

## **Message from the Medical Officer of Health**

The Niagara Region Public Health Department is pleased to release the Niagara Region Influenza Pandemic Plan, Version 1. This plan sets out a comprehensive region-wide approach for pandemic preparedness and emergency response planning, and provides thorough information to guide local pandemic planning activities.

This plan has been prepared by representatives from Public Health, the health care sector, emergency response providers, school boards, and numerous other community stakeholders over the past year. Working relationships among stakeholders have been strengthened and will aid in future planning and response to other emergencies and health-related issues. In addition, this document is based on current federal and provincial pandemic plans.

You will notice redundancy within the document, for example infection control practices, as we aimed to create a holistic plan, with stand-alone chapters. This document aims to be a springboard to stimulate dialogue and assist planning efforts among colleagues, stakeholders, and our broader community, as growing involvement in pandemic preparedness develops.

This is a living document and will be updated as necessary to reflect current best practices and changes to federal and provincial pandemic plans.

On behalf of myself, Dr. Sider, Dr. Feller, and the Pandemic Planning Team, I welcome any recommendations to the strengthening of this document. In terms of next steps, we are committed to further developing this document, to allow for a robust, comprehensive, and operational plan.

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## Executive Summary

This is the first official pandemic influenza plan for the Region of Niagara. It has been written by a steering committee which consisted of six sub-committees: Surveillance, Vaccine and Antivirals, Public Health Measures, Health Services, Emergency Services, and Communications. These sub-committees included representatives from Public Health, the health care delivery sector, emergency response, school boards, and other community stakeholders. The plan sets out a comprehensive region-wide strategic approach to health preparedness and response planning, and provides information to guide local pandemic planning groups. It is also important to note that Niagara Region's plan is closely aligned with provincial direction provided in the Ontario Health Plan for an Influenza Pandemic (OHP/IP).

The goals of the Niagara Region Influenza Pandemic Plan are in keeping with the provincial goals, which consist of the following:

1. Minimize serious illness and overall deaths through appropriate management of Niagara's health care system, and
2. Minimize societal disruption in Niagara as a result of an influenza pandemic.

The ethical and legal frameworks outlined in the Ontario Health Plan for an Influenza Pandemic for the province also provide the templates for response within the Region of Niagara.

The Niagara Region Influenza Pandemic Plan is written in response to the existing threat of a possible influenza pandemic. Its value, however, goes beyond assisting with the community response to a possible pandemic. Many of the aspects of the influenza pandemic plan will also assist in dealing with other health-related emergencies such as biologic, chemical, radiologic, or nuclear agents or events. As well, the working relationships established among the many stakeholders involved in the development of this plan will facilitate planning and response to other emergencies and health-related issues.

This first influenza pandemic plan represents the work that has been done to date. In some areas, the document contains concrete plans for how a particular area of response will be implemented. In other areas, it contains a range of options or an inventory of resources to assist with possible responses. This is felt to be a practical approach, as in many circumstances the exact situation requiring a response, and therefore the most appropriate response, cannot be accurately predicted in advance. In other areas of the plan, ideas are presented for future consideration and development.

This is a living document and will be reviewed as new information is available to reflect current best practices. It will require revisions as the international, federal, and provincial documents on which it is based are modified, and as further scientific information to assist with planning becomes available.

The following provides an overview of the structure and content of this planning document.

## **Introduction – Chapter 1**

This chapter reviews the legislative authority necessary during an influenza pandemic, the aim of the emergency management, and the response necessary. It reviews the planning assumptions established in the Region of Niagara to assist in the planning process. The chapter defines the pandemic emergency management linkages such as the lead agency, corporate support, departmental/service support, and local municipal management. The IMS structure is identified and outlined within this chapter.

## **Planning Approach – Chapter 2**

This chapter outlines the goals and planning objectives of the steering committee and the six sub-committees. In addition, the chapter reviews the ethical and legal/legislative framework which will guide the emergency response during an influenza pandemic. Each of the applicable Acts are summarized and links are provided to the entire document.

## **Pandemic Influenza – General Information – Chapter 3**

This chapter describes the basic features of how the influenza virus spreads, typical symptoms, how long it takes for infection to develop, and how long the virus persists in the environment. It reviews Avian Influenza and why health care experts are concerned about this influenza virus in its relationship to an influenza pandemic. Pandemic is defined, as well as how often pandemics have occurred in history and the preventative strategies learned from these prior pandemics. The World Health Organization's (WHO) alert phases are reviewed. Lastly, the potential health impact on the Region of Niagara is outlined.

