PROCEDURE

Influenza (flu) vaccine (inactivated or recombinant) - what you need to know

An inactivated or recombinant flu vaccine is an injection that helps protect you from seasonal influenza.

PURPOSE
Reduce the risk and severity of seasonal influenza

PROCEDURE TYPE
Therapeutic, minimally invasive intramuscular injection

WHERE IT IS DONE
Outpatient clinic, pharmacy, workplace, or community vaccination site

ANAESTHESIA
None

HOW LONG IT TAKES
About 1 to 5 minutes

PREPARATION
No fasting; review allergies, prior reactions, and current illness

RECOVERY
Same day, with no routine driving restriction

MAIN RISKS
Sore arm, fever, fainting, severe allergic reaction

RESULTS
Immune protection develops in about two weeks

Overview

The inactivated or recombinant influenza vaccine is an injection that helps protect you from seasonal flu. Influenza is a respiratory infection that can cause fever, cough, body aches, and serious complications.

Inactivated vaccines contain influenza viruses that have been killed. Recombinant vaccines use laboratory-made influenza proteins and do not contain influenza virus. Neither type can give you flu.

The vaccine is usually injected into an upper-arm muscle. Babies and some young children may receive it in the thigh.

Flu viruses change over time, and protection decreases. For this reason, vaccination is offered each flu season using vaccines designed for the viruses expected to circulate.

The live intranasal flu vaccine is a different product given as a nasal spray. It is not another name for the inactivated or recombinant injection, and it is not suitable for everyone.

Why the procedure is performed

Flu vaccination reduces your chance of becoming ill with influenza. If you still develop flu, vaccination may lower the risk of severe illness, hospital treatment, and some complications.

Vaccination is particularly important for people more likely to become seriously unwell, including older adults, young children, pregnant people, and people with certain long-term health conditions.

No flu vaccine provides complete protection. Its effectiveness changes from season to season because circulating viruses and vaccine strains are not always a close match. Your age, health, and immune response also affect protection.

Who should and should not have it

Annual flu vaccination is recommended for most people aged 6 months and older. The appropriate vaccine depends on your age, pregnancy status, health conditions, allergies, and which products are available.

Adults aged 65 and older may be offered a high-dose inactivated, adjuvanted inactivated, or recombinant vaccine. These are designed to produce a stronger immune response. If one is unavailable, another age-appropriate injectable flu vaccine can still be used.

The injection may need to be avoided, delayed, or given with extra precautions if:

Guillain-Barré syndrome is a rare condition in which the immune system affects the nerves. A previous episode does not always rule out vaccination, but your healthcare team should weigh the benefits and risks.

A mild illness, such as a minor cold, usually does not require vaccination to be delayed. Egg allergy also does not usually prevent flu vaccination. People with egg allergy may receive an age-appropriate flu vaccine using the usual safety measures available at vaccination sites.

Inactivated and recombinant flu vaccines can be given during pregnancy. The live nasal vaccine is not used during pregnancy.

- You are younger than the minimum age approved for that vaccine
- You previously had a severe allergic reaction to a flu vaccine or one of its ingredients
- You have a moderate or severe illness, with or without fever
- You developed Guillain-Barré syndrome within six weeks of an earlier flu vaccine
- You have a bleeding condition or take medicine that increases bleeding

How to prepare

Follow the treating facility's instructions first, because its preparation and check-in procedures take priority.

You do not need to fast. Eat and drink normally unless you are attending for another procedure that has separate restrictions. Wearing clothing with a loose or short sleeve makes the upper arm easier to reach.

Before vaccination, tell the healthcare professional about:

Do not stop prescribed blood thinners like warfarin or apixaban unless the healthcare professional managing them tells you to do so. The injection may cause a larger bruise, but many people taking these medicines can still be vaccinated safely.

Bring your vaccination record if you have one. Some children need two doses in a flu season, based on their age and vaccination history.

- Any serious allergy or previous vaccine reaction
- Guillain-Barré syndrome
- A current fever or significant illness
- Pregnancy or a weakened immune system
- A bleeding disorder or blood-thinning medicine

What happens during the procedure

A healthcare professional will confirm your identity and check that the vaccine is suitable for your age and health history. You should have an opportunity to ask questions before agreeing to receive it.

You will usually sit down. The injection site may be cleaned, and a small needle will be placed into the muscle of your upper arm. For babies and some young children, the thigh is commonly

used.

The injection itself takes a few seconds. You may feel a brief sharp sting or pressure. A small dressing may be applied if there is bleeding.

You will usually be asked to remain seated or nearby for about 15 minutes. This allows staff to help if you feel faint or have an immediate allergic reaction.

