

Influenza

Clinical Practice Guideline



Overview of the Condition/Disease

Definition: Influenza is a contagious respiratory illness caused by influenza A or B viruses that infect the nose, throat, and sometimes the lungs. It can cause mild to severe illness, and at times can lead to hospitalizations and even death. The best way to prevent influenza is by getting a flu vaccine every year.

Pathophysiology: Influenza can often present with a fever, cough, sore throat, runny or stuffy nose, muscle aches, headaches, and/or fatigue. Influenza can increase the risk of complications of pneumonia, hospitalization and even death.



Best Practice Standards for Prevention and Management

Education:

- Influenza can be passed up to 1 day before symptom onset and infectiousness can continue 3-4 days after illness begins. In some cases, especially with young children, the infectious period may be longer.
- Onset of illness can be 1 to 4 days with an average of 2 days.

Interventions:

- Per the Centers for Disease Control and Prevention (CDC) and the CDC's Advisory Committee on Immunization Practices (ACIP) vaccination is recommended for all individuals, 6 months of age and older, who do not have contraindications. A licensed and age-appropriate vaccine should be used. With the exception of vaccination for adults aged ≥ 65 years, ACIP makes no preferential recommendation for a specific vaccine when more than one licensed, recommended, and age-appropriate vaccine is available.
- The [composition of flu vaccines](#) has been updated.
- The age indication for the cell culture-based inactivated flu vaccine, Flucelvax Quadrivalent (ccIIV4), changed from 2 years and older to 6 months and older.
- For the 2022-2023 flu season, 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](#).
- The recommended timing of vaccination is similar to last season. For most people who need only one dose for the season, September and October are generally good times to get vaccinated. Vaccination in July and August is not recommended for most adults but can be considered for some groups. While ideally it's recommended to get vaccinated by the end of October, but vaccination should continue after October and throughout the season as long as influenza viruses are circulating and unexpired vaccine is available. For most adults (particularly adults aged ≥ 65 years) and for

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pregnant persons in the first or second trimester, vaccination during July and August should be avoided unless there is concern that vaccination later in the season might not be possible.

- ACIP recommends that adults aged ≥ 65 years preferentially receive any one of the following higher dose or adjuvanted influenza vaccines: quadrivalent high-dose inactivated influenza vaccine (HD-IIV4), quadrivalent recombinant influenza vaccine (RIV4), or quadrivalent adjuvanted inactivated influenza vaccine (aIIV4). If none of these three vaccines is available at an opportunity for vaccine administration, then any other age-appropriate influenza vaccine should be used.”
- For persons who are pregnant or may become pregnant:
 - The ACIP, the American College of Obstetricians and Gynecologists (ACOG), and the American Academy of Family Physicians (AAFP) recommend that all women who are pregnant or who might be pregnant during the upcoming influenza season receive IIV because of an increased risk of serious illness and complications from influenza. LAIV is not recommended for use during pregnancy.
- For persons with an egg allergy:
 - Persons who have experienced only hives after exposure to egg may receive any licensed, recommended, age-appropriate influenza vaccine (i.e., IIV4, RIV4, or LAIV4).
 - Persons reporting symptoms other than hives after exposure to egg (such as angioedema or swelling, respiratory distress, lightheadedness, or recurrent emesis; or who required epinephrine or another emergency medical intervention) may also receive any licensed and recommended influenza vaccine that is otherwise appropriate.
 - If a vaccine other than ccIIV4 or RIV4 is selected for such a person, it should be administered in an inpatient or outpatient medical setting and supervised by a health care provider who is able to recognize and manage severe allergic reactions.
 - A previous severe allergic reaction to influenza vaccine, regardless of the component suspected of causing the reaction, is a contraindication to future receipt of any influenza vaccine.

COVID-19 Considerations:

- While COVID-19 infection control protocols such as mask wearing, hand-washing, and physical distancing help prevent the spread of the flu, they do not provide complete protection. Flu vaccination is a critical tool in preventing the flu, in addition to infection control protocols

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- For persons with COVID-19:
 - For those who have acute illness with suspected or confirmed COVID-19, clinicians can consider delaying vaccination until patients are no longer acutely ill.

If influenza vaccination is delayed, patients should be reminded to return for vaccination once recovered from COVID-19.

