

Herpes zoster in older people: Opportunities for prevention



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Advisory Committee

Disclosures



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- John Litt has, is, or has been, a member of a number of Immunisation Advisory Boards on various vaccines for a range of vaccine manufactures, including: GSK, Seqirus, AstraZeneca and Sanofi Pasteur.
- He has received financial support for attending immunisation conferences, developing educational programs and materials for immunisation, as well as presenting Immunisation Vaccination updates to a variety of audiences including the Immunisation Coalition, GPs and Practice Nurses
- He was previously a member of ATAGI (2000-2004) and the National Centre for Immunisation Research and Surveillance Scientific Advisory Board (2007-2016) and has been a member of the Immunisation Coalition Scientific Advisory Board since 2007.
- John has been paid an honoraria for this webinar which has been sponsored by GSK

Learning outcomes



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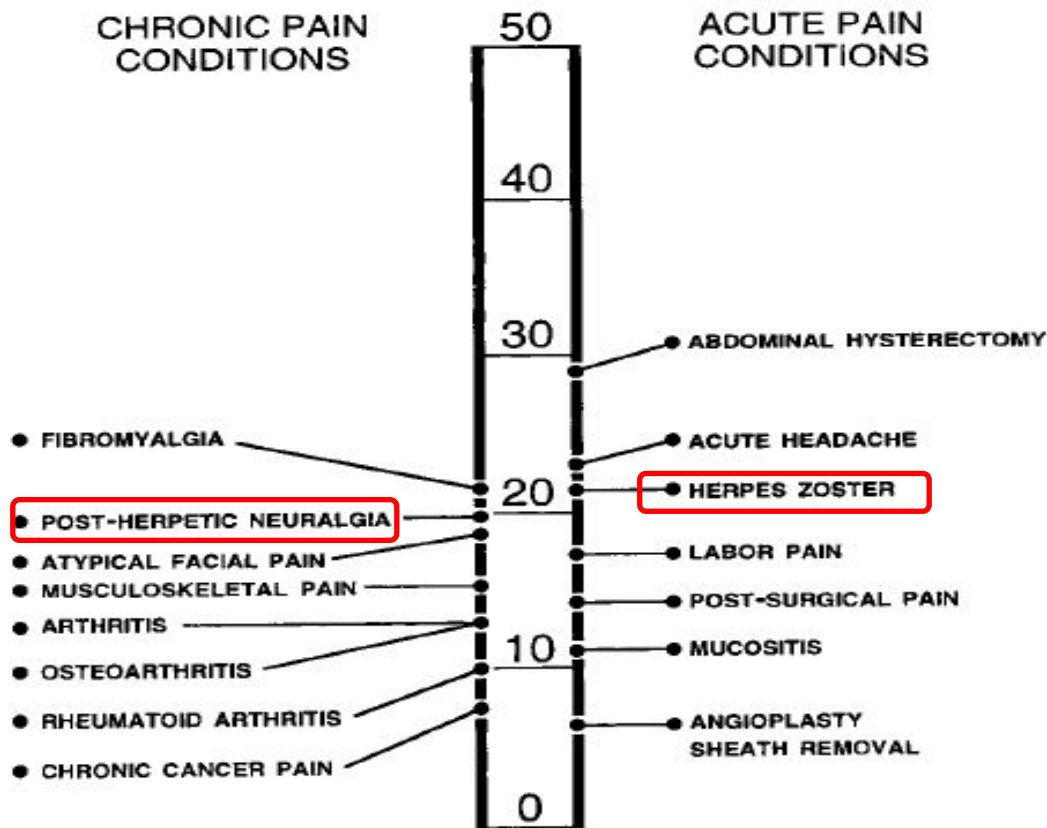
By completing this learning activity, participants will be able to:

- Understand the risk of herpes zoster (HZ) in people aged and older
- Describe the burden and frequency of zoster –related complications in older adults and their clinical impact
- Understand and apply the Australian guideline recommendations for herpes zoster vaccination.
- Be aware of the zoster vaccine effectiveness, eligibility and contraindications
- Identify key messages and strategies to support informed discussions with eligible patients about zoster vaccination.
- Apply an evidence-based systems approach to increase HZ vaccination uptake in targeted patients in your practice

Herpes zoster (HZ): Risk factors and impacts



Comparison of total pain rating index scores; McGill Pain Questionnaire



Impact of acute HZ on functioning and quality of life¹



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Acute pain from HZ greatly interfered with the activities of daily living:¹



64% sleep



58% enjoyment of life



53% general activities



46% mood



29% walking ability



45% normal work



31% relationships

1. Drolet M et al. The impact of herpes zoster and postherpetic neuralgia on health-related quality of life: a prospective study. Canadian Medical Association Journal. 2010;182:1731-36.

Who is at risk of HZ?



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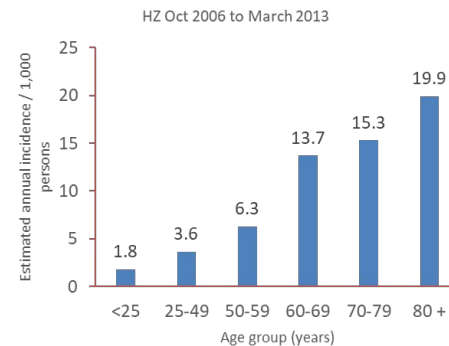
“[In] 2007, more than 95% of the adult population in Australia had antibodies to VZV by the age of 30 years.

