



Heatwave Action Guide to Cool Schools

Engineering Controls to Cool Schools:

- Keep mechanical ventilation operating on maximum night and day on schooldays.
- Leave windows open night and day, which don't have vandalism hazards (i.e. on 2nd or 3rd floor). The night air will cool the classroom to start off 5-10°C cooler.
- Place fan near or in open window to bring cool air in from outside.
- Open up the windows all day. For those few schools which have windows that open at the top and bottom – remove the top screws. The upper window can safely open half a metre, as it is too high to be accessible, but the lower window cannot.
- Check ventilation units (e.g., Tempspec), exhaust fans and ducts for obstructions. Remove.

Administrative Controls to Cool Schools

- Hold Sports Days early in the day: the intense midday sun, heat and smog in the afternoon cause heat stress and asthmatic reactions.
- Make teachers aware of dehydration/heat stress concerns. See next page.
- Provide cool drinks for workers (e.g., lemonade or ice tea) instead of coffee.
- Have a light lunch menu without heavy protein foods (e.g., meat, dairy, etc) which take body heat/energy to break down.
- Plant shade trees around your school to cool the next heat wave. Phone Evergreen Foundation at 596-1495 and speak to Kathryn Goetz for help & grants.
- Consider keeping students indoors at recess during smog alerts.

Cool Teachers and Students:

- Sprinkle yourself with water. Young children can be supervised running through the sprinkler.
- Wear light-coloured, loose-fitting clothing made of 100% cotton, rayon or other natural fibre, as these fabrics breathe.
- Bring a bottle of water or juice to class but not cola, coffee or alcohol. Drink 2 or 3 litres of water per day, even if not thirsty.
- Discuss with your class the health effects of dehydration in extreme heat and how to avoid heat stress.
- Apply sunscreen with a Sun Protection Factor (SPF) of 15 or higher on exposed skin and wear a brimmed hat.
- Move to library, gymnasium or outside in the shade from the warmest classrooms.
- Arrange a class trip to cool off for an hour: visit nearby air-conditioned library, Community Centre, the municipal pool, a nearby church basement. Bring extra sunscreen.
- Keep electrical lights and computers off.
- Keep blinds partly closed if sun is shining in to allow air flow but stop heat.

It ain't easy being cool.

The Ministry of Labour uses the Threshold Limit Values for Heat Stress published by the ACGIH for industrial workplaces, based on humidity and temperature. These values are based on preventing fit, acclimatized workers' core temperatures from rising above 38° C.



Heat Stress Hazards

Working or playing where it is hot puts stress on our body's cooling system. When the heat is combined with other stresses such as hard physical activity, loss of fluids, fatigue or some medical conditions, it may lead to heat-related illness, disability and even death.

Heat Rash

Cause: Hot humid environment; plugged sweat glands.
Symptoms: Red bumpy rash with severe itching.
Treatment: Rinse skin with cool water. Change into dry clothes and avoid hot environments
Prevention: Wash with cool cloth or sprinkle water.

Heat Cramps

Cause: Heavy sweating drains a person's body of salt, which cannot be replaced just by drinking water.
Symptoms: Painful cramps in arms, legs or stomach, which occur suddenly at work or later at home. Cramps are serious because they can be a warning of other more dangerous heat-induced illnesses.
Treatment: Move to a cool area; loosen clothing and drink cool sated water (1 tsp. Salt per gallon of water) or commercial fluid replacement beverage. If the cramps are severe or don't go away, seek medical aid.
Prevention: When working in the heat, workers should put salt on their food (if on a low-salt diet, this should be discussed with a doctor). This will give the body all the salt it needs; don't take salt tablets.

Heat Exhaustion

Cause: Inadequate salt and water intake causes a persons' body's cooling system to start to break down.
Symptoms: Heavy sweating; cool moist skin; body temperature over 38 ° C; weak pulse; normal or low blood pressure; person is tired, weak, clumsy, upset or confused; is very thirsty; or is panting or breathing rapidly, vision may be blurred.
Treatment: This condition can lead to heat stroke, which can kill. Move the person to a cool shaded area; loosen or remove excess clothing; provide cool water to drink (salted at one teaspoon per gallon water if possible); fan and spray with cool water; call medical aid if necessary.
Prevention: Reduce activity levels and/or heat exposure. Drink fluids regularly.

Heat Stroke

Cause: If a person's body has used up all its water and salt, it will stop sweating. This can cause body temperature to rise.
Symptoms: High body temperature (over 41° C) and any one of the following: the person is weak, confused, upset or acting strangely; has hot, dry, red skin; fast pulse; a headache or dizziness. In later stages, a person may pass out and have convulsions.
Treatment: Dial 9-1-1. This condition can kill a person quickly. Remove excess clothing; fan and spray the person with cool water; offer sips of cool water if person is conscious.
Prevention: Reduce activity levels and/or heat exposure. Drink fluids regularly.

Note: Children become dehydrated more quickly than adults because of smaller size.