February 16, 2012

Wisconsin:
Wisconsin continues to have remarkably low influenza activity. 89% of viruses have been A(H3N2) and 11% (H1N1). The prevalence of influenza-like illness [fever of 100°F or higher and either cough or sore throat] in Wisconsin's primary care patients is estimated to be 1.2% and is stable.

14.7% of last week's primary care patients had all-cause respiratory infections.
The prevalence of acute diarrheal illness (ADI) in Wisconsin's primary care patients is stable at 2.0%

Primary Care Snapshot:
The most common identified cause of Acute Respiratory Infection (ARI) in Wisconsin surveillance clinics is Influenza A, closely followed by RSV. Over the past 4 weeks the typical ARI case presenting for primary care has been 35.5 years old and 73% of patients have been female. 58% of patients identified a sick contact 1-3 days before illness onset and typically presented to the clinic 3.7 days after illness onset. 42% of illnesses are characterized as mild, with 56% having moderate symptoms and 2% having severe symptoms.

Typical symptoms include:
cough - 88%
sore throat - 71%
nasal congestion - 71%
nasal discharge - 67%
fever - 48%
headache - 42%

Clinical Notes:
Prophylaxis
There appears to be an excellent match between the current influenza vaccine and circulating strains
- Influenza vaccine is recommended for everyone 6 months and older, including pregnant women
- Pneumococcal vaccine (PPSV-23) for adult smokers, asthmatics and a number of other chronic conditions

Diagnosis
- influenza infections are at low levels at this time
- PPV of rapid antigen tests at this time is moderate
- NPV of rapid antigen tests at this time is high

Treatment
Antivirals need to be started with 48 hours of symptom onset to be effective against influenza
Antivirals started after 48 hours may be effective for hospitalized patients with confirmed influenza

Resistance Patterns
- all tested recent influenza A and B isolates have been sensitive to oseltamivir and zanamivir
- high levels of adamantamine resistance exist in influenza A isolates from around the world

Other
- Rhinoviruses predominate Wisconsin isolates from patients with respiratory infection
- RSV activity is near peak in Wisconsin
- Human metapneumovirus, adenoviruses, coronaviruses and parainfluenza viruses are co-circulating at low levels

Pertussis
For the week ending January 21, B. pertussis was detected in 9.3% (n=323) specimens tested by PCR in Wisconsin. Current 2011-2012 Bordetella pertussis/parapertussis activity can be viewed at:
http://www.slh.wisc.edu/labupdates/reports/bordetella.dot

Across the U.S.:
378 (10.5%) respiratory specimens during week 5 (January 29 - February 4, 2012) were positive for influenza.

For the 2011-2012 influenza season to date:
-88.3% of subtyped isolates have been type A
14.0% of all sub-typed A viruses have been 2009 H1N1
86.0% of A viruses have been H3N2
-11.7% of isolates have been type B

-7.3% of deaths during week 5 (January 29 – February 4, 2012) were due to pneumonia or influenza
[between the seasonally-adjusted epidemic threshold of 7.8%]

two pediatric deaths have been reported this season.

Global News [from the WHO]:

**Avian Influenza (H5N1):**
Since the beginning of 2012, there have been 6 laboratory-confirmed cases and 5 deaths due to Avian influenza (A-H5N1) from Cambodia, China, Egypt, Indonesia, and Viet Nam. Since 2003, there have been 584 laboratory-confirmed cases of Avian influenza (A-H5N1). There have been 345 associated deaths (case fatality rate= 59.1%).

**Other Observations:**

**February 16th Phenology:** Today’s photoperiod is 10 hours and 35 minutes. Daylength is increasing by 2 minutes and 44 seconds each day.

**A Good Day...** What makes for a good day? Louie Schwartzberg—an award-winning cinematographer, director, and producer—introduces his short film on Gratitude and Happiness. Brother David Steindl's spoken words, Gary Malkin's musical compositions and Louie's cinematography make this a stunningly beautiful piece, reminding us of the precious gift of life, and the beauty all around us. Thanks to my wife, Jo, for sending this along...
[http://www.youtube.com/watch?v=gXDMoiEkyuQ&feature=email](http://www.youtube.com/watch?v=gXDMoiEkyuQ&feature=email)

**and a Starry Night...** visualizing the flow of "Starry Night" of Vincent Van Gogh.
[http://www.youtube.com/watch?v=pCHFaXYHGAg](http://www.youtube.com/watch?v=pCHFaXYHGAg)

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