

# Herpes zoster vaccination

## pocket guide for immunizers

### Herpes Zoster Vaccines

1. Live attenuated zoster vaccine (LZV)
2. Recombinant zoster vaccine (RZV)

### Recommendations for use

The National Advisory Committee on Immunization<sup>1</sup> recommends:

- Vaccination of individuals 50 years of age and older without contraindications with RZV
- Vaccination of individuals 50 years of age and older without contraindications with RZV if they received the LZV or had an episode of herpes zoster
- If RZV is contraindicated, unavailable or inaccessible, then LZV may be considered for immunocompetent individuals 50 years of age and older without contraindications
- RZV (not LZV) may be considered for immunocompromised adults 50 years of age and older

### Dosage and Schedule

1. Live attenuated zoster vaccine (LZV)
  - Single-dose regimen of 0.65mL given by subcutaneous injection
2. Recombinant zoster vaccine (RZV)
  - Two doses of 0.5mL given intramuscularly into the deltoid region of the upper arm at 2 to 6 months apart
  - A 0 and 12 months schedule may be considered for improved adherence to second dose

### Contraindications and Precautions

- Both LZV and RZV are contraindicated in persons with a history of anaphylaxis after previous administration of the vaccine.
- Since LZV is a live vaccine, it is contraindicated in:
  - individuals with primary and acquired immunocompromised states
  - individuals who have recently used or are currently using immune-suppressive medications
  - active untreated tuberculosis
  - pregnancy - pregnancy should also be avoided for three months after the administration of the vaccine

### Adverse Events Associated with Either Vaccine

- erythema
- fatigue
- headache
- pain at injection site
- myalgia

### Simultaneous Administration with Other Vaccines

- RZV and LZV may be administered concomitantly with other live vaccines given by parenteral, oral or intranasal routes.
- Inactivated vaccines, including RZV, may be administered concomitantly with, or at any time before or after, other inactivated vaccines or live vaccines protecting against a different disease.
- LZV may be given at any time before or after live oral or intranasal vaccines. If two live parenteral vaccines are not administered concomitantly, there should be a period of at least 4 weeks before the second live parenteral vaccine is given.

### Duration of Protection

- While protection against HZ remains statistically significant up to 3 years following immunization with LZV, significant waning of protection has been observed one-year post immunization, particularly in older age groups.
- LZV vaccine may not provide optimal ongoing protection at older ages, and waning of vaccine efficacy against PHN over time is unknown.
- Waning of protection against herpes zoster appears to occur at a slower rate with RZV compared to LZV, and is minimal for at least 4 years post-immunization.

### Counseling Points

Patient education on the short-term reactogenicity of RZV is recommended before the vaccine is administered, to promote adherence to the second dose.

### Reference

<sup>1</sup>National Advisory Committee on Immunization (NACI). Updated Recommendations on the Use of Herpes Zoster Vaccines (2018). An Advisory Committee Statement (ACS). <https://www.canada.ca/en/services/health/publications/healthy-living/updated-recommendations-use-herpes-zoster-vaccines.html>