Role of Pharmacists in Flu Vaccination

Pharmacists play a critical role in protecting patients against seasonal influenza and influenza-related complications by advocating for and administrating influenza vaccines and supporting adherence with CDC’s influenza antiviral recommendations. While clinical practices have limited hours and typically require appointments, pharmacies often have longer hours, convenient locations, and many do not require appointments, offering another accessible avenue for patients to get their annual influenza vaccines.

CDC Flu Vaccine Recommendations

The Advisory Committee on Immunization Practices (ACIP) recommends that everyone ages 6 months and older receive an influenza vaccine every year. Vaccination against influenza is specifically important for people at high risk of influenza-related complications, including:

- Children younger than 5 years, especially younger than 2 years.
- Adults 65 years and older.
- Pregnant women and women up to two weeks postpartum.
- Residents of nursing homes and other long-term care facilities.
- American Indians and Alaska natives.
- People who have certain medical conditions, including:
  - Asthma.
  - Neurological and neurodevelopmental conditions (including disorders of the brain, spinal cord, peripheral nerve, and muscle, such as cerebral palsy, epilepsy [seizure disorders], stroke, intellectual disability, moderate to severe developmental delay, muscular dystrophy, or spinal cord injury).
  - Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis).
  - Heart disease (such as congenital heart disease, congestive heart failure, and coronary artery disease).
  - Blood disorders (such as sickle cell disease).
  - Endocrine disorders (such as diabetes mellitus).
  - Kidney disorders.
  - Liver disorders.
  - Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders).
  - Weakened immune system due to disease or medication (such as people with HIV or AIDS, cancer, or those on chronic steroids).
  - Children and adolescents receiving aspirin or salicylate-containing medications.
  - People with extreme obesity (body mass index [BMI] of 40 or more).

Types of Vaccines Available

For the 2019-2020 flu season, providers may choose to administer any licensed, age-appropriate flu vaccine -- inactivated influenza vaccine (IIV3 or IIV4), recombinant influenza vaccine (RIV4), or live attenuated influenza vaccine (LAIV4):

<table>
<thead>
<tr>
<th>VACCINE TYPE</th>
<th>VACCINE DESCRIPTION</th>
<th>RECOMMENDED FOR*</th>
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<tbody>
<tr>
<td>Quadrivalent (4-component) Inactivated Influenza Vaccine (IIV4)</td>
<td>Injectable inactivated vaccine containing the influenza A(H1N1), (H3N2) and two influenza B lineage viruses predicted to be most common.</td>
<td>People 6 months and older</td>
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<tr>
<td>Live Attenuated Influenza Vaccine (LAIV)</td>
<td>Intranasal live attenuated vaccine containing the influenza A(H1N1), (H3N2) and two influenza B lineage viruses predicted to be most common.</td>
<td>Healthy non-pregnant people 2 years through 49 years</td>
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<tr>
<td>Quadrivalent Cell Culture-Based Inactivated Influenza Vaccine (ccIIV4)</td>
<td>Injectable inactivated influenza vaccine manufactured using cell culture rather than eggs, containing the influenza A(H1N1), (H3N2) and two influenza B lineage viruses predicted to be most common.</td>
<td>People 4 years and older</td>
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<tr>
<td>Quadrivalent Recombinant Influenza Vaccine (RIV4)</td>
<td>Injectable influenza vaccine produced without the use of influenza viruses or eggs; Contains the influenza A(H1N1), (H3N2) and two influenza B lineage viruses predicted to be most common.</td>
<td>Adults 18 years and older</td>
</tr>
<tr>
<td>Trivalent Adjuvanted Inactivated Influenza Vaccine (aIIV3)</td>
<td>Injectable inactivated influenza vaccine containing MF59 adjuvant, designed to help promote a stronger immune response in older adults; Contains the influenza A(H1N1), (H3N2) and influenza B viruses predicted to be most common.</td>
<td>Adults 65 years and older</td>
</tr>
<tr>
<td>Trivalent High-Dose Inactivated Influenza Vaccine (HD-IIV3)</td>
<td>Injectable inactivated influenza vaccine containing four times the antigen of a standard-dose flu vaccine, designed to help promote a stronger immune response in older adults; Contains the influenza A(H1N1), (H3N2) and influenza B viruses predicted to be most common.</td>
<td>Adults 65 years and older</td>
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*Licensed ages vary for different brands; consult package insert for appropriate ages for specific vaccines.

