

Shingles (Zoster): Questions and Answers

INFORMATION ABOUT THE DISEASE AND VACCINES

What causes shingles?

Both chickenpox and shingles are caused by the same virus, the varicella zoster virus (VZV). After a person has had chickenpox, the virus rests in the body's nerves permanently. Approximately 30% of all people who have been infected with chickenpox will later develop herpes zoster, commonly known as zoster or shingles.

Why do some people develop shingles and others don't?

Shingles occurs when VZV reactivates and causes recurrent disease. It is not well understood why this happens in some people and not others. The risk of getting shingles increases as a person gets older. People who have medical conditions that keep the immune system from working properly, or people who receive immunosuppressive drugs are also at greater risk to get shingles.

What are the symptoms of shingles?

Shingles usually starts as a rash with blisters that scab after 3 to 5 days. The most frequently mentioned symptom is pain. The rash and pain usually occur in a band on one side of the body, or clustered on one side of the face. The rash usually clears within 2 to 4 weeks.

Before the rash develops, there is often pain, itching, or tingling in the area where the rash will develop. Other symptoms of shingles can include fever, headache, chills, and upset stomach.

What are possible complications from shingles?

Very rarely, shingles can lead to pneumonia, hearing problems, blindness, scarring, brain inflammation (encephalitis), or death.

For about one person in five, severe pain can continue even after the rash clears up, a situation called post-herpetic neuralgia (PHN). As people get older, they are more likely to develop PHN, and it is more likely to be severe and long lasting. The pain may be sharp or throbbing, and it may extend beyond the area of the original rash. The skin may be unusually sensitive to touch and to changes in temperature. PHN can last for months, or even years.

Is there a treatment for shingles?

Several antiviral medicines can be used to treat shingles. These medications should be started as soon as possible after the rash appears. They can help shorten the length and severity of the episode. Antiviral treatment is most effective if administered within 24 to 72 hours of the appearance of the rash.

Pain medicine may also help with pain caused by shingles.

Is there a test for shingles?

Yes. Shingles is usually diagnosed based on symptoms and the appearance of the rash. A definite diagnosis is made by growing the varicella virus from a skin lesion.

Can you catch shingles from an infected person?

No, shingles cannot be passed from one person to another such as through sneezing, coughing, or casual contact. While it is possible for the VZV virus to be spread from a person with active shingles to a person who has never had chickenpox or never been vaccinated against chickenpox (if they have direct contact with the rash), the person exposed would develop chickenpox, not shingles.

How common is shingles in the United States?

It is estimated that one million cases of shingles occur annually.

Can you get shingles more than once?

Yes, but rarely. Most people will have only one occurrence of shingles in their lifetime, but second and third occurrences have been reported.

What kind of vaccine is available?

There are two different vaccines available to prevent zoster. Live zoster vaccine (ZVL; Zostavax, Merck) contains virus that has been modified, or weakened. The virus replicates (grows) to produce immunity in the body without causing illness. Recombinant zoster vaccine (RZV; Shingrix, GlaxoSmithKline) contains a single genetically engineered protein from the zoster virus. RZV is not alive and cannot replicate in the body.

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How is this vaccine given?

ZVL is given by an injection, usually in the fat into the back of the upper arm. RZV is also given by injection but into the deltoid muscle of the upper arm.

Who should get this vaccine?

The Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention recommends that all adults age 50 years and older receive a two dose series of RZV. The doses should be given 2 to 6 months apart. People 50 years and older should receive RZV even if they previously received the live zoster vaccine or have had shingles. ACIP prefers that people receive RZV rather than ZVL.

Alternatively people 60 years and older can receive one dose of ZVL, including persons who have already had an episode of shingles. ZVL is approved by the Food and Drug Administration (FDA) for people 50 to 59 years of age. ACIP does not recommend routine ZVL vaccination of people age 50 through 59 years, but a clinician may give it to people in this age group if desired.

How effective are these vaccines?