Therefore, **almost the entire adult population is at risk of shingles.**”¹

Lifetime risk across population:¹
20-30%

Risk increases with age:^{1,2}

>70% cases occur in people aged over 50 years¹



Adapted from MacIntyre et al. 2015.²

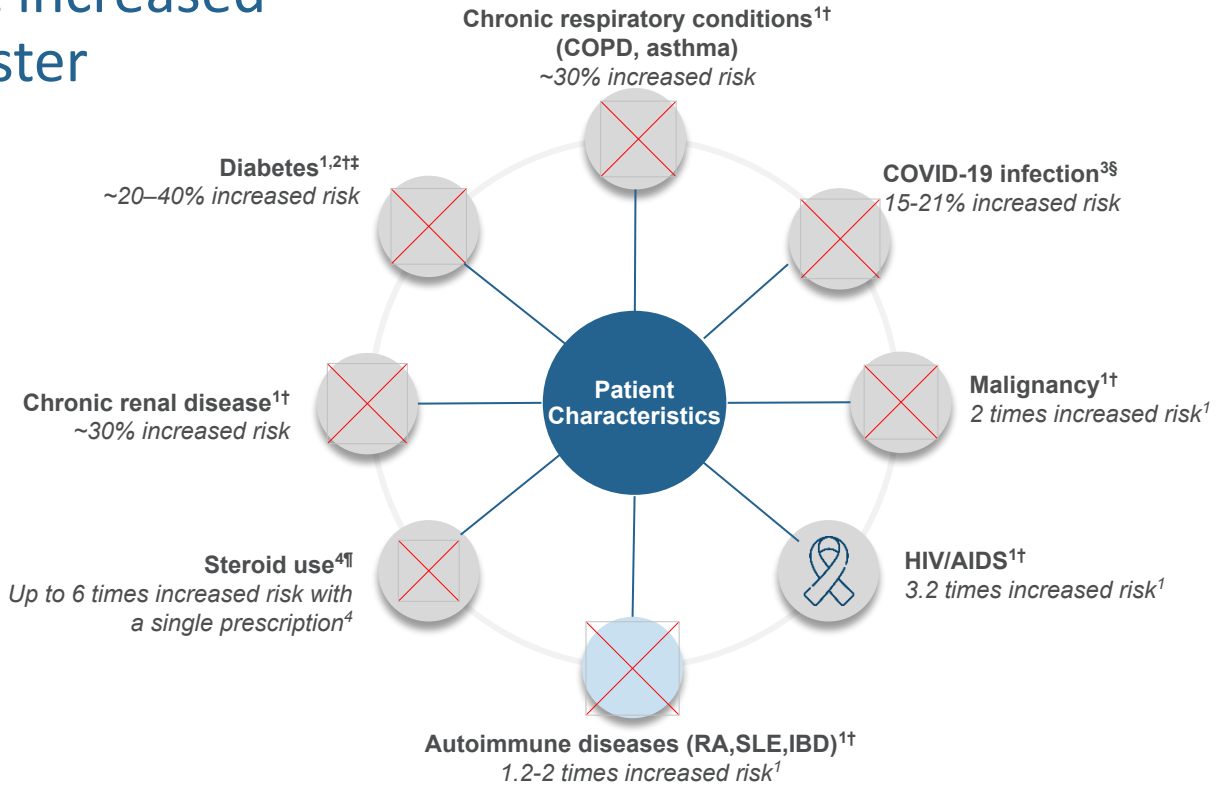
1. National Centre for Immunisation Research and Surveillance (NCIRS). Zoster vaccines for Australian adults fact sheet. Available at <https://ncirs.org.au/ncirs-fact-sheets-faqs/zoster-vaccine-australian-adults> Accessed January 2026.

2. MacIntyre R, et al. Increasing Trends of Herpes Zoster in Australia. PLoS ONE 2015;10(4): e0125025.

Who is at increased risk of zoster



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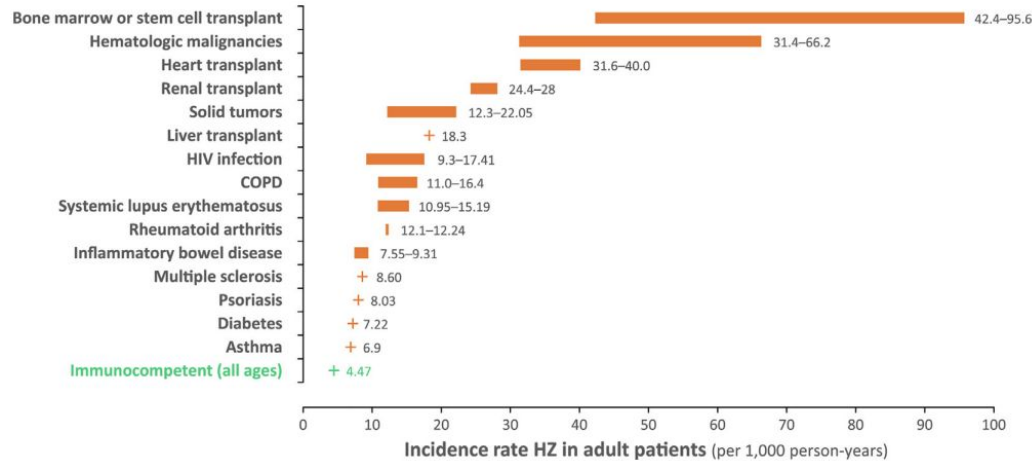


*List of risk factors is not exhaustive and presented HZ risk may vary with age. †Meta-analysis of 88 studies (N=198,751,846); estimates based on risk ratio and age ranged from 3 months to 104 years. ‡Meta-analysis of 16 studies (N=65,541,845); estimates based on risk ratio and age was ≥18 years. §Retrospective cohort study of individuals ≥50 years of age (N=394,677); adjusted incidence rate ratios were estimated by Poisson regression. ¶Prospective population-based study of adults ≥45 years of age (n=20,048) on new systemic corticosteroid users with a median equivalent systemic prednisolone dose of 300 mg⁴; risk was analyzed by Cox proportional hazards models, adjusting for age, sex, and other characteristics. AIDS, acquired immunodeficiency syndrome; COPD, chronic obstructive pulmonary disease⁵; HIV, human immunodeficiency virus; IBD, inflammatory bowel disease; RA, rheumatoid arthritis; SLE, systemic lupus erythematosus

Comorbidity and immunosuppressive therapy are also risk factors for HZ^{1,2}



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Incidence of HZ in adult immunocompromised subgroups. Source: Sullivan et al. 2023.¹ [Licensed under CC by 4.0](#)
Graph is based on a review of 33 studies of HZ incidence in various disease groups.

HZ risk is increased with:²

- Biologics (especially non-TNF- α blockers)
- Corticosteroids
- Non-biologic DMARDs

But risk also increases without immunosuppressant therapy in diabetes, chronic renal disease, CVD, depression, SLE, asthma RA, IBD (RR 2.08 to 1.23)³

1. Sullivan et al. Safety and efficacy of recombinant and live herpes zoster vaccines for prevention in at-risk adults with chronic diseases and immunocompromising conditions. Vaccine 2023;41:36-48. 2. Marra F, Lo E, et al. Risk of herpes zoster in individuals on biologics, disease-modifying antirheumatic drugs, and/or corticosteroids for autoimmune diseases: a systematic review and meta-analysis. Open Forum Infectious Diseases 2016; 3:ofw205. 3. Marra F, Parhar K, et al. Risk factors for herpes zoster infection: a meta-analysis. Open Forum Infectious Diseases. 2020;7(1):ofaa005.

Herpes zoster (HZ): Impacts/complications



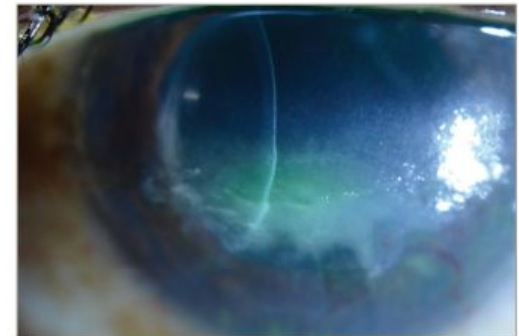
What are the main complications of Zoster?

