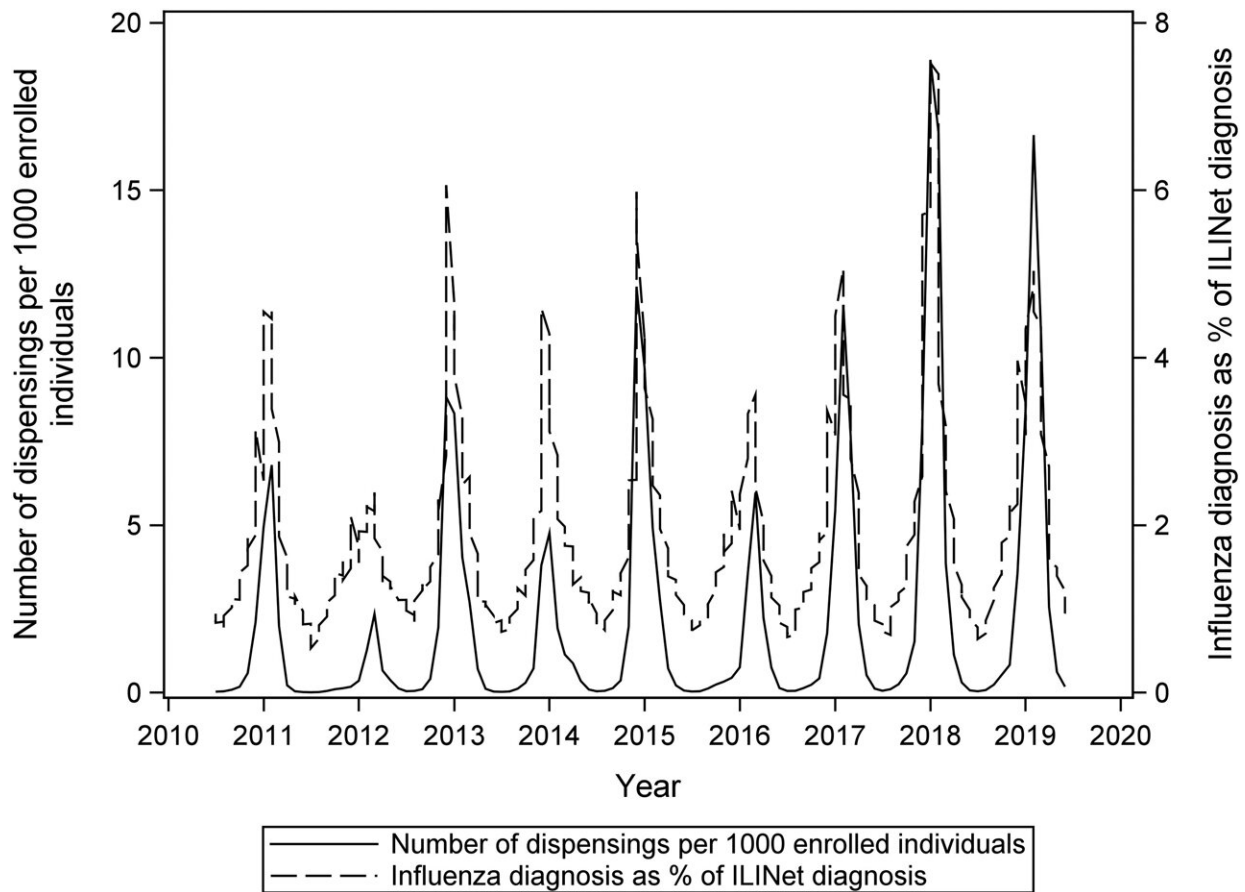


Antiviral treatment is largely underused in children with influenza, study shows

November 13 2023



Relationship between antiviral dispensing rates and influenza diagnoses. The solid line represents antiviral dispensings per 1000 enrolled children over 10 calendar years. The dotted line represents the influenza diagnoses from the ILINet over the same calendar year. Influenza diagnoses are plotted as a percentage of influenza diagnoses. Credit: *Pediatrics* (2023). DOI: 10.1542/peds.2023-061960

Despite national medical guidelines supporting the use of antiviral medications in young children diagnosed with influenza, a new study reports an underuse of the treatment.

"Trends in Outpatient Influenza Antiviral Use Among Children and Adolescents in the United States" was published in *Pediatrics*.

"Antiviral treatment, when used early, improves [health outcomes](#) with [influenza](#)," said lead author and principal investigator James Antoon, MD, Ph.D., MPH, assistant professor of Pediatrics and Hospital Medicine at Monroe Carell Jr. Children's Hospital at Vanderbilt.

Antoon and colleagues collaborated with researchers from the University of Illinois at Chicago on a large study examining outpatient and emergency department prescription claims for patients younger than 18 from all 50 states over a nine-year period.

Oseltamivir, also known as Tamiflu, is the only oral antiviral medication approved for use in children younger than 5 years old.

"We found that [young children](#), less than 5 years old and especially those 2 years old and younger, are undertreated for influenza," said Antoon. "We noted that about 40% of children were treated with an antiviral, when guidelines recommend all of them be treated. It's important to note that we found low rates of antiviral use in all age groups."

The study also found wide geographic variation in the use of influenza antivirals—there was a threefold to twentyfold difference in the rate of antiviral use based on geographic region that was not explained by differences in the incidence of flu, said Antoon.

"These findings highlight opportunities for improvement in the prevention and treatment of influenza, especially in the most vulnerable

children," he added.

Potential reasons for underprescribing in children include a wide range of perceptions about efficacy, differences in interpretation of testing, a misunderstanding of the national guidelines and concern for [adverse drug events](#) associated with oseltamivir in children.

A previous 2023 study, led by Antoon, explored how often children diagnosed with influenza experience serious neuropsychiatric side effects.

In that study, Antoon and his team were able to quantify the number of pediatric neuropsychiatric events, describe which children are more likely to experience the events and showed that these relatively infrequent events occur in both those children treated and not treated with an antiviral.

"Treatment of children in the outpatient setting has been reported to decrease symptom duration, household transmission, antibiotic use and influenza-associated complications like ear infections," said Antoon.

The low rate of antiviral use in young children captured in the study along with recent evidence of low guideline-concordant [antiviral treatment](#) in children at high risk for influenza complications highlight the need for improved flu management in the most vulnerable children in the U.S., according to the study.

More information: James W. Antoon et al, Trends in Outpatient Influenza Antiviral Use Among Children and Adolescents in the United States, *Pediatrics* (2023). [DOI: 10.1542/peds.2023-061960](https://doi.org/10.1542/peds.2023-061960)

Provided by Vanderbilt University Medical Center

Citation: Antiviral treatment is largely underused in children with influenza, study shows (2023, November 13) retrieved 27 April 2024 from <https://medicalxpress.com/news/2023-11-antiviral-treatment-largely-underused-children.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.