Influenza
Prevention and Wellness 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 seasonal influenza 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.
- For the 2024-2025 flu season, Trivalent inactivated influenza vaccines (IIV3s), trivalent recombinant influenza vaccine (RIV3), and trivalent live attenuated influenza vaccine (LAIV3) are expected to be available.
- Vaccination timing: For most persons who need only 1 dose of influenza vaccine for the season, vaccination should ideally be offered during September or October. However, vaccination should continue after October and throughout the season as long as influenza viruses are circulating and unexpired vaccine is available. Influenza vaccines might be available as early as July or August, but for most adults (particularly adults aged ≥65 years) and for 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:
    - High-dose inactivated influenza vaccine (HD-IIV3, Fluzone High-Dose)
    - Recombinant influenza vaccine (RIV3, Flublok)
    - Adjuvanted inactivated influenza vaccine (aIIV3, Fluad)
- For persons who are pregnant or may become pregnant:
    - Any age-appropriate IIV3 or RIV3 vaccination should be used and may be given in any trimester.
    - LAIV3 should not be used during pregnancy but can be used postpartum.
- For all children aged 6 months through 8 years who are recommended to receive two doses this season should receive their first dose as soon as possible after vaccine becomes available; these children should receive the second dose ≥4 weeks later. Persons aged ≥9 years need only one dose.
- For persons with an egg allergy:
    - Multiple studies indicate that egg-allergic persons are not at increased risk of severe allergic reactions to egg-based influenza vaccines.
    - Any influenza vaccine that is otherwise appropriate for the recipient's age and health status (egg based or non-egg based) can be administered to persons with egg allergy.
    - Egg allergy necessitates no additional safety measures for influenza vaccination beyond those recommended for any recipient of any vaccine.
    - Regardless of allergy history, all vaccines should be administered in settings in which personnel and equipment needed for rapid recognition and treatment of acute allergic reactions, including anaphylaxis, are available.

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.
- For persons with COVID-19:
    - For those who have moderate or severe COVID-19, vaccination should usually be deferred until they have recovered from the acute illness.
    - For those with mild or asymptomatic COVID-19, further deferral might be considered to avoid confusing COVID-19 symptoms with potential postvaccination reactions.
    - Influenza vaccines given concomitantly with a Coronavirus 2019 vaccination should be given in different limbs if possible.
    - Other considerations for determination of when to vaccinate include:
        - current local influenza activity
        - the recipient's individual risk for severe influenza illness

- current or recent use of immunosuppressive therapeutic agents that might blunt immune response to vaccines
- risk for exposing others in the vaccination setting to 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.

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 IIV3s	Moderate or severe acute illness with or without fever History of Guillain-Barre syndrome within 6 weeks of receipt of influenza vaccine	History of severe allergic reaction (e.g., anaphylaxis) to any component of the vaccine (other than egg), or to a previous dose of any influenza vaccine (any egg-based IIV, ccIIV, RIV, or LAIV of any valency)
Trivalent Inactivated Influenza Vaccines (ccIIV3s)	Moderate or severe acute illness with or without fever History of Guillain-Barre syndrome within 6 weeks after receiving the vaccine History of severe allergic reaction to a previous dose of any other influenza vaccine (any egg-based IIV, RIV, or LAIV of any valency)	History of severe allergic reaction (e.g., anaphylaxis) to ccIIV of any valency, or to any component of ccIIV3.
Trivalent Recombinant Influenza Vaccine (RIV3)	Moderate or severe acute illness with or without fever History of Guillain-Barre syndrome within 6 weeks after receiving the vaccine History of severe allergic reaction to a previous dose of any other influenza vaccine (any egg-based IIV, ccIIV, or LAIV of any valency)	History of severe allergic reaction (e.g., anaphylaxis) to RIV of any valency, or to any component of RIV3
Trivalent Live Attenuated Influenza Vaccine (LAIV3)	Moderate or severe acute illness with or without fever History of Guillain-Barre syndrome within 6 weeks after receiving the vaccine Asthma in persons aged ≥ 5 years Other underlying medical conditions that might predispose to complications after wild-type influenza infection (e.g., chronic pulmonary, cardiovascular	History of severe allergic reaction (e.g., anaphylaxis) to any component of the vaccine (other than egg) or to a previous dose of any influenza vaccine (i.e, any egg-based IIV, ccIIV, RIV, or LAIV of any valency) Simultaneous aspirin or salicylate-containing therapy in children and adolescents Children aged 2 through 4 years who have received a diagnosis of asthma or whose parents or caregivers report that a health care provider has told them during the preceding

	[except isolated hypertension], renal, hepatic, neurologic, hematologic, or metabolic disorders [including diabetes mellitus])	12 months that their child had wheezing or asthma or whose medical record indicates a wheezing episode has occurred during the preceding 12 months Children and adults who are immunocompromised due to any cause, including but not limited to medications, congenital or acquired immunodeficiency states, HIV infection, anatomic asplenia, or functional asplenia (e.g., due to sickle-cell anemia) Close contacts and caregivers of severely immunosuppressed persons who require a protected environment Pregnancy Persons with active communication between the CSF and the oropharynx, nasopharynx, nose, or ear or any other cranial CSF leak Persons with cochlear implants (due to potential for CSF leak, which might exist for some period of time after implantation. Providers might consider consultation with a specialist concerning risk of persistent CSF leak if an age- appropriate inactivated or recombinant vaccine cannot be used) Receipt of influenza antiviral medication within the previous 48 hours for oseltamivir and zanamivir, 5 days for peramivir, and 17 days for baloxavir

*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.

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.

Additional Resources

Guillain-Barre syndrome fact sheet (July 19, 2024): https://www.ninds.nih.gov/health-information/disorders/guillain-barre-syndrome

Guillain-Barre Syndrome and Vaccines (July 31, 2024): Guillain-Barré Syndrome (GBS) and Vaccines | Vaccine Safety | CDC

Summary of Recommendations (September 5, 2024). Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP)—United States, 2024-25

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

References

Centers for Disease Control & Prevention (CDC). (2024, November 7). *Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP)—United States, 2024-25* ACIP Recommendations Summary | Influenza (Flu) | CDC

Centers for Disease Control & Prevention (CDC). (2024, November 7). *Key Facts About Influenza (Flu)* About Influenza | Influenza (Flu) | CDC

Centers for Disease Control & Prevention (CDC). (2023, October 17). *Flu Symptoms & Complications* Signs and Symptoms of Flu | Influenza (Flu) | CDC

Grohskopf LA, Ferdinands JM, Blanton LH, Broder KR, Loehr J. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2024–25 Influenza Season. MMWR Recomm Rep 2024;73(No. RR-5):1–25. DOI: http://dx.doi.org/10.15585/mmwr.rr7305a1.

Immunize.org. (2024, November 7). *Ask the experts Influenza.* https://www.immunize.org/askexperts/experts_inf.asp

WI Department of Health Services. (2024, November 7). *Influenza (Flu).* https://www.dhs.wisconsin.gov/influenza/index.htm