

**TO: COMMITTEE OF THE WHOLE BOARD  
OCTOBER 18, 2006**

**FROM: DIRECTOR OF EDUCATION**

**SUBJECT: TCDSB HEAT PROTOCOL IN SCHOOLS**

**Origin:**

Arising out of the Human Resources, Program and Religious Affairs Committee meeting of May 31, 2006, staff was directed to develop a heat protocol for TCDSB schools.

**Executive Summary:**

**This report recommends a heat protocol for TCDSB schools that would come into effect when the City of Toronto Medical Officer of Health declares a heat alert.**

**Comments:**

1. The Board has an approved protocol for severe weather conditions that addresses school response when cold winter weather produces temperatures that could lead to frostbite.
2. There are two heat alert systems in Ontario that are issued to the public when the combination of high temperature and high humidity leads to increased discomfort and greater risk of heat stress to vulnerable members of the population.
3. Most municipalities in Ontario have heat alert systems that are based upon Environment's Canada's temperature and humidity chart (Appendix A, Table 1). When temperatures are expected to exceed 30 ° C and the humidex values are expected to exceed 40 ° C, Environment Canada issues a Humidex Advisory. The higher the humidex, the more difficult it is for perspiration to evaporate and cool the body.
4. The City of Toronto has established its own unique heat alert system that is based upon the relationship between weather conditions and increased mortality rates among vulnerable segments of our population such as senior citizens, infants, preschool children and the homeless.
5. In 2001, the City of Toronto Public Health Department partnered with the University of Delaware to develop a heat alert system specifically for Toronto. The City of Toronto Medical Officer of Health will issue a heat alert when there is a 65 percent likelihood of more deaths than would be expected on a normal day. An extreme heat

alert is declared when there is a 90 percent likelihood of excess mortality than what is expected on a normal day.

6. The City of Toronto keeps a record of all heat alerts. There were a total of nine heat alerts and eight extreme heat alerts in Toronto during the period of May to September 2006 (Appendix A, Table 2).
7. The proposed TCDSB Heat Protocol would be activated upon the declaration of a heat alert by the City of Toronto Medical Officer of Health (Appendix B)

**Recommendation:**

**That the following TCDSB Heat Protocol be approved:**

<b>CITY OF TORONTO MEDICAL OFFICER OF HEALTH HEAT ALERT DECLARATION</b>	
	TCDSB Communications Department will send an advisory via e-mail and voice mail message system to all schools
	Principals will make frequent announcements reminding staff and students to drink plenty of water
	Personal water bottles will be allowed at student desks
	Staff will be asked to close south-facing window coverings during the day
	If feasible, computers and lights will be tuned off
	If computers must be turned on, computer use will be limited to the earliest hours of the school day
	Schools will limit outdoor physical education activities to the early morning
	Since the gym tends to be cooler, some outdoor physical education activities will be scheduled in the gym
	Where there are cooling centers in the school such as an air-conditioned library or classroom(s), students and staff will access these cooling centers on a rotation basis throughout the day

<b>CITY OF TORONTO MEDICAL OFFICER OF HEALTH</b>	
<b>EXTREME HEAT ALERT DECLARATION</b>	
	Same steps as outlined under Heat Alert Declaration, plus
	All outdoor physical activity will be cancelled. Track and field days will be rescheduled to rain days.
	If the school has mechanical ventilation with no operable windows and the mechanical ventilation malfunctions, school closure under <i>TCDSB Policy A.16 Emergency School Closure</i> , will be considered.

C. Maltese, Senior Manager  
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Kevin Kobus  
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**TABLE 1: HEAT ALERT SYSTEM # 1, ENVIRONMENT CANADA'S HUMIDEX READINGS**

<b>Humidex Range</b>	<b>Degree of Comfort</b>
<b>20-29</b>	<b>comfortable</b>
<b>30-39</b>	<b>some discomfort</b>
<b>40-45</b>	<b>great discomfort; avoid exertion</b>
<b>above 45</b>	<b>dangerous</b>
<b>above 54</b>	<b>heat stroke imminent</b>

**TABLE 2: HEAT ALERT SYSTEM # 2, CITY OF TORONTO MEDICAL OFFICER OF HEALTH, HEAT ALERT AND EXTREME HEAT DAYS IN TORONTO SINCE 2001 (months of May to September).**

<b>YEAR</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b># Heat Alerts</b>	<b>6</b>	<b>14</b>	<b>3</b>	<b>2</b>	<b>8</b>	<b>9</b>
<b># Heat Alerts during the school year</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>5</b>
<b># Extreme Heat Alerts</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>18</b>	<b>8</b>
<b># Extreme Heat Alerts during the school year</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>8</b>	<b>1</b>

**TCDSB HEAT PROTOCOL**

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