Lester B. Pearson School Board
Commission scolaire Lester-B.-Pearson

# LBPSB GUIDELINES FOR EXTREME HEAT

## 1.0 CONTEXT

Extreme heat waves may occur at the end and the beginning of the school year. The purpose of this guideline is to establish measures to be taken within the schools and centres to ensure the health and improve comfort of students and employees of the School Board during these periods.

## 2.0 PREVENTIVE MEASURES

According to the Direction régionale de santé publique Montréal, when it's very hot, some people are at greater risk of developing heat-related health problems. Older people, young children (0-4 years old), people with heart or lung disease, and people with mental health problems or drug or alcohol problems can be affected more than the rest of the population. The following guidelines have been reviewed by the Direction régionale de santé publique de Montréal as appropriate actions for warm/hot weather.

### School Responsibilities

- Message parents to request students bring reusable water bottles and keep hydrated by drinking water throughout the day;
- Message parents to request students bring a sunhat, wear lightweight and light colored clothes. Schools with uniforms will be flexible with appropriate clothing;
- Limit exposure to sun (shorter time outside at lunch and looking for shaded area);
- Turn off lights in classes and in strategic places in the school;
- Use blinds, shades or curtains to reduce direct sunlight;
- Use portable fans to circulate air;
- Teachers should make appropriate modifications of the instructional program ( including hydration breaks);
- Elementary teachers may wish to rearrange the daily schedule so that basic skills subjects are taught at the optimal time (generally the morning);
- Keep interior doors open day and night (encourage air circulation);
- If possible schools, are encouraged to access local water park (sprinklers, splash pads etc.);
- For schools where there is no mechanical ventilation, it is possible to keep windows open during the night, subject to the following conditions:
  - Ensure caretaker closes windows before leaving
  - For elementary schools with caretaker split shifts, contact head office to ensure a caretaker is present until 11 pm.

### School Board Responsibilities

- Include a link to these guidelines on the LBPSB website;
- Send out Heat Wave guidelines through an ERMS in May and September;

- Ensure students have access to at least one air-conditioned area (computer room, library etc.);
- Provide portable fans to schools without air conditioning;
- Upon issuance by Environment Canada of a heat warning, initiate overnight free cooling in mechanically ventilated buildings.

**Students and Parent Responsibilities**

- Bring a water bottle and keep hydrated throughout the day;
- Wear loose, lightweight and light coloured clothing and bring a sunhat;
- Apprise school of any specific medical condition which may be exacerbated by extreme heat. Inform school if electing to keep children at home due to extreme weather.

## 3.0 HEAT RELATED ILLNESS

There are many factors which can affect a person's heat tolerance including the use of medications, and diseases. (please see Appendix B) During heat waves, be aware of the following symptoms which may be warning signs of a heat stroke:

- dizziness;
- headaches;
- nausea;
- fatigue.

In the presence of one or several of these symptoms, stop the activity.

Call 911 when a person is incoherent, or loses balance or consciousness. It is a medical emergency. While waiting for help, move the person in the shade or in a cool place, spray their body with water and fan them. If the person is conscious and lucid, have them drink fresh water.

People with known health problems (sickle-cell anemia, multiple sclerosis, cystic fibrosis, muscular dystrophy, etc.) and pregnant women are at higher risk during heat waves. Ask for a medical note specifying which activities are allowed and stay vigilant!

# APPENDIX A

Humidex is a measure of how hot we feel. It is an equivalent scale intended for the general public to express the combined effects of warm temperatures and humidity. It provides a number that describes how hot people feel, much in the same way the equivalent chill temperature, or "wind chill factor," describes how cold people feel. Humidex is used as a measure of perceived heat that results from the combined effect of excessive humidity and high temperature.

Environment Canada uses humidex ratings to inform the general public when conditions of heat and humidity are possibly uncomfortable.

| Humidex Range | Degree of Comfort |
|---|---|
| 20 – 29 Green | Comfortable |
| 30 – 39 Yellow | Some discomfort |
| 40 – 45 Orange | Great discomfort; avoid exertion |
| Above 45 | Dangerous; heat stroke possible |

What is the importance of humidity?