Contraindications and Precautions to Vaccine:

- **Contraindication:** A condition in a recipient that increases the risk for a serious reaction to vaccination are conditions under which vaccines should not be administered.
- **Precaution:** A condition in a recipient that might increase the risk for a serious adverse reaction, might cause diagnostic confusion, or might compromise the ability of the vaccine to produce immunity (e.g., administering measles vaccine to a person with passive immunity to measles from a blood transfusion administered up to 7 months prior). In general, vaccinations should be deferred when a precaution is present. However, a vaccination might be indicated in the presence of a precaution if the benefit of protection from the vaccine outweighs the risk for an adverse reaction.

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Vaccine	Precaution	Contraindication
	A vaccine should be deferred when a precaution is present.	A vaccine should not be given when a contraindication is present.
Egg-based IIV4s	<p>Moderate or severe acute illness with or without fever</p> <p>History of Guillain-Barre syndrome within 6 weeks of receipt of influenza vaccine</p>	History of severe allergic reaction (e.g., anaphylaxis) to any component of the vaccine or to a previous dose of any influenza vaccine (i.e., any egg-based IIV, ccIIV, RIV or LAIV)
Inactivated Influenza Vaccine (IIV4)	<p>Moderate or severe acute illness with or without fever</p> <p>History of Guillain-Barre syndrome within 6 weeks after receiving the vaccine</p> <p>History of severe allergic reaction to a previous dose of any other influenza vaccine (i.e., any egg-based IIV, RIV, or LAIV)</p>	History of severe allergic reaction to any component of the vaccine or after a previous dose of any influenza vaccine
Recombinant Influenza Vaccine (RIV4)	<p>Moderate or severe acute illness with or without fever</p> <p>History of Guillain-Barre syndrome within 6 weeks after receiving the vaccine</p> <p>History of severe allergic reaction to a previous dose of any other influenza vaccine (i.e., any egg-based IIV, ccIIV, or LAIV)</p>	History of severe allergic reaction (e.g., anaphylaxis) to a previous dose of any RIV or any component of RIV4
Live Attenuated Influenza Vaccine (LAIV)	<p>Moderate or severe acute illness with or without fever</p> <p>History of Guillain-Barre syndrome within 6 weeks after receiving the vaccine</p> <p>Asthma in persons aged ≥ 5 years</p> <p>Other underlying medical conditions that might predispose to complications after wild-type influenza infection (e.g., chronic pulmonary, cardiovascular</p>	<p>History of severe allergic reaction to any component of the vaccine or to a previous dose of any influenza vaccine (i.e., any egg-based IIV, ccIIV, RIV or LAIV)</p> <p>Concomitant aspirin-or salicylate-containing therapy in children and adolescents</p> <p>Children aged 2 through 4 years who have received a diagnosis of asthma or whose parents or caregivers report</p>

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	<p>[except isolated hypertension], renal, hepatic, neurologic, hematologic, or metabolic disorders [including diabetes mellitus])</p>	<p>that a health care provider has told them during the preceding 12 months that their child had wheezing or asthma or whose medical record indicates a wheezing episode has occurred during the preceding 12 months</p> <p>Children and adults who are immunocompromised due to any cause, including but not limited to immunosuppression caused by medications, congenital or acquired immunodeficiency states, HIV infection, anatomic asplenia, or functional asplenia (e.g., due to sickle-cell anemia)</p> <p>Close contacts and caregivers of severely immunosuppressed persons who require a protected environment</p> <p>Pregnancy</p> <p>Persons with active communication between the CSF and the oropharynx, nasopharynx, nose, or ear or any other cranial CSF leak</p> <p>Persons with cochlear implants</p> <p>Receipt of influenza antiviral medication within the previous 48 hours for oseltamivir and zanamivir, previous 5 days for peramivir, and previous 17 days for baloxavir</p>
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*Any other contraindication(s), precaution(s), or reason(s) stated by a member for not obtaining the influenza vaccine should be documented in the member record.

*If a prescribing health care provider defers a vaccination on the basis of a precaution, the precaution is to be counted as a contraindication.

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Additional conditions that negatively impact the condition/disease:

Pregnancy	Recent incarceration
Immunocompromising conditions	Communal living
Chronic liver disease	Chronic lung disease
End stage renal disease	Obesity
Very young or very old populations	Endocrine disorders
Homelessness	Physical Disability, Intellectual Disability, or Developmental Disability



Anticipating, Recognizing, and Responding to Symptoms



Seek timely medical attention when current interventions and/or medications are not managing symptoms.

