

### Delaware Weekly Influenza Report Week 20 (May 11- May 17, 2014) Delaware Division of Public Health

#### National Synopsis 2013 - 2014

National data are updated Friday of each week. Please visit <a href="http://www.cdc.gov/flu/weekly/">http://www.cdc.gov/flu/weekly/</a> for the most current information. Influenza activity continued to decrease in the United States, during week 20(ending May 17, 2014). Two states reported widespread activity; five states and Guam reported regional activity; six states reported local activity; the District of Columbia, Puerto Rico and 32 states reported sporadic activity; five states reported no influenza activity; and the U.S. Virgin Islands did not report.

Surrounding states in our region reported widespread (MD), and sporadic (D.C., PA, WV, and VA) influenza activity.

Both national and state data are provisional and subject to change as additional reports are received.

#### Delaware Influenza Surveillance 2013 - 2014

There were eight confirmed cases of influenza reported during week20 and the level of influenza activity was designated "Sporadic" based on available data. The rates of influenza like illness (ILI) reported by sentinel providers was 0%, well below the regional baseline of 2.0%.

#### Level of Influenza Activity<sup>1</sup> in Delaware, Week 20

## Sporadic

Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI.

Influenza-like illness (ILI) is defined as patients presenting with fever of 100° F or greater, cough and/or sore throat in the absence of a known cause other than influenza.

No Activity: No laboratory-confirmed<sup>2</sup> cases of influenza and no reported increase in the number of cases of ILI.

**Sporadic:** Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI.

**Local:** Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed<sup>2</sup> influenza in a single region of the state.

**Regional:** This level does not apply to Delaware. Per CDC, regional does not apply to states with  $\leq 4$  regions<sup>3</sup>.

**Widespread:** Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed<sup>2</sup> influenza in at least half the regions of the state with recent laboratory evidence of influenza in the state.

Activity levels may not be comparable across states because some states may use different definitions for lab confirmation of influenza cases. Some states may include rapid diagnostic tests as confirmatory while Delaware considers viral culture or PCR as confirmatory.

<sup>&</sup>lt;sup>2</sup> Laboratory confirmed case= case confirmed by viral culture or PCR.

<sup>&</sup>lt;sup>3</sup> Region= population under surveillance in a defined geographical subdivision of a state. Regions typically include several counties.

Table 1a. Influenza positive cases reported, statewide and by county.

|                    | rmed Flu Cases<br>ubtype       | Wks<br>40-52 | Wks<br>01-10 | Wk<br>11 | Wk<br>12 | Wk<br>13 | Wk<br>14 | Wk<br>15 | Wk<br>16 | Wk<br>17 | Wk<br>18 | Wk<br>19 | Wk<br>20 | YTD  | YTD<br>Total | YTD<br>County% |
|--------------------|--------------------------------|--------------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------|--------------|----------------|
|                    | A (2009 H1)                    | 88           | 929          | 52       | 34       | 16       | 8        | 7        | 0        | 0        | 3        | 0        | 0        | 1137 | 1811         |                |
| /ide               | A (H3)                         | 4            | 13           | 4        | 9        | 13       | 8        | 12       | 15       | 15       | 7        | 5        | 1        | 106  |              |                |
| Statewide          | A (subtyping not performed)    | 18           | 225          | 10       | 12       | 12       | 14       | 7        | 4        | 2        | 10       | 3        | 0        | 317  |              |                |
|                    | В                              | 6            | 18           | 6        | 19       | 25       | 38       | 48       | 33       | 18       | 19       | 10       | 7        | 251  |              |                |
|                    |                                |              |              |          |          |          |          |          |          |          |          |          |          |      |              |                |
| e                  | A (2009 H1)                    | 20           | 352          | 17       | 10       | 8        | 3        | 2        | 0        | 0        | 1        | 0        | 0        | 413  | 756          | 42%            |
| Castle             | A (H3)                         | 3            | 6            | 2        | 7        | 8        | 5        | 6        | 11       | 12       | 3        | 4        | 0        | 67   |              |                |
| New Cast<br>County | A (subtyping not performed)    | 0            | 122          | 3        | 3        | 4        | 0        | 2        | 1        | 2        | 2        | 1        | 0        | 140  |              |                |
|                    | В                              | 4            | 13           | 4        | 10       | 10       | 14       | 38       | 13       | 9        | 11       | 5        | 5        | 136  |              |                |
|                    | A (2009 H1)                    | 26           | 374          | 23       | 14       | 5        | 5        | 4        | 0        | 0        | 2        | 0        | 0        | 453  |              |                |
| t f                | A (H3)                         | 0            | 3            | 1        | 2        | 3        | 2        | 2        | 2        | 1        | 3        | 0        | 0        | 19   |              |                |
| Kent<br>County     | A (subtyping<br>not performed) | 10           | 63           | 5        | 8        | 5        | 10       | 4        | 1        | 0        | 2        | 2        | 0        | 110  | 672          | 37%            |
|                    | В                              | 0            | 5            | 2        | 9        | 13       | 19       | 6        | 17       | 6        | 8        | 4        | 1        | 90   |              |                |
|                    | A (2009 H1)                    | 42           | 203          | 12       | 10       | 3        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 271  | 383          |                |
| × ×                | A (H3)                         | 0            | 4            | 1        | 0        | 2        | 1        | 4        | 2        | 2        | 1        | 1        | 1        | 19   |              |                |
| Sussex<br>County   | A (subtyping not performed)    | 8            | 40           | 2        | 1        | 3        | 4        | 1        | 2        | 0        | 6        | 0        | 0        | 67   |              | 21%            |
|                    | В                              | 2            | 1            | 0        | 0        | 2        | 5        | 4        | 3        | 3        | 4        | 1        | 1        | 26   |              |                |

