HE-C 3-1

Region of Peel
Working for you

REPORT
General Committee

For Information

DATE: March 30, 2010

REPORT TITLE: **REGION OF PEEL RESPONSE TO PANDEMIC H1N1 2009 INFLUENZA**

FROM: Janette Smith, Commissioner of Health Services
David L. Mowat, MBChB, MPH, FRCPC, Medical Officer of Health

OBJECTIVE

The objective of this report is to provide Regional Council with the outcomes of the Region of Peel Health Services and Public Health response to protect Peel residents against pandemic H1N1 (pH1N1) 2009 influenza, and to summarize the costs associated with pH1N1 preparedness and response.

REPORT HIGHLIGHTS

- The World Health Organization announced pandemic alert phase 6 on June 11, 2009.
- The second wave of pH1N1 started in early October and peaked in Peel from October 25 to November 7, 2009.
- Since the report of the first case of pH1N1 influenza in Peel in April, 2009, 1,049 confirmed cases have been reported in Peel Region including 185 hospitalizations and 10 deaths.
- Peel Public Health offered immunization clinics from October 27, 2009 to January 8, 2010 and 104,147 clients were seen at the clinics. In addition, over 302,000 vaccine doses were distributed to physicians and other providers in Peel during this time period.
- The Region of Peel set up two flu assessment centres that opened on November 10 and 12 and were closed on November 18. Service was provided to 295 residents in these clinics.
- The cost associated with pH1N1 preparedness and response was $6.6 million and $0.6 million for flu assessment centres.
- The Ministry has sent a letter indicating approval for 100 per cent of the costs to December 31, 2009.
- The funding announcement will result in 2010 unanticipated revenue of $2.5 million. Staff will bring back a report with recommendations on service level and financial strategies regarding the 2010 unanticipated revenue.

DISCUSSION

1. Background

The first cases of novel H1N1 influenza in Ontario were reported in April, 2009. As of February 5, 2010, 1,049 confirmed cases of pandemic H1N1 (pH1N1) had been reported in Peel Region, including 185 hospitalizations and 10 deaths. This grossly underestimates the true number of cases since not all cases were confirmed through laboratory testing.

The World Health Organization announced pandemic alert phase 6 on June 11, 2009. In anticipation of a second wave of influenza in the fall of 2009, pandemic response activities as set out in the Pandemic Influenza Plan for the Health Sector in Peel, 2007 were initiated. Activities included: healthcare coordination, public health measures and vaccine management and distribution, preparation for the administration of vaccine and establishment of flu assessment centres.

There are more than 1.2 million people in Peel. Administration of vaccine to a population this size, while maintaining high standards of efficiency, care and safety was an extensive undertaking that required significant time and resources to prepare and implement. Since Peel Public Health has fewer staff per capita than most other health units, the challenge to allocate enough staff for mass immunization and flu assessment centres required costly, alternative strategies.

According to the Ontario Health Plan for an Influenza Pandemic, 2008 (OHPIP), each community was encouraged to plan for and to oversee the development of flu assessment centres. The objective was to ensure that there would be alternative treatment centres, if the capacity of existing primary and acute care services was exceeded. Region of Peel Public Health coordinated as the lead agency for the planning and implementation of flu assessment centres for the Region.

2. Pandemic Preparedness and Response: Outcomes

a) Emergency Management and Health Sector Coordination

From April to October, 2009, pandemic response activities, which included surveillance, communication and emergency response planning, were managed by Public Health's Communicable Disease Control Group. On October 6, pH1N1 was declared a "significant event" by the Medical Officer of Health and Peel Public Health business continuity plans were enacted in order to train and deploy staff for mass immunization clinics. On October 30, authority was shifted from the Communicable Diseases Division to the Public Health Control Group, due to a surge in influenza activity and the opening of clinics. The declaration of a "significant event" was rescinded December 11, 2009, in response to decreasing influenza activity and the waning demand for pH1N1 vaccine.

Also during this time, the Pandemic Health Sector Coordinating Committee was established by the Medical Officer of Health, in order to communicate with the hospitals, LHINs and other community agencies, facilitating the management of the capacity of the health care system and advising on infection control.

b) Surveillance and Public Health Measures

Peel Public Health worked with local partners under tight timelines to initiate several enhanced surveillance initiatives to monitor the spread and change in pandemic virus activity. This included monitoring of school absenteeism through the Public and Separate School Boards and daycare absenteeism through Regional daycares. It also included surveillance for influenza-like illness among sentinel physicians within Peel Region.

Peel Public Health also implemented a system to monitor emergency department visits and hospital admissions to detect increases in influenza activity. This served as a trigger for opening flu assessment centres.

