

Weekly Influenza Update

April 3, 2008

Wisconsin:

Seasonal influenza activity continues to decline as Spring emerges in Wisconsin. Based on historical trends, about 9% of cases are yet to occur. Given the increasing proportion of influenza B cases in Wisconsin and relatively poor vaccine match for influenza B viruses, it is reasonable to stop immunizing at this time. 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 2.5%. 16.6% of last week's primary care patients had acute respiratory infections.

CLINICAL NOTES:

Diagnosis

- the PPV of fever and (cough and/or sore throat) is declining
- PPV of rapid influenza tests is fair, NPV is good

Prevention

- it is reasonable to stop providing routine immunization at this time
- consider immunization for high risk individuals who have not yet been immunized this season
- the estimated vaccine match is 48% for North Central US

Treatment

- treat influenza A and B infections with oseltamivir or zanamivir
- antivirals must be started within 36-48 hours of first symptoms to be effective in outpatient setting
- antivirals may be effective well past 48 hours for hospitalized patients
- NOTE: 9.5 % of H1N1 viruses exhibit a mutation that confirms resistance to oseltamivir

Other

- RSV prevalence is low
- rotavirus isolation has been relatively low this season

Across the U.S.:

As of March 22, 31,722 positive surveillance cultures have been recorded in the United States. 21.3% of respiratory specimens during week 12 (March 16-22) were positive for influenza.

-76.2% of isolates have been type A

28.2% of all sub-typed A viruses have been H1N1 (69% are similar to vaccine strain; 31% show somewhat reduced reactivity)

71.8% of A viruses have been H3N2 (17% are similar to vaccine strain; 76% are A/Brisbane with reduced reactivity; 7% have reduced reactivity)

-23.8% of isolates have been type B (4% are similar to the vaccine strain; 1% have reduced reactivity; 95% belong to a different strain type)

-8.9% of deaths during week 12 (March 16-22) were due to pneumonia or influenza [well above the epidemic threshold of 7.1%].

-53 pediatric influenza deaths has been reported to CDC this season, including 2 from Wisconsin

Global News [from the WHO]: The Ministry of Health of Indonesia has announced three new cases of human H5N1 avian influenza infection. The cases are not linked epidemiologically. The first is a 15-year-old male student who developed symptoms on 19 March, was hospitalized on 22 March and died on 26 March. The second case is an 11-year-old female student who developed symptoms on 19 March, was hospitalized on 23 March and died on 28 March. The third case is a 21-month-old female who developed symptoms on 17 March, and was hospitalized on 22 March. She is presently recovering in hospital.

Two additional H5N1 cases were confirmed in Pakistan by serological testing, thus providing final H5N1 infection test results on a previously reported family cluster. The preliminary risk assessment found no evidence of sustained or community human to human transmission.

All identified close contacts including the other members of the affected family and involved health care workers remain asymptomatic and have been removed from close medical observation. These laboratory test results support the epidemiological findings from the outbreak investigation in December 2007, and the final risk assessment that suggested limited human to human transmission likely occurred among some of the family members which is consistent with some human-to-human transmission events reported previously. This outbreak did not extend into the community, and appropriate steps were taken to reduce future risks of human infections.

Since 2003, there have been 378 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 238 associated deaths (case fatality rate= 63.0%). 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.

Other Observations:

Today -- April 3rd, 2008 -- marks the 40th anniversary of Martin Luther King, Jr's "I've been to the mountaintop" speech given in Memphis, Tennessee. A few lines of which are reproduced below:

"Well, I don't know what will happen now. We've got some difficult days ahead. But it really doesn't matter with me now, because I've been to the mountaintop.

"And I don't mind.

"Like anybody, I would like to live a long life. Longevity has its place. But I'm not concerned about that now. I just want to do God's will. And He's allowed me to go up to the mountain. And I've looked over. And I've seen the Promised Land. I may not get there with you. But I want you to know tonight, that we, as a people, will get to the promised land!"

<http://www.americanrhetoric.com/speeches/mlkivebeentothemountaintop.htm>

King was assassinated on April 4, 1968

When thinking of the "promised land," consider this... The three primary contenders for the US presidency this year include a male who is older than the average life expectancy for white males in 1968 (68 years), a woman, and an African American.

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