



## BOARD ADMINISTRATIVE PROCEDURE

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### 716 - Extreme Weather and Environmental Conditions

DIRECTIONAL POLICY

### Healthy Schools and Workplaces

#### **Title of Administrative Procedure:**

Extreme Weather and Environmental Conditions

#### **Date Approved:**

November 2023

#### **Projected Review Date:**

November 2028

#### **Directional Policy Alignment:**

This administrative procedure aligns with the *Healthy Schools and Workplaces Directional Policy*. The Board recognizes that the health and safety of our school community members is of utmost importance. Providing guidelines to be used when responding to extreme weather and environmental conditions at CDSBEO schools and workplaces will help to ensure all staff understand the expectations and procedure when extreme weather or an environmental event takes place.

#### **Alignment with Multi-Year Strategic Plan:**

The *Extreme Weather and Environmental Conditions Administrative Procedure* is aligned with the tenant of "Protecting" which reflects our priority of always ensuring the safety and well-being of CDSBEO staff and students, including those times where there are extreme weather and environmental conditions. Pope Francis reminds us in his encyclical *Laudato Si'*, "... we are presently witnessing a disturbing warming of the climatic system. ... Humanity is called to recognize the need for changes of lifestyle, production, and consumption, in order to combat this warming or at least the human causes which produce or aggravate it." (*Laudato Si'*, 2015)

[CDSBEO Strategic Plan 2020-2025](#)

## **Action Required**

### **1. Preamble:**

This administrative procedure will address extreme weather and environmental condition response and the guidelines to be followed to ensure safe settings for staff and students during times of these conditions.

With the exception of a minimum indoor temperature of 18<sup>0</sup>C, applicable in most indoor workplace settings in Ontario, there is no mandated temperature (high or low) that requires employers to remove employees from the workplace. According to the Occupational Health and Safety Act, it is the responsibility of employers and supervisors to take every precaution reasonable in the circumstances for the protection of a worker.

For the purpose of this administrative procedure, the following authorities will be considered the primary source of official information for all temperature related facts [i.e., Humidex, Air Quality Health Index (AQHI), Wind Chill, and Temperature], when determining the need to make a decision regarding the safety of students and staff during an extreme weather or environmental event:

- Government of Canada- Environment and Natural Resources - Environment Canada
- Local Public Health Authorities [Ex. Leeds, Grenville, and Lanark District Health Unit and Eastern Ontario Health Unit (EOHU)]
- Local Conservation Authorities (Ex. Cataraqui Region Conservation Authority, Mississippi Valley Conservation Authority, Raisin Region Conservation Authority, Rideau Valley Conservation Authority, and South Nation Conservation Authority).

### **2. Procedure:**

When an event involving extreme weather or an environmental condition presents itself, principals, vice-principals, managers, and supervisors will ensure an appropriate response plan is developed and implemented for their staff and students with the support of the Occupational Health and Safety Coordinator where appropriate.

The following control measures and/or responses should be followed for each extreme weather or environmental condition outlined to minimize potential effects of exposure.

#### **a) To Mitigate Heat Stress:**

An appropriate response plan for hot weather will be initiated when:

- i. The humidex reaches or exceeds 35<sup>0</sup>C;

- ii. Heat waves occur during *three consecutive days* reaching 32°C or higher;
  - iii. There is a smog alert combined with higher temperatures; or
  - iv. There is an *Environment Canada Humidex Advisory* in regard to ambient air temperatures exceeding 30°C and a humidex rating which exceeds 40°C
- The Principal, Manager, or Supervisor will monitor Environment Canada and/or local Public Health Units for a Heat Warning when there is elevated heat and humidity;
  - Encourage staff and students to drink plenty of cool fluids regularly. It is best to avoid drinking caffeinated products;
  - Encourage staff and students to avoid strenuous physical activity;
  - Encourage staff and students to wear lightweight, loose-fitting, light coloured and breathable clothing;
  - Encourage staff and students to avoid direct exposure to the sun where possible, wear a hat and sunglasses, and apply sunscreen;
  - When possible, alter time of day for physically demanding tasks and activities and/or reduce physical activities/work;
  - Principals, Vice-Principals, Managers and Supervisors will refer to *Appendix A: Extreme Weather and Environmental Conditions – Heat Response – Humidex Table* for information on appropriate hot weather response and when it is appropriate to discontinue work/play due to extreme weather.
  - Where necessary, alter schedules for staff/students performing strenuous/physically demanding activities (see *Appendix A: Extreme Weather and Environmental Conditions – Heat Response – Humidex Table*); When indoors in a non-air-conditioned building, encourage staff and students to use all appropriate strategies to keep buildings cool;
  - Portable fans that meet CSA Group certification and are plugged directly into a wall outlet may be used and should be unplugged before the end of the day;
  - Where rooms with air conditioning exist within the school, groups of students and staff should be rotated into these rooms;
  - Operable windows may be opened in the morning when it is cool outside to allow air to circulate where effective and closed as it starts to get hot outside. Drapes and windows may be closed to reduce direct sunlight;
  - Classroom lights and computers may be turned off if not needed;
  - For extreme heat warnings (Humidex values over 40°C), the Plant and Maintenance Department shall monitor and maintain building ventilation/existing cooling systems and consider any applicable adjustments to system operations/running times as may be applicable based on the extreme heat weather event.
  - Additional controls to prevent exposure to high temperatures may be required for vulnerable individuals such as staff and students with special needs or medical conditions.
  - Principals, Vice-Principals, Managers and Supervisors will share information on the symptoms of heat and cold stress and assist staff and students in seeking first-aid or medical attention, as appropriate and required, if they suffer from such symptoms. (See Appendix C – Hazards of Extreme Heat and Appendix D - Hazards of Extreme

