



# Outbreak Preparedness Toolkit

## Influenza & Antiviral Readiness

### Facilitator's Guide

**Time Required:** 30 min

**Target Audience:** Individuals involved with decision making regarding antiviral prophylaxis and treatment as well as front line staff providing direct care to residents.

## Introduction

Influenza vaccination and antiviral medication play a key role in the management of outbreaks of influenza, as they are effective for both the prevention and early treatment of influenza infection. Long term care homes and retirement homes should be prepared to preauthorize influenza antiviral orders for all residents prior to the start of the influenza season each year. The neuraminidase inhibitor, oseltamivir (Tamiflu™), is effective against influenza A and B viruses and is recommended by Toronto Public Health (TPH) as first line prophylaxis and treatment for influenza outbreaks.

Are you familiar with when and how antiviral medications should be given? Let's get prepared!

## Objectives

- Become familiar with how to apply the antiviral prophylaxis and treatment algorithm
- Understand the importance of preparing for influenza season (e.g. preauthorized orders ready for all residents, pharmacy identified)

- Facilitate discussions and critical thinking through application scenarios/situations

## Instructions

Read through the scenario and questions below and practice using the antiviral algorithm in the appendix to determine the course of action. The participant worksheet that accompanies this facilitator guide can be used to record discussions and answers to the questions.

**Note: If you would like to obtain a PowerPoint version of this activity, please email your TPH Liaison or [LRCT@toronto.ca](mailto:LRCT@toronto.ca).**

## Activity

### Influenza Outbreak Scenario

#### Background

Blueberry Fig Long Term Care Home is home to 58 residents across 4 units (Birch, Maple, Oak and Evergreen). There are two dining rooms at the facility: Birch and Maple share one dining room while Oak and Evergreen share another dining room. Each unit has their own small activity room and there is one large activity room on the main floor that is accessed by all units.

#### Scenario

##### February 15

Resident Violet Rain (V.R.), who is in a single room on Maple unit, became symptomatic with a fever and cough and was subsequently tested for COVID-19 and Multiplex.

##### February 16

Resident, Green Fern (G.F.), in a single room on the same unit, became symptomatic with fever, cough, and malaise and was tested for COVID-19 and Multiplex. V. R.'s result came back negative for COVID-19, Multiplex pending.

##### February 17

V.R.'s result came back positive for Influenza B.

56 hours passed since Violet became symptomatic and her symptoms have not improved. No more symptomatic residents on the unit or the facility and no staff were off sick.

TPH declared a **Confirmed Influenza Respiratory Outbreak** on Maple Unit at Blueberry Fig Long Term Care Home on February 17 subsequently issued a letter to the Director of Care at the facility, detailing the recommendations of TPH for the use of antivirals in the outbreak affected area. The letter included algorithms for the recommendations for prophylaxis and treatment of residents and recommendations for prophylaxis of staff ([See Appendix A](#)).

Resident	Unit	Symptom Onset	Test Results
Violet Rain	Maple	February 15	COVID-19 negative Influenza B positive
Green Fern	Maple	February 16	Pending

### 1. Who should be started on antiviral prophylaxis treatment and for how long?

**What dose should be given for prophylaxis treatment? *Consider residents and staff recommendations.***

- Prophylaxis should be started immediately upon confirmation of an influenza outbreak and should continue until the outbreak has been declared over (8 days after onset of symptoms of the last resident case or 3 days after exclusion of the last staff case, whichever is longer).
- All well **residents** on Maple Unit (regardless of immunization status) should receive antiviral prophylaxis immediately upon confirmation of an influenza outbreak
  - Oseltamivir Prophylaxis dose: 75 mg po once per day until the outbreak is declared over.
- All **staff** on Maple Unit who have not been immunized with this year's seasonal influenza vaccine or who received influenza immunization less than two weeks ago should receive antiviral prophylaxis.
  - Oseltamivir Prophylaxis dose: 75 mg po once per day, until the outbreak is declared over.

