

# Delaware Weekly Influenza Report Week 52 (December 21-27, 2014) Delaware Division of Public Health

#### National Influenza Synopsis 2014-2015:

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. During week 52 (December 21-27, 2014), U.S. flu activity continued to increase in intensity and expand geographically in many areas of the country. The severity of flu disease so far this season is similar to some previous seasons in which influenza A (H3N2) viruses have circulated predominantly. The geographic spread of influenza in 43 states was reported as <a href="widespread">widespread</a>; Puerto Rico and six states (Alaska, Arizona, California, Maine, Nevada and Oregon) reported <a href="regional">regional</a> activity and Hawaii reported <a href="mailto:sporadic">sporadic</a> activity. The District of Columbia, Guam and the U.S. Virgin Islands did not report. Both national and state data are provisional and subject to change as additional reports are received.

### Delaware Influenza Surveillance 2014-2015:

During week 52, there were 370 laboratory-confirmed cases of influenza reported among Delaware residents. Reports of influenza-like illness (ILI) received from participating providers, facilities, and institutions indicated relatively low levels of ILI in the community. Levels of ILI from sentinel providers were not reported due to insufficient data.

#### Level of Influenza Activity in Delaware, Week 52:

Widespread

Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of the state with recent laboratory evidence of influenza in the state.

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 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 influenza in a single region of the state.

Regional: Outbreaks of influenza or increases in ILI and recent laboratory-confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions.<sup>3</sup>

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

<sup>&</sup>lt;sup>3</sup> Region = population under surveillance in a defined geographical subdivision of a state. Regions typically include several counties. Regional doesn't apply to states with ≤ four counties.

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<sup>&</sup>lt;sup>1</sup> 2014-2015 Region 3 (DE, DC, MD, PA, VA, and WV) baseline = 2.0%.

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

Table 1a. Influenza positive<sup>1</sup> cases reported<sup>2</sup> statewide and county by subtype (A) or lineage (B)<sup>3</sup>, Delaware 2014-2015

|                      | rmed Flu Cases<br>btype / Lineage | Wk<br>40 | Wk<br>41 | Wk<br>42 | Wk<br>43 | Wk<br>44 | Wk<br>45 | Wk<br>46 | Wk<br>47 | Wk<br>48 | Wk<br>49 | Wk<br>50 | Wk<br>51 | Wk<br>52 | YTD | YTD<br>Total | YTD<br>County<br>% |
|----------------------|-----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|--------------|--------------------|
|                      | A / 2009 H1N1                     | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 3        | 4   |              |                    |
| ш                    | A / 2012 H3N2                     | 0        | 1        | 2        | 1        | 9        | 8        | 13       | 23       | 33       | 37       | 45       | 82       | 54       | 308 |              |                    |
| MB                   | A / no subtype                    | 0        | 0        | 0        | 2        | 2        | 7        | 9        | 16       | 40       | 47       | 64       | 185      | 313      | 685 | 1,004        |                    |
| STATEWIDE            | B / Yamagata                      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0   | 1,004        |                    |
| ST/                  | B / Victoria                      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 1   |              |                    |
|                      | B / no lineage                    | 0        | 0        | 0        | 3        | 0        | 1        | 0        | 0        | 0        | 1        | 1        | 0        | 0        | 6   |              |                    |
|                      | A / 2009 H1N1                     | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 1   |              |                    |
| o o                  | A / 2012 H3N2                     | 0        | 0        | 0        | 1        | 1        | 0        | 1        | 3        | 6        | 10       | 18       | 50       | 34       | 124 | 269          | 26.8%              |
| astl                 | A / no subtype                    | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 3        | 3        | 5        | 17       | 112      | 141 |              |                    |
| New Castle<br>County | B / Yamagata                      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0   |              |                    |
| Š                    | B / Victoria                      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 1   |              |                    |
|                      | B / no lineage                    | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 2   |              |                    |
|                      | A / 2009 H1N1                     | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 3        | 3   |              |                    |
| _                    | A / 2012 H3N2                     | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 4        | 5        | 5        | 9        | 15       | 13       | 52  |              | 42.6%              |
| Kent                 | A / no subtype                    | 0        | 0        | 0        | 0        | 0        | 1        | 1        | 4        | 16       | 23       | 38       | 111      | 176      | 370 | 428          |                    |
| ~ 양                  | B / Yamagata                      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0   | 420          | 42.0%              |
|                      | B / Victoria                      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0   |              |                    |
|                      | B / no lineage                    | 0        | 0        | 0        | 1        | 0        | 1        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 3   |              |                    |
|                      | A / 2009 H1N1                     | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0   |              |                    |
| <b>ا</b> ر           | A / 2012 H3N2                     | 0        | 1        | 2        | 0        | 8        | 7        | 12       | 16       | 22       | 22       | 18       | 17       | 7        | 132 | 307          | 30.6%              |
| Sussex               | A / no subtype                    | 0        | 0        | 0        | 2        | 2        | 6        | 8        | 11       | 21       | 21       | 21       | 57       | 25       | 174 |              |                    |
| Sus                  | B / Yamagata                      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0   |              |                    |
|                      | B / Victoria                      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0   |              |                    |
|                      | B / no lineage                    | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1   |              |                    |

