



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

**Novel H1N1 Influenza (Swine Influenza)
Updated Clinician Guidance
August 20, 2009**

Dear Kentucky Clinician:

The ongoing pandemic caused by novel H1N1 influenza A virus continues to expand in Kentucky, in the United States, and internationally. The Centers for Disease Control and Prevention (CDC) and the Kentucky Department for Public Health (KDPH) expect that more cases, more hospitalizations, and more deaths from this pandemic will occur over the coming weeks to months.

Surveillance

Kentucky experienced a steady, but low rate of novel H1N1 activity over the summer. In recent weeks, almost all laboratory specimens that have tested positive for influenza A virus at KDPH's Division of Laboratory Services (DLS) have been the novel H1N1 influenza virus rather than seasonal influenza virus. Following CDC's lead, KDPH is no longer counting individual cases of novel H1N1 infection, but rather using usual statewide influenza surveillance methods to report aggregate levels of activity. At this time, surveillance in the state indicates an upswing in flu activity following the resumption of classes at many schools. Most of this activity is likely due to novel H1N1 influenza, because it appears to be the predominant circulating strain of flu.

Testing

Since many influenza cases caused by novel H1N1 virus are anticipated to occur in Kentucky in the next few weeks to months, clinicians should use appropriate medical judgment, surveillance data and recommended public health guidelines to make determinations about laboratory testing or the use of antivirals. Most patients who present with influenza-like illness during the summer and early fall will likely have novel H1N1 infection. Fortunately, many patients who have been infected with novel H1N1 influenza virus infection, but who are not in a high-risk group, have had a self-limited respiratory illness similar to typical seasonal influenza, <http://www.cdc.gov/h1n1flu/recommendations.htm>.

Because of novel H1N1's comparable severity to seasonal flu, most patients with influenza will NOT require definitive diagnostic virology testing in order to receive appropriate treatment and guidance on preventing further transmission. However, KDPH requests that specimens from patients who meet the following criteria be sent to the Division of Laboratory Services (DLS) in Frankfort.

Novel H1N1 Influenza (Swine Influenza)
Updated Clinician Guidance
August 20, 2009

Criteria for Submission of Laboratory Specimens to the Division of Laboratory Services:

Currently, KDPH is asking the health care community to submit specimens for novel H1N1 influenza virus testing *only* from patients with *acute febrile respiratory illness* who are:

- (1) *pregnant* **OR**
- (2) *have a clinical condition that has required hospitalization* **OR**
- (3) *are living in an institutional setting where previous cases have not been identified.*

In May 2009, KDPH ceased requesting specimens from patients who did not meet these criteria. For additional clarification, KDPH does not request specimens from patients who are contacts of confirmed cases, unless they meet the above criteria. KDPH also does not request specimens from patients who have been observed for prolonged times in Emergency Rooms or other observation areas but were discharged prior to 24 hours of care. Furthermore, specimens from patients who test positive for rapid influenza A are not requested, unless the patient meets the criteria stated in the box above.

If patients do not meet the criteria for testing at DLS, but the clinician feels a need to test, specimens can be sent by health care providers to private (non-public health) reference laboratories that are also performing novel H1N1 testing. When definitive novel H1N1 testing is indicated at DLS based on the above criteria, the following should be collected as soon as possible after illness onset: nasopharyngeal swab, nasal aspirate or a combined nasopharyngeal swab with oropharyngeal swab. If these specimens cannot be collected, a nasal swab or oropharyngeal swab is acceptable. Per CDC guidance, nasal washes are **no longer recommended for specimen collection**. Ideally, swab specimens should be collected using swabs with a synthetic tip (e.g. polyester or Dacron®) and an aluminum or plastic shaft. Swabs with cotton tips and wooden shafts **are not recommended**. Specimens collected with swabs made of calcium alginate are not acceptable. Specimens should be placed into 1 to 3 mL sterile viral transport medium (M4RT) and immediately placed on ice or cold packs or at 4°Celsius (refrigerator) for transport to the laboratory. Label specimen container, package and ship to DLS, as directed (<http://www.chfs.ky.gov/dph/info/lab/>). Before sending the specimen to DLS, please call DLS at 502-564-4446 for tracking and guidance.

