



Influenza in Pregnancy/Postpartum Information for Obstetric Providers

Pregnant women should be vaccinated against the flu. If flu symptoms develop, treatment should begin as soon as possible after illness onset.

Influenza is a contagious respiratory disease that can cause mild to severe illness. Flu activity generally starts to increase in October and most commonly peaks during the winter months. Data on flu activity in Washington are published weekly in the Washington State Department of Health Flu Update: www.doh.wa.gov/YouandYourFamily/IllnessandDisease/Flu

Pregnant women are at higher risk for developing severe complications from influenza compared to women who are not pregnant. Pregnant women with influenza also have a greater chance of having obstetric problems, including premature labor and delivery.

Both CDC and ACOG recommend that all pregnant/postpartum women should get vaccinated during any trimester of pregnancy. In addition to protecting the pregnant woman, flu vaccination protects the newborn who is too young to receive vaccine. Studies show the highest flu vaccine rates when pregnant women have both a recommendation from their health care provider and vaccination onsite. **Pregnant women should not receive live attenuated vaccine (nasal spray).**

It is imperative that pregnant women with influenza illness get treated with antiviral medications and acetaminophen for fever as soon as possible. Data from the 2009–2010 influenza season showed women who were treated early with antiviral medications were less likely to be admitted to an intensive care unit and less likely to die. In addition, available data suggest that neuraminidase inhibitors (oseltamivir and zanamavir) are not teratogenic.

Refer to the checklist on the back of this handout to prepare your practice for flu season.

Resources:

ACOG Influenza Vaccination during Pregnancy. Committee Opinion No. 608. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2014; 116:1006-7. Available at: www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Influenza-Vaccination-During-Pregnancy

CDC: Influenza Antiviral Medications: Summary for Clinicians. <http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>

Integrating immunizations into practice. Committee Opinion No. 661. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2016; 127; e104-7. www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Gynecologic-Practice/Integrating-Immunizations-Into-Practice

Louie JK, Salibay CJ, Kang M, Glenn-Finer RE, Murray AL, Jamieson DJ. Pregnancy and Severe Influenza Infection in the 2013-2014 Influenza Season. *Obstetrics and Gynecology* 2015; 125:1: 184-192.

Polyzous KA, Konstantelias AA, Pitsa CE, Falagas ME. Maternal Influenza Vaccination and Risk for Congenital Malformations A systematic review and meta-analysis. *Obstetrics and Gynecology* 2015; 5; 1075- 1084.

Rasmussen S A, Jamieson DJ. 2009 H1N1 Influenza and Pregnancy- 5 years Later. *New England Journal of Medicine* 2014; 1373-1375.

Practice Preparations and Patient Care for Flu Season

Practice preparations

- ❑ Develop a plan for your practice during influenza season. Include how to keep pregnant staff and pregnant patients separated from potentially infected patients. For assistance go to the Centers for Disease Control and Prevention (CDC): www.cdc.gov/flu/professionals/vaccination/index.htm
- ❑ Arrange for vaccinations for yourself and your staff as soon as available.
- ❑ Designate an immunization coordinator.
- ❑ Provide women with information about planning for flu season. CDC site: www.cdc.gov/flu/keyfacts.htm
- ❑ Routinely confirm phone contact information on all pregnant women.
- ❑ Develop a practice plan to:
 - Encourage vaccination for pregnant women's families.
 - Advise pregnant women to get vaccinated during any trimester of pregnancy. Document refusal.
 - Provide flu vaccines in your office. You can bill an administration code. If referring out, follow up until she receives it.
 - Issue standing orders for vaccination.
 - Use prompts to remind staff.
 - Establish a reminder system for flu vaccinations.
 - Educate patients about flu symptoms and reporting symptoms by phone immediately.
 - Ease pregnant women's concerns about taking medication and vaccines during pregnancy by emphasizing benefits and safety of treatment and immunizations during pregnancy.
 - Ensure rapid access to phone consultation and clinical evaluation.
 - Isolate sick patients.
 - Monitor those patients you treat for flu. Antiviral prophylaxis of infants under 3 months is not generally recommended by CDC. For more information: www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm
 - Consider treatment of pregnant and postpartum women (up to 2 weeks) based on phone contact if hospitalization is not indicated and if this will reduce delay in treatment.
- ❑ Licensed midwives will need to make arrangements with a provider having prescriptive authority to assure that their patients get antiviral medication quickly. Options include referral to the woman's primary care, another obstetric provider or local pharmacy. Follow up until she receives it.

Patient care

- ❑ Promote influenza vaccine for women at visits prior to conception, during pregnancy and postpartum. For more information about flu vaccine go to: www.cdc.gov/flu/protect/vaccine/index.htm
- ❑ Begin antiviral and fever treatment based on clinical evaluation as soon as possible, preferably within the first 48 hours. Although it is ideal to begin treatment less than 48 hours after symptoms begin, there is clinical benefit when treatment is initiated later. Do not delay antiviral treatment while waiting for laboratory confirmation. The sensitivities of Rapid Influenza Diagnostic Tests (RIDT) are generally 40–70 percent; therefore, a negative RIDT does not exclude the diagnosis of influenza. Discontinuing medication should not be based on a negative RIDT, unless a likely alternative diagnosis is made.
- ❑ Treat regardless of whether the woman has been vaccinated. Vaccination is only about 60 percent effective.
- ❑ Check the CDC sites for testing recommendations: www.cdc.gov/flu/professionals/diagnosis/index.htm and treatment recommendations: www.cdc.gov/flu/professionals/antivirals/avrec_ob.htm
- ❑ Fever in pregnant women should be treated because of the risk that it appears to pose to the fetus. Acetaminophen appears to be the best option for treatment of fever during pregnancy.
- ❑ Monitor sick pregnant women closely. If symptoms are mild, pregnant women may be encouraged to stay at home with frequent phone consultation.
- ❑ Consider treating women who have been exposed to someone with flu with prophylactic antiviral medication: www.cdc.gov/flu/professionals/antivirals/avrec_ob.htm
- ❑ Encourage women to breastfeed their newborn, even while being treated for flu. Advise them not to cough or sneeze in baby's face and consider wearing a face mask.
- ❑ Report flu-associated deaths to the local public health agency where the patient resides.

More information

For more information on flu in Washington State: www.doh.wa.gov/flunews

For the patient handout *Flu and Pregnancy: Some Things You Need to Know*: <http://here.doh.wa.gov/materials/flu-and-pregnancy>