

# Baltimore City Seasonal Influenza Surveillance Report:

Week 4 - Week ending January 26, 2008



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

- 14% of "rapid" influenza tests reported by Baltimore City sentinel laboratories this week were positive
- According to the Centers for Disease Control and Prevention, Influenza is widespread in several states surrounding Maryland.  
<http://www.cdc.gov/flu/weekly/usmap.htm>
- For information on preventing the flu (including vaccination), visit the Health Department website at  
<http://www.baltimorehealth.org/flu> or call 311

### SUMMARY

**Syndromic surveillance:**<sup>1</sup> 13.1% of visits reported by one sentinel healthcare provider<sup>2</sup> this week in Baltimore City were due to influenza-like-illness (ILI).<sup>4</sup> The average number of 911 calls containing complaints of general sickness has been increasing steadily.

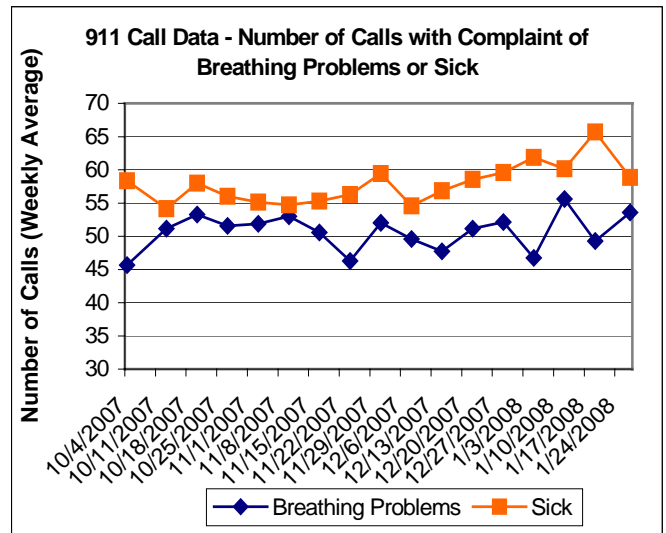
**Documented influenza:** The percentage of positive "rapid" influenza tests reported by Baltimore City sentinel laboratories<sup>5</sup> remains high. 13.8% of tests were positive, a slight decrease from last week when the percent positive was 16.3%. There were no deaths due to influenza<sup>6</sup> 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 were five mentions of "fever" in the text of 911 calls<sup>7</sup> during this period. Weekly averages of daily 911 calls for "breathing problems" and "sick" complaints are graphed below. The average number of calls for "sick" has increasing steadily for the

past several weeks. These numbers are consistent with this time period in previous years.



#### Emergency Department Data

During the past week, the number of patients presenting with chief complaints<sup>8</sup> 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
<b>Baltimore City</b>				
4	1 (3)	157	1198	<b>13.1%</b>
<b>Baltimore Metro Region<sup>3</sup></b>				
4	3 (14)	258	1611	<b>16.0%</b>

## DOCUMENTED INFLUENZA

### *Lab Confirmed Cases of Influenza*

The Maryland State Department of Health and Mental Hygiene reported that the strain of the first flu isolate (from a Baltimore City Resident) was A/Solomon Islands/3/2006-like, which is a match to one of the three components of this season's influenza vaccine.

### *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
<b>Baltimore City</b>				
4	4(4)	48	347	<b>13.8%</b>
<b>Baltimore Metro Region</b>				
4	8 (10)	96	597	<b>16.1%</b>

### *Institutional Outbreaks*

To date, there has been one outbreak of influenza A in Baltimore City. The outbreak occurred at an assisted-living facility during week 3.

### *Influenza and Pneumonia Mortality*

There were no deaths due to influenza and 14 deaths due to pneumonia. This constituted 10.4% of all deaths reported in Baltimore City during this week, similar to the same time period during the years 2003-2007 when P&I mortality ranged from 8.1-14.3%.

## HOSPITAL CAPACITY

Baltimore City hospitals have not experienced a strain on capacity during this period.<sup>9</sup>

## NOTES

<sup>1</sup>The 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.

<sup>2</sup>The 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.

<sup>3</sup>The Baltimore Metropolitan Region includes Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties, and Baltimore City.

<sup>4</sup>Influenza-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 16<sup>th</sup>, 2007).

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

<sup>6</sup>The 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.

<sup>7</sup>The 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.

<sup>8</sup>Five 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.

<sup>9</sup>The Baltimore City Fire Department's Emergency Medical Systems Division provides the Baltimore City Health Department with data on hospital stay time and ambulance diversions each week for the purpose of tracking hospital capacity during the flu season.

### **MORE INFORMATION ON INFLUENZA SUREVILLANCE**

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](http://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](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>