



MARYLAND INFLUENZA SURVEILLANCE REPORT - Week 14 (April 5 to April 11, 2009)

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

- Influenza activity in Maryland is "LOCAL" with an increased proportion of visits to providers for influenza-like illness (ILI) in one of five surveillance regions in Maryland.
- 2% of respondents to the Maryland Resident Influenza Tracking Survey reported ILI symptoms | The median percent of ILI visits to sentinel providers was 0%
- Reported confirmed cases continued to decrease for the fifth week in a row, and they are now at levels not seen since December of 2008.
- Based on previous flu seasons' observations, flu activity should continue to decrease through April and end in early May.

INSIDE:

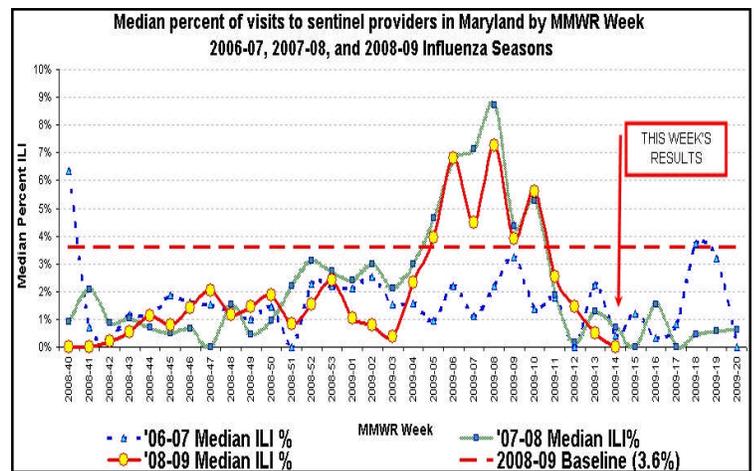
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OUTPATIENT INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE NETWORK

This week, a total of 21 ability in reported ILI visits for ILI were reported by 5 providers. The **median** percent of ILI visits in Maryland was 0%. 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.



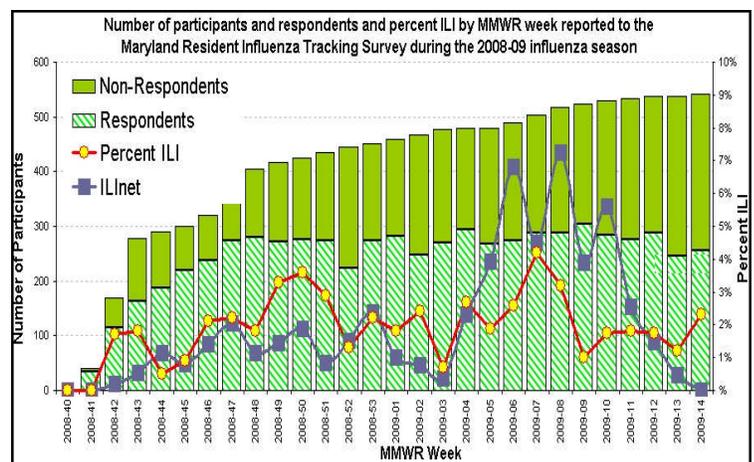
MARYLAND RESIDENT INFLUENZA TRACKING SURVEY RESULTS

A total of 541 participants signed up at www.tinyurl.com/flu-enroll by the end of week 14. Of the 538 residents who received the weekly survey, 285 (47%) responded to it. Among the respondents, 6 (2%) reported flu-like symptoms.

the results.

