

## Infant ab levels highest with Tdap vax in early 3rd trimester

November 1 2018

---



(HealthDay)—Tetanus, diphtheria, and acellular pertussis (Tdap)

vaccines given to pregnant women early in the third trimester may offer the most protection against infant pertussis, according to a study published in the Oct. 9 issue of the *Journal of the American Medical Association*.

C. Mary Healy, M.D., from the Baylor College of Medicine in Houston, and colleagues determined [pertussis](#) toxin antibody concentrations in cord blood from neonates born to 626 women, immunized or not immunized with Tdap vaccine during pregnancy, to assess optimal gestational age for immunization to maximize concentrations of neonatal [antibodies](#). A total of 312 of the women received the Tdap vaccine at a mean gestation of 31.2 weeks, and 314 were not immunized.

The researchers found that geometric mean concentrations (GMCs) of neonatal cord pertussis toxin antibodies from the Tdap-exposed group were 47.3 IU/mL versus 12.9 IU/mL in the Tdap-unexposed group. Compared with Tdap-unexposed neonates, more Tdap-exposed neonates had pertussis toxin antibody concentrations of  $\geq 15$  IU/mL (86 percent versus 37 percent),  $\geq 30$  IU/mL (72 percent versus 17 percent), and  $\geq 40$  IU/mL (59 percent versus 12 percent). When the Tdap vaccine was administered during weeks 27 through 30, GMCs of pertussis toxin antibodies were highest; they reached a peak at week 30 (57.3 IU/mL) and declined thereafter.

"Immunization with Tdap [vaccine](#) during the third trimester of pregnancy, compared with no immunization, was associated with higher neonatal concentrations of pertussis toxin antibodies," conclude the authors.

Two authors disclosed financial ties to the pharmaceutical industry.

**More information:** [Abstract/Full Text \(subscription or payment may be required\)](#)

Copyright © 2018 [HealthDay](#). All rights reserved.

Citation: Infant ab levels highest with Tdap vax in early 3rd trimester (2018, November 1)  
retrieved 19 April 2024 from  
<https://medicalxpress.com/news/2018-11-infant-ab-highest-tdap-vax.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.