



**STAFF REPORT
ACTION REQUIRED**

**STOCKPILING REQUIREMENTS FOR PANDEMIC INFLUENZA
PREPAREDNESS**

Date:	January 24, 2008
To:	Executive Committee
From:	City Manager Medical Officer of Health Deputy City Manager and Chief Financial Officer
Wards:	[All Wards]
Reference Number:	

SUMMARY

The purpose of this report is to advise City Council of the stockpiling requirements essential to help ensure the continuity of critical City operations in the event of a pandemic influenza and to seek Council approval to purchase the antiviral medication Oseltamivir (Tamiflu) and report further on a funding source for the remaining requirements.

RECOMMENDATIONS

The City Manager, Medical Officer of Health and Deputy City Manager – Chief Financial Officer recommend that:

1. The antiviral medication Oseltamivir (Tamiflu) in the total amount of \$4,723,989.00 be purchased from Hoffman-La Roche Ltd.
2. Expenditures totalling \$606,100.00 be approved to set up a warehousing and distribution system for pandemic influenza supplies.
3. 2008 expenditures for warehousing and distribution of supplies and the purchase of antiviral medication Oseltamivir (Tamiflu) be funded from the City’s Emergency Planning Reserve Fund.

4. The Deputy City Manager and Chief Financial Officer report to the Budget Committee in 2008 on funding options for the remaining stockpiling requirements for pandemic influenza preparedness as outlined in the financial impact statement.
5. City Council request the Provincial Minister of Health and Long-Term Care to explore with the suppliers of Oseltamivir (Tamiflu) and Zanamivir (Relenza), on behalf of all government or government funded bodies in Ontario that need to stockpile these products, ways to minimize financial loss in stockpiling of these antivirals in the event that the stockpiled supplies expire and can no longer be used before a pandemic occurs.
6. City Council forward this report to all single and regional tier municipalities in Ontario with a request that they support recommendation 5 as well as Provincial partnership funding of antiviral medication, personal protective equipment and infection control supplies.
7. The appropriate City Officials be authorized and directed to take the necessary action to give effect thereto.

Financial Impact

The following table summarizes the estimated City expenditures for the stockpiling requirements for pandemic influenza preparedness.

Stockpiling Requirements for Pandemic Influenza Preparedness Expenditures (\$ millions)						
Year	Personal Protective Equipment and Infection Control Supplies	Antiviral Medication		Stockpiling 8 weeks of Operational Supplies	Warehousing and Distribution of supplies	Total
		TAMIFLU	RELENZA			
2008					0.606	0.606
2009	13.745	4.724	0.601	7.507	0.267	26.844
Total	13.745	4.724	0.601	7.507	0.873	27.450
Emergency Planning Reserve Fund						5.100
Additional Funding Requirements						22.350

Of the total \$27.450 million required, this report recommends commitments to purchase Oseltamivir (Tamiflu) totalling \$4.724 million and expenditures to set up a warehouse and controls of distribution totalling \$0.606 million in 2008. The City's Emergency Planning Reserve Fund with a balance of \$5.1 million will fund 2008 expenditures. With the exception of ongoing cost of warehousing staff of \$0.136 million, all expenditures are one-time. However, as the shelf life of the antiviral medication is only 4.25 years, future expenditures may be required to maintain the stock.

The City Divisions and ABCs considered essential to service continuity were also requested to provide their requirements for operational supplies to be stockpiled in the event of a pandemic influenza. Essential operational supplies are required to last 8 weeks in the event of a Pandemic. The required inventory totalling \$7.507 million is beyond what City Divisions and ABCs normally stockpile for ongoing operations. Stockpiling for personal protective equipment (PPE) and infection control supplies estimated at \$13.745 million is also well beyond what would be considered normal stockpiling of these types of supplies at the City.

The Deputy City Manager and Chief Financial Officer will report to Budget Committee in 2008 on a funding source for the remaining requirements for PPE and infection control supplies, antiviral medication, stockpiling costs for 8 weeks of operational supplies and ongoing staffing cost for warehousing totalling \$22.350 million.

