

## What is herpes zoster (shingles)?

Herpes zoster, commonly known as shingles, is caused by the varicella-zoster virus – the same virus that causes chickenpox. Chickenpox is most common in children [see our Chickenpox (Varicella) fact sheet]. Shingles can affect people of any age but is more common as we get older and in people with weakened immune systems.

## How do you get it?

In people who have previously had chickenpox, shingles occurs when the dormant varicella-zoster virus is no longer kept in check by the body's immune system and it becomes active. You cannot catch shingles from someone with chickenpox. Varicella-zoster virus is abundant in New Zealand and most people acquire the virus during childhood.

## Who is most at risk?

Anyone who has previously had chickenpox is at risk of developing shingles at some stage in their life. Most adults in New Zealand will have been exposed to varicella zoster virus, even if they do not recall having had chickenpox. The older we get the more likely we are to get shingles. Of those aged 85 years, at least half will have had herpes zoster.

In addition to getting older, other factors such as having a weakened immune system, psychological stress, physical trauma, being a woman and genetic susceptibility, e.g. a history of related family members getting herpes zoster, can increase the risk of getting shingles.

## What are the symptoms of shingles?

Shingles is characterised by a painful rash that develops on one area of the body. Often burning, tingling or itching is felt under the skin in the affected area before the rash develops. The rash commonly occurs on the back, abdomen or face. Tiredness, fever, headache and upset stomach may also occur.

Approximately 1–14 days after the onset of pain, a rash of small blisters appear on a reddened area of skin. The blisters follow nerve pathways, and often extend front to back on one side of the body or head. The pain may become a throbbing or burning pain. After a few days, the blisters will crust over, like chickenpox. Over the course of several days to weeks, the crusts drop off and the skin will heal.

## How serious is shingles?

The pain from shingles can seriously restrict daily living activities. Shingles of the face or scalp may result in complications, such as headaches and weakness on the face causing a droop on the affected side. It may take several months for this weakness to clear. Some people also develop painful eye or ear inflammation and infections.

Nerve damage can occur in the same region as the rash, particularly in the elderly, causing numbness or tingling and nerve pain for months or years after the rash has cleared. This chronic pain is known as post-herpetic neuralgia.

The blisters of the shingles rash contain the varicella-zoster virus (the chickenpox virus). It is possible for the virus to be passed to a close contact by touching the blisters. It is possible to catch chickenpox from close contact with the shingles rash. The risk of this can be minimised if the rash is covered.

## Which vaccine protects against shingles?

A zoster vaccine (Zostavax®) can be given to help prevent the reactivation of the varicella-zoster virus. By boosting immunity against the virus, the vaccine helps to reduce the incidence or severity of shingles and its painful complications.

## How protective is the vaccine?

In clinical trials, the zoster vaccine is most effective at preventing shingles in people aged 50–59 years (around 7 in 10 immunised protected) and becomes less effective with advancing age. Around 5 in 10 people aged 65–69 years and around 4 in 10 people aged 80 years or older.

The real-life ability of Zostavax to prevent shingles or severe disease and post herpetic neuralgia (PHN), appears to be better than was shown during trials especially for those aged 70 years or older.

Adults who get shingles even though they have been immunised, Zostavax may reduce the pain associated with shingles, the effect of shingles pain on daily activities and the risk of post-herpetic neuralgia.

The highest protection against shingles is during the first year after receiving Zostavax. By eight years after receiving Zostavax protection against getting shingles is very low but could still be enough to prevent the development of post herpetic-neuralgia or needing to be hospitalised.

Adults who have previously had shingles can receive Zostavax. An episode of shingles is expected to boost natural immunity against a further episode, so immunisation too soon after having herpes zoster is unlikely to provide any benefit.

There is no information about whether a Zostavax booster immunisation provides any benefit. Although there are no recommendations, adults who have previously received a Zostavax immunisation can receive a second Zostavax. There are no safety concerns about receiving a second dose.

## How safe is the vaccine?

The zoster vaccine has an excellent safety record; it was first used in the U.S. in 2006. As it contains live varicella-zoster virus, specialist advice should be sought for anyone with a weakened immune system. Mild vaccine-associated adverse events such as headache, redness or swelling at injection site, and itching or rash around the injection site are known vaccine responses (refer to the table on the next page).

## Who can have the zoster vaccine?

The vaccine is approved for use from 50 years of age, whether or not they recall having had chickenpox in the past, especially for those who have previously had shingles or are living with someone with an impaired immune system. Despite the fact that it is less effective the older we get, the incidence and long-term effects of shingles increase with age, and hence, the vaccine is likely to be of greater benefit to older people.

The vaccine is free for two groups of people in New Zealand:

### Standard programme

**Adults aged 65 years on/after 1 April 2018**

- » No age limit for the standard programme
- » No time limit for the standard programme

OR

### Catch-up programme

**Adults aged 66–80 years inclusively on 1 April 2018**

- » Age limit for the catch-up programme
- » Time limit for the catch-up programme
- » Eligible until 31 December 2020 or they turn 81 years of age, whichever comes first

## Who should not have or should seek more advice before having the zoster vaccine?

Zostavax is a live vaccine. The usual contraindications and precautions for live vaccines apply to the zoster vaccine. Specialist advice should be sought if you have any concerns.

Anyone with severe allergy (anaphylaxis) to components of the vaccine, including gelatin and neomycin, or those who have had a severe allergic reaction to the vaccine previously, should not have the vaccine.

Immunisation should be postponed in individuals who are acutely unwell. The presence of a minor infection is not a reason to delay immunisation.

Herpes zoster	
Complications of disease	Vaccine responses
<ul style="list-style-type: none"> <li>» Severe pain affecting daily living activities</li> <li>» Headache</li> <li>» Facial palsy (droopiness)</li> <li>» Eye and ear infections</li> <li>» Chronic nerve damage, causing pain and tingling (post-herpetic neuralgia)</li> </ul>	<p><b>Common responses</b></p> <ul style="list-style-type: none"> <li>» Mild pain, redness and swelling around injection site</li> <li>» Itching or rash around injection site</li> <li>» Headache</li> </ul> <p><b>Rare responses</b></p> <ul style="list-style-type: none"> <li>» Severe allergic reaction (anaphylaxis)</li> </ul>

Vaccines are prescription medicines. Talk to your doctor or nurse about the benefits or any risks.

## References

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