

Pandemic Influenza Preparedness Update

Date:	March 22, 2007
To:	Board of Health
From:	Medical Officer of Health
Wards:	All
Reference Number:	

SUMMARY

This report updates the Board of Health on issues affecting the City of Toronto's ability to respond to an influenza pandemic. The City is guided by the directions set out by the federal and provincial governments in their respective Pandemic Influenza Plans. The Province of Ontario has not yet provided direction on several important issues such as personal protective equipment and the distribution of antiviral medication for prophylaxis (prevention).

Toronto Public Health (TPH) has been working with a subcommittee of the Pandemic Influenza Advisory Group and other stakeholders to develop a plan for the operation of assessment, treatment and referral centres. An operational plan will be considered by the advisory group in early May. Additional work is required to identify suitable locations for the centres. Staff will compile an inventory of City-owned space and make contact with walk-in clinics and urgent care centres.

The report also updates information on the spread of avian influenza and outlines the progress TPH has made in its preparedness activities since the last report to the Board of Health.

Financial Impact

There are no financial implications arising from this report.

DECISION HISTORY

At its meeting of January 31, 2006, City Council adopted the Pandemic Influenza Plan for the City of Toronto (Policy and Finance Committee Report No. 1, Clause No. 14).

The Board of Health has requested that the Medical Officer of Health provide monthly verbal updates and quarterly written reports on the state of preparedness for an influenza pandemic. This is the second quarterly report for 2007.

ISSUE BACKGROUND

Influenza is a highly contagious respiratory illness caused by a virus which is constantly changing and mutating. An influenza pandemic occurs when there is an abrupt and major change in the protein structure of the Influenza A virus resulting in a new subtype. Since people have little or no immunity to this new strain, it can spread quickly causing outbreaks in one or more countries or worldwide. This is called a pandemic. The exact nature of the pandemic virus and illness will not be known until it emerges. Because health care services in Toronto are currently working at or near capacity, pandemic influenza may quickly overwhelm the system.

Pandemic strains of influenza tend to emerge three or four times each century. In the last century, influenza pandemics occurred in 1918 (Spanish flu), 1957 (Asian flu) and 1968 (Hong Kong flu). The pandemic of 1918-1919 caused between 20 and 40 million deaths worldwide, while the pandemics of 1957 and 1968 caused much less mortality and morbidity. It is generally believed that another influenza pandemic will occur but there is no way of predicting when that might be, nor precisely the level of illness that might result.

Influenza pandemics occur in two or three waves over a period of months to a year or more. An effective vaccine would likely take four to six months to become available. Initially, public health measures will include: case investigation, isolation and treatment; and contact identification and follow-up potentially including quarantine and prophylaxis in an effort to stop or slow the spread of infection locally. However, as public health resources are exhausted it is unlikely that these measures can be sustained in the pandemic period and it is generally believed they will have only limited effectiveness. A strain of avian influenza known as H5N1 is currently spreading in bird populations globally. To date, there is no evidence that this virus has the ability to spread efficiently from person-to-person. However, if the virus changes and acquires this ability, a pandemic may ensue.

COMMENTS

A) Surveillance Update

The World Health Organization (WHO) pandemic alert phase remains at Phase 3. This means that there are cases of human infection(s) with a new subtype of influenza virus, but no human-to-human spread or at most rare instances of spread to a close contact. There is currently no pandemic or highly pathogenic H5N1 avian influenza in North America.

Human Cases

The WHO continues to monitor the number of human cases of avian influenza (H5N1) and, as of March 12, 2007, reports 278 human cases and 168 deaths (an increase of 17 human cases and 11 deaths since December 31, 2006).

In 2007, the outbreak of highly pathogenic H5N1 avian influenza spreading from animals to humans has expanded geographically. To date, the WHO has confirmed human infection in 12 countries (two new countries—Nigeria and Laos—in 2007), with the majority of 2007 cases affecting the young (mean 21.1 years, median 22.0 years, range 4 years–44 years) and females (80.0% female). Confirmed cases with known exposure in 2007 acquired their infection following contact with diseased birds.

The case fatality rate in 2007 for confirmed cases varies by country, ranging from 0 to 100%, with an overall rate of 66.7%. This is an increase over previous years (2003-2006) with an overall case fatality rate of 60.1% (range 33.3% –100.0%). This may reflect lack of access to health care in the newly identified countries.