In regard to provincial partnership funding, the City submits that the unique circumstances surrounding the planning for an event such as pandemic influenza requires appropriate provincial funding of antiviral medication, PPE and infection control supplies. However, the stockpiling for operational supplies and warehousing should remain a municipal responsibility.

DECISION HISTORY

On October 15, 2007, the Board of Health considered a September 28, 2007, report from the Medical Officer of Health (MOH) tabling the updated Toronto Public Health Plan for an Influenza Pandemic. In November, 2005 the Board of Health, in considering a status report by Toronto Public Health (TPH) on pandemic influenza planning, requested that the City Manager: ensure continuity of operations plans be in place by July 2006; proactively address HR & Labour Relations issues arising from an influenza pandemic; and implement an information and education plan for staff, collaborating with TPH staff.

This report responds to a key element in the Board of Health request as it relates to the City's continuity of operations planning and the purchase of supplies necessary to maintain essential City services should a pandemic influenza occur. The report seeks Council approval for the funding to purchase the antiviral medication Oseltamivir (Tamiflu) and set up a warehousing and distribution system for pandemic influenza supplies; and report further on a funding source for the remaining requirements.

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 the completely new strain of Influenza A virus, it can spread very quickly. When outbreaks occur in one or more countries or worldwide, the event is called a pandemic. The exact nature of the pandemic virus and illness will not be known until it emerges. 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. Because health care

services in Toronto are currently working at or near capacity, pandemic influenza could 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 (death) and morbidity (illness). 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.

A strain of avian influenza known as H5N1 has been spreading in bird populations globally. To date, there is no evidence that this virus has the ability to spread efficiently from person to person.

In order for the City's divisions, agencies, boards and commissions to prepare for an influenza pandemic, they must begin to stockpile supplies required when a pandemic occurs. Failure to do so may result in the City being unable to provide services to the public during the emergency.

COMMENTS

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.

As of January 24, 2008, the WHO reports a total of 353 human cases of H5N1 avian influenza and 220 deaths since 2003 and has confirmed human infection in 14 countries. Virtually all human cases are believed to have acquired their infection following contact with diseased birds. In previous years, the overall case fatality rate has been 60.1%. From January 2003 to January 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.

Stockpiling

The City has expressed concern at various times throughout the pandemic influenza planning process regarding the level of guidance it has received from the Provincial government on stockpiling of critical supplies including the use of antiviral medications, PPE and infection control supplies. In April, 2006 Mayor Miller wrote to Premier McGuinty to inform him of the City's pandemic influenza planning activities and to seek clarification on specific issues impacting municipalities. As it relates to stockpiling of critical supplies, the Mayor asked for clear provincial recommendations regarding the provision of PPE for both infection control and occupational health and safety requirements and clarity regarding the adequate stockpiling of antiviral medications for health care workers, emergency responders and those who provide

critical infrastructure. In addition the Mayor requested that funding be provided by the Province to assist the City to acquire and store critical supplies.

On April 24, 2007 the Chair of the Board of Health wrote to the Minister of Health and Long-Term Care and copied the Minister of Labour requesting clarification on a number of issues, including stockpiling of critical supplies. The letter expressed the City's desire to move forward with the stockpiling of PPE and requested the Province's position with regard to the use of N95 masks for non-medical staff who work with the general public or directly with people who may be ill with influenza. In addition Councillor Filion requested the provincial position on the prophylactic use of antiviral medication and whether the Ministry would be providing the City with this medication from the provincial stockpile or whether the City was expected to purchase it alone or whether essential service workers were expected to perform their jobs without it.

The response from the Province to both these letters indicated they were still in the process of clarifying many of these issues and would release guidelines in the near future.

