

# 4CMenB vaccination effective against invasive meningococcal disease in children under 5

February 2 2023, by Elana Gotkine

---



Complete vaccination with the four-component, protein-based meningococcal serogroup B vaccine (4CMenB) is effective for preventing invasive meningococcal disease in children younger than 5 years, according to a study published in the Feb. 2 issue of the *New England Journal of Medicine*.

Jesús Castilla, M.D., Ph.D., from the Instituto de Salud Pública de Navarra in Pamplona, Spain, and colleagues examined the effectiveness of 4CMenB in preventing [invasive meningococcal disease](#) in children in a nationwide matched case-control study. All laboratory-confirmed cases of invasive meningococcal disease in children younger than 60 months between Oct. 5, 2015, and Oct. 6, 2019, were identified; 306 cases (79.4 percent with serogroup B disease) were matched to 1,224 controls.

The researchers found that 11.4 and 24.3 percent of case patients and controls, respectively, had received at least one dose of 4CMenB. The effectiveness against invasive meningococcal disease caused by any serogroup was 76 percent for complete vaccination (receipt of at least two doses) and 54 percent for partial vaccination. The effectiveness against meningococcal serogroup B disease was 71 percent for complete vaccination. Vaccine effectiveness with at least one dose of 4CMenB was 64 and 82 percent against serogroup B disease and non-serogroup B disease, respectively. Forty-four case patients had serogroup B strains that were expected to be covered by 4CMenB; none of these patients had been vaccinated.

"This evidence may be useful in making decisions about the inclusion of this vaccine in the immunization program of countries where invasive meningococcal disease in [children](#) is problematic and its prevention a priority," the authors write.

Several authors disclosed financial ties to the [pharmaceutical industry](#).

**More information:** Jesús Castilla et al, Effectiveness of a Meningococcal Group B Vaccine (4CMenB) in Children, *New England Journal of Medicine* (2023). [DOI: 10.1056/NEJMoa2206433](https://doi.org/10.1056/NEJMoa2206433)

Copyright © 2023 [HealthDay](#). All rights reserved.

Citation: 4CMenB vaccination effective against invasive meningococcal disease in children under 5 (2023, February 2) retrieved 11 May 2024 from <https://medicalxpress.com/news/2023-02-4cmenb-vaccination-effective-invasive-meningococcal.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.