

SCHOOL HAZARD FACTS FOR FAMILIES

UNITE FOR COMFORTABLE TEMPERATURES

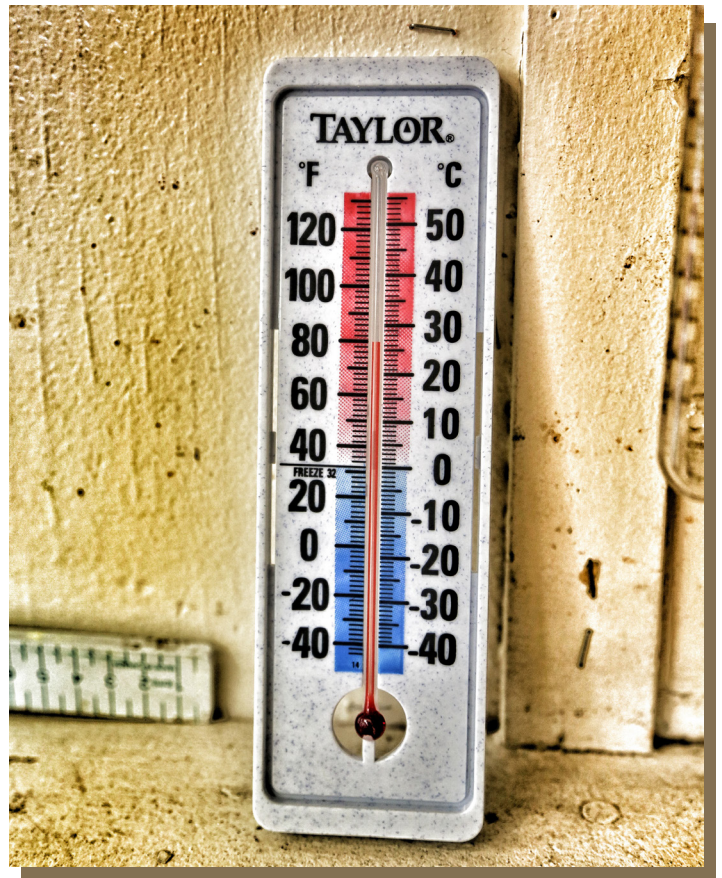
Schools with Comfortable Temperatures

If families and school staff work together, comfortable temperatures in schools are more likely and all will benefit. See the *Unite for Healthy Schools* factsheet for how to do this.

Comfortable temperatures are about more than comfort. Teaching, learning, and even health are likely to suffer if classrooms are too hot or cold. Staff and students may complain of headaches, drowsiness, and difficulty concentrating.

Temperatures ranging from 68 to 79 degrees Fahrenheit (°F) are widely accepted as achievable and comfortable. Research has shown that temperatures between 73 °F and 79 °F in summer and 68 °F and 75 °F in winter will be acceptable to 80 percent of the population. Temperatures above 80 °F can be a health problem, depending on other factors, such as humidity, activity level, clothing, and the physical condition of staff and students.

School buildings need heating and cooling systems capable of keeping temperatures in the comfortable range no matter what the weather outside – hot, cold, sunny, cloudy, windy, rainy or snowy. The systems need to be able to handle the sun beating on the roof, windows and walls. The systems must be able to handle internal heat sources like computers and kitchens and permit strenuous activities like sports and physical education.



The top floor of the school shouldn't be hotter than the ground floor. The sunny side of the building shouldn't be hotter than the shady side. Staff and students shouldn't have to wear coats, hats, and gloves indoors. Staff shouldn't need to bring in fans or space heaters from home to make classrooms comfortable. All these problems distract from teaching and learning.

HEATING AND COOLING SYSTEMS

A central forced air conditioning system or unit ventilators that provide cooling as well as heat are ideal but many schools still don't have either. Many have only window AC units for some rooms.

Lack of heat in schools is usually associated with a temporary breakdown of heaters, boilers and radiators and difficulty getting them fixed in a timely manner. Ironically, overheating of schools is also a problem in the heating season, as is overcooling in the summer. Such conditions are not only unhealthy, they also waste energy.

THERMOSTATS

A thermostat switches heating or cooling devices on or off to maintain the correct temperature. All occupied areas should have a thermostat that can be controlled by the teacher or other staff. Thermostats should not be locked or broken. They should be cleaned and calibrated regularly. If they are affected by direct sunshine, heat sources, drafts or other conditions that might give false results, they should be relocated.

QUICK FIXES

Staff can take common-sense measures, such as opening windows, closing blinds and shades and using fans (though they are not effective above 95 °F). Administrators can relocate staff and students to cooler areas, dismiss school early or provide portable air conditioners on wheels. And everyone can drink water to replace fluid loss from sweating.

PERMANENT FIXES

New heating and air conditioning systems may be tough to obtain. However, staff and families can strive for them as well as less expensive measures, including:

- Solar film on windows, skylights, glass walls, etc.
- Exterior awnings and shades or shade trees
- Reflective window shades and blinds

- Ceiling fans (at least 8-feet high)
- Replacement windows that block the heat (“low-e” windows)
- Replacement/coating of roof with bright white or shiny material
- Better thermostats with staff control

TEMPERATURE LEGISLATION

Bills designating corrective actions that must be taken by districts when school buildings are too hot or too cold have been introduced in the New Jersey legislature every year since 2007. Strong support from parents, school staff and their unions will be necessary to pass them.

LAWS THAT APPLY

The PEOSH Indoor Air Quality (IAQ) Standard lists some useful things that should be done concerning temperature. It requires the district to have a written plan to comply with the IAQ Standard and identify a Designated Person who is responsible for compliance. It requires the district to establish and follow a preventive maintenance schedule for heating and cooling systems. It requires the district to make sure the heating and cooling systems are in proper operating order when temperatures are outside of the range of 68 °F to 79 °F. Maintenance records must be kept for three years and must be available to employees and their unions.

PEOSH can only be utilized by school employees, not students and their families. So families should work through school staff and their unions to see if they want to involve PEOSH.

This factsheet is one of a series prepared for the Healthy Schools Now Coalition by the New Jersey Work Environment Council, 7 Dunmore Ave., First Floor East, Ewing, NJ 08618, (609) 882-6100. Funded in part by the Princeton Area Community Foundation and the Schumann Fund for New Jersey.

Healthy Schools Now is a coalition of parents, educators, students and public school advocates dedicated to ensuring that all New Jersey children and school employees learn and work in safe, modern school buildings.

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