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How long (duration) does the shingles vaccine work for to prevent shingles?

Quick Summary

Live attenuated zoster vaccine (LZV) and recombinant zoster vaccine (RZV) show distinct patterns in durability of protection against shingles. Studies of LZV indicate that protection against herpes zoster is near 67–70% during the first year but then diminishes steadily. For example, one study noted effectiveness falling to about 47% at 2 years and further decreasing to 32% by 8 years, with another reporting only 15% at 10 years and negligible protection by 11 years. In contrast, RZV consistently demonstrates high effectiveness. Several trials report protection between roughly 90% and 97% for periods from 1 to 5 years, with subsequent estimates ranging from 84% to 91% maintained for up to 7 years. These results are consistent across a range of older age groups.

Key points:

1. LZV offers strong short-term protection that wanes substantially beyond 5 to 8 years.
2. RZV maintains robust protection for at least 7 years.
3. Both vaccines yield similar effectiveness across older populations, including those aged 80 and above.

Vaccine Effectiveness (over time), Per Study:

Study	Time Period	Vaccine Effectiveness (%)	Outcome Measured	Vaccine Type
Baxter et al., 2017	1 year	67.5 (95% CI: 65.4–69.5)	Herpes zoster incidence	Live attenuated zoster vaccine (LZV)

Study	Time Period	Vaccine Effectiveness (%)	Outcome Measured	Vaccine Type
Baxter et al., 2017	2 years	47.2 (95% CI: 44.1–50.1)	Herpes zoster incidence	Live attenuated zoster vaccine (LZV)
Baxter et al., 2017	8 years	31.8 (95% CI: 15.1–45.2)	Herpes zoster incidence	Live attenuated zoster vaccine (LZV)
Schmader et al., 2012a	1–4 years	51.3 (herpes zoster incidence), 61.1 (burden of illness), 66.5 (postherpetic neuralgia)	Herpes zoster, burden of illness, postherpetic neuralgia	Live attenuated zoster vaccine (LZV)
Schmader et al., 2012a	5 years	39.6 (herpes zoster incidence), 50.1 (burden of illness), 60.1 (postherpetic neuralgia)	Herpes zoster, burden of illness, postherpetic neuralgia	Live attenuated zoster vaccine (LZV)
McDonald et al., 2017	1 year	50.0 (95% CI: 44.7–54.8)	Herpes zoster incidence	No mention found
McDonald et al., 2017	5 years	14.0 (95% CI: -21.0–38.9)	Herpes zoster incidence	No mention found
Gagliardi et al., 2019	Up to 3 years	51 (LZV), 92 (RZV)	Herpes zoster incidence	Live attenuated zoster vaccine (LZV), Recombinant zoster vaccine (RZV)
Schmader et al., 2012b	1.3 years (mean)	69.8 (95% CI: 54.1–80.6)	Herpes zoster incidence	Live attenuated zoster vaccine (LZV)

Study	Time Period	Vaccine Effectiveness (%)	Outcome Measured	Vaccine Type
Lal et al., 2015	3.2 years (mean)	97.2 (95% CI: 93.7–99.0)	Herpes zoster incidence	Recombinant zoster vaccine (RZV)
Cunningham et al., 2016	3.7 years (mean)	89.8 (95% CI: 84.2–93.7)	Herpes zoster incidence	Recombinant zoster vaccine (RZV)
Boutry et al., 2021	5.1–7.1 years	84.0 (95% CI: 75.9–89.8)	Herpes zoster incidence	Recombinant zoster vaccine (RZV)
Boutry et al., 2021	1–7.1 years	90.9 (95% CI: 88.2–93.2)	Herpes zoster incidence	Recombinant zoster vaccine (RZV)
Klein et al., 2023	1 year	67 (95% CI: 65–69)	Herpes zoster incidence	Live attenuated zoster vaccine (LZV)
Klein et al., 2023	10 years	15 (95% CI: 5–24)	Herpes zoster incidence	Live attenuated zoster vaccine (LZV)
Morrison et al., 2015	7 years	46.0 (95% CI: 28.4–60.2)	Herpes zoster incidence	Live attenuated zoster vaccine (LZV)
Morrison et al., 2015	11 years	-1.4 (95% CI: -56.6–38.1)	Herpes zoster incidence	Live attenuated zoster vaccine (LZV)

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