuous physical labor.

Symptoms of Heat Exhaustion

Cool, moist, pale or flushed skin
 Heavy sweating
 Headaches
 Nausea or vomiting
 Dizziness
 Exhaustion

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