Table 1b. Age subgroup-specific influenza positive cases

| abie                 | 1b. Age su                | ogroup       | -speci       | ne imi   | uenza    | posi     | tive Ca  | ises.    |          |          |          |          |          |     |              |                |
|----------------------|---------------------------|--------------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|--------------|----------------|
|                      | rmed Flu Cases<br>e Group | Wks<br>40-52 | Wks<br>01-10 | Wk<br>11 | Wk<br>12 | Wk<br>13 | Wk<br>14 | Wk<br>15 | Wk<br>16 | Wk<br>17 | Wk<br>18 | Wk<br>19 | Wk<br>20 | YTD | YTD<br>Total | YTD<br>County% |
|                      | 0-4 years                 | 33           | 210          | 18       | 8        | 11       | 11       | 9        | 4        | 4        | 6        | 1        | 0        | 315 |              |                |
| vide                 | 5-24 years                | 23           | 285          | 20       | 20       | 25       | 24       | 17       | 18       | 11       | 6        | 3        | 1        | 453 |              |                |
| Statewide            | 25-49 years               | 42           | 413          | 22       | 26       | 14       | 15       | 19       | 9        | 8        | 14       | 6        | 4        | 592 | 1811         |                |
| Šť                   | 50-64 years               | 13           | 203          | 8        | 13       | 4        | 11       | 9        | 9        | 5        | 6        | 4        | 2        | 287 |              |                |
|                      | 65+ years                 | 5            | 74           | 4        | 7        | 12       | 7        | 20       | 12       | 7        | 11       | 4        | 1        | 164 |              |                |
|                      |                           |              |              |          |          |          |          |          |          |          |          |          |          |     |              |                |
| ø)                   | 0-4 years                 | 8            | 89           | 7        | 4        | 6        | 5        | 3        | 2        | 4        | 2        | 1        | 0        | 131 | 756          | 42%            |
| astl<br>nty          | 5-24 years                | 8            | 106          | 8        | 9        | 13       | 11       | 11       | 11       | 11       | 4        | 1        | 1        | 194 |              |                |
| New Castle<br>County | 25-49 years               | 10           | 165          | 5        | 10       | 5        | 1        | 13       | 4        | 3        | 3        | 3        | 2        | 224 |              |                |
| Se O                 | 50-64 years               | 2            | 93           | 4        | 4        | 1        | 3        | 4        | 6        | 3        | 3        | 2        | 2        | 127 |              |                |
|                      | 65+ years                 | 0            | 39           | 2        | 3        | 5        | 2        | 17       | 2        | 2        | 5        | 3        | 0        | 80  |              |                |
|                      | 0-4 years                 | 12           | 77           | 7        | 4        | 4        | 6        | 4        | 1        | 0        | 1        | 0        | 0        | 116 |              |                |
| it t                 | 5-24 years                | 3            | 107          | 11       | 8        | 11       | 9        | 5        | 5        | 0        | 2        | 1        | 0        | 162 | 1            |                |
| Kent<br>County       | 25-49 years               | 16           | 162          | 10       | 9        | 4        | 12       | 4        | 2        | 2        | 7        | 3        | 0        | 231 | 673          | 37%            |
| J                    | 50-64 years               | 4            | 74           | 3        | 9        | 3        | 6        | 3        | 2        | 1        | 3        | 2        | 0        | 110 |              |                |
|                      | 65+ years                 | 2            | 25           | 0        | 3        | 4        | 3        | 0        | 10       | 4        | 2        | 0        | 1        | 54  |              |                |
|                      | 0-4 years                 | 13           | 44           | 4        | 0        | 1        | 0        | 2        | 1        | 0        | 3        | 0        | 0        | 68  |              |                |
| ž ĕ                  | 5-24 years                | 12           | 72           | 1        | 3        | 1        | 4        | 1        | 2        | 0        | 0        | 1        | 0        | 97  | 382          | 21%            |
| Sussex<br>County     | 25-49 years               | 16           | 86           | 7        | 7        | 5        | 2        | 2        | 3        | 3        | 4        | 0        | 2        | 137 |              |                |
| S O                  | 50-64 years               | 7            | 36           | 1        | 0        | 0        | 2        | 2        | 1        | 1        | 0        | 0        | 0        | 50  |              |                |
|                      | 65+ years                 | 3            | 10           | 2        | 1        | 3        | 2        | 3        | 0        | 1        | 4        | 1        | 0        | 30  |              |                |

