

September 26, 2017

Dear Colleague,

As a trusted health care provider, you play a crucial role in safeguarding the health of all of your patients, including pregnant women and their newborns. Studies have shown that pregnant women who received a vaccine recommendation from a health care provider were more likely to be vaccinated than those who did not receive a recommendation.¹

You are in the unique position to help decrease two vaccine preventable diseases. Influenza (flu) and pertussis (whooping cough) continue to put pregnant women and their babies at high risk of serious illness. Unfortunately, millions of women and their babies remain unprotected from these diseases.

All pregnant women, or those who might be pregnant during the upcoming flu season, should get a flu vaccine. The flu vaccine can be given during any trimester of pregnancy to decrease the risk of complications of influenza in the mother. In addition, the pertussis (tetanus, diphtheria and acellular pertussis) vaccine (Tdap) should be given to pregnant women, preferably during the early part of gestational weeks 27 through 36, to maximize the passive antibody transfer to their infants.

Some of your patients <u>may have questions</u> about receiving any vaccine while being pregnant. Below is some information that might be useful during conversations with your patients during the upcoming months:

- Flu vaccines given during pregnancy protect both the mother and her baby from flu. Vaccination has reduced the risk of flu-associated acute respiratory infection in pregnant women by up to one-half.² Babies of women who get a flu vaccine during their pregnancy are protected from flu infection for their first several months of life, when they are still too young to get vaccinated.³
- Flu shots have a good safety record. ⁴ Millions of flu vaccines have been given for decades, including to pregnant women, with a good safety record. Observational and prospective studies in pregnant women support the safety of influenza vaccine during pregnancy. However, data on first trimester flu vaccine administration is more limited than for second or third trimester vaccination. One recent study of data from the 2010-2012 seasons found that women who received two consecutive annual flu vaccines containing an H1N1 pdm 09 component early in pregnancy had an increased risk of miscarriage (median gestational age was 7 weeks) during 28 days after receiving the second vaccine the following season. In contrast, other studies have not found a link between flu vaccination and miscarriage. Follow up studies are ongoing. The Advisory Committee on Immunization Practices (ACIP), The American College of Obstetricians and Gynecologist, and CDC continue to recommend that pregnant women get a flu vaccine because flu poses a danger to pregnant women and their babies.
- **Tdap vaccines are important and safe for pregnant women and their infants.** Several prospective and observational studies have shown that Tdap is safe and well tolerated in pregnant women. Multiple studies show Tdap vaccination during the second or third trimester of pregnancy prevents pertussis in at least 9 out of 10 infants younger than 2 months of age.⁵ Receipt of Tdap between 27 through 36 weeks of pregnancy is 85% more effective at preventing pertussis in babies younger than 2 months of age compared with administering this vaccine to postpartum mothers in the hospital after giving birth.⁶

For more information about influenza vaccines, review CDC's <u>seasonal influenza vaccination resources for health professionals</u>. For information about the Tdap vaccine and pregnancy, please see CDC's <u>pregnancy and whooping cough resources for healthcare</u> <u>professionals</u>. To learn more about all vaccines for pregnant women, review ACIP's <u>Guidelines for Vaccinating Pregnant Women</u>.

Thank you for protecting the health and safety of your patients.

¹Ding, et al. MMWR 2014; Kahn K. et al. Internet Panel Sur, U.S. 2016

²Thompson MG, et al. Clin Infect Dis 2014; Madhi et al. N Engl J Med 2014; Zaman et al. N Engl J Med 2009

³Mahdi et al. N Engl J Med 2014; Tapia et al. Lancet Infect Dis 2016; Steinhoff et al. Lancet Infect Dis 2017

⁴Chambers CD, et al. *Vaccine* 2016; Bratton KN, et al. *Clin Infect Dis* 2015; Huang WT, et al. *Vaccine* 2014; Ma F, et al. *Clin Vaccine Immunol* 2014; Irving SA, et al *Obstet Gynecol* 2013; Chambers CD, et al. *Vaccine* 2013; Oppermann M, et al. *Vaccine* 2012; Pasternak B, et al. *BMJ* 2012; Sammon CJ, et al. PLoS ONE 2012; Heikkinen T, et al. *Obstet Gynecol* 2012

⁵Dabrera G, et al. *Clin Infect Dis* 2015; Amirthalingam G, et al. *Lancet* 2014; Amirthalingam G, et al. *Clin Infect Dis* 2016; Baxter R, et al. *Pediatrics* 2017 ⁶Winter K. et al. *Clin Infect Dis* 2017

/Nancy Messonnier/ Nancy Messonnier, MD (CAPT, USPHS) Director National Center for Immunization and Respiratory Diseases Centers for Disease Control and Prevention

/Karen Remley/ Karen Remley, MD, MBA, MPH, FAAP CEO/Executive Vice President American Academy of Pediatrics

/Lisa Kane Low/ Lisa Kane Low, PhD, CNM, FACNM, FAAN President American College of Nurse-Midwives

/Debbie Dawson Hatmaker/ Debbie Dawson Hatmaker, PhD, RN, FAAN Executive Director/EVP American Nurses Association

/Lynn Erdman/ Lynn Erdman, MN, RN, FAAN CEO Association of Women's Health, Obstetric and Neonatal Nurses

/Paul E. Jarris/ Paul E. Jarris, MD, MBA Chief Medical Officer, Senior Vice President Mission Impact March of Dimes

/Alfred Abuhamad/ Alfred Abuhamad, MD President Society for Maternal-Fetal Medicine /John Meigs/ John Meigs, Jr., MD, FAAFP Board Chair American Academy of Family Physicians

/L. Gail Curtis/ L. Gail Curtis, PA-C, MPAS, DFAAPA President and Chair of the Board American Association of Physician Assistants

/Hal C. Lawrence III/ Hal C. Lawrence III, MD, FACOG Executive Vice President and CEO American College of Obstetricians and Gynecologists

/Mitchel C. Rothholz/ Mitchel C. Rothholz, RPh, MBA Chief Strategy Officer American Pharmacists Association

/Deborah L. Wexler/ Deborah L. Wexler, MD Executive Director Immunization Action Coalition

/Doris Browne/ Doris Browne, MD, MSPH President National Medical Association