TPH continues to ask for direction and guidance from the provincial government on issues that pertain to use of antiviral medication for prophylaxis and PPE/IC supplies. TPH staff participate on four provincial committees where these issues are raised and discussed: Ontario Health Plan for an Influenza Pandemic (OHPIP) steering committee; OHPIP community strategic advisory committee; public health subcommittee; vaccine and antiviral workgroup. Allison Stuart, director of the Emergency Management Unit (EMU), Ministry of Health Long Term Care (MOHLTC) attended the Board of Health on May, 14, 2007, upon invitation from the Board, to address these and other issues. On November 2, 2007 TPH participated in the IDEAS network, a pandemic influenza exercise, that included the federal and provincial governments as well as other parts of the health care sector. The debrief following this exercise highlighted the need for clarity and direction regarding use of antiviral medication for prophylaxis. TPH staff will continue to engage with the province on these issues.

However, as the City awaits clarification and guidance from the Province, it has become clear that it must begin making decisions on stockpiling of supplies without the aid of Provincial Government guidelines or policies. On November 23, 2007 the City Manager took the City's concerns to the Regional Chief Administrative Officers (CAOs) table. Although there is a wide range of planning activities taking place across municipalities, all CAOs agreed that consistency in approach at the municipal level is essential. Given the overall cost of pandemic preparedness in Toronto and the amounts potentially spent across the Province, the City Manager will continue to work with the Regional CAOs to establish a broader municipal negotiation process with the Deputy Minister of Health and Long-Term Care on issues affecting pandemic influenza planning at the municipal level.

On June 13, 2007, the City Pandemic Influenza Steering Committee approved in principle the interim recommendations of the MOH on stockpiling of PPE and infection control supplies for use by City of Toronto staff in the event of pandemic influenza. The MOH made these recommendations to the City Manager in the absence of federal and provincial guidance.

Also on June 13, 2007 Budget Committee recommended to Executive Committee the transfer of \$5.1 million to a pandemic preparedness account within the Emergency Planning Reserve Fund.

This funding will be used to establish an inventory of necessary materials and supplies to be used during a pandemic. An additional \$14.9 million will be required to cover the costs of purchasing, stockpiling (warehousing), and distributing all supplies required by City Divisions and ABCs in the event of a pandemic.

There are three broad categories of supplies the City has determined it must stockpile to ensure continuity of operations. They are personal protective equipment (PPE) and infection control (IC) supplies, antiviral medications and operational supplies.

Personal Protective Equipment and Infection Control Supplies

Personal Protective Equipment (PPE) and Infection Control (IC) supplies required in the event of a pandemic include masks, hand sanitizer, waste receptacle, hand soap, environmental cleaning supplies, etc. The Medical Officer of Health has recommended the City stockpile an eight week supply of PPE and IC supplies to cover the anticipated first wave of an influenza pandemic.

The MOH has provided the City's Pandemic Influenza Steering Committee with a list of recommended PPE and IC supplies, which would be required during a pandemic. The list is attached as Appendix A to this report. Based on advice from the Medical Officer of Health, the Pandemic Influenza Steering Committee determined that City of Toronto staff who, as part of their work, are expected to provide care to persons ill or suspected of being ill with influenza should be provided with properly fitted N95 masks or their equivalent. Those employees would include most staff from Toronto Public Health, Emergency Medical Services, Toronto Fire Services, Children's Services, and staff working in Homes for the Aged and emergency shelters. Some other civic employees may also fall into this category, for example, Wheel Trans staff, special constable services, etc.

Once the MOH has advised that a pandemic has reached Toronto and that a risk exists for City workers, a supply of surgical masks will also be available for staff who become sick at work and for the use by employees in the workplace. A decision regarding the use of these masks will be made in consultation with the MOH. The MOH continues to review new information on pandemic requirements as it continues to emerge. Should the recommended PPE and IC supplies change, the MOH will report to the City Manager any changes required to properly support the City's stockpiling plan.

The list of recommended PPE and IC supplies was distributed to all City Divisions and ABCs and they were requested to provide their estimated requirements. They were also asked to indicate the amount they had previously stockpiled and what was still required to be stockpiled.