Based on surveillance data, peak influenza activity in the Region of Peel in wave two occurred from October 25 to November 7, 2009. Currently there is very little circulation of influenza in Peel. As of March 5, 2010, only seven cases of influenza have been reported in Peel in 2010.

Although initiated for the purpose of detection and monitoring the second pandemic wave, these enhanced surveillance initiatives will continue and will better position Peel Public Health to identify future outbreaks in our community.

Public health measures were implemented to reduce the spread of disease, including management of cases and contacts of pH1N1. Public Health also enhanced the frequency of information and education of infection prevention and control measures, such as use of personal protective equipment (e.g., masks), and hand hygiene. These were communicated to schools, workplaces, and the public.

c) Mass Immunization

Peel Public Health offered immunization clinics from October 27, 2009 to January 8, 2010, in accordance with the Mass Immunization Operational Annex to the Pandemic Influenza Plan for the Health Sector in Peel, 2007.

Approximately 460 Public Health staff were directly assigned to clinic operations. Nursing agencies supplied an additional 189 registered nurses who provided 11,750 hours of service. Approximately 500 additional staff and 216 volunteers from across the corporation were involved in supporting this operation.

Meeting the large-scale staffing requirements involved several complex processes including activation of Public Health Business Continuity Plans, collective agreement negotiations and an extensive hiring effort executed by Human Resources. Ongoing co-ordination between Communicable Diseases and Human Resources staff ensured that all of the recruitment, management and pay requirements were met.

While Public Health and agency staff focussed on delivering the service, many more Regional staff supported various aspects of clinic operations. Each location required establishment of agreements for use of the site, procurement and set up of equipment and furniture, parking, security, maintenance, advertising and signage. Staff from across the organization adjusted their work plans to make sure these were in place and managed throughout the time the clinics operated.

Overall, 104,147 clients were seen at Peel Public Health clinics. Mass immunization clinics were available at:

- Four large fixed sites: two located in Brampton and two in Mississauga
- Three short term sites: two in Caledon and one in Mississauga
- Additional sites to reach targeted populations, e.g., pregnant women, homeless populations and flu assessment centre staff.

Following an evaluation of the mass immunization initiative, the Mass Immunization Operational Annex to Peel's Pandemic Influenza Health Sector Plan will be revised.

d) Vaccine Distribution to Community Providers

On October 11, the Ministry of Health and Long-Term Care informed health units that pH1N1 vaccine delivery by physicians and selected providers would be permitted. Peel Public Health developed a vaccine distribution strategy within three weeks to ensure the equitable allocation based on patient population and size of practice. A courier service capable of maintaining vaccine cold chain was also contracted to provide direct vaccine delivery to providers. This proved to be an effective strategy for maintaining centralized control in situations of limited vaccine supply.

In addition to the vaccine administered at Peel clinics, 302,000 doses of vaccine were distributed to physicians, hospitals, long term care, correctional facilities, colleges/universities, and other providers.

e) Influenza Assessment Centres

The Region opened two flu assessment centres located in Mississauga and Brampton on November 10 and 12 respectively. These centres were located at Frank McKechnie Community Centre in Mississauga and Century Gardens Recreation Centre in Brampton and provided services to 295 residents of Peel. The centres were closed on November 18 due to decreased demand.

Corporate staff who led the implementation of flu assessment centres encountered many human resource recruitment issues. Deployment of Regional staff was challenging as normally the Region does not provide acute medical care Administrative support staff and nursing staff had to be contracted from external agencies. Nursing staff were acquired from agencies that had agreements with CCAC Mississauga-Halton and CCAC Central West.

Cultivating and maintaining physician commitment was challenging in the initial stages as a rate of pay had not been determined by the Ministry and the start and end dates for the centres were uncertain. It was challenging for physicians to commit to shifts since it would interfere with their regular workplace and they had no assurances the flu assessment centres would open. Chiefs of Family Medicine at each of the hospitals were helpful in recruiting physicians, including Emergency Room doctors, family physicians, and internists.

Based on this experience it has been recommended that the Ministry of Health and Long-Term Care conduct an evaluation to determine the cost benefit and effectiveness of establishing flu assessment centres in this tested model. Regional staff will be recommending that future centres be operationalized within the existing acute care delivery system.

f) Communication

A comprehensive communication strategy is vital to pandemic management. The newly developed pandemic Public Health communication infrastructure model provided a framework for communication that was effective during the planning phase of pH1N1 in informing public health staff, key internal/external stakeholders, website development and the development of basic communication.

