

Dear IEHP Providers,

Last week, we advised physicians of the latest antiviral treatment guideline established by the World Health Organization (WHO). On September 8, 2009, CDC released an updated antiviral treatment guideline. The summary of the guideline is provided below:

- Treatment with oseltamivir or zanamivir is recommended for all persons with suspected or confirmed influenza **requiring hospitalization**.
- **Treatment with oseltamivir or zanamivir generally is recommended for persons with suspected or confirmed influenza who are at higher risk for complications (children younger than 5 years old, adults 65 years and older, pregnant women, persons with certain chronic medical or immunosuppressive conditions, and persons younger than 19 years of age who are receiving long-term aspirin therapy.**
- **Persons who are not at higher risk for complications or do not have severe influenza requiring hospitalization generally do not require antiviral medications for treatment or prophylaxis. However, any suspected influenza patient presenting with warning symptoms (e.g., dyspnea) or signs (e.g., tachypnea, unexplained oxygen desaturation) for lower respiratory tract illness should promptly receive empiric antiviral therapy.**
- Clinical judgment is an important factor in antiviral treatment decisions for all patients presenting for medical care who have illnesses consistent with influenza.
- 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 \(RIDTs\)](#).
- Testing for 2009 H1N1 influenza infection with real-time reverse transcriptase-polymerase chain reaction (rRT-PCR) should be prioritized for persons with suspected or confirmed influenza requiring hospitalization and based on guidelines from local and state health departments.
- Groups at higher risk for 2009 H1N1 influenza complications are similar to those at higher risk for seasonal influenza complications.
- Actions that should be taken to reduce delays in treatment initiation include:
 - Informing persons at higher risk for influenza complications of signs and symptoms of influenza and need for early treatment after onset of symptoms of influenza (i.e., fever, respiratory symptoms);
 - Ensuring rapid access to telephone consultation and clinical evaluation for these patients as well as patients who report severe illness;
 - Considering empiric treatment of patients at higher risk for influenza complications based on telephone contact if hospitalization is not indicated and if this will substantially reduce delay before treatment is initiated.
- In selected circumstances, providers might also choose to provide selected patients at higher risk for influenza-related complications (e.g., patients with neuromuscular disease) with prescriptions that can be filled at the onset of symptoms after telephone consultation with the provider.
- **Antiviral chemoprophylaxis generally should be reserved for persons at higher risk for influenza-related complications who have had contact with someone likely to have been infected with influenza.**

- Based on global experience to date, 2009 H1N1 influenza viruses likely will be the most common influenza viruses among those circulating in the coming season, particularly those causing influenza among younger age groups. Circulation of seasonal influenza viruses during the 2009-10 season is also expected. Influenza seasons are unpredictable, however, and the timing and intensity of seasonal influenza virus activity versus 2009 H1N1 circulation cannot be predicted in advance.
- Persons with suspected 2009 H1N1 influenza or seasonal influenza who present with an uncomplicated febrile illness typically do not require treatment. However, some groups appear to be at higher risk for influenza-related complications.
- Currently circulating 2009 H1N1 viruses are susceptible to oseltamivir and zanamivir, but resistant to amantadine and rimantadine; however, antiviral treatment regimens might change according to new antiviral resistance or viral surveillance information.
- Information on the dose and dosing schedule for oseltamivir and zanamivir is provided in this document. An April 2009 [Emergency Use Authorization](#) authorizes the emergency use of oseltamivir in children younger than 1 year old, subject to the terms and conditions of the EUA

The latest antiviral treatment guideline focuses on the appropriate use of antiviral medications based on the latest development and to raise the awareness of the antiviral resistance. Please review the summary in detail, and use antiviral medications appropriately. As a reminder, IEHP has adopted the same clinical criteria for the use of antivirals such as Tamiflu (oseltamivir). Antivirals will be approved if the criteria are met (pharmacists are authorized to dispense Tamiflu if the conditions are stated on the prescriptions).

IEHP Interim Guidance on Antivirals

Table R1: Use of antivirals for treatment of influenza

Population	Pandemic (H1N1) influenza virus 2009	Multiple co-circulating influenza A sub-types or viruses with different antiviral susceptibilities	Sporadic zoonotic influenza A viruses including H5N1
Mild to moderate uncomplicated clinical presentation			
At-risk ^a population	oseltamivir or zanamivir (04)	Zanamivir, or oseltamivir plus M2 inhibitor ^b (10)	oseltamivir or zanamivir
Otherwise healthy ^c	Need not treat (03)	Need not treat (09)	oseltamivir
<p>a Infants and children aged less than 5, the elderly (>65 years), nursing home residents, pregnant women, patients with chronic co-morbid conditions such as cardiovascular, respiratory or liver disease, diabetes, and those with immunosuppression related to malignancy, HIV infection or other diseases.</p> <p>b Amantadine should not be used in pregnant women (recommendation 12).</p> <p>c All those not covered by the at-risk definition above.</p>			
Severe or progressive clinical presentation^d			
At-risk ^a population	Oseltamivir (01) (zanamivir should be used where virus is known to be resistant to oseltamivir, or if oseltamivir unavailable) (02)	oseltamivir plus M2 inhibitor ^b , or zanamivir (05,06, 07)	oseltamivir plus M2 inhibitor
Otherwise healthy ^c			
d See section 2 Case Description. Would include all patients requiring hospitalization.			

1. Members with H1N1 clinical presentation **AND**
 - a. children under 5
 - b. pregnant women
 - c. with an underlying health condition such as asthma, diabetes, or those with reduced immunity such as people with HIV)

2. Members with **Severe or Progressive** H1N1 clinical presentation
Signs and Symptoms of Severe and Progressive disease include, but not limited to:
 - Shortness of breath, dyspnea, tachypnea, hypoxia and /or radiological signs of lower respiratory tract disease (pneumonia)
 - Exacerbation of underlying chronic disease
 - Symptoms and signs suggesting oxygen impairment or cardiopulmonary insufficiency
 - Altered mental status, unconscious, drowsiness, or difficult to awaken, seizures, confusion, severe weakness or paralysis
 - Severe dehydration

If you have any questions regarding this recommendation, please feel free to contact Chris Chan, Pharm.D. at 909-890-2067. For more information, please visit CDC's H1N1 flu website at <http://www.cdc.gov/h1n1flu/antiviral.htm> or www.iehp.org for the latest information.

Sincerely,

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