

Weekly Influenza Update

November 21, 2008

Wisconsin:

Influenza activity is at baseline in Wisconsin. One influenza A virus has been isolated from a Wisconsin patient. One influenza B isolate was acquired in Taiwan and transported to Wisconsin. 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 1.2%.

11.8% 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 1.4%.

There have been some increases in pertussis activity in our area. For a refresher on case identification, diagnosis, isolation and treatment, please go to the following URL: <http://www.dhs.wisconsin.gov/immunization/pertussis.htm>

CLINICAL NOTES:

Prophylaxis

There is an abundance of influenza vaccine this year. 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 infection is rare at this time
- PPV of rapid influenza tests is poor, NPV is excellent

Treatment

- a limited number of viruses have been tested this season and all have been sensitive to oseltamivir and zanamivir
- a limited number of viruses showed full resistance to the adamantane antivirals -10.4% of H1N1 viruses at the end of last season exhibit a mutation that confirms resistance to oseltamivir

Other

- Rhinovirus, parainfluenza type 3 and adenovirus are the dominant respiratory viruses in Wisconsin
- RSV prevalence is very low
- rotavirus isolations are rare

Across the U.S.:

As of November 8, 85 positive surveillance cultures have been recorded in the United States. 1.7% of respiratory specimens during week 45 (November 2-8) were positive for influenza.

-90.6% of isolates have been type A

95% of all sub-typed A viruses have been H1N1

5% of A viruses have been H3N2

-9.4% of isolates have been type B

-6.3% of deaths during week 45 (November 2-8) were due to pneumonia or influenza [below the epidemic threshold of 6.8%].

-no pediatric influenza deaths have been reported to CDC this season

Global News [from the WHO]: There have been no new cases of Avian influenza (A-H5N1) reported since 9/10/08.

Since 2003, there have been 387 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 245 associated deaths (case fatality rate= 63.3%). 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:

Cold temperatures in late November and a late Thanksgiving contribute-in my experience-to an early influenza peak. This is countered, however, by an increase in pre-season immunity from abundant vaccine this year and decreased holiday travel (and social mixing)due to economic issues. What's the outlook? We'll see...

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