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Immunization for Pregnant Women: A Call to Action

from the

American Academy of Family Physicians; American College of Nurse-Midwives; American College of Obstetricians and Gynecologists; and Association of Women's Health, Obstetric and Neonatal Nurses

INTRODUCTION

Immunizations are an essential part of prenatal care, offering critical protection to women and their fetuses against potentially deadly diseases. The Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices recommends that women who are pregnant receive an inactivated influenza and a tetanus/diphtheria/acellular pertussis (Tdap) vaccine in every pregnancy (1). The American Academy of Family Physicians; American College of Nurse-Midwives; American College of Obstetricians and Gynecologists; and Association of Women's Health, Obstetric and Neonatal Nurses strongly support this recommendation. As professional organizations whose members care for pregnant women, we affirm the importance of recommending and advocating that pregnant women receive all recommended vaccines at the appropriate time during each pregnancy. The current increase in hesitancy about the safety and efficacy of vaccines has created an environment that calls for our urgent commitment to discussing the evidence-based benefits of vaccination with pregnant women.

INFLUENZA

During the 2018-19 season, an estimated 35.5 million people in the United States contracted influenza, and 16.5 million visited health care practitioners for related care. In the same season, more than 490,000 hospitalizations and 34,000 deaths were attributed to influenza (2). Among women of reproductive age, pregnant women account for more than a quarter of flu-associated hospitalizations each season (3). Influenza can be a devastating disease for pregnant women because of the increased risk of fetal demise (4) and preterm labor and preterm birth (5, 6). Influenza can also cause severe, life-threatening illness to pregnant women (7, 8). Influenza vaccination plays an important role in protecting pregnant women against such serious illness. Moreover, influenza vaccination during pregnancy also transfers antibodies to the fetus, helping to protect babies against flu before their own eligibility for the vaccination at 6 months (9).

In the United States, the influenza season typically lasts from October to May. The CDC recommends that all women who are, will, or could be pregnant during influenza season should receive an influenza vaccine during any trimester (1). The composition of the influenza vaccine typically changes annually to accommodate the strain(s) of the virus that are expected to be most prevalent that year, making it critical to receive an influenza vaccine each year (10).

PERTUSSIS

Pertussis (whooping cough) can be a deadly infection for infants and children. Most cases occur in infants less than two months old; babies in this age group account for 69% of pertussis deaths and 262-743 pertussis-related hospitalizations each year (3). Yet, infants are not eligible for the first pertussis containing vaccine until two months of age. As a result, newborns are best protected if their mothers received a Tdap vaccine during pregnancy.

Pregnant women should receive the tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) vaccine during *each* pregnancy, between 27 weeks and 36 weeks of gestation. When a pregnant woman receives a Tdap vaccine, maternal antibodies are passed to the fetus, giving the infant a boost of protection at birth until they can receive their first pertussis-containing vaccine. The Tdap vaccine should be administered as early as possible in the 27-36-weeks-of-gestation window to maximize the maternal antibody response and passive antibody transfer to the fetus (11-14). Pregnant women should be counseled that, when given during the recommended time period, the Tdap vaccine is extremely effective at preventing pertussis in infants less than 2 months of age (15). Partners, family members, and infant caregivers should also receive the Tdap vaccine if they have not previously been vaccinated (14).

SAFETY

No evidence currently demonstrates that vaccinating pregnant women with inactivated virus, bacterial vaccines, or toxoids adversely affects the fetus. In fact, a growing body of data demonstrates the safety of these vaccines in pregnancy (13, 16-18). Influenza vaccination, for example, has been shown to reduce pregnant women's risk for influenza-associated hospitalizations by an average of 40%, thus demonstrating that pregnancy is in fact safer *because* of prenatal vaccination (3). Health care practitioners should point women to evidence-based resources and studies such as those referenced herein when they express doubts or questions about the safety of vaccines during pregnancy.

YOUR ROLE AND RESPONSIBILITIES

Collectively, the American Academy of Family Physicians; American College of Nurse-Midwives; American College of Obstetricians and Gynecologists; and Association of

Women's Health, Obstetric and Neonatal Nurses are deeply committed to improving immunization rates in pregnant women and ask that our members commit to the following:

1. For pregnant women, assess vaccine status and discuss which vaccines they should receive and when, ideally during the first prenatal visit.
2. Strongly recommend that all pregnant women and anyone who resides in their households receive an influenza vaccine annually.
3. Strongly recommend that all pregnant women receive a Tdap vaccine between 27 weeks and 36 weeks of gestation in each pregnancy, preferably during the earlier part of this time period.
4. If a pregnant woman declines vaccination, inquire about her reasons; reintroduce the discussion and offer the immunization at the next office visit.
5. Become educated on the safety and efficacy of vaccines during pregnancy and be comfortable communicating this information thoroughly to patients.

Making a strong recommendation is crucial to vaccine uptake. Routinely reviewing a woman's antepartum record will reveal important gaps in immunization status and prompt an open and fact-based dialogue. Addressing hesitancy about vaccines with firm data is important. Messaging to the community should consistently emphasize that getting vaccinated is the best step for preventing illness and that the inactivated (injectable) influenza and Tdap vaccines are safe to receive during pregnancy (17-20).

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