



CABINET FOR HEALTH AND FAMILY SERVICES
DEPARTMENT FOR PUBLIC HEALTH

4/30/2009
Page 1 of 3

Swine Influenza: Update #2
Dear Clinician:

Human cases of influenza caused by swine-origin influenza A (H1N1) virus (S-OIV) have been found now in patients in several states in the US, as well as in Mexico, Austria, Canada, Germany, Israel, New Zealand, Spain, and the United Kingdom. Today, the World Health Organization raised their current level of influenza pandemic alert from phase 4 to phase 5, the second highest pandemic alert level.

To date, the Kentucky Department for Public Health (KDPH) **HAS NOT IDENTIFIED** any *confirmed* cases of influenza caused by S-OIV here in Kentucky. However, KDPH is investigating and doing testing on some potential cases.

Since the outbreak is in the early stages nationwide, the science is not yet clear about how virulent this new influenza virus strain might be or how readily transmissible it is. Nevertheless, in preparation for a possible worsening scenario, KDPH is issuing this information to providers.

CDC has updated interim case definitions on the following site, as of the early morning of April 29, 2009: http://www.cdc.gov/swineflu/casedef_swineflu.htm. The definition of a *probable* case of S-OIV infection is now defined only as a person with an acute febrile respiratory illness who is positive for influenza A, but negative for H1 and H3 by influenza RT-PCR. So in order for a Kentucky case to be a *probable* or *confirmed*, specialized laboratory testing must be done. The Division of Laboratory Services at KDPH is able to determine whether a virus specimen is a known circulating human influenza strain. If results do not indicate that the specimen is a known circulating human strain, the Division of Laboratory Services will forward the specimen to the CDC for further analysis. The Division of Laboratory Services anticipates receiving reagents from the CDC for specific influenza S-OIV typing in the near future.

Spread of influenza can be prevented through proper handwashing, coughing in one's elbow, and avoidance of contact with sick persons. Kentucky's normal seasonal influenza season has not yet come to a close, though it is waning. Much of the circulating human influenza virus in Kentucky during this season was human H1N1, which was widely resistant to oseltamivir. This situation results in a challenge for providers, both in terms of diagnosis and treatment.

KDPH is asking the health care community to be vigilant in recognizing influenza-like symptoms in patients and to test appropriately. For now, the Division of Laboratory Services would like to receive specimens on patients that meet the CDC criteria for *probable* or *suspected* cases, or on those with influenza-like illness who have positive



**CABINET FOR HEALTH AND FAMILY SERVICES
DEPARTMENT FOR PUBLIC HEALTH**

4/30/2009
Page 2 of 3

rapid influenza A tests. Before sending to the Division of Laboratory Services, please call your local health department or KDPH's Departmental Operations Center at 1-888-398-0013 for tracking and guidance.

Epidemiological data thus far indicate that the swine-origin influenza A (H1N1) virus appears to be sensitive (susceptible) to the neuraminidase inhibitor antiviral medications zanamivir and oseltamivir. S-OIV is resistant to the adamantane antiviral medications, amantadine and rimantadine. Empiric antiviral treatment should be considered for confirmed, probable or suspected human influenza cases caused by S-OIV. Close contacts of those with probable or confirmed human cases caused by S-OIV should also be treated prophylactically with neuraminidase inhibitors. See the CDC website for more detailed information regarding chemoprophylaxis <http://www.cdc.gov/swineflu/recommendations.htm>. If influenza infection of unknown virus type is being strongly considered for severely ill patients before laboratory testing, clinicians may want to consider treating with both a neuraminidase inhibitor and amantadine or rimantidine. The table below identifies treatment approaches for respiratory infections caused by S-OIV:

Suggested Treatment Approaches

Types of human influenza cases	oseltamivir/zanamivir	amantadine/rimantadine
Suspected or confirmed influenza caused by human H1N1 influenza virus		+
Suspected or confirmed influenza case caused by swine-origin influenza A (H1N1) virus (S-OIV)	+	
Unknown influenza virus infection	+	+

Recommendations for use of antivirals may change as data on antiviral susceptibilities and effectiveness become available. Antiviral doses recommended for treatment of respiratory infections caused by S-OIV in adults or children 1 year of age or older are the same as those recommended for seasonal influenza. Oseltamivir use for children < 1 year old was recently approved by the U.S. Food and Drug Administration (FDA) under an Emergency Use Authorization (EUA), and dosing for these children is age-based. Please see the CDC recommendations (<http://www.cdc.gov/swineflu/recommendations.htm>). If an adverse event is identified regarding the use of an antiviral, please contact the local



**CABINET FOR HEALTH AND FAMILY SERVICES
DEPARTMENT FOR PUBLIC HEALTH**

4/30/2009
Page 3 of 3

health department in your jurisdiction for advice on completing the adverse events reporting form.

If influenza is not suspected, please do not treat with the above antivirals, as overuse of them could result in changing susceptibility patterns. In addition, prescribing antivirals to patients to stockpile for future use "just in case" could lead to unintended consequences (<http://www.cdc.gov/flu/professionals/antivirals/side-effects.htm>) and to shortages of antivirals.

KDPH has limited stockpiles of antivirals that can be used for treatment if and when commercially available supplies become exhausted. In addition, KDPH has asked CDC to send Kentucky 25% of the state's allotment from the national stockpile to supplement our supplies.

Thank you for your willingness to work with us toward the identification, prevention and appropriate treatment of influenza. More information, including guidance for care of patients in the home, can be found at <http://www.cdc.gov/swineflu/guidance>. As the swine flu situation changes, more updates will be forthcoming.