

# Weekly Influenza Update

April 19, 2008

RUBELLA ALERT (see bottom)

Wisconsin:

Influenza activity is at baseline in Wisconsin. Based on historical trends, less than 4.2% of cases are yet to occur. The few isolates being reported from Wisconsin are influenza B. The prevalence of influenza-like illness [fever of 100oF or higher and either cough or sore throat] in Wisconsin's primary care patients has fallen to an estimated 1.5%. 14.2% of last week's primary care patients had acute respiratory infections.

We have initiated "Acute Diarrheal Illness" surveillance through the UW Department of Family Medicine's Clinical Data Warehouse. The prevalence of ADI in Wisconsin's primary care patients is at 1.8%.

CLINICAL NOTES:

Diagnosis

- influenza infection is rare at this time
- PPV of rapid influenza tests is poor, NPV is good

Prevention

- the estimated vaccine match for 2007-2008 was 46% for North Central US

Treatment

- 10.4% of H1N1 viruses exhibit a mutation that confirms resistance to oseltamivir

Other

- Parainfluenza virus 3 is being detected in low number
- RSV prevalence is low
- rotavirus isolations are increasing

Across the U.S.:

As of April 12, 35,485 positive surveillance cultures have been recorded in the United States. 11.9% of respiratory specimens during week 15 (April 6-12) were positive for influenza.

-73.3% of isolates have been type A

27.2% of all sub-typed A viruses have been H1N1 (69% are similar to vaccine strain; 31% show somewhat reduced reactivity)

72.8% of A viruses have been H3N2 (23% are similar to vaccine strain; 69% are A/Brisbane with reduced reactivity; 8% have reduced reactivity)

-26.7% of isolates have been type B (4% are similar to the vaccine strain; 1% have reduced reactivity; 95% belong to a different strain type)

-7.8% of deaths during week 15 (March 6-12) were due to pneumonia or influenza [above the epidemic threshold of 6.8%].

-66 pediatric influenza deaths has been reported to CDC this season, including 2 from Wisconsin

Global News [from the WHO]:

The Ministry of Health and Population of Egypt has announced two new human cases of avian influenza A(H5N1) virus infection. The first case is a 19-year-old male who developed symptoms on 30 March was hospitalized on 31 March and died on 4 April. Investigations into the source of his infection indicate a history of contact with sick and dead poultry. The second case is a 2-year-old male who developed symptoms on 13 April and was hospitalized on 14 April and is currently in hospital. Investigations into the source of his infection indicate a history of contact with sick and dead poultry.

Since 2003, there have been 381 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 240 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: RUBELLA ALERT

A case of rubella has been serologically confirmed in an adult male from Waukesha County. The patient's rash onset was 4/9/08 and his communicable period is from 4/2/08-4/17/08. The source is believed to be from Monterey Mexico where the Wisconsin case worked during his source period. Contact tracing among family and work employees is underway by the local health department. In light of this case further guidance on rubella investigation and control will be forthcoming. In this period of concurrent measles transmission both measles and rubella should be considered in the diagnosis of fever/rash diseases. The clinical specimens (serology, Nasopharyngeal, throat and urine) needed for laboratory confirmation of measles and rubella are the same.

Collect specimens from symptomatic individuals and submit to the State Laboratory of Hygiene (SLH) for laboratory confirmation. The SLH will automatically test for both diseases As we are dealing with both measles and rubella the immunization recommendations stated in the Measles Investigation and Control Guidelines, dated April 10, 2008, apply. The emphasis in rubella control is to maintain high rubella immunization levels and identification of susceptible individuals, especially pregnant females.

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