

Study: Flu vaccine in pregnant women not linked to autism risk in children

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Pregnant women who received an influenza vaccine did not put their children at increased risk of **autism spectrum disorder (ASD)**, according to a new study.

Researchers from Kaiser Permanente Northern California found there was no significant association between ASD risk and either maternal influenza vaccination or influenza infection.

The findings are detailed in the study “Association Between Influenza Infection and Vaccination During Pregnancy and Risk of Autism Spectrum Disorder” (Zerbo O, et al. *JAMA Pediatr.* Nov. 28, 2016, <http://jamanetwork.com/journals/jamapediatrics/fullarticle/2587559>).

Previous studies have reported mixed results on associations between influenza infection during pregnancy and ASD, and none have looked at maternal vaccination, researchers said.

They studied records of 196,929 children from 2000-'10 and found that 3,101 (1.6%) had been diagnosed with ASD. Among mothers, 1,400 (0.7%) had contracted influenza, and 45,231 (23%) received the influenza vaccine during pregnancy.

After adjusting for covariates, the team concluded there was no association between maternal influenza infection and ASD risk anytime or when broken down by trimester.

There also was no association between maternal influenza vaccination overall and ASD risk. When broken down by trimester, “there was a suggestion of increased risk” in the first trimester. However, the authors noted “the association was statistically insignificant after adjusting for multiple comparisons, indicating that the finding could be due to chance.”

“While we do not advocate changes in vaccine policy or practice, we believe that additional studies are warranted to further evaluate any potential associations between first-trimester maternal influenza vaccination and autism,” they wrote.

The Academy and the Centers for Disease Control and Prevention’s Advisory Committee on Immunization Practices strongly recommend that pregnant women receive a flu shot to protect both the mother and baby



from life-threatening illness, saying the vaccine is safe and effective.

“Pregnant women are of special concern because they are at high risk of complications from influenza,” the Academy said in its [2016-'17 influenza policy](#). “Vaccination of pregnant women also provides protection for their infants, potentially for as long as 6 months through the transplacental transfer of antibodies.”

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