

# Baltimore City Seasonal Influenza Surveillance Report:

## Week 15/16 - Weeks ending April 19, 2008



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

- The Baltimore City Health Department lowered the seasonal flu level from Flu Alert to Decreasing Flu starting this period
- Indicators of influenza activity in Baltimore City have been decreasing steadily since week 6 (week ending February 9<sup>th</sup>)
- The level of influenza activity in Maryland during week 16 was reported as "Local" <http://www.cdc.gov/flu/weekly/usmap.htm>
- For the summary report of the 2007-2008 flu season in Baltimore City, visit the Health Department website at <http://www.baltimorehealth.org/flu>

### SUMMARY

**Syndromic surveillance:**<sup>1</sup> The percent of visits due to influenza-like-illness (ILI)<sup>4</sup> reported by Baltimore City sentinel healthcare providers<sup>2</sup> has declined steadily since week 4 (week ending January 26<sup>th</sup>). During week 15, 1% of visits reported were due to ILI. No providers reported data for week 16.

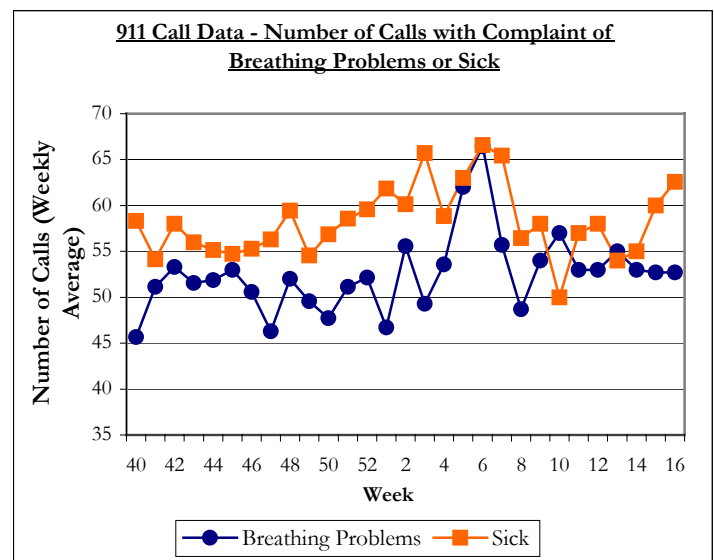
**Documented influenza:** The percent of positive rapid flu tests reported by Baltimore City sentinel laboratories<sup>5</sup> has been decreasing steadily since week 5 (week ending February 2<sup>nd</sup>). A small increase in the percent positive during week 16 is attributable to a large decrease in the number of rapid flu tests ordered and the small number of reporting laboratories. Less than 1% of "rapid" influenza tests reported were positive during week 15; a decrease compared to the previous week when the percent positive was 2.2%. During week 16 the percent positive was 8.3%. No deaths related to influenza were reported this period. The number of

deaths due to pneumonia and influenza was comparable to the same time period in past years.

### Syndromic Surveillance

#### 911 Call Data

Weekly averages of daily 911 calls for "breathing problems" and "sick" complaints reached the highest level (season-to-date) during week 6 (week ending February 9). During weeks 15 and 16, the average number of calls for "breathing problems" complaints remained similar to the previous week. The number of "sick" complaints increased. The numbers of both types of complaints are consistent with this time period in previous years.



### Emergency Department Data

During the past week, the number of patients presenting with a chief complaint<sup>8</sup> of fever or flu-like symptoms were 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>                     |   |              |                                      |                                |
| 15  | 1 (3)                                       | 3            | 340                                  | <b>0.9%</b>                    |
| 16  | 0 (3)                                       | N/A          | N/A                                  | N/A                            |
| <b>Baltimore Metro Region<sup>3</sup></b> |   |              |                                      |                                |
| 15  | 2 (14)                                      | 3            | 562                                  | <b>0.5%</b>                    |
| 16  | 1 (14)                                      | 1            | 288                                  | <b>0.3%</b>                    |

### DOCUMENTED INFLUENZA

#### Lab Confirmed Cases of Influenza

As of week 16, the Maryland State Department of Health and Mental Hygiene laboratory has isolated influenza virus in 230 samples submitted for testing. Of those, 19% were type A H1, 36% were Type A H3, 26% were Type A unsubtype, and 19% were Type B.

#### 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>         |                               |                       |   |                    |
| 15                            | 1 (4)                         | 1                     | 121                                     | <b>0.8%</b>        |
| 16                            | 1 (4)                         | 1                     | 12                                      | <b>8.3%</b>        |
| <b>Baltimore Metro Region</b> |                               |                       |   |                    |
| 15                            | 6 (10)                        | 12                    | 249                                     | <b>4.8%</b>        |
| 16                            | 3 (10)                        | 3                     | 55                                      | <b>5.5%</b>        |

#### Institutional Outbreaks

During this time period, there were no outbreaks reported to the Baltimore City Health Department. To date, there have been three outbreaks of confirmed influenza A and two outbreaks of pneumonia/ILI in Baltimore City.

#### Influenza and Pneumonia Mortality

There were 0 deaths due to influenza and 26 deaths due to pneumonia reporting during weeks 15 and 16. There have been 3 deaths related to influenza this season. Deaths due to pneumonia and influenza

constituted 7.6% of all deaths reported in Baltimore City during this week, similar to this time period in previous years. P&I mortality ranged from 8.4-12.6% during 2003-2007.

### HOSPITAL CAPACITY

Baltimore City emergency departments 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>