During the implementation of mass immunization the pH1N1 landscape changed daily and required additional communication leadership and resources. The Public Health

communication model with a designated director, manager, and communications associate worked very well. Systems were put in place to manage large unexpected crowds arriving for immunization by establishing the posting of web wait time updates, a ticket system and "line walkers" to provide public relations and new information to residents who were waiting in lines outside clinics. Website and newspaper ads were key strategies to informing the public about pH1N1, priority groups and mass immunization clinic dates and locations. Physicians in our community were informed through regular faxed Health Professional Updates and contact with our MOH/AMOH office. School Boards, private schools and workplaces received regular communication in the form of letters for staff and parents. The Region's Customer Contact Centre was able to manage a surge in call volume and adapt quickly to changing communication messages.

Working closely with the Customer Contact Centre, an Emergency Health Queue was implemented for the first time and the Public Health Contact Centre staff responded to 2,641 calls that required a health professional. The Corporate Public Inquiry Centre was also set up and staff responded to more than 16,000 calls.

A large volume (more than 150) of media requests were received and accommodated by the MOH office and communication team. When an incorrect dose was given to 11 children, transparent and up front communication about the issue pre-empted further escalation and negative media.

Through the evaluation of this event, the communication annex for pandemic planning will be revised to include the successes and areas for improvement in order to be prepared for future events.

PROGRAM IMPLICATIONS

Once mass immunization clinics were in progress, there was significant impact on Peel Public Health programs. Mass immunization required large numbers of staff qualified to administer vaccine, i.e. registered nurses, as well as many other staff and volunteers to support clinic operations. The large scale redeployment affected many Regional departments and resulted in disruption of regular services.

FINANCIAL IMPLICATIONS

The cost associated with H1N1 pandemic planning and response totaled $6.6 million ($6.4 million for 2009 and $0.2 million for 2010). In addition, the cost related to the flu assessment centres operated by the Region was $0.6 million. The detailed costs are outlined below.

The Ministry of Health and Long-Term Care provided health units with a $10.00 per dose recovery for the H1N1 vaccines administered. To date, Peel Public Health has been reimbursed $1.0 million for the vaccinations administered through the mass immunization clinics. This leaves outstanding recoverable balance of $5.4 million for 2009 and $0.2 million for 2010. On March 26, 2010, the Region received a letter from the Ministry that a reimbursement of 100 per cent of the costs, representing $5,367,034 has been approved for payment for the period up to December 31, 2009. The Ministry has also verbally indicated that there will be a separate process to apply for funding for the 2010 portion of the costs.

As the Ministry did not commit in writing of their intent to fund 100 per cent of the actual costs, Peel conservatively estimated the 2009 H1N1 funding allocation at $3.9 million of the actual incurred costs of $6.4 million, representing 62 per cent subsidy rate. With this funding

announcement, Peel Health will generate a 2010 unanticipated revenue of $2.5 million. In August, Peel Health is expecting an announcement from the Ministry on Peel's funding allocation for cost shared programs. Staff will bring back a future report with recommendations on service level and financial strategies related to the 2010 unanticipated revenue.

H1N1 Planning and Mass Immunization Costs	2009	2010	Total
Internal Staffing Costs	3,217,053	89,390	3,306,443
Agency Nurses	763,299	779	764,078
Facilities (rental, maintenance, security, storage)	870,159	49,447	919,606
H1N1 Supplies (including initial stockpiling)	669,732	7,600	677,332
Communications	354,427	6,104	360,531
Other Operating Costs	531,468	38,588	570,056
Total	**$6,406,138**	**$191,908**	**$6,598,046**

Flu Assessment Centres Costs	2009	2010	Total
Internal Staffing Costs	148,907		148,907
Agency Nurses	41,820		41,820
Other External Labour Costs	87,435		87,435
Facilities (rental, maintenance, security, storage)	185,739	266	186,005
H1N1 Supplies (including initial stockpiling)	16,181		16,181
Communications	41,674		41,674
Other Operating Costs	70,034	1,521	71,555
Total	**$591,790**	**$1,787**	**$593,577**

March 30, 2010
REGION OF PEEL RESPONSE TO PANDEMIC H1N1 2009 INFLUENZA

CONCLUSION

The implementation of the pH1N1 outbreak response, including mass immunization and the establishment of the flu assessment centres, was an example of effective collaboration between Peel Public Health, Long Term Care, Paramedic Services and the Region of Peel departments, community partners and the medical community. The successful planning and execution of multiple complex health initiatives exemplifies the Region's commitment to protecting the health and well-being of the residents of Peel.

Janette Smith
Commissioner of Health Services

David L. Mowat, MBChB, MPH, FRCPC
Medical Officer of Health

Approved for Submission:

D. Szwarc, Chief Administrative Officer

For further information regarding this report, please contact Isabelle Mogck at extension 2615 or via email at isabelle.mogck@peelregion.ca

Authored By: *Monali Varia*

c. Legislative Services
Manager, Financial Support Unit (FSU)