

AT A GLANCE

Antiviral Medications for Seasonal Influenza: Public Health Considerations

Updated: December 2022

Purpose

This document briefly describes key considerations for the use of antiviral medications as a public health measure for reducing the spread and severity of seasonal influenza, including outbreak prevention and control. It also provides additional resources for health care providers who may be prescribing influenza antivirals for their patient population(s).

Overview

Antiviral medications may be used for both the prevention (i.e., chemoprophylaxis) and treatment of seasonal influenza.¹

In Canada, two neuraminidase inhibitors – oseltamivir (Tamiflu®) and zanamivir (Relenza®) – are licensed for the treatment and prevention of seasonal influenza.¹

- **Note:** Although still licensed in Canada, amantadine is no longer recommended due to high rates of resistance observed among recently circulating influenza A viruses.¹

Prevention of Seasonal Influenza

Neuraminidase inhibitors are well-tolerated and effective when used for chemoprophylaxis of seasonal influenza in select circumstances.¹

The Association of Medical Microbiology and Infectious Disease Canada (AMMI) recommends the use of influenza antiviral chemoprophylaxis, combined with antiviral treatment of symptomatic individuals and concurrent administration of influenza vaccine, to reduce the spread of seasonal influenza in closed facilities (i.e., those with a fixed residential population with limited turnover or units that can be closed) experiencing an outbreak.¹

- Closed facilities include long-term care homes and retirement homes where residents may be at an increased risk of influenza complications due to advanced age and/or underlying medical conditions. Residents of other closed facilities, such as correctional facilities, may also face an increased risk of influenza transmission due to their unique environment.¹

Early empiric treatment with influenza antiviral medications is preferred over other strategies such as continuous seasonal prophylaxis (i.e., pre-exposure) or post-exposure prophylaxis.¹

Pre-exposure prophylaxis may be considered for use during community outbreaks of influenza for individuals at high-risk for complications in the following scenarios:

- During the 14 day period post-immunization (if vaccinated); OR
- When vaccination is contraindicated; OR
- When there is evidence of poor seasonal influenza vaccine effectiveness.¹

For persons at very high risk of complications, early presumptive treatment initiated as soon as possible after exposure to an infectious case (i.e., before symptoms begin), may be appropriate when influenza is prevalent; this strategy is preferred over post-exposure prophylaxis due to concerns regarding drug resistance.¹

Treatment of Seasonal Influenza

When used for treatment, antiviral medications have been shown to decrease the duration of influenza symptoms and reduce the severity and possible complications of influenza, such as hospitalizations and potentially deaths.¹

AMMI recommends early empiric antiviral treatment for seasonal influenza based on an individual's clinical presentation and their risk factors for developing complications.^{1,2}

Specifically, when influenza is circulating in the community, AMMI recommends influenza antivirals be used to treat adults and children with influenza-like illness (ILI) who:

- Are at higher risk of complications of influenza; OR
- Have severe, complicated, or progressive illness; OR
- Are hospitalized.^{1,2}

Antiviral medications work best if administered within 48 hours of symptom onset. Therefore, when influenza is circulating in the community, antiviral treatment should be started as soon as possible without waiting for laboratory-confirmation of influenza.^{1,2}

- **Note:** Antiviral treatment should still be initiated beyond the 48 hour window in severely ill individuals (such as hospitalized patients), and for those with progressive, severe, or complicated illness or risk factors for complications of influenza.^{1,2}

When to Consider Antiviral Medications for Treatment

Antiviral medications are recommended for the treatment of seasonal influenza if you answer 'Yes' to all three questions (1, 2, and either 3a or 3b).

1. Is influenza circulating in your community?

Consult Public Health Ontario's [Ontario Respiratory Pathogen Bulletin](#)³ or your local [public health unit](#).⁴

2. Does your patient have symptoms of ILI?

Symptoms can include sudden onset of fever, cough, headache, sore throat, muscle aches, and fatigue.

- **Note:** Fever may be absent in older adults.

3a. Is your patient at high risk for complications of influenza?

Those at high risk for complications include adults 65 years of age and older, pregnant women and women up to four weeks post-partum, and those with underlying medical conditions. (For additional details on high risk individuals see the [AMMI Canada foundational document for antivirals](#)).¹

AND/OR

3b. Does your patient have moderate, progressive, severe, or complicated influenza, such as individuals who are hospitalized with ILI?

Note: If patients without risk factors for complications and without serious illness present within 48 hours of symptom onset, antiviral treatment can be:

- Considered, but not routinely recommended, for those 1 to 5 years of age;
- Considered in those 18 to 64 years of age.²

Co-Administration of Influenza and SARS-CoV-2 Antivirals

Individuals co-infected with influenza and COVID-19 who are receiving remdesivir or other antivirals for their SARS-CoV-2 infection should also receive oseltamivir if they meet the above criteria for initiation of influenza antiviral treatment; however, it is presently uncertain whether there are significant drug-drug interactions.²

Resources for Prescribers

Recommendations

[Use of antiviral drugs for seasonal influenza: foundation document for practitioners – update 2019.¹](#)

[2021–2022 AMMI Canada guidance on the use of antiviral drugs for influenza in the COVID-19 pandemic setting in Canada.²](#)

Product Monographs

[Product monograph: Tamiflu®.⁵](#)

[Product monograph: Relenza®.⁶](#)

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