Cold).

**b) In The Event of An Air Quality Health Index:**

- Higher than 7, strenuous outdoor activities for staff and students at risk due to health conditions should be rescheduled. Consideration should be given to reducing or rescheduling strenuous outdoor activities for the general population.
- Above 10, avoid strenuous outdoor activities for staff and students at risk due to health conditions. Strenuous outdoor activities should be reduced or rescheduled for the general population.
- People with heart or breathing problems are at greater risk and additional precautions may be required to manage their condition.

**c) To Mitigate Cold Stress:**

- Establish 'warm areas' for lunch and work/rest breaks;
- Encourage the use of warm clothing for outdoor work/play that is appropriate for the task, the temperature, and the weather conditions;
- Encourage staff and students to wear multiple layers and to cover exposed skin (ex. hats, scarves, mittens);
- Encourage staff to wear appropriate footwear if working conditions are also wet/icy/slippery;
- Principals, Vice-Principals, Managers and Supervisors will refer to *Appendix B: Extreme Weather and Environmental Conditions – Cold Response* for information on appropriate cold weather response and when it is appropriate to discontinue work/play due to extreme weather.
- Principals, Vice-Principals, Managers and Supervisors will post information on the symptoms of heat and cold stress and assist staff and students in seeking first-aid or medical attention, as appropriate and required, if they suffer from such symptoms. (See Appendix C – Hazards of Extreme Heat and Appendix D - Hazards of Extreme Cold).

**d) In the Event of a Thunderstorm Watch/Warning or Lightning Strikes:**

- The outdoor activity facilitator/ "in-charge" person must take necessary precautions to protect staff and students;
- When lightning is seen or thunder is heard, immediately suspend outdoor activities, and have staff and students take shelter in a protected area.

**e) In the Event of High Water/Flood Advisory:**

- When issued by the local conservation authority, take appropriate precautions to maintain the safety of staff and students.

**f) In the Event of High Winds:**

- A wind warning will be issued by Environment Canada when the threshold criteria of 70 km/h or more sustained wind and/or gusts to 90 km/h or more is met;
- When wind speeds are greater than 40 km/h, suitable precautions should be taken to ensure staff and student safety. Activity is to stop and/or be moved indoors when the effect of wind poses a risk to participants. Suspend any activities at elevations (ex. activity on a roof/ladder) until wind speeds have subsided;
- When wind speeds are between 50-69 km/h, outside activities should be avoided.
- Suspend outdoor activities if a wind warning has been issued (wind speeds of 70 km/h or gusts of 90 km/h)
- During periods of increased wind, it is advisable to use protective eyewear for any outdoor activity due to the increased movement of dust/debris.

**g) In the Event of a Tornado Warning:**

- See D2:3 Emergency Procedure- Tornadoes for planned response,
- Staff will regularly receive information and instruction regarding this Administrative Procedure.

**Responsibilities****The Board of Trustees is responsible for:**

- Reviewing this Administrative Procedure to ensure its alignment with the *Healthy Schools and Workplaces Directional Policy*;
- Reviewing this Administrative Procedure as part of its regular policy and procedures review cycle.

**The Director of Education is responsible for:**

- Designating resources for the implementation of and compliance with the Administrative Procedure.

**Superintendents of School Effectiveness are responsible for:**

- Ensuring Principals are consistent with the application of this Administrative Procedure.
- Ensuring that any employee for whom they have supervisory responsibility is aware of this Administrative Procedure.
- Maintaining an awareness of the contents and requirements of this Administrative Procedure.
- Maintaining an awareness of control measures and responses to extreme weather and environmental conditions.
- Identifying signs /symptoms of heat/cold related illness and assisting affected staff

in seeking appropriate first aid or medical treatment.