Antiviral medication for Prophylaxis

The MOH recommended that antiviral medications be stockpiled for use as prophylaxis by employees who as part of their work are expected to provide care to persons who are ill with influenza (i.e. TPH, Homes for the Age, Children's Services, Emergency Medical Services, Toronto Fire Services, and Shelter, Support, Housing and Administration). These recommendations were based on increased risk of exposure in the workplace for these staff. In

addition, the City's Pandemic Influenza Steering Committee has recommended stockpiling for those providing essential services and key decision makers. They include Toronto Police Services, the Toronto Transit Commission, Toronto Water, and the Mayor and Members of Council.

The MOH has recommended the stockpile of two types of antiviral medications. They are Oseltamivir (Tamiflu), which can be taken by the majority of the population, and Zanamivir (Relenza), which is taken by those who cannot take Oseltamivir (Tamiflu).

Oseltamivir (Tamiflu) is only manufactured and supplied by Hoffman-La Roche Ltd. and Zanamivir (Relenza) is only manufactured and supplied by GlaxcoSmithKline Inc. (GSK).

The number of antivirals required is based on current recommended prophylactic dosing for an 8 week (56 days) period, the estimated duration of one pandemic wave. Beyond the first wave, it is anticipated that a vaccine will be available.

A survey of City divisions providing critical services to the public, TTC and Toronto Police was conducted to determine the amount of antiviral medication required for their staff. The M.O.H. has advised that 10% of the antiviral requirements are to be purchased as Zanamivir (Relenza) for those who cannot use Oseltamivir (Tamiflu) for various reasons. As a result, 10% of the antiviral requirements will be purchased as Zanamivir (Relenza) and 90% will be purchased as Oseltamivir (Tamiflu).

Given the two levels of services (health care field and essential City services) that require antiviral medication, the total cost for antivirals, based on an eight week supply is estimated at \$5.3 million.

Zanamivir (Relenza) has a delivery time of about 90 days whereas Oseltamivir (Tamiflu) has a much longer delivery time of approximately 12 to 18 months. Given this, it is recommended that a Sole Source Purchase Order (P.O.) be issued to the manufacturer of Oseltamivir (Tamiflu) for the City's estimated quantities to ensure that the City has sufficient stockpiling of this antiviral medication should a pandemic occur. With a shorter delivery lead required for Zanamivir (Relenza), it is not necessary to proceed with the purchase of this particular antiviral until later in 2008. Staff will ensure the delivery of both antiviral medications will coincide. This will prevent unnecessary expiration of medication over the next year.

Both manufacturers have confirmed that if the City's stockpiled supply is not used before its expiry date (4.25 years from the date of delivery) the City will suffer a financial loss. The City's expenditures for these medications should be considered as insurance to support the emergency response and key essential services. The City is concerned that because of lack of coordination on the purchase of this product by the Provincial or Federal Governments, all government and government funded bodies who need to stockpile antiviral medication run a risk of financial loss should they not use their supply before its expiry. There would also be a further cost of approximately \$9.0 thousand to dispose of the expired medication should both the Oseltamivir (Tamiflu) and Zanamivir (Relenza) stockpiled expire before a pandemic occurs.

The information obtained from the Divisions and ABCs indicates approximately \$2.4 million of pandemic supplies has already been stockpiled by City Divisions and ABCs. An additional \$13.7 million will be required to purchase PPE and IC supplies and \$5.3 million will be required to purchase antiviral medication. It should be noted that these are preliminary estimates and City staff will continue to review the data in detail to ensure that estimates are as accurate as possible.

Given the extraordinary costs associated with this planning process, it is recommended that City Council request the Provincial Minister of Health and Long-Term Care explore with the suppliers of Oseltamivir (Tamiflu) and Zanamivir (Relenza), on behalf of all government and government funded bodies in Ontario that need to stockpile these products, ways to minimize financial loss in stockpiling antiviral medications in the event that the stockpiled supplies expire before a pandemic occurs and can no longer be used. It is further recommended that City Council forward this report to all single and regional tier municipalities in Ontario with a request that they support recommendation 5 as well as Provincial partnership funding of antiviral medication, PPE and infection control supplies.

