

Weekly Influenza Update

December 11, 2008

Wisconsin:

Influenza activity continues to be at baseline in Wisconsin. There have been 8 confirmed influenza detections in Wisconsin [4 A(H1), 2 A(H3) and 2 B] coming from Dane, Kenosha, Milwaukee, Racine, Waukesha, and Wood Counties. The prevalence of influenza-like illness [fever of 100oF or higher and either cough or sore throat] in Wisconsin's primary care patients is an estimated to be 1.4%.

16.1% of last week's primary care patients had acute respiratory infections (ARI). [note: this is 3-fold higher than in late August] The prevalence of acute diarrheal illness (ADI) in Wisconsin's primary care patients is at 1.7%.

CLINICAL NOTES:

Prophylaxis - National Influenza Vaccination Week (see below) Continue to offer influenza vaccine to anyone interested. Full immunity is achieved within 2 weeks of vaccination. Vaccination is targeted towards:

- all high risk individuals
- children from 6 months to 18 years
- adults 50 years and above
- pregnant women
- healthcare workers

Diagnosis

- influenza infections are rare at this time
- PPV of rapid influenza tests is poor, NPV is excellent

Treatment

- a limited number of viruses have been tested for neuraminidase inhibitor resistance this season
 - 24 out of 25 A(H1) viruses were resistant to Oseltamivir (96%)
 - 0/5 A(H3) and 0/9 B viruses have been resistant to oseltamivir.

All viruses tested have been sensitive to zanamivir

- a limited number of viruses have been tested for adamantane resistance this season
 - 0/25 A(H1N1) viruses were resistant to adamantanes
 - 5/5 A(H3N2) viruses were resistant to adamantanes (100%)
 - Adamantane antivirals are ineffective against influenza B viruses

Other

- Rhinovirus, parainfluenza type 3 and adenovirus continue to circulate in Wisconsin
- RSV prevalence is low
- rotavirus isolations are at low levels

Across the U.S.:

As of November 29th, 365 positive surveillance cultures have been recorded in the United States. 2.0% of respiratory specimens during week 48 (November 23-29) were positive for influenza.

- 77.3% of isolates have been type A
 - 87.5% of all sub-typed A viruses have been H1N1
 - 12.5% of A viruses have been H3N2
- 22.7% of isolates have been type B

- 6.7% of deaths during week 48 (November 23-29) were due to pneumonia or influenza
[below the epidemic threshold of 7.1%] -no pediatric influenza deaths have been reported to CDC this season

Global News [from the WHO]: The Ministry of Health of Indonesia has announced two new confirmed cases of human A(H5N1) influenza. A 9-year-old female developed symptoms on 7 November and was hospitalized on 12 November. She recovered and was discharged from hospital on 27 November. Investigations into the source of her infection indicate poultry deaths at her home on 2 November. The second case, a 2-year-old female, developed symptoms on 18 November, was hospitalized on 26 November and died on 29 November. Initial investigations into the source of her infection suggest exposure at a live bird market. Of the 139 cases confirmed to date in Indonesia, 113 have been fatal (81.3%).

Since 2003, there have been 389 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 246 associated deaths (case fatality rate= 63.2%). 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.

Other Observations:

National Influenza Vaccination Week--December 8--14, 2008. "To help raise awareness regarding the seriousness of influenza and the importance of annual vaccination throughout the influenza, the U.S.

Department of Health and Human Services, National Influenza Vaccine Summit, CDC, and other partners are conducting activities during the third annual National Influenza Vaccination Week, December 8--14, 2008.

CDC, Families Fighting Flu, and other partners also have designated Tuesday, December 9, as Children's Flu Vaccination Day to put a special focus on the importance of influenza vaccination to prevent influenza and its complications in children. Thursday, December 11, is Senior Vaccination Day, emphasizing the importance of vaccinating older persons, and Friday, December 12, is designated as Health-Care Worker Vaccination Day, promoting influenza vaccination of health-care workers.

"Posters and educational materials for National Influenza Vaccination Week are available at <http://www.cdc.gov/flu/professionals/flugallery>.

Measles: From 2000 to 2007, measles deaths fell by 74 percent globally, from an estimated 750,000 to 197,000. During this period, the largest reductions occurred in Africa and the Eastern Mediterranean where deaths dropped by 89 percent and 90 percent respectively. The world's success in reaching the 2010 measles goal depends on ensuring that all children receive two doses of measles vaccine including one dose by their first birthday, strengthening disease surveillance systems, and providing effective treatment for measles. For the full report, see:

<http://www.cdc.gov/mmwr/PDF/wk/mm5748.pdf>

Pneumovax: On October 22, 2008, the ACIP voted on new and revised recommendations for the use of 23-valent pneumococcal polysaccharide vaccine (PPSV23) for the prevention of invasive pneumococcal disease.

The new provisional recommendations include:

Recommendation for use of the 23-valent pneumococcal polysaccharide vaccine (PPSV23) among adult cigarette smokers: Adults who smoke cigarettes are at substantially increased risk for invasive pneumococcal disease.

The ACIP recommends that cigarette smoking should be added to the list of indications for PPSV23 in adults aged 19 through 64 years.

Proposed wording of the revised recommendation: Persons aged 19 through 64 years who smoke cigarettes should receive a single dose of PPSV23 and smoking cessation counseling.

Recommendation for use of PPSV23 among adults who have asthma:

Asthma is an independent risk factor for invasive pneumococcal disease.

The ACIP recommends that asthma should be included among the chronic pulmonary diseases (such as COPD and emphysema) that are indications for

PPSV23 in adults aged 19 through 64 years.

Proposed wording of the revised recommendation: "Persons aged 19 through 64 years who have asthma should receive a single dose of PPSV23."

<http://www.cdc.gov/vaccines/recs/provisional/downloads/pneumo-Oct-2008-508.pdf>

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