PROCEDURE

Recombinant zoster (shingles) vaccine, RZV - what you need to know

RZV is a two-dose injection that helps prevent shingles and its complications.

PURPOSE
Prevent shingles and long-lasting nerve pain

PROCEDURE TYPE
Therapeutic preventive care - intramuscular injection

WHERE IT IS DONE
Outpatient clinic or pharmacy

ANAESTHESIA
None

HOW LONG IT TAKES
About one to two minutes

PREPARATION
No fasting; bring vaccine records and wear a loose sleeve

RECOVERY
Same day; driving allowed if you feel well

MAIN RISKS
Sore arm, fatigue, fever, allergic reaction

RESULTS
Protection develops after the two-dose series

Overview

The recombinant zoster vaccine, or RZV, helps protect you from shingles. Shingles is a painful rash caused by reactivation of the virus that causes chickenpox.

RZV does not contain live virus, so it cannot give you shingles or chickenpox. It contains a piece of the virus and an ingredient that strengthens the immune response.

The vaccine is given as an injection into a muscle, usually in your upper arm. The standard course has two doses. Most people receive the second dose 2 to 6 months after the first. Some people with weakened immune systems may be advised to receive it sooner.

Why the procedure is performed

RZV is given to lower your chance of developing shingles. It also reduces the risk of complications, including postherpetic neuralgia. This is nerve pain that can continue after the shingles rash has healed.

Protection is important because shingles becomes more common with age and with conditions or treatments that weaken the immune system.

The vaccine may still be recommended if you:

RZV prevents future shingles. It does not treat an active shingles rash or relieve pain from an existing episode.

- Previously had shingles
- Received an older shingles vaccine
- Do not remember having chickenpox
- Have a long-term condition or take treatment that affects immunity

Who should and should not have it

In the United States, the Centers for Disease Control and Prevention recommends two RZV doses for adults aged 50 and older. It is also recommended for adults aged 19 and older who have, or will have, a weakened immune system because of an illness or treatment.

You should not receive a dose if you had a severe allergic reaction to a previous RZV dose or one of its ingredients.

Vaccination is usually delayed if you currently have shingles. You can generally receive it after the rash has cleared and the acute symptoms have settled.

A moderate or severe illness, especially with fever, may also be a reason to wait. A mild illness such as a minor cold does not usually require a delay.

Tell the vaccination team before the injection if you:

If you are pregnant, the CDC advises considering delaying RZV because information about its use during pregnancy is limited. Breastfeeding is not generally a reason to delay vaccination.

RZV is not a chickenpox vaccine. If testing has shown that you have never had chickenpox or immunity to its virus, your healthcare team can explain whether chickenpox vaccination is more appropriate.

- Are pregnant or may be pregnant

- Have previously had Guillain-Barré syndrome, a rare nerve disorder
- Have a history of severe allergies
- Recently received another vaccine
- Are taking medicine that suppresses your immune system
- Expect to start chemotherapy, radiation therapy or another immune-suppressing treatment

How to prepare

Follow the treating facility's own instructions first, because its procedures and your medical needs may affect how you prepare.

You do not need to fast. Eat and drink normally unless you have been given different instructions. Drinking enough fluid may help if you tend to feel faint during injections.

Wear clothing that makes your upper arm easy to reach. Bring your vaccination record if you have one.

Make sure the vaccination team knows about your allergies, health conditions, pregnancy status and current medicines. Blood thinners like warfarin or apixaban usually do not prevent vaccination, but they can increase bruising. Do not stop a prescribed blood thinner unless the clinician who manages it tells you to do so.

If this is your second dose, bring the date of your first dose. If more than 6 months have passed, the series usually does not need to be restarted.

What happens during the procedure

A healthcare professional will confirm your identity, review your vaccine history and ask about allergies or reasons to delay the injection.

You will sit with your upper arm exposed. The vaccine is injected into the deltoid muscle, the large muscle at the top of your arm. The injection itself takes only a few seconds.

You may feel a brief sharp sting or pressure. Anaesthesia and sedation are not needed.

You may be asked to remain at the clinic for about 15 minutes afterward. This allows staff to help if you feel faint or have an immediate allergic reaction.

Recovery and what to expect afterward

Pain: A sore, red or swollen arm is common. A cool compress and gentle arm movement may help. Ask your healthcare team which pain medicine is suitable for you if needed.

Eating: You can eat and drink normally after the injection. Fluids may be helpful if you develop a fever or feel tired.

