Extreme Temperature Protocol in Middlesex-London

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History

- Informal monitoring, tracking and responding to extreme weather since 1999.
- July 2005 Middlesex-London recorded more than 10 consecutive days of extreme heat.
- July 13, 2005 cooling centres were established across London & Middlesex County.
- It was identified that a combined effort of public health, city & county managers, social services workers and emergency medical officers was needed to develop a systematic plan to provide assistance to the most vulnerable populations.

Planning Principles

Identify a lead agency and participating organizations

Use consistent, standardized warning system activated and deactivate and the according education
Implement response activities targeting high-risk populations

Collect and evaluate information

Ongoing revision of the plan

**Why a Protocol?**

To make official the practice of issuing a Heat Alert Response and a Cold Alert Response to inform local agencies, in a coordinated manner, of the forecast of an extreme weather temperature to ensure that vulnerable persons are informed and protected.
Protocol Goal

To reduce the health risks associated with extreme hot or cold weather, especially for those at risk (e.g. seniors, those with underlying medical conditions, homeless persons) through a coordinated, community response.

General Protocol Activities

- Extreme Temperature Network formed 2005, Chaired by Medical Officer of Health or (delegate).
- Monitor email, weather radio & website for extreme temperature alert criteria.
- Spring and Fall Network membership meetings to review protocol, roles and responsibilities.
- Develop and revise English and French public education resources.
Criteria for Initiating Alerts

A Cold Alert is initiated in the following circumstances, when one or more of these criteria are met:

- Daily predicted low temperature of –15 degrees Celsius without wind chill; or
- The wind chill reaches the level at which Environment Canada issues a warning for outdoor activity for people in the Middlesex-London area; or
- Extreme weather conditions, such as a blizzard or ice storm.
### Cold Alert Activities

<table>
<thead>
<tr>
<th>Year</th>
<th>Date</th>
<th>Duration</th>
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<tbody>
<tr>
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<td></td>
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<td>March 5</td>
<td>2 days</td>
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<tr>
<td>2007</td>
<td>January 2</td>
<td>1 day</td>
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<td>January 30</td>
<td>1 day</td>
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<td></td>
<td>February 9</td>
<td>3 days</td>
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<td></td>
<td>January 10</td>
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<td></td>
<td>February 9</td>
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<td>March 2</td>
<td>2 days</td>
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</table>
Criteria for Initiating Alerts

A **Heat Alert** means an oppressive air mass is forecast and the likelihood of excess weather-related mortality exceeds 65 percent.


A **Heat Alert** is initiated in the following circumstances, when one or more of these criteria are met:

- The forecast is showing a humidex advising of 40 Celsius or higher.
- The humidex is forecast to rise to 36 Celsius or higher, combined with an Environment Canada Smog Alert.
- High temperatures without a humidex reading equal 38 Celsius or above.
- Environment Canada issues a humidex warning for outdoor activity for people in the Middlesex-London area.
should we consider removing this one or at least listing it last on this slide?

eXPerience; 2009-03-10
Heat Alert Activities

• 2006
  May 29   1 day
  July 16  2 days
  July 31  2 days

• 2007
  June 26  2 days
  July 9   2 days
  August 1 3 days

• 2008  no alerts issued

Monitoring

Temperature, air quality and wind chill information is monitored by Middlesex-London Health Unit staff through the Environment Canada and Air Quality Ontario web sites. These sites post special weather statements, including information on heat, cold and smog episodes.

• http://weatheroffice.ec.gc.ca/canada/on_e.html
• http://airqualityontario.com
Notification

Middlesex-London Health Unit staff receive daily an advance 5-day e-weather forecast from Environment Canada and a specific message when there is either Smog, Wind Chill or Humidex Advisories issued for Southern Ontario.

Consultation

Middlesex-London Health Unit staff consult with the local weather office to discuss Middlesex-London specific forecasts with a trained meteorologist, if necessary.
Decision

Based on weather sources and conditions, the Medical Officer of Health (or delegate) will determine if the Middlesex-London Health Unit will issue a Heat Alert to the communities in Middlesex-London.

Activation

If a Heat or Cold Alert is declared by the Medical Officer of Health (or delegate), Health Unit staff send notification to the Extreme Temperature Network via email and fax.

Each agency is then responsible for internal notification of its staff and for the notification of their external partnering services.
Communications

In addition, Heat Alert and Cold Alert information will be posted to the Middlesex-London Health Unit’s website at www.healthunit.com

Media Notification

The Middlesex-London Health Unit sends notification of each Alert to all media outlets by fax in Middlesex-London (both print and broadcast).
Public Education

• Information can be obtained by calling the Middlesex-London Health Unit at 519-663-5317 Ext 2300 and visiting the website at www.healthunit.com

• Agencies can include information in their newsletters and post on their bulletin boards and on their websites and be prepared to answer questions.

• Education via the media (articles/fact sheets submitted).

• Supplementary education may be delivered when a Heat Alert is called and when the media interview staff.
Heat Alert protracted?

• When a Heat Alert lasts longer than 3 days, it becomes an Event.
• Middlesex-London Health Unit activates Emergency Operations Centre to help coordinate the County and City’s Hot Weather response during a prolonged heat emergency.
• Provide Corporate Communications at both the County and City with an electronic copies of all media releases and information fact sheets issued.
• Staff of Environmental Health and Chronic Disease Services operate an telephone information line to answer questions regarding temperature related issues and refer concerned citizens’ calls as appropriate.

Termination

• Once the decision has been made that the extreme hot weather or extreme cold weather is no longer a health threat the Medical Officer of Health (or delegate) terminates the Heat Alert or Cold Alert by notifying the Network, participating agencies and the media.
• Individual agencies are be responsible for notifying their staff and partnering services that the Alert has been terminated.
Agency Roles & Responsibilities

- Currently have 37 Network member agencies and organizations.
- It is the responsibility of the Extreme Temperature Network membership to ensure that the Protocol is reviewed and updated on bi-annual basis.

Successes

- shared Protocol and consulted with many Health Units and other agencies in Ontario.
- MLHU staff resource packages updated and distributed each year.
- Participate in a Childcare Provider workshop in October 2006 reaching 200+ workers.
- profiled and recognized the good work done by community partners and volunteers during times when Extreme Temperature Alerts are in effect.
- added to media messaging during heat alerts that donations of sunscreen and sun hats would be of benefit to clients of shelters.
Challenges

• Bringing 37 Network members together twice per year.
• Collecting data from each organization.
• School Boards not currently participating as members of the Network.
• No formal evaluation to date.

Future

• continue to partner in consultation and collaboration with Network membership.
• meeting with Research, Education, Evaluation & Development (REED) Services in March to develop an evaluation tool and process
• Spring Network meeting will include a membership survey to measure our progress after 3 years, how we can work more collaboratively, and discuss future directions.
• next steps?
Fact Sheet Resources

English and French versions of:

- “Heat Alert Guidelines” - general public, child cares & schools
- “Managing Heat-Related Illness”
- “Understanding the UV Index”
- “Air Quality Index & You”