- Cutaneous
 - Skin pigmentation changes and scarring
 - Bacterial superinfection of the lesions
 - Cutaneous hypersensitivity or allodynia (5 - 10%)
- Neurologic
 - PHN
 - Stroke & dementia*
 - Other due to the involvement of the nervous system: cranial neuropathies, polyneuritis, myelitis, aseptic meningitis, or partial facial paralysis occur
- Ophthalmic
 - epithelial and stromal keratitis
 - Uveitis
 - acute retinal necrosis
- Disseminated zoster and pneumonitis (immune compromised)



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Figure 3: Persistent epithelial defect with early stromal melting in an eye with neurotrophic keratitis secondary to herpes zoster ophthalmicus



Risk factors for PHN



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- Advancing age
- Prodromal pain
- Greater severity of acute pain
- Greater rash severity
- Greater degree of sensory impairment in the affected dermatome
- No clear evidence for gender³, immune compromise⁴, or dermatome affected
- No evidence of higher PHN with depression or cancer²

Post-herpetic neuralgia (PHN)¹⁻³



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- Most common and debilitating complication of zoster
- Chronic neuropathic pain in area of rash
 - Burning, throbbing, itching, tender, stabbing, shooting, sharp, tingling
 - May be triggered by even minor stimuli to the affected skin (allodynia) – in >90% of patients with PHN

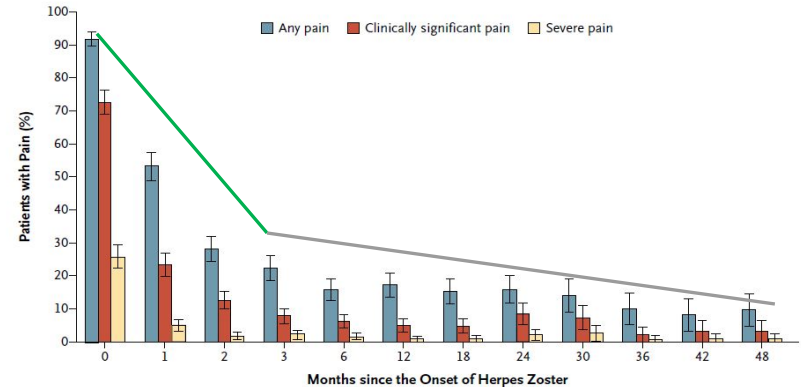


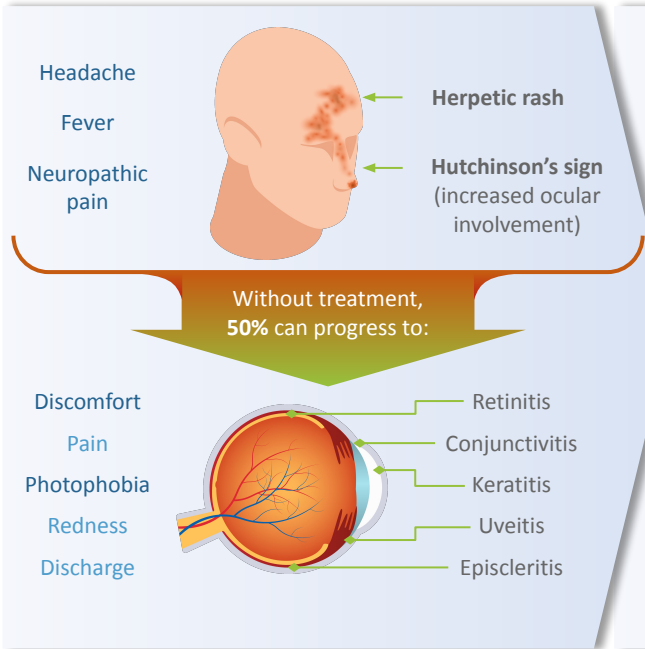
Figure 1. Incidence of Pain over Time after the Onset of Herpes Zoster.

Shown are the proportions of patients with any pain, clinically significant pain, and severe pain in a study involving 566 patients with a mean age of 66 years (range, 58 to 75). Clinically significant pain was defined by a score of more than 30 on a visual-analogue scale that ranged from 0 to 100, with 100 indicating maximal pain. Severe pain was defined by a score of more than 70 on the same scale. I bars denote 95% confidence intervals. Data are from van Wijck.⁹

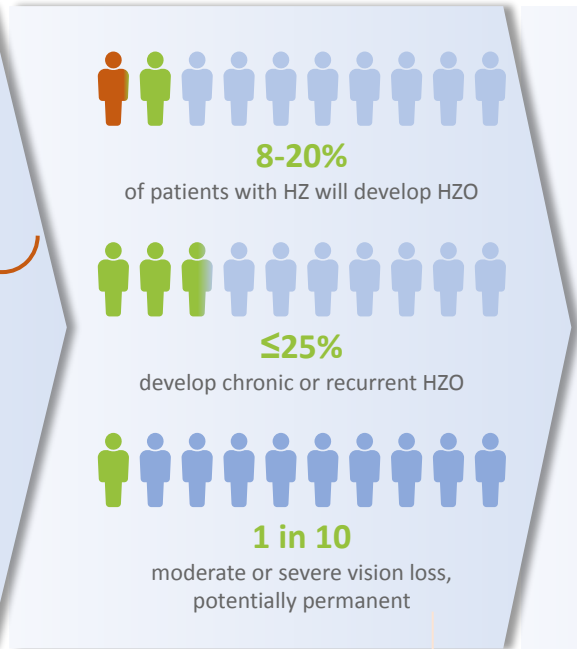


Burden and complications of herpes zoster ophthalmicus (HZO)

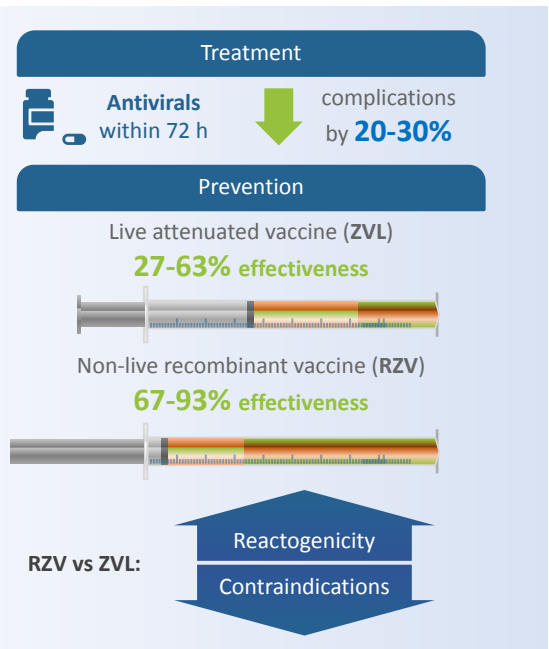
HZO SIGNS & SYMPTOMS



ASSOCIATED BURDEN



WHAT CAN BE DONE?



