

Pandemic Influenza Preparedness Update

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To:	Board of Health
From:	Medical Officer of Health
Wards:	All
Reference Number:	

SUMMARY

The report provides updated information on the epidemiology of influenza and outlines the progress Toronto Public Health (TPH) has made in its pandemic influenza 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 April, 2006, Toronto City Council endorsed the Toronto Pandemic Influenza Plan. A revised version of the plan, now titled the Toronto Public Health Plan for an Influenza Pandemic, was received by the Board of Health at its meeting of October 15, 2007. The Board of Health has requested that the Medical Officer of Health provide monthly verbal updates, quarterly written reports and an annual written report on the status of preparedness for an influenza pandemic. This is the first quarterly report for 2009.

ISSUE BACKGROUND

Influenza is a highly contagious respiratory illness caused by a virus which is constantly changing. 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. When outbreaks occur worldwide the event is called a pandemic. The exact nature of the next pandemic will not be known until it emerges. Influenza pandemics tend to 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. Because health care services in Toronto are currently working at or near capacity, a severe pandemic could overwhelm the health system.

TPH is the lead health agency for pandemic influenza planning, preparedness and response in the City of Toronto. Local planning is based on the Canadian Pandemic Influenza Plan (CPIP) and Ontario Health Plan for an Influenza Pandemic (OHPIP).

TPH is responsible for the local planning and delivery of disease surveillance and reporting, health risk assessment and communications, public health measures such as case and contact investigation and management, liaison with hospitals and other agencies, the distribution and administration of antiviral medication and vaccine, supporting Toronto Emergency Management Program Committee (TEMPC) operations at the Toronto Emergency Operations Centre, and ensuring psychosocial supports. In addition, the Ministry of Health and Long-Term Care (MOHLTC) has directed TPH to lead the planning of influenza assessment, treatment and referral centres - to be known as community flu centres - and play a coordinating role in the broader health care sector in the city. This coordinating role has been extended in OHPIP to include planning for all influenza assessment and treatment services, including the development of community flu centres if required. The Medical Officer of Health is to provide direction on the role of primary care in the public health unit.

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 (H5N1 avian influenza, which first caused human cases in 1997), but no human-to-human spread or at most rare, instances of spread to a close contact. There is currently no highly pathogenic H5N1 avian influenza in North America.

Human Cases

As of March 11th, 2009 the WHO reported a total of 16 cases of H5N1 avian influenza for 2009. To date, the WHO has confirmed human infection in fifteen countries. All confirmed cases with known exposures in 2009 are believed to have acquired their infection following contact with diseased birds. The case fatality rate in 2009 for confirmed cases varies by country, with an overall rate of 38% to-date.

Animal Cases

From January 2003 to February 2009, a total of 62 countries have identified highly pathogenic H5N1 infection in domestic and/or wild birds. There have been no cases identified in Canada.

B) Update on Toronto Public Health Planning & Preparedness

Incident Management System Training

TPH continued Incident Management System (IMS) training for all non-union staff, specific to the roles they have been assigned for responding to large scale emergencies such as pandemic influenza. Nine training modules were developed based on the emergency response functions within the IMS.

- 13 training sessions have been delivered to 153 non-union staff which include public health incident manager, emergency information, liaison, safety, operations, planning, logistics and finance/administration
- Three orientation sessions have been delivered to 51 non-union staff assigned to Tier 1 functions. Their roles will be to maintain TPH core services during an emergency.

TPH is currently developing training for non-union staff assigned to IMS sub-functions. These are the specific roles within each IMS function e.g. case and contact management, hotline. Fifteen training sessions have been scheduled for the period from late March to June 2009.

In addition, a series of table-top exercises involving all TPH non-union staff are being planned for the fall of 2009. The goal of these exercises is to test overall emergency readiness and provide an opportunity to practise emergency management skills.

Respiratory Protection Program

TPH developed a Respiratory Protection Policy in January 2009, as part of an overall emergency preparedness activity designed to protect the health and safety of TPH staff during an emergency event.

TPH launched a respiratory protection program in February 2009 to fit test all TPH staff to N95 respirators. Forty-one staff have been trained as fit testers using quantitative fit testing equipment. Each fit test takes 45 minutes and employees receive training during this time on how to use the respirator properly. Approximately 375 employees have been fit tested to date.

Mass Immunization Clinic Plan

A mass immunization clinic (MIC) plan has been developed to immunize Torontonians when vaccine to protect from the pandemic strain is made available. Forty-one school locations have been selected for immunization clinics and Memoranda of Understanding have been signed by the Toronto District School Board and the Toronto Catholic District School Board. Clinic flow pattern, roles and responsibilities, and policies and procedures have been developed. Outstanding issues include stockpiling of supplies not provided by the MOHLTC, courier needs, and human resource needs. TPH has been working with Corporate Human Resources and the volunteer sector to look at options for staffing MIC's.

TPH Pandemic Influenza Advisory Group

TPH continues to have quarterly meetings of the advisory group. Subcommittees have recently been reorganized to focus on (1) human resource needs and (2) primary care issues

(1) Human Resources Subcommittee

TPH and Corporate Human Resources have met twice with members of the volunteer sector including St. John Ambulance, Canadian Red Cross, Salvation

Army, United Way, and Volunteer Toronto to plan for potential roles for those volunteer organizations in an influenza pandemic emergency. Further meetings will be held in the spring 2009. Faith based groups will be consulted in the future.

