Influenza Vaccination Information for Health Care Workers

Did You Know?

- CDC, the Advisory Committee on Immunization Practices (ACIP), and the Healthcare Infection Control Practices Advisory Committee (HICPAC) recommend that all U.S. health care workers get vaccinated annually against influenza.
- Health care workers include (but are not limited to) physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual staff not employed by the health-care facility, and persons (e.g., clerical, dietary, housekeeping, laundry, security, maintenance, administrative, billing, and volunteers) not directly involved in patient care but potentially exposed to infectious agents that can be transmitted to and from health care workers and patients.

Why Get Vaccinated?

- Influenza (the flu) can be a serious disease that can lead to hospitalization and sometimes even death. Anyone can get very sick from the flu, including people who are otherwise healthy.
- You can get the flu from patients and coworkers who are sick with the flu.
- If you get the flu, you can spread it to others even if you don’t feel sick.
- By getting vaccinated, you help protect yourself, your family at home, and your patients.

How Many Health Care Workers Got Vaccinated Last Season?

- Early season 2014–15 flu vaccination coverage among health care personnel was 64.3%, similar to early season coverage during the 2013–14 season (62.9%).
  - During the previous two seasons, flu vaccination coverage increased by 9–12 percentage points from early season to the end of the season.
- By occupation, early season flu vaccination coverage was highest among pharmacists (86.7%), nurse practitioners/physician assistants (85.8%), physicians (82.2%), nurses (81.4%), and other clinical professionals (72.0%).
  - Flu vaccination coverage was lowest among administrative and non-clinical support staff (59.1%) and assistants or aides (46.6%).
- By work setting, early season flu vaccination coverage was highest among health care personnel working in hospitals (78.7%).
  - Flu vaccination coverage was lowest among health care personnel working in long-term care facilities (54.4%).
- Early season flu vaccination coverage was higher among health care personnel whose employers required (85.8%) or recommended (68.4%) that they be vaccinated, compared to those whose employer did not have a policy or recommendation regarding flu vaccination (43.4%).
- Among unvaccinated health care personnel who did not intend to get the flu vaccination during this flu season, the most common reason reported for not getting vaccinated was that they don’t think that flu vaccines work. The second most common reason was that they don’t need the vaccine.
- See Health Care Personnel and Flu Vaccination, Internet Panel Survey, United States, November 2014 for more information.

Influenza (Flu) Facts

- Influenza (the flu) can be a serious disease that can lead to hospitalization and sometimes even death. Anyone can get sick from the flu.
- People with flu can spread it to others. Influenza viruses are spread mainly by droplets made when people with flu cough, sneeze or talk. These droplets can land in the mouths or noses of
people who are up to about 6 feet away or possibly be inhaled into the lungs. Less often, a person might get flu by touching a surface or object that has flu virus on it and then touching their own mouth or nose.

- Most healthy adults may be able to infect others beginning 1 day before symptoms develop and up to 5 to 7 days after becoming sick. Children may pass the virus for longer. Symptoms start 1 to 4 days after the virus enters the body. That means that you may be able to pass on the flu to someone else before you know you are sick, as well as while you are sick. Some persons can be infected with the flu virus but have no symptoms. During this time, those persons may still spread the virus to others.
- Some people, such as older adults, pregnant women, and very young children as well as people with certain long-term medical conditions are at high risk of serious complications from the flu. These medical conditions include chronic lung diseases, such as asthma and chronic obstructive pulmonary disease (COPD), diabetes, heart disease, neurologic conditions and pregnancy.
- Since health care workers may care for or live with people at high risk for influenza-related complications, it is especially important for them to get vaccinated annually.
- Annual vaccination is important because influenza is unpredictable, flu viruses are constantly changing and immunity from vaccination declines over time.
- CDC recommends an annual flu vaccine as the first and best way to protect against influenza. This recommendation is the same even during years when the vaccine composition (the viruses the vaccine protects against) remains unchanged from the previous season.

**Flu Vaccine Facts**

- **The seasonal flu vaccine protects against the influenza viruses that research indicates will be most common during the upcoming season.** Trivalent vaccines are made to protect against three flu viruses; an influenza A (H1N1) virus, an influenza A (H3N2) virus, and an influenza B virus. Quadrivalent vaccines protect against four viruses; the same viruses as the trivalent vaccine as well as an additional B virus.
- **Flu vaccines CANNOT cause the flu.** Flu vaccines are made with either killed or weakened viruses.
- **Flu vaccines are safe.** Serious problems from the flu vaccine are very rare. The most common side effect that a person is likely to experience is soreness where the injection was given. This is generally mild and usually goes away after a day or two. Visit Influenza Vaccine Safety for more information.

**Who Is Recommended for Vaccination?**

Everyone 6 months of age and older should get a flu vaccine every season. This recommendation has been in place since February 24, 2010 when CDC’s Advisory Committee on Immunization Practices (ACIP) voted for “universal” flu vaccination in the United States to expand protection against the flu to more people.

Vaccination to prevent influenza is particularly important for people who are at high risk of serious complications from influenza. See People at High Risk of Developing Flu-Related Complications for a full list of age and health factors that confer increased risk.

More information is available at Who Should Get Vaccinated Against Influenza.

**Who Shouldn't Be Vaccinated?**

CDC recommends use of the flu shot (inactivated influenza vaccine or IIV) and the recombinant influenza vaccine (RIV). The nasal spray flu vaccine (live attenuated influenza vaccine or LAIV) should not be used during 2016-2017. Different flu vaccines are approved for use in different groups of people. Factors that can determine a person's suitability for vaccination, or vaccination with a particular vaccine, include a person's age, health (current and past) and any allergies to flu vaccine or its components.