HZO is a painful ophthalmic emergency with potentially severe complications

Early identification and treatment is crucial

Primary care physicians should consider vaccination to reduce HZO incidence

Risk of stroke post-zoster

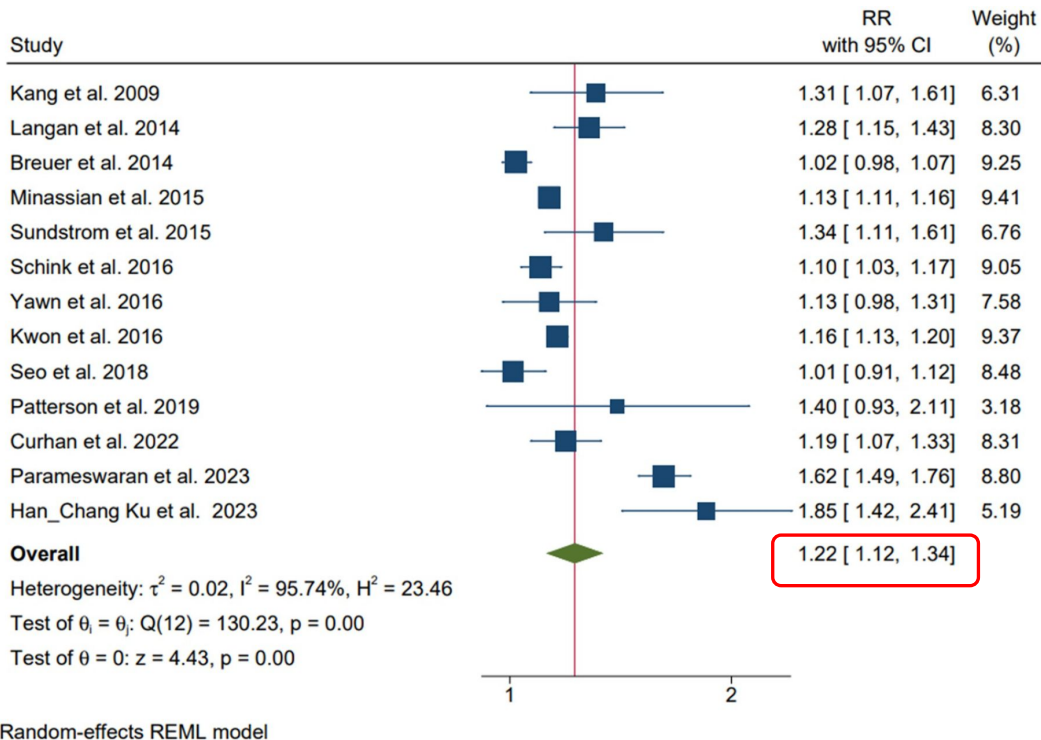


FIGURE 3 Forest plot of stroke attack risk with HZ. The ES was considered statistically significant, with the 95% CI not overlapping 1. CI, confidence interval; ES, effect size; HZ, herpes zoster.

HZ diagnosis and treatment



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- Diagnosis: Usually by clinical assessment, especially after rash appearance¹
- Treatment: Antiviral therapy within 72 hours of rash onset¹
- Pain relief (paracetamol, NSAIDs)²

Advice for patients:²

- Keep rash dry and clean
- Cover rash
- Avoid scratching
- Wear loose clothing
- Cool compresses, baths or ice packs
- Don't apply creams or sticking plasters
- Avoid contact with at-risk people
- Don't share towels, go swimming or play contact sports

1. National Centre for Immunisation Research and Surveillance (NCIRS). Zoster vaccines for Australian adults fact sheet. Available at <https://ncirs.org.au/ncirs-fact-sheets-faqs/zoster-vaccine-australian-adults> Accessed March 2026. Liu Pain Physician. 2023 Jul;26(4):

2. Healthdirect. Shingles. Available at: <https://www.healthdirect.gov.au/shingles#treated> Accessed March 2026 . Hao Front Neurol. 2026 Jan 27

Features of the HZ vaccine



RZV pivotal phase III program: ZOE-50 and ZOE-70^{1,2}

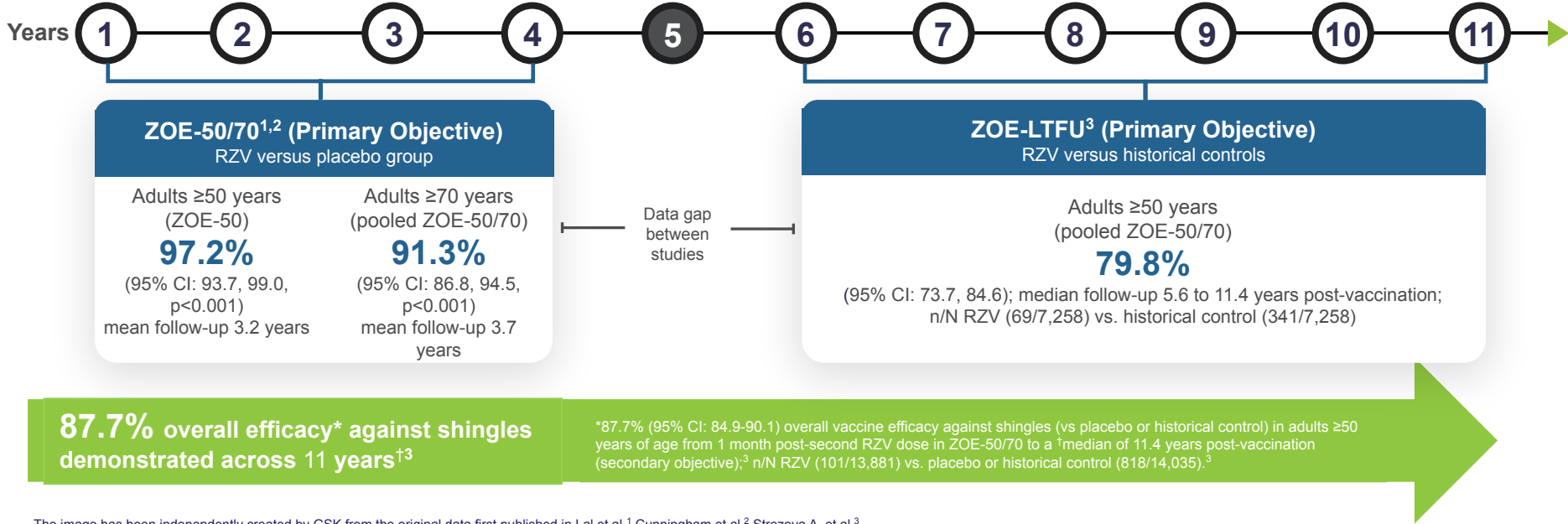
	ZOE-50 ¹ (Zoster-006)	ZOE-70 ² (Zoster-022)
Study design	Randomised, observer-blind, placebo-controlled, multi-centre, multinational (North America, Europe, Latin America, Asia-Pacific [including Australia])	
Primary objectives	VE _{HZ} in subjects ≥50 years of age	VE _{HZ} in subjects ≥70 years of age
Dosing schedule	2 doses administered 2 months apart	
Actual Enrolment	16160	14816
Primary objectives (pooled analysis)	VE _{PHN} in individuals ≥70 years of age VE _{HZ} efficacy in individuals ≥70 years of age	
Actual enrolment (pooled analysis)	16596	

ZOE-50 and ZOE-70 studies conducted at the same sites
Subjects ≥70 years of age were randomly assigned to ZOE-50 or ZOE-70

New England Journal of Medicine 2015¹, 2016²



RZV demonstrated high efficacy* sustained across 11 years.^{†1-3} Efficacy continues to be monitored.