(2) Primary Care Subcommittee

TPH continues to work with representatives from the primary care system to plan for influenza assessment, treatment and referral services in an influenza pandemic. The Ontario Health Plan for an Influenza Pandemic (OHPIP) states that influenza assessment, treatment and referral services will be provided in the community using the existing primary care system including Telehealth, family health teams, community health centres, physicians, nurse practitioners, walk-in clinics and pharmacies. The provincial pandemic influenza steering committee has convened two working groups to address the issues involved: Primary Care Working Group and Rapid Access to Antiviral Medication Working Group. Dr. Brian Schwartz, Director, Emergency Management Support, Ontario Agency for Health Protection and Promotion and Scientific Advisor, Emergency Management Unit, MOHLTC is co-chair of both working groups. Dr. Schwartz will be attending the next meeting of the TPH Primary Care Subcommittee in May, 2009 to update the subcommittee on the progress of the provincial working groups and to respond to questions and address issues.

TPH Influenza Assessment, Treatment and Referral Centres (Flu Centres)

TPH plans to open four to six influenza assessment, treatment and referral centres during an influenza pandemic to address the needs of specific populations (e.g. vulnerable populations, persons without a health care provider.) Potential sites have been chosen and finalized with Parks, Forestry and Recreation Division. Clinic flow pattern, roles and responsibilities, assessment tools, communication plan, and security plan have been developed. Other areas of work include development of policies and procedures, consultation with Community Care Access Centres for community referral support, transfer of patients to health care facility plans, and courier needs. TPH has been working with Corporate Human Resources and the volunteer sector to look at options for staffing flu centres.

Toronto Public Health Plan for an Influenza Pandemic

The Toronto Public Health Plan for an Influenza Pandemic is updated on the TPH website as new information evolves, significant changes are made in OHPIP or TPH planning and preparedness work progresses. Two chapters on surveillance were updated in March 2009 to reflect updated information in OHPIP including the implementation of the web portal and next steps. Additional chapters are currently being updated to reflect changes in TPH IMS structure, developments related to occupational health and safety, stockpiling and natural death surge planning, detailed logistical developments with respect to flu centres, mass immunization clinics as well as updating communications to reflect updates to the Corporate Strategic Communication Plan.

Central Ontario Pandemic Planners for Public Health

TPH continues to meet with public health partners across the GTA and central Ontario approximately every two months to share information/resources and collaborate on public health pandemic planning. Issues currently being addressed include the development of a social marketing survey through the Rapid Risk Factor Surveillance System (RRFSS) to assess the needs of the community for information during a pandemic emergency.

C) Update on City of Toronto Planning & Preparedness

Pandemic Influenza Steering Committee

The City Pandemic Influenza Steering Committee, chaired by the City Manager, continues to meet approximately every two to three months. The Medical Officer of Health and other TPH staff are members of this committee.

Corporate Stockpiling

TPH continues to work with the City Manager's Office, Purchasing and Material Management Division, the Office of Emergency Management (OEM) and other city divisions on the stockpiling of personal protective equipment (PPE), infection control supplies and antiviral medication. A joint report from the City Manager and the Medical Officer of Health recommending a phased approach to stockpiling was approved by Budget Committee on February 26, 2009, Executive Committee on March 24, 2009 and is going to City Council on April 29, 2009.

Phase 1 of the stockpiling includes the initial purchase of antiviral medication for employees who as part of their job are expected to provide direct care to persons with influenza i.e. TPH, Long Term Care Homes and Services, Children's Services, Emergency Medical Services (EMS), Toronto Fire Services, Shelter, Support, Housing & Administration, the Toronto Emergency Management Planning Committee and City Council. TPH, Long Term Care Homes and Services, and EMS began stockpiling PPE within their existing operating budgets. Phase 2 stockpiling (2009) includes a four week supply of PPE, the remainder of an eight week supply of antiviral medication for Phase 1 groups as well as TTC WheelTrans and the Toronto Police Service. Other items include hand sanitizer and surgical masks. Phase 3 stockpiling (2010) will include the remaining four week supply of PPE and infection control supplies, eight week supply of antiviral medication for Toronto Water and TTC, and critical operation supplies.

The joint report further recommended a diversification of antiviral medication stockpiles to 80% Oseltamivir and 20% Zanamivir for the purposes of prophylaxis. Diversification of the stockpile provides an alternative should resistance to Oseltamivir become an issue.

Natural Death Surge Planning

The City of Toronto Natural Death Surge Committee is led by Toronto Police Services, with membership including Emergency Medical Services, Office of Emergency Management, TPH, and Office of the Chief Coroner, other Agencies / Divisions and the Ontario Funeral Association.

The committee has developed a draft strategy to address the issues regarding a natural death surge with particular attention to deaths occurring in private homes. The draft strategy defines roles and responsibilities, provides guidance for dealing with anticipated increased deaths during a pandemic, and outlines the City's contingency plans to ensure bodies are removed from a death scene directly to a funeral home or temporary storage facility. The draft strategies include a Quick Response Team plan, investigation and pronouncement of deaths, temporary storage facilities, body transport, body storage, funeral services and body disposition.

Issues currently being addressed are costs for body transportation from temporary City morgues to funeral homes, prolonged body storage in institutions (hospitals and long term care homes), identification of legislative changes needed during a pandemic regarding the issuance of the medical certificate of death, supply management and burial requirements for faith-based groups.

Auditor General

The Auditor General requested an update with respect to outstanding recommendations made in his report to the Board of Health on December 4, 2007. The City Manager's Office coordinated and submitted the response. The results of this follow-up process are expected to be reported to the Board of Health in May 2009 and then to the Audit Committee in June 2009.

D) Update on Health Care Sector Planning & Preparedness

Health Care Sector Meetings

Local geographic health care coordination meetings have been organized by TPH to identify and work on issues at a local level. Four regional meetings were held in January-February 2009 to discuss common issues (e.g. community flu centres, human resources, etc), share information and resources. The next series of meetings is planned for May 2009.

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