

Section 9 Antiviral

1. Objectives
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Antiviral Drugs (i.e., anti-influenza drugs) can be used to treat and prevent influenza, and will be an important disease management strategy during an influenza pandemic – particularly during the early wave(s) when vaccine is not available.

Ontario currently has an antiviral stockpile large enough to treat 25% of the population, which is the proportion of the population who will become sick enough during a pandemic to need antiviral treatment.

1. Objectives

1. To maintain the security of antiviral drugs supplied to HKPRDHU by MOHLTC.
2. To store, distribute, allocate and administer antiviral drugs efficiently and appropriately.
3. To monitor the safety and effectiveness of antiviral drugs as well as any development of resistance to antivirals.

2. Antiviral Supply

The federal government is responsible for approving and licensing antiviral drugs. At the current time, two antivirals are licensed for use in Canada for prophylaxis and treatment of influenza A infections: amantadine and oseltamivir (Tamiflu), a neuraminidase inhibitor. When administered within two days (48 hours) of the onset of illness, both amantadine and neuraminidase inhibitors (e.g., oseltamivir) are effective in reducing length of illness and hospitalization and, in the case of oseltamivir, influenza complications, but resistance to amantadine can develop when the drug is used for treatment during annual influenza season. Another antiviral, zanamivir (Relenza) is licensed for treatment only – and is the recommended treatment for pregnant and lactating women. A fourth antiviral, rimantadine is not currently licensed in Canada.

Because of amantadine's side effect profile and individual dosing requirement, oseltamivir (Tamiflu) is the drug of choice for most people during a pandemic. Clinicians may consider other drugs, based on their clinical expertise and judgment.

Based on consultation with chief medical officers of health, the Public Health Agency of Canada (PHAC) is now working with the provinces to establish a national antiviral stockpile, with a target of having enough supplies to treat those needing care and for early containment.

Ontario has committed to maintaining a stockpile large enough to treat up to 25% of the population. This stockpile is currently in place, and includes a supply of zanamivir to diversify the stockpile and provide appropriate treatment for pregnant and lactating women

3. Antiviral Storage and Distribution

To be effective, antiviral treatment must be started within 48 hours of the onset of symptoms, and the earlier treatment is started, the more effective it is. To provide timely treatment, Ontario must have an effective system for distributing antiviral drugs.

During a pandemic, the Ministry Emergency Operations Centre (MEOC) will be responsible for coordinating the distribution of antivirals across the province, and public health units will be responsible for coordinating the distribution of antiviral drugs among health care organizations at the local level. The system will address distribution of antivirals to special populations, including those under federal jurisdiction (e.g., First Nations). HKPRDHU will implement MOHLTC guidelines and directives.

4. Use of Antiviral Drugs

Ontario will develop a provincial policy on the use of antivirals for prophylaxis after consideration of the national policy (currently under development) and in accordance with the ethical framework for decision-making. This will help ensure a consistent approach to using antivirals for prophylaxis across all provinces and territories, which will lead to stronger public confidence and morale.

Currently there is no evidence that putting large groups of otherwise healthy Canadians on antiviral drugs in order to prevent influenza (i.e., prophylaxis) will slow or stop the spread of a pandemic; however, prophylaxis with antiviral drugs may play a key role in maintaining critical services (i.e., preventing infection in and providing reassurance to people caring for individuals with influenza as well as workers in critical industries) until a vaccine becomes available.

5. Monitoring Adverse Events

Based on national recommendations, Ontario will develop a mechanism to monitor adverse effects from antiviral drugs as well as the development of resistance. HKPR will adopt provincial mechanism to collect this information at the local level.

Φ Next Steps

HKPRDHU will implement policies being developed by the MOHLTC.

Ontario Health Plan for an Influenza Pandemic, Chapter 9, Accessing Antiviral Drugs and Vaccine, (p. 9-4).
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