The body attempts to maintain a constant internal temperature of 37°C at all times. In hot weather, the body produces sweat, which cools the body as it evaporates. As the humidity or the moisture content in the air increases, sweat does not evaporate as readily. Sweat evaporation stops entirely when the relative humidity reaches about 90 percent. Under these circumstances, the body temperature rises and may cause illness.

Source: https://www.ccohs.ca/oshanswers/phys_agents/humidex.html

More information regarding Heat and Extreme Heat is available on the Sante Montreal website.

https://santemontreal.qc.ca/en/heat/

# APPENDIX B

Ontario Ministry of Labour, Health and Safety Guidelines for Treatment and Prevention of Hot Weather Related Hazards

| | CAUSE | SYMPTOMS | TREATMENT | PREVENTION |
|---|---|---|---|---|
| **HEAT RASH** | Hot humid environment; plugged sweat glands. | Red bumpy rash with severe itching. | Change into dry clothes and avoid hot environments. Rinse skin with cool water. | Wash regularly to keep skin clean and dry. |
| **HEAT CRAMPS** | Heavy sweating from strenuous physical activity drains a person's body of fluid and salt, which cannot be replaced just by drinking water. Heat cramps occur from salt imbalance resulting from failure to replace salt lost from heavy sweating. | Painful cramps occur commonly in the most worked muscles (arms, legs or stomach); this can happen suddenly at work or later at home. Heat cramps are serious because they can be a warning of other more dangerous heat-induced illnesses. | Move to a cool area; loosen clothing, gently massage and stretch affected muscles and drink cool salted water (1½ to 2½ mL salt in 1 litre of water) or balanced commercial fluid electrolyte replacement beverage. If the cramps are severe or don't go away after salt and fluid replacement, seek medical aid. Salt tablets are not recommended. | Reduce activity levels and/or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke. |
| **FAINTING** | Fluid loss, inadequate water intake and standing still, resulting in decreased blood flow to brain. Usually occurs in unacclimatized persons. | Sudden fainting after at least two hours of work; cool moist skin; weak pulse. | **GET MEDICAL ATTENTION.** Assess need for cardiopulmonary resuscitation (CPR). Move to a cool area; loosen clothing; have the person lie down; and if the person is conscious, offer sips of cool water. Fainting may also be due to other illnesses. | Reduce activity levels and/or heat exposure. Drink fluids regularly. Move around and avoid standing in one place for too long. Workers should check on each other to help spot the symptoms that often precede heat stroke. |
| **HEAT EXHAUSTION** | Fluid loss and inadequate salt and water intake causes a person's body's cooling system to start to break down. | Heavy sweating; cool moist skin; body temperature over 38°C; weak pulse; normal or low blood pressure; person is tired and weak, and has nausea and vomiting; is very thirsty; or is panting or breathing rapidly; vision may be blurred. | **GET MEDICAL ATTENTION.** This condition can lead to heat stroke, which can cause death quickly. Move the person to a cool shaded area; loosen or remove excess clothing; provide cool water to drink; fan and spray with cool water. Do not leave affected person alone. | Reduce activity levels and/or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke. |
| **HEAT STROKE** | There are two types of heat stroke:<br>• Classic heat stroke may occur in older adults and in persons with chronic illnesses exposed to excessive heat. When the body has used up its water and salt reserves, it stops sweating causing a rise in body temperature.<br>Heat stroke may develop suddenly or may follow from heat exhaustion. | High body temperature (over 40°C) and any one of the following: the person is weak, confused, upset or acting strangely; has hot, dry, red skin (classic heat stroke) or profusely sweating (exertional heat stroke); a fast pulse; headache or dizziness. In later stages, a person may pass out and have convulsions. | **CALL AMBULANCE.** This condition can kill a person quickly. Remove excess clothing; fan and spray the person with cool water; offer sips of cool water if the person is conscious. | Reduce activity levels and/or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke. |

https://www.labour.gov.on.ca/english/hs/pubs/gl_heat.php