For more information, cdc.gov/flu/professionals
or call 1-800-CDC-INFO
Egg Allergies
People with egg allergies can receive any licensed, recommended age-appropriate influenza vaccine and no longer have to be monitored for 30 minutes after receiving the vaccine. People who have severe egg allergies should be vaccinated in a medical setting and be supervised by a health care provider who is able to recognize and manage severe allergic conditions.

Strategies to Increase Influenza Vaccination Rates in Your Pharmacy

Screen for High-Risk Patients

- CDC recommends that everyone ages 6 months and older receive an influenza vaccine, but pharmacists can help identify patients through incoming referrals and prescriptions for whom influenza vaccination is especially important, particularly patients at high risk for developing influenza-related complications.
- If patients have not received their influenza vaccine, pharmacists have an opportunity to offer a flu vaccine on-site.

Advocacy and Promotion

- Pharmacists can share newsletters, posters, brochures, and other promotional materials to highlight the risk of influenza and the importance of influenza vaccination.
- Pharmacists also can partner with local health departments and nonprofit advocacy groups to promote influenza vaccines among high-risk groups and the general public.

How to Give a Strong Recommendation

Apply the CDC SHARE Model

SHARE is a five-part approach that health care professionals can use to communicate with patients about the importance of influenza vaccines and to enable patients to make informed decisions:

**SHARE APPROACH**

- **S**hare the tailored reasons why the recommended vaccine is right for the patient given his or her age, health status, lifestyle, occupation, or other risk factors.
  “This vaccine can protect you and your family from getting sick from flu. By getting a flu vaccine today, you’ll be protecting yourself and the people around you who are more vulnerable to serious flu illness, like your children and parents.”

- **H**ighlight positive experiences with vaccines to reinforce the benefits and strengthen confidence in vaccination.
  “The CDC recommends that everyone get a flu vaccine each year. I always get one myself so I don’t pass along flu to my patients and my family members.”

- **A**ddress patient questions and any concerns about the vaccine, including side effects, safety, and vaccine effectiveness in plain and understandable language.
  “A flu vaccine cannot cause flu illness. There can be some mild side effects, but this is not flu illness. There are different side effects that may be associated with getting a flu shot or a nasal spray flu vaccine.”

- **R**emind patients that vaccines protect them and their loved ones from many common and serious diseases.
  “Flu activity is going to start to pick up, and CDC says to expect more cases in the coming months. That is why I want to make sure I help protect you and your loved ones.”

- **E**xplain the potential costs of getting the disease, including serious health effects, time lost (such as missing work or family obligations), and financial costs.
  “It’s important to get vaccinated this season because flu vaccination can reduce potential flu illnesses, doctor visits, and missed work and school due to flu. Flu vaccination also has been shown to reduce the risk of hospitalization and can be life-saving for children. Most of the children who die from flu each year have not been vaccinated.”

For more information, [cdc.gov/flu/professionals](http://cdc.gov/flu/professionals) or call 1-800-CDC-INFO
Address Patient Questions
When patients express hesitation about getting an influenza vaccine, take the opportunity to identify their concerns and address any questions or misconceptions they may have about influenza or influenza vaccination using the CDC SHARE Model.

