Key Facts about Influenza (Flu) & Flu Vaccine

Information from:

What is influenza (also called flu)?

The flu is a contagious respiratory illness caused by influenza viruses that infect the nose, throat, and lungs. It can cause mild to severe illness, and at times can lead to death. The best way to prevent the flu is by getting a flu **vaccine** each year.

Signs and symptoms of flu

People who have the flu often feel some or all of these signs and symptoms:

- Fever* or feeling feverish/chills
- Cough
- Sore throat
- Runny or stuffy nose
- Muscle or body aches
- Headaches
- Fatigue (very tired)
- Some people may have vomiting and diarrhea, though this is more common in children than adults.

**It's important to note that not everyone with flu will have a fever.*

How flu spreads

Most experts believe that flu viruses 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 nearby. Less often, a person might also get flu by touching a surface or object that has flu virus on it and then touching their own mouth, eyes or possibly their nose.

Period of contagiousness

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. 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. Some people, especially young children and people with weakened immune systems, might be able to infect others for an even longer time.

How serious is the flu?

Flu is unpredictable and how severe it is can vary widely from one season to the next depending on many things, including:

- what flu viruses are spreading,
- how much flu vaccine is available
- when vaccine is available
- how many people get vaccinated, and
- how well the flu vaccine is matched to flu viruses that are causing illness.

Certain people are at greater risk for serious complications if they get the flu. This includes older people, young children, pregnant women and people with certain health conditions (such as asthma, diabetes, or heart disease).

Flu seasons are unpredictable and can be severe. Over a period of 30 years, between 1976 and 2006, estimates of flu-associated deaths in the United States range from a low of about 3,000 to a high of about 49,000 people.

Complications of flu

Complications of flu can include bacterial pneumonia, ear infections, sinus infections, dehydration, and worsening of chronic medical conditions, such as congestive heart failure, asthma, or diabetes.

Prevent seasonal flu: Get vaccinated

The single best way to prevent the flu is to get a flu vaccine each season.

There are several flu vaccine options for the 2014-2015 flu season.

Traditional flu vaccines made to protect against three different flu viruses (called "trivalent" vaccines) are available. In addition, flu vaccines made to protect against four different flu viruses (called "quadrivalent" vaccines) also are available.

Trivalent flu vaccine protects against two influenza A viruses (an H1N1 and an H3N2) and an influenza B virus. The following trivalent flu vaccines are available:

- Standard dose trivalent shots (IIV3) that are manufactured using virus grown in eggs. These are approved for people ages 6 months and older. There are different brands of standard dose trivalent shot, and each is approved for different ages.
- A standard dose intradermal trivalent 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 high-dose trivalent shot, approved for people 65 and older.
- A standard dose trivalent shot containing virus grown in cell culture, which is approved for people 18 and older.
- A standard dose trivalent shot that is egg-free, approved for people 18 through 49 years of age.

The quadrivalent flu vaccine protects against two influenza A viruses and two influenza B viruses. The following quadrivalent flu vaccines are available:

- A standard dose quadrivalent flu shot.
- A standard dose quadrivalent nasal spray, approved for people 2 through 49 years of age (recommended preferentially for healthy children 2 through 8 years old when immediately available and there are no contraindications or precautions).

(*"Healthy" in this instance refers to children 2 years through 8 years old who do not have an underlying medical condition that predisposes them to influenza complications.)

When to get vaccinated against seasonal flu

Yearly flu vaccination should begin soon after flu vaccine is available, and ideally by October. However, getting vaccinated even later can be protective, as long as flu viruses are circulating. While seasonal influenza outbreaks can happen as early as

October, most of the time influenza activity peaks in January or later. 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.

Who Should Get Vaccinated This Season?

Everyone 6 months of age and older should get a flu vaccine this season. This recommendation has been in place sinceFebruary 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.

While everyone 6 months and older should get a flu vaccine this season with rare exception, it's especially important for some people to get vaccinated.

Those people include the following:

- **People who are at high risk of developing serious complications (like pneumonia) if they get sick with the flu.**
  - **People who have certain medical conditions including asthma, diabetes, and chronic lung disease.**
  - **Pregnant women.**
  - **People younger than 5 years (and especially those younger than 2), and people 65 years and older.**
  - **A complete list is available at People Who Are at High Risk of Developing Flu-Related Complications.**
- **People who live with or care for others who are at high risk of developing serious complications (see list above).**
  - **Household contacts and caregivers of people with certain medical conditions including asthma, diabetes, and chronic lung disease.**
  - **Household contacts and caregivers of infants younger than 6 months old.**
  - **Health care personnel.**

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

Special Consideration Regarding Egg Allergy:

People who have ever had a severe allergic reaction to eggs may be advised not to get vaccinated or to get recombinant flu vaccine, if they are aged 18 through 49 years. People who have had a mild reaction to egg—that is, one which only involved hives—may receive a flu shot with additional precautions. Recombinant flu vaccines also are an option for these people if they are aged 18 through 49 years and they do not have any contraindications to that vaccine. Make sure your doctor or health care professional knows about any allergic reactions. Most, but not all, types of flu vaccine contain a small amount of egg.

Use of the nasal spray seasonal flu vaccine

Vaccination with the nasal-spray flu vaccine is an option for healthy* people 2 to 49 years of age who are not pregnant. Even people who live with or care for those in a high risk group (including health care workers) can get the nasal-spray flu vaccine as long as they are healthy themselves and are not pregnant. The one exception is health care workers who care for people with severely weakened immune systems who require a protected hospital environment; these people should get the inactivated flu vaccine (flu shot).

Nasal Spray Vaccine in Children Age 2 to 8 Years Old

Starting in 2014-2015, CDC recommends use of the nasal spray vaccine (LAIV) in healthy children 2 through 8 years of age, when it is immediately available and if the child has no contraindications or precautions to that vaccine. Recent studies suggest that the nasal spray flu vaccine may work better than the flu shot in younger children. However, if the nasal spray vaccine is not immediately available and the flu shot is, children age 2 through 8 years old should get the flu shot. Don't delay vaccination to find the nasal spray flu vaccine. For more information about the new CDC recommendation, see Nasal Spray Flu Vaccine in Children 2 through 8 Years Old or the 2014-2015 MMWR Influenza Vaccine Recommendations.

Who should not be vaccinated against seasonal flu?

There is no special or additional contraindication for people getting quadrivalent versus trivalent vaccine. See "Who should not get a flu vaccine" for the contraindications to getting a flu shot and the nasal spray vaccine.