## 2023 Shingles (Herpes Zoster)

guide for health care professionals





#### Cause

Reactivation of the virus which causes chickenpox (varicella-zoster virus VZV) in a person who has previously had varicella (chickenpox).

After developing chickenpox, the virus lies dormant in the dorsal root or trigeminal ganglia and can become reactivated later in life to cause shingles.

#### **Features**

Generally, shingles presents as an acute, self-limiting vesicular rash which is often painful and lasts around 10–15 days.

The rash is usually unilateral, most commonly affecting the lumbar or thoracic dermatomes. The virus works down the nerves that branch out from the spinal cord

In 80% of cases, the early phase occurs 2–3 days before the rash.

Early symptoms may be severe pain (e.g. 'burning', 'stabbing'), itching and numbness around the affected areas. This may be accompanied by headache, photophobia and malaise.

#### **Complications**

- Severe pain (where the rash was) known as post-herpetic neuralgia (PHN):
  - Persistent chronic neuropathic pain which persists for more than 90 days from the onset of the rash.
  - Can interfere with carrying out everyday activities and can be difficult to treat.
  - Increased risk of PHN with age: affects around 30% of people with shingles over 80 years of age.
- Serious complications involving the eye called herpes zoster ophthalmicus (in about 10–20% of shingles patients)
- Very rarely, shingles can lead to pneumonia, hearing problems, blindness, encephalitis or death.

#### **Transmission**

Shingles cannot be passed from one person to another. However, a person with shingles can pass the varicella zoster virus to a person who has never had chickenpox or who has not had the chickenpox vaccine. In such cases, the person exposed to the virus may develop chickenpox but not shingles.

The virus is spread by direct contact with the fluid contained in the blisters, which can transfer to sheets and clothing. Until the blisters scab over, the person is infectious.

Counsel patients to avoid contact with people who have a weakened immune system, newborns and pregnant women while contagious.

#### Who is at Risk?

In a national serosurvey conducted in 2007, more than 95% of the adult population in Australia had antibodies to VZV by the age of 30, indicating that they had been previously infected with the virus. Therefore almost the entire adult population is at risk of shingles. Overall, 20–30% of people will develop shingles in their lifetime, most after the age of 50 years.

People who are immunocompromised are also at risk.

## The role of the healthcare professional

You play an active role in protecting thousands of older
Australians who are at a higher risk of shingles and its complications as well as providing treatment during a zoster infection.



# Shingles occurs most commonly in older age groups and can cause severe pain.

for more go to: www.immunisationcoalition.org.au/resources/shingles/





#### Vaccines

There are two vaccines available for people aged 50 years and older, to prevent herpes zoster:

- Zostavax (Merck): is a liveattenuated varicella zoster virus vaccine given subcutaneously as a single dose.
- Shingrix (GlaxoSmithKline):
   is an adjuvant recombinant
   varicella zoster virus
   glycoprotein E (gE) subunit
   (non-live) vaccine given
   intramuscularly in two divided
   doses 2-6 months apart.

#### Which vaccine should be used?

Shingrix is preferred over Zostavax for people aged 50 years and over, for the prevention of herpes zoster and its complications due to its higher efficacy. The manufacturer has not submitted it for supply on the NIP at this stage. It is availabe under private prescription.

Zostavax remains an alternative to Shingrix for people who are immunocompetent. It is available on the NIP for all people at 70 years of age.

#### **Vaccine Efficacy**

Shingrix demonstrated a high efficacy against herpes zoster of about 97% in adults 50 years and older and about 91% in those aged 70 years and older.

In clinical trials, Zostavax efficacy was lower and decreased with increasing age (70% in people aged 50-59 years, 64% in those aged 60-69 years, 41% in 70-79 years, and 18% in 80-89 years (no longer statistically significant in this age group).

#### People who are immunocompromised

Zostavax is generally contraindicated in people who are immunocompromised. Shingrix is recommended in this population.

## Who should be vaccinated with the zoster vaccine?

- Zoster vaccines are registered for use in people aged 50 years and over. They are recommended for adults aged 60 years and over. Zostavax is not recommended for people who are immunocompromised.
- Household contacts (50 years of age and older) of a person who is, or who is expected to become immunocompromised.
- Persons with chronic conditions, since they may have a higher risk of morbidity and mortality due to shingles.

#### Vaccine safety

Shingrix causes moderately high rates of local and systemic infections. Common reactions include: injection-site pain (up to 79%), redness (up to 39%), and swelling (up to 26%) and systemic symptoms such as fatigue and myalgia (up to 46%), headache (up to 39%), shivering (up to 28%), fever (up to 22%), and gastrointestinal symptoms (up to 18%).

Zostavax contains live attenuated varicella-zoster virus. It is safe and well tolerated. Some people may experience a headache, fatigue or soreness around the site where the shot was given. The reaction is typically mild and resolves within a few days.

### Who should NOT receive the live zoster vaccine?

- Pregnant women
- Previous anaphylaxis to the vaccine (either Zostavax or varicella vaccine) or its components.
- People who are severely immunocompromised.

**Zostavax** is free for all adults aged 70 YEARS through the (NIP). A single catch up dose will be funded under the NIP for adults 71–79 years of age until **31 October 2023.** 

## Before vaccinating people with Zostavax

Obtain medical history prior to vaccination with Zostavax, check contraindications of Zostavax in immunocompromised individuals.

In persons who are or have recently been immuno-compromised, the safety of administering Zostavax should always be considered on a case-by-case basis. If there is uncertainty around the level of immunocompromise and when vaccine administration may be safe, vaccination should be withheld and expert advice sought from the treating physician and/or an immunisation specialist.

#### Who should not receive Shingrix?

Previous anaphylaxis to the vaccine.

#### **Shingrix and Pregnancy**

There is currently no data on the use of Shingrix in pregnant women (Category B2).

#### **Treatment**

Antiviral treatment (famciclovir, valaciclovir or aciclovir) may help to reduce pain and shorten the duration of shingles. The treatment is best taken within 72 hours of the onset of the rash but may still be helpful if taken after this time. These antiviral treatments are all considered safe with limited side effects (nausea, headache).