Table 1b. Influenza positive<sup>1</sup> cases reported<sup>2</sup> statewide and county by age group, Delaware 2014-2015

|                      | rmed Flu Cases<br>ge Group | Wk<br>40 | Wk<br>41 | Wk<br>42 | Wk<br>43 | Wk<br>44 | Wk<br>45 | Wk<br>46 | Wk<br>47 | Wk<br>48 | Wk<br>49* | Wk<br>50 | Wk<br>51 | Wk<br>52 | YTD | YTD<br>Total | YTD<br>County<br>% |
|----------------------|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|-----|--------------|--------------------|
| 111                  | 0-4 years                  | 0        | 1        | 1        | 2        | 2        | 3        | 4        | 6        | 6        | 8         | 11       | 42       | 49       | 135 |              |                    |
| STATEWIDE            | 5-24 years                 | 0        | 0        | 1        | 3        | 6        | 10       | 8        | 17       | 38       | 28        | 51       | 110      | 84       | 356 |              |                    |
| TEV                  | 25-49 years                | 0        | 0        | 0        | 0        | 1        | 3        | 5        | 7        | 13       | 29        | 24       | 46       | 79       | 207 | 1,004        |                    |
| TA                   | 50-64 years                | 0        | 0        | 0        | 0        | 1        | 0        | 1        | 5        | 8        | 7         | 8        | 22       | 47       | 99  | .,           |                    |
| 0,                   | 65+ years                  | 0        | 0        | 0        | 1        | 1        | 0        | 4        | 4        | 8        | 13        | 17       | 48       | 111      | 207 |              |                    |
|                      | 0-4 years                  | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 1         | 2        | 5        | 10       | 19  |              |                    |
| y the                | 5-24 years                 | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 2        | 4         | 10       | 17       | 26       | 60  |              |                    |
| w Cast<br>County     | 25-49 years                | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 2        | 4        | 6         | 4        | 18       | 28       | 63  | 269          | 26.8%              |
| New Castle<br>County | 50-64 years                | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 1        | 2        | 1         | 2        | 4        | 27       | 38  |              |                    |
| Z                    | 65+ years                  | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 1        | 2         | 6        | 24       | 55       | 89  |              |                    |
|                      | 0-4 years                  | 0        | 0        | 0        | 1        | 0        | 1        | 1        | 0        | 3        | 3         | 5        | 26       | 30       | 70  |              |                    |
| _                    | 5-24 years                 | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 6        | 12       | 12        | 22       | 64       | 50       | 167 |              |                    |
| Kent                 | 25-49 years                | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 1        | 3        | 7         | 13       | 17       | 48       | 90  | 428          | 42.6%              |
| ㅈ 호                  | 50-64 years                | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 2        | 1         | 2        | 12       | 15       | 32  |              |                    |
|                      | 65+ years                  | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 1        | 5         | 6        | 7        | 49       | 69  |              |                    |
|                      | 0-4 years                  | 0        | 1        | 1        | 0        | 2        | 2        | 3        | 6        | 3        | 4         | 4        | 11       | 9        | 46  | •            |                    |
| ž ž                  | 5-24 years                 | 0        | 0        | 1        | 3        | 6        | 9        | 8        | 10       | 24       | 12        | 19       | 29       | 8        | 129 | 307          | 30.6%              |
| Sussex<br>County     | 25-49 years                | 0        | 0        | 0        | 0        | 0        | 2        | 5        | 4        | 6        | 16        | 7        | 11       | 3        | 54  |              |                    |
| 80                   | 50-64 years                | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 4        | 4        | 5         | 4        | 6        | 5        | 29  |              |                    |
|                      | 65+ years                  | 0        | 0        | 0        | 0        | 1        | 0        | 4        | 3        | 6        | 6         | 5        | 17       | 7        | 49  |              |                    |

Based on patients with positive nucleic acid or viral culture test results reported to the Division of Public Health.