- Zanamivir Prophylaxis dose: 10 mg daily (two 5 mg inhalations once per day), until the outbreak is declared over.
- For **staff** that received Influenza vaccine less than 14 days ago, prophylaxis should be given until 2 weeks after influenza immunization or outbreak is declared over, whichever is shorter

**Note:** For dose adjustment and contraindications please refer to the Product Monograph

## 2. Who should be started on antiviral treatment and for how long?

- Resident Violet Rain has been **symptomatic for more than 48 hours** and has not been improving so should immediately start a treatment dose of Oseltamivir, 75 mg po twice per day, for 5 days. Since Violet is a lab confirmed influenza case, no further course of Oseltamivir is needed after the 5 days.
- Resident Green Fern has been **symptomatic for less than 48 hours** so should be started on a treatment dose of Oseltamivir, 75 mg po twice per day, for 5 days. Upon completion of the treatment dose, Green should switch to a prophylaxis dose until the outbreak has been declared over. If Green's results in a lab confirmed influenza case, then no further course of Oseltamivir is needed after the 5 day treatment dose.

**Note:** For dose adjustment and contraindications please refer to the Product Monograph

### February 18

Resident Green Fern's (G.F.)'s result came back negative for COVID-19 and positive for Influenza B.

PSW staff Daisy Bunch (D.B.) who provides care to residents on **both Maple and Birch Units**, called in sick with symptoms of a fever, cough, and body aches. D.B. had provided care to the two symptomatic residents on Maple Unit.

Two other residents from Birch unit that share a room, Sunflower Field (S.F.) and Pumpkin Vine (P.V.) became symptomatic and met the case definition and line listed.

S.F. and P.V. COVID-19 results negative and multiplex results pending.  
 After consulting with Toronto Public Health, it was decided to expand the influenza outbreak area to include Birch Unit.

Resident	Unit	Symptom Onset	Test Results
Violet Rain	Maple	February 15	COVID-19 negative Influenza B positive
Green Fern	Maple	February 16	COVID-19 negative Influenza B positive
Sunflower Field	Birch	February 18	COVID-19 negative Multiplex pending
Pumpkin Vine	Birch	February 18	COVID-19 negative Multiplex pending
Staff	Unit	Symptom Onset	Test Results
Daisy Bunch (PSW)	Maple and Birch	February 18	N/A

**3. Should any treatment be recommended for PSW Daisy Bunch?**

- No antiviral treatment is recommended by the facility.
- Daisy Bunch is to be excluded from work and can be referred to contact their health care provider to discuss their health needs and concerns.

**4. Residents Sunflower Field and Pumpkin Vine have been symptomatic for less than 48 hours. What should you recommend?**

- Sunflower Field and Pumpkin Vine should be started on a treatment dose of Oseltamivir, 75 mg po twice per day, for 5 days.
- Upon completion of the treatment dose, both Sunflower and Pumpkin should switch to a prophylaxis dose until the outbreak has been declared over, unless they receive a lab confirmation of influenza. If this is the case, then no further course of Oseltamivir is needed after the 5 day treatment dose.

**5. What recommendations should be made for the following individuals?**

**a. Residents on Birch Unit:**

- All **well residents** on Birch Unit (regardless of immunization status) should receive antiviral prophylaxis.
  - Oseltamivir Prophylaxis dose: 75 mg po once per day until the outbreak is declared over.

**b. Staff on Birch Unit:**

- All **staff** on Birch Unit who have not been immunized with this year’s seasonal influenza vaccine or who received influenza immunization less than two weeks ago should receive antiviral prophylaxis.
  - Oseltamivir Prophylaxis dose: 75 mg po once per day, until the outbreak is declared over.
  - Zanamivir Prophylaxis dose: 10 mg daily (two 5 mg inhalations once per day), until the outbreak is declared over
  - For staff that received Influenza vaccine **less than 14 days ago**, prophylaxis should be given until 2 weeks after influenza immunization or outbreak is declared over, whichever is shorter

**Note:** Prophylaxis should be started immediately upon confirmation of an influenza outbreak and should continue until the outbreak has been declared over (8 days after onset of symptoms of the last resident case or 3 days after exclusion of the last staff case, whichever is longer). For dose adjustment and contraindications please refer to the Product Monograph.

