



Hamilton

INFORMATION REPORT

**CITY WIDE
IMPLICATIONS**

To:	Mayor and Members Board of Health		
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Date:	June 11, 2007		
Re:	Cold Alert Trigger BOH07036 (City Wide)		

Council Direction:

This report is a follow up to memo dated December 7, 2006 regarding changes to the Cold Alert Trigger.

Information:

In Fall, 2006, Public Health Services altered the trigger for a Cold Alert based on stakeholder input and new information about wind chill from Environment Canada.

Previously, the criteria for a Cold Alert was an actual temperature of minus 15 Celsius, regardless of wind. For 2006-2007, a Cold Alert was issued when the current or forecast weather conditions were at or below minus 15 degrees Celsius or minus 20 with wind chill.

Environment Canada typically only mentions wind chill in the forecast if wind chill is expected to be minus 25. Thus, the revised Hamilton threshold of minus 20 with wind chill provides a significant margin of safety over the wind chill warning issued by Environment Canada. This 'safety margin' is intended to provide an additional level of protection for those who are most vulnerable to the effects of cold weather, including the homeless.

The Cold Alert is an acute response to cold temperatures, and is not intended to replace longer-term solutions to problems faced by homeless people.

RESULTS OF THE ENVIRONMENTAL SCAN FROM THIRTY FIVE PUBLIC HEALTH UNITS IN ONTARIO

A survey was sent via e-mail from the Association of Supervisors of Public Health Inspectors (Ontario) (ASPHIO) to all Ontario Public Health Units. McMaster Institute of Environmental Health (MIEH) then followed up with personal telephone calls. Overall the response rate to the survey was 94% (only two health units did not give input). Of the thirty four (34) public health units surveyed only 21% or seven (7), including Hamilton, have taken the lead role for declaring a Cold Alert. Table 1 summarizes the role of Public Health Units across Ontario.

Table 1

Health Unit name	Health Unit role	Comment
Algoma; Chatham-Kent; Eastern Ontario; Grey Bruce; Haliburton, Kawartha Pine Ridge; Hastings & Prince Edward; Huron; Kingston, Frontenac, Lennox & Addington; Leeds, Grenville & Lanark; North Bay & Parry Sound; Northwestern; Oxford; Perth Peterborough; Porcupine; Haldimand-Norfolk; Renfrew; Simcoe-Muskoka; Elgin St. Thomas; Timiskaming; Thunder Bay; Wellington Dufferin Guelph.	N/A	22 Health Units in Ontario do not have a cold weather protocol.
Brant; Halton; Middlesex-London; Niagara; Peel; Ottawa; Hamilton	Trigger – call and cancel alerts, notify community partners and general public. Conduct program evaluations.	Hamilton is the only health unit to incorporate a minus 20 wind chill factor in addition to the other trigger of minus 15 degrees without wind chill. Environment Canada’s wind chill warning for outdoor activity is at minus 25 wind chill.
Durham; Sudbury; Waterloo; Toronto	Not responsible for trigger or response. Involved as community members.	In Toronto, for example, the Shelter, Housing & Support Emergency Planning Unit is the lead agency to call the trigger.

Consistent with other Public Health Units, Hamilton Public Health Services role is related to the trigger and communication of Cold Alerts. Other community partners,

participating on the COLD Committee, are responsible for the programmatic response which results from a Cold Alert being declared.

INPUT FROM 'Community Organization for Low Degrees (COLD)

Prior to the Fall 2006 bi-annual community partners meeting MIEH developed and distributed an evaluation survey to community partners. The majority of the respondents wished PHS to take the lead for calling and cancelling the Cold Weather Alert. Eighty (80%) of the partners depend on PHS to 'call' an official alert before activating their individual, internal organizational policies. Thus at the community's request PHS assumed the lead role for 'calling' an alert (trigger) and communicating the information to both the general public and COLD Committee member agencies.

At the debrief semi annual meeting in May 2007, community partners were again asked for their input regarding the new 'trigger'. Overall, the partners responded positively to the new 'trigger' and were very satisfied with the impact for their target populations. Communication from community partners (Mission Services, Martha House, Interval House, Hamilton Urban Core, and Good Shepherd Centres) include:

“...likes the new trigger – it is softer, gentler approach, communication was smooth.

...Cold Alerts worked well.

...everything worked well.

...prepared ahead of time and said the alerts worked well.”¹

“...everything went smoothly”²

Prior to implementing the change in the 'trigger', several shelters felt the need to call 'unofficial cold alerts' due to weather conditions which did not meet the old threshold. After incorporating wind chill into the trigger, many shelters reported that they did not call 'unofficial cold alerts'. In fact, a number of the COLD partners have been able to revise and adapt their internal P & P's to better serve the community due to the discussions and research conducted by PHS and MIEH.

PHS CHANGES TO COLD ALERT 'TRIGGER' 2006

Prior to the fall of 2006, Public Health Services called a cold alert when the actual temperature was at or below minus 15 Celsius, regardless of wind conditions. This threshold is consistent with the few other public health units who have a Cold Alert protocol. Where wind chill is addressed by other public health units, it is only used when Environment Canada issues a wind chill warning for outdoor activity at -25 wind chill. Thus, the revised Hamilton threshold of minus 20 with wind chill provides a significant margin of safety over when a wind chill warning is issued by Environment Canada. Table 2 outlines the threshold for a cold alert in Hamilton in relation to other levels of increasing risk.

¹ Community Organization for Low Degrees– COLD Alert Debriefing Meeting Minutes, May 8, 2007

² Good Shepherd Man's Centre, Brother Tom Liss, communication to COLD Alert Committee.

Table 3 – New Trigger Dates (7 alerts over 30 days)

December							January						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2		1	2	3	4	5	6
3	4	5	6	7	8	9	7	8	9	10	11	12	13
10	11	12	13	14	15	16	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27
24	25	26	27	28	29	30	28	29	30	31			
31													

February							March						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3			1	2	3		
4	5	6	7	8	9	10	4	5	6	7	8	9	10
11	12	13	14	15	16	17	11	12	13	14	15	16	17
18	19	20	21	22	23	24	18	19	20	21	22	23	24
25	26	27	28				25	26	27	28	29	30	31

Cold Alert days
using new threshold

Public Health Services monitored Environment Canada’s website and documented the daily forecast. While it is understood that the forecast weather (temperature and wind) is not perfect a predictor of actual weather conditions, analysis of historical meteorological data reveals that every occurrence of the threshold being met was captured with a cold alert being issued.

Public Health Services will continue with same protocol for the winter of 2007 – 2008.

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