Pandemic (H1N1) 2009
Health Alert Update for Healthcare Providers and Clinicians
July 22, 2009

This Health Alert Update for Providers addresses Pandemic (H1N1) 2009 lessons learned and provides guidance for clinicians. Please note the name change from novel influenza A (H1N1) in keeping with the World Health Organization’s nomenclature.

A. Summary of Interim Guidance on Antiviral Recommendations for Pandemic (H1N1) 2009 Virus Infection

The following is a summary of recommendations from the California Department of Public Health (CDPH) for the use of antiviral medications to treat or prevent pandemic (H1N1) 2009 virus infections (referred to below as H1N1). A complete revised guidance will be forthcoming.

CDPH recommends the selective use of oseltamivir or zanamivir to reduce severe disease and mortality caused by H1N1 virus infection while delaying development of drug resistance. Resistance to oseltamivir has occurred after its use in chemoprophylaxis but currently is sufficiently rare that either oseltamivir or zanamivir is recommended for treatment or chemoprophylaxis.

Persons at higher risk for severe H1N1 virus infection have:

- Underlying medical conditions associated with severe seasonal influenza; OR
- A Body Mass Index (BMI) ≥35 (very obese).

**Antiviral treatment for five days** is recommended:

- For cases who:
  - Are hospitalized; **OR**
  - Are at a higher risk for severe influenza; **OR**
  - Have pneumonia.
- For suspect cases in the categories above:
  - Treatment is recommended until any PCR testing for influenza is negative; **OR**
  - Testing for diseases other than influenza is positive, also considering the possibility of co-infection.
• Prompt treatment is optimal, but beginning treatment more than 48 hours after onset of symptoms may still be beneficial and is also recommended.
• Higher (e.g., double) doses and extended (e.g., up to 10 days) courses of treatment should be considered for patients:
  o Requiring intensive care; OR
  o At higher risk (e.g., BMI >35) and either hospitalized or with pneumonia. Outpatients at higher risk should be monitored closely for pneumonia.

Antiviral chemoprophylaxis for up to ten days after last exposure can be considered for:
• Persons who are at high-risk for severe influenza and have been close (e.g., household) contacts of a confirmed, probable or suspect case.
• Healthcare workers or public health workers who were not using appropriate personal protective equipment during close contact with an infectious patient, co-worker, or household contact.
  o Most of these exposures can be prevented by using recommended infection control measures for healthcare settings. (See “Infection Control” section of CDPH webpage for H1N1: http://www.cdph.ca.gov/HealthInfo/discond/Pages/SwineInfluenzaHealthPros.aspx)
• Patients at high risk for severe influenza who have had close contact with an infectious healthcare worker or patient who is a confirmed or probable case.

These recommendations also apply to most educational, residential, and correctional facilities. However, antiviral treatment and prophylaxis of residents and employees are recommended during outbreaks of confirmed H1N1 virus infection in nursing homes and other facilities where persons at high risk of severe influenza receive medical care or reside for longer stays (e.g., intensive care or transplant units).

Liberal use of antiviral prophylaxis for patients who are not in a category for whom it is currently recommended may increase the risk for development of antiviral resistance and is not recommended.

B. H1N1 Lessons Learned and Clinician Considerations
• Asthmatic patients with H1N1 infection may present with what appears to be an asthma exacerbation rather than an ILI.
• Rapid influenza test results should not be relied upon to identify patients who are not infected with H1N1.
  o At this time, data suggest that up to 50% of infected people may have negative rapid test results.
Patients at higher risk of influenza complications who present with ILI should receive antiviral treatment even if their rapid influenza test results are negative.

CDPH continues to test isolates of the H1N1 virus for antiviral resistance. Guidance will be modified as needed to reflect changes in viral resistance.