Both zoster vaccines have been studied in large clinical trials. ZVL reduced the occurrence of shingles by about 50% among persons age 60 years and older. In this study the vaccine was most effective for those age 60–69 years (64%); effectiveness declined with increasing age to 41% for those age 70–79 years and 18% for those age 80 years and older. A later study showed the vaccine to be about 70% effective in preventing shingles among persons age 50–59 years. Protection declines over time since vaccination. There is little or no protection 10 years following vaccination.

In clinical trials RZV reduced the occurrence of shingles by 97% among people 50 years and older. A second study found that RZV reduced the occurrence of shingles by 90% among people 70 years and older. In this study RZV reduced the occurrence of shingles by 85% four years after vaccination.

Do zoster vaccines prevent post-herpetic neuralgia?

Both zoster vaccines reduce the risk of post-herpetic neuralgia (PHN). ZVL reduced the overall occurrence of PHN by 66%. The amount of reduction varied by age group. RZV reduced the overall occurrence of PHN by 89%. The amount of reduction also varied by age group but not as much as with ZVL.

Who recommends this zoster vaccine?

Zoster vaccines are recommended by CDC's Advisory Committee on Immunization Practices, the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists, and the American College of Physicians.

What side effects have been reported with zoster vaccines?

The most commonly reported side effects following ZVL are redness (36%), pain or tenderness (35%), swelling (26%), and itchiness (7%) at the injection site. Local side effects are also most common following RZV with study participants reporting pain (69%–88% depending on age group), redness (38%), and swelling (30%). People who received RZV also reported symptoms such as muscle pain, tiredness, and headache more frequently than those who received a placebo. About 9% of people who received RZV experienced pain at the injection site severe enough to prevent normal activities. About 11% of people who received RZV experience systemic events (myalgia, fatigue, headache, fever, shivering, and gastrointestinal symptoms) severe enough to prevent normal activities.

If I have a strong reaction after my first dose of RZV should I still take the second dose?

Not everyone who has a strong local reaction after the first dose of RZV will have the same reaction after the second dose. CDC encourages people to get the second dose even if a strong local reaction occurs with the first dose.

Who should NOT receive zoster vaccine?

For both zoster vaccines people who are allergic to a component of the vaccine or who had an allergic reaction following a previous dose should not receive that vaccine again. For both vaccines if the person has a severe acute illness vaccination should be deferred until the illness has improved.

ZVL is a live virus vaccine and should not be given to individuals who have a weakened immune system caused by treatments that they are taking such as radiation or corticosteroids, or due to conditions such as HIV/AIDS, cancer of the lymph, bone, or blood. Pregnant women should not receive ZVL. There is currently no information available on the use of RZV in people who are pregnant or lactating women. RZV should not be

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given to individuals who have a weakened immune system caused by treatments that they are taking such as radiation or corticosteroids, or due to conditions such as HIV/AIDS, cancer of the lymph, bone, or blood.

Is the cost of shingles vaccine covered by Medicare?

All Medicare Part D plans cover both zoster vaccines, meaning that a pharmacy can bill Medicare for the cost of the vaccine. Your share of payment varies by plan. Medicare Part B does not cover the shingles vaccine. If you have private insurance, your plan may or may not cover the vaccine; contact your insurer to find out.

ZVL is a live virus vaccine and is very fragile. If you get ZVL at a pharmacy, it is very important that it be administered in the pharmacy. ZVL should NEVER be transported from a pharmacy to a doctor's office. It must be given as soon as it is removed from storage in a pharmacy freezer.

Does the zoster vaccine cause shingles?

No.

Can a person who has received the live zoster vaccine infect others with this virus?

No. It is safe to be around infants and young children, pregnant women, or people with weakened immune systems after you get ZVL. Transmission of the chickenpox virus from a person who has received ZVL has never been documented. Some people who get ZVL will develop a chickenpox-like rash near the place where they were vaccinated. As a precaution, this rash should be covered until it disappears.