<sup>&</sup>lt;sup>1</sup> Based on patients with positive nucleic acid or viral culture test results reported to the Division of Public Health. <sup>2</sup> Reports are by date of specimen collection, not the date the results are obtained. As a result, prior weeks' counts may be adjusted to reflect additional cases received.

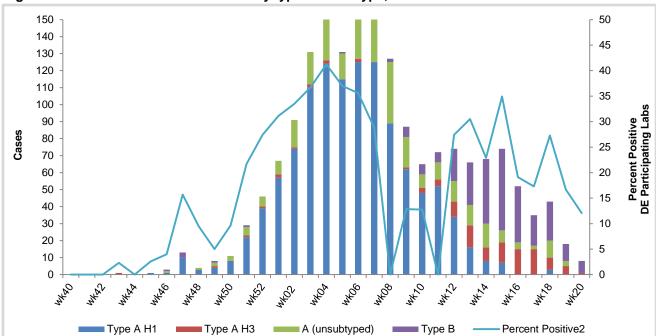


Figure 1. Confirmed cases<sup>1</sup> of influenza by type and subtype, Delaware 2013-2014 Influenza Season.

Table 2. Influenza-related hospitalizations, Delaware 2013-2014

| Flu R                | elated       | Wks   | Wks   | Wk    | Wk | Wk | Wk | Wk | Wk | Wk | Wk | Wk | YTD | YTD   | YTD     |
|----------------------|--------------|-------|-------|-------|----|----|----|----|----|----|----|----|-----|-------|---------|
| Hosp                 | italizations | 40-52 | 01-10 | 11-12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | לוז | Total | County% |
| d)                   | 0-4 years    | 8     | 33    | 6     | 0  | 2  | 2  | 0  | 1  | 2  | 0  | 0  | 54  |       |         |
| Vide                 | 5-24 years   | 1     | 36    | 5     | 3  | 3  | 3  | 1  | 3  | 3  | 1  | 0  | 59  |       |         |
| Statewide            | 25-49 years  | 0     | 64    | 5     | 3  | 1  | 10 | 3  | 2  | 3  | 1  | 1  | 93  | 422   |         |
| Sta                  | 50-64 years  | 4     | 83    | 9     | 2  | 5  | 2  | 3  | 3  | 2  | 0  | 1  | 114 |       |         |
|                      | 65+ years    | 2     | 48    | 9     | 9  | 5  | 12 | 8  | 2  | 7  | 0  | 0  | 102 |       |         |
| Ф                    | 0-4 years    | 4     | 19    | 3     | 0  | 1  | 0  | 0  | 1  | 0  | 0  | 0  | 28  |       |         |
| New Castle<br>County | 5-24 years   | 0     | 22    | 2     | 2  | 2  | 2  | 0  | 3  | 2  | 0  | 0  | 35  |       |         |
| ew Cast<br>County    | 25-49 years  | 0     | 40    | 4     | 1  | 0  | 8  | 2  | 2  | 0  | 0  | 0  | 57  | 246   | 58%     |
| δΩ                   | 50-64 years  | 1     | 56    | 5     | 1  | 1  | 0  | 3  | 2  | 2  | 0  | 1  | 72  |       |         |
| _                    | 65+ years    | 0     | 26    | 5     | 4  | 2  | 10 | 2  | 2  | 3  | 0  | 0  | 54  |       |         |
|                      | 0-4 years    | 4     | 10    | 2     | 0  | 1  | 1  | 0  | 0  | 1  | 0  | 0  | 19  |       |         |
| # £                  | 5-24 years   | 1     | 10    | 3     | 1  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 16  |       |         |
| Kent                 | 25-49 years  | 0     | 16    | 1     | 2  | 1  | 1  | 1  | 0  | 1  | 1  | 0  | 24  | 125   | 30%     |
| _ O                  | 50-64 years  | 2     | 23    | 4     | 1  | 2  | 1  | 0  | 0  | 0  | 0  | 0  | 33  |       |         |
|                      | 65+ years    | 1     | 17    | 2     | 4  | 2  | 0  | 6  | 0  | 1  | 0  | 0  | 33  |       |         |
|                      | 0-4 years    | 0     | 4     | 1     | 0  | 0  | 1  | 0  | 0  | 1  | 0  | 0  | 7   |       |         |
| e ex                 | 5-24 years   | 0     | 4     | 0     | 0  | 1  | 1  | 1  | 0  | 0  | 1  | 0  | 8   |       |         |
| Sussex               | 25-49 years  | 0     | 8     | 0     | 0  | 0  | 1  | 0  | 0  | 2  | 0  | 1  | 12  | 51    | 12%     |
| ωÖ                   | 50-64 years  | 1     | 4     | 0     | 0  | 2  | 1  | 0  | 1  | 0  | 0  | 0  | 9   |       |         |
|                      | 65+ years    | 1     | 5     | 2     | 1  | 1  | 2  | 0  | 0  | 3  | 0  | 0  | 15  |       |         |