Animal Cases

Since January 2004, a total of 60 countries have identified highly pathogenic H5 infection in domestic and/or wild birds. There have been no cases identified in Canada. Since last report (January 2007) both England and Kuwait reported their first case of highly pathogenic H5N1 in bird populations and several countries reported re-emergence of the virus in bird populations (e.g., Nigeria, Laos, Turkey, Myanmar and Thailand). Additional animal hosts have been confirmed in Germany (cat and weasel), Iraq (cat) and Indonesia (pigs).

Bird Surveillance

Canada's Inter-Agency Wild Bird Influenza Survey - 2006 is a collaborative effort involving federal, provincial and non-governmental agencies. It is coordinated by the Canadian Cooperative Wildlife Health Center (CCWHC). Health units in Ontario were asked by the Ministry of Health and Long-Term Care (MOHLTC) to voluntarily participate in the survey. TPH is a partner in this survey. Reports to Toronto Public Health of clusters of three or more dead birds of one species or a single larger bird (crow-sized or larger) will be referred to Animal Services for collection. These will then be sent to the CCWHC in Guelph for avian influenza testing.

B) Federal and Provincial Developments

Toronto Public Health still awaits direction from the federal and provincial governments on several urgent issues relating to its ability to respond to pandemic influenza. These include:

1. What level of funding will be available from these governments to support the operation of assessment, treatment and referral centres;

2. Resolution of significant questions regarding the operation of assessment centres including liability and malpractice insurance issues and the use of personnel who are not currently licensed as health care practitioners;
3. What form of personal protective equipment is most appropriate for health care workers and other staff who are in contact with individuals ill with influenza or large numbers of people; and
4. Whether antiviral medications will be recommended for the use of health care workers and other staff to help protect them from contracting influenza when transporting, treating or assessing persons with influenza.

The motions relating to these issues, adopted at the January 29, 2007 Board of Health meeting, were conveyed to the Minister of Health and Long-Term Care (see the reply from the Director, Emergency Management Unit in Attachment I).

C) City of Toronto Developments

Assessment Centres

In the fall of 2006, the Ministry of Health and Long-Term Care gave Toronto Public Health the responsibility for planning the implementation of assessment, treatment and referral centres.

During February and early March 2007, Toronto Public Health has held six meetings of a subcommittee of the Pandemic Influenza Advisory Group to develop an operational plan for pandemic influenza assessment centres. TPH, in collaboration with the Toronto Academic Health Science Network (TAHSN), invited representatives from a range of sectors that would be involved with the implementation of assessment centres including hospitals, pharmacies, community health centres, community care access centres, long-term care homes, the Ministry of Health and Long-Term Care, Emergency Medical Services, Toronto Police Service and communications.

The subcommittee proposes that assessment centres would offer the following services:

1. information about influenza
2. information about self care or care for others
3. basic clinical assessment of influenza symptoms
4. distribution of antiviral medication with treatment information
5. distribution of a “flu-kit” which might include fluid replacement drinks, as well as anti-pyretic, anti-nausea, and anti-diarrheal medications
6. discharge information, including community resource information.

The operational plan will be presented to the Pandemic Influenza Advisory Group at its meeting in May and will be included in the next version of the Toronto Pandemic Influenza Plan. The subcommittee will then develop a staffing model and address such

logistical issues as the number of centres required and possible locations for them. To help identify suitable locations, TPH staff will compile an inventory of City-owned space and will contact walk-in clinics and urgent care centres.

Stockpiling

Discussions are ongoing between Toronto Public Health staff and senior City of Toronto managers about what personal protective equipment and other infection control supplies the City should stockpile to ensure the continuity of Tier One operations in the event of a pandemic.

Other Activities

The progress achieved in preparedness planning is summarized in Attachment II, grouped under headings which reflect TPH core activities related to pandemic influenza:

1. TPH internal planning and preparedness
2. City of Toronto planning and preparedness
3. Linkages with the health care system
4. Working with the community

CONTACT

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SIGNATURE

Dr. David McKeown
Medical Officer of Health

ATTACHMENTS

- Attachment I: Letter of Reply from Allison M. Stuart, Director, Emergency Management Unit, Ministry of Health and Long-Term Care
- Attachment II: Pandemic Influenza Planning Status Update (March 20, 2007)

Attachment I

**Ministry of Health
and Long-Term Care**

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MAR 02 2007

Candy Davidovits
Secretariat, Board of Health
Toronto City Hall
100 Queen Street West, 10th Floor West
Toronto ON M5H 2N2

Dear Ms. Davidovits:

I am writing in response to your letter from January 29th, 2007 in which you seek clarification from the Minister of Health and Long-Term Care on a number of issues related to influenza pandemic planning.