**February 20**

Resident Purple Lilac (P.L.) on Birch Unit, became symptomatic and meets the established case definition and is added to the line list. P.L. started Oseltamivir Prophylaxis dose of 75 mg po once per day on February 18.

Resident	Unit	Symptom Onset	Test Results
Violet Rain	Maple	February 15	COVID-19 negative Influenza B positive
Green Fern	Maple	February 16,	COVID-19 negative Influenza B positive
Sunflower Field	Birch	February 18,	COVID-19 negative

Resident	Unit	Symptom Onset	Test Results
			Multiplex pending
Pumpkin Vine	Birch	February 18,	COVID-19 negative Multiplex pending
Purple Lilac	Birch	February 20	Pending
Staff	Unit	Symptom Onset	Test Results
Daisy Bunch (PSW)	Maple and Birch	February 18	N/A

**5. What should be the next course of action for Purple Lilac, with regards to antiviral medication?**

- Since Purple Lilac has developed symptoms of influenza-like illness, immediately switch Purple to a treatment dose of Oseltamivir, 75 mg po twice per day, for 5 days.
- Upon completion of the treatment dose, Purple Lilac should switch to a prophylaxis dose until the outbreak has been declared over. If Purple results in a lab confirmed influenza case, then no further course of Oseltamivir is needed after the 5 day treatment dose.

**Note:** For dose adjustment and contraindications please refer to the Product Monograph.

## Debrief Discussion Questions

1. What challenges has your facility had in the past in preparing pre-authorized orders?
2. How have you overcome these challenges? Are there any ideas on how to mitigate these challenges in preparing for this year?
3. How does your facility track pre-authorized order completions?

4. Have you had to administer antivirals for an influenza OB in the past? If so, were there any challenges? How can these challenges be addressed in preparing for this year?

## Feedback

Thank you for completing the activity. We want to hear your feedback. Please complete this short survey (1-2 min) so we can continue to improve the tools.

[https://s.tphsurvey.chkmkt.com/TPH\\_OBPrep\\_Toolkit](https://s.tphsurvey.chkmkt.com/TPH_OBPrep_Toolkit)



## Additional Resources/References

- [PHO Antiviral Medications for Seasonal Influenza: Information for Health Care Providers, 2019](#)
- [PHO FAQ Antiviral Medication Use During an Influenza Outbreak: Congregate Living Settings](#)

*Version 2 (June 2023)*



## Appendix A – Antiviral Letter and Algorithms



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Deputy Medical Officer of Health

**Dr. Eileen de Villa**  
Medical Officer of Health

**Public Health**  
277 Victoria Street  
5th Floor  
Toronto, Ontario M5B 1W2

**Reply:** TPH Investigator's name  
**Tel:** TPH Investigator's Phone #  
**Fax:** TPH Investigator's Fax #

February 17, 2023

Blueberry Fig Long Term Care Home  
Toronto, ON

Dear Dr. John Doe,

**Re: 2022-2023 Influenza Season Recommendations for Antiviral Use for a Confirmed Influenza B Outbreak at Blueberry Fig Long Term Care Home on Maple Unit. OB # 3895-2023-5555**

On February 17, an influenza B outbreak was declared at Blueberry Fig Long Term Care Home on Maple Unit. This letter details the recommendations of Toronto Public Health (TPH) for the use of antivirals in the outbreak affected area, please see Tables 1 and 2 for specifics.

**The neuraminidase inhibitor, oseltamivir (Tamiflu™), is effective against influenza A and B viruses and is recommended by TPH as first line prophylaxis and treatment for influenza outbreaks.**

All well residents (regardless of immunization status), and all staff who have not been immunized with this year's seasonal influenza vaccine or who received influenza immunization less than two weeks ago should receive antiviral prophylaxis. Prophylaxis should be started immediately upon confirmation of an influenza outbreak and should continue until the outbreak has been declared over (8 days after onset of symptoms of the last resident case or 3 days after exclusion of the last staff case, whichever is longer). Treatment should be initiated as necessary.

Please note that if the influenza B outbreak extends to other areas of your facility it is expected that TPH's recommendations for antiviral use will also apply to those areas.

