

Swine Flu Update #8

Updated Guidance on the Appropriate Use of Antivirals for Treatment of Influenza A (H1N1)

Oseltamivir (Tamiflu) Resistance

The Centers for Disease Control and Prevention (CDC) recently reported that two immunosuppressed patients had developed oseltamivir-resistant infections after undergoing treatment with oseltamivir. Testing identified that the infections in both patients were initially sensitive to oseltamivir, and that a mutation in the neuraminidase protein resulted in the drug resistance. An investigation of the healthcare workers treating the patients as well as the patient's close contacts revealed no evidence of transmission of the oseltamivir-resistant viruses. At this time, there is no evidence of on-going transmission of oseltamivir-resistant novel influenza A (H1N1) virus in the US or worldwide.

Antiviral Treatment Guidance

CDC recommends that antiviral treatment be focused on those with severe respiratory illness and those at highest risk of complications from influenza. Treatment is not recommended for patients who present with an uncomplicated febrile respiratory illness and no underlying conditions that place them at risk for complications.

Antivirals **should be** prescribed to:

- Hospitalized patients with probable or confirmed novel influenza A H1N1 infection
- Patients with mild or uncomplicated probable or confirmed novel influenza A H1N1 infection who are at higher risk for severe illness or complications of influenza because of underlying health conditions, such as:
 - Children younger than 5 years old;
 - Adults 65 years of age and older;
 - Persons with the following conditions: chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological (including sickle cell disease), neurologic, neuromuscular, or metabolic disorders (including diabetes mellitus);
 - Persons with immunosuppression, including that caused by medications or by HIV;
 - Pregnant women;
 - Persons younger than 19 years of age who are receiving long-term aspirin therapy; and
 - Residents of nursing homes and other chronic-care facilities.

- Health-care workers involved in direct patient care of probable or confirmed cases of novel influenza A H1N1 who have not used appropriate personal protective equipment.

Antivirals **should not be** prescribed to:

- Patients with mild or uncomplicated probable or confirmed cases of novel influenza A H1N1 with no underlying conditions that place them at risk for more severe illness or complications of influenza (as described above)
- Asymptomatic close contacts of probable or confirmed cases of novel influenza A H1N1 cases with no underlying conditions that place them at risk for more severe illness or complications of influenza
- Health-care workers involved in direct patient care who used appropriate personal protective equipment. Post-exposure prophylaxis is not indicated for most healthcare situations.
- Patients or health-care workers who wish to take the antiviral medications prophylactically in the absence of exposure to disease
- Patients who wish to stockpile the antivirals for future use

Strategic National Stockpile

Antivirals provided through the Strategic National Stockpile are authorized only for use in the treatment of patients and cannot be used for prophylaxis.

Note regarding PPE: SNHD guidance published on July 22, 2009 differs from that published by CDC and recommends N95 respirators only for staff members performing aerosol-generating procedures. Standard and droplet precautions (including use of surgical masks) are sufficient for routine patient care activities. The full guidance is available at: <http://www.southernnevadahealthdistrict.org/download/epi/tech-bulletin-swine-072209.pdf>

References

- CDC Interim Guidance on Antiviral Recommendations for Patients with Novel Influenza A (H1N1) Virus Infection and Their Close Contacts. <http://www.cdc.gov/h1n1flu/recommendations.htm>
- Oseltamivir-Resistant Novel Influenza A (H1N1) Virus Infection in Two Immunosuppressed Patients --- Seattle, Washington, 2009. MMWR. August 21, 2009 / 58 (32);893-896