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

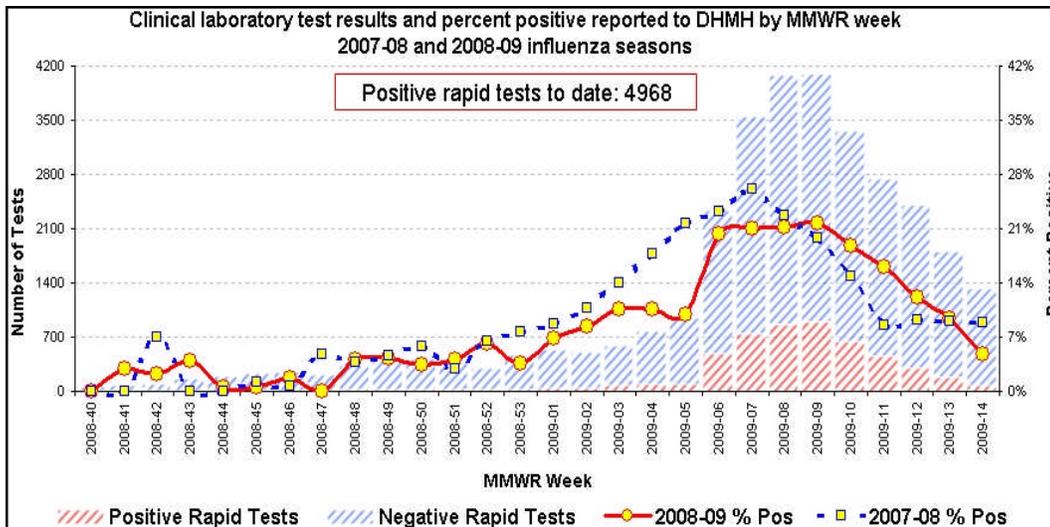
Because there is no baseline to compare these results, and the sample size is small (compared to the population), caution must be taken when interpreting



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MARYLAND CLINICAL LABORATORY INFLUENZA SURVEILLANCE

During week 14, a total of 1,311 rapid influenza tests were reported by 26 reporting clinical laboratories. Of these, **63 tests (5%) were positive**. **NOTE:** We have added 10 new clinical labs to our network starting on week 6.



Rapid Test Result	No.	%
Type A	887	18%
Type B	589	12%
Type A or B	3,492	70%
TOTAL	4,968	100%

Number of positive rapid influenza tests by virus type, 2008-09 influenza season.

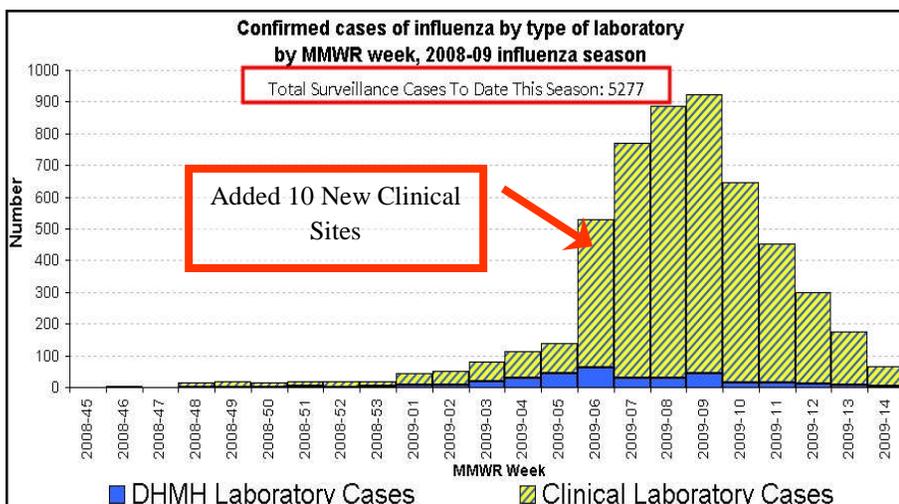
MARYLAND DHMH LABORATORIES ADMINISTRATION REPORTS

During week 14, a total of 2 specimens were submitted for testing at the DHMH laboratory. Two (100%) were positive for influenza: Type A (2, 100%) and Type B (0, 0%). This season, a total of 814 specimens have been submitted for testing at the DHMH laboratory. Of these, 321 (39%) have been positive by PCR and/or viral culture.