If you have any questions regarding TPH's recommendations, please do not hesitate to contact (TPH Investigator Name), Communicable Disease Investigator, at (416) XXX-XXX during business hours or after hours at 3-1-1.

Sincerely,

TPH AMOH/Physician Consultant's name  
Toronto Public Health

cc:

Attachments

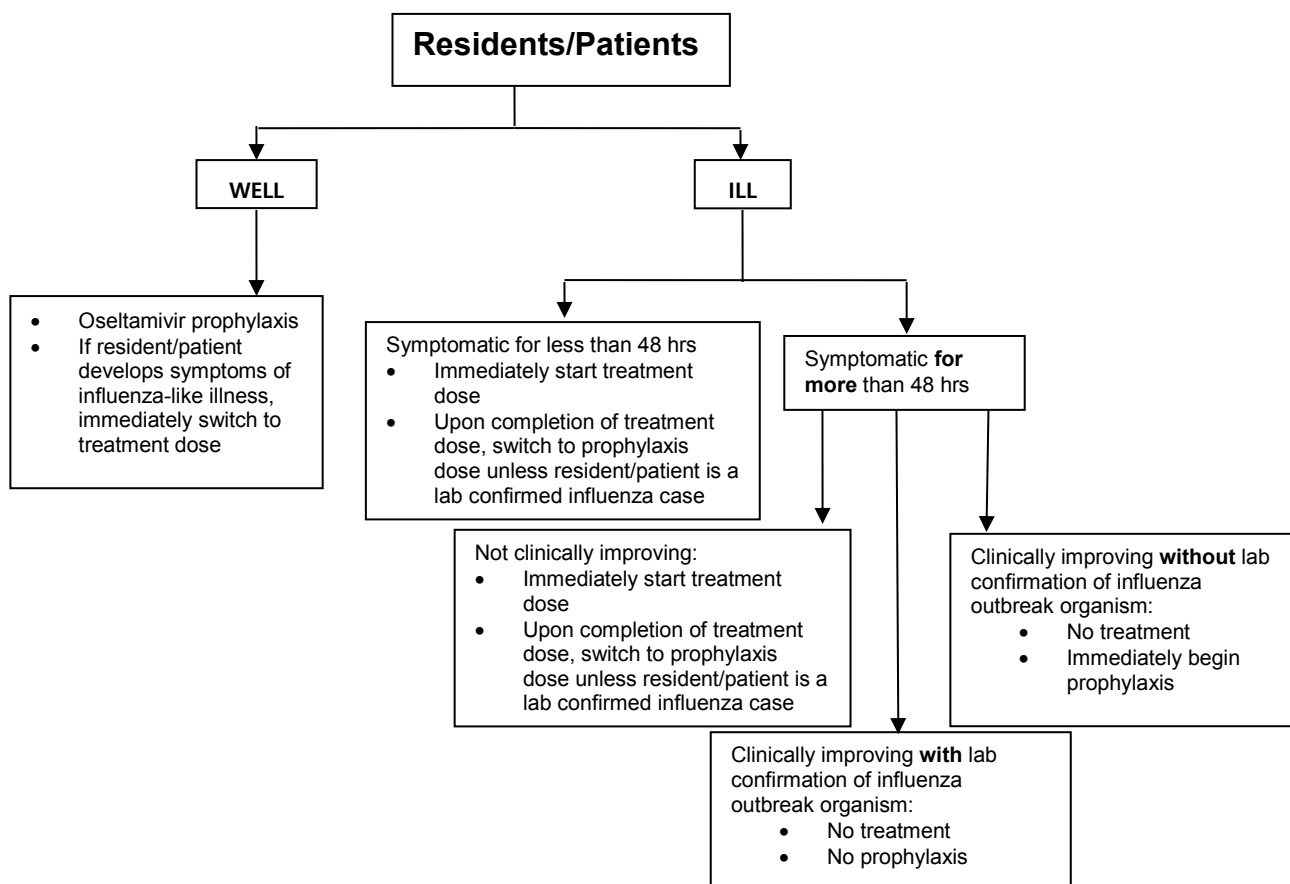
Table 1 Recommendations for Oseltamivir Prophylaxis and Treatment: Residents/Patients

