

# Maternal Tdap vaccination protects youngest infants from pertussis

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Introduction of a tetanus toxoid, reduced diphtheria toxoid, and acellular

pertussis (Tdap) vaccination during pregnancy can protect the youngest infants from pertussis, according to a study published online Feb. 6 in *JAMA Pediatrics*.

Tami H. Skoff, from the U.S. Centers for Disease Control and Prevention in Atlanta, and colleagues calculated and compared [pertussis](#) incidence rates in the pre-maternal Tdap vaccination period (2000 to 2010) and the post-maternal Tdap vaccination period (2012 to 2019) for [infants](#) younger than 2 months (target group of maternal vaccination) and infants age 6 to less than 12 months (comparison group).

The researchers found that in the pre-maternal Tdap vaccination period, annual pertussis incidence did not change among infants aged younger than 2 months and increased slightly among older infants, with no change in the difference in incidence seen between the two age groups. In the post-maternal Tdap vaccination period, there was a decrease in incidence observed among infants younger than 2 months (slope,  $-14.53$  per 100,000 infants per year), while no change was seen for older infants (slope,  $1.42$  per 100,000 infants per year). During the post-maternal Tdap vaccination period, the incidence rate difference between the two age groups decreased significantly (slope,  $-14.43$  per 100,000 infants per year). Between the pre- and post-maternal Tdap vaccination periods, pertussis incidence rate differences were significantly different (slope difference,  $-14.51$  per 100,000 infants per year).

"Our [data](#) suggest that maternal Tdap vaccination is associated with a reduction in disease burden among the youngest and most vulnerable age group (

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