Recovery and what to expect afterward

Your arm may feel sore, tender, or slightly swollen. A cool compress and gentle arm movement may help. Ask your healthcare team which pain medicine is appropriate if you need it.

You can eat and drink normally after vaccination. Staying hydrated may help if you feel tired or light-headed.

Most people can return to normal activity immediately. If your arm is uncomfortable, you may prefer to avoid strenuous upper-body exercise until it improves.

There is no routine driving restriction because the vaccine does not involve sedation. Do not drive if you feel faint, dizzy, or unwell.

Most people can return to work or school the same day. Mild tiredness, headache, muscle aches, or fever can occur and usually settle within a few days.

Risks and possible complications

Common effects include pain, redness, or swelling where the injection was given. Some people develop headache, tiredness, muscle aches, nausea, or a mild fever. These reactions are signs of an immune response and are not influenza.

Fainting can happen around injections, especially in adolescents. Sitting or lying down during vaccination and remaining for observation helps reduce injury from a fall.

Severe allergic reactions are uncommon but require immediate treatment. Vaccination sites should have staff and equipment available to respond.

Guillain-Barré syndrome has been reported rarely after flu vaccination. Influenza infection itself is also associated with this condition. Tell your healthcare team if you previously developed Guillain-Barré syndrome, particularly after a flu vaccine.

As with any injection, minor bleeding, bruising, or infection at the needle site can occur.

Results and follow up

There is no immediate test result. Your immune system usually takes about two weeks to build protection.

You should receive a record showing the vaccine name and date. Keep it with your health records, especially if you received the vaccine at a pharmacy, workplace, or community clinic.

Routine medical follow-up is not usually needed. Some children require a second dose during the same flu season. The vaccination team will advise you based on the child's age, previous doses, and current recommendations.

You can still catch flu after vaccination. The vaccine does not protect against every influenza virus or against other infections that can cause flu-like symptoms.

Alternatives

Your alternatives depend on your age and health:

- Live nasal flu vaccine: Avoids a needle but contains weakened live virus. It is limited to eligible people in a defined age range and is not suitable during pregnancy or for some people with weakened immunity or other health conditions.
- A different injectable flu vaccine: Another inactivated or recombinant formulation may be suitable if a particular product is unavailable or unsuitable. Age approvals and ingredients differ.
- Not being vaccinated: Avoids vaccine side effects but leaves you without vaccine-based protection for that flu season.
- Everyday infection precautions: Handwashing, ventilation, and avoiding close contact when someone is ill may reduce spread, but they do not replace vaccination.
- Antiviral medicine: Prescription antiviral treatment may shorten illness or reduce complications when used appropriately. It is not a substitute for routine vaccination.

When to call your healthcare team

Contact your healthcare team during routine hours if redness, swelling, fever, or pain is worsening rather than improving, lasts longer than expected, or concerns you. Also call if you need advice about a second childhood dose or an incomplete vaccination record.

Seek urgent medical advice if you develop new weakness, tingling, difficulty walking, or other

significant neurological symptoms after vaccination.

Call emergency services immediately for difficulty breathing, swelling of the face or throat, widespread hives, a rapid heartbeat with severe dizziness, collapse, or loss of consciousness. These may be signs of a severe allergic reaction.

Common questions

Will I be asleep?

No. Flu vaccination does not require anaesthesia or sedation. You remain awake and the injection takes only a few seconds.

Can I drive home?

Usually, yes. Wait until any light-headedness has passed, and do not drive if you feel faint or unwell.

How painful is it?

Most people feel a brief sting. Arm soreness may develop afterward and usually improves within a few days.

Can the flu shot give me flu?

No. Inactivated vaccines contain killed virus, and recombinant vaccines contain laboratory-made proteins rather than influenza virus.

When will I know it worked?

There is no routine test to confirm protection. Your immune response generally develops over about two weeks.

Can I get it with other vaccines?

Many vaccines can be given during the same visit, usually at different injection sites. The vaccination team will check whether the combination is appropriate for you.

Sources

- Centers for Disease Control and Prevention. Influenza Vaccination: A Summary for Clinicians
- Centers for Disease Control and Prevention. Who Should and Should Not Get a Flu Vaccine

- Centers for Disease Control and Prevention. Inactivated Influenza Vaccine: Vaccine Information Statement
- Centers for Disease Control and Prevention. Clinical Guidance for Seasonal Influenza Vaccine Safety
- Grohskopf LA and colleagues. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices-United States, 2025-26 Influenza Season . MMWR Recommendations and Reports, 2025
- US Food and Drug Administration. Flublok: Package Insert and Product Information