



Updated Interim Recommendations for Obstetric Health Care Providers Related to Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season

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- Pregnant women are at higher risk for severe complications and death from influenza, including both 2009 H1N1 influenza and seasonal influenza.
- Treatment with oseltamivir (Tamiflu®) or zanamivir (Relenza®) is recommended for pregnant women with suspected or confirmed influenza and can be taken during any trimester of pregnancy. The duration of antiviral treatment is 5 days. See Table 1 (below) for dosing information.
- Oseltamivir and zanamivir are "Pregnancy Category C" medications, indicating that no clinical studies have been conducted to assess the safety of these medications for pregnant women. However, the available risk-benefit data indicate pregnant women with suspected or confirmed influenza should receive prompt antiviral therapy. Pregnancy should not be considered a contraindication to oseltamivir or zanamivir use.
- Treatment should be initiated as early as possible because studies show that treatment initiated early (i.e., within 48 hours of illness onset) is more likely to provide benefit.
- Treatment should not wait for laboratory confirmation of influenza because laboratory testing can delay treatment and because a negative rapid test for influenza does not rule out influenza. The sensitivity of rapid tests can range from 10 % to 70%. View information on [the use of rapid influenza diagnostic tests \(http://www.cdc.gov/h1n1flu/guidance/rapid_testing.htm\)](http://www.cdc.gov/h1n1flu/guidance/rapid_testing.htm).
- At this time, most 2009 H1N1 influenza viruses are susceptible to oseltamivir and zanamivir. However, antiviral treatment regimens might change depending on new antiviral resistance or viral surveillance information.
- For treatment of pregnant women with suspected or confirmed influenza, oseltamivir is currently preferred because of its systemic absorption. See Table 1 (below) for dosing information.
- Based on global experience to date, 2009 H1N1 influenza viruses likely will be the most common influenza virus among those circulating in the coming season, particularly those causing influenza among younger age groups.
- Since rapid access to antiviral medications is essential, health care providers who care for pregnant women should develop methods to ensure that treatment can be started quickly after symptom onset. Actions that will support early treatment initiation include:
 - Informing pregnant women of signs and symptoms of influenza and the need for early treatment after onset of symptoms onset of influenza. In a recent series of pregnant women with 2009 H1N1 influenza, manifestations included fever (97%), cough (94%) rhinorrhea (59%), sore throat (50%), headache (47%), shortness of breath (41%), myalgia (35%), vomiting (18%), diarrhea (12%) and conjunctivitis (9%), similar to those in the general population. Individuals may be infected with influenza, including 2009 H1N1, and have respiratory symptoms without fever.
 - Ensuring rapid access to telephone consultation and clinical evaluation for pregnant women
 - Consider empiric treatment of pregnant women based on telephone contact if hospitalization is not indicated and if this will substantially reduce delay before treatment is initiated
- Post-exposure antiviral chemoprophylaxis can be considered for pregnant women who have had contact with someone likely to have been infectious with influenza. The duration of antiviral chemoprophylaxis post-exposure is 10 days after the last known exposure. See Table 1 (below) for dosing information.
- The drug of choice for chemoprophylaxis of pregnant women is less clear. Zanamivir may be the preferable antiviral for chemoprophylaxis of pregnant women because of its limited

systemic absorption. However, respiratory complications that may be associated with zanamivir because of its inhaled route of administration need to be considered, especially in women at risk for respiratory problems. For these women, oseltamivir is a reasonable alternative. The duration of antiviral chemoprophylaxis post-exposure is 10 days after the last known exposure. See Table 1 (below) for dosing information.

- Pregnant women given post-exposure chemoprophylaxis should be informed that the chemoprophylaxis lowers but does not eliminate the risk of influenza and that protection stops when the medication course is stopped. Those receiving chemoprophylaxis should be encouraged to seek medical evaluation as soon as they develop a febrile respiratory illness that might indicate influenza.
- All pregnant women should be counseled about the early signs and symptoms of influenza infection and advised to immediately call for evaluation if clinical signs or symptoms develop.
- Early treatment is an alternative to chemoprophylaxis for some pregnant women who have had contact with someone likely to have been infectious with influenza. Clinical judgment is an important factor in treatment decisions.
- 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.

Table 1. Antiviral medication dosing recommendations for treatment or chemoprophylaxis of novel influenza A (H1N1) infection

(Table extracted from IDSA guidelines for seasonal influenza [\[http://www.journals.uchicago.edu/doi/full/10.1086/598513\]](http://www.journals.uchicago.edu/doi/full/10.1086/598513).)

Agent, group	Treatment	Chemoprophylaxis
Oseltamivir		
Adults	75-mg capsule twice per day for 5 days	75-mg capsule once per day for 10 days
Zanamivir		
Adults	Two 5-mg inhalations (10 mg total) twice per day for 5 days	Two 5-mg inhalations (10 mg total) once per day for 10 days