

Perth County Influenza Pandemic Plan

Chapter 6: Mass Vaccination and Antivirals

Perth County Influenza Pandemic Plan
Chapter 6: Mass Vaccination and Antivirals

TABLE OF CONTENTS

6.0 Introduction	6-5
6.1 Immunization of Priority Groups	6-5
Table 6A: Perth County Priority Groups for Vaccination	
Table 6B: Immunization Clinic Grouping in Perth County	
6.2 General Public Immunization Clinics	6-9
6.3 Immunization Resources.....	6-9
Table 6C: Human Resources Required for Public Clinics	
6.4 Immunization Clinic Process	6-11
6.4.1 Before the Clinic	
<i>Figure 6A – Mass Vaccination Centre Floor Plan and Clinic Flow</i>	
6.4.2 During the Clinic	
6.4.3 After the Clinic	
6.5 Next Steps	6-12
 Figure 6A: Mass Vaccination Centre Floor Plan and Clinic Flow	 6-13

Perth County Influenza Pandemic Plan
Chapter 6: Mass Vaccination and Antivirals

6.0 INTRODUCTION

Two of the tools that will be used to control the spread of pandemic influenza in Perth County are antiviral medication (Tamiflu® or Relenza®) and vaccine. The federal government has stockpiled one such medication. Antivirals will be important throughout the pandemic, but especially during the first wave when there may be no vaccine available to immunize people prior to contracting the illness. The Health Unit will receive medication from the Ministry of Health and Long Term Care and redistribute it in a manner that allows for its rapid use in appropriate circumstances.

Vaccines are one of the most cost-effective tools in the prevention of disease. During an influenza pandemic, a vaccine targeted at the pandemic strain will be one of the central tools for protecting the population in Perth County. Unfortunately, a new vaccine to protect against pandemic influenza will take months to develop, owing to the fact that the new strain must be shown to be an efficient transmitter of the illness from person to person before mass production can start. Any vaccine produced must be effective at preventing the illness caused by the exact virus; otherwise people receiving it will not be adequately protected. Although it is not expected that a vaccine will be available during the first wave of an influenza pandemic, when it does become available, the demand will be significant. Provisions have also been made in the event that a two-dose schedule is required.

The Perth District Health Unit will receive vaccine from the province in stages over several months. Because the supply will initially be limited, and the capacity of the Health Unit to administer the vaccine is constrained by the number of staff available, clinics will be held in stages. Over the course of the pandemic, the Health Unit will administer or distribute vaccine doses to individuals as per the provincially designated priority groups they have been placed in.

6.1 IMMUNIZATION OF PRIORITY GROUPS

The Perth District Health Unit will provide vaccine to priority groups using a number of different strategies. The priority groups are outlined in **Table 6A**.

Most members of priority groups 1-3 will receive influenza immunizations through their employer. This strategy is consistent with the typical scenario for vaccine provision during the annual influenza vaccine campaigns. The Perth District Health Unit will distribute vaccine to these priority groups and assist where required in organizing immunization clinics targeting only those listed as a priority.

Where an organization does not typically immunize their own staff, the Health Unit will hold clinics to provide immunization. Selected groups are addressed below:

- **Hospitals** – enough vaccine will be provided to Perth County hospitals to immunize priority staff as designated through the enumeration process which occurred in 2005 and will be updated periodically. This information together with direct consultation of hospital administration and their organizational plan should allow priority staff to be protected as soon as a vaccine becomes available and will ensure that critical hospital functions continue. Within hospitals, staff members are categorized in different priority groups, and the Health Unit will assist the hospitals in identifying which individuals should be immunized at which phase of their immunization program.
- **EMS**– the Health Unit will assist Perth County Ambulance in organizing clinics to immunize paramedics. As paramedics become more involved in routine annual non-pandemic influenza immunization clinics to immunize staff during a pandemic may be run exclusively by the paramedics themselves with organizational assistance by the Health Unit, or the clinics could be staged by the Health Unit only.
- **Long Term Care Homes** – the Health Unit will provide vaccine to LTCH's for immunization of staff providing direct resident care. As these staff members provide a critical service to a vulnerable population, it is essential to protect them, in order to protect against the introduction of the pandemic strain of influenza into the home. Residents of LTCH's are in a different priority group (Group 4) and will be provided with vaccine as it becomes available, but not necessarily at the same time that staff are immunized.
- **Police and Fire Fighters** – as members of priority Group 3, police and fire fighters will be provided with immunization. Clinics will be organized and run by the Health Unit at several central locations.
- **Physicians and nurses working in community settings** – special clinics will be organized and staffed by the Health Unit in some instances to facilitate the immunization of community health care providers as identified in priority Group 2. The Health Unit may provide vaccine to some groups within this priority group where efficient capacity exists to immunize those required while minimizing vaccine wastage. For instance, the Health Unit may organize and staff a special clinic where staff from a number of separate physician's practices can attend, and in other instances vaccine may be provided directly to the agency or physician if it is more efficient for them to immunize their staff directly.
- **Societal Decision Makers** – as members of priority Group 3, identified key decision makers involved in critical infrastructure will be provided immunization through clinics staged by the Health Unit.

- **Priority Groups 4-6** – all others not identified above will be provided an opportunity for immunization when additional vaccine becomes available. Residents of Perth County will be invited to specific clinics based on either their postal code or street boundaries within their town. Refer to Table 6B. Details regarding these clinics can be found in the sections below.

Table 6A: Perth County Priority Groups for Vaccination

Priority	Group	Members	Estimated Numbers
1 2	Front Line Health Care Providers Remaining health care providers	Hospital staff Physicians and NP offices LTCH CCAC Nursing agencies Public Health Pharmacies Labs EMS Fire fighters functioning as paramedics	2,739 Expected vaccination rate =90%
3	Emergency / essential service providers	Police Fire fighters not functioning as paramedics Hydro and other utilities Public transit Municipal politicians Municipal workers Funeral services Correctional services	850 Expected vaccination rate =90%
4	Persons at risk for fatal outcomes	65 years and older Chronic medical conditions Children between ages 6 and 24 months	12,465 Expected vaccination rate =80%
5	Healthy adults	Adults between 19 and 64 years with no underlying medical condition	46,868 Expected vaccination rate =80%
6	Children aged 24 months to 18 years	Children aged 24 months to 18 years	18,104 Expected vaccination rate =80%

Due to the double counting of some individuals that may belong to several priority groups, the total number to be vaccinated exceeds the current population of Perth County

Table 6B: Immunization Clinic Groupings in Perth County

	Postal Codes	Total number of persons to attend
Stratford	N4Z 0X0 N5A 1A4 to N5A 1V4 N5A 1V5 to N5A 2H2 N5A 2H3 to N5A 2X9 N5A 2Y1 to N5A 3L6 N5A 3L8 to N5A 3Y9 N5A 3Z1 to N5A 4W6 N5A 4W7 to N5A 5L9 N5A 5M1 to N5A 5Z7 N5A 5Z8 to N5A 6S1 N5A 6S2 to N5A 6S5 N5A 6S6 to N5A 7B2 N5A 7B3 to N5A 7L1 N5A 7L2 to N5A 7W3 N5A 7W4 to N5A 8B3 and N3A 3S9 to N3A 4E4 and N0B 2P0 AND N0K 1X0	2688 2452 2411 2404 2464 2426 2417 2441 2465 2231 1910 2438 2428 2467 1794 235 2562
New Hamburg Shakespeare and Sebringville		
St Marys	N4X 1A1 to N4X 1B2 N4X 1B3 to N4X 1C5 N4X 1C6 to N4X 1E1 and N0K 1V0	2459 2360 1263 939
Listowel	N4W 1A1 to N4W 1S9 N4W 1T1 to N4W 2R4 N4W 2R5 TO N4W 3G7 and Gowanstown N0G 1Y0 N4W 3G9 to N4W 3W2	1966 1983 1631 2511
Atwood	N0G 1B0	2121
Mitchell, Dublin, Fullarton, Brodhagen, Bornholm, Staffa	N of Hwy 8 and W of Hwy 23 and N0K 1B0 N of Hwy 8 and E of Hwy 23 and N0K 1A0 S of Hwy 8 and W of Hwy 23 and N0K 1E0 & N0K 1Y0 S of Hwy 8 and E of Hwy 23 and N0K 1H0	

