MARYLAND INFLUENZA SURVEILLANCE REPORT - Week 46

(November 9 to November 15, 2008)

Office of Epidemiology and Disease Control Programs | Maryland Department of Health and Mental Hygiene

- The proportion of visits for influenza-like illness to sentinel providers remains below baseline, but it continues on an upward trend.
- Maryland has first case of laboratory-confirmed case of influenza! **THE FLU IS HERE**!
- First case was Influenza Type A (H1). We have had 5 confirmed cases to date this season
- More people continue to join the Maryland Resident Influenza Tracking Survey (MRITS)
- The flu is popular this time of year… Even Google is tracking it.

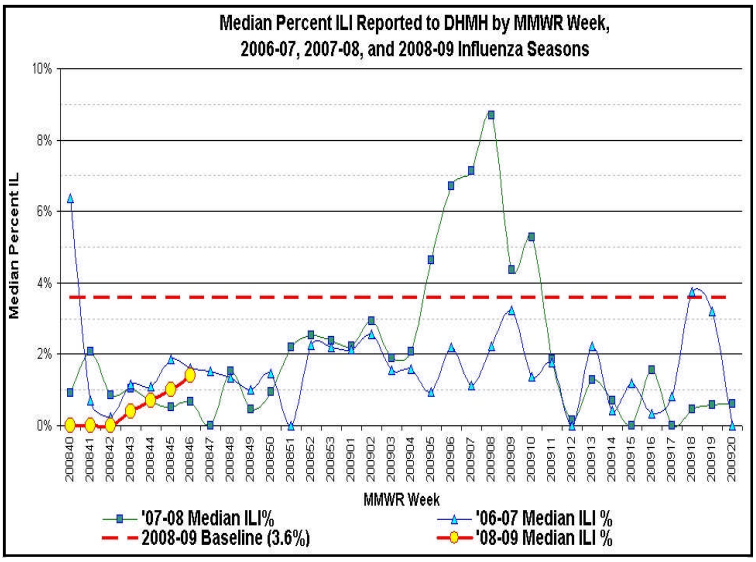
INSIDE:

VISITS TO PROVIDERS FOR INFLUENZA-LIKE ILLNESS (ILI)

This week, a total of 124 visits for ILI were reported by 11 providers. The median percent of ILI visits in Maryland was 1.4%. This is **below** the state baseline of 3.6%.

Sentinel providers are health care providers who report to us the proportion of patient visits for influenza like illness. Because of the great variability in reported ILI proportions among providers each week, the median ILI is used instead of the average. Half of the ILI reports were below the median and half were above.

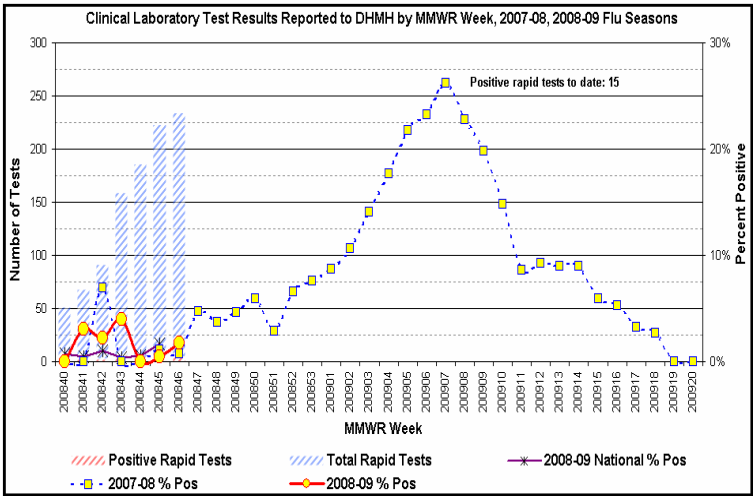
If you are interested in becoming a sentinel provider, please feel free to contact us at flu@dhmh.state.md or by phone at 410-767-6700.



RAPID INFLUENZA TESTS PERFORMED BY SENTINEL CLINICAL LABORATORIES

This week, a total of 229 rapid influenza tests were performed by 17 reporting clinical laboratories. Of these, **4 tests (1.7%) were positive**.

