Antiviral guidance for suspected, probable, or confirmed novel H1N1 influenza

The Centers for Disease Control and Prevention would like to emphasize that it is very important to get the word out to clinicians, particularly those in primary care (including internists, pediatricians, family practitioners, OB-GYN physicians) and hospital-based clinicians (emergency physicians, hospitalists, intensivists) to ***emphasize early, empiric antiviral treatment for hospitalized patients and high-risk outpatients with suspected, probable, or confirmed novel swine-origin influenza A (H1N1) virus infection.***

Preliminary information indicates that some hospitalized patients with novel influenza A (H1N1) virus infection have not been treated with antivirals or that treatment with antiviral agents was delayed until confirmatory testing was completed. In particular, some patients with chest x-ray evidence of pneumonia and influenza symptoms have not received antivirals early. While data from seasonal influenza indicates that early antiviral treatment is most effective (within 48 hours of symptom onset), some studies have reported a benefit in treating hospitalized patients. Therefore, initiating therapy at the earliest possible time is desirable, including at hospital admission, if patients were not previously treated.

Clinicians should be aware that influenza virus infection can cause primary viral pneumonia and early treatment of people with influenza-related pneumonia is desirable. Additionally, empiric treatment with influenza antiviral medications does not preclude empiric treatment for bacterial co-infections. Specific influenza testing should be performed for any hospitalized patient with suspected novel influenza A (H1N1) virus infection.

The CDC Antiviral recommendations are available at: http://www.cdc.gov/h1n1flu/recommendations.htm. The CDC Testing recommendations are available at: http://www.cdc.gov/h1n1flu/specimencollection.htm.

Accordingly, the CDC would like to emphasize antiviral treatment for the following:

1. All hospitalized patients with suspected, probable, or confirmed novel influenza A (H1N1) virus infection should be empirically treated with oseltamivir or zanamivir as early after illness onset as possible.

   No comparative studies have been done to assess whether higher doses or longer treatment courses might be more effective for severely ill patients. However, a longer duration of treatment should be considered for severe illness that persists at the end of the usual 5 day course. Some experts also recommend higher treatment doses (e.g., 150 mg oseltamivir twice per day), based on concerns about the potential for lower oseltamivir absorption, higher viral loads, and reduced delivery of oseltamivir to damaged tissue among severely ill patients. Patients who have received higher treatment doses or longer treatment durations have tolerated these regimens without substantial increase in adverse events, based on limited data.

2. All outpatients with suspected novel influenza A (H1N1) virus infection who are at higher risk for influenza complications should be empirically treated with oseltamivir or zanamivir as early after illness onset as possible.

3. Groups with a higher risk for influenza complications:
   a. Children younger than 5 years old. The risk for severe complications from seasonal influenza is highest among children younger than 2 years old.
   b. Adults 65 years of age and older.
   c. Persons with the following conditions:
      i. Chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological (including sickle cell disease), neurologic, neuromuscular, or metabolic disorders (including diabetes mellitus);
      ii. Immunosuppression, including that caused by medications or by HIV;
      iii. Pregnant women;
      iv. Persons younger than 19 years of age who are receiving long-term aspirin therapy;
      v. Residents of nursing homes and other chronic-care facilities.

The CDC is requesting help to disseminate this specific message about antiviral guidance with your organization's membership. Please include this information on your websites, in your email communications, electronic newsletters, and other communication vehicles. The CDC greatly appreciates your assistance in this effort!