6.2 GENERAL PUBLIC IMMUNIZATION CLINICS

Immunizing a large number of people during a time of high demand will prove challenging. One of the most challenging aspects of this relates to the availability of vaccine. It is expected that there will be extremely high demand for vaccine during an influenza pandemic; however it is possible that vaccine will be received by the Health Unit in stages. To enable the Health Unit to manage the volume and flow of people wishing to receive the vaccine, a targeted staging of clinics where particular groups of people within priority groups 4-6 are invited to particular clinics will be employed. **Table 6B** outlines the proposed groupings for mass vaccination clinics.

Public clinics will likely be staged in locations similar to those used during the annual flu shot campaign. Locations for clinics have been examined to ensure the following qualities are present:

- Wheelchair access
- Space to accommodate sufficient numbers of people
- Sufficient parking
- Indoor waiting areas
- Accessible by public transportation

On average there will be two clinics per day operating for ten hours per day, with two shifts of staff. Assuming that each injecting nurse can give 20 shots per hour, public clinics will be able to accommodate 1200 to 2000 clients per clinic. A system where residents will be invited by postal code or street boundary to attend particular clinics will be used to ensure that demand for the vaccine is managed. A target of 80% of healthy adults immunized in Perth County has been set to achieve potential benefit to those who cannot be immunized. It is estimated that approximately 50,000 people may present for immunization through general public clinics. This would require approximately 30 clinics throughout the County and could be achieved in 2-4 weeks.

6.3 IMMUNIZATION RESOURCES

The staging of mass immunization clinics will require adequate supplies of both human and material resources. Material resources such as syringes and other clinic supplies will be accessed from the Ministry of Health and Long Term Care which is stockpiling the needed materials. Clinic supplies will be delivered to clinic locations using a dedicated supply van, obtained at the start of the clinic schedule.

Table 6C: Human Resources Required for Public Clinics:

Function	Requirements	Limiting Factors	Perth County Plan Planning for Possible Solutions / Expediting Steps
Nurses	<p><u>General Public Clinics</u></p> <ul style="list-style-type: none"> • 6-10 injection stations with 1 nurse per station • 1-2 float nurses to address questions and to tend to “fainters” • 2 to preload vaccine into syringes and supply to injectors * <p><u>School Clinics</u></p> <ul style="list-style-type: none"> • 3-6 injection stations with 1 nurse per station • 1 float nurse/preloader 	<p>External supply of nurses may be extremely limited due to surges in need in the hospital and community care sectors.</p> <p>Team size will fluctuate with the school population with each school clinic lasting 6 hrs</p>	<p>Public Health Nurses may be more readily available for immunization clinic work as many other programs will be scaled back or stopped. Retired nurses, paramedics, vets or other classes of health care workers may be recruited to meet the human resource needs.</p>
Administrative Assistants	<p><u>General Public Clinics</u></p> <ul style="list-style-type: none"> • 3 to manage flow of clients and to distribute consent forms and info sheets as well as manage clinic stats <p><u>School Clinics</u></p> <ul style="list-style-type: none"> • 1 to process consent forms 	<p>Limited supply internally coupled with any flu-related illness will impact on availability.</p>	<p>Since many other health unit programs will be scaled back or stopped, Admin time may be freed for clinic work. Temp agencies could be tapped as well for additional staff</p>
Volunteers	<p><u>General Public Clinics</u></p> <ul style="list-style-type: none"> • 4 to assist with flow of clients, distribution of paperwork, and assisting clients post-vaccination to get refreshment <p><u>School Clinics</u></p> <ul style="list-style-type: none"> 3 to manage flow of students and to summon new classes 	<p>Many different agencies will require the assistance of volunteers during the pandemic, so coordination will be needed.</p>	<p>Social Services is planning for the coordination of volunteer activity in Perth county. Students could also be recruited to assist.</p>

*staff preloading vaccine into syringes may not need to be nurses. Availability of nurses will be assessed at the time of actual clinic scheduling and alternate staff for this function may be required.