Because the sensitivity and specificity of rapid flu tests vary with the prevalence of influenza in the population*, rapid flu tests performed before the first DHMH lab-confirmed case are not counted as confirmed cases for the purpose of surveillance. **Now that the DHMH laboratory has confirmed a case by reference methods, all rapid influenza tests will be counted as confirmed cases.**



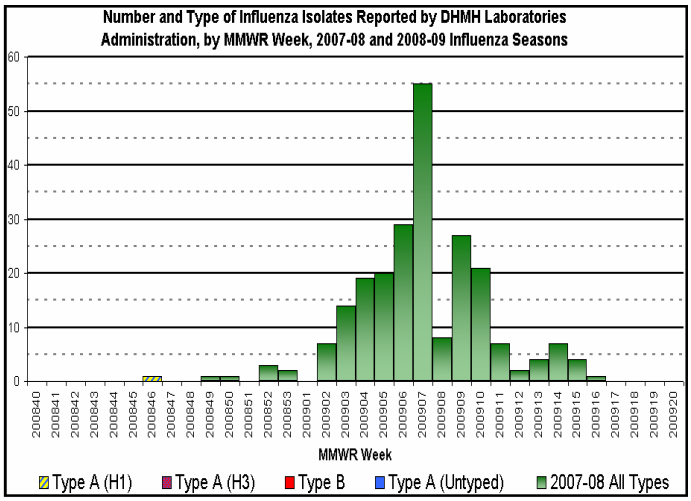
* "**Rapid Diagnostic Testing for Influenza**", Centers for Disease Control and Prevention. Available at: http://www.cdc.gov/flu/professionals/diagnosis/rapidclin.htm

DHMH STATE LABORATORY ISOLATE TYPING AND SUBTYPING

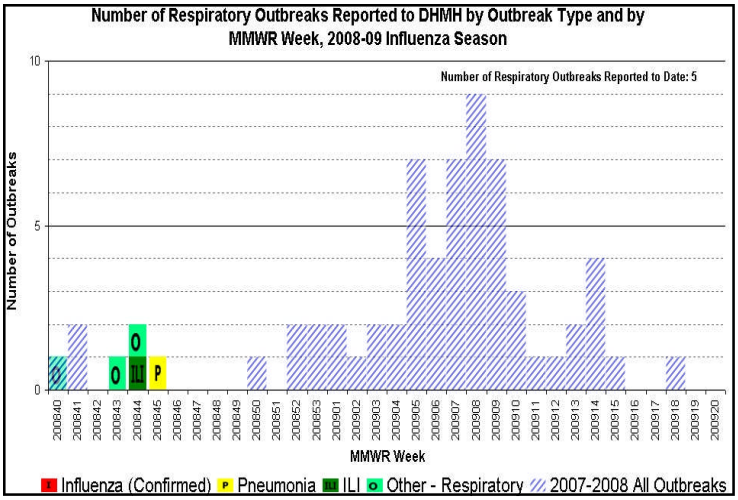
To date this season, there has been one case of influenza reported by the DHMH laboratory. During the 2007-2008 influenza season, a total of 232 specimens were positive for influenza by PCR and/or viral culture at the DHMH lab.

The DHMH Laboratories Administration has reported the first lab-confirmed case of influenza of the 2008-2009 season. The case is a child living in the Baltimore Metro Region.

A sample of isolates processed at the DHMH public health lab is sent to CDC for further testing, including the determination of the circulating strains and any resistance to antiviral medications.



INSTITUTIONAL OUTBREAKS REPORTED TO DHMH



No outbreaks of influenza or influenza-like illness were reported to DHMH this week..

Although influenza is not a reportable condition in Maryland, outbreaks of influenza in institutional settings are reportable. Please contact your local health department to report an outbreak.

For more information about outbreak investigations in Maryland, please visit:

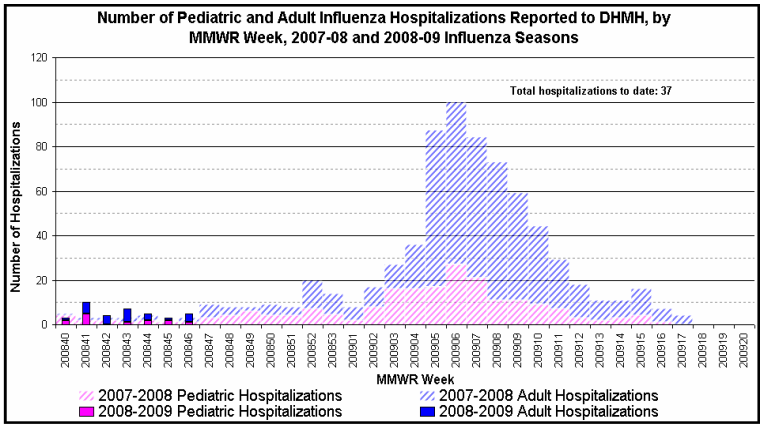
http://tinyurl.com/edcpoutb

INFLUENZA HOSPITALIZATIONS REPORTED TO DHMH

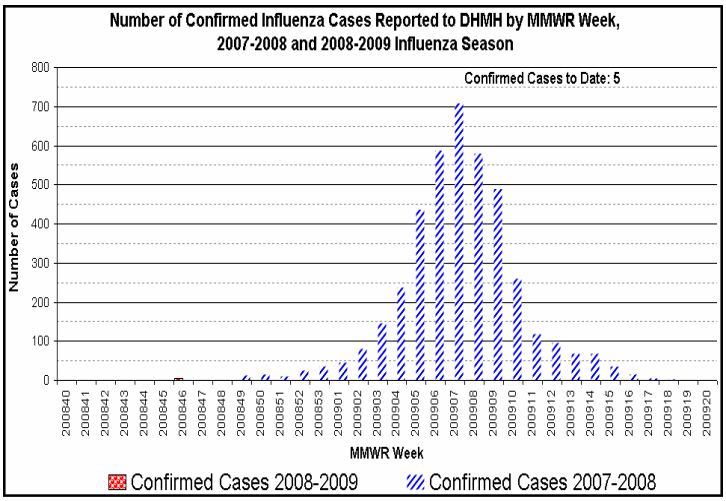
The Emerging Infections Program collects information on a weekly basis from several hospitals in the Baltimore Metro Region on the number of hospitalizations associated with influenza.

This week, a total of 5 hospitalizations were reported to DHMH. Of these, 4 (80%) were adults (age 18 and older) and 1 (20%) was a child.

To date, there have been 37 hospitalizations for influenza reported to DHMH. During the 2007-2008 season, a total of 720 (28% children, 72% adults) hospitalizations were reported.



MARYLAND LAB-CONFIRMED CASES OF INFLUENZA



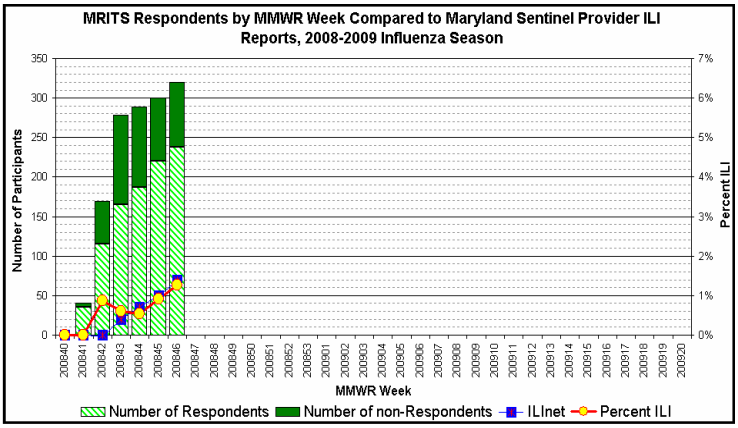
This week, 5 lab-confirmed cases of influenza were reported to DHMH. Our season total is now 5 cases. Last season, we received reports of 4,029 lab-confirmed cases, with the peak number of cases (708) reported for week 7 (February 10-16, 2008).

Cases are not confirmed by rapid flu test until the first influenza isolate is detected at DHMH lab. After that first isolate, all clinical laboratory tests that are positive are counted as confirmed cases of influenza for surveillance purposes.

