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Women's Health Care Physicians

COMMITTEE OPINION

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Committee on Obstetric Practice

Influenza Vaccination During Pregnancy

Abstract: Preventing influenza during pregnancy is an essential element of prenatal care, and the most effective strategy for preventing influenza is annual immunization. The Centers for Disease Control and Prevention's Advisory Committee on Immunization Practice recommends influenza vaccination for all women who will be pregnant through the influenza season (October through May in the United States). The American College of Obstetricians and Gynecologists' Committee on Obstetric Practice supports this recommendation. No study to date has shown an adverse consequence of inactivated influenza vaccine in pregnant women or their offspring. Vaccination early in the season and regardless of gestational age is optimal, but unvaccinated pregnant women should be immunized at any time during influenza season as long as the vaccine supply lasts.

Influenza vaccination is an essential element of prenatal care because pregnant women are at an increased risk of serious illness due to influenza. Most reports of excess seasonal influenza-related morbidity have focused on excess hospital admissions for respiratory illness during influenza season. For example, a retrospective cohort study in Nova Scotia compared hospitalizations and respiratory illness among pregnant women during influenza season with hospital admissions during influenza season for the same women in the year before their pregnancies. Women were more likely to have increased medical visits or increased lengths of stay if hospitalized for respiratory illnesses during pregnancy than when not pregnant, especially during the third trimester; the association between pregnancy status and hospital admission was particularly striking for women with comorbidities (1). In addition to the risks from seasonal influenza, pregnant women experienced excess mortality during the influenza pandemics of 1918–1919, 1957–1958, and most recently, the 2009 pandemic (2–10).

The Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP) recommends that all women who will be pregnant during influenza season (October through May in the United States) receive inactivated influenza vaccine at any point in gestation; live attenuated influenza vaccine is contraindicated for pregnant women (11). No study to date has shown an adverse consequence of inactivated influenza vaccine in pregnant women or their offspring (12). The vaccine is made the same way each year, with the only difference being the use of a new strain of influenza based on predictions of prevalent strains in the community. There have been no reports of any adverse outcomes in pregnant women or their infants. Thimerosal, a mercury-containing preservative used in multidose vials, has not been shown to cause any adverse effects except for occasional local skin reactions. There is no scientific evidence that thimerosal-containing vaccines cause adverse effects in children born to women who received vaccines with thimerosal. Hence, ACIP does not indicate a preference for thimerosal-containing or thimerosal-free vaccines for any group, including pregnant women (11). In addition to the benefits of immunization for pregnant women, a prospective, controlled, blinded randomized trial demonstrated fewer cases of laboratory-confirmed influenza among infants whose mothers had been immunized compared with women in the control group, as well as fewer cases of respiratory illness with fever. Maternal immunity is the only effective strategy in newborns because the vaccine is not approved for use in infants younger than 6 months (13).

The American College of Obstetricians and Gynecologists' Committee on Obstetric Practice supports ACIP's recommendation that all women who are pregnant during influenza season receive inactivated influenza vaccine. Despite the safety of the vaccine, many obstetrician–gynecologists have not participated in influenza vaccination programs. Survey data suggest vaccination

rates in pregnancy for seasonal influenza in recent years of 15–25% (11) and for 2009, an H1N1 vaccination rate of 38% (14). However, small numbers of pregnant women were surveyed, and confidence intervals around the estimates are wide. Provider education with simple chart prompts has been shown to increase the frequency of discussion between physicians and pregnant women regarding influenza and vaccination (15). This is particularly important because it has been shown that lack of knowledge about the benefits of the vaccine is a barrier to vaccine acceptance (16, 17).

Pregnant women represent a vulnerable population with regard to influenza, and influenza vaccination is an integral element of prenatal care. It is imperative that health care providers, health care organizations, and public health officials continue efforts to improve the rate of influenza vaccination among pregnant women.

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