

## Health Update:

### Novel H1N1 Influenza Update 7: Current Situation, Clinical Issues, Testing Policies, and Planning/Response Actions for Outpatient Medical Facilities

July 28, 2009

This document will be updated as new information becomes available. The current version can always be viewed at <http://www.dhss.mo.gov>

The Missouri Department of Health & Senior Services (DHSS) is now using 4 types of documents to provide important information to medical and public health professionals, and to other interested persons:

**Health Alerts** convey information of the highest level of importance which warrants immediate action or attention from Missouri health providers, emergency responders, public health agencies or the public.

**Health Advisories** provide important information for a specific incident or situation, including that impacting neighboring states; may not require immediate action.

**Health Guidances** contain comprehensive information pertaining to a particular disease or condition, and include recommendations, guidelines, etc. endorsed by DHSS.

**Health Updates** provide new or updated information on an incident or situation; can also provide information to update a previously sent Health Alert, Health Advisory, or Health Guidance; unlikely to require immediate action.

Health Update  
July 28, 2009

**FROM:** MARGARET T. DONNELLY  
DIRECTOR

**SUBJECT:** Novel H1N1 Influenza Update 7: Current Situation, Clinical Issues, Testing Policies, and Planning/Response Actions for Outpatient Medical Facilities

This Health Update on novel H1N1 influenza summarizes the present situation in Missouri, discusses selected clinical issues, and describes the current testing policies of the Missouri State Public Health Laboratory. In addition, it lists 10 critical planning and response actions that medical offices and outpatient facilities should be taking to prepare for the potentially very large numbers of novel H1N1 influenza cases that may be seen in the coming months.

#### Current Situation in Missouri

In the Northern Hemisphere, novel influenza A (H1N1) virus is persisting, and is continuing to cause outbreaks and sporadic cases in numerous locales despite the onset of summer. In Missouri, 80 confirmed cases of novel H1N1 influenza, including one death, have been reported as of July 23, 2009. (See [http://www.dhss.mo.gov/BT\\_Response/H1N1Flu.html](http://www.dhss.mo.gov/BT_Response/H1N1Flu.html) for more details.) Because specific testing for novel H1N1 influenza virus infection has been limited, the actual number of persons in Missouri who have been infected with the virus is undoubtedly much higher. Outbreaks of influenza-like illness (ILI) have occurred in recent weeks in youth camps in the state; individuals involved in six of these outbreaks have tested positive for novel H1N1 influenza virus. It appears likely that infections with this virus are occurring throughout the state, although their exact number cannot be estimated. Currently, the overall level of influenza activity in Missouri is reported as sporadic.

#### Selected Clinical Issues

**Guidance for clinicians in managing patients with novel H1N1 influenza virus infection is available at <http://www.cdc.gov/h1n1flu/clinicians/>.**

The Centers for Disease Control and Prevention (CDC) is currently recommending antiviral treatment for two groups of persons:

1. All hospitalized patients with confirmed, probable, or suspected novel H1N1 influenza.
2. Patients with confirmed, probable, or suspected novel H1N1 influenza who are at higher risk for seasonal influenza complications. (For a listing of groups at higher risk, see <http://www.cdc.gov/h1n1flu/identifyingpatients.htm#groupsatrisk>.)

CDC also recommends that if a patient is not in a high-risk group or is not hospitalized, then healthcare providers should use clinical judgment to guide treatment decisions. Many patients who have had 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. For most of these patients, the benefits of using antivirals may be modest.

**Guidance for antiviral use is found at <http://www.cdc.gov/h1n1flu/recommendations.htm>.**

The Missouri Department of Health and Senior Services (DHSS) has a Web site for medical professionals which provides links to comprehensive information on novel H1N1 influenza. This site is located at [http://www.dhss.mo.gov/BT\\_Response/MedProfs.html](http://www.dhss.mo.gov/BT_Response/MedProfs.html).

CDC has stated that infection with novel H1N1 influenza virus appears to result in a spectrum of illness similar to that caused by seasonal influenza viruses. While many infections with novel H1N1 influenza virus are relatively mild, some persons have had severe or even fatal infections. Included here are individuals who developed rapidly

Office of the Director  
912 Wildwood  
P.O. Box 570

Jefferson City, MO 65102  
Telephone: (800) 392-0272  
Fax: (573) 751-6041

Web site: <http://www.dhss.mo.gov>

progressive lower respiratory tract disease resulting in respiratory failure, development of acute respiratory distress syndrome (ARDS), and prolonged intensive care unit (ICU) admission.

