Pregnancy and flu vaccination: Getting to and staying at an 80% vaccination rate

After years of effort, Rhode Island can report that over 80% of women who gave birth in 2019 and 2020 received a flu shot during the 12 months before their baby was born. However, flu vaccination rates dropped sharply in the 2021-22 flu season for most Rhode Islanders.

Background

The influenza (flu) vaccine has been proven safe in clinical trials and is the most effective way to protect pregnant women and newborn babies from getting seriously ill with influenza. Newborn babies cannot be vaccinated, but they can receive protection from their mother’s vaccine while still in the womb.

The American College of Obstetricians (ACOG), American Academy of Family Physicians (AAFP), and Centers for Disease Control and Prevention (CDC) all recommend that women who are or plan to become pregnant receive the inactivated flu vaccine (the live, attenuated flu vaccine should not be used during pregnancy). In Rhode Island, the flu vaccine is generally covered by insurance or provided free of charge. However, there are still various reasons why not all women receive a flu vaccine in the year before giving birth.

Rhode Island data

The Rhode Island Pregnancy Risk Assessment Monitoring System (RI-PRAMS) collects information on perinatal experiences and attitudes each year. The survey asks several questions related to the flu vaccine, including: During the 12 months before the delivery of your new baby, did you get a flu shot?

Recommended Actions for Prenatal Care Providers

• Provide a strong recommendation for influenza vaccination to pregnant women that addresses concerns around side effects to mother and baby.
• Educate staff and pregnant women about the importance of influenza vaccination during pregnancy and offer evidence-based information related to its safety.
• Issue standing vaccine orders to prevent missed opportunities for vaccination.
• Offer vaccination to pregnant women at the earliest opportunity and throughout the influenza season.
• Vaccinate postpartum women who were not vaccinated during pregnancy, preferably before hospital discharge or at the six-week postpartum visit.
• Educate staff and postpartum women that breastfeeding is not a contraindication to vaccination.
• Vaccinate all healthcare personnel in your practice to prevent spreading influenza to patients.
• Establish an influenza vaccination reminder system in your practice.
• Post influenza prevention announcements and provide brochures to prompt vaccination requests.
• Advise family members and other close contacts of pregnant and postpartum women and infants that they should also be vaccinated against influenza.
Figure 1 Percent of Rhode Island women who received flu vaccine in the 12 months before their baby was born (2012-2020)

The most recent data from 2018-2020 show that some populations were less likely to get the flu vaccine than others. Among women who had Medicaid insurance before their latest pregnancy, 76.3% got the vaccine compared to 81.9% of women with private insurance. Women with life adversities are more at risk for remaining unvaccinated: 75.1% of women with depression either before or during pregnancy were vaccinated, compared to 81.0% of women without depression, and 76.8% of women with adverse childhood experiences (ACEs) got the vaccine compared to 82.4% of women with no ACEs. The largest difference is whether a healthcare provider offered the vaccine or told the woman to get one: 81.9% of those women were vaccinated, compared to only 50.9% of women who did not hear that from a healthcare provider.

Reasons for not getting the flu vaccine

Among women who did not get the flu vaccine, the most common reason given was concern over side effects and possible harm to the baby. A small number of women also wrote in reasons based on misinformation, such as believing the vaccine causes autism or birth defects. (The flu vaccine and routine childhood vaccines have been tested for years, and there is no evidence of any association with autism or birth defects).

Figure 2 Explanations offered by Rhode Island women who did not get the flu vaccine in the 12 months before giving birth (2018-2020)