

*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 and health care organizations can plan for delivery of influenza vaccination to ameliorate the expected simultaneous circulation of several different viral respiratory infections including COVID-19, respiratory syncytial virus (RSV), 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. 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, persons who are pregnant, as well as those with chronic medical conditions are at greatest risk for such complications from influenza, which can be fatal. Several other viral respiratory conditions, including COVID-19, have symptoms similar to influenza and can cause severe or fatal infections.

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 Resources.

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



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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. 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

All vaccines for the 2023-2024 influenza season are formulated to protect against four types of influenza (quadrivalent vaccines). During this season, influenza vaccines will be formulated against A(H1N1), A(H3N2), and two B strains. A new recommendation this season is that all persons 6 months and older with an egg allergy should receive influenza vaccine. There are three flu vaccines that are preferentially recommended for people 65 years and older. These are 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 (see Resources).

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 (DOH) Office of Communicable Disease Epidemiology:

- Case of suspected novel influenza or unsubtypable influenza (if confirmed should enter into WDRS)
- Death in a person with laboratory-confirmed influenza (should enter into WDRS)
- Single confirmed cases or clusters of suspected influenza 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. DOH has several materials pertaining to influenza-

like illnesses and outbreaks in long term care facilities which have recently been updated and translated into several languages (see Resources).

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, deceased patients suspected to have had influenza, patients with suspected novel influenza virus infection, or ill persons with potential exposure to birds or swine infected with influenza. This surveillance is intended to detect novel influenza strains.

DOH provides weekly influenza surveillance updates from October to May and monthly updates during the summer. Influenza data are also visible on the DOH joint respiratory illness data dashboard newly available this season to display COVID-19, RSV, and influenza data (see Resources).

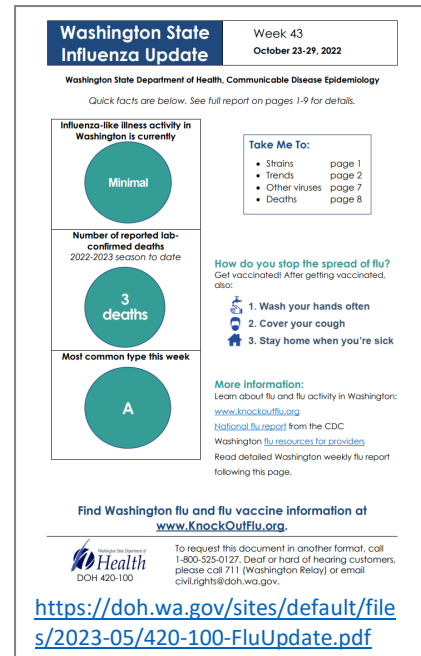
Concurrent Outbreaks

The level of influenza activity cannot be predicted for any particular season. The severity of the 2022-23 influenza season was higher than the last several seasons, with one wave of influenza A activity. Influenza activity rose sharply early in the season, with A(H3N2) viruses predominating throughout the season. This sharp rise in activity in addition to circulating SARS-CoV-2 (the cause of COVID-19) and RSV viruses placed a strain on healthcare resources.

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.

During the 2023-2024 influenza season it is likely that influenza viruses, SARS-CoV-2, and other respiratory viruses such as RSV will circulate concurrently. Coinfection with influenza and COVID-19 has been laboratory demonstrated. Simultaneous occurrence of COVID-19, RSV, 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 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 DOH Office of Communicable Disease Epidemiology (206-418-5500) to discuss any influenza situation including possible outbreaks. Links to state and national resources are also provided below regarding specific topics.



Resources

Vaccination recommendations:

<https://www.cdc.gov/flu/pdf/professionals/acip/acip-2023-24-Summary-Flu-Vaccine-Recommendations.pdf>

Vaccine coadministration:

<https://www.cdc.gov/flu/prevent/coadministration.htm>

DOH Influenza Immunization Partner Toolkit Resources:

<https://qa-doh-doh.pantheonsite.io/you-and-your-family/illness-and-disease-z/flu/materials-and-resources/knock-out-flu-toolkit>

Treatment:

<https://www.cdc.gov/flu/treatment/treatment.htm>

Antiviral medications:

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

Washington State Influenza Update:

<https://doh.wa.gov/sites/default/files/2023-05/420-100-FluUpdate.pdf>

DOH Respiratory Illness Data Dashboard

<https://doh.wa.gov/data-and-statistical-reports/diseases-and-chronic-conditions/communicable-disease-surveillance-data/respiratory-illness-data-dashboard>

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>

DOH Prevention and control of outbreaks in skilled nursing and assisted living facilities:

<https://doh.wa.gov/sites/default/files/2023-08/420-493-FluOutbreakLTC-SNFAL.pdf>

DOH Prevention and control of outbreaks in adult family homes:

<https://doh.wa.gov/sites/default/files/2023-08/420-494-FluOutbreakLTC-AFH.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>



Recognize the Emergency Warning Signs of Respiratory Illness

CALL 911 NOW WHEN: • Severe trouble breathing (struggling for each breath, can barely speak or cry) • Passed out or stopped breathing • Lips or face are bluish when not coughing • There may be a life-threatening emergency	GET MEDICAL HELP RIGHT AWAY FOR INFANTS WHEN: • Fever over 100.4F for infants younger than 3 months, or fever for more than 24 hours if older than 3 months • Fast or labored breathing • Looks very ill or is unusually drowsy or difficult to console • Significantly fewer wet diapers than normal	CHILDREN SHOULD GO TO THE ER WITH ANY OF THESE: • Fast or labored breathing • Not able to drink enough fluids • Very decreased alertness and activity • Fever for more than 72 hours, or repeated rising above 104F	ADULTS SHOULD GO TO THE ER WITH ANY OF THESE: • Difficulty breathing or shortness of breath • Chest pain • Confusion • Worsening fever and cough, especially with pink or bloody mucus
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Get your flu vaccine & COVID-19 booster. Visit knockoutflu.org to learn more about preventing the spread of flu.

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