

Clinical Pearl

Flu Vaccine Recommendations and Dosages

The influenza vaccine is recommended for many population groups and can help prevent serious complications.

Audiey Kao, MD, PhD

About 10 to 20 percent of US residents contract the influenza virus each year, resulting in an average of 114,000 hospitalizations and 36,000 deaths annually [1]. The influenza virus causes flu, a serious respiratory disease that may present with symptoms similar to those of the common cold but is caused by a different virus. Common flu symptoms are:

- Fever,
- Headaches,
- Tiredness,
- Dry cough,
- Sore throat,
- Nasal congestion and body aches.

The flu is most common during the winter months; for North America the flu season is from November to March. Although anyone may get the flu, some people are more vulnerable to serious complications from contracting the virus. It is recommended that people at high risk for flu-related complications get an influenza vaccine each year in October or November [2].

Flu shots are recommended for all patients who [3]:

- Are 50 years old or older;
- Are 6 months to 49 years old with 1 or more of the following conditions:
 - a chronic pulmonary or cardiovascular disorder including asthma,
 - a chronic blood, kidney, or immune system disease including HIV,
 - diabetes that has required medical follow-up or hospitalization in the past year,
 - a 2nd or 3rd trimester of pregnancy during flu season,
 - a child or teenager on long-term aspirin therapy.
- Reside in nursing homes or other chronic care facilities;
- Are likely to transmit the virus to a person at high risk such as:
 - health care workers, caregivers, or household members with a high-risk condition,
 - children 0-23 months of age or caretakers of children of this age;
- Are 6-23 months of age;
- Any other person older than 6 months who wishes to reduce the likelihood of getting the flu and does not have any contraindications.

Patients should not get the flu vaccine if they have had serious reactions (eg, anaphylaxis) to eggs or to a previous influenza vaccine or to one of its components. Healthy, nonpregnant people who are between 5 and 49 years old may receive the live attenuate influenza vaccine (LAIV). Persons with chronic diseases (eg, asthma, heart and renal disease, diabetes) that may put them at high risk when exposed to the wild virus should not be offered LAIV. People who are in

close contact with immunosuppressed people should be given the inactivated influenza virus (IIV).

Vaccine Dosing and Administration [3]

- IIV may be given to patients older than 6 months. Patients between 6-35 months of age should be given 0.25 mL; patients 3 years old or older should be given 0.5 mL. Give IM with a 22-25g, > 1" needle.
- Healthy people between 5 and 49 years old may receive 0.5mL LAIV (0.25 mL in each nostril).
- Children who are younger than 9 years old and receiving a flu shot for the first time should receive 2 doses. For IIV, the doses should be separated by at least 4 weeks. For LAIV given to children 5-8 years old, the doses should be separated by at least 6 weeks.

Side Effects [3]

- Soreness and redness at the injection site lasting 1-2 days are the most common side effects of IIV.
- Runny nose and nasal congestion are the most common side effects of LAIV.

The vaccine is not always a perfect match for the virus circulating that season, but those who are vaccinated and contract the virus will likely experience milder symptoms. Physicians should remind patients that the best way to protect themselves and their loved ones from the flu is by getting vaccinated.

References

1. Centers for Disease Control and Prevention. Influenza: the disease. Accessed October 21, 2003.
2. Centers for Disease Control and Prevention. Preventing influenza (the flu) and controlling its spread. Accessed October 21, 2003.
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3. Immunization Action Coalition. Influenza vaccination pocket guide information. September 2003. Accessed October 21, 2003.
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