

## Flu Vaccine

The single best way to protect against the flu is to get vaccinated each year. There are two types of vaccines:

- The "flu shot" — an inactivated vaccine (containing killed virus) that is given with a needle, usually in the arm. The flu shot is approved for use in people older than 6 months, including healthy people and people with chronic medical conditions.
- The nasal-spray flu vaccine — a vaccine made with live, weakened flu viruses that do not cause the flu (sometimes called LAIV for "live attenuated influenza vaccine" or FluMist®). LAIV (FluMist®) is approved for use in healthy\* people 2 to 49 years of age who are not pregnant.

Each vaccine contains three influenza viruses: one A (H3N2) virus, one A (H1N1) virus and one B virus. The viruses in the vaccine change each year based on international surveillance and scientists' estimations about which types and strains of viruses will circulate in a given year.

About two weeks after vaccination, antibodies that provide protection against influenza virus infection develop in the body.

### When to Get Vaccinated

Yearly flu vaccination should begin in September or as soon as vaccine is available and continue throughout the influenza season, into December, January and beyond. This is because the timing and duration of influenza seasons vary. While influenza outbreaks can happen as early as October, most of the time influenza activity peaks in January or later.

### Who Should Get Vaccinated

In general, anyone who wants to reduce their chances of getting the flu can get vaccinated. However, it is recommended by ACIP that certain people should get vaccinated each year. They are either people who are at high risk of having serious flu complications or people who live with or care for those at high risk for serious complications. During flu seasons when vaccine supplies are limited or delayed, ACIP makes recommendations regarding priority groups for vaccination.

People who should get vaccinated each year are:

- Children aged 6 months up to their 19th birthday
- Pregnant women
- People 50 years of age and older
- People of any age with certain chronic medical conditions
- People who live in nursing homes and other long-term care facilities
- People who live with or care for those at high risk for complications from flu, including:
  - Health care workers

- Household contacts of persons at high risk for complications from the flu
- Household contacts and out of home caregivers of children less than 6 months of age (these children are too young to be vaccinated)

### Use of the Nasal Spray Flu Vaccine

It should be noted that vaccination with the nasal-spray flu vaccine is always an option for healthy\* people 2 to 49 years of age who are not pregnant.

### Who Should Not Be Vaccinated

There are some people who should not be vaccinated without first consulting a physician.

These include:

- People who have a severe allergy to chicken eggs.
- People who have had a severe reaction to an influenza vaccination.
- People who developed Guillain-Barré syndrome (GBS) within 6 weeks of getting an influenza vaccine.
- Children less than 6 months of age (influenza vaccine is not approved for this age group)
- People who have a moderate-to-severe illness with a fever (they should wait until they recover to get vaccinated.)

### Vaccine Effectiveness

The ability of flu vaccine to protect a person depends on the age and health status of the person getting the vaccine, and the similarity or "match" between the virus strains in the vaccine and those in circulation. Testing has shown that both the flu shot and the nasal-spray vaccine are effective at preventing the flu.

### Vaccine Side Effects (What to Expect)

Different side effects can be associated with the flu shot and LAIV.

#### Flu Shot

The viruses in the flu shot are killed (inactivated), so you cannot get the flu from a flu shot. Some minor side effects that could occur are:

- Soreness, redness or swelling where the shot was given
- Fever (low grade)
- Aches

If these problems occur, they begin soon after the shot and usually last one to two days. Almost all people who receive influenza vaccine have no serious problems from it.

However, on rare occasions, flu vaccination can cause serious problems, such as severe allergic reactions.

### LAIV (FluMist®)

The viruses in the nasal-spray vaccine are weakened and do not cause severe symptoms often associated with influenza illness. (In clinical studies, transmission of vaccine viruses to close contacts has occurred only rarely.)

In children, side effects from LAIV (FluMist®) can include

- Runny nose
- Wheezing
- Headache
- Vomiting
- Muscle aches
- Fever

In adults, side effects from LAIV (FluMist®) can include

- Runny nose
- Headache
- Sore throat
- Cough

\* "Healthy" indicates persons who do not have an underlying medical condition that predisposes them to influenza complications.

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