## **Surveillance – Chapter 4**

This chapter reviews the importance of surveillance information in preparing for an influenza pandemic. The chapter outlines the websites and sources of information that provide information on the influenza situation around the world. Many of these sources are currently monitored on an ongoing basis and monitoring of these sites will be enhanced as a pandemic becomes more likely. The current mechanisms for monitoring influenza activity within the Region of Niagara are reviewed in the appendixes, which is primarily a "passive" system whereby reports are received by the Niagara Region Public Health Department. Additional surveillance mechanisms will be implemented to detect the arrival of influenza in the community. This form of "active" surveillance involves looking for signs of influenza through regular contact with health care organizations, schools, workplaces, and child care centres. The surveillance activities are described for each phase of the pandemic.

## **Antivirals and Vaccine – Chapter 5**

The World Health Organization, the Public Health Agency of Canada, and the Ministry of Health and Long-Term Care (MOHLTC) all agree that a monovalent influenza vaccine will be a

powerful tool for reducing disease, death, and societal disruption during an influenza pandemic. Antiviral medications will also play an important role in preventing and treating influenza illness during a pandemic. The availability of antiviral drugs will normally precede the availability of influenza vaccine. Until a vaccine is available, antivirals may be recommended for use preventively for specifically identified groups such as health care workers and other essential service workers. Antivirals have also been recommended for use in treating those at high risk of complications due to influenza. Priority groups for both antiviral medication and vaccination are being identified by the Ontario Ministry of Health and Long-Term Care. A plan to distribute the antiviral drugs during a pandemic is outlined; however, next steps include identifying distribution sites within the community. The issues related to personal and corporate stockpiling of antiviral drugs are being reviewed and not yet available for publication. The mass vaccination plan, including roles and responsibilities within the clinics, is included.

## **Public Health Measures – Chapter 6**

This chapter outlines Public Health Measures that are non-medical interventions that may be used to reduce the spread of the influenza virus. Public health measures include public education, case and contact management, community-based disease control strategies (i.e. social distancing, school closures and restriction/cancellation of large public gatherings), travel restrictions, and cross-border measures. The type of public health measures used will depend on the epidemiology of the virus (e.g. pathogenicity, modes of transmission, incubation period, attack rate in different age groups, period of communicability, and susceptibility to antivirals). Two categories of Public Health Measures have been determined – individual and community. This chapter describes each of the measures which will be taken during each phase of the pandemic.

## **Health Services – Chapter 7**

The delivery of health care services in the Region of Niagara during a pandemic will be extremely challenging. Niagara is already designated an under-serviced area in terms of availability of health care practitioners, and both community-based and hospital-based systems will be further stressed by employee absenteeism and the increased volume of patients seeking care. Due to the sheer size of the numbers involved, care for influenza patients must be largely community-based care and, in many cases, home-based care. In spite of this, increased numbers of patients will require emergency and in-patient care. While all health care providers will be impacted by influenza pandemic, the following groups will absorb the greatest shock: primary care physicians and nurse practitioners, ER doctors, internists and paediatricians, and all nursing personnel in ER. Optimal management of influenza in the Niagara Region will depend on 1) successfully supporting the efforts of community-based health care workers, 2) effectively utilizing scarce manpower and equipment resources in hospital and long-term care facility settings, and 3) strategically implementing alternative methods of health care delivery that are responsive, efficient, and needs based. The NRPHD pandemic plan for health services aims to facilitate the above by providing vision, education, leadership, communication tools, and limited manpower.

## **Infection Control – Chapter 8**

This chapter outlines the basic principles of infection control related to influenza. Infection control practices are outlined for the general public. In addition, infection control references for health care and community settings are provided. Adherence to infection control practices is essential to minimize the transmission of influenza. Frequent and careful hand washing is emphasized as a key infection control strategy and may be the only significant preventive measure available, particularly early in a pandemic. If the pandemic virus behaves differently (e.g. different routes of transmission, longer incubation period or period of communicability), infection control practices will be adjusted accordingly.

Note: The Ministry of Health and Long-Term Care is continuing to develop a provincial position on personal protective equipment (i.e. masks). In the absence of a provincial position, references to masks and/or respirators throughout this document should be interpreted broadly (i.e. facial protection).

## **Pandemic Communications Plan – Chapter 9**

This chapter outlines communication objectives, principles, and accountabilities during a pandemic. Internal and external stakeholders are identified, with specific strategies outlined to communicate pandemic key messages/information in a transparent, accessible, and real-time manner.