

**UPDATE: Seasonal Influenza Updates and Reminders**

<b>DATE:</b>	12/08/21
<b>TO:</b>	Health Alert Network
<b>FROM:</b>	Alison Beam, JD, Acting Secretary of Health
<b>SUBJECT:</b>	<b>UPDATE: Seasonal Influenza Updates and Reminders</b>
<b>DISTRIBUTION:</b>	Statewide
<b>LOCATION:</b>	n/a
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<b>COUNTY:</b>	n/a
<b>MUNICIPALITY:</b>	n/a
<b>ZIP CODE:</b>	n/a

**This transmission is a “Health Update” provides important information for a specific incident or situation; may not require immediate action.**

**HOSPITALS:** PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; **EMS COUNCILS:** PLEASE DISTRIBUTE AS APPROPRIATE; **FQHCs:** PLEASE DISTRIBUTE AS APPROPRIATE **LOCAL HEALTH JURISDICTIONS:** PLEASE DISTRIBUTE AS APPROPRIATE; **PROFESSIONAL ORGANIZATIONS:** PLEASE DISTRIBUTE TO YOUR MEMBERSHIP; **LONG-TERM CARE FACILITIES:** PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL, AND NURSING STAFF IN YOUR FACILITY

This Health Update provides Seasonal Influenza Updates and Reminders.

- The majority of flu viruses reported so far this season have been influenza A(H3N2) viruses. Approximately 80% of reported cases have been in children and young adults, who often spread flu.
- H3N2-predominant seasons have been associated with more severe flu seasons, especially among older adults and young children.
- Offer current seasonal influenza vaccine to all eligible persons aged 6 months and older. Flu vaccination is especially important for high risk groups such as elderly and pregnant females. Flu vaccine and COVID-19 vaccine can be given at the same visit for those eligible to receive both.
- Consider testing for both influenza virus and SARS-CoV-2 in patients with influenza-like illness (ILI).
- Treat suspected or confirmed patients as soon as possible with antivirals if the patient is hospitalized, at higher risk for influenza complications, or developing progressive illness. Starting antiviral treatment should not wait for laboratory confirmation.
- Consider antiviral post-exposure prophylaxis during influenza outbreaks in institutions (e.g., long-term care facilities, university/college dormitories), especially where there is co-circulation of SARS-CoV-2.
- Influenza is a reportable condition in Pennsylvania and all POSITIVE influenza laboratory test results, lab-confirmed hospitalizations, and lab-confirmed deaths should be reported electronically through Pennsylvania’s public health disease surveillance reporting system (PA-NEDSS).
- If you have questions about this guidance, please call your local health department or **1-877-PA-HEALTH (1-877-724-3258)**.

## **BACKGROUND**

Recent increases in influenza activity in many places in the United States signals the beginning of the 2021-2022 influenza season in the United States. While influenza activity is still low overall nationally, an increase in influenza A(H3N2) viruses has been detected in recent weeks nationally and in Pennsylvania, with most of these infections occurring in young adults. Influenza outbreaks in colleges, universities, and congregate settings such as Long-Term Care Facilities (LTCF) have been reported to Pennsylvania Department of Health (PA-DOH). Influenza vaccination coverage is still low nationally and in Pennsylvania. There is still time this season to benefit from getting an annual influenza vaccine. The influenza A(H3N2) component of this season's vaccines was recently updated in response to the evolution of a new group of viruses called 2a (i.e., 3C.2a1b.2a) that did not circulate widely last year and were not included in last season's H3N2 vaccine component, which makes it important to encourage receiving this year's seasonal flu vaccine<sup>1</sup>. While current influenza activity in Pennsylvania is low, upcoming holiday travel presents a potential for wider community spread. Promoting influenza vaccination will help prevent further spread and will curb hospitalizations and deaths and prevent overwhelming our healthcare system.

## **INFLUENZA OUTBREAKS AT LONG TERM CARE FACILITIES**

For detailed guidance on influenza outbreaks at LTCFs, please review PAHAN – 537 titled “[Testing and Management Considerations for Long-term Care Facility Residents with Acute Respiratory Illness Symptoms when SARS-CoV-2 and Influenza Viruses are Co-circulating](#)”

The toolkit for controlling influenza and respiratory virus outbreaks at LTCFs is available at this link: “[Influenza Outbreaks in Long-term Care Facilities: Toolkit for Facilities](#)”.

## **INFLUENZA VACCINE**

Available seasonal influenza vaccines in the United States provide protection against four different influenza viruses: A(H1N1)pdm09, A(H3N2), B/Victoria lineage, and B/Yamagata lineage viruses. In the past, influenza A(H3N2) virus-predominant seasons were associated with more hospitalizations and deaths in persons aged 65 years and older compared to other age groups and infection with other influenza viruses.

CDC is anticipating an increase in influenza illness this winter, and both A(H3N2) and B-Victoria viruses are already co-circulating. Moreover, as SARS-CoV-2 continues to circulate in the United States, illnesses associated with both viruses might stress health care systems. Even when vaccination does not prevent infection it can reduce the severity of influenza illness, helping to avert serious outcomes including hospitalization and death.

## **ADDITIONAL INFORMATION ON ANTIVIRALS**

There are two oral influenza antiviral medications approved by the U.S. Food and Drug Administration (FDA) commonly available by prescription to treat influenza virus infection that can also be used for post-exposure prophylaxis (PEP) following influenza exposure. These include oseltamivir (trade name Tamiflu®), and baloxavir marboxil (trade name Xofluza®) (Table

1). Inhaled zanamivir and intravenous peramivir antiviral medications are available; however, they are used less frequently.