The image has been independently created by GSK from the original data first published in Lal et al,¹ Cunningham et al,² Strezova A, et al.³

Open-label long-term efficacy assessed in participants ≥50 years of age during the pivotal trials (N=13,881)^{1,2} and the long-term follow-up (LTFU) study (mTVC: N=7,258).³ Study was not designed for statistical testing and all statistical analyses were descriptive. In the absence of an unvaccinated placebo group for the LTFU study (median of 5.6 years to 11.4 years post-vaccination) matched historical controls from the placebo group in the ZOE-50/70 studies, adjusted for region, were used.³

RZV versus placebo recipients from the ZOE-50/70 trials, adjusted for age and region^{1,2}

No data are available for year 5 because that period corresponds to the gap between ZOE-50/70 and the LTFU study.¹⁻³

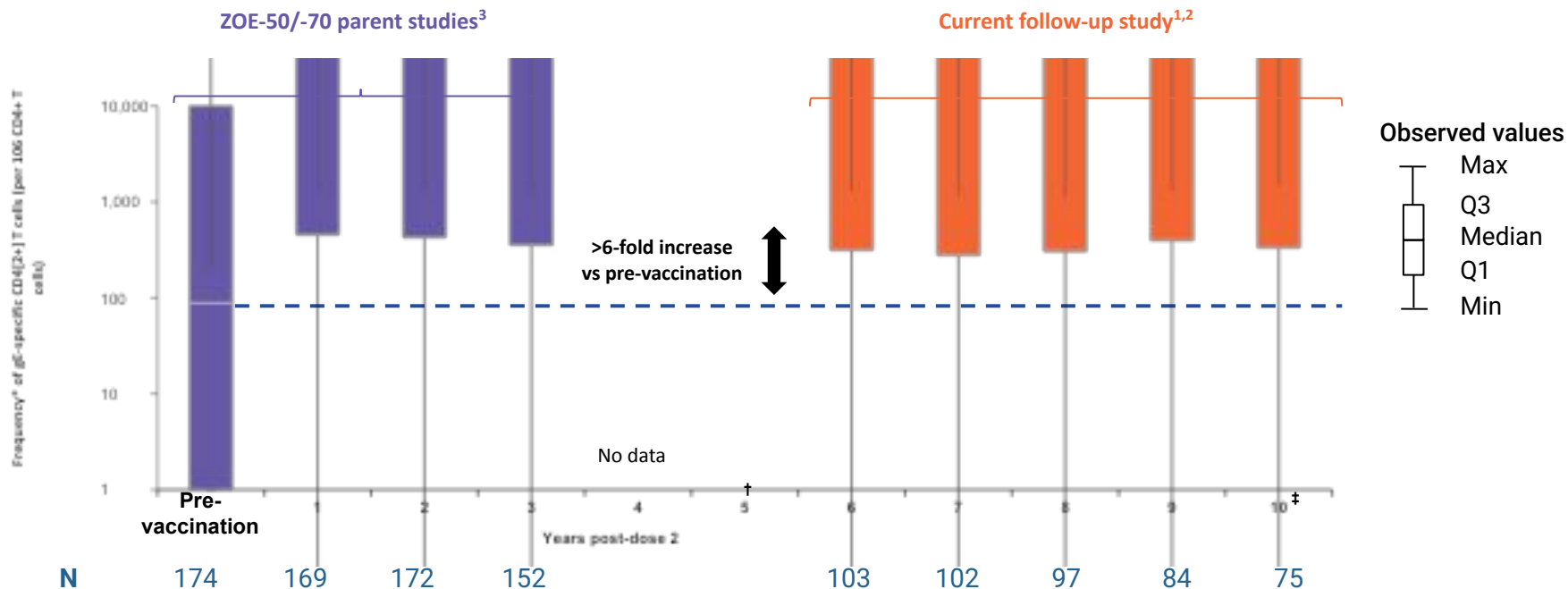
Efficacy evaluated in the mTVC, which included participants who received both doses of study vaccine in ZOE-50/70 and did not develop a confirmed case of shingles within 1 month of dose 2.¹⁻³



Zoster-049: Long-term persistence of cell-mediated immune responses¹

The frequency of gE-specific CD4[2+] T cells remained above baseline from Year 6 to Year 10 after vaccination^{1,2}

ATP cohort (N=108)^{1,2}



*The frequency of gE-specific CD4[2+] T cells was assessed per 10⁶ total CD4[2+] T cells;¹ †Data not shown because only three participants had available results for this analysis;² ‡Data collection was incomplete at the data lock point for the second interim analysis²

ATP, according-to-protocol; gE, glycoprotein E; max, maximum; min, minimum; N, number of participants with available results; Q, quartile

Adverse events (AEs) with the HZ vaccine



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Counsel patients about AEs prior to vaccination¹

Shingrix common AE's include:²

- Local
 - injection site pain (up to 79%)
 - redness (up to 39%)
 - swelling (up to 26%) and systemic symptoms such as fatigue and myalgia (up to 46%)
- Systemic
 - headache (up to 39%)
 - shivering (up to 28%)
 - fever (up to 22%)
 - gastrointestinal symptoms (up to 18%)

1. Australian Technical Advisory Group on Immunisation (ATAGI). Statement on the clinical use of zoster vaccines in adults in Australia. Available at: <https://www.health.gov.au/sites/default/files/documents/2022/05/statement-on-the-clinical-use-of-zoster-vaccine-in-older-adults-in-australia-statement-on-the-clinical-use-of-zoster-vaccine-in-older-adults-in-australia.pdf>. Accessed January 2026. 2. Shingrix (recombinant Varicella Zoster Virus glycoprotein E antigen). Product Information. 9 September 2022. <https://www.tga.gov.au/resources/artg/289257>

Herpes zoster (HZ) vaccination: Recommendations

Prophylaxis with vaccination is an effective strategy against HZ



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HZ vaccination is recommended for:^{*1,2}

- All immunocompetent people aged ≥ 50 years
- Immunocompromised people aged ≥ 18 years
- People with chronic conditions such as splenectomy, diabetes, RA, IBD, dermatologic conditions (e.g. psoriasis), cardiorespiratory disease or renal disease (e.g. glomerulonephritis or reduced renal function) should also consider vaccination²

Optimal age of vaccination differs for individuals^{1,2}

1. National Centre for Immunisation Research and Surveillance (NCIRS). Zoster vaccines for Australian adults fact sheet. https://ncirs.org.au/zoster-shingles/zoster-shingles-vaccine-frequently-asked-questions-faqs#faq_11, accessed 8.3.26

2. National Centre for Immunisation Research and Surveillance (NCIRS). Zoster vaccines: Frequently asked questions. https://www.ncirs.org.au/sites/default/files/2022-05/Zoster%20vaccines%20-%20Frequently%20asked%20questions_11_May_2022_Final.pdf. Accessed March 2026.

RZV overview¹⁻³



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Shingrix	
Vaccine type	Adjuvanted recombinant VZV glycoprotein E subunit (non-live)
Storage	+2 to +8° C
Dosing schedule	2 doses intramuscularly <ul style="list-style-type: none">• 2-6 months apart (immunocompetent)• 1-6 months apart (immunocompromised)*
Indications	Prevention HZ and PHN in: <ul style="list-style-type: none">• adults ≥ 50 years• adults ≥18 years at increased risk of HZ
Recommended groups	Immunocompetent and immunocompromised

As of October 31, 2023, Shingrix (recombinant varicella zoster virus vaccine) is the only shingles vaccine available and replaced Zostavax on the NIP as of November 1, 2023

*A shorter interval of 1-2 months can be considered to provide more rapid protection in immunocompromised individuals.

