

Baltimore City Seasonal Influenza Surveillance Report:

Week 49 - Week ending December 8, 2007



This week's level: **Flu Alert**

- The first PCR-confirmed case of influenza in Baltimore City was reported on December 6
- The percentage of positive "rapid" influenza tests reported by Baltimore City sentinel laboratories has increased to 16%
- For information on preventing the flu (including vaccination), visit the Health Department website at www.baltimorehealth.org/flu or call 311

SUMMARY

Syndromic surveillance:¹ The percentage of visits to sentinel healthcare providers² for influenza-like-illness (ILI)³ increased this week in the Baltimore Metro Region⁴. 7.1% of visits reported by sentinel providers in Baltimore City were due to ILI. There were no anomalies in the number of fever/flu complaints to Baltimore City emergency departments. The number of 911 calls with complaints of "sick" were elevated for one day during the previous time period, but did not show a sustained increase during this period.

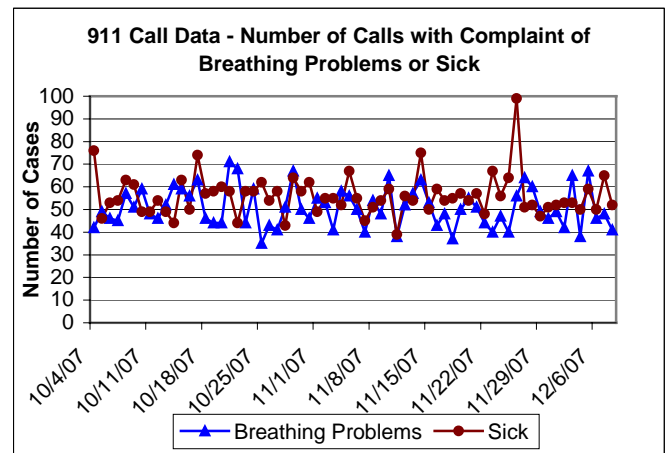
Documented influenza: The first PCR-confirmed case of influenza in Baltimore City was reported this week. The percentage of positive "rapid" influenza tests reported by Baltimore City sentinel laboratories⁵ increased from 6.8% during week 48 to 16.3% during this period. There were no deaths due to influenza⁶ and the number of deaths due to pneumonia and influenza were consistent with this same time period in past years.

SYNDROMIC SURVEILLANCE

911 Call Data

There have been approximately 4 mentions of fever or flu-like symptoms in the text of 911 calls⁷ during

this period. Numbers of daily calls for breathing problems and sick complaints are graphed below. During the previous time period there was an increase in the number of calls in which the primary complaint was "sick," however this increase was not sustained during this period. The number of calls for "breathing problems" was consistent with this time period in previous years.



Emergency Department Data

During the past week, the number of patients presenting with chief complaints⁸ of fever or flu-like symptoms was consistent with this time period in previous years.

ILI Cases at Doctor's Offices

Table 1: Proportion of patient visits due to ILI from sentinel providers in Baltimore City and the Baltimore Metro Region

Week	No. of Reporting Sentinel Providers (Total)	Cases of ILI	Patients seen by reporting providers	% of patient visits due to ILI
Baltimore City				
49	1(2)	78	1097	7.1%
Baltimore Metro Region				
49	3 (13)	85	1435	5.9%

DOCUMENTED INFLUENZA

PCR Confirmed Cases of Influenza: The first PCR-confirmed case of influenza in a Baltimore City resident was reported on December 6.

Rapid Test Confirmed Cases of Influenza

Table 2: Percent of positive rapid flu tests from Baltimore City and the Baltimore Metro Region sentinel hospital laboratories

Week	No. of Reporting Labs (Total)	No. of Positive Tests	Total Tests Performed by Reporting Labs	% Positive for Flu
Baltimore City				
49	2 (3)	8	49	16.3%
Baltimore Metro Region				
49	4 (7)	8	61	13.1%

Institutional Outbreaks

No institutional outbreaks of influenza have been reported to the Baltimore City Health Department during this period.

Influenza and Pneumonia Mortality

There were no deaths due to influenza and 16 deaths due to pneumonia. This constituted 9.1% of all deaths reported in Baltimore City during this week, similar to the same time period during the years 2003-2006 when P&I mortality ranged from 6.9-10.6%.

HOSPITAL CAPACITY DATA

There were no aberrations in the frequency of yellow or red alerts⁹ in Baltimore City hospitals during this period.

NOTES

¹The main goal of syndromic surveillance is to identify illness clusters early, before diagnoses are confirmed and reported to public health agencies. Non-specific indicators of illness such as chief complaint data from emergency departments will provide early indications that flu activity in the community may be increasing.

²The Maryland Department of Health and Mental Hygiene (DHMH) collects data from sentinel providers throughout the state as part of the Centers for Disease Control and Prevention's (CDC) national influenza surveillance program. The percent of patient visits due to influenza-like illness (ILI) is calculated as the total number of patients with ILI seen at all sentinel providers' offices divided by the total number of patients seen at these practices. Not all sentinel providers report each week; the number reporting each week this period is documented in Table 1. Additionally, the number of

providers reporting in the city is small and could result in fluctuations in the % of patient visits due to ILI.

³Influenza-Like Illness (ILI) is defined as a fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat in the absence of a KNOWN cause other than influenza. (<http://www.cdc.gov/flu/weekly/pdf/flu-surveillance-overview.pdf> - Last Accessed October 16th, 2007).

⁴The Baltimore Metropolitan Region includes Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties, and Baltimore City.

⁵Data on the percent of positive rapid-flu tests are reported to the Health Department by DHMH on a weekly basis.

⁶The Baltimore City Health Department reports mortality due to influenza and pneumonia to the CDC on a weekly basis. Deaths for which pneumonia or influenza was listed as the underlying or contributing cause of death are counted in this report. These numbers represent deaths that occurred in Baltimore City (regardless of residence of the deceased). The date of death is usually within ~2-3 weeks of the report.

⁷The Biosurveillance Analyst at the Baltimore City Health Department receives 911 call data on a daily basis and analyzes these data for aberrations in the number of calls in which "breathing problems," "sick," "fever," or "flu" are included in the text.

⁸Five Baltimore City emergency departments report chief complaint data to the Health Department's Biosurveillance Analyst regularly. Based on historical data, the data are analyzed for aberrations in chief complaints of fever or flu-like syndromes.

⁹A hospital is on yellow alert when there are no available beds and ambulances are re-routed to a different hospital. Red alerts occur when the hospital has no available beds with EKG monitors and ambulances must be re-routed.

MORE INFORMATION ON INFLUENZA SURVEILLANCE

For more information on the Baltimore City Health Department's Seasonal Influenza plan and for past reports, please visit our website:

www.baltimorehealth.org/flu

For information on influenza activity state-wide, please visit the DHMH's Influenza surveillance program website:

http://edcp.org/influenza/Influenza_serv.html

For information on influenza activity nation-wide, please visit the CDC's website:

<http://www.cdc.gov/flu/weekly/fluactivity.htm>