CONFIRMED INFLUENZA CASES (5,277) AND STRAIN TYPING

For the purpose of influenza surveillance, cases are counted as “confirmed” when they are based on more reliable reference test methods (PCR or culture) performed by the DHMH lab, or are based on other techniques such as rapid test for the detection of influenza antigen AFTER the DHMH lab has confirmed its first case of the season.

This is done because the sensitivity and specificity of rapid flu tests vary with the prevalence of influenza in the population¹, and are less reliable when prevalence is low. This season, all positive clinical laboratory results from week 46 onward (4,956) are counted as confirmed cases, and of course, all of the positive DHMH lab results (321).



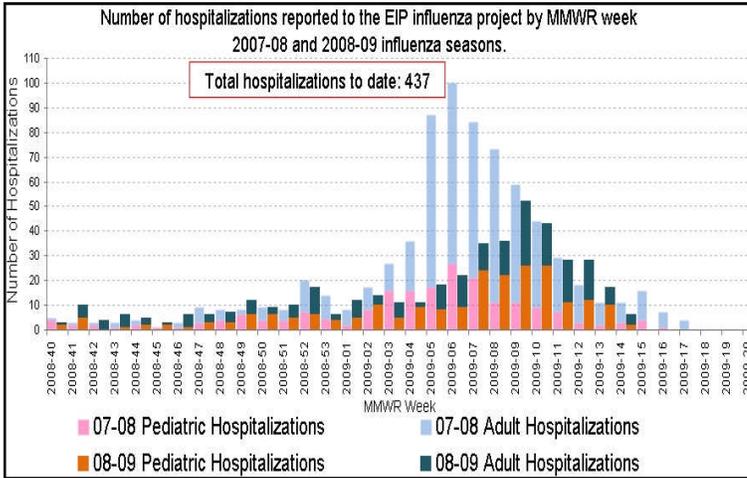
Influenza Type	No.	%
Type A	2	<1%
Type A (H1)	151	47%
Type A (H3)	6	2%
Type B	161	50%
Types A & B	1	<1%
TOTAL	321	100%

Number of positive influenza tests performed by the DHMH laboratory by virus type, 2008-09 Influenza Season.

1-For more information, please read: “Rapid Diagnostic Testing for Influenza”, Centers for Disease Control and Prevention, <http://tinyurl.com/cdcrapids>
 For more information on the different types of influenza viruses, please read: <http://tinyurl.com/cdcfluvirus>

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EMERGING INFECTIONS PROGRAM (EIP) INFLUENZA PROJECT



Twenty-one hospitals in the Baltimore Metro Region provide information to EIP on the number of hospitalizations associated with influenza on a weekly basis during the flu season.

437 (212, 49% adult, and 225, 51% pediatric) hospitalizations for influenza reported to DHMH.

Last season, 715 (516, 72% adult, and 199, 28% pediatric) hospitalizations were reported.

During week 14, 6 hospitalizations, 2 children and 4 adults, were reported to EIP.

For more information on the program, please contact Maya Monroe, MPH, EIP Epidemiologist at 410-767-6700.

To date, there have been

DIVISION OF OUTBREAK INVESTIGATION REPORTS

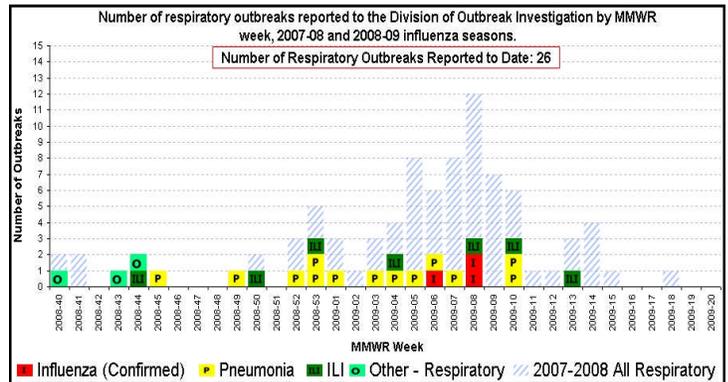
During week 14, no outbreaks of influenza or influenza-like illness were reported to the Division of Outbreak Investigation. To date, there have been 26 respiratory outbreaks reported this flu season.

breaks in general are reportable to DHMH. Please contact your local health department to report an outbreak.