- People who cannot get a flu shot
- People who should talk to their doctor before getting the flu shot

**What Kinds of Seasonal Flu Vaccines Are Available?**

CDC recommends use of injectable influenza vaccines (including inactivated influenza vaccines and recombinant influenza vaccines) during 2016-2017. The nasal spray flu vaccine (live attenuated influenza vaccine or LAIV) should not be used during 2016-2017.

Both trivalent (three-component) and quadrivalent (four-component) flu vaccines will be available.

Trivalent flu vaccines include:
• Standard-dose trivalent shots (IIV3) that are manufactured using virus grown in eggs. Different flu shots are approved for different age groups. Most flu shots are given in the arm (muscle) with a needle. One trivalent vaccine formulation can be given with a jet injector, for persons aged 18 through 64 years.

• A high-dose trivalent shot, approved for people 65 and older.

• A recombinant trivalent shot that is egg-free, approved for people 18 years and older.

• A trivalent flu shot made with adjuvant (an ingredient of a vaccine that helps create a stronger immune response in the patient’s body), approved for people 65 years of age and older (new this season).

Quadrivalent flu vaccines include:

• Quadrivalent flu shots approved for use in different age groups.

• An intradermal quadrivalent flu shot, which is injected into the skin instead of the muscle and uses a much smaller needle than the regular flu shot. It is approved for people 18 through 64 years of age.

• A quadrivalent flu shot containing virus grown in cell culture, which is approved for people 4 years of age and older (new this season).

How Do Flu Vaccines Work?

The seasonal flu vaccine protects against the influenza viruses research indicates will be most common during the upcoming season. Antibodies develop in the body about two weeks after vaccination. These antibodies provide protection against infection from viruses that are the same as or similar to those used to make the vaccine.

What Viruses Does the 2016-2017 Vaccine Provide Protection Against?

All 2016-2017 influenza vaccines are made to protect against the following three viruses:

• an A/California/7/2009 (H1N1)pdm09-like virus
• an A/Hong Kong/4801/2014 (H3N2)-like virus
• a B/Brisbane/60/2008-like virus. (This is a B/Victoria lineage virus)

Some of the 2016-2017 flu vaccine is quadrivalent vaccine and also protects against an additional B virus (B/Phuket/3073/2013-like virus). This is a B/Yamagata lineage virus.

Vaccines that give protection against three viruses are called trivalent vaccines. Vaccines that give protection against four viruses are called quadrivalent vaccines.

More information about influenza vaccines is available at Preventing Seasonal Flu With Vaccination.

If I Got Vaccinated During the 2015-2016 Season, Do I Need to Get Vaccinated This Season?

Yes. CDC recommends a yearly flu vaccine for everyone 6 months and older. This is for two reasons: vaccine compositions may be updated from one season to the next and a person's immune protection from vaccination declines over time. So an annual vaccination is needed to get the “optimal” or best protection against the flu.

When Should I Get Vaccinated?

Optimally, vaccination should occur before onset of influenza activity in the community. Health care providers should offer vaccination by the end of October, if possible. Vaccination should continue to be offered as long as influenza viruses are circulating. While seasonal influenza outbreaks can happen as early as October, most of the time influenza activity peaks between December and February. Since it takes about two weeks after vaccination for antibodies to develop in the body that protect against influenza virus infection, it is best that people get vaccinated so they are protected before influenza begins spreading in their community.

Protect yourself, your family, and your patients by getting a flu vaccine this season.

What Is CDC’s Position on Mandating Flu Vaccination for Health Care Workers?

The findings of a recent CDC review of related published literature indicate that influenza vaccination of health care personnel can enhance patient safety. 1, 2
CDC conducts science-based investigations, research, and public health surveillance both nationally and internationally. CDC adopts recommendations that are made by the Advisory Committee for Immunization Practices. These recommendations may be considered by state and other Federal agencies when making or enforcing laws. CDC also has infection control recommendations for health care settings. However, CDC does not issue any requirements or mandates for state agencies, health systems, or health care workers regarding infection control practices, including influenza vaccination or the use of masks.

However, some employers require certain immunizations. Hospitals, for example, may require some staff to get the flu vaccine or hepatitis B vaccine or take other precautions such as the use of masks.

To find out more about the laws in your state, contact your state health department through Public Health Resources: State Health Departments.

State Immunization Laws for Healthcare Workers and Patients and Vaccines and Immunizations: Basics and Common Questions National Center for Immunization and Respiratory Diseases have more information. For more information, updates, and access to free materials to assist with educating staff and patients about the impact of influenza and the benefits of vaccination, visit CDC Seasonal Influenza (Flu) or call the National Immunization Hotline at (800) 232-2522 (English), (800) 232-0233 (español), or (800) 243-7889 (TTY).

Special Consideration Regarding Egg Allergy

The recommendations for vaccination of people with egg allergies have changed for 2016-2017.

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.

More Information


Health Care Personnel and Flu Vaccination, Internet Panel Survey, United States, November, 2013

Influenza Vaccination Coverage Among Health-Care Personnel — United States, 2012–13 Influenza Season. MMWR Morb Mortal Wkly Rep 2013;62(38);781-786


Health Care Personnel Flu Vaccination, Internet Panel Survey, United States, November, 2012

CDC. Influenza Vaccination Coverage Among Health-Care Personnel – 2011-12 Influenza Season, United States. MMWR 2012;61:753-757.


CDC. Influenza Vaccination Coverage Among Health-Care Personnel—United States, 2010-11 Influenza Season. MMWR 2011;60:1073-1077.

CDC. Telebriefing on Influenza Vaccination Among Health Care Personnel and Pregnant Women. Thursday, August 18, 2011.


