



STAFF REPORT INFORMATION ONLY

Pandemic Influenza Preparedness Update

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| Date: | October 7, 2008 |
| 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. A new version of the Ontario Health Plan for an Influenza Pandemic (OHPIP) has recently been released and highlights are reported here. This report also summarizes the recommendations recently issued by the Pan-Canadian Public Health Network Council on the use of antivirals for prevention during an influenza pandemic.

Financial Impact

There are no financial implications arising from this report.

DECISION HISTORY

At its meeting of April 25, 26 & 27, 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 and quarterly written reports on the status of preparedness for an influenza pandemic. This is the third quarterly report for 2008.

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 virus and illness 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 most recent Canadian Pandemic Influenza Plan (CPIP) (released in December 2006) and Ontario Health Plan for an Influenza Pandemic (OHPIP) (released in August 2008).

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 2008 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, 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 September 10 the WHO reports a total of 36 cases of H5N1 avian influenza for 2008. To date, the WHO has confirmed human infection in fifteen countries. All confirmed cases with known exposures in 2008 are believed to have acquired their infection following contact with diseased birds. The case fatality rate in 2008 for confirmed cases varies by country, with an overall rate of 78% to-date.

Animal Cases

From January 2003 to September 2008, a total of 61 countries have identified highly pathogenic H5N1 infection in domestic and/or wild birds. There have been no cases identified in Canada.

B) Federal Developments

A report from the Pan-Canadian Public Health Network Council concerning the use of antiviral medications for prophylaxis during an influenza pandemic was released in August, 2008. It concludes that the use of antiviral medications for prophylaxis during an influenza pandemic could be recommended to governments to:

- 1) prevent illness among individuals who had been in close contact with an infected person in the period immediately preceding the declaration of a pandemic; and
- 2) control outbreaks in closed, high risk facilities during the pandemic period.

These recommendations are premised on adoption of the corollary recommendations which emphasize the need for a comprehensive communications strategy on the pan-Canadian pandemic influenza plan, strengthened occupational health and safety measures, including infection control in healthcare delivery settings, and additional research.

C) Provincial Developments

The MOHLTC released an updated version of the Ontario Health Plan for an Influenza Pandemic (OHPIP) on August 12, 2008. Significant changes from the previous version and their relevance to TPH are summarized in Attachment 1.

D) Update on TPH & City of Toronto Planning & Preparedness

The Toronto Public Health Plan for an Influenza Pandemic (TPHPIP) is updated on an ongoing basis as required i.e. as new information arises, significant progress in TPH planning occurs, or new versions of provincial or federal plans are released. Since the release of TPHPIP in October, 2007 several chapters are in the process of being revised or updated and are expected to be finalized by the end of the year.

E) Stockpiling Update

At its meeting on May 20, 2008 the Board of Health requested the Medical Officer of Health to include in his next written report on pandemic preparedness:

1. a comparison of anti-viral medication stockpiling, both for treatment and prophylaxis, for Canada, Ontario and other large jurisdictions throughout the world; and
2. the extent to which current stockpiling levels allow Toronto Public Health to adequately meet its responsibility.

TPH has conducted a scan of other large cities in Canada, the United States, the United Kingdom and other European countries, regarding plans for antiviral stockpiling. Generally, stockpiles are primarily established for treatment purposes, with enough to treat from 15 to 25% of the population. Some jurisdictions indicate that a portion may be used for early containment or prophylactic purposes but do not specify that proportion.

With respect to the adequacy of current stockpiling of anti-viral medication, the Province of Ontario is stockpiling enough to treat 25% of the population, which is consistent with

or exceeds the treatment stockpiles of other jurisdictions. In addition, the City of Toronto is in the process of purchasing anti-viral medications to potentially be used as prophylaxis for staff who, as part of their work, are expected to provide direct care to persons ill with influenza. This goes beyond the current federal recommendations on preventive use of anti-viral medications.

TPH currently has in place a four week stockpile of personal protective equipment and infection control supplies. OHPIP indicates that the MOHLTC will provide an additional four week supply at the time of the pandemic. Widely used planning assumptions anticipate resumption of supply chains in between pandemic waves. TPH continues to review its stockpile in light of new scientific information, new direction from OHPIP and scans of other jurisdictions.

In March 2008, the City Manager, Medical Officer of Health and staff met with the Acting Chief Medical Officer of Health and Acting Assistant Deputy Minister, Public Health Division to discuss stockpiling for pandemic influenza. The discussion included an update on the status of federal/provincial policy development on the use of anti-viral medications for prophylaxis, issues with respect to implementation of early treatment of cases and containment of infection. In addition, it was clarified that the Province of Ontario purchases anti-viral medications under the federal agreement with the pharmaceutical company and, although they share the City's concerns with respect to expiration of stockpiled anti-viral medications, they cannot provide any resolution on this.

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ATTACHMENTS

Attachment 1: Highlights from Ontario Health Plan for an Influenza Pandemic 2008