

# Weekly Influenza Update

December 31, 2009

Happy New Year !

Wisconsin:

As 2009 fades, dose has influenza in Wisconsin. Since the arrival of H1N1, there have been 13,187 confirmed and probable cases, 1123 hospitalizations and 47 deaths in 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 estimated to be 0.8%.

12.8% 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 1.0%

CLINICAL NOTES:

Prophylaxis

As of December 18th, 111 million doses of H1N1 vaccine have been released and an estimated 60 million Americans have been immunized.

- 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
  - 1.4% of 2009 H1N1 viruses have been resistant to oseltamivir
  - 99.8% of 2009 H1N1 have been resistant to adamantane antivirals

#### Other

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

#### Across the U.S.:

6.9% of respiratory specimens during week 50 (December 13-19) were positive for influenza.

- 99.0% of subtyped isolates have been type A
  - 100% of all sub-typed A viruses have been 2009 H1N1
  - 0.0% of A viruses have been seasonal H1N1
  - 0.0% of A viruses have been H3N2
- 1.0% of isolates have been type B

Since August 30, 2009, there have been 36,163 lab-confirmed influenza-associated hospitalizations and 1,630 lab-confirmed influenza-associated deaths.

- 7.2% of deaths during week 50 (December 13-19) were due to pneumonia or influenza  
[below the epidemic threshold of 7.3%]

-285 pediatric have been reported since April 26th. Of there, 241 were associated with 2009 H1N1, 42 with unknown subtype A, and 2 with seasonal influenza. Bacterial co-infections were noted in 33 of 104 cases which had samples collected from a normally sterile site (31.7%).

Global News [from the WHO]: As of 27 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 12,220 deaths.

Avian Influenza (H5N1): The Ministry of Health of Cambodia has announced a new confirmed case of human infection with the H5N1 avian influenza in a 57-year-old male who developed symptoms on 11 December. He was admitted to the hospital on 16 December, where he received treatment and is in stable condition.

The Ministry of Health of Egypt has reported a new laboratory confirmed human case in a 21 year old female from who developed symptoms of fever and cough on 15 December. She was admitted to the hospital where she received oseltamivir treatment on the same day and is in a stable condition. Investigation revealed that the case had close contact with dead poultry and was involved in slaughtering sick birds.

Since 2003, there have been 467 laboratory-confirmed cases of Avian influenza (A-H5N1). There have been 282 associated deaths (case fatality rate= 60.4%).

#### Other Observations:

December 31st Phenology: Today's photoperiod is 9 hours and 3 minutes, and daylength is increasing by 42 seconds per day.

The Decade in 7 minutes:

<http://www.youtube.com/watch?v=LfhTPagKEAE&feature=fvhl>

My wishes to all of you for a Happy 2010.

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