Operational Supplies

The City Divisions and ABCs were also requested to provide their requirements for stockpiling of operational supplies for their operations that are considered essential to service continuity. Operational supplies include a 6-8 week supply of items such as food and other necessities for the City's Homes for the Aged and Shelters as well as chlorine required to ensure the supply of safe drinking water, cleaning and janitorial supplies to maintain sanitary conditions, etc.

The total value of supplies required for the continuity of operations, based on an eight week supply is approximately \$9.1 million, with approximately \$1.6 million worth of supplies currently stockpiled by divisions. As a result, Divisions and ABCs will experience budget pressures in having to purchase and stockpile more supplies than they would during normal operations. Therefore, the Deputy City Manager and Chief Financial Officer will report to the Budget Committee in 2008 on funding options for the remaining stockpiling requirements for pandemic influenza preparedness as outlined in the financial impact statement.

Warehousing and Distribution of Supplies

Pandemic supplies required by the Divisions and ABCs that cannot be stored at their location will be stocked and tracked in a City owned central warehousing facility under the responsibility of Purchasing and Materials Management Division (PMMD). PMMD will manage all centrally stocked pandemic supplies in the Financial Information System materials management module. The pandemic supply inventory value would be held in an inventory holding account in the Financial Information System until required by the operating division at which time it would be charged to their operating budget. This will provide accurate reporting in terms of quantities, values and costing related to pandemic supplies. The pandemic supplies would be managed through the current Materials Management and Warehousing programs which includes contract management, inventory counting, replenishment, shelf life and ensuring that stock is rotated to avoid material obsolescence. In the event of a pandemic, the Divisions and ABCs would submit

their requests for pandemic supplies from PMMD Stores as required. PMMD would pick, issue and deliver the supplies as per the Division's or ABC's request.

There were three central warehousing options considered in determining the most suitable solution for the City. Those options included leasing space, leasing space with handling service and utilizing an existing City owned facility. The City owned and staffed facility option was selected by the Pandemic Steering Committee as being the most cost effective option that provided the best control over the purchase and distribution of supplies and monitoring costs. As a location has not been found to date, PMMD has engaged Facilities and Real Estate to search for a suitable existing City owned facility. The facility will have to accommodate all the supplies that the Divisions and ABCs have identified which need to be warehoused by PMMD.

When a City owned central warehousing facility has been secured there will be costs associated with the initial set up and preparation of the facility and provision of continued central stockpiling and distribution. Warehousing equipment, delivery equipment and staffing resources will be required. Based on the pandemic supplies identified by the Divisions and ABCs to date, estimated costs for staff and equipment requirements for the stockpiling and distribution of pandemic supplies, are \$0.606 million as an initial cost in 2008 and \$0.267 million in 2009 to set up a warehousing and distribution operation and an annual cost of \$0.136 million to maintain that operation. Property and facility security and access control provisions will be included in the warehousing strategy and initial set up requirements to ensure there are appropriate measures in place to protect the property, facility and warehouse contents.

In addition, Health Canada regulations specify that an Establishment License is required to store the antivirals until such time that they are distributed to City staff. The estimated annual license fee is \$10 thousand.

PMMD is working with Fleet Services to determine if there is a suitable solution for providing City owned vehicles to be used to deliver the stockpiled pandemic supplies. If a suitable solution is not feasible PMMD will have to acquire vehicles to meet that need (ie rental or purchase).

PMMD is developing a detailed corporate procurement and warehousing plan for the purchase, warehousing and distribution of supplies required in preparation for a pandemic emergency based on the stockpiling requirements provided by City Divisions and ABCs. This detailed plan should be finalized before the end of March 2008.

Tracking Costs of Pandemic Supplies

The costs for pandemic supplies will be tracked and reported in the same manner as was done for Severe Acute Respiratory Syndrome (SARS). The costs incurred directly by Divisions will be recorded in specific (non-program) accounts created for each Division.

For the stockpiling coordinated by the PMMD, the purchase of these supplies will be accumulated in one corporate inventory account and charged to the appropriate divisional cost center at the time of distribution. The resource/equipment requirements for warehousing and

distribution of the supplies will be charged to the PMMD pandemic specific non-program cost center. All the costs incurred (corporately and in each Division and ABC) will be reported periodically to Senior Management and Council by the Accounting Services Division.

