

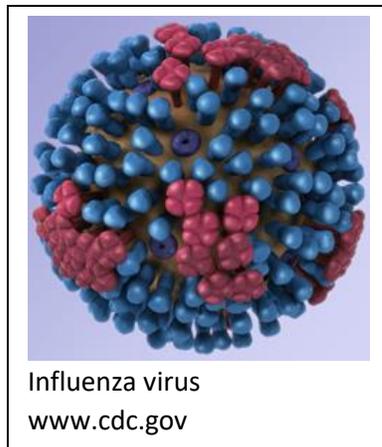
*epi*TRENDS

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Influenza

Influenza activity levels usually peak in winter months, and the time to prepare is now in the autumn. This year public health agencies and healthcare organizations can plan for delivery of influenza vaccination to ameliorate the expected simultaneous circulation of two different viral respiratory infections, COVID-19 and influenza.



The Disease

Influenza (flu) is a respiratory infection caused by influenza A and influenza B viruses. Typical illness is characterized by fever with other symptoms such as cough, runny nose, and sore throat. There may also be muscle or body aches, weakness, fatigue, and respiratory tract congestion. Children may have vomiting and diarrhea. Several other viral respiratory conditions, including COVID-19, have symptoms similar to influenza.

Complications of influenza can be severe and include viral pneumonia or secondary bacterial pneumonia, heart or brain inflammation, and organ failure. The very young and the elderly, women who are pregnant, as well as those with chronic medical conditions are at greatest risk for such complications from influenza, which can be fatal.

Antiviral treatment is recommended as early as possible for any patient with confirmed or suspected influenza who is hospitalized; who has severe, complicated, or progressive illness; or who is at an increased risk for influenza complications. For information about antiviral treatment see: <https://www.cdc.gov/flu/treatment/treatment.htm>



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Influenza A and influenza B viruses infecting humans change constantly. Influenza A viruses can undergo major variations – in 2009 there was an unexpected pandemic of a new influenza A H1N1 virus first identified in early spring of that year. Excess deaths occurred among certain risk groups such as younger children, pregnant women, and those with chronic medical conditions.

Influenza Vaccines

The best way to prevent influenza is through vaccination. Yearly vaccination is recommended for all persons ages 6 months and older. Vaccines are formulated to protect against four types of influenza (quadrivalent vaccines). As influenza strains change, so too will the specific composition of the influenza vaccine be changed by the vaccine manufacturers. The specific virus lineages used may vary by the type of influenza vaccine but the vaccines all induce similar immunity. Choices for an individual’s influenza vaccine type and dose depend on the age and other characteristics of the recipient (see table below).

Vaccine	Approved Ages	Dose volume
Afluria Quadrivalent	6 through 35 months ≥3 years	0.25 mL 0.5 mL
Fluarix Quadrivalent	≥6 months	0.5 mL
FluLaval Quadrivalent	≥6 months	0.5 mL
Fluzone Quadrivalent	6 through 35 months ≥3 years	0.5 mL (see below) 0.5 mL
Flucelvax Quadrivalent	≥6 months	0.5 mL
Flublok Quadrivalent	≥18 years	0.5 mL
Fluzone High-Dose Quadrivalent	≥65 years	0.7 mL
Fluad Quadrivalent	≥65 years	0.5 mL

During the 2022-2023 influenza season, all influenza vaccines will be quadrivalent [A(H1N1), A(H3N2), and 2 B strains]. Licensure on one vaccine has changed; Flucelvax Quadrivalent is now approved for people 6 months and older. There are three flu vaccines that are preferentially recommended for people 65 years and older: Fluzone High-Dose Quadrivalent vaccine, Flublok Quadrivalent recombinant flu vaccine, and Fluad Quadrivalent adjuvanted flu vaccine. Influenza and COVID-19 vaccines can be given at the same time: <https://www.cdc.gov/vaccines/covid-19/clinical-considerations/index.html>

Influenza Surveillance in Washington

The following are influenza-related conditions notifiable to Washington’s local health jurisdictions for eventual reporting to the Washington State Department of Health’s (WA DOH) Office of Communicable Disease Epidemiology:

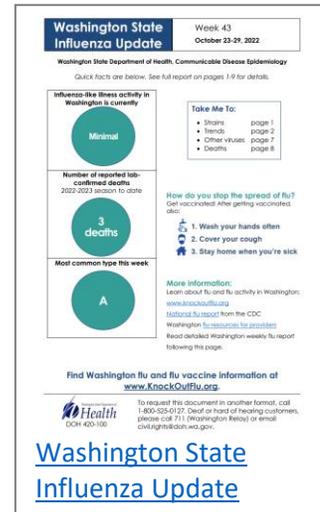
- Case of suspected novel influenza or unsubtypeable influenza
- Death in a person with laboratory-confirmed influenza (should enter into WDRS)
- Single confirmed influenza cases or clusters of suspected cases in long term care facilities
- Suspected or confirmed influenza outbreaks in healthcare facilities, schools, or other community settings

Controlling influenza in long term care facilities is of particular concern due to the vulnerable populations and congregate living situation. WA DOH has several materials pertaining to influenza-like illnesses and outbreaks at long term care facilities. See the link in the Resources section below.

