

# Antiviral Drugs for the 2009-2010 Influenza Season

*[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC – safer, healthier people.*

Hello, I'm Dr. Tony Fiore. Welcome to this CDC podcast for clinicians on antiviral drugs. Since mid-September 2009, over 99 percent of influenza viruses detected in the United States have been 2009 H1N1. The 2009 H1N1 viruses are susceptible to the neuraminidase inhibitor type of antiviral drugs, oseltamivir and zanamivir.

It's very important that antiviral drugs be used early on in the course of illness to treat influenza in people who are hospitalized and people who are sick with influenza and have a greater chance of having serious influenza complications. Other people may also benefit from treatment with antiviral drugs.

People with suspected influenza who have symptoms of lower respiratory tract illness, whose illness is worsening, or who have signs and symptoms of severe illness, such as poor oxygenation, or exacerbations of chronic conditions should receive prompt empiric antiviral therapy, regardless of previous health or age. Antiviral drugs work best if started within two days of illness onset. But for severely ill persons, or persons who appear to be worsening or unstable, CDC recommends that treatment be started even if more than two days have passed since the illness began. Because bacterial co-infections, including pneumonia, sinusitis, and otitis media, may occur with or after an influenza illness, clinicians should also consider the potential need for antibiotics, along with empiric treatment with antiviral medications.

Clinical judgment is a critical factor in all treatment decisions, and making decisions about treating outpatients can be challenging. It's important to know who is at higher risk for developing complications of influenza, and consider early treatment for these persons.

People at higher risk for influenza complications include the following:

- Children younger than five, but especially children younger than two years old,
- Adults 65 years of age and older ,
- Pregnant women,
- Persons younger than 19 years of age who are receiving long-term aspirin therapy, and,
- People who have medical conditions, including a wide variety of heart, lung, neurological, and immunosuppressive diseases, including asthma and diabetes

Regardless of a patient's age or underlying health conditions, however, clinicians still must rely on their clinical judgment in making treatment decisions. For example, people who are already beginning to feel better don't usually need to be treated.

Determining if a patient has influenza can be very challenging since presenting symptoms of influenza can range from classical respiratory symptoms with fever to illnesses without fever or in some cases with fever and behavioral change or other constitutional symptoms, but no respiratory symptoms.

Most people do not need to be tested for influenza, but if a clinician decides to test, the initiation of treatment should not be delayed to wait for test results. Clinicians should keep in mind that rapid influenza diagnostic tests are more likely to fail to detect influenza viruses, compared to tests like RT-PCR.

Because rapid influenza tests are only moderately sensitive in detecting 2009 H1N1 infection, a negative rapid test result should not be used to rule out influenza, and clinicians should still use antivirals to treat severely ill or higher risk patients that they believe may have influenza, regardless of the rapid test result.

The U.S. Food and Drug Administration recently issued an Emergency Use Authorization, or E-U-A for the use of oseltamivir for children less than one year old. A discussion of dosing options is available at [www.cdc.gov/h1n1flu](http://www.cdc.gov/h1n1flu).

Discussing treatment issues with patients who are ill, as well as those who are at higher risk for severe illness, is important. Health care providers can minimize delays in treatment initiation by counseling patients at higher risk for influenza complications about signs and symptoms of influenza and the need for early treatment after symptom onset. Request that high risk patients contact you immediately if signs or symptoms of influenza develop. Ensure rapid access to telephone consultation and clinical evaluation for these patients, as well as patients who report severe illness. Consider empiric treatment of high risk patients based on telephone contact if this will substantially reduce delay before treatment is initiated.

The recommended duration of treatment is five days. However, hospitalized patients with severe infections might require longer treatment courses.

Patients who begin treatment should be told that some people may continue to shed influenza virus for up to four or more days after beginning therapy or even longer if they remain ill. Therefore, patients should continue good hand washing and respiratory hygiene practices during the entire period of time that they receive antiviral therapy to prevent transmission of virus to others.

Both seasonal and 2009 H1N1 influenza vaccines are currently available. However, patients who received vaccination can still sometimes get influenza. Therefore, early empiric treatment, when indicated, is still emphasized for vaccinated persons with suspected influenza infection.

Now I would like to discuss using antiviral drugs for prevention of influenza. Antiviral drugs can prevent illness if given soon after being exposed to someone with influenza. Exposures that are more likely to end up causing illness are usually those that involve close contact, such as those that might occur in a household, talking face-to-face with someone, or while providing health care to an ill person.

CDC recommends that the use of antiviral medications for prevention be limited to certain circumstances. Use of oseltamivir or zanamivir for prevention should only be considered for people at higher risk for influenza complications, or persons who work in health care settings or provide emergency medical care. Don't start antiviral drugs to prevent illness if more than 48

hours have passed since the exposure. Another option to prophylactic use is watchful waiting after an exposure and initiation of antiviral treatment if symptoms develop. This approach avoids unnecessary antiviral side effects and expense, and might help with reducing the risk of spreading antiviral resistant influenza viruses.

For more information on influenza for health care providers, please visit [www.cdc.gov/h1n1flu](http://www.cdc.gov/h1n1flu) and [www.flu.gov](http://www.flu.gov).

*[Announcer] For the most accurate health information, visit [www.cdc.gov](http://www.cdc.gov) or call 1-800-CDC-INFO, 24/7.*