Thus far, most cases of illness, hospitalization, and death associated with novel H1N1 influenza virus infection have occurred among persons less than 65 years of age. Groups at increased risk of influenza-related complications include pregnant women, those with asthma, COPD, diabetes, chronic cardiovascular disease, and immunocompromised persons. These are the same groups as previously recognized to increase the risk of severe illness from seasonal influenza. In addition, morbid obesity may represent an additional risk factor for severe illness (see below). It should also be noted, however, that fatal disease associated with novel H1N1 influenza has occurred among persons without these conditions who previously were healthy.

Widespread susceptibility to this virus among young persons and the potential for large numbers of cases raises the possibility of more hospitalizations and deaths especially among younger age groups than would be expected for a typical routine seasonal influenza virus.

Evidence from previous pandemics and from seasonal influenza suggests that pregnant women are likely to be at increased risk of morbidity and mortality related to infection with novel H1N1 influenza virus. The impact of this virus on the newborn is unknown, but based on previous experience, newborns are expected to be at increased risk of severe illness.

Guidance for managing specific patient populations (e.g., pregnant women, young children) is available from CDC at <http://www.cdc.gov/h1n1flu/clinicians/#specific>.

Neurologic complications have been described previously in association with respiratory tract infection with seasonal influenza A or B viruses, and a recent CDC report described four children with neurologic complications associated with novel H1N1 influenza virus infection who had been admitted to hospitals in Dallas County, Texas. Patients were aged 7-17 years and were admitted with signs of ILI and seizures or altered mental status. All four patients recovered fully and had no neurologic sequelae at discharge. CDC states that these findings indicate that, as with seasonal influenza, neurologic complications can occur after respiratory tract infection with novel H1N1 influenza virus. CDC recommends that for children who have ILI accompanied by unexplained seizures or mental status changes, clinicians should consider acute seasonal influenza or novel H1N1 influenza virus infection in the differential diagnosis, send respiratory specimens for appropriate diagnostic testing, and promptly initiate empirical antiviral treatment, especially in hospitalized patients. Clinicians should not wait for the results of diagnostic testing before beginning treatment. Additional cases of children with neurologic complications are likely to be reported as the pandemic continues, and clinicians should remain aware of the potential for severe neurologic sequelae associated with seasonal or novel H1N1 influenza virus infection. [MMWR 2009; 58(28);773-8. (<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5828a2.htm>) This report contains additional information on the clinical course and management of these patients, as well as clinical care recommendations for patients with ILI and neurologic signs/symptoms.]

The possible relationship between obesity and severe disease in persons with novel H1N1 influenza virus infection is currently being evaluated. A CDC report has summarized the clinical characteristics of a small series of 10 patients with novel H1N1 influenza virus infection and ARDS at a tertiary-care ICU in Michigan. Of the 10 patients, nine were obese (body mass index [BMI]  $\geq 30$ ), including seven who were extremely obese (BMI  $\geq 40$ ); five had pulmonary emboli; and nine had multiorgan dysfunction syndrome (MODS). Three patients died. It is not presently known whether obesity is an independent risk factor for severe complications of novel H1N1 influenza virus infection. However, CDC recommends that clinicians be aware of the potential for severe complications of infection with this virus, particularly in extremely obese patients. [MMWR 2009; 58(27):749-52. (<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5827a4.htm>) Contained in this report is further information on the clinical course and management of these patients, as well as recommendations for clinicians caring for patients with novel H1N1 influenza virus infection.]

Higher oseltamivir dosing and longer duration of treatment have been suggested for H5N1 (avian influenza) patients with severe pulmonary disease. CDC has stated that until additional data are available, higher oseltamivir dosage (e.g., 150 mg orally twice a day for adults) or extending the duration of treatment can be

considered for severely ill hospitalized patients with novel H1N1 influenza virus infection. [MMWR 2009; 58(27):749-52. (<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5827a4.htm>)]

Vaccines for novel H1N1 influenza virus are presently under development. Current information is available from CDC at [http://www.cdc.gov/h1n1flu/vaccination/public/vaccination\\_qa\\_pub.htm](http://www.cdc.gov/h1n1flu/vaccination/public/vaccination_qa_pub.htm).

