

Live Attenuated Influenza Vaccine [LAIV] (The Nasal Spray Flu Vaccine)

For the 2018-2019 U.S. influenza season, CDC and its vaccines advisory committee (ACIP) recommend that providers use any licensed, age-appropriate influenza vaccine (Inactivated influenza vaccines (IIV), Recombinant influenza vaccine (RIV), or live attenuated influenza vaccine (LAIV4) with no preference expressed for one vaccine over another. (LAIV4 is again a recommended option for people for whom it is otherwise appropriate.) [Learn more](#).

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What flu viruses does the nasal spray vaccine protect against?

All nasal spray flu vaccines for the 2018-2019 season will contain four flu viruses: an influenza A (H1N1) virus, an influenza A (H3N2) virus and two influenza B viruses.

Are any of the available flu vaccines recommended over the others?

For the 2018-2019 flu season, the [Advisory Committee on Immunization Practices \(ACIP\)](#) recommends annual influenza vaccination for everyone 6 months and older with any licensed age-appropriate flu vaccine including inactivated influenza vaccine (IIV), recombinant influenza vaccine (RIV4) or live attenuated influenza vaccine (LAIV4) with no preference expressed for any one vaccine over another.

Who can be vaccinated with the nasal spray flu vaccine?

The nasal spray is approved for use in non-pregnant individuals, 2 years through 49 years of age. People with some medical conditions should not receive the nasal spray flu vaccine.

Who should not be vaccinated with the nasal spray flu vaccine?

Some people should not get the nasal spray flu vaccine:

- Children younger than 2 years
- Adults 50 years and older
- Pregnant women
- People with a history of severe allergic reaction to any component of the vaccine or to a previous dose of any influenza vaccine
- Children 2 years through 17 years of age who are receiving aspirin- or salicylate-containing medications.
- People with weakened immune systems (immunosuppression)
- Children 2 years through 4 years who have asthma or who have had a history of wheezing in the past 12 months.
- People who have taken influenza antiviral drugs within the previous 48 hours.
- People who care for severely immunocompromised persons who require a protected environment (or otherwise avoid contact with those persons for 7 days after getting the nasal spray vaccine).

In addition, the following conditions are precautions to the use of the nasal spray influenza vaccine:

- Asthma in people aged 5 years and older.
- Other underlying medical conditions that can put people at higher risk of serious flu complications. These include conditions such as lung disease, heart disease (except isolated hypertension), kidney disease (like diabetes), kidney or liver disorders, neurologic/neuromuscular, or metabolic disorders. See “People at High Risk of Developing Flu-Related Complications.”
- Moderate or severe acute illness with or without fever.
- Guillain-Barré Syndrome within 6 weeks following a previous dose of influenza vaccine.

How effective is the nasal spray seasonal flu vaccine?

Influenza vaccine effectiveness (VE) can vary from year to year, among different age and risk groups, by vaccine type, and even by virus type and subtype. While data from 2010-2011 through 2016-2017 indicated that LAIV lacked effectiveness among 2 through 17-year-olds against H1N1pdm09 influenza viruses (2009 H1N1) in the U.S., LAIV was effective against influenza B viruses, and was similarly effective against H3N2 viruses as inactivated influenza vaccines. For the 2018-2019 season, the manufacturer of LAIV4 has included a new H1N1 vaccine component. Some data suggest this will result in improved effectiveness of LAIV4 against H1N1. However, no published effectiveness estimates for this vaccine component against H1N1 viruses are yet available. ACIP and CDC voted to resume the recommendation for the use of LAIV4 based on evidence suggesting that the new H1N1 component will result in improved effectiveness of LAIV against these viruses. There is no expressed preference for any flu shot or the nasal spray vaccine.

For more information about vaccine effectiveness, visit [How Well Does the Seasonal Flu Vaccine Work?](#) [Learn more](#) about the 2017-18 flu season and vaccine composition for the 2018-19 flu season.

Should the nasal spray flu vaccine be given to patients with chronic diseases?

There is a precaution against giving the nasal spray flu vaccine to people with certain chronic health conditions because the safety and effectiveness of this vaccine in people with those conditions has not been established.

Should pregnant and postpartum women avoid contact with people who were recently vaccinated with the nasal spray vaccine?

Pregnant and postpartum women do not need to avoid contact with persons recently vaccinated with the nasal spray flu vaccine. However, the nasal spray flu vaccine should not be given to women who are pregnant. Postpartum women can receive a flu shot or the nasal spray flu vaccine.

Are there any contraindications to giving breastfeeding mothers the nasal spray vaccine?

Breastfeeding is not a contraindication for the nasal spray vaccine. Breastfeeding mothers younger than 50 years can get the nasal spray flu vaccine as long as they do not have any contraindication to getting that vaccine. See [Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices \(ACIP\) – United States, 2015-2016 Influenza Season – August 7, 2015](#) for a list of contraindications and precautions for the nasal spray vaccine.

Can the nasal spray flu vaccine be given to patients when they are ill?

The nasal spray flu vaccine can be given to people with mild illnesses (e.g., diarrhea or mild upper respiratory tract infection with or without fever). However, nasal congestion might limit delivery of the vaccine to the nasal lining. Delaying vaccination with LAIV until the nasal congestion is reduced should be considered. People with moderate or severe illness, with or without fever, should generally wait to be vaccinated until they have recovered. Your healthcare provider can provide advice about when to get vaccinated if you are feeling ill.

Can nasal spray flu vaccine give me flu?

Flu vaccines do not cause flu illness. The nasal spray flu vaccine does contain live viruses. However, the viruses are attenuated (weakened), so that they will not cause influenza illness. The weakened viruses are also cold-adapted, which means they are designed to only multiply at the cooler temperatures found within the nose. The viruses cannot infect the lungs or other areas where warmer temperatures exist.

While a flu vaccine cannot give you flu illness, there are different side effects that may be associated with getting a flu shot or a nasal spray flu vaccine.

These side effects are mild and short-lasting, especially when compared to symptoms of bad case of flu.

What are the side effects that could occur?

The viruses in the nasal spray vaccine are weakened and do not cause severe symptoms often associated with influenza illness. Side effects from the nasal spray may include:

- Runny nose
- Wheezing
- Headache
- Vomiting
- Muscle aches
- Fever
- Sore throat
- Cough

If these problems occur, they usually begin soon after vaccination and are mild and short-lived. 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. People who think that they have been injured by a vaccine can file a claim for compensation from the [National Vaccine Injury Compensation Program \(VICP\)](#).

More information about the safety of flu vaccines is available at [Influenza Vaccine Safety](#).

Note: There is no recommendation for pregnant women or people with pre-existing medical conditions to get special permission or written consent from their doctor or health care professional for influenza vaccination if they get vaccinated at a worksite clinic, pharmacy or other location outside of their physician's office. For more information, visit [Misconceptions about Seasonal Flu and Flu Vaccines](#).