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Issue Brief – Influenza Vaccination for Pregnant Women

Pregnant women and infants are at increased risk for severe infections and hospitalization from influenza.

- Influenza is more likely to cause severe illness in pregnant women than in women who are not pregnant. Changes in the immune system, heart, and lungs during pregnancy make pregnant women more prone to serious illness from influenza.
- Risk of premature labor and delivery is increased in pregnant women with influenza. Flu-associated fever may be associated with neural tube defects and other adverse outcomes for a developing baby.
- Influenza hospitalization rates in infants <6 months of age are ~ three times those of older children.¹

Inactivated flu vaccine (flu shot) is considered safe and effective during any stage of pregnancy.

Influenza vaccination is the most effective way to protect pregnant women and their newborns from influenza. The Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (CDC/ACIP) recommends that women who are or plan to be pregnant during influenza season receive influenza vaccine as soon as possible and during any trimester of pregnancy.² The American College of Obstetricians and Gynecologists (ACOG), the American Academy of Family Physicians (AAFP), the American College of Nurse-Midwives (ACNM) and others have advised healthcare providers to ensure their pregnant patients are vaccinated against influenza each year.³

- The ACOG Committee on Obstetric Practice considers influenza vaccination an **integral element of prenatal care**⁴ to protect the pregnant woman and her newborn from influenza.
- Influenza vaccines have been safely given to millions of pregnant women.^{5,6} Review of reports to the Vaccine Adverse Events Reporting System found no evidence of a link between pregnancy complications or adverse fetal outcomes among pregnant women and flu shots.⁷
- A recent study suggested there might be an increased risk of spontaneous abortion (miscarriage) among pregnant women who received the flu vaccine that included H1N1 during the 2010-11 and 2011-12 flu seasons.⁸ There are reasons to be cautious about this study: It does not say the flu vaccine caused the miscarriages, and other studies on this subject have found NO increased risk for miscarriage after getting the flu shot.⁹ Further investigating is being done. CDC, ACOG and other health agencies continue to recommend that all women get a flu shot during pregnancy to protect themselves and their baby.

Flu vaccination during pregnancy protects both mothers and their newborns.

- Infants born to mothers who receive flu vaccine while pregnant are nearly 50% less likely to be hospitalized for flu than infants born to mothers who do not receive the vaccine while pregnant.¹⁰⁻¹³ No flu vaccines are licensed for use in children <6 months of age.
- A 2014 study shows that the flu vaccine effectively prevented flu infections in HIV-infected and uninfected pregnant women, and infants of HIV-uninfected women from birth to 24 weeks.¹⁴
- Studies have demonstrated that women who receive flu vaccine during pregnancy give birth to healthier infants and are less likely to experience adverse fetal outcomes such as prematurity and small for gestational age births.^{15, 16}

A healthcare provider's strong recommendation and provision of the vaccine are critical in a pregnant or postpartum woman's decision to get vaccinated against influenza.¹⁷

- A study¹⁸ among pregnant women in the US revealed that those who received a recommendation for influenza vaccination from a healthcare provider *and* were offered the vaccine during the same visit were:
 - More than twice as likely to be vaccinated as women who received only a recommendation and no offer to be vaccinated (65.2% vs. 25.5%).
 - Eleven times as likely to be vaccinated as women who did not receive a recommendation (65.2% vs. 5.8%).

Influenza Vaccine and Pregnancy – How Can Healthcare Providers Help Their Patients?

General

- Educate clinic staff, pregnant women and their families about the increased risk of influenza in pregnant women and infants, the importance of prevention through vaccination, and the safety of influenza vaccine.
- Issue standing orders for influenza vaccination of pregnant women and women who anticipate being pregnant during flu season.
- Post influenza prevention announcements and provide brochures to prompt vaccination requests.
- Establish an influenza vaccination reminder system for your patients.
- Provide influenza vaccine to your patients and to clinic staff.

Pregnant women

- Recommend vaccination during any trimester and continue to offer the vaccine throughout the flu season (September through April).
- Inform pregnant women about the importance of decreasing their risk from the flu and related complications, including hospitalization and death, for themselves and their babies, through vaccination.
- Explain that protection is transferred from mother to her unborn baby by vaccination during pregnancy.
- Discuss the importance of early treatment with antiviral medications of both vaccinated and unvaccinated pregnant patients if flu is suspected during periods of local influenza activity; delay of treatment while awaiting confirmation is not recommended.
- Recommend unvaccinated post-partum women be vaccinated before hospital discharge.
- Educate staff and postpartum women that breastfeeding is not a contraindication to vaccination.
- Recommend (and provide where possible) vaccination of family members and other infant caregivers.

For more information, go to:

- CDC's Web site on Influenza Vaccine and Pregnancy: www.cdc.gov/vaccines/pubs/preg-guide.htm
- Public Health – Seattle & King County: www.kingcounty.gov/health/flu

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