1. National Centre for Immunisation Research and Surveillance (NCIRS). Zoster vaccines for Australian adults fact sheet. Available at <https://ncirs.org.au/ncirs-fact-sheets-faqs/vaccines-australian-adults>. Accessed January 2023.
2. National Centre for Immunisation Research and Surveillance (NCIRS). Zoster vaccines: Frequently asked questions. https://www.ncirs.org.au/sites/default/files/2022-05/Zoster%20vaccines%20-%20Frequently%20asked%20questions_11_May_2022_Final.pdf. Accessed January 2023.
3. Shingrix (recombinant Varicella Zoster Virus glycoprotein E antigen). Product Information. 9 September 2022. <https://www.tga.gov.au/resources/artg/289257>

Guideline recommendations vs NIP schedule¹



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Shingrix	
Cost/availability	<p>Free through NIP for:</p> <ul style="list-style-type: none">• Adults aged 65 years and over (non-indigenous)• Aboriginal and Torres Strait Islander adults aged 50 years and over• Immunocompromised adults aged 18 years and over with the following medical conditions:<ul style="list-style-type: none">- haematopoietic stem cell transplant- solid organ transplant- haematological malignancy- advanced or untreated HIV
Australian Immunisation Handbook advice	<p>“All people aged ≥ 50 years who are immunocompetent should be offered zoster vaccine. People who are immunocompetent are recommended to receive a 2-dose schedule of Shingrix, 2-6 months apart, for the prevention of herpes zoster and associated complications.”</p>

As of October 31, 2023, Shingrix (recombinant zoster virus vaccine) is the only shingles vaccine on the NIP as of November 1, 2023.

1. Australian Immunisation Handbook. Zoster (herpes zoster). Available at: <https://immunisationhandbook.health.gov.au/contents/vaccine-preventable-diseases/zoster-herpes-zoster>. Accessed January 2026.

Zoster vaccination is recommended by some clinical guidelines groups



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- **COPD:** The GOLD 2023 report states adults with **COPD** should receive routine use of shingles vaccine, as recommended by the US CDC.²
- **Rheumatic and musculoskeletal diseases (RMD):** “The herpes zoster (shingles) vaccine Shingrix replaced Zostavax on the National Immunisation Program on November 1, 2023.” Australian Rheumatology Association guidelines : “For patients aged > 18 years who are on immunosuppressive medication, administering the recombinant zoster vaccine is strongly recommended.”^{3,4}
- **Inflammatory Bowel Disease (IBD):** Canadian Association of Gastroenterology “In adult patients with IBD 50 years of age and older, we recommend recombinant zoster vaccine be given”^{5,6}
- **Diabetes** RACGP Diabetes handbook recommends recombinant zoster vaccine be given⁷

1. National Centre for Immunisation Research and Surveillance (NCIRS). Zoster vaccines: Frequently asked questions.

https://www.ncirs.org.au/sites/default/files/2022-05/Zoster%20vaccines%20-%20Frequently%20asked%20questions_11_May_2022_Final.pdf. Accessed January 2026. 2. Global initiative for Chronic Obstructive Lung Disease. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease. 2023 report. Available from <https://goldcopd.org>. Accessed January 2026. Key adults vaccinations for people living with COPD [file:///C:/Users/litt/Downloads/Resource_Key-adult-vaccinations-for-Australians-living-with-COPD_20251215%20\(1\).pdf](file:///C:/Users/litt/Downloads/Resource_Key-adult-vaccinations-for-Australians-living-with-COPD_20251215%20(1).pdf) accessed 20.3.25

3. https://rheumatology.org.au/Portals/2/Documents/Public/Professionals/Vaccination%20Information/240916%20%20Vaccinations%20in%20AIRD%20for%20GPs%20and%20AHPs%20final.pdf?ver=SrdU0_Wm6tRCLBz3cUj_FQ%3d%3d#:~:text=Varicella%20Zoster%20vaccine%20%2D%20Shingrix&text=For%20immunocompromised%20people%20aged%20%3E18,2%20months%20apart%20is%20recomended.&text=For%20people%20aged%20%3E20%20years,in%20immunocompetent%20people%20is%20recommended. accessed 20.3.26. 4. American College of Rheumatology. 2022 Guideline for Vaccinations in Patients with Rheumatic and Musculoskeletal Diseases Summary. <https://www.rheumatology.org/Practice-Quality/Clinical-Support/Clinical-Practice-Guidelines/Vaccinations>. Accessed January 2023. 5. Jones JL, et al. Canadian Association of Gastroenterology Clinical Practice Guideline for Immunizations in Patients With Inflammatory Bowel Disease (IBD)-Part 2: Inactivated Vaccines. Gastroenterology. 2021 Aug;161(2):681-700. 6. Kucharik 2021 <https://academic.oup.com/ecco-icc/article/15/6/879/6175313?questAccessKey=7>.



RZV effective in frail elderly

High Vaccine efficacy unaffected by presence of multiple comorbidities or frailty (cf influenza and pneumococcal vaccines)¹.



Recombinant Zoster Vaccine Is Efficacious and Safe in Frail Individuals

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Table 1. RZV vaccine efficacy against herpes zoster in immunocompetent and immunocompromised adult populations.

Population	Vaccine Efficacy (95% CI)
Adults ≥50 years	97.2% (93.7–99.0%) [29]
Adults ≥70 years*	91.3% (86.8–94.5%) [30]
Adults ≥50 years with chronic medical conditions	
Diabetes mellitus [†]	91.2% (81.1–96.6%) [31]
Coronary artery disease [†]	97.0% (82.3–99.9%) [31]
Chronic renal disease ^{†‡}	86.6% (–4.5 to 99.7%) [31]
Asthma [†]	88.8% (63.6–97.8%) [31]
Other respiratory disorders [†]	84.5% (46.4–97.1%) [31]
pIMDs ^{†§}	90.5% (73.5–97.5%) [37]
Immunocompromised adults ≥18 years	
HSCT	68.2% (55.6–77.5%) [35]
Hematologic malignancies [†]	87.2% (44.3–98.6%) [36]

*Represents pooled analyses of data from participants 70 years of age or older in ZOE-50 and ZOE-70 studies.

[†]Post-hoc analysis.

[‡]The low number of participants with chronic renal disease limited the statistical power to assess vaccine efficacy.

[§]Includes psoriasis, spondyloarthropathy, rheumatoid arthritis, celiac disease, inflammatory bowel disease, and type 1 diabetes mellitus.

Abbreviations: HSCT, autologous hematopoietic stem cell transplantation; RZV, recombinant zoster vaccine; pIMDs, potential immune-mediated diseases.

BACKGROUND/OBJECTIVES: Frail participants are often under-represented in randomized trials, raising questions about outcomes of interventions in real-world settings. Frailty is strongly associated with vulnerability to illness and adverse health outcomes. We studied the impact of frailty on recombinant zoster vaccine (RZV) clinical outcomes.

DESIGN/SETTING: Data from two previously conducted phase III randomized trials of RZV were pooled. These two parent trials were conducted concurrently at the same study sites using the same methods.

PARTICIPANTS/INTERVENTION: In the two parent studies, participants aged ≥50 years (ZOE-50 study) and ≥70 years (ZOE-70 study), respectively, were randomized 1:1 to receive two doses of RZV or placebo.

