Guidelines for Dealing with High Temperature Conditions in the Workplace

As a result of very hot weather and/or problems with ventilation systems, conditions in a building may arise that require active steps to maintain the comfort of employees and students and ensure their health and safety. These conditions may happen in a building, group of buildings or in a given section of a building, therefore steps should be taken at a local level to assess the situation and determine an appropriate response.

What is the maximum temperature to which people can be exposed?

In legislation, there is no single value for the maximum temperature to which a person can be exposed at work, nor is there a single value above which work should stop. This is because there are a number of factors that determine one’s limits including: the relative humidity, the amount of air movement, the length of time one is exposed, the intensity of manual tasks, the type of clothing being worn, the degree of individual acclimatization, as well as each person’s health status. The Canadian Centre for Occupational Health and Safety (CCOHS) recommends the use of Environment Canada’s “humidex” scale, which figures in temperature as well as relative humidity and provides better guidance on dealing with thermal comfort issues than relying solely on temperature. The humidex scale is divided into 4 ranges, according to the associated effects:

- Less than 29: No discomfort
- 30 to 39: Some discomfort
- 40 to 45: Great discomfort; avoid exertion
- Above 45: Dangerous; Heat stroke possible

Humidex values can be calculated using this table provided by CCOHS. An extremely high humidex reading is defined by Environment Canada as one that is over 40. While actions may be warranted at any elevated level, humidex readings above 40 will require careful and immediate attention.

How should you report problematic conditions?

In the event that conditions become problematic please contact the Facilities Call Centre (FCC) to report the situation. See below for contact information. FCC will respond by dispatching personnel to investigate the situation and resolve it as soon as possible.

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<tr>
<th>To contact FCC Call Centre</th>
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<tr>
<td>By telephone</td>
<td>(514) 398-4555</td>
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<tr>
<td>By e-mail</td>
<td><a href="mailto:fcc.fod@mcgill.ca">fcc.fod@mcgill.ca</a></td>
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<tr>
<td>Online (login with McGill ID)</td>
<td>[<a href="http://www.mcgill.ca/facilities/fcc/">www.mcgill.ca/facilities/fcc/</a>]</td>
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If you feel that the conditions are such that they can adversely affect the health and safety of personnel in your area, you should contact Security Services at (514) 398-3000 (downtown campus) or (514) 398-7777 (Macdonald campus). They will send an agent to the location and will mobilize the necessary personnel to assess and respond to the situation.

What options are available to deal with high temperature and humidity conditions?

When high temperature conditions are experienced, please use your judgment to assess the local conditions and the compatibility of the environment with the types of activities that are being carried out. In responding to high temperature conditions, a number of measures can be considered, as follows:

- First, consider those individuals who report that they have health problems or are taking medications that make them more vulnerable to elevated heat, as well as anyone reporting they are feeling ill. Arrange to re-locate them to a comfortable location. Failing that, they should be sent home. Their absence from work will be recorded as sick leave, as appropriate.
- Offer to temporarily reassign personnel to other areas in the building or move them to alternative locations at the University or elsewhere so that they can continue their work remotely.
- Avoid strenuous activities to reduce exertion and/or shift people to tasks in which they would be less affected by the temperatures conditions;
- Open windows or doors, where practical;
- Provide ample drinking water to prevent dehydration;
- Wear light and loose clothing;
- Close window blinds on the sunny side of a space to reduce radiant heat;
- Eliminate any extraneous sources of heat in the area (e.g., turn off unused computers or other electrical or mechanical devices);
- Install fans (which may be requested through the Facilities Call Centre);
- Increase the frequency of breaks;

Also, the CCOSH website noted above can be consulted for more detailed recommendations based on humidex readings.

Please note that any decision to close down a unit or service for all or part of the day and send staff home should be done in consultation with the unit head and Human Resources. Environmental Health and Safety can provide services to measure the ambient room temperature and relative humidity conditions in the workplace and provide counsel to help in this decision.

Revised: September 21, 2010