

Weekly Influenza Update/Swine Influenza Update

April 30, 2009

[Note: I am combining information on both seasonal influenza and swine influenza in this update. As the 2008-2009 influenza season is nearly over, and to avoid potential confusion, future updates will focus on swine influenza]

ALERT: There are 3 probable cases of swine influenza [A(H1N1) (S-OIV)] IN Wisconsin, two from Milwaukee County and one from Adams County.

Wisconsin:

Seasonal Influenza activity is declining in Wisconsin. In the last week, influenza B viruses have comprised 87% of isolates. Based on historic trends, 98% of cases have already occurred. The prevalence of influenza-like illness [fever of 100oF or higher and either cough or sore throat] in Wisconsin's primary care patients is estimated to be 0.8%.

10.5% of last week's primary care patients had acute respiratory infections (ARI).

The prevalence of acute diarrheal illness (ADI) in Wisconsin's primary care patients is at 1.9%.

CLINICAL NOTES:

Prophylaxis

Social distancing, face masks and handwashing are strongly encouraged All patients with a cough or sneezing need to wear a face mask and should sit at least 3-4 feet from other patients in the health care facility waiting rooms. Patients refusing a mask should be isolated at least 4-6 feet from the nearest neighbor, or preferably, placed into an examination room. Please provide a warning to any clinical staff dealing with this type of patient.

Vaccine offers little to no protection at this time A vaccine for A(H1N1) (S-OIV) is under development, but it will be several months before such a vaccine is widely available

Diagnosis

The current definition of an Acute Febrile Respiratory Infection is a temperature of 37.8 C (100 F) and with a recent onset of runny nose/nasal congestion and/or sore throat and/or cough. If these criteria have been met and the individual has recently traveled to or lives in a community in which swine influenza has been confirmed, then that person is a suspected case of swine influenza.

The goal of testing at this time is SURVEILLANCE. The test for the swine influenza virus is not a diagnostic tool.

Therefore, base any decisions to treat on the symptoms and duration of illness. Many people who want testing will not meet the definition. They should not be tested. This will only serve to cause backlog problems within the Wisconsin State Laboratory of Hygiene. Should you have a suspected case, please contact the Wisconsin Division of Public Health at

608-266-5326 (after hours: 608-258-0099 for the on-call epidemiologist) to discuss the criteria.

Obtaining a specimen from the nasopharynx or posterior pharynx of a suspected case is a HIGH RISK procedure. The person collecting the specimen should wear an N-95 respirator (TB mask), gloves and eye protection. Use of a nebulizer and laryngoscopy are also a potentially high risk procedures.

- influenza infections are at low levels at this time
- PPV of rapid influenza tests is moderate, NPV is high

Treatment

- Suspected cases of swine influenza (see definition above) can be treated with either oseltamivir or zanamivir. Treat only if the treatment can be initiated within 48 hours of the first symptom
- All A(H1N1) (S-OIV) viruses have been sensitive to oseltamivir and zanamivir. They are resistant to amantadine and rimatadine
- Antivirals need to be started with 48 hours of symptom onset to be effective

- Antivirals started after 48 hours may be effective for hospitalized patients with confirmed influenza

Other

- RSV prevalence has declined to low levels

- adenoviruses, rhinoviruses, and parainfluenza viruses are circulating in Wisconsin and causing acute respiratory symptoms

- Rotavirus isolations have peaked at low levels and are declining

Across the U.S.:

As of this morning, CDC is reporting 109 confirmed cases of swine influenza (this count does not include probable cases) as follow:

Arizona-1 California-14 Indiana-1 Kansas-2 Massachusetts-2

Michigan-1 Nevada-1 New York-50 Ohio-1 South Carolina-10

Texas-26

There has been one death in a 22 month old boy in Texas.

<http://www.cdc.gov/swineflu/>

As of April 18th, 25,925 positive surveillance cultures for seasonal influenza have been recorded in the United States. 6.2% of respiratory specimens during week 15 (April 12-18) were positive for influenza.

-65.9% of isolates have been type A

-34.1.% of isolates have been type B

-6.8% of deaths during week 15 (April 12-18) were due to pneumonia or influenza

[equal to the epidemic threshold of 7.8%]

-55 pediatric influenza deaths have been reported this season

Global News [from the WHO]: As of 29 April 2009, eight countries have officially reported cases of swine influenza A/H1N1 infection. In addition to the U.S., Mexico has reported 26 confirmed human cases of infection including seven deaths. The following countries have reported laboratory confirmed cases with no deaths - Canada (13), Germany (3), Israel (2), New Zealand (3), Spain (4) and the United Kingdom (5).

Based on assessment of all available information and following several expert consultations, Dr Margaret Chan, WHO's Director-General raised the current level of influenza pandemic alert from phase 4 to 5. She stated that all countries should immediately activate their pandemic preparedness plans. At this stage, effective and essential measures include heightened surveillance, early detection and treatment of cases, and infection control in all health facilities.

Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region (in this case Mexico and the U.S.). While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

Avian Influenza: Since 2003, there have been 421 laboratory-confirmed cases of Avian influenza (A-H5N1). The cases been confined to Laos, Viet Nam, Thailand, Indonesia, Cambodia, the People's Republic of China, Turkey, Iraq, Azerbaijan, Egypt, Djibouti Nigeria, Myanmar and Pakistan.

There have been 257 associated deaths (case fatality rate= 61.0%).

There is enhanced avian influenza surveillance in Wisconsin. Contact Tom Haupt at the Wisconsin Division of Public health (608-266-5326) prior to submitting specimens for fee-exempt testing for patients with influenza-like illness returning from Southeast Asia within 10 days.

Do well out there. You're our best line of defense... and be careful

Jonathan L. Temte, MD/PhD

Advisory Committee on Immunization Practices Associate Professor Department of Family Medicine University of
Wisconsin School of Medicine and Public Health

777 South Mills Street

Madison, Wisconsin 53715

Telephone: 608-263-3111

Fax: 608-263-6663

email: Jon.Temte@fammed.wisc.edu