MEASUREMENTS: In the current ZOE-Frailty study (NCT03563183), a frailty index was created using previously

validated methods. Clinical outcomes assessed by frailty status included vaccine efficacy, immunogenicity, reactogenicity, and safety.

RESULTS: Of 29,305 participants from the pooled ZOE-50 and ZOE-70 total vaccinated cohort, 92% were included in this study. Mean age was 68.8 years; 58.1% were women; 45.6% were pre-frail and 11.3% frail. The percentage of frail participants increased with age from 5.7% aged 50–59 years to 22.7% aged ≥80 years. RZV vaccine efficacy against herpes zoster was >90% for all frailty subgroups (non-frail: 95.8% [95% confidence interval = 91.6–98.2], pre-frail: 90.4% [84.4–94.4], frail: 90.2% [75.4–97.0]). The RZV group demonstrated robust anti-gE antibody and gE-specific CD4⁺ responses, with mean concentrations remaining above pre-vaccination levels at least 3 years post-dose two, in all frailty subgroups. In the RZV group, the percentage of participants reporting solicited adverse events tended to decrease with increasing frailty.

CONCLUSION: The relatively nonrestrictive inclusion/exclusion criteria in the parent ZOE studies resulted in a range of participants that included frail and pre-frail older adults. RZV significantly reduced the risk of herpes zoster across all frailty subgroups. *J Am Geriatr Soc* 69:744–752, 2021.

Keywords: older adults; frail; herpes zoster; quality of life; subunit vaccine

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Present address: Lidia Oostvogels, CureVac AG, Tübingen, Germany;

Impact of zoster (and use of antivirals) on risk of dementia



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- Systematic review of six cohort studies on 538,531 patients
- Increased risk of dementia in patients with HZ, who did **not** receive antiviral treatments (hazard ratio [HR]: 1.15 95% CI 1.03 to 1.28)
- Reduced risk of dementia among patients with HZ, who **received antiviral treatments** (HR: 0.68 (95% CI: 0.59 to 0.77))

Effects of herpes zoster infection, antivirals and vaccination on risk of developing dementia: A systematic review

Eighteen studies (N = 9.4 million) were included.

Zoster Infection was associated with **elevated risk of dementia** (RR 1.14; 95% CI: 1.04, 1.25)

Treatment with **antivirals showed a small effect** (RR 0.84; 95% CI: 0.71, 0.99)

HZ vaccination was associated with a **significantly lower risk** (RR 0.68; 95% CI: 0.56, 0.83)

The study authors commented that

'it is unclear as to how treatment with antivirals or prevention of infection with vaccination reduces dementia.

The main theory is that these interventions limit the CNS-related damage caused by the virus and/or reduces the inflammatory processes that take place with an

RZV vs placebo: efficacy against HZ in IC patients¹⁻³



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Age group (years)	No. evaluable subjects (placebo/Shingrix)	Vaccine efficacy (%) [95% CI]		Incidence rate per 1000 person years	
		HZ	Placebo	Shingrix	
Zoster-002 (aHSCT recipients)[†]					
≥ 18	851/870	68.2 [55.5; 77.6]*	84.3	30	
Zoster-039 (hematologic malignancy patients)[‡]					
≥ 18	256/259	87.2 [44.2, 98.6]**	66.2	8.5	

[†] Over a median follow-up period of 21 months.

[‡]VE calculation was performed post-hoc; median follow-up period of 11.1 months

*P<0.001 for efficacy comparisons with placebo.²

**P=0.021 for efficacy comparisons with placebo.³

Observational data in a general IC population aged ≥ 65 years and in individuals being treated for IBD on immunosuppressant medications aged ≥ 50 years, have also shown good protection against HZ.⁴⁻⁶

1. Shingrix (recombinant Varicella Zoster Virus glycoprotein E antigen). Product Information. 9 September 2022. <https://www.tga.gov.au/resources/artg/289257>
2. Bastidas A, et al.; ZOE-HSCT Study Group Collaborators. Effect of Recombinant Zoster Vaccine on Incidence of Herpes Zoster After Autologous Stem Cell Transplantation: A Randomized Clinical Trial. Journal of the American Medical Association. 2019;322(2):123-33.
3. Dagnew AF, et al; Zoster-039 study group. Immunogenicity and safety of the adjuvanted recombinant zoster vaccine in adults with haematological malignancies: a phase 3, randomised, clinical trial and post-hoc efficacy analysis. Lancet Infectious Diseases. 2019;19(9):988-1000.
4. ATAGI recommendation for the use of Shingrix in immunocompromised adults aged ≥18 years. Available at: https://www.ncirs.org.au/sites/default/files/2022-06/Recommendations%20for%20Shingrix%20use%20in%20immunocompromised%20adults_May%202022_final.pdf Accessed Jan 2023.
5. Izurieta HS, et al. Recombinant Zoster Vaccine (Shingrix): Real-World Effectiveness in the First 2 Years Post-Licensure. Clinical Infectious Diseases. 2021;73(6):941-948.
6. Khan N, et al. Efficacy of recombinant zoster vaccine in patients with inflammatory bowel disease. Clinical Gastroenterology and Hepatology. 2022;20(7):1570-1578.e1.

Other contraindications



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Shingrix:¹

- Hypersensitivity to the active substances or to any component of the vaccine

1. Shingrix (recombinant Varicella Zoster Virus glycoprotein E antigen). Product Information. 9 September 2022. <https://www.tga.gov.au/resources/artg/289257> 2. <https://immunisationhandbook.health.gov.au/contents/vaccine-preventable-diseases/zoster-herpes-zoster> 2026

Co-administration?



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- ✓ **Influenza (unadjuvanted*
inactivated seasonal)**^{1,2}
- ✓ **COVID mRNA vaccines**
- ✓ **Pneumococcal (PCV and PPV23)**^{1,3}
- ✓ **Diphtheria-Tetanus-Pertussis
(Tdap)**^{1,4}

Coadministration generally
well tolerated¹⁻⁴

No safety issue raised¹⁻⁴

No immunologic interference
observed^{1-4†}

* No data currently available regarding
concomitant use with other vaccines,
including the adjuvanted seasonal
influenza vaccine

†Non-inferiority criterion met for humoral response to SHINGRIX and for all Tdap antigens except pertactin. Clinical relevance unknown.4 PI=prescribing information; PCV=pneumococcal conjugate vaccine; PPV23=23-valent pneumococcal polysaccharide vaccine; Tdap=tetanus, diphtheria and acellular pertussis vaccine. 1. Shingrix Prescribing Information. 2. Schwarz TF, et al. J infect Dis. 2017;216(1):1352–1361; 3. Marechal C, et al. Vaccine. 2018;38(29):4278–4286. 4. Strezova A, et al. Vaccine. 2019;37(39):5877–85.

