

Recombinant vaccine confers more protection against influenza

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A high-dose recombinant influenza vaccine is more effective than standard-dose vaccine among adults aged 50 to 64 years, according to a study published in the Dec. 14 issue of the *New England Journal of*

Medicine.

Amber Hsiao, Ph.D., M.P.H., from the Kaiser Permanente Vaccine Study Center in Oakland, California, and colleagues conducted a cluster-randomized [observational study](#) to compare the effectiveness of recombinant vaccines as compared with standard-dose vaccines against influenza-related outcomes in adults under the age of 65 years. During the 2018 to 2019 and 2019 to 2020 influenza seasons, facilities routinely administered either a [high-dose](#) recombinant influenza vaccine (Flublok Quadrivalent) or one of two standard-dose influenza vaccines to [adults](#) aged 50 to 64 years and 18 to 49 years.

Data were included for 1,630,328 individuals aged 18 to 64 years who received vaccines (632,962 in the recombinant-vaccine group and 997,366 in the standard-dose group). The researchers identified 1,386 and 2,435 cases of polymerase chain reaction (PCR)-confirmed influenza diagnosed in the recombinant-vaccine and standard-dose groups, respectively.

Among participants aged 50 to 64 years, 2.00 and 2.34 cases per 1,000 tested positive for influenza in the recombinant-vaccine and standard-dose groups, respectively (relative vaccine effectiveness, 15.3 percent). The relative vaccine effectiveness against influenza A was 15.7 percent in the same age group. Compared with the standard-dose vaccines, the recombinant vaccine was not significantly more protective against influenza-related hospitalization.

"Participants between the ages of 50 and 64 years who received the recombinant vaccine had more protection against confirmed influenza than those who received a standard-dose vaccine," the authors write.

The study was funded by Sanofi, the manufacturer of the Flublok [vaccine](#).

More information: Amber Hsiao et al, Recombinant or Standard-Dose Influenza Vaccine in Adults under 65 Years of Age, *New England Journal of Medicine* (2023). [DOI: 10.1056/NEJMoa2302099](https://doi.org/10.1056/NEJMoa2302099)

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