Novel H1N1 Influenza (Swine Influenza) Updated Clinician Guidance August 20, 2009

Treatment

The majority of patients with influenza will probably not need antivirals prescribed for their illness. Epidemiological data thus far indicate that the novel H1N1 virus is usually sensitive (susceptible) to the neuraminidase inhibitor antiviral medications zanamivir and oseltamivir. Novel H1N1 is resistant to the adamantane antiviral medications, amantadine and rimantadine. If influenza is suspected, consider treating hospitalized patients and patients at higher risk of influenza related complications with neuraminidase inhibitors based on clinical severity and risk factors. If the patient has severe illness, clinicians should consider treatment with either zanamivir or oseltamivir *and* amantadine or rimantadine to ensure proper treatment for any new seasonal influenza A virus infection as well as novel H1N1. As a reminder, some circulating seasonal influenza last season was resistant to neuraminidase inhibitors. Only high-risk close contacts of probable or confirmed human cases caused by novel H1N1 should be given antiviral chemoprophylaxis with neuraminidase inhibitors. See the CDC Website for more detailed information regarding chemoprophylaxis: <http://www.cdc.gov/h1n1flu/recommendations.htm>

Antiviral doses recommended for treatment of respiratory infections caused by novel H1N1 in adults or children 1 year of age or older are the same as those recommended for seasonal influenza. Oseltamivir use for children less than 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 at: (<http://www.cdc.gov/h1n1flu/recommendations.htm>).

Recommendations for use of antivirals may change as data on antiviral susceptibilities and effectiveness become available. In fact, overuse of antivirals may result in changing susceptibility patterns, like resistance. The August 14, 2009 issue of *Morbidity and Mortality Weekly Report* (MMWR) Dispatch published a report on “Oseltamivir-Resistant Novel Influenza A (H1N1) Virus Infection in Immunosuppressed Patients Receiving Oseltamivir Therapy,” http://www.cdc.gov/mmwr/preview/mmwrhtml/mm58d0814a1.htm?s_cid=mm58d0814a1_e. 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.

School and Workplace Exclusion

CDC has recently issued new guidance related to school and work exclusion policies for persons with influenza-like illness. **“CDC recommends that people with influenza-like illness remain at home until at least 24 hours after they are free of fever (100° F [37.8°C]), or signs of a fever without the use of fever-reducing medications.”** This is a change from the previous recommendation that ill persons stay home for 7 days after illness onset or until 24 hours after the resolution of symptoms, whichever was longer. The new recommendation applies to camps, schools, businesses, mass gatherings, and other community settings where the majority of people are not at increased risk for influenza complications. This guidance does not apply to health care settings where the exclusion period should be continued for 7 days from symptom onset or until the resolution of symptoms, whichever is longer,”

<http://www.cdc.gov/h1n1flu/guidance/exclusion.htm>

**Novel H1N1 Influenza (Swine Influenza)
Updated Clinician Guidance
August 20, 2009**

Prevention

Transmission of novel H1N1 and seasonal influenza appear to be by similar mechanisms. Spread of both seasonal influenza and novel H1N1 influenza can be prevented through proper handwashing, coughing in one's elbow or sleeve, avoiding contact with sick persons, and staying home from school or work if illness occurs.

A vaccine against novel H1N1 influenza is expected to be available sometime this fall from the federal government. This vaccine is separate from seasonal influenza vaccine. Based on the epidemiology of the illnesses, target groups for the two vaccines are distinct, though there is some overlap in the targeted groups: <http://www.cdc.gov/flu/professionals/vaccination/> and <http://www.cdc.gov/h1n1flu/vaccination/>. If your clinic or facility is interested in receiving and administering novel H1N1 vaccine under a provider agreement with KDPH, please register your interest at <https://khelps.chfs.ky.gov>. Interested providers will be updated as parameters concerning novel H1N1 vaccine distribution and administration evolve.

Thank you for your willingness to work with us to prevent and appropriately treat influenza. More information, including guidance for health care workers and care of patients in the home, can be found at KDPH's Health Alerts website (<http://healthalerts.ky.gov>) and the CDC novel H1N1.