<sup>&</sup>lt;sup>1</sup> Based on patients with positive nucleic acid or viral culture test results reported to the Delaware Division of Public Health. There were eight confirmed cases of influenza reported during MMWR 20. Confirmed cases are reported for the date the specimen was collected; not the date that positive test result was reported; this is different from the percent positive calculation.

<sup>&</sup>lt;sup>2</sup> Percent positive= (number of specimens PCR positive for flu reported during the week) / (total number of specimens submitted during the week); lab data reflect the date the test result was reported and not the date that the specimen was collected. The percent positive reflects only the percent testing positive for specimens submitted by WHO/NREVSS Collaborating Laboratories in Delaware (includes Christiana Care and the Delaware Public Health Laboratory). The percent positive does not reflect specimens tested by hospitals not participating in the WHO/NERVSS Collaborating Labs in Delaware.

Table 3. Influenza-related deaths, Delaware 2013-2014

| Flu- Related | Wks<br>40-52 | Wks<br>01-10 | Wk<br>11 | Wk<br>12 | Wk<br>13 | Wk<br>14 | Wk<br>15 | Wk<br>16 | Wk<br>17 | Wk<br>18 | Wk<br>19 | Wk<br>20 | Cumulative |
|--------------|--------------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|
| Deaths       | 0            | 4            | 0        | 0        | 0        | 0        | 0        | 2        | 0        | 0        | 0        | 0        | 6          |

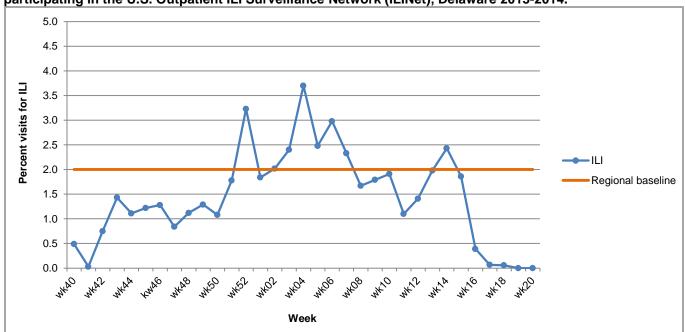
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-2013.

| Influenza Season  | Annual Flu Case Totals |
|-------------------|------------------------|
| 2004 – 2005       | 995                    |
| 2005 – 2006       | 541                    |
| 2006 – 2007       | 508                    |
| 2007 – 2008       | 1401                   |
| 2008 – 2009       | 738                    |
| 2009 – 2010       | 2247                   |
| 2010 – 2011       | 1470                   |
| 2011 – 2012       | 262                    |
| 2012 – 2013       | 1773                   |
| 2013 – 2014 (YTD) | 1811                   |

# U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) (Sentinel) Provider Surveillance Network:

An ILINet (sentinel) provider conducts surveillance of influenza-like illness (ILI) in collaboration with the Division of Public Health and the Centers for Disease Control and Prevention (CDC). Data reported by ILINet providers, in combination with other influenza surveillance data, provide a national and statewide picture of influenza activity in the U.S.