## Laboratory Testing

The Missouri State Public Health Laboratory (MSPHL) is currently following a testing protocol that is consistent with seasonal influenza practices and is not accepting routine specimens for novel H1N1 influenza virus testing. MSPHL will only be performing testing for this virus under the following circumstances:

1. Specimens submitted by Influenza Sentinel Providers, or
2. Specimens submitted for epidemiological investigation purposes (i.e., as part of an outbreak being investigated by DHSS, local public health agencies, and/or CDC).

[Note for Influenza Sentinel Providers: Sentinel Providers have returned to their traditional off-season testing protocol. DHSS requests that a minimum of 3 specimens be sent from each Sentinel Provider during the period from June 1 through September 30. Sentinel Providers should also submit their weekly office data to the Influenza Sentinel Physicians Surveillance Network Database.]

## Planning and Response Actions for Medical Offices and Outpatient Facilities

It is anticipated that when the regular influenza season begins later this year, the potential will exist for very large numbers of infections caused by novel H1N1 influenza virus to occur, especially given evidence that population immunity to this virus is low, particularly among the young. There is additional concern that during the summer the virus might undergo mutations that would cause it to become more transmissible or more virulent. Whether this will actually occur is not known, but is being monitored closely by public health officials worldwide.

**Now is the time for all medical facilities to plan and, as appropriate, begin to implement actions to allow them to continue operation during an influenza pandemic.** CDC has recently released a document entitled *10 Steps You Can Take: Actions for Novel H1N1 Influenza Planning and Response for Medical Offices and Outpatient Facilities* to assist these facilities in this process. This document is reproduced below, beginning on the next page.

---

As new information becomes available, DHSS will issue additional Health Updates.

Questions on novel H1N1 influenza should be directed to your local public health agency, or to DHSS' Bureau of Communicable Disease Control and Prevention at 573/751-6113, or 866-628-9891.

## **10 Steps You Can Take: Actions for Novel H1N1 Influenza Planning and Response for Medical Offices and Outpatient Facilities**

Centers for Disease Control and Prevention (CDC)

July 14, 2009

<http://www.cdc.gov/h1n1flu/10steps.htm>

It is critical to assure that medical offices and other outpatient facilities (e.g., outpatient/ambulatory clinics, outpatient surgery centers, urgent care centers, physical therapy/rehabilitation offices or clinics) that provide routine, episodic, and/or chronic healthcare services can manage an increased demand for services in the midst of a novel H1N1 influenza outbreak. Ensuring a sustainable community healthcare response will be important for a likely recurrence of novel H1N1 flu in the fall. See CDC's H1N1 Web site at <http://www.cdc.gov/h1n1flu/> for up-to-date information.

**1. Develop a Business Continuity Plan** – Novel H1N1 flu outbreaks will impact your organization, employees, suppliers of critical materiel, and your family. Identify your office/clinic's essential functions and the individuals who perform them. Make sure you have trained enough people to properly work in these essential functions and allow for potential absenteeism. Develop a plan that will sustain your core business activities for several weeks. Make sure you have alternate plans for critical supplies in case there is disruption in your supply chains. For information about planning see: <http://www.ready.gov/business/plan/index.html>.

**2. Inform employees about your plan for coping with additional surge during pandemic** – Provide clear and frequent communication to ensure that your staff are aware and understand the plan. Explain any policies and procedures that will be used to protect staff and your patients, and to manage a surge of patients. Improve the resiliency of your staff by advising that employees have a pandemic family plan or personal plans.

**3. Plan to operate your facility if there is significant staff absenteeism** – Are you ready for 20 to 40% of your employees not being able to come to work? Cross training your staff is key to resilience here. What else can be done to assure continuity of operations with reduced staff?

**4. Protect your workplace by asking sick employees to stay home** – Be sure to ask sick staff to stay home. All personnel should self monitor daily for signs and symptoms of febrile respiratory illness. Staff who develop these symptoms should be instructed not to report to work, or if at work, should cease patient care activities and notify their supervisor. Be sure to align your sick leave policies so ill staff can stay home. See *What to Do If You Get Flu-Like Symptoms* at <http://www.cdc.gov/h1n1flu/sick.htm> for more information.

