

Practical Strategies for Recommending Immunization to Patients at Risk of Herpes Zoster



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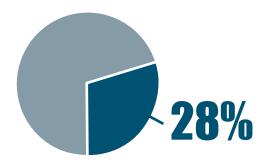


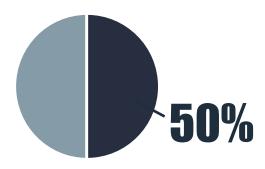
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Importance of Adult Immunization





- In Canada, the lifetime risk of HZ is 28%, jumping to 50% for individuals ≥80 years of age^{1,2}
- Nearly 2/3 of HZ cases occur in individuals ≥50 years of age, with immunocompromised patients
 5.4x more likely to develop HZ complications^{3,4}

HZ infection can result in debilitating complications

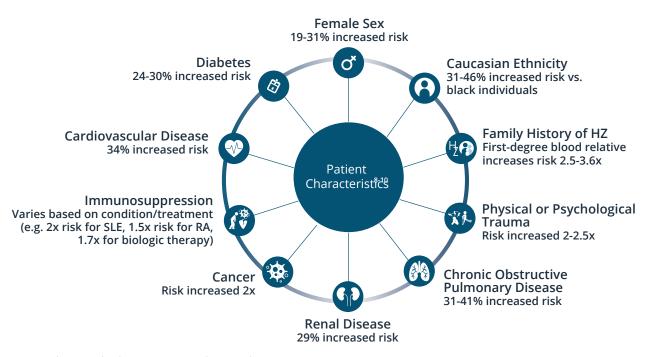


Post-herpetic Neuralgia (PHN): persistent or relapsed pain lasting ≥90 days post-onset of initial HZ rash⁵



HZ Ophthalmicus (HZO): herpes of the ophthalmic division of the trigeminal nerve, often leading to severe chronic pain, vision loss and increased risk of stroke^{6,7}

Herpes Zoster Risk Factors



RA: rheumatoid arthritis; SLE: systemic lupus erythematosus.

Initiating Discussion of HZ Vaccination

The following are best practices for initiating discussions with your patients:¹¹

- When reviewing EMRs during preventative care visits, look at birthdate/age. Discussions on HZ immunization should be conducted in any patient patient ≥50 years of age
- Consider leveraging HZ immunization when discussing or planning to administer other vaccines (i.e. COVID-19 boosters, flu, pneumococcal, tetanus)
- When discussing shingles, it is important to use patient references and real-world evidence to help relate the burden of disease (i.e. family history)



Prescriptions should be filled and administered immediately to ensure patients are protected sooner



NACI guidelines recommend COVID-19 vaccines can be given simultaneously with other vaccines, including HZ vaccines

EMR: electronic medical record; NACI: National Advisory Committee on Immunization.

NACI Recommendations for HZ Immunization

In the general population, NACI strongly recommends RZV for individuals ≥50 years of age without contraindications¹²



NACI strongly recommends RZV for individuals ≥50 years of age who were previously vaccinated with LZV



NACI strongly recommends RZV for individuals ≥50 years of age who have previously experienced an episode of HZ



HC recommends RZV for adults ≥18 years of age who are or will be at increased risk of HZ due to immunodeficiency or immunosuppression caused by known disease or therapy¹³

*LZV may be considered when RZV is contraindicated or unavailable.

LZV: live zoster vaccine; NACI: National Advisory Committee on Immunization; RZV: recombinant zoster vaccine.

Special Patient Populations

Immunization of patients who have experienced HZ¹¹

- Discuss with patients the inability to develop complete immunity to HZ and the estimated recurrence rate of 6.2% for HZ reinfection
- · Reinforce awareness of HZ complications



NACI has given a discretionary recommendation to wait ≥1 year after the HZ episode. Consider setting a follow-up with the patient 1 year post diagnosis to discuss vaccination¹²

Re-immunization of patients who have received LZV¹¹

- When reviewing EMRs, consider checking vaccination history to determine if a patient has previously received LZV
- Discuss with patients that RZV is significantly more effective in reducing HZ and PHN incidence in adults ≥60 years of age



NACI has given a strong recommendation for RZV for individuals previously vaccinated with LZV¹²

EMR: electronic medical record; LZV: live zoster vaccine; NACI: National Advisory Committee on Immunization; RZV: recombinant zoster vaccine.

Barriers for Adult HZ Immunization

The following are key barriers for patients receiving immunization:^{14,15}



Cost of vaccination: If patient does not have private coverage/is not publicly funded, try to leverage family members to assist with paying for vaccination (i.e. gifts)



Side effect concerns: While there are noted side effects with vaccination (e.g. pain, swelling), these are typically predictable versus the potential complications associated with HZ



Lack of receiving an HCP recommendation:

Persistence is key. While many patients may say no initially, it is important to keep vigilant with recommendations as many patients may change their mind over time



When discussing with patients, ensure the value of vaccination is effectively communicated. The cost of contracting HZ is far greater than the cost of HZ vaccination

Strategies for the Immunization of Immunocompromised Patients

Health Canada guidelines recommend HZ vaccination for immunocompromised individuals ≥18 years of age13

- Improve identification of at-risk groups you commonly see in your practice to leverage opportunities for HZ vaccination discussions during treatment planning/initiation
- Discuss updating vaccination with patients when beginning an immunosuppressive therapy to ensure they are aware of potential risks
- Keep documentation up-to-date to ensure all HCPs can identify immunocompromised patients who may be in need of vaccination



When filling a prescription, be aware of patients on immunosuppressive drugs to confirm vaccination status. Drugs include:11

- Dexamethasone
- mTOR Inhibitors: Sirolimus
- Steroids: Prednisone (>20 mg/day), Calcineurin Inhibitors: Tacrolimus, Cyclosporine
 - Antiproliferative Agents: MMF, AZA

References

- 1. Brisson et al. Epidemiol Infect. 2001;127:305-14
- 2. Johnson et al. Ther Adv Vaccines. 2015;3:109-20
- 3. Public Health Agency of Canada. Available from: https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/healthy-living/updated-recommendations-use-herpes-zoster-vaccines-eng.pdf
- 4. Muñoz-Quiles et al. BMC Infect Dis. 2020;21:905
- 5. Sampathkumar et al. Mayo Clin Proc. 2009;84:274-80
- 6. Catron and Hern. West J Emerg Med. 2008;9:174-6
- 7. Kang et al. Stroke. 2009;40:3443-8
- 8. Kawai and Yawn. Mayo Clin Proc. 2017;92:1806-21
- 9. Marra et al. Open Forum Infect Dis. 2016;3
- 10. Marra et al. Open Forum Infect Dis. 2020;7
- 11. Recommendations of the steering committee. July 2022
- 12. Public Health Agency of Canada. Available from: https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/healthy-living/updated-recommendations-use-herpes-zoster-vaccines-eng.pdf
- 13. Health Canada. Canadian Immunization Guide. Available from: https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-8-herpes-zoster-(shingles)-vaccine.html
- 14. Steben et al. J Obstet Gynaecol Can. 2019;41:599-607
- 15. Steben et al. J Obstet Gynaecol Can. 2019;41:1125-33
- 16. Centres for Disease Control and Prevention. Clinical Considerations for Use of RZV in Immunocompromised Adults Aged ≥19 Years. Available from: https://www.cdc.gov/shingles/vaccination/immunocompromised-adults.html