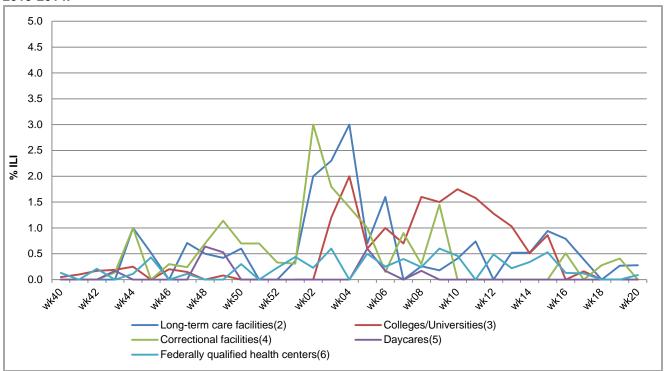
Figure 2. Percentage of visits for influenza-like illness (ILI) reported by sentinel healthcare providers participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2013-2014.



<sup>&</sup>lt;sup>1</sup> Seven of 11 sentinel providers reported during Week 20. Data are subject to change as additional reports are received.

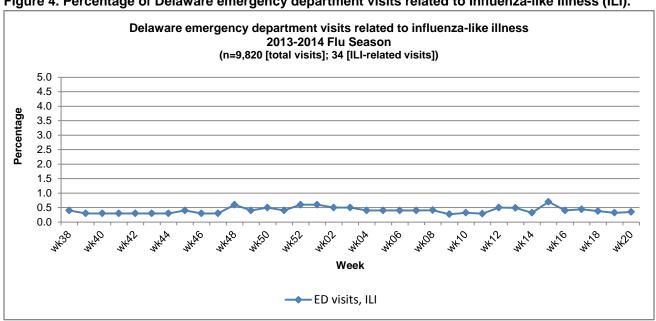
<sup>&</sup>lt;sup>2</sup> Regional baseline is calculated by CDC using non-influenza weeks from the previous 3 influenza seasons. Delaware is a member of Region 3 and includes DE, DC, MD, PA, VA, and WV. Regional baseline= 2.0%.

Figure 3. Influenza-Like Illness (ILI) reported by influenza surveillance reporting partners<sup>1</sup>, Delaware 2013-2014.



Reporting partners include long-term care facilities, colleges and universities, correctional facilities, daycares, and federally qualified health centers.

Figure 4. Percentage of Delaware emergency department visits related to Influenza-like Illness (ILI).



<sup>&</sup>lt;sup>2</sup> % ILI= percentage of residents with ILI symptoms. Five of 19 LTCFs reported for MMWR 20.

<sup>&</sup>lt;sup>3</sup> % ILI= percentage of student visits for ILI. Schools reporting include the University of Delaware, Delaware State University, and Wesley College.

<sup>&</sup>lt;sup>4</sup> % ILI= percentage of visits for ILI at the correctional facility. Six of 10 facilities reported for MMWR 20.

<sup>&</sup>lt;sup>5</sup> % ILI= percentage of children absent with ILI. One of 12 daycare providers reported for MMWR 20.

<sup>&</sup>lt;sup>6</sup> % ILI= percentage of visits for ILI at FQHCs. FQHCs reporting include LARED and Henrietta Johnson Medical Center.

**NOTE:** Data provided do not reflect the total number of individuals who have been infected with the influenza virus in Delaware during the reporting period as a result of the following factors:

- Many people ill with influenza-like symptoms do not seek medical care.
- Many who do seek medical care are not tested for influenza.
- The Delaware Public Health Laboratory (DPHL) is limited by capacity to processing a maximum of 3 specimens per day from each reporting entity.

The Division of Public Health (DPH) is committed to serving you better. Please visit us at <a href="flu.delaware.gov">flu.delaware.gov</a> or <a href="http://dhss.delaware.gov/dhss/dph/dpc/immunize-flu.html">http://dhss.delaware.gov/dhss/dph/dpc/immunize-flu.html</a> for general information on the flu or specific information on DPH flu clinics. For questions on Delaware's weekly flu report, please call the Office of Infectious Disease Epidemiology at 302-744-1033. For questions regarding influenza vaccination information, please call 302-744-1060.