



News Articles, Infectious Diseases, Influenza, Vaccine/Immunization

Study: Maternal vaccination during pregnancy safe for infants

by Melissa Jenco, News Content Editor

New research supports recommendations that pregnant women receive influenza and tetanus, diphtheria and acellular pertussis (Tdap) vaccines.

The study found the vaccines are not associated with increased risk of infant hospitalization or death.

Both influenza and pertussis can cause serious illness in infants, but mothers can pass antibodies to their babies to protect them before they can receive their own vaccinations. The Centers for Disease Control and Prevention (CDC) recommends pregnant women receive influenza vaccine any time during pregnancy. They also should receive Tdap vaccine, ideally between weeks 27-36.

Researchers, including several from the CDC, performed a case-control study to look at infants' risk of hospitalization and death in their first six months of life. They used data from the Vaccine Safety Datalink on more than 400,000 live births from 2004-'14 and reported their findings in "Infant Hospitalizations and Mortality Following Maternal Vaccination" (Sukumaran L, et al. *Pediatrics*. Feb. 20, 2018, <http://pediatrics.aappublications.org/content/early/2018/02/16/peds.2017-3310>).

Among the 25,222 hospitalizations, about 18% were for respiratory issues. Of those, about 2% had influenza and 3% had pertussis. Among 157 deaths, 9% were respiratory, but none were linked to influenza or pertussis.

Authors found infants did not have an increased risk of hospitalization or death when their mother had been vaccinated. Adjusted odds ratios for hospitalization and maternal influenza and Tdap vaccination were 1 and 0.94, respectively. Likewise, adjusted odds ratios for infant mortality and maternal influenza or Tdap vaccination were 0.96 and 0.44. The study also showed infants hospitalized for respiratory problems had lower rates of maternal vaccination for Tdap compared to controls.

The study's findings are consistent with other studies showing vaccination during pregnancy is not linked to childhood hospitalization, development issues or chronic conditions.

"Our study helps strengthen the growing evidence of long-term safety of vaccination in pregnancy for infants," authors wrote.

Resources

- [Information from the CDC on vaccination during pregnancy](#)
- [AAP Red Book chapter on pertussis](#)
- [AAP Red Book chapter on influenza](#)
- [Information for parents from HealthyChildren.org on pertussis](#)
- [Information for parents from HealthyChildren.org on flu](#)
- [Information for parents from HealthyChildren.org on vaccination during pregnancy](#)