Zoster vaccine coverage



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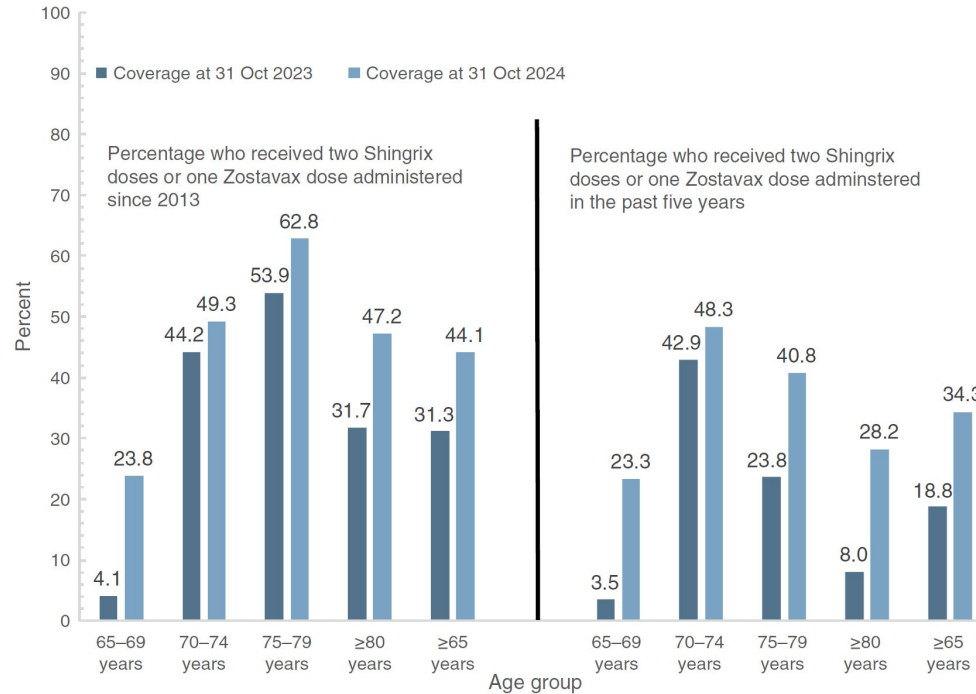


Fig. 1. Shingles vaccination coverage (one Zostavax dose or two Shingrix doses ≥ 4 weeks apart) among adults aged ≥ 65 years at 31 October 2023 and 31 October 2024, by age group, Australia.

What factors increase the likelihood that a patient will get HZV?



In decreasing order of importance:

- HCW recommendation
- Vaccination history eg influenza, pneumococcal
- Beliefs about shingles
 - Personal likelihood of getting shingles and whether s/he feels s/he is at increased risk
 - Don't believe that natural immunity from the disease is better protection
 - Personal or family experience with shingles or PHN
 - Beliefs about RZV
 - Effectiveness (including against complications)
 - Potential adverse effects and vaccine safety
 - Duration of protection
 - Whether RZV can cause shingles
- Cost of the vaccine



Other important considerations:

Can you vaccinate someone who has had shingles?¹

- Vaccination appears safe in people with shingles history.
- Vaccine efficacy in preventing recurrences has not been studied.
- Wait 1 year after shingles infection in immunocompetent person.
- Wait 3 months after shingles infection in immunocompromised person.

Can people receive Shingrix after receiving Zostavax?²

- Shingrix can be given subsequent to Zostavax if a person wants to increase their level of protection against HZ
 - Five years if received free Zostavax
 - 12 months is the person paid for zostavax
- ATAGI recommends a minimum interval of at least 12 months

1. National Centre for Immunisation Research and Surveillance (NCIRS). Zoster vaccines: Frequently asked questions.

https://www.ncirs.org.au/sites/default/files/2022-05/Zoster%20vaccines%20-%20Frequently%20asked%20questions_11_May_2022_Final.pdf. Accessed January 2026.

2. Australian Technical Advisory Group on Immunisation (ATAGI). Statement on the clinical use of zoster vaccines in adults in Australia. Available at.

<https://www.health.gov.au/sites/default/files/documents/2022/05/statement-on-the-clinical-use-of-zoster-vaccine-in-older-adults-in-australia-statement-on-the-clinical-use-of-zoster-vaccine-in-older-adults-in-australia.pdf>. Accessed January 2026.

Future research



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- In immunocompetent people:
 - follow-up studies on the durability of efficacy of RZV up to 15 years are continuing.
 - studies on the safety of RZV coadministration with other adjuvanted vaccines are urgently needed eg adjuvanted influenza vaccine
- In immunocompromised (IC) patients, further research is required on:
 - the completion of phase 3 trials in patients receiving solid organ transplants (SOTs) and those with solid tumours receiving chemotherapy.
 - the durability of immunogenicity and vaccine efficacy beyond 12 to 18 months needs to be defined for all the five groups with severe immunosuppression.
 - the safety and efficacy of RZV in patients with autoimmune diseases who are being treated with biological and synthetic DMARDs, especially agents with an immunosuppressive effect on T cell responses (phase 3 trials of RZV in patients on the most important DMARDs, JAK inhibitors, are in progress).
 - RZV is both needed and safe to give in IC patients who are at high risk of zoster

Summary

HZ risk is greatest at age > 50 years¹

HZ vaccine is available in Australia:¹

- an adjuvanted recombinant zoster vaccine (Shingrix), through private prescription

Unless contraindicated HZ vaccination is recommended for:^{1,2}

- Immunocompetent people aged ≥ 50 years
- Immunocompromised people aged ≥ 18 years

People with chronic conditions should also consider vaccination²

Vaccination rates are suboptimal

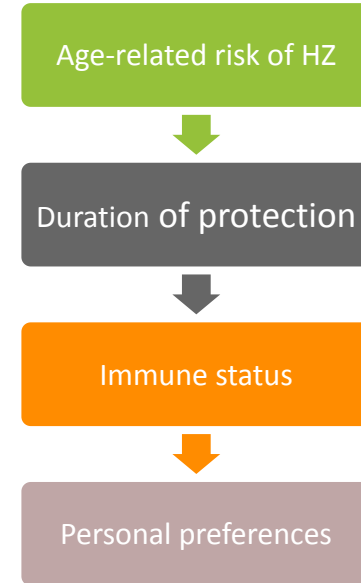
Coverage can be improved through

- HCW recommendation⁴
- A more systematic approach⁵



When deciding whether to offer a HZ vaccine consider:³

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1. National Centre for Immunisation Research and Surveillance (NCIRS). Zoster vaccines: Frequently asked questions.

https://www.ncirs.org.au/sites/default/files/2022-05/Zoster%20vaccines%20-%20Frequently%20asked%20questions_11_May_2022_Final.pdf. Accessed January 2023. 2. National Centre for Immunisation Research and Surveillance (NCIRS). Zoster vaccines for Australian adults fact sheet. Available at <https://ncirs.org.au/ncirs-fact-sheets-faqs/zoster-vaccine-australian-adults>. Accessed January 2026. 3. . Australian Technical Advisory Group on Immunisation (ATAGI). Statement on the clinical use of zoster vaccines in adults in Australia. Available at <https://www.health.gov.au/sites/default/files/documents/2022/05/statement-on-the-clinical-use-of-zoster-vaccine-in-older-adults-in-australia-statement-on-the-clinical-use-of-zoster-vaccine-in-older-adults-in-australia.pdf>. Accessed January 2026. 4. Wennekes Arch Public Health. 2024 Mar 12: 5. Wang JMIR Public Health Surveill. 2023