To: Mayor and Members
   Board of Health

From: Elizabeth Richardson, MD, MHSc, FRCP
      Medical Officer of Health
      Public Health Services

Date: June 11, 2007

Re: Emergency Preparedness - Update BOH07033 (City Wide)

Council Direction:

This report provides an update about emergency preparedness and response initiatives undertaken by Public Health Services, in keeping with the policy on Communication between the Medical Officer of Health and Board of Health, approved in October 2006.

Information:

Mandate/Standards:
Three statutory components govern Public Health Services preparedness and response to an emergency affecting the health of the community. The first is The Emergency Management and Civil Protection Act (June 2006) which requires each municipality to develop, implement and maintain an emergency management program. Within this program, all municipal departments and services are expected to develop, implement and maintain an emergency management program that defines departmental procedures and arrangements for responding to a municipal emergency.

The second is the 1990 Health Protection and Promotion Act (HPPA) which imposes duties and responsibilities on the local Medical Officer of Health for the control of health hazards and communicable diseases.

The third component is the draft Ontario Public Health Standards (February 2007). These are proposed to have the statues of HPPA regulations once finalized. A goal established by these standards is for Public Health Units within the province to enable and ensure a consistent and effective response to public health emergencies and emergencies with the potential to have a public health impact.
Overview of Program Activities

Public Health Services’ emergency management program reflects potential hazards identified by the City Of Hamilton Emergency Management Program. These hazards have been identified based on frequency or likelihood of occurrence and magnitude of consequence or impact.

The following is the resulting list of Hazard Identification and Risk Assessment (HIRA) events identified for the City Of Hamilton:

1. Chemical Spill – Fixed Site
2. Chemical Spill – En Route
3. Water (health) Emergencies
4. Health Emergencies
5. Terrorism
6. Civil Disorder
7. Violent Wind Event
8. Explosion / Fire
9. Transportation Accidents
10. Special Events

Although these specific hazards could lead to potential emergencies, Public Health Services maintains an all-hazard approach to planning, in order to reduce the potential risk and impacts of natural and human-induced hazards within the Hamilton community.

Components of the Emergency Management Program

Public Health Services uses the provincial and federal approach to emergency management, based on 4 components:

1. Mitigation / Prevention
2. Preparedness
3. Response
4. Recovery

Mitigation

Mitigation focuses on advance measures to reduce the risk of occurrence of an emergency event (e.g. developing dams / dykes, rezoning areas and developing building codes). Mitigation initiatives at Public Health Services include the development of the Environmental Health Program to include an Emergency Response Team, developing an Outbreak Response Team and establishing and testing the Public Health Emergency Operations Centre.

Public Health Services shall also attend the City Of Hamilton Emergency Control Group meetings and participate on all relevant city emergency response initiatives.
Preparedness
Preparedness refers to actions and initiatives taken to ensure an effective risk-based emergency response. Preparedness initiatives taken by Public Health Services include:

I. Plan development
Public Health has developed the following plans;
- Public Health Services Emergency Response Plan
- Public Health Services Pandemic Plan
- Hamilton Community Pandemic Plan
- Sub-plans for Water and Health Emergencies (developed with the City Of Hamilton, Emergency Management Program)

II. Training
Public Health Services has provided training to all staff on the following topics:
- Incident Management System
- Response to suspicious packages
- Basic emergency response role
- Shelter training
- Outbreak response
- Pandemic planning
- CBRN training with Police Services
- Emergency Survival kits
- Notification process

III. Exercises
Public Health Services has participated in the following city, industry and departmental exercises:
- Tornado Exercise (City Of Hamilton 2002)
- Operation Shut down (Police Services 2003)
- Plane Explosion Exercise at Limeridge Mall (City Of Hamilton 2004)
- Operation Snake (Police Services Exercise 2004)
- Gas Leak Exercise (Shell Canada 2005)
- Pandemic and Train Derailment in North Hamilton (City Of Hamilton exercise 2005)
- Suspicious Gas – mountain area (City Of Hamilton Exercise 2006)
- Measles outbreak (Public Health Exercise 2006)