Some common patient questions can include:

**Do flu vaccines work?**
- Flu vaccines are effective in reducing the risk of flu illness and its potentially serious complications, though their effectiveness varies each year.
  - During the 2017-2018 influenza season, influenza vaccination prevented an estimated 7 million influenza illnesses, 109,000 hospitalizations, and 8,000 deaths associated with influenza.
- Recent flu vaccine effectiveness studies show that flu vaccination reduces the risk of flu illness by between 30% and 60% generally.
- Flu vaccination may make your illness milder if you do get sick.
- Flu vaccination can reduce the risk of flu-associated hospitalization, including among children, older adults, and others who are more vulnerable to serious flu complications.
  - A 2018 study showed that getting a flu shot reduces a pregnant woman’s risk of being hospitalized due to influenza by an average of 40%.
  - A 2018 study showed that from 2012 to 2015, influenza vaccination among adults reduced the risk of being admitted to an intensive care unit (ICU) for influenza by 82%.
  - A 2017 study showed that flu vaccination reduced deaths, intensive care unit (ICU) admissions, ICU length of stay, and overall duration of hospitalization among hospitalized flu patients. Flu vaccination can reduce a child’s risk of influenza-related death by half (51%) among children with underlying high-risk medical conditions and by two-thirds (65%) among healthy children.

**I’ve heard that some people get a flu vaccine and still get sick with flu.**
- That’s possible, but there is data to show that your illness will be milder if you do get sick because you were vaccinated.

**Can a flu vaccine give me the flu?**
- No. There can be some mild side effects, but this is not flu illness.

**Do I need a flu vaccine every year?**
- CDC recommends a flu vaccine for everyone 6 months and older every year for two reasons:
  - First, a person’s immune protection from vaccination declines over time and therefore, an annual vaccine is needed for optimal protection.
  - Second, because flu viruses are constantly changing, the formulation of the flu vaccine is reviewed each year and sometimes updated to keep up with changing flu viruses.

**How severe was the 2018-2019 flu season? Did flu vaccine offer protection against flu?**
- Influenza activity in the United States during the 2018-2019 season was of moderate activity.
- The 2018-2019 flu season lasted 21 weeks, making it the longest in 10 years.
- The hospitalization rate was highest among people 65 years old and older, who accounted for 47% of reported influenza associated hospitalizations.
- Receiving a seasonal influenza vaccine each year remains the best way to prevent influenza and its potentially serious complications.

For more information, [cdc.gov/flu/professionals](http://cdc.gov/flu/professionals) or call 1-800-CDC-INFO
Share Additional Information
If the conversation does not lead to an influenza vaccine administered that day, pharmacists can share the CDC patient flyer or another informational brochure that the patient can take home to review and consider for the future.

CDC Antiviral Recommendations for Seasonal Flu
CDC recommends antiviral medications for treatment of influenza as an important adjunct to annual influenza vaccination. If a patient becomes sick with influenza, antiviral drugs may be a treatment option. Antiviral drugs can lessen symptoms and shorten the time patients are sick by 1 or 2 days and can prevent more serious influenza-related complications, like pneumonia and respiratory failure.

Antiviral treatment is recommended as early as possible, ideally within 48 hours of symptom onset, for any patient with confirmed or suspected influenza, who is hospitalized, has severe or progressive illness, or is at high risk for influenza-related complications. Clinical judgment is based on a patient’s disease severity and progression, age, underlying medical conditions, likelihood of influenza, and time of onset of symptoms.

For more answers to common misconceptions, visit CDC’s website.

References
- CDC MMWR: Influenza Activity In the United States During The 2017–18 Season and Composition of the 2018–19 Influenza Vaccine
  https://www.cdc.gov/mmwr/volumes/68/wr/mm6824a3.htm?s_cid=mm6824a3_w
- ASHP Guidelines on the Pharmacist’s Role in Immunization
  https://www.ashp.org/-/media/assets/policy-guidelines/docs/quidelines/pharmacists-role-immunization.ashx?la=en&hash=84FB763202C4EFA6034EF80A2765401AE9287B4D
- Make a Strong Flu Vaccine Recommendation
  https://www.cdc.gov/flu/professionals/vaccination/flu-vaccine-recommendation.htm
- Misconceptions about Seasonal Flu and Flu Vaccines
  https://www.cdc.gov/flu/about/qa/misconceptions.htm
- Vaccine Effectiveness
  https://www.cdc.gov/flu/about/qa/vaccineeffect.htm
- What are the benefits of flu vaccination?
  https://www.cdc.gov/flu/prevent/vaccine-benefits.htm
- Key Facts About Seasonal Flu Vaccine
  https://www.cdc.gov/flu/protect/keyfacts.htm

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