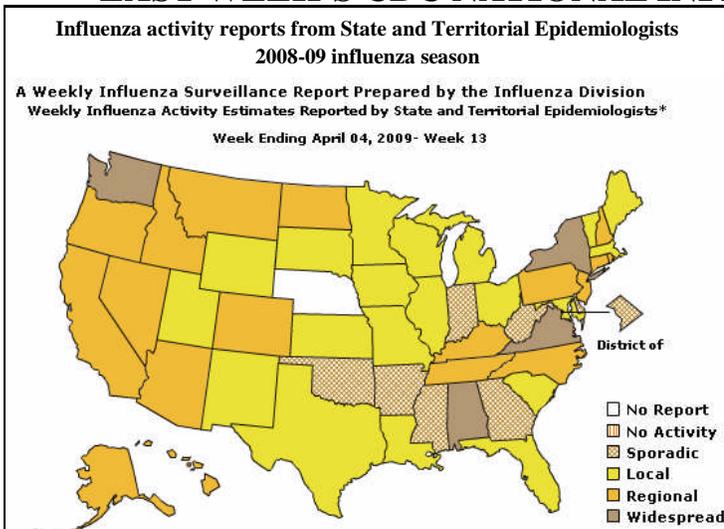
For more information, please visit the Division of Outbreak Investigations web page at:

<http://tinyurl.com/edcpoutb>

Although influenza is not a reportable condition in Maryland, disease out-



LAST WEEK'S CDC NATIONAL INFLUENZA SURVEILLANCE REPORT



According to CDC, “during week 13, influenza activity continued to decrease in the United States.”

- Visits to sentinel providers for ILI are below baseline nationally.
- **Four States** reported “widespread” influenza activity; 18 states reported “regional” flu activity; 20 states reported “local” activity.

- 12.3% of specimens tested by national laboratories were positive for influenza.
- Two pediatric deaths due to influenza were reported to CDC. The total now stands at 45 reported cases this season.

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

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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

Is It Over?

When it comes to influenza surveillance, there are many questions that we cannot answer with absolute certainty. This is because the nature of disease surveillance prevents us from seeing the entire picture of how diseases are spread and when they are circulating. The best we can do is get together a group of systems that will give us the best picture possible. Starting in September and into October, there are media requests for us to forecast the flu season. Will it be bad? Will it be good? Will it be long? A very long list of factors comes into play when it comes do influenza. For example, how each of us will react to being exposed to the flu varies depend-

ing on our immunity and general health status, how much of the virus we are exposed to, when we are exposed to it, and the strain we are exposed to. As far as forecasting flu in the general population, we have to take into account all of these individual factors PLUS other variables such as weather, mass gatherings, and how many people chose to get vaccinated. Needless to say, it is tough to forecast the flu season. It is just as difficult to forecast the end of the flu season. Here we are, at week 14, and we will continue to report on flu surveillance until week 20. Why are we doing this if flu activity levels are obviously dropping?

Influenza surveillance looks at the syndrome (disease presentation) that is influenza-like illness. Not only have flu cases been detected well into the last weeks of flu surveillance, but emerging respiratory infections (like SARS) don't worry about the calendar. So we need to be on the lookout. Suppose there is an up-tick in the number of people presenting with flu-like illness at doctors' offices but the number of positive flu tests keeps dropping. We would take steps to find out what is going on, be it the flu (a strain that is not picked up by the tests) or something else. So we carry on with surveillance of influenza and other diseases beyond week 20. Is it over? No, it never will be.

WEEK	ACTIVITY
2009-08	Widespread
2009-09	Regional
2009-10	Regional
2009-11	Regional
2009-12	Local
2009-13	Local
2009-14	Local

Influenza activity in Maryland according to DHMH

