

# Autism risk may rise with in utero exposure to antiseizure meds

March 24 2024, by Elana Gotkine

---



The incidence of autism spectrum disorder is higher among children exposed to topiramate in the second half of pregnancy compared with the general population of children without exposure to antiseizure medications in utero, according to a study published in the March 21 issue of the *New England Journal of Medicine*.

Sonia Hernández-Díaz, M.D., Dr.P.H., from the Harvard T.H. Chan School of Public Health in Boston, and colleagues identified a population-based cohort of pregnant women and their children within two health care utilization databases. Exposure to specific antiseizure medications was defined based on prescription fills from gestational week 19 until delivery.

The researchers found that at eight years of age, the estimated cumulative incidence of autism spectrum disorder was 1.9 percent for the 4,199,796 children who had not been exposed to antiseizure medications. On restriction to children born to mothers with [epilepsy](#), the incidence was 4.2, 6.2, 10.5, and 4.1 percent with no exposure to antiseizure medications, exposure to [topiramate](#), exposure to valproate, and exposure to lamotrigine, respectively.

Compared with no exposure to antiseizure medications, propensity score-adjusted hazard ratios were 0.96 (95 percent confidence interval, 0.56 to 1.65), 2.67 (95 percent confidence interval, 1.69 to 4.20), and 1.00 (95 percent confidence interval, 0.69 to 1.46) for exposure to topiramate, valproate, and lamotrigine, respectively.

"After adjustment for indication, the association was substantially attenuated for topiramate and lamotrigine, whereas a dose-dependent increased risk remained for valproate," the authors write.

**More information:** Sonia Hernández-Díaz et al, Risk of Autism after Prenatal Topiramate, Valproate, or Lamotrigine Exposure, *New England Journal of Medicine* (2024). [DOI: 10.1056/NEJMoa2309359](https://doi.org/10.1056/NEJMoa2309359)

Kimford J. Meador, Risks of Fetal Exposure to Topiramate, *New England Journal of Medicine* (2024). [DOI: 10.1056/NEJMe2401164](https://doi.org/10.1056/NEJMe2401164)

Copyright © 2024 [HealthDay](#). All rights reserved.

Citation: Autism risk may rise with in utero exposure to antiseizure meds (2024, March 24)  
retrieved 28 April 2024 from  
<https://medicalxpress.com/news/2024-03-autism-utero-exposure-antiseizure-meds.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.