IV. Public Awareness /Education
Public Health Services has participated in the following public awareness initiatives:
2002 to 2007 – Emergency Preparedness Day
Pandemic communication – through the Public Health Services website, community presentations and committee meetings, Public Health Services has endeavoured to keep the public informed of all pandemic planning initiatives and measures the public could take to prepare for a pandemic.
Response
Public Health Services uses the Incident Management System (IMS) as the basic command structure for an effective response to an emergency incident. This IMS structure is modelled after the Ontario IMS and North American emergency management standards. Each member of the Public Health Emergency Control Group is responsible for one of the following sectors of the IMS model: Command, Operations, Planning, Logistics and Finance and Administration.

Public Health Services has responded to the following city emergencies:
- Locke Street water main break January 2003
- Hydro outage August 2003
- Rosedale water event August 2004
- Lynden water event September 2004
- Flooding – east end of Hamilton (water back-up) December 2006
- Lottridge Street fire June 2007

Response within Public Health Services has met some challenges. Resources to fill all the response initiatives has been limited with individual members of the Public Health Emergency Control Group fulfilling more then one emergency response role and divisional role.

Other challenges include communication and delivery of public health messages. With one corporate information officer, the process of notifying and processing the communication message is often difficult. There is also a great demand for public notifications through a community communication system. A process of notifying a selected area is needed to notify a community of a potential danger.

Recovery
Recovery is the process of returning to regular functioning. Public Health Services participates in recovery planning by evaluating the public health response and ensuring the health of the community is no longer at risk. Public health roles and responsibilities are evaluated after all activations and opportunities for further improvements in planning and response are identified.

Resources
Currently there is one full time employee to complete all emergency preparedness initiatives at Public Health Services.

How are we doing?

Impact on Health of Hamiltonians
The residents of Hamilton have responded well to any emergency event involving their health. During the boiled water advisories the community was compliant to boiling their water and there was no increased Emergency Room visits or reported illnesses. Flooding resulted in property damage and many residents were distressed with the extent of damage to their personal belongings. Public Health Nurses and Inspectors
provided support to those attending the evacuation centres and offered links to the community to assist with the recovery process. During the power outage, Public Health Services provided information on disposing spoiled food and visited Long Term Care Facilities to ensure the vulnerable population were not at risk.

Comparisons to Peer Communities
The Emergency Planner for Public Health Services has initiated a network group of emergency planners from other Health Units within the South Central region of Ontario. This ‘Public Health Unit Emergency Planners Working Group’ meets bi-monthly to share emergency resources and preparedness initiatives. Hamilton Public Health Services, is a leader in this group. Unlike other Health Units, Public Health Services has a team of Public Health Inspectors trained as Emergency Responders and has regular meetings of the Public Health Emergency Program Committee to address emergency preparedness and response initiatives.

Emerging Issues
Climate change with the resulting extreme temperatures, increase in damaging storms and potential for wide spread power outage will result in more municipal emergency. Public Health Services will need to prepare for the effects of climate change and address the public health issues that could result.

The issue of emerging infectious diseases such as Pandemic Influenza or Extensively Drug Resistant TB are issues that have the potential to affect the Hamilton community. Public Health Services has collaborated with community agencies to prepare for a pandemic. This work is extensive and requires ongoing resources to ensure an effective plan and response. Public Health Services has the lead role for Pandemic Planning in the community, and supports the other health care and community sectors in their planning efforts.

Summary
PHS has implemented an emergency preparedness and response program that uses proven methods and approaches and is integrated within the City of Hamilton’s Emergency Response Plan. These efforts appear well-aligned with the directions in the 2007 draft Ontario Public Health Standards. Through this planning process and working together, the City, PHS and its partners will be well equipped to reduce illness and death in the City of Hamilton during emergencies that affect the health of our community.

Elizabeth Richardson, MD, MHSc, FRCPC
Medical Officer of Health
Public Health Service