

Hot Weather Response Plan Update

Date:	March 4, 2010
To:	Board of Health
From:	Medical Officer of Health
Wards:	All Wards
Reference Number:	

SUMMARY

This report provides an update on the City of Toronto Hot Weather Response Plan and the experience of summer 2009.

Financial Impact

There is no financial impact stemming from this report.

DECISION HISTORY

In 1999, City Council directed Toronto Public Health (TPH) to develop a Hot Weather Response (HWR) Plan to protect residents from the health impacts of extreme heat. Over the past ten years the HWR Plan has been revised periodically as new research becomes available or recommendations are made by the Board of Health or the HWR committee. TPH reviews the HWR plan on an annual basis and reports yearly on its implementation and revisions, if any, for the upcoming season.

ISSUE BACKGROUND

Extreme heat impacts different people in different ways depending on their age, underlying medical conditions and how well an individual is able to cope with and acclimatize to hot weather conditions.

In addition to individual characteristics, a person's physical and social environment can also influence vulnerability to heat. Socially isolated seniors are at highest risk for heat-related illness and death. Other at risk groups include people with chronic and pre-existing illnesses, children and people who are marginally housed or homeless. Climate change is expected to bring higher temperatures in Toronto. Environment Canada predicts that the number of days with temperatures over 30 degrees Celsius in Toronto will more than triple from about fifteen days per year between 1961 – 1990 to about 65 days per year by 2080 – 2100.

Since 2001, TPH has adopted the Heat Health Alert System as the basis for declaring Heat and Extreme Heat Alerts. A Heat Alert is issued when an oppressive air mass is forecast and the likelihood of excess weather-related mortality exceeds 65 percent. An Extreme Heat Alert is issued when the likelihood of excess weather-related mortality exceeds 90 percent. Declaration of a Heat or Extreme Heat Alert by Toronto's Medical Officer of Health activates specific responses under the HWR plan.

This report was prepared in consultation with Shelter, Support & Housing Administration Division and Municipal Licensing & Standards Division.

COMMENTS

The Experience of 2009:

The summer of 2009 was not a typical year for the City of Toronto. From June 22 to July 30, 2009, the City was subject to a labour disruption, which included unionized TPH and other city staff involved in hot weather response. Fortunately, the summer of 2009 was unseasonably cool, with TPH calling only two Extreme Heat Alerts on June 24 and 25 and one Heat Alert on August 17, 2009. Despite the city labour disruption, certain services under the HWR plan continued including the monitoring of the Heat Health Alert System, declaration of Alerts, media releases and updates to the Heat Alert website, notification of community partners by Findhelp, activation of the Heat Information Line, street and park outreach conducted by the Canadian Red Cross and the opening of City cooling centres during Extreme Heat Alerts.

In 2009, the HWR committee chaired by TPH held its pre-season meeting on April 7, 2009 to confirm the coordination and implementation of the HWR plan and met on October 19, 2009 to debrief on the season's activities.

Public Education and Outreach:

In 2009, TPH and its partners provided public education and targeted education on the risks of extreme heat and on precautions to prevent heat-related illness and death. TPH distributed over 42,000 brochures, provided four presentations and over 100 packages to community agencies. As well, over 620 Hot Weather Protection Plan packages were provided to landlords of boarding homes and rooming houses. TPH also handled 32 media requests relating to heat and recorded over 52,500 visits to the Heat Alert website.

In 2010, TPH will continue its public and targeted education to seniors, agencies that work with or have contact with seniors or vulnerable adults, and to landlords of boarding homes and rooming houses. In addition, TPH will continue its campaign to encourage the public to call or visit family, friends and neighbours, especially isolated adults and seniors during Alerts.

Cooling Places and Cooling Centres:

Cooling Places

During Heat Alerts the public is encouraged to use air-conditioned services and facilities that already exist in the neighbourhood as cooling places. This includes libraries, community centres, drop-in centres and shopping malls.

Drop-in centres provide supports to people who are homeless during heat alerts by providing air-conditioned spaces for them to stay, helping them find other cool places to stay during hours when the drop-in is closed, and by providing information about heat and how to protect from heat related health risks. Hours at homeless drop-in centres have been extended year round, including coverage during weekends and statutory holidays, which helps to ensure cool spaces are available for this population. Selected drop-ins are also distribution points for TTC tokens made available by Toronto Public Health during Extreme Heat Alerts. A total of 577 tokens were distributed by 16 drop-ins in 2009.