Table 2 Recommendations for Antiviral Prophylaxis: Staff

**TABLE 1: RECOMMENDATIONS FOR OSELTAMIVIR PROPHYLAXIS AND TREATMENT: RESIDENTS/PATIENTS**

Oseltamivir **Prophylaxis** dose: 75 mg po once per day, until the outbreak is declared over. \*

Oseltamivir **Treatment** dose: 75 mg po twice per day, for 5 days. \*

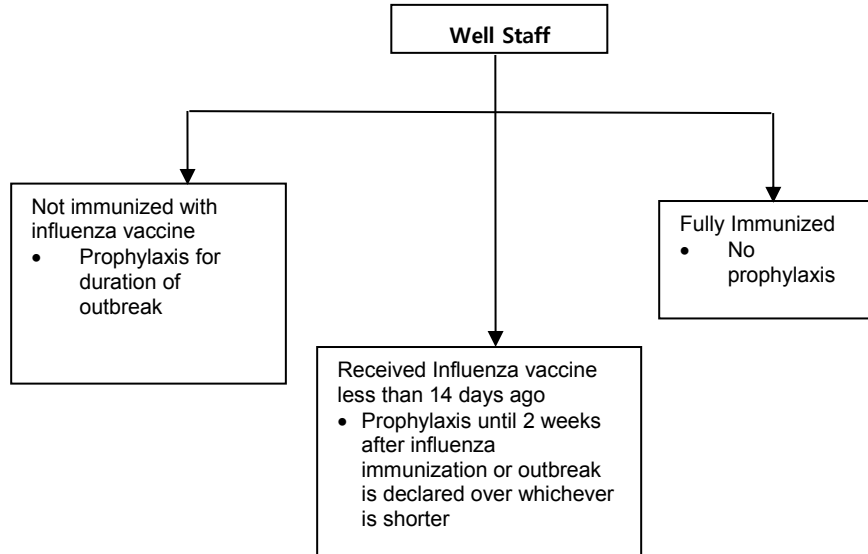


\*For dose adjustment and contraindications please refer to the Product Monograph.

**TABLE 2: RECOMMENDATIONS FOR ANTIVIRAL PROPHYLAXIS: STAFF**

Oseltamivir Prophylaxis dose: 75 mg po once per day, until the outbreak is declared over. \*

Zanamivir Prophylaxis dose: 10 mg daily (two 5 mg inhalations once per day), until the outbreak is declared over. \*



Ill staff: Exclude from work.  
Antiviral treatment upon the recommendation of their health care provider.

\*For dose adjustment and contraindications please refer to the Product Monograph.

## Appendix B – Scenario Test Result Summary

Resident	Unit	Symptom Onset	Test Results	Antiviral Dose
Violet Rain	Maple	February 15	COVID-19 –ve Influenza B +ve	Oseltamivir, 75 mg po twice per day X 5 days
Green Fern	Maple	February 16	COVID-19 –ve Influenza B +ve	Oseltamivir, 75 mg po twice per day X 5 days. Then switch to a prophylaxis dose until OB over If lab confirmed then stop in 5 days
Sunflower Field	Birch	February 18	COVID-19 –ve Multiplex pending	Oseltamivir, 75 mg po twice per day, for 5 days. Then switch to a prophylaxis dose until OB over If lab confirmed then stop in 5 days
Pumpkin Vine	Birch	February 18	COVID-19 –ve Multiplex pending	Oseltamivir, 75 mg po twice per day, for 5 days. Then switch to a prophylaxis dose until OB over If lab confirmed then stop in 5 days
Purple Lilac	Birch	February 20	Pending	Feb 18 - Oseltamivir Prophylaxis dose of 75 mg po

Resident	Unit	Symptom Onset	Test Results	Antiviral Dose
				once per day Feb 20- Oseltamivir, 75 mg po twice x 5 days. If lab confirmed then stop in 5 days
Staff	Unit	Symptom Onset	Test Results	Antiviral Dose
Daisy Bunch  (PSW)	Maple and Birch	February 18	N/A	No antiviral treatment is recommended by the facility.  Meet family physician