

Comparison of chickenpox and shingles (varicella and herpes zoster)

The first infection with the varicella-zoster virus causes chickenpox. After recovery, the virus remains latent (sleeping) in spinal nerves and may reactivate years later, causing shingles. Either Varilrix® or Varivax® can be used to prevent chickenpox. Zostavax® is used to reduce the risk of virus reactivation and shingles. The following table compares chickenpox with shingles and identifies the correct vaccine to use.

Chickenpox (varicella)	Shingles (herpes zoster)
Disease	Disease
» Primary infection with varicella-zoster virus	» Secondary infection from reactivation of latent varicella-zoster virus » Only occurs when there has been a prior varicella zoster-virus infection
» Systemic » Usually widespread rash over trunk and face with some on the arms and legs	» Localised » Rash occurs in the area the infected nerve supplies, typically on the back/chest or face
» Usually children	» Usually adults aged 50 years or older
» Contact with infected droplets of saliva in the air initially, then contact with liquid from rash blisters may cause chickenpox	» Contact with liquid from rash blisters may cause chickenpox
» Infectious from 1–2 days before the rash appears until after the rash blisters have dried up	» Infectious once the rash becomes blisters until after the rash blisters have dried up
» Signs and symptoms » Mild fever, loss of appetite, headache, tiredness » Itchy rash that becomes blisters	» Signs and symptoms » Altered sensation, e.g. tingling, burning, numbness, where the rash will appear » Mild fever, tiredness » Unilateral, localised rash that becomes blisters » Nerve pain
» Varicella zoster-virus establishes latent infection in dorsal root ganglia and cranial nerves	
Prevention	Risk reduction
Varilrix® or Varivax® (these two vaccines are interchangeable)	Zostavax®
Only used to prevent primary varicella (chickenpox) infection	Only used to reduce the risk of secondary (herpes zoster/shingles) infection
Live, attenuated vaccine	Live, attenuated vaccine 10 and 14 times stronger than Varilrix and Varivax vaccines respectively
Approved for use from 9 months and 12 months of age respectively	Approved for use from 50 years of age
Dose » 9–11 months of age » Two doses » Give the second dose from 12 months of age and at least 4 weeks after the first dose » 12 months–12 years » One or two doses » One dose gives good protection, two doses give optimal protection » 13–49 years » Two doses » 50+ years » Not routinely recommended for this age group » Two doses	Dose » 50+ years » One dose » History of previous varicella infection is not required » Serological evidence of previous varicella infection may be indicated for individuals who are likely to develop significant immunosuppression in the future or who are recovering from immunosuppressive therapy, or individuals with HIV infection » Individuals with a history of shingles or who have purchased one dose of Zostavax can receive a funded dose when they become eligible » A minimum interval of 1 year after previous shingles disease or vaccination is recommended to maximise any benefits
Vaccine efficacy » Children under 13 years: against all chickenpox, 70–90% protected after one dose; 97–99% protected after two doses » Individuals aged 13 years or older: against moderate to severe chickenpox, 79–91% protected after two doses	Vaccine efficacy » Individuals aged 50–59 years: against shingles 70% » Individuals aged 60–69 years: against shingles 64% » Individuals aged 70–79 years: against shingles 41% » Individuals aged 80 years or older: against shingles 18%

References

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