Summary

One of the key elements to ensuring continuity of operations for the City is to have the necessary supplies available for staff to continue working through an influenza pandemic. In the absence of comprehensive provincial guidelines on the purchase and funding of such supplies, the Pandemic Influenza Steering Committee has determined that the City must begin the purchase of PPE, IC supplies, antiviral medications and operational supplies in order to be as prepared as possible should a pandemic occur in the near future. At the same time however, the City must continue its discussions and negotiations at the Provincial level through the ongoing work of Toronto Public Health and begin another level of provincial negotiation, at the broader municipal level, through the work of the City Manager and the Ontario Regional Chief Administrative Officers to ensure appropriate partnership funding between the provincial and municipal orders of government.

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ATTACHMENTS

Appendix A - List of PPE and IC Supplies recommended by the Medical Officer of Health

Appendix B - Information on Provincial and Federal Governments, Hospitals, GTA
Municipalities and Universities

APPENDIX A

List A: Interim Infection Control Supplies and Personal Protective Equipment recommended by the MOH for All Staff October 2007

Receives Supply	Type of Supply	Recommended Quantity	Rationale
All Staff	Tissue	1 box of tissue/week/employee	Maintain respiratory etiquette
	Hand Sanitizer	1 bottle/week/employee If an employee deals extensively with the public as part of their job, the amount should be increased to 1 bottle/shift/employee	Frequent hand sanitization will decrease the spread of influenza.
	Waste Receptacle	1 receptacle in close proximity to employee work station/area	Disposal of soiled tissues
	Hand Soap	3 X the usual amount of hand soap/person	There will be an emphasis on hand hygiene in order to decrease the spread of influenza. Some washrooms will also be accessed by the general public which will increase the amount of soap used.
	Environmental Cleaning Supplies	2 X the usual amount of environmental cleaning supplies	It is recommended that high touch surfaces be cleaned frequently.
	Surgical Masks	1 mask/employee	If an employee becomes ill at work, the ill employee should wear a surgical mask to prevent transmission to others.
	Surgical Masks	To be determined centrally	In consultation with the MOH, surgical masks may be provided to staff for use by employees in the workplace.

List B : Interim Infection Control Supplies and Personal Protective Equipment for Staff Who as Part of Their Work Are Expected to Provide Care to Persons Ill with Influenza as Recommended by the MOH
October 2007

Receives Supply	Type of Supply	Recommended Quantity	Rationale
<p>This includes most of: Toronto Public Health Emergency Medical Services Toronto Fire services Homes for the Aged Children's Services Shelters</p> <p>Some other City staff may also fall into this category in the event of redeployment.</p> <p>This does not include community influenza assessment, treatment and referral centres, as the PPE will be supplied by the MOHLTC.</p>	Tissue	1 box of tissue/week/employee	Maintain respiratory etiquette
	Hand sanitizer	1 bottle /shift/employee	Frequent hand sanitization will decrease the spread of influenza.
	Waste Receptacle	1 receptacle in close proximity to employee work station	Disposal of soiled tissues
	Hand Soap	2 X the usual amount of hand soap/person	Hand hygiene reduces transmission of influenza
	Environmental Cleaning Supplies	2 X the usual amount of environmental cleaning supplies	It is recommended that high touch surfaces be cleaned frequently.
	N95 masks	EMS and Homes for the Aged should base volume on operational procedures For all other health divisions, 4 N95 masks/ 8 hour shift/ employee	The Ministry of Health and Long Term Care is recommending the use of N95 masks for all health workers
	Surgical masks	1 mask/employee	If an employee becomes ill at work, the ill employee should wear a surgical mask to prevent transmission to others.
	Gloves	Health related divisions may currently have policy directions regarding glove changes. If they do not, gloves should be changed after each client contact. Divisions will need to estimate the average # of client contacts per hour.	
	Goggles or other type of eye protection	TPH recommends the use of reusable goggles. 2 goggles/employee	
Disposable gowns	4 gowns per shift/employee		

APPENDIX B

Information on Provincial and Federal Governments, Hospitals, GTA Municipalities and Universities and Ontario Power Generation

Federal Government

It is our understanding that the Federal Government has stockpiled treatment dosages of antiviral medication and a supply of respiratory protective equipment.

