

Pregnant Patients Need Protection Too!

Alyssa Strouse, MPH, Adult and Adolescent Immunization Coordinator, MDHHS Division of Immunization

Vaccines are considered one of the greatest public health achievements and today, vaccines protect babies, children, adolescents and adults, including pregnant women, from 27 diseases. Except for hepatitis B vaccine, which is given within 24 hours of birth, other routine childhood vaccines are not recommended until at least 2 months of age. Maternal vaccination helps protect newborn infants from dangerous vaccine-preventable diseases, such as pertussis and influenza, until they are old enough to develop their own immunity through vaccination.¹

Prior to becoming pregnant, women should check with their healthcare provider to ensure that they are up to date on all recommended vaccines, including the MMR (measles-mumps-rubella) vaccine. Patients should wait at least one month after receiving the MMR vaccine, and confirming immunity with a blood test, before getting pregnant. Pregnant women should be vaccinated against pertussis, also known as whooping cough, and flu every pregnancy. However, according to the 2020 State of The IMMUNION, pregnant women in the United States are dramatically undervaccinated with only 1 in 3 women receiving both Tdap and influenza vaccines.¹

According to the Centers for Disease Control and Prevention (CDC), the United States is seeing a resurgence in pertussis. In 2012, there were approximately 49,000 cases of pertussis, with nearly 2,300 cases occurring among infants less than 3 months age, resulting in 15 deaths among this vulnerable population.⁴ Infants less than 2 months old are too young to be protected by the childhood pertussis vaccine series and therefore susceptible to increased morbidity and mortality due to pertussis. In infants younger than 1 year of age who get pertussis, about 50% will require hospital treatment, 61% will experience apnea, 23% will develop pneumonia and 1% will die.⁴ To protect babies from pertussis, pregnant women should receive the tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) during each pregnancy. Optimal timing for receiving the Tdap vaccine is between 27- and 36-weeks' gestation, preferably during the earlier part of this period, to maximize the maternal antibody response and passive antibody transfer to the infant.²

Pregnant women and their babies are also at an increased risk for influenza-related complications. Influenza vaccination for pregnant women is especially important because pregnant women who contract influenza are at a higher risk of maternal morbidity and mortality, in addition to fetal morbidity, including congenital anomalies, spontaneous abortion, preterm birth and low birth weight.³ Women who are or will be pregnant during influenza season should receive an annual influenza vaccine. According to CDC, pregnant women who receive a flu vaccine reduce their risk of being hospitalized with influenza by an average of 40%.² Influenza vaccine is recommended for everyone 6 months of age or older, so pregnant women can protect their newborn babies from influenza by receiving a flu vaccine during pregnancy.

Evidence indicates that a strong provider recommendation is the number one predictor in whether a patient chooses to vaccinate and protect their newborn baby against pertussis and influenza. Further, the decision to vaccinate is often made during the prenatal period and therefore it is imperative that healthcare providers promote vaccination and discuss the importance of protection during this time. Pregnant women that choose to vaccinate and protect their newborn baby are more likely to continue routinely recommended vaccines for their infants. Vaccines protect people of all ages against disease

and maternal vaccination ensures that newborn babies are protected from dangerous and deadly diseases until they are old enough to be vaccinated. Protect our most vulnerable population by ensuring that your pregnant patients receive Tdap and influenza vaccines every pregnancy.

References

1. Vaccinate Your Family: The Next Generation of Every Child By Two. (2020). *State of The IMMUNION: A Report on Vaccine-Preventable Disease in the U.S.*. Retrieved from https://64gbq3vj11cj33l2zkxw10k-wpengine.netdna-ssl.com/wp-content/uploads/2020/02/SOTIReport_2020_FINAL-1.pdf
2. Centers for Disease Control and Prevention (CDC). (2019, September 24). Pregnancy and Vaccination: Toolkit for Prenatal Care Providers. Retrieved from <https://www.cdc.gov/vaccines/pregnancy/hcp-toolkit/index.html>
3. Immunization, Infectious Disease and Public Health Preparedness Expert Work Group. (2018). Maternal Immunization. *Obstetrics and Gynecology*, e214-217.
4. Centers for Disease Control and Prevention (CDC). (2017, June 29). Pregnancy and Whooping Cough. Retrieved from <https://www.cdc.gov/pertussis/pregnant/hcp/rationale-vacc-pregnant-women.html>