Potential symptoms:

- Fever, headache, fatigue, muscle aches, runny nose, cough, congestion, or sore throat. Severe complications from other flu can be pneumonia, hospitalizations and/or death.

Manifestation of symptoms:

- Symptoms usually occur 1-4 days after exposure. An exposed person can spread the virus up to one day prior to the onset of symptoms through the course of illness.



Interventions to manage symptoms:

- Pain relievers/fever reducers
- Extra sleep/rest
- Avoid contact with other if possible unless for medical care or support. Stay home and away from other until you are fever free for 24 hours without the use of fever reducers
- Drink plenty of fluids
- Some people may need to have anti-viral medications prescribed by a doctor which work best if they are taken within two days of onset. These medications may make the symptoms less intense and the illness shorter. Most people will recover without the use of antivirals.
- Emergency warning signs of flu when medical attention should be sought include:
 - Difficulty breathing or shortness of breath
 - Pain or pressure in chest or abdomen
 - Sudden dizziness
 - Confusion
 - Severe or persistent vomiting

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Guidelines and Process for Interdisciplinary Team

Care teams are responsible for educating and assisting members with receiving the seasonal influenza vaccine from a qualified provider.

- Care teams must document members vaccination dates or refusals in MIDAS.
- Care teams may assist members with coordinating care with providers and finding transportation



Health Equity Considerations

Anyone can get sick with the flu, but research shows some people are at higher risk. Please be considerate of members at higher risk and make sure to provide education when necessary.

- Individuals with a disability are at increased risk for complications related to vaccine-preventable diseases and experience a disproportionate number of hospitalizations and adverse outcomes related to influenza. However, vaccinations rates among this group are lower than, or comparable to, the general population.
- In general: ethnic and cultural minority groups have continued to experience a disproportionate burden of disease, injury, premature death, and disability when compared to the Caucasian population
- Health disparities can mean lower life expectancy, decreased quality of life, loss of economic opportunities, as well as perceptions of injustice
- Health disparities are reflected in decreased productivity, increased health care costs, and social inequities Contributing factors to ethnic, cultural, and gender disparities:
 - Mistrust in the health care system (stemming from historical mistreatment or neglect)
 - Personal and group experiences of discrimination
 - Lack of health literacy
 - Provider prejudice or unconscious bias
 - Lack of cultural competency and clinical humility among health care providers
 - Discordance in patient-provider gender, race, and/or ethnic background
 - Lack of minority representation among health care providers (only 19% of RNs in the workforce are from racial or ethnic minorities)



Quality Assurance Monitoring

My Choice Wisconsin monitors all influenza vaccinations received from July 1st through March 31st of each measurement year.

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Additional Resources

2022-2023 Summary of ACIP Recommendations: Prevention and Control of Seasonal Influenza with Vaccines: [acip-2022-23-summary-of-recommendations.pdf](#) (cdc.gov)

2022-2023 Influenza Vaccination Recommendations and Guidance on Coadministration with COVID-19 Vaccines - CDC COCA Call (September 8, 2022):

https://emergency.cdc.gov/coca/calls/2022/callinfo_090822.asp

Presentation slides of particular note:

- Flu vaccine: 8,19, 20, 28, 33,34
- Coadministration of Flu vaccine and Covid-19 Vaccine: 38, 39, 40

[Guidance for Planning Vaccination Clinics | CDC](#)

Guillain-Barre syndrome fact sheet: [Guillain-Barré Syndrome Fact Sheet | National Institute of Neurological Disorders and Stroke \(nih.gov\)](#)

Q&A Resource: [Ask the Experts: Influenza Vaccines \(immunize.org\)](#), September 16, 2022

Education Resources for health care professionals (includes access to resources for member and staff education):

2022-2023 (August 26, 2022): [Seasonal Influenza Vaccination Resources for Health Professionals | CDC](#)

[Immunization Conversation Kit for Managed Care Organizations | Wisconsin Department of Health Services](#)

To report a vaccine adverse event to the Vaccine Adverse Event Reporting System: [Vaccine Adverse Event Reporting System \(VAERS\) \(hhs.gov\)](#)



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