Reports are by the date the laboratory results are obtained. As a result, prior weeks' counts may be adjusted to reflect additional cases received.

The Division of Public Health Laboratory now has the capability to identify lineage for Influenza B. Since some laboratories in the state do not have this capability, these influenza cases will be categorized as Influenza B, no lineage identified.

Number of Cases 452 462 A (unsubtyped)

Figure 1. Confirmed cases of influenza by type and subtype/lineage, Delaware 2014-2015\*

Table 2. Influenza-related hospitalizations statewide and county, by age group, Delaware 2014-2015

|                      | italized Flu<br>s by Age Group | Wk<br>40 | Wk<br>41 | Wk<br>42 | Wk<br>43 | Wk<br>44 | Wk<br>45 | Wk<br>46 | Wk<br>47 | Wk<br>48 | Wk<br>49 | Wk<br>50 | Wk<br>51 | Wk<br>52 | YTD | YTD<br>Total | YTD<br>County<br>% |
|----------------------|--------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|--------------|--------------------|
|                      | 0-4 years                      | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 1        | 1        | 0        | 0        | 1        | 3        | 7   |              |                    |
| STATEWIDE            | 5-24 years                     | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 1        | 1        | 1        | 0        | 1        | 5   |              |                    |
| Ī                    | 25-49 years                    | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 2        | 1        | 6        | 6        | 15  | 166          |                    |
| Į.                   | 50-64 years                    | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 3        | 0        | 5        | 17       | 26  |              |                    |
| 0)                   | 65+ years                      | 0        | 0        | 0        | 1        | 1        | 0        | 2        | 0        | 0        | 4        | 12       | 26       | 67       | 113 |              |                    |
|                      | 0-4 years                      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 1   |              |                    |
| y te                 | 5-24 years                     | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 1        | 0        | 0        | 2   |              |                    |
| w Cast<br>County     | 25-49 years                    | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 2        | 1        | 4        | 4        | 11  | 90           | 54.2%              |
| New Castle<br>County | 50-64 years                    | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 1        | 0        | 0        | 13       | 15  |              |                    |
| Z                    | 65+ years                      | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 1        | 6        | 16       | 37       | 61  |              |                    |
|                      | 0-4 years                      | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 1        | 3   |              |                    |
|                      | 5-24 years                     | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 1        | 0        | 0        | 1        | 3   |              |                    |
| Kent                 | 25-49 years                    | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 2        | 3   | 48           | 28.9%              |
| 국 호                  | 50-64 years                    | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 4        | 4        | 9   |              |                    |
|                      | 65+ years                      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 1        | 2        | 26       | 30  |              |                    |
|                      | 0-4 years                      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 1        | 0        | 0        | 0        | 1        | 3   |              |                    |
| t še                 | 5-24 years                     | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0   |              |                    |
| Sussex               | 25-49 years                    | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 1   | 28           | 16.9%              |
| 80                   | 50-64 years                    | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 1        | 0        | 2   |              | 10.070             |
|                      | 65+ years                      | 0        | 0        | 0        | 0        | 1        | 0        | 2        | 0        | 0        | 2        | 5        | 8        | 4        | 22  |              |                    |

Table 3. Influenza-related deaths, Delaware 2014-2015

| Influenza- Related<br>Deaths | Wk<br>40 |   |   |   |   |   |   |   |   |   |   |   |   | YTD<br>Total |
|------------------------------|----------|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Deatils                      | 0        | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 3            |

Based on patients with positive nucleic acid or viral culture test results reported to the Delaware Division of Public Health.

Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-2005 through 2014-2015

| Influenza Season  | Total Annual<br>Influenza Cases |
|-------------------|---------------------------------|
| 2004 – 2005       | 995                             |
| 2005 – 2006       | 541                             |
| 2006 – 2007       | 508                             |
| 2007 – 2008       | 1,401                           |
| 2008 – 2009       | 738                             |
| 2009 – 2010       | 2,247                           |
| 2010 – 2011       | 1,470                           |
| 2011 – 2012       | 262                             |
| 2012 – 2013       | 1,773                           |
| 2013 – 2014       | 1,842                           |
| 2014 – 2015 (YTD) | 1,004                           |

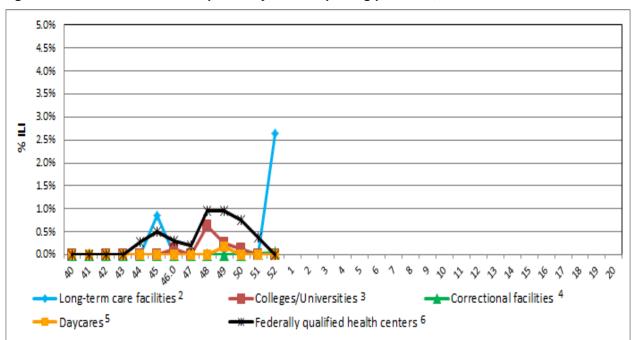
## U.S. Outpatient Influenza-Like Illness Surveillance Network (ILINet) Sentinel Providers

An ILINet (sentinel) provider conducts surveillance for 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 reported by sentinel providers<sup>1</sup> participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2014-2015

Figure 2 will not be shown until sufficient data are available from sentinel providers.

Figure 3. Influenza-like illness reported by ILINet reporting partners<sup>1</sup>, Delaware 2014-2015



<sup>1</sup> ILINet reporting partners include long-term care facilities, colleges / universities, correctional facilities, daycare facilities and federally qualified health centers.

 $<sup>^{\</sup>rm 2}$  % ILI= percentage of residents with ILI symptoms. Eight of 20 LTCFs reported.

<sup>&</sup>lt;sup>3</sup> % ILI= percentage of student visits for ILI; One university reported.

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

 $<sup>^{5}</sup>$  % ILI= percentage of children absent with ILI; No daycare provider reported.

<sup>&</sup>lt;sup>6</sup> % ILI= percentage of visits for ILI at FQHCs; LaRed (Seaford & Georgetown) and Henrietta Johnson Medical Center (Wilmington & Southbridge).

The regional baseline is calculated by CDC using non-influenza weeks from the previous three influenza seasons. Delaware is part of Region 3 that also includes DC, MD, PA, VA and WV.

Percentage of Emergency Department Visits Related to Flu 2014-2015 Flu Season, Week 52 (n=9,712 [total visits] and 309 [flu-related visits])

3.4
3.2
3
2.8
2.6
2.4
2.2
4
2.2
1
0.8
0.6

Figure 4. Percentage of Delaware emergency department visits related to influenza (flu)\*

\* Two syndromes are represented in this graph. Influenza-like illness (ILI) syndrome is defined as a chief complaint with fever and cough and/or sore throat. The flu syndrome is defined as any chief complaint regarding influenza.

#### **Summary of International Influenza Activity**

Globally influenza activity continued to increase in the northern hemisphere with influenza A(H3N2) viruses predominating so far. In the United States, flu activity continued to increase in intensity and expand geographically in many areas of the country. The severity of flu disease so far this season is similar to some previous seasons in which influenza A (H3N2) viruses have circulated predominantly. In Canada, ILI activity was within expected levels. Influenza detections continued to increase and influenza A(H3N2) and influenza A (not subtyped) have predominated. In Central American and the Caribbean, respiratory virus activity remained low, with the exception of Puerto Rico, where ILI activity was reported as high, but influenza detections have been low and stable. In Europe the intensity of influenza activity remained low in the majority of countries, but the number of countries with increased activity continued to rise compared to previous weeks. In eastern Asia, influenza activity continued to increase with influenza A(H3N2) virus predominating. In tropical Asia, influenza activity was low. In the southern hemisphere, influenza activity was at inter-seasonal level.

Reference: World Health Organization (WHO), 2014. Influenza Update number 227. Retrieved on January 2, 2015, from <a href="http://www.who.int/influenza/surveillance">http://www.who.int/influenza/surveillance</a> monitoring/updates/latest update GIP surveillance/en/ Reports are updated biweekly.

**NOTE:** The data provided do not reflect the total number of individuals who have been infected with the influenza virus in Delaware during the reporting period due to 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 is limited by capacity to processing a maximum of three specimens per day from each reporting entity.

The Delaware Division of Public Health (DPH) is committed to serving you better by providing the most accurate influenza data available. 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, call the DPH Office of Infectious Disease Epidemiology at 302-744-4990.
- For questions regarding influenza vaccination information, please call 302-744-1060.