The Ontario Health Plan for an Influenza Pandemic (OHPIP) is an evergreen documented that continues to be updated and enhanced on an annual basis. Updates regarding the issues you have raised such as antiviral prophylaxis, personal protective equipment and the implementation of Influenza Assessment, Treatment and Referral centres are provided on a bimonthly basis to the OHPIP Steering Committee which is responsible for providing guidance on updates to the overall plan. This committee is comprised of representatives from Ministry of Labour, Public Health, Emergency Management Ontario, and other key healthcare stakeholder associations, employers and labour groups. Also included as a member of the OHPIP Steering Committee is the Association of Local Public Health Agencies, and Associate Medical Officer of Health, Dr. Barbara Yaffe is their delegate.

I can advise you that the issues you have identified in your letter regarding antiviral prophylaxis, personal protective equipment and the implementation of Influenza Assessment, Treatment and Referral centres continue to be addressed at all three levels of government, but there is no provincial policy position in any of these areas available at this time. Work continues in each of these areas with the anticipation of the release of the next iteration of the Ontario Health Plan for an Influenza Pandemic in the summer 2007.

I would be pleased to speak at an upcoming Board of Health meeting regarding actions to date if that Board would find this useful.

Sincerely,

A handwritten signature in blue ink, appearing to read "Allison J. Stuart".

Allison J. Stuart
Director, Emergency Management Unit

U07-01994

- c: Dr. George Pasut, A/Chief Medical Officer of Health, Public Health Division
Ruth Hawkins, A/Assistant Deputy Minister, Public Health Division
Dr. Leon Genesove, Provincial Physician, Ministry of Labour

Attachment II**Pandemic Influenza Planning Status Update (March 20, 2007)****1. Toronto Public Health (TPH) Planning and Preparedness**

	Activity	Progress since last report	Next steps	Issues pending Federal or Provincial direction
Disease Surveillance and Reporting	Weekly Summaries	Toronto Public Health produces, circulates and posts on its website a weekly summary of global events of interest to pandemic surveillance.	This activity is being maintained on an ongoing basis.	
	School Absenteeism Data	To develop an additional surveillance tool, TPH is working with the Toronto District School Board to obtain access to data on absenteeism among school-aged children.		
Operational Preparedness	Incident Management System (IMS) assignments and training	<ul style="list-style-type: none"> ▪ TPH will use the IMS as the organizational structure to manage the response to pandemic influenza. Specific roles are being confirmed. ▪ Technical briefings were held for all TPH physicians. 	<ul style="list-style-type: none"> ▪ Training of management personnel will begin in 2007. ▪ Communicable Disease Control (CDC) management will receive a technical briefing March 22. 	
Mass Vaccination Clinics	Memoranda of Understanding with School Boards	<ul style="list-style-type: none"> ▪ Schools have been identified as sites for mass vaccination clinics. ▪ The Toronto District School Board has agreed on a memorandum of understanding. 	The Office of Emergency management is preparing a report to City Council to seek authorization for the City Manager to sign memoranda of understanding with the school board and other external institutions for the use of facilities during an emergency.	