Cooling Centres

In 2009, SSHA planned to open seven Cooling Centres during Extreme Heat Alerts, four in neighbourhood community centres, two in city civic centres and Metro Hall as the 24-hour site. However, due to the city labour disruption, alternate Cooling Centre locations were opened.

A total of 611 individuals visited the seven Cooling Centres with an average stay of 15 minutes. In 2010, SSHA will continue to utilize neighbourhood based community centres and civic centres as cooling centre locations.

Tracking Heat Related Deaths:

In June 2009, TPH met the Office of the Chief Coroner to review existing protocols for reporting deaths where heat may be a contributing factor (possible heat-related deaths). The Office of the Chief Coroner agreed to contact TPH to report possible heat-related deaths identified during routine investigations within one business day and within 24 hours for cases involving multi-residential buildings where the person was found in a hot environment, and other residents may be at risk. For 2009, TPH did not receive any reports of possible heat-related deaths from the Office of the Chief Coroner.

Maximum Heat Standard:

Starting on December 1, 2008, Municipal Licensing and Standards (MLS) embarked on a program to proactively inspect and audit the City's multi-residential apartment buildings. In the first year of the program, the building audit team inspected 188 buildings. In 2010, MLS expects over 200 buildings will be audited. Part of the audit included determining which buildings had central air conditioning and other available facilities to deal with hot weather.

Of the 188 buildings visited in 2009, only three buildings had central air conditioning. The other buildings did not provide any air conditioning in the common areas, although

many individual units did make use of window air conditioning units, which were most often installed by the resident. Municipal Licensing and Standards has some concerns over the hazard some of these units could pose if not installed properly. Although not part of its audit program, these units are inspected whenever an in-suite inspection is conducted. Unsafe units are cited through a property standards order.

Requiring the retrofit of existing buildings to introduce central air conditioning, especially older ones, has considerable technical and cost implications. An examination of these issues is recommended and would include consultation with other City Divisions. In addition, although a maximum heat standard might be desirable, there is still a need to determine the most appropriate authority for introducing this regulation.

Heat Registry:

The Shelter, Support and Housing Administration Division has been working with two drop-in centres for homeless people to pilot a heat registry for clients most at risk of heat related illnesses; primarily individuals living in marginal housing without air conditioning. In 2009, SSHA worked with Parkdale Activity Recreation Centre (PARC) and Sistering to further develop the heat registry program and to operate a peer led Heat Registry. Clients opt to register, and in the event of a Heat Alert or Extreme Heat Alert, are contacted by a trained peer and offered assistance. In 2009, 98 clients signed onto the heat registry.

In 2010, SSHA will make available an on-line Heat Registry Manual to assist other agencies interested in establishing a local heat registry.

Heat-Related Vulnerability Assessment:

TPH has initiated a project that will focus on mapping vulnerability to heat. Vulnerability to heat depends on individual characteristics such as age or existing illness as well as features of a person's physical and social environment, such as location, quality of housing, access to air conditioning or community support. In 2009, TPH developed recommendations for mapping of heat-related vulnerability for Toronto. The recommendations were based on a review of vulnerability mapping work carried out in other jurisdictions and a scan of mapping data available for Toronto.

In December 2009, Natural Resources Canada accepted a funding proposal from Ontario's Regional Adaptation Collaborative (ORAC). TPH is a member of ORAC. This funding will enable TPH to implement the recommendations for creating the heat vulnerability maps. TPH plans to refine the recommended approach based on newly available research and information gathered through stakeholder consultation, explore the benefits of specific mapping techniques to identify groups of vulnerable people, and determine how to validate the approach. TPH will create a series of maps showing risk for heat-related illness in Toronto and available adaptation resources in Toronto. As well, TPH will create documents that will enable TPH staff to maintain and update the maps regularly. The heat vulnerability assessment work is expected to be completed by mid-2012.

Evaluation of Toronto’s Heat Alert and Response System:

In collaboration with Health Canada’s Climate Change and Health Office (CCHO), TPH has begun an evaluation of Toronto’s Heat Alert and Response System (HARS). In 2009, TPH and Health Canada prepared an evaluation framework, outlining key themes for evaluation. Key areas identified by TPH and CCHO staff included assessing the overall impact of the HARS for health protection, evaluating the choice of Alert trigger, exploring perceptions, attitudes, and actions of TPH, community organizations, and the public, and evaluating the ease of implementing the HARS.

Currently, TPH and Health Canada are collaborating on multiple evaluation projects to explore each evaluation theme. A final report on the Toronto HARS Evaluation will be developed and shared, with results being incorporated into Health Canada’s broader initiative on “Developing Heat Resilient Communities and Individuals in Canada”.

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