

Antiviral Medications for H1N1 Flu Virus

FREQUENTLY ASKED QUESTIONS FOR PATIENTS

Published by the Pharmaceutical Services Division, B.C. Ministry of Health Services

Reviewed by the Office of the Provincial Health Officer, B.C. Ministry of Healthy Living and Sport; and the B.C. Centre for Disease Control

General Information

Certain antiviral medications can be used to treat influenza symptoms. The H1N1 flu virus can be treated by two prescription medications called oseltamivir (Tamiflu®) and zanamivir (Relenza®). Another antiviral medication, amantadine, does not work against the H1N1 flu virus.

These medications stop the influenza virus from multiplying. They work best if taken early (within 48 hours from when symptoms start). Influenza symptoms may include fever, cough, sore throat, and muscle or joint pains. Antiviral medications reduce symptoms and shorten the length of illness by one or two days. They also reduce the chance of serious outcomes such as lung infections (pneumonia) and hospitalizations.

Medications are different from vaccines. Vaccines protect against catching influenza. A vaccine for the H1N1 flu virus is currently being manufactured and is expected to be released in November 2009, for all Canadians who need and want it. The yearly seasonal influenza shot protects against some types of influenza viruses, but the 2009 annual seasonal shot will not protect against the H1N1 flu virus.

Prevention and Treatment with Good Infection Control

Everyone has a role to play in good infection control (that is, taking precautions to protect themselves as well as others around them). Even people taking antiviral medications should follow these recommendations. To avoid getting or spreading influenza it is best to:

- wash your hands often with soap and water, or use an alcohol-based hand rub, especially after you cough or sneeze and always before you eat;
- cover your mouth and nose with a clean tissue when you cough or sneeze;
- throw used tissues in the trash immediately;
- cough and sneeze into your sleeve;
- avoid touching your eyes, nose or mouth;
- avoid close contact with sick people as much as possible;
- stay home (rest, drink plenty of fluids) and limit contact with others if you are feeling sick;
- phone your doctor's office ahead of your visit.

Treatment with Antiviral Medications

Antiviral medications are not needed by everyone who gets influenza. Most people with mild symptoms do not require antiviral treatment. However, if symptoms worsen, you should call your doctor. Antiviral medications are recommended for people with moderate to severe influenza symptoms **OR** people at a higher risk of having complications or requiring hospitalization from influenza, regardless of how mild,

moderate, or severe their symptoms are (for example, pregnant women, or those with certain chronic conditions). Antiviral medications, with rare exceptions, should only be used for treatment (not prevention). If the medications are overused they may not work against the H1N1 flu virus anymore due to the development of resistance.

Antiviral medications should preferably be started within **48 hours** of when influenza symptoms first appear, in people described above with confirmed or suspected H1N1 flu virus. Testing is not needed before starting antiviral medications.

Please check with your pharmacist, doctor, or health care team if you have any questions about whether you need to take antiviral medications for your influenza symptoms. More information is also available by calling HealthLink BC at 8-1-1.

Table 1. Detailed information about the antiviral medications oseltamivir and zanamivir.

	Oseltamivir (Tamiflu®)	Zanamivir (Relenza®)
Available forms	Oseltamivir is available as a capsule or a liquid suspension. Children should take the child-strength version of the capsules wherever possible. The capsules can be opened and mixed with sweetened liquids (for example, chocolate syrup) right before taking the dose. The liquid may be the Tamiflu® product or a preparation made up by a pharmacist.	Zanamivir comes as an inhaled powder, which comes with a special inhalation device. The Relenza® product is not readily available. It is currently reserved for people in whom oseltamivir is not an option (for example, those who are resistant or intolerant to oseltamivir, or those who cannot take medications by mouth).
Recommended use	It works best if started within 48 hours from when symptoms start. Oseltamivir should be taken for 5 days. It should be taken twice a day (morning and evening). It is best taken with food or milk to decrease any stomach upset.	It works best if started within 48 hours from when symptoms start. Zanamivir should be taken for 5 days. It should be inhaled twice a day (morning and evening).
Warnings about unsuitable use	People with fructose intolerance should not take the liquid suspension as they cannot breakdown the fructose in the product. Ask your pharmacist or doctor about how to take this medication if you have kidney disease, or if you are on dialysis.	Zanamivir should not be used by people with severe reactive airways disease (for example, asthma and chronic obstructive pulmonary disease), because inhaling the powder can worsen their symptoms. People with lactose intolerance may be sensitive to the lactose in the product.
Side effects	Upset stomach, including nausea and vomiting, are the most common side effects. They can be decreased by taking oseltamivir with food, and usually go away after one or two days. Dizziness can also occur. Rare but serious mood and behaviour changes can happen. These include confusion, agitation and self-injury. Any side effects of concern (especially mood and behaviour changes) should be reported to your pharmacist or doctor, or by calling HealthLink BC at 8-1-1.	Cough, sinusitis and ear, nose and throat infections are the most common side effects. Upset stomach, including nausea and vomiting, can also occur. Other side effects are headache and dizziness. Any side effects of concern should be reported to your pharmacist or doctor, or by calling HealthLink BC at 8-1-1.
Drug interactions	There are no known important drug interactions. To make sure it is safe to take your other medications while taking oseltamivir, ask your pharmacist.	There are no known drug interactions. To make sure it is safe to take your other medications while taking zanamivir, ask your pharmacist.
Storage	Capsules should be stored at room temperature, away from direct heat and light. Liquid suspension may be stored at room temperature or in the fridge. The liquid cannot be frozen.	The inhaled powder should be stored at room temperature, away from direct heat and light in a dry area.