Herpes zoster (shingles)

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 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.

What are the symptoms of shingles?
Shingles is characterised by a painful rash that develops on one area of the body. Often a burning, sharp pain, tingling or numbness is felt under the skin in the affected area before the rash develops; this commonly occurs on the back, abdomen or face, and can lead to severe itching or aching. 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. After a few days the blisters will crust over, similar to 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.

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

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.

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. One in four people will have shingles at least once in their lifetime. The risk of shingles increases from the age of 50 and risk of post-herpetic neuralgia increases significantly with age from 70 years of age. Anyone at any age with weakened immune systems, as a result of emotional stress, certain medications or underlying medical conditions, major surgery and skin burns are also at risk of developing shingles.1,2

Which vaccine protects against shingles?
A zoster vaccine (Zostavax®) is licensed, but not funded, for people over the age of 50 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?
The zoster vaccine is most effective at preventing shingles in people aged 50–69 years for at least 5–8 years. Long term duration of protection is unknown. It will not work for everyone, it is expected to be effective in 6–7 out of every 10 people immunised. Although the vaccine’s effectiveness in preventing shingles decreases with age in those over 70 years (to around 1–3 in 10 immunised), it is appears to be effective in reducing the severity of shingles, the effect of shingles pain on daily activities, and in preventing post-herpetic neuralgia in the elderly.3

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 reactions (see table).

### Herpes zoster

<table>
<thead>
<tr>
<th>Complications of disease</th>
<th>Vaccine responses</th>
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<tr>
<td>• Severe pain affecting daily living activities</td>
<td><strong>Common responses</strong></td>
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<tr>
<td>• Headache</td>
<td>• Mild pain, redness and swelling around injection site</td>
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<td>• Facial palsy (droopiness)</td>
<td>• Itching or rash around injection site</td>
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<tr>
<td>• Eye and ear infections</td>
<td>• Headache</td>
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<td>• Chronic nerve damage, causing pain and tingling (post-herpetic neuralgia)</td>
<td><strong>Rare responses</strong></td>
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<tr>
<td></td>
<td>• Severe allergic reaction (anaphylaxis)</td>
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Vaccines are prescription medicines. Talk to your doctor or nurse about the benefits or any risks.
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Who should have the zoster vaccine?
The vaccine is licensed for adults over the age of 50 years, 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.

Who should not have or should seek more advice before having the zoster 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.

References