



CHEO'S PANDEMIC PLAN

EXECUTIVE SUMMARY

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**Children's Hospital of Eastern Ontario
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Executive Summary

Ottawa experiences an annual winter influenza epidemic that significantly impacts the health of our children and youth. Children often serve as the ongoing source of infection in the community with those less than 5 years of age and those with underlying medical illnesses at greatest risk of hospitalization and significant morbidity/mortality. During regular “influenza season”, CHEO cares for large numbers of children/youth with influenza through our emergency, ambulatory and in-patient services.

In the near future, Ottawa will face an influenza pandemic; that is, a global epidemic caused by a novel form of the virus which has never previously circulated in humans and against which the world’s population has no pre-existing immunity. With this widespread susceptibility to infection, if the virus is readily transmitted between people while maintaining its ability to cause significant illness, an influenza pandemic is inevitable. It is widely acknowledged that a pandemic will cause significant morbidity and mortality and will overwhelm the present capacity of the health care system.

Since 2002, a novel avian (bird) form of influenza virus, H5N1, has caused more than 200 cases of human illness with a greater than 50% mortality rate. More than half of these infections have occurred in children/youth < 20 years of age. To date, most infected individuals have had direct contact with infected chickens and/or other avian species. In order for a pandemic to occur, this avian influenza virus must continue to evolve to enable efficient person to person transmission. Exactly when or how this will occur, is not yet known.

The World Health Organization (WHO) has called for all countries to prepare for the next imminent influenza pandemic. They will declare a pandemic when sustained human-to-human transmission of a novel influenza virus is confirmed. It is anticipated that the pandemic will occur in at least two waves with the first wave lasting 6-10 weeks and the second, possibly more severe wave, 3-10 months later.

The governments of Canada and Ontario have developed plans, which describe both their approaches to pandemic preparedness as well as their planned responses to the pandemic event. While Canada is seen as a world leader in pandemic preparedness, specific pediatric planning has not been a priority to date.

CHEO’s planning context

CHEO is an independent tertiary care pediatric hospital affiliated with the University of Ottawa. Our 1.5 million catchment area includes Eastern Ontario and Western Quebec. CHEO serves as the tertiary care pediatric centre for the Ottawa-Carleton Region, Western Quebec and the Baffin Region of Nunavut. CHEO is the only acute care health facility with in-patient paediatric services in Ottawa.

CHEO’s pandemic planning has been a collaborative, organization-wide process. Each area of the organization has been involved throughout, and developed a unit specific plan

which was subsequently reviewed, revised, and finally integrated into the overall CHEO plan. CHEO's representatives have participated in the Ottawa regional planning process, the Ontario provincial pediatric planning committee and in national pediatric pandemic planning discussions.

CHEO's Pandemic Planning Goals and Assumptions

CHEO's Pandemic Planning Goals are:

1. To minimize serious illness and mortality from pandemic influenza in children and youth who live in the region
2. To support CHEO staff and physicians during the pandemic period
3. To continue to serve as the tertiary care facility for children/youth of the region during pandemic
4. To minimize the impact of pandemic influenza on the delivery of essential health care services at CHEO

Given the present demographics of human infection with avian influenza and the historical over-representation of children/youth in previous influenza pandemics, CHEO's plan assumes that up to 30% of those infected will be children/youth. Our pandemic plan is therefore based on:

- approximately 2500 children/youth requiring ambulatory/ED visits per week
- 120-140 children/youth requiring hospitalization each week

Unlike in isolated, regional emergencies, the nature of an influenza pandemic is such that all regions in Ontario will be dealing with pandemic at approximately the same time. CHEO's planning has therefore assumed that we will need to be self-sufficient in our response to the situation.

General Overview of CHEO's Pandemic Response

In order to optimize CHEO's ability to respond effectively, all of CHEO's staff and physicians will be considered essential workers for the duration of the pandemic and will be expected to report for work. Human Resources, in consultation with Directors, has developed an extensive re-deployment plan to facilitate and co-ordinate staffing.

CHEO will implement its Incident Management System (IMS) at the declaration of a pandemic by the Provincial and regional authorities. CHEO will have ongoing communication and collaboration with regional partners in addition to other pediatric health care facilities across the country to ensure that organizational responses are co-ordinated with those of other facilities. CHEO will implement all provincial and regional directives as these are announced.

CHEO's plan has considered the unique medical, psychosocial and ethical issues that face children/youth and their families with respect to pandemic influenza. To the extent possible, CHEO will attempt to separate pandemic patients from non-pandemic patients

throughout the institution. All non-essential health services will be curtailed in order to maximize CHEO's ability to respond optimally. By re-configuration of hospital units and utilizing non-traditional patient care areas (ex. Daycare Surgery Unit (DCSU) as a second Pediatric intensive care unit (PICU)), the hospital's surge capacity during pandemic can increase to 215 beds. This will allow for 150 pandemic and 65 non-pandemic patients to be admitted. The maximum number of pediatric critical care beds will be 29. The emergency department will rapidly triage patients prior to entering the hospital and has developed a staffing template that would enable up to 350 patients per day to be seen. A detailed plan for the admission of pandemic patients and sequential declaration of inpatient units as pandemic units has been developed.

Ethical Guidelines

CHEO's pandemic plan has been developed following ethical guidelines and principles as directed in the Ontario Pandemic Influenza Plan with specific attention to the unique issues that result from providing health care to children/youth and their families.

Ongoing Re-evaluation of the Pandemic Plan

Given the number of remaining gaps in knowledge related to the nature of the next influenza pandemic, this plan is a living document. It will be reviewed and updated as new information becomes available. CHEO will undertake a complete annual review of the plan, even if no new information has arisen.

In addition, at the time of release of the first full version of this document (November 2006), a number of other unresolved issues remain. These include: the development of specific strategies within both our institution and within the broader regional planning context; provincial jurisdictional and legal/policy issues that still have not been determined and that CHEO will be required to follow; the development of national pediatric/youth specific triage and management protocols. CHEO's pandemic planning committee will continue to work on these areas of the plan, in ongoing collaboration with all of the above jurisdictions.

CHEO Pandemic Planning Committee

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To obtain a copy of CHEO's Pandemic Plan, please contact Luce Lavoie, Director of Public Relations at 613-737-7600 ext. 2658 or by email: lavoie_l@cheo.on.ca