1. Toronto Public Health (TPH) Planning and Preparedness

	Activity	Progress since last report	Next steps	Issues pending Federal or Provincial direction
Mass Vaccination Clinics (continued)	Planning		<ul style="list-style-type: none"> Identify potential staff for clinics. Develop data management system. 	<ul style="list-style-type: none"> Depending on the availability of vaccine, additional staff may be required to operationalize the clinics Scope of practice and liability issues regarding vaccinators.
Assessment, Treatment and Referral Centres	Planning	<ul style="list-style-type: none"> A work group of the Toronto Pandemic Influenza Advisory Group is developing an operational plan which will be completed by May 2007. 	The operational plan will be considered by the Advisory Group in May and will be included in the next version of TPIP.	<ul style="list-style-type: none"> Issues related to staffing, legal status, equipment, supplies, and budget remain unresolved. Mechanisms for the distribution of antiviral medications for early treatment.
Health Risk Assessment and Communications	Public Education Campaign	<ul style="list-style-type: none"> Three posters and two fact sheets on infection control have been posted on the TPH website and translated into 14 languages. 5,000 copies of the infection control posters have been distributed to the Toronto District School Board and 3,000 to the Toronto Catholic District School Board. 	<ul style="list-style-type: none"> Posters will be distributed to sites including emergency shelters, drop-ins and community health centres. The Pandemic Influenza website will be redesigned to make it more accessible. 	
Public Health Measures	Participate on the MOHLTC Public Health Measures Work Group	The group is discussing which sections of the Centers for Disease Control document " <i>Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States</i> " should be adapted into the next version of OHPIP.	The group will hold a face-to-face meeting April 18.	

2. City of Toronto Planning and Preparedness

	Activity	Progress since last report	Next steps	Issues pending Federal or Provincial direction
Continuity of Operations Planning (COOPs)	Review of Priority Activities	Divisions have aligned their criteria for designation of Tier One operations.	The Office of Emergency Management (OEM) will host a follow up divisional planning meeting in Spring 2007.	
Occupational Health and Safety	Employee Education and Communications	TPH has provided five information sessions for 140 joint health and safety committee members in Cluster A..	TPH will provide sessions for joint health and safety committee members in Clusters B and C.	
Human Resources Policy	Policy Development and Consultation	The City Manager and other senior managers met with the leaders of the City's unions and association on March 20 to provide them with an overview of the City's planning and preparedness efforts to date and to engage them in a discussion about the Union/COTAPSAI's role in the development of the City's contingency plans.		
Stockpiling	Stockpile Equipment for pandemic influenza and Tier 1 Operations	The Medical Officer of Health is engaged in ongoing discussions with the City Manager on stockpiling requirements.	Final decisions on City stockpiling to be implemented.	

3. Linkages with the Health Care System

	Activity	Progress since last report	Next steps	Issues pending Federal or Provincial direction
Physician Communication and Engagement	Outreach/Consultation	<ul style="list-style-type: none"> ▪ Physician Communication and Engagement subcommittee has met twice (January 19 & March 9). ▪ Additional fax and email information has been received in response to the January 2007 follow up survey. ▪ Exploring purchase of additional physician fax and email information. ▪ AMOH attended meeting organized by the Canadian Public Health Association and the Canadian College of Family Physicians to discuss tools for family physicians. 	<ul style="list-style-type: none"> ▪ Testing of urgent communications physician list. ▪ Contact national organizations to advocate for educational opportunities. 	Inability to communicate with all physicians in a timely manner.
Engagement of the Health Care Sectors	Long Term Care Homes Planning Meeting		TPH is organizing a meeting on April 13 with all long-term care homes in Toronto to share information on pandemic influenza planning.	
	Cross-sectoral planning		TPH will host a cross-sectoral planning meeting May 10.	

4. Working with the Community

	Activity	Progress since last report	Next steps	Issues pending Federal or Provincial direction
Homeless and Housing Service Providers	Education and Information Sharing	A meeting of representatives from shelters, drop-ins, and rooming houses, organized by TPH, had to be cancelled because of poor response.	Discuss alternative strategies with Shelter, Support and Housing Administration.	
Sectoral Planning	Planning Guides	New or revised guides have been posted online and will be distributed in April for the following sectors: <ul style="list-style-type: none"> - Schools; - Day Nurseries; - Colleges and Universities; - Correctional Facilities; - Funeral Homes and Crematoriums. - Business community. 	<ul style="list-style-type: none"> ▪ Revised planning guides for community health centres and City program areas will be finalized. 	
	Consultations and Education Sessions	<ul style="list-style-type: none"> ▪ CDC Director presented to a meeting of financial sector representatives organized by Finance Canada in January. 	<ul style="list-style-type: none"> ▪ TPH will hold an educational meeting with the day nursery sector. ▪ TPH is scheduled to present at a planning workshop of the Canadian Association of University Business Officers, March 22. ▪ CDC Director will participate in a national agri-food planning meeting in late March. 	