- Implementing this Administrative Procedure.
- Ensuring the regular provision of information and instruction regarding this Administrative Procedure.

**Principals and Vice-Principals are responsible for:**

- Maintaining an awareness of the contents and requirements of this Administrative Procedure.
- Monitoring local weather conditions.
- Implementing the guidelines outlined within this Administrative Procedure where appropriate.
- Maintaining an awareness of control measures and responses to extreme weather and environmental conditions.
- Identifying signs /symptoms of heat/cold related illness and assisting affected staff or students in seeking appropriate first aid or medical treatment.
- Cold Weather - When the wind chill approaches –20 to -25, principals must be particularly vigilant and consider keeping children indoors for recess and lunch hour.
- Referring to Appendices A and B for information on appropriate hot and cold weather response and when it is appropriate to discontinue work/play due to extreme weather.
- Ensuring that any employee for whom they have supervisory responsibility is aware of this Administrative Procedure.

**Plant Maintenance Department are responsible for:**

- Monitoring and maintaining building facility ventilation and cooling systems and consider any applicable adjustments to these systems based on the extreme heat weather event. Consideration may be given to adjusting HVAC system schedules to allow them to be left on to allow cooler night air to come in.

**Staff are responsible for:**

- Encouraging parents to dress children appropriately.
- Educating children about the weather, appropriate clothing, and good habits for the season.
- Encouraging children to wear the appropriate clothing during outside activities.
- Ensuring that in any extreme weather situation (freezing rain, extremely high winds, extreme cold weather in excess of -20°C to -25 °C) students remain indoors.
- Reporting to their supervisor any illness or occurrence of Heat or Cold stress.
- Identifying signs/symptoms of heat/cold related illness and assisting affected staff or students in seeking appropriate first aid or medical treatment.

## Progress Indicators

- Training records will show that staff have received regular information and instruction in relation to this Administrative Procedure.
- First Aid responders in Board facilities will be trained to identify and respond to heat/cold-related illnesses.

## Definitions:

**Air Quality Health Index**- AQHI is a scale designed to communicate the health risk posed by air pollution. The scale, from 1-10+, suggests steps we can take to reduce our exposure. The higher the number, the greater the risk, and the need to take precautions.

**Humidex**- The term “humidex” is short for humidity index. It is an equivalent scale intended for the public to express the combined effects of warm temperatures and humidity. Environment Canada uses humidex ratings to inform the general public when conditions of heat and humidity are possibly uncomfortable.

**Wind Chill**- The Wind Chill Index is expressed in temperature-like units which equate the combined effect of wind and temperature. In Canada, the Wind Chill is provided on a Celsius scale, but is reported without the degree sign as it is not a real temperature, but rather represents a perceived feeling of cold on the skin.

**Heat Warning** - A heat warning is issued by the Medical Officer of Health when Environment and Climate Canada forecast conditions of daytime  $T_{max} > 31^{\circ}\text{C}$  and nighttime  $T_{min} \geq 20^{\circ}\text{C}$  Humidex  $\geq 40^{\circ}\text{C}$  which are expected to last at least 2 days.

## Related Documents

[Appendix A - Extreme Weather and Environmental Conditions- Heat Response](#)

[Appendix B - Extreme Weather and Environmental Conditions- Cold Response](#)

[Appendix C- Hazards of Extreme Heat](#)

[Appendix D- Hazards of Extreme Cold](#)

## References

- [Emergency Preparedness-D2:3 Tornadoes](#)
- [Laudato si' \(24 May 2015\) | Francis \(vatican.va\)](#)

- [Government of Canada- Environment and Natural Resources \(Environment Canada\)](#)
- Ministry of Education Memorandum 2019: B12- Provincial Working Group on Safety- [High Temperature Guideline](#) (Guideline Version September 12, 2018).
- ["Managing Heat Stress at Work"](#) June 28, 2019, update.
- ["Warm Season Weather Hazards"](#) April 16, 2019, Government of Canada
- ["Guideline No. 33: Working in Extreme weather and environmental conditions: Safety Guidelines for the Film and Television Industry in Ontario"](#), ISBN: 978-4249- 9952-1, Issued June 2009, Review Date August 2010.
- Ontario Air Quality Health Index, visit [airqualityontario.com](http://airqualityontario.com) and then find your nearest city. Follow the Health Messages found on this site which correspond to the current index ratings in your area for both "at risk" and general populations. Further local guidance can be found on the [Eastern Ontario Health Unit](#) and the [Leeds, Grenville and Lanark District Health Unit](#) websites.
- ["Wind Chill- The Chilling Facts"](#), Environment Canada Fact Sheet, ISBN 978-0- 662-47625-2.