Provincial Government

The following information is excerpted from the Ontario Plan for an Influenza Pandemic 2007 (OHPIP):

“To be able to respond effectively to a pandemic and avoid supply chain problems, the Ministry of Health and Long-Term Care is asking all health care settings/providers to plan for and maintain a four-week stockpile of personal protective equipment and other critical supplies.”...“In addition, the ministry is developing a four-week provincial stockpile of personal protective equipment that organizations will be able to access when/if their individual/local stockpiles are exhausted.”

“To help organizations estimate their equipment and supply requirements, the Ministry has developed templates of generic equipment and supplies required to provide care for people with influenza in the community and in hospital- including personal protective equipment (PPE) and diagnostic equipment and supplies for direct patient care (see Chapter 10A). As OHPIP evolves and the roles of various health sectors are more clearly defined, the templates will be reviewed and refined.

The templates include:

- generic equipment and supplies across health sectors that would either be unavailable or in limited supply during a pandemic
- PPE required based on the Provincial Infectious Diseases Advisory Committee (PIDAC) and Ministry of Labour recommendations for infection control and occupational health and safety for influenza.”

“The province will take responsibility for direct procurement of SOME equipment and supplies for Flu Centres; local Advisory Committees /lead agencies will be responsible for procuring other supplies.” OHPIP Table 11A-2 outlines which supplies will be procured provincially or locally. In general, the MOHLTC will procure medical, PPE and IC supplies while cleaning, administrative, IT and some additional medical supplies are a local responsibility.

It is TPH's understanding that the MOHLTC has completed their stockpile of antiviral medication to treat 25% of Ontario's population. The MOHLTC is working towards completing its supply of 55,000,000 N95 masks.

Hospitals

The Ontario Hospital Association (OHA) has advised hospitals that it was available for them to purchase, but hospitals were not required to report back about their decision.

The Toronto Academic Health Sciences Network (TAHSN), made up of Toronto teaching hospitals affiliated with the University of Toronto, released its Pandemic Influenza Planning Guidelines in May 2006. A key recommendation is the stockpiling of antiviral medications to protect all hospital staff.

GTA Municipalities

A survey of eleven municipalities in the Greater Toronto Area (GTA) asking if they were making arrangements for stockpiling supplies required during a pandemic resulted in five responses.

Of the five responses, one (City of Oshawa) has indicated that it is making arrangements to stockpile pandemic supplies and four have indicated that they are not making any arrangements to stockpile pandemic supplies at this time.

GTA Universities

A survey of 5 universities in the GTA asking if they were making arrangements for stockpiling resulted in four responses to the survey.

Of the four responses, two (McMaster and York Universities) have indicated that they are making arrangements to stockpile pandemic supplies and two have indicated that they have not made any arrangements to stockpile pandemic supplies.

Ontario Power Generation

Ontario Power Generation has advised their pandemic preparation includes the following:

1. Supply of Oseltamivir (Tamiflu) for prophylaxis use for all employees,
2. Supply of Oseltamivir (Tamiflu) for all employees' families through their drug plan and family physician,
3. Supply of Zanamivir (Relenza) for 5% of employees based on their population,

4. First Responder Teams (doctors / nurses / trained members) to receive'
 - a. N95 respirators
 - b. Latex gloves
 - c. Gowns (latex and special cloth)
5. All employees to receive:
 - a. 6 surgical masks per day
 - b. hand wipes
 - c. hand sanitizer
6. Cleaning regime (double cleaning on shift change)
 - a. All employees clean own work area prior to leaving
 - b. All employees clean own work area upon arrival
7. Cleaning Pilot project
 - a. Application of a product called 'AGEIS' permanently sanitizes all areas applied at a cost of \$2 per sq ft. It is guaranteed for life on all flat surfaces.