**Table 1: Summary of most common antiviral medications for treatment and post-exposure prophylaxis of influenza**

	<b>Oseltamivir (Tamiflu®)</b>	<b>Baloxavir (Xofluza®)</b>
Approved by FDA	1999	2018
Mechanism	Neuraminidase inhibitor	Cap-dependent endonuclease inhibitor
Route of administration	<b>Oral</b>	<b>Oral</b>
Treatment dosing	<p><b>Daily dosing for 5 days</b></p> <ul style="list-style-type: none"> <li>Adults: 75 mg <b>twice daily</b></li> <li>Children: varies by age/weight<sup>2</sup></li> </ul>	<p><b>Single dose only</b></p> <ul style="list-style-type: none"> <li>&lt;80 kg: 40 mg</li> <li>≥80 kg: 80 mg</li> </ul>
Post-exposure prophylaxis dosing	<p><b>Daily dosing for 7 days</b></p> <ul style="list-style-type: none"> <li>Adults: 75 mg <b>once daily</b></li> <li>Children: varies by age/weight<sup>2</sup></li> </ul>	<p><b>Single dose only</b></p> <ul style="list-style-type: none"> <li>&lt;80 kg: 40 mg</li> <li>≥80 kg: 80 mg</li> </ul>
Age	<p><b>Treatment:</b> any age for treatment</p> <p><b>PEP:</b> ≥3 months</p>	<b>Treatment or PEP:</b> ≥12 years
Contraindications	Known hypersensitivity	Known hypersensitivity

**USE OF ANTIVIRAL MEDICATIONS FOR TREATMENT OF INFLUENZA**

CDC recommends influenza antiviral medications to treat influenza as an important adjunct to vaccination. Treatment with influenza antivirals has been shown to be safe. Influenza antivirals benefit clinical and public health by reducing illness and severe outcomes of influenza. CDC recommends influenza antiviral treatment as soon as possible for patients with suspected or confirmed influenza who are:

- Hospitalized
- Outpatients at increased risk for complications<sup>3</sup>
- Outpatients with progressive disease

Influenza antiviral treatment may be offered to patients with uncomplicated influenza based on clinician judgment to shorten their illness duration or lessen symptoms. The use of antiviral treatment in patients with uncomplicated influenza might help lessen the stress on healthcare systems when both influenza and SARS-CoV-2 are co-circulating.

Antivirals are most effective when started **within two days after the beginning of illness**. It is also possible that antiviral treatment started after 48 hours may offer some benefit.

Potential also exists for co-infection of influenza and SARS-CoV-2 viruses. In such situations, influenza antivirals can be given for influenza illness. Because of the importance of early treatment, decisions about starting antiviral treatment should not wait for laboratory confirmation of influenza. However, COVID-19 should be excluded with a rapid diagnostic assay if one is available.

## **USE OF INFLUENZA ANTIVIRALS FOR POST-EXPOSURE PROPHYLAXIS (PEP)**

Both oseltamivir and baloxavir are FDA-approved for influenza PEP. The efficacy of PEP is high for oseltamivir (68%-89%) and baloxavir (86%). Prior to the COVID-19 pandemic, CDC only recommended limited use of influenza antiviral medications for PEP. PEP has been recommended previously in closed congregate settings such as long-term care facilities or crowded group settings. Given the unique considerations of influenza outbreaks in various settings in the context of co-circulation with SARS-CoV-2, influenza antiviral PEP might be considered for persons who:

- Have had recent close contact with a person with influenza (e.g., roommates)
- Live in confined quarters (e.g., dormitories, shelters, prisons) with increasing incidence of influenza
- Are at increased risk for severe illness from influenza
- Have had recent close contact with a person with influenza and will be traveling for the holidays. PEP may reduce transmission during travel as well as reduce transmission to family members or friends who may be at higher risk for influenza complications

## **INFLUENZA TESTING**

Information to assist clinicians about influenza testing decisions, including in the context of SARS-CoV-2 co-circulation, is available at: [Information for Clinicians on Influenza Virus Testing](#). The most accurate influenza tests (with high sensitivity and specificity) are molecular assays. Molecular assays are recommended for hospitalized patients with suspected influenza. Information on influenza molecular assays is available at; [Testing Guidance for Clinicians When SARS-CoV-2 and Influenza Viruses are Co-circulating | CDC](#).

## **REPORTING INFLUENZA TO PA DOH**

Positive influenza laboratory tests are reportable to PA DOH. Positive test results, hospitalizations, and deaths should be reported through [PA-NEDSS](#).

## **Resources**

- 1- World Health Organization. Recommended composition of influenza virus vaccines for use in the 2021-2022 northern hemisphere influenza season. ([https://cdn.who.int/media/docs/default-source/influenza/202102\\_recommendation.pdf](https://cdn.who.int/media/docs/default-source/influenza/202102_recommendation.pdf) Last accessed on: 6 December 2021).
- 2- CDC: Influenza Antiviral Medications: Summary for Clinicians. (<https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm> Last accessed on: 6 December 2021).
- 3- CDC. People at Higher Risk of Flu Complications. (<https://www.cdc.gov/flu/highrisk/index.htm> Last accessed on: 6 December 2021).

## **Additional resources for clinicians**

- Pennsylvania 2021/2022 Influenza Season Data (<https://www.health.pa.gov/topics/disease/Flu/Pages/2021-22-Flu.aspx> last accessed on: 6 December 2021).
- CDC: Weekly National Flu Vaccination Dashboard. (<https://www.cdc.gov/flu/fluview/dashboard/vaccination-dashboard.html> Last accessed on: 6 December 2021).

If you have questions about this guidance, please call your local health department or **1-877-PA-HEALTH (1-877-724-3258)**.

Categories of Health Alert messages:

**Health Alert:** conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory:** provides important information for a specific incident or situation; may not require immediate action.

**Health Update:** provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of December 08, 2021 but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.