Activity: Light daily activity is usually fine. If you feel unwell, rest and avoid strenuous exercise until you feel better. Reactions often begin within a day or two and usually settle within several days.

Driving: You may drive after vaccination if you feel well. Do not drive if you feel faint, dizzy or too unwell to control a vehicle safely.

Work: Many people return to work immediately. Some prefer to plan the vaccine before a lighter day because tiredness, muscle aches, headache, chills or fever can temporarily affect normal activities.

Risks and possible complications

RZV produces a strong immune response, so short-term reactions are common. These may be more noticeable after the second dose.

Possible reactions include:

Fainting can occur around the time of any injection. Sitting or lying down helps prevent injury if you become light-headed.

A severe allergic reaction is uncommon but needs immediate treatment. Signs can include trouble breathing, swelling of the face or throat, widespread hives, severe dizziness or collapse.

Guillain-Barré syndrome has been reported after RZV. This is a rare disorder in which the immune system affects the nerves. Safety monitoring has identified a possible association in older adults, but this does not mean every reported case was caused by the vaccine. Discuss your individual benefits and risks if you have previously had this condition.

- Pain, redness or swelling where the injection was given
- Tiredness or headache
- Muscle aches, chills or fever
- Nausea or stomach discomfort

Results and follow up

RZV does not produce an immediate test result. Your immune system builds protection after each dose, with the full series providing the intended protection.

Arrange your second dose before leaving the clinic or set a reminder. The usual interval is 2 to 6 months. For some people who are immunocompromised, a 1-to-2-month interval may be used when faster completion would be helpful.

If your second dose is late, receive it when you can. You usually do not need to repeat the first dose.

No routine blood test is needed to confirm that the vaccine worked. The vaccine greatly lowers risk but cannot prevent every case. Contact your healthcare team if you later develop a painful, blistering rash, especially on one side of your body or face.

Alternatives

RZV is the preferred shingles vaccine in the United States. There is no medicine, supplement or lifestyle change that provides equivalent protection.

Your alternatives include:

- Delay vaccination: This may be reasonable during active shingles, a moderate or severe illness, or pregnancy. Delaying leaves you without the vaccine's added protection during that time.
- Decline vaccination: You avoid vaccine reactions, but keep your underlying risk of shingles and its complications.
- Use antiviral treatment if shingles develops: Antiviral medicines can shorten an episode or reduce complications when started promptly, but they do not provide the same preventive protection as vaccination.
- Use another shingles vaccine: Older live-virus shingles vaccines are no longer used in the United States. Availability and recommendations differ by country, and live vaccines may be unsuitable for people with weakened immunity.

When to call your healthcare team

Contact your healthcare team during routine hours if:

Seek urgent medical advice if you develop new weakness, tingling that spreads upward, difficulty walking or facial weakness in the days or weeks after vaccination.

Call emergency services immediately for trouble breathing, swelling of your face or throat, widespread hives, severe dizziness or collapse. These may be signs of a severe allergic reaction.

- Side effects are not improving after several days
- Redness or swelling continues to spread
- You missed the recommended time for your second dose
- You develop a new rash and are unsure whether it could be shingles
- You have questions about receiving the second dose after a strong reaction

Common questions

Will I be asleep?

No. This is a quick injection and does not require sedation or anaesthesia.

Can I drive myself home?

Usually, yes. Wait for the requested observation period and drive only if you feel well. Arrange another way home if you are dizzy or faint.

How painful is it?

The injection usually causes a brief sting. Arm soreness afterward is common and can be strong enough to affect sleep or activity for a short time.

When will I know it worked?

There is no routine test or immediate result. Protection develops as your immune system responds, especially after the second dose.

Do I still need it if I have already had shingles?

Often, yes. Shingles can happen more than once. Vaccination is generally given after the current episode has resolved.

What if my second dose is late?

Receive it as soon as practical. The series usually does not need to be restarted.

Sources

- Centers for Disease Control and Prevention. Shingles Vaccine Recommendations

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- U.S. Food and Drug Administration. SHINGRIX prescribing information
- Dooling KL, Guo A, Patel M, et al. Recommendations of the Advisory Committee on Immunization Practices for Use of Herpes Zoster Vaccines. MMWR, 2018
- Anderson TC, Masters NB, Guo A, et al. Use of Recombinant Zoster Vaccine in Immunocompromised Adults Aged 19 Years and Older. MMWR, 2022