Year-round influenza surveillance is needed to identify the specific influenza viruses in circulation, to assist with vaccine development, and to detect changes in patterns of antiviral resistance. Surveillance data also inform providers when influenza is present in their community so any appropriate antiviral medications can be started promptly.

To track the viruses causing human infections, the Washington State Public Health Laboratories (PHL) conduct influenza virus testing and subtyping primarily for surveillance purposes. Local health jurisdictions can call the Office of Communicable Disease Epidemiology to arrange testing of specimens from patients associated with influenza outbreaks, from deceased patients suspected to have had influenza, from patients with suspected novel influenza virus infection, or from ill persons with potential exposure to birds or swine infected with influenza. This surveillance is intended to detect novel influenza strains.

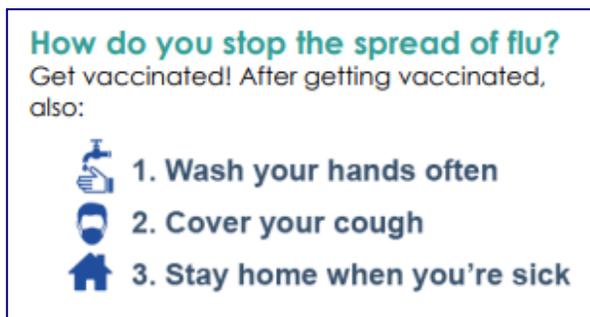
Using multiple sources of data, WA DOH provides weekly influenza surveillance updates from October to May and monthly updates during the summer (see Resources).



Concurrent Outbreaks

The level of influenza activity cannot be predicted for any particular season. The severity of the 2021–22 influenza season was low, with two waves of influenza A activity. Influenza activity continued from October 2021 through mid-June 2022, with A(H3N2) viruses predominating throughout the season. WA DOH continues to strongly recommend annual influenza vaccination for all groups. Influenza vaccines protect individuals and communities from the flu, while also protecting Washington’s hospital capacity and ability to fight the COVID-19 pandemic.

During the 2022-2023 influenza season it is likely that influenza viruses and SARS-CoV-2 (the cause of COVID-19) will circulate concurrently in at least some areas. Coinfection with influenza and COVID-19 has been laboratory demonstrated. Simultaneous occurrence of COVID-19 and influenza in a region will likely stress the public health, laboratory, and healthcare systems. If coinfections result in more severe illnesses, hospitalizations and deaths may both increase.



Reducing influenza’s impact is an important public health objective. Promoting annual influenza vaccination can protect individuals from infection and shield the healthcare system from excessive demands. Local health jurisdictions should always feel free to call the Department of Health’s Office of Communicable Disease Epidemiology (206-418-5500) to discuss any influenza situation including possible outbreaks.

Resources

Vaccination recommendations:

<https://www.cdc.gov/flu/professionals/acip/summary/summary-recommendations.htm>

DOH Influenza Immunization Partner Toolkit Resources:

toolkits.knockoutflu.org

Antiviral medications:

<https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>

Washington State Influenza Update:

<https://www.doh.wa.gov/Portals/1/Documents/5100/420-100-FluUpdate.pdf>

Surveillance guideline for novel influenza:

<https://www.doh.wa.gov/Portals/1/Documents/5100/420-057-Guideline-InfluenzaNovel.pdf>

Surveillance guideline for influenza death:

<https://www.doh.wa.gov/Portals/1/Documents/5100/420-112-Guideline-InfluenzaDeath.pdf>

Washington State public health and healthcare information:

<https://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/PublicHealthSystemResourcesandServices/Immunization/InfluenzaFluInformation>

Outbreak control in long term care:

<https://www.doh.wa.gov/Portals/1/Documents/5100/fluoutbrk-LTCF.pdf>

CDC Testing and treatment of influenza when SARS-CoV-2 and influenza viruses are co-circulating:

<https://www.cdc.gov/flu/professionals/diagnosis/index.htm>

CDC Testing and Management Considerations for Nursing Home Residents with Acute Respiratory Illness Symptoms when SARS-CoV-2 and Influenza Viruses are Co-circulating:

<https://www.cdc.gov/flu/professionals/diagnosis/testing-management-considerations-nursinghomes.htm>

DOH Laboratory Testing and Cohorting Recommendations for Respiratory Outbreaks in Long-Term Care when SARS-CoV-2 and Influenza Viruses are Co-circulating:

<https://doh.wa.gov/sites/default/files/2022-02/420-373-FluCOVIDLTCF.pdf?uid=6361a200d77f4>