

Weekly Influenza Update

December 18, 2009

Winter Solstice

Wishes to all for a Merry Christmas and a Joyous Holiday Season [no report planned next week as I will be away]

Wisconsin:

Influenza activity has decreased to below baseline in Wisconsin over the past two weeks. Since the arrival of H1N1, there have been 13,137 confirmed and probable cases, 1093 hospitalizations and 46 deaths.

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 1.0%.

12.3% 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 1.5%

CLINICAL NOTES:

Prophylaxis

As of December 15th, 95 million doses of H1N1 vaccine have been released. Because of a significant decline in H1N1 circulation and due to increasing supplies of H1N1 vaccine, it is reasonable to vaccinate anyone interested in protection from influenza infection

Continue vaccinating with seasonal influenza vaccine Pneumococcal vaccine is indicated for smokers, and people with asthma and other chronic lung conditions as well as a number of other chronic conditions

Demographics and Symptoms

(based on laboratory-confirmed H1N1 cases in Wisconsin primary care sites)

Median time from onset to clinic visit: 2 days

Mean age: 23.9 years

Sex Ratio: female 46%; Male 54%

% with probable exposure to similar illness within 1-3 days of onset: 38%

Common symptoms

Fever: 82%

Cough: 100%

Sore Throat: 73%

Runny Nose: 73%

Headache: 56%

Any GI symptom: 27%

Severity: mild - 10%; moderate 90%; severe 0%

Diagnosis

- influenza infections are at low levels at this time
- the best performing rapid antigen tests will miss 31% of true cases of 2009 H1N1.
- trust the positive results
- a negative test in a patient with influenza-like illness does not rule out influenza

Treatment (see: <http://www.cdc.gov/H1N1flu/recommendations.htm>)

Prompt empiric treatment is recommended for persons with suspected or confirmed influenza and:

- Illness requiring hospitalization
- Progressive, severe, or complicated illness, regardless of previous health status
- Patients at risk for severe disease

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

Resistance Patterns

- a limited number of viruses have been tested for neuraminidase inhibitor resistance this season
 - all tested 2009 H1H1 viruses have been sensitive to zanamivir
 - 0.8% of 2009 H1N1 viruses have been resistant to oseltamivir
 - 99.8% of 2009 H1N1 have been resistant to adamantane antivirals

Other

- Rhinovirus, adenoviruses, and parainfluenza viruses are co-circulating at low levels in Wisconsin
- increasing numbers of RSV isolates have been detected

Across the U.S.:

8.9% of respiratory specimens during week 48 (November 29 - December 5) were positive for influenza.

- 98.5% of isolates have been type A
 - 97.7% of all sub-typed A viruses have been 2009 H1N1
 - 0.3% of A viruses have been seasonal H1N1
 - 0.0% of A viruses have been H3N2
- 1.5% of isolates have been type B

Since August 30, 2009, there have been 33,490 lab-confirmed influenza-associated hospitalizations and 1,445 lab-confirmed influenza-associated deaths.

- 7.8% of deaths during week 48 (November 29 - December 5) were due to pneumonia or influenza
[above the epidemic threshold of 7.1%]

-267 pediatric have been reported since April 26th. Of there, 224 were associated with 2009 H1N1, 41 with unknown subtype A, and 2 with seasonal influenza. Bacterial co-infections were noted in 30 of 96 cases which had samples collected from a normally sterile site (31%).

Global News [from the WHO]: As of 6 December 2009, worldwide more than 208 countries and overseas territories or communities have reported laboratory confirmed cases of pandemic influenza H1N1 2009, including at least 9596 deaths.

Avian Influenza (H5N1): The Viet Nam Ministry of Health has reported a new confirmed case of H5N1 in a who developed symptoms on 18 November, was hospitalized and died on 28 November 2009. The source of exposure is currently under investigation. His family kept some chickens and wild geese in their household.

Since 2003, there have been 445 laboratory-confirmed cases of Avian influenza (A-H5N1). There have been 263 associated deaths (case fatality rate= 59.1%).

Other Observations:

December 18th Phenology: Today's photoperiod is 9 hours and 12 seconds, and daylength is decreasing by 20 seconds per day. As of December 11, the sun started setting slightly later each day. The sunrise, however, will continue to occur later until January 9th.

December 21st is the Winter Solstice when our daylength will be 8 hours:
59 minutes: 37 seconds.

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