Flu Vaccination During Pregnancy Decreases Flu Hospitalizations and Emergency Department Visits in Infants Younger Than 6 Months

CDC study provides additional evidence that flu vaccination not only protects moms but also protects infants younger than 6 months when they are too young for vaccination and are at higher risk of flu-related hospitalization.

December 18, 2023 – A new study published in *JAMA Pediatrics* shows that infants younger than 6 months born to moms who were vaccinated during their pregnancy were protected from flu-related emergency department visits and hospitalizations. Infants are at higher risk of being hospitalized compared to other children but cannot get a flu shot until they turn 6 months. This study underscores the importance of pregnant people getting vaccinated since both pregnant people and their infants are at higher risk of being hospitalized with flu.

The study in *JAMA Pediatrics* looked at data from the New Vaccine Surveillance Network (NVSN) from the 2016-2017 through the 2019-2020 flu seasons and found that:

- Flu vaccination during pregnancy reduced the risk of flu in infants younger than 6 months by one-third.
- Maternal vaccine effectiveness increased with the severity of infant disease, reducing the risk in infants of emergency department visits by about 20 percent and reducing the risk of hospitalization by about 40 percent.
- Protection was greatest among infants younger than 3 months, reducing the risk of flu-related hospitalizations or emergency department visits by half.
- Maternal vaccine effectiveness was higher in infants born to mothers vaccinated later during their pregnancy.

Flu vaccination during pregnancy is safe and protects both pregnant people and their infants. A previous study has shown that flu vaccination during pregnancy reduced the risk of flu illness in pregnant people by about half. This estimate was similar to other estimates of flu vaccine effectiveness in adult populations during the same season. For infants, maternal vaccination provides critical protection from flu because the pregnant person passes antibodies to their developing baby. Other studies have also shown similar results: flu vaccination during pregnancy protects against flu illnesses and flu-related hospitalizations in infants during their first few months of life.

NVSN includes 7 pediatric medical institutions across the United States and conducts population-based surveillance in infants and children with acute respiratory illness and acute gastroenteritis. For this observational study, NVSN analyzed data from more than 3,700 infants where a little more than half of mothers were vaccinated during pregnancy. Influenza virus infection during pregnancy is associated with an increased risk of hospitalization, and some studies have found an association with some adverse birth outcomes. However, flu vaccination among pregnant people is concerningly low and has fallen by 10 to 15 percentage points since the COVID-19 pandemic, according to CDC data systems.

While safety concerns are often cited by pregnant people as a reason why they are reluctant to get vaccinated, there is a large body of scientific studies that supports the safety of the flu vaccine in pregnant people and their infants, and CDC continually monitors vaccine safety. Flu vaccines are safe and effective. CDC and ACIP (Advisory Committee on Immunization Practices) recommend pregnant people get vaccinated during any trimester of their pregnancy.

This study also highlights important racial and ethnic health disparities as well as disparities in health outcomes associated with flu vaccination during pregnancy. Infants born to unvaccinated pregnant people were more likely to be non-Hispanic Black and publicly insured. Infants born to unvaccinated pregnant people were also more likely to have underlying medical conditions and be born prematurely.

Pregnant people should talk to their health care provider about getting a flu shot for the best protection for themselves and their infants. There's still time to get a flu vaccine this season. Find a flu vaccine today: https://www.vaccines.gov/find-vaccines/

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