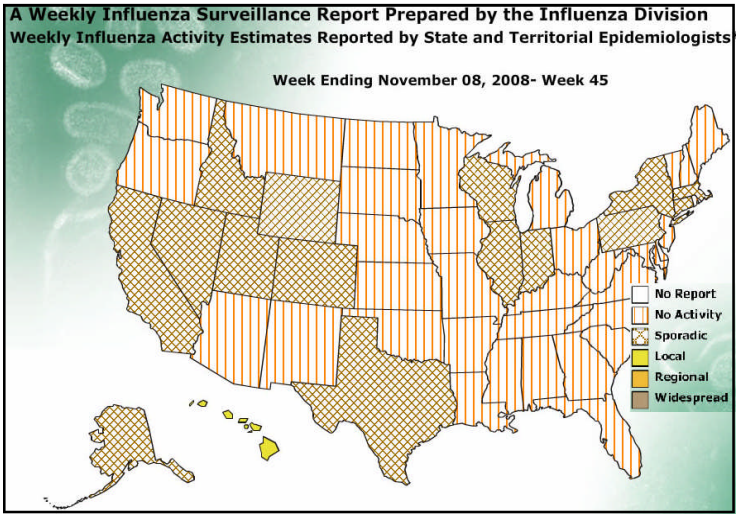
MARYLAND RESIDENT INFLUENZA TRACKING SURVEY (MRITS)

A total of 320 participants signed up at http://tinyurl.com/flu-enroll by the end of week 46. Of the 320 residents who received the weekly survey, 238 (74.4%) responded to it. Among the respondents, 3 (1.3%) reported flu-like symptoms. **A total of 19 (8%) of the respondents reported getting their flu vaccine this week!** Because there is no baseline to compare these results, and the sample size is small (compared to the population), caution must be taken when interpreting the results.

We continue to recruit participants. Please enroll at the link above or pass on the link to anyone interested.



CDC WEEKLY INFLUENZA SURVEILLANCE



According to CDC, "during week 45, a low level of influenza activity was reported in the United States." Visits to sentinel providers are below baseline; 1 state reported "local" influenza activity; 15 states, Puerto Rico, and the District of Columbia reported "sporadic" influenza activity (the other 35 states reported "no activity", including Maryland), and about 1.7% of specimens tested were positive for influenza. Also, no pediatric deaths due to influenza were reported during week 45.

For more information, visit: http://cdc.gov/flu/weekly

Division of Communicable Disease Surveillance | Office of Epidemiology and Disease Control Programs | Maryland Department of Health and Mental Hygiene

201 West Preston Street
3rd Floor, Unit #26
Baltimore, MD 21201

Phone: 410-767-6700
Fax: 410-696-4215
E-mail: flu@dhmh.state.md.us

HEALTHY PEOPLE HEALTY COMMUNITIES

All information submitted to DHMH through the surveillance systems is voluntary. This information is used to estimate the geographic extent of flu activity, and not the virulence or pathogenicity of circulating viruses. This information is not intended for individual diagnoses.

ALL INFORMATION IS SUBJECT TO CHANGE AS MORE DATA IS SUBMITTED AFTER THE PUBLICATION OF THIS REPORT

If you have any questions about influenza surveillance in Maryland, or you would like to join our Influenza Sentinel Provider Network, please contact Rene F. Najera, MPH, Epidemiologist at the Division of Communicable Disease Surveillance in the Office of Epidemiology and Disease Control Programs.

WE'RE ON THE WEB!!!

WWW.EDCP.ORG

Flu? Google It!

Only 100 years ago, we had very little idea of what exactly caused the flu - something that would prove to be a costly piece of missing information in the 1918-1919 Flu Pandemic. Today, we know that the flu is caused by a virus, that comes in three types (A, B, and C) and many assorted strains.

Knowing how the flu is spread, who it affects, why, and where it is active, allows us to test and implement control measures. That knowledge comes from anecdotal evidence, research studies, and epidemiologic surveillance.

According to Census Bureau statistics (2003), 54.7% of US households have internet access. While not universal, web technology for disease tracking and reporting is not a thing of the future. We are using this technology today in the Maryland Resident Influenza Tracking Survey (MRITS).

Google, the well-known internet search provider, realized that people look for information by "googling" terms like "flu", "fever", or "cough", when they are sick. Data managers at Google figured out a way to analyze these trends and match them against CDC data. The results were impressive. They saw that the number of people searching for flu information tracks closely with flu-like illness reported to CDC.

How is this different than the MRITS? Google doesn't collect demographic data like age and specific (county-level) location. Google collects information on millions of queries to their database. The MRITS has 345 participants to date.

Nevertheless, both systems can be helpful tools if used with established and validated disease surveillance systems. As web technology evolves, we in public health must also evolve our practices. For more information on Google Flu Trends: www.google.org/flutrends

Taken in the context of other epidemiologic surveillance systems, Google can be a helpful tool.