

Weekly Influenza Update

February 5, 2009

CONGRATULATIONS WISCONSIN! - Sometime this week, the one millionth dose of influenza vaccine given this season will be recorded in the Wisconsin Immunization Registry. This will be the first time that this level of coverage has been achieved. Moreover, many more doses have been given but are not recorded in the WIR, as many vaccine providers do not use this valuable resource.

Haemophilus influenzae type B (Hib) Disease Alert and call to increase Hib vaccine coverage in infants and young children (see attached pdf)

Voluntary Withdrawal of five lots of Fluvirin (see below at bottom)

Wisconsin:

Influenza activity is increasing, although at fairly low levels in Wisconsin. 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 2.0%.

12.4% 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 1.8%.

CLINICAL NOTES:

Prophylaxis

Continue to offer influenza vaccine to anyone interested. Full immunity is achieved within 2 weeks of vaccination.

Vaccination is targeted towards:

- all high risk individuals
- children from 6 months to 18 years
- adults 50 years and above
- pregnant women
- healthcare workers

Diagnosis

- influenza infections continue to be rare at this time
- PPV of rapid influenza tests is poor, NPV is excellent

Treatment

- 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
- a limited number of viruses have been tested for neuraminidase inhibitor resistance this season
162 out of 165 A(H1) viruses were resistant to Oseltamivir (98%)

0/37 A(H3) and 0/67 B viruses have been resistant to oseltamivir.

All viruses tested have been sensitive to zanamivir

- a limited number of viruses have been tested for adamantane resistance this season
2/165 A(H1N1) viruses were resistant to adamantanes (1%)
37/37 A(H3N2) viruses were resistant to adamantanes (100%)
Adamantane antivirals are ineffective against influenza B viruses

Across the upper Midwest, 71% of influenza viruses to date have been A(H1N1), 13% A(H3N2) and 16% B. Therefore:

- Oseltamivir alone will be effective in 29% of cases
(cost per Rx = \$119.99)
- Zanamivir alone will be effective in 100% of cases
(cost per Rx = \$72.99)
- Amantadine/Rimantadine alone will be effective in 70% of cases
(cost per rimantadine Rx = \$28.19)
(cost per Amantadine Rx = \$12.89)

- Oseltamivir plus Amantadine/Rimantadine will be effective in 100% of cases
(cost per combined Rx = \$132.79 - \$148.18)

Other

- RSV prevalence is moderate and increasing
- parainfluenza and adenovirus continue to circulate in Wisconsin
- Rotavirus isolations are at low levels

Across the U.S.:

As of January 24th, 3,188 positive surveillance cultures have been recorded in the United States. 15.8% of respiratory specimens during week 3 (January 18-24) were positive for influenza.

-84.1% of isolates have been type A

86.4% of all sub-typed A viruses have been H1N1

13.6% of A viruses have been H3N2

-15.9% of isolates have been type B

-7.3% of deaths during week 3 (January 18-24) were due to pneumonia or influenza

[below the epidemic threshold of 7.8%] -two pediatric influenza deaths [from Colorado and Texas] have been reported this season

Global News [from the WHO]: The Ministry of Health and Population of Egypt has announced a new human case of avian influenza A(H5N1) virus infection in a 2-year-old male whose symptoms began on 2 February and was hospitalized on 3 February. He remains in a stable condition.

Investigations into the source of his infection indicate a recent history of contact with dead poultry.

The Ministry of Health in China has announced a new confirmed human case of H5N1 infection. The case is a 21-year-old female who had onset of symptoms on 23 January and remains in hospital in a clinically stable condition. Investigations into the source of her infection indicate possible exposure to sick and dead poultry.

Since 2003, there have been 405 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 254 associated deaths (case fatality rate= 62.7%). 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:

February 5 Phenology: Today's photoperiod is 10 hours and 8 minutes, and daylength is increasing by 2 minutes and 31 seconds per day.

Groundhog Day - A Primer on Groundhogs (from National Geographic):

The common groundhog, or woodchuck (*Marmota monax*), is one of 14 species of marmots. Groundhogs are the largest members of the squirrel family. Though they are usually seen on the ground, they can climb trees and are also capable swimmers. These rodents frequent the areas where woodlands meet open spaces, like fields, roads, or streams. Here they eat grasses and plants as well as fruits and tree bark. These rodents live a feast-or-famine lifestyle, gorging themselves all summer to build up plentiful reserves of fat. After the first frost, they retreat to their underground burrows and snooze until spring, drawing their sustenance from body fat. While hibernating, the animal's heart rate plunges, and its body temperature is not much warmer than the temperature inside its burrow.

Groundhog hibernation gave rise to the popular American custom of Groundhog Day, held on the second of February every year. Tradition dictates that if a groundhog sees its shadow that day, there will be six more weeks of winter, though such a prediction seems a sure bet over much of the groundhog's North American range.

Wisconsin was greeted by bright sunshine on the morning of February 2nd. Six more weeks of winter brings us just 4 days shy of the spring equinox.

Voluntary Withdrawal of Fluvirin: The FDA is notifying the public of a problem with five lots of Fluvirin (Novartis). This is a voluntary market withdrawal and not a recall. Any remaining vaccine is being removed from the market as a precaution and there is no public health risk from this vaccine. The problem was loss of potency of stored vaccine over time, and action requested is to "immediately discontinue use of and return any remaining doses from five lots of FLUVIRIN(r) Influenza vaccine Luer-Lok pre-filled syringes". Revaccination is not necessary.

See: <http://www.fda.gov/cber/recalls/novflu020409.htm>

FLUVIRIN (r) (Influenza Virus Vaccine) Luer-Lok pre-filled syringes DATE NOTIFICATION INITIATED:

February 4, 2009

LOT NUMBER / EXPIRATION DATE:

Lot Number	Expiration Date
878771P	05 / 2009
878772P	05 / 2009
878773P	05 / 2009
878775P	05 / 2009
878776P	05 / 2009

MANUFACTURER:

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