**5. Plan for a surge of patients and increased demands for your services** – Consider using your telephone system to deliver messages to incoming callers about when to seek medical care at your facility, when to seek emergency care, and where to go for information about caring for a person with flu at home (see *Taking Care of a Sick Person in Your Home* at [http://www.cdc.gov/h1n1flu/guidance\\_homecare.htm](http://www.cdc.gov/h1n1flu/guidance_homecare.htm)). Consider extending your hours of operation to include telephone triage of patients during a community outbreak.

**6. Care for patients with novel H1N1 flu in your facility** – Make plans to screen patients for signs and symptoms of febrile respiratory illness at entry to the facility. If feasible, use separate waiting and exam rooms for possible novel H1N1 flu patients; plan to offer surgical masks to symptomatic patients who are able to wear them (adult and pediatric sizes should be available), provide facial tissues, receptacles for their disposal, and provide hand hygiene products in waiting areas and examination rooms. For information on caring for patients see: *Interim Guidance for Clinicians on Identifying and Caring for Patients with Swine-origin Influenza A (H1N1) Virus Infection* at <http://www.cdc.gov/h1n1flu/identifyingpatients.htm>.

**7. Take steps to protect the health of your workforce during an outbreak of H1N1** – All healthcare personnel who come in close contact with patients who may have novel H1N1 flu should take precautions to include use of respiratory and eye protection for all patient care activities (see: *Healthcare Workplaces Classified as Very High or High Exposure Risk for Pandemic Influenza* at <http://www.osha.gov/Publications/exposure-risk-classification-factsheet.html>). For information on the use of infection control measures including use of personal protective equipment for staff, see *Interim Guidance for Infection Control for Care of Patients with Confirmed or Suspected Novel H1N1 influenza virus Infection in a*

*Healthcare Setting* at [http://www.cdc.gov/h1n1flu/guidelines\\_infection\\_control.htm](http://www.cdc.gov/h1n1flu/guidelines_infection_control.htm). Plan now to stockpile sufficient PPE for your staff. (see: *Proposed Guidance on Workplace Stockpiling of Respirators and Facemasks for Pandemic Influenza* at <http://www.osha.gov/dsg/guidance/stockpiling-facemasks-respirators.html>).

**8. Provide immunization against seasonal flu at no cost to your staff** – In the fall there may be several influenza strains circulating at the same time. Although seasonal flu immunization will not provide protection to novel H1N1 influenza, annual influenza vaccination is recommended for health care professionals and will likely protect against seasonal influenza strains. See: *Influenza Vaccination of Health-Care Personnel* at [http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5502a1.htm?s\\_cid=rr5502a1\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5502a1.htm?s_cid=rr5502a1_e).

**9. Make sure you know about the pandemic planning and response activities of the hospitals, outpatient facilities and local public health in your community** – Actively seek information from and coordinate with key medical, clinical facilities and public health departments in your community to learn about how they will manage patients during a pandemic. Medical offices, emergency rooms, urgent care centers and hospitals in communities with outbreaks will likely have difficulty managing a large influx of patients; a coordinated community response is important to manage surge and assure optimal patient care. Develop a plan to manage your patients who do not need to seek emergency services.

**10. Plan now so you will know where to turn to for reliable, up-to-date information in your local community** – Staff in healthcare settings should monitor the CDC H1N1 Flu Web site and local/State health department Web sites for the latest information. For local health department contact information, see <http://www.naccho.org/about/lhd/>. [The Missouri Department of Health and Senior Services (DHSS) Web site address is <http://www.dhss.mo.gov/>, and the address for DHSS' H1N1 Flu Web site is [http://www.dhss.mo.gov/BT\\_Response/H1N1Flu.html](http://www.dhss.mo.gov/BT_Response/H1N1Flu.html).]

Be prepared for a range of situations. The true impact of novel H1N1 flu outbreaks in the coming months will not be known until it happens. Be prepared for a possibility that your facility will have significant increased demand for services and the possibility that the fall outbreak may have greater impact than the outbreak in the spring, 2009.

For more information see the *Medical Offices and Clinics Pandemic Influenza Planning Checklist* at <http://pandemicflu.gov/plan/healthcare/medical.html>. Also sign up to receive regular updates about novel H1N1 influenza, emerging infectious diseases, and other emergency preparedness and response information by going to [www.emergency.cdc.gov/clinregistry](http://www.emergency.cdc.gov/clinregistry).