6.4 IMMUNIZATION CLINIC PROCESS

6.4.1 Before the Clinic

The clinic will be set up according to a standard floor plan seen in [Figure 6A](#). Staff will arrive on site and begin preparing the physical layout of the clinic as well as the injection stations some time before the communicated start time. Preloading of vaccine will occur within the guidelines of the College of Nurses as well as vaccine manufacturers. With the expectation that the clinics will be well attended, assistance with security and traffic flow outside the building will be requested. Private security contractors as well as local police will be accessed to provide this service. The Health Unit will prepare consent forms, information sheets, and screening questions in advance using samples from previous routine flu shot clinics as well as OHPIP recommendations. Documents will be posted on the Health Unit website in advance of clinics and communication will encourage residents to review the information prior to attending the clinic in order to speed the flow of people through the clinic.

6.4.2 During the Clinic

Clinic planning will address issues that may arise out of any other recommended Public Health measure put in place during the pandemic to minimize the risk of illness spread. Residents attending the clinic will enter the clinic at the communicated start time. It is anticipated that residents may assemble at the clinic well in advance of the start time, however to ensure that the staff and physical setup are ready, the doors will remain closed. Clinic attendees will then proceed through the clinic in stages as outlined below:

Stage 1 – registration and screening

Attendees will be greeted by volunteers that will provide them with consent forms and direct them to tables where they can complete the forms. It is possible at this stage that any attendees reporting certain respiratory symptoms may be directed to a separate part of the clinic to avoid any potential spread of illness. Upon completion of the forms, attendees will proceed to the registration area where Administrative Assistants will review consent forms for completeness and clinic eligibility and refer clients to one of the injecting stations or to a float nurse to answer any medical questions. Should an attendee present to the wrong clinic (Their postal code is not included in the list being served at that particular clinic time), they will be directed to the appropriate clinic.

Stage 2 - Injection

Attendees that have passed through the registration process will then proceed to an injecting station when one is available. The nurse at the injecting station will review the consent form to ensure that it is understood and has been signed. Additional screening questions will be asked by the nurse to determine the appropriateness of proceeding with the immunization. The immunization will be given and the attendee asked to proceed to the waiting area for 15 minutes to assess for any signs of anaphylaxis. The injecting nurse will give the attendee a slip indicating that they have received the vaccine. It is possible that the attendee will be asked to complete a short questionnaire during the time they are waiting.

Stage 3 - Exit

After waiting 15 minutes, clinic attendees may leave the clinic. Additional information about pandemic influenza will be available.

6.4.3 After the Clinic

It is possible that people receiving the vaccine may require a second dose some time later. Information will be available at the time of the initial immunization regarding the time frame required between doses. An active recall system will not be employed to bring residents back for their second dose. A system nearly identical to that described above will be used and postal-code specific clinics will be appropriately timed. Residents returning for their second dose will be encouraged to bring their slip from the first clinic, however the residents themselves will be responsible to report the time elapsed from their first dose, as the Health Unit will not have the capacity to search paper consents from the first clinics.

6.5 NEXT STEPS

The mass vaccination plan for the Health Unit's response to pandemic influenza will be reviewed periodically and at least on an annual basis. Further detailing of the operational plan for many of the actions described in this chapter is ongoing with the intent that very clear step-by-step processes will enable the execution of the plan by staff assisting but not typically involved with the immunization program.

The Health Unit is awaiting further information and direction on antivirals from the Ministry of Health and Long term Care. Once this information has been received, further development of the Health Unit's antiviral distribution plan will be added to this chapter.

MASS VACCINATION CENTRE FLOOR PLAN AND CLINIC FLOW



