



The American College of  
Obstetricians and Gynecologists  
WOMEN'S HEALTH CARE PHYSICIANS

## Frequently Asked Questions Concerning Seasonal Influenza for Obstetrician–Gynecologists

### **Should pregnant women be immunized against seasonal influenza (flu)?**

Yes. Influenza vaccination is an essential element of prenatal care because pregnant women are at increased risk of serious illness and mortality due to influenza. Case reports and limited studies indicate that pregnancy can increase the risk of serious medical complications of influenza. One study found that during an average flu season, 25 of every 10,000 women in their third trimester of pregnancy were hospitalized for flu-related complications. In addition, maternal immunity is the only effective strategy for newborns because the vaccine is not approved for use in infants younger than 6 months.

### **Is it safe for pregnant women to be immunized against seasonal influenza?**

Yes. There is no study to date that has shown an adverse consequence for women or their offspring after administration of inactivated influenza vaccine to pregnant women. The influenza vaccine is made the same way each year, with the only difference being the use of a different strain of influenza. There have been no reports of any adverse outcomes in pregnant women or their infants.

### **During which trimester should pregnant women be immunized?**

All women who will be pregnant during influenza season (October through May) should receive inactivated influenza vaccine at any point during their pregnancy.

### **Which flu vaccine should pregnant women receive?**

Pregnant women should receive the inactivated influenza vaccine, which is injected intramuscularly in the deltoid muscle. Currently, there are two types of the inactivated influenza vaccine available: 1) the trivalent vaccine and 2) the quadrivalent vaccine, both of which may be used during pregnancy. The Advisory Committee on Immunization Practices and the American College of Obstetricians and Gynecologists do not preferentially recommend a specific formulation—trivalent or quadrivalent—of the influenza vaccine. Live attenuated influenza vaccine is contraindicated for pregnant women.

### **Is it safe for pregnant women to receive an influenza vaccine that contains mercury (thimerosal)?**

Yes. 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, including autism, in children born to women who received vaccines with thimerosal. A study of influenza vaccination, which examined more than 2,000 pregnant women, demonstrated no adverse fetal effects associated with the influenza vaccine.

Additionally, higher numbers of influenza-associated deaths among pregnant women have been documented during influenza pandemics. Because pregnant women are at increased risk of influenza-related complications and because a substantial safety margin has been incorporated into the health guidance values for organic mercury exposure, the benefits of influenza vaccine with reduced or standard thimerosal content outweigh the theoretical risk, if any, of thimerosal.

## Should we provide antiviral chemoprophylaxis to pregnant women exposed to influenza?

Yes. Because of the high potential for morbidity in pregnant and postpartum women, the Centers for Disease Control and Prevention recommends that postexposure antiviral chemoprophylaxis can be considered for pregnant women and women who are up to 2 weeks postpartum (including after pregnancy loss) who have had close contact with someone likely to have been infected at the time with influenza. The chemoprophylaxis recommendation is 75 mg of oseltamivir daily for 10 days. All women who are pregnant or in the first 2 weeks after delivery or pregnancy loss should be counseled about the early signs and symptoms of influenza infection, such as fever more than 100.0°F coupled with difficulty breathing, dizziness when standing, or pain in the chest, and are advised to immediately call for evaluation if clinical signs or symptoms develop.

## Resources

For more information on antiviral chemoprophylaxis in pregnant and postpartum women, see the Centers for Disease Control and Prevention's web site: [www.cdc.gov/flu/professionals/antivirals/avrec\\_ob.htm](http://www.cdc.gov/flu/professionals/antivirals/avrec_ob.htm).

For more information, visit CDC's section concerning seasonal flu vaccine safety and pregnant women: [www.cdc.gov/flu/protect/vaccine/qa\\_vacpregnant.htm](http://www.cdc.gov/flu/protect/vaccine/qa_vacpregnant.htm).

Please see the American College of Obstetrician and Gynecologists Immunization for Women web site for health care provider and patient resources: [www.immunizationforwomen.org](http://www.immunizationforwomen.org).

This information is designed to aid practitioners in assessing their patients' immunization needs. This guidance should not be construed as dictating an exclusive course of treatment or procedure. Variations in practice may be warranted based on the needs of the individual patient, resources, and limitations unique to the institution or type of practice. Please be advised that this guidance may become out-of-date as new information becomes available from the Centers for Disease Control and Prevention.