



Delaware Weekly Influenza Report

Week 50 (December 7-13, 2014)

Delaware Division of Public Health

National Influenza Synopsis 2014-2015:

National data are updated Friday of each week. Please visit <http://www.cdc.gov/flu/weekly/> for the most current information. During week 50 (December 7-13, 2014), influenza activity continued to increase in the United States. The geographic spread of influenza in Guam and 29 states was reported as widespread; Puerto Rico and 14 states reported regional activity; the District of Columbia, the U.S. Virgin Islands and five states (Alaska, Arizona, Idaho, New Jersey and New Mexico) reported local activity; and two states (Oregon and Hawaii) reported sporadic influenza activity. Both national and state data are provisional and subject to change as additional reports are received.

Delaware Influenza Surveillance 2014-2015:

During week 50, there were 106 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 were below the regional baseline of 2.0%.

Level of Influenza Activity in Delaware, Week 50:

| | |
|---|---|
| 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. ³ | |
| 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. | |

¹ 2014-2015 Region 3 (DE, DC, MD, PA, VA, and WV) baseline = 2.0%.

² Laboratory-confirmed case = case confirmed by viral culture or PCR.

³ 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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Table 1a. Influenza positive¹ cases reported² statewide and county by subtype (A) or lineage (B)³, Delaware 2014-2015

| Confirmed Flu Cases by Subtype / Lineage | | Wk 40 | Wk 41 | Wk 42 | Wk 43 | Wk 44 | Wk 45 | Wk 46 | Wk 47 | Wk 48 | Wk 49 | Wk 50 | YTD | YTD Total | YTD County % |
|--|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----------|--------------|
| STATEWIDE | A / 2009 H1N1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 354 | |
| | A / 2012 H3N2 | 0 | 1 | 2 | 1 | 9 | 9 | 13 | 20 | 32 | 34 | 44 | 165 | | |
| | A / no subtype | 0 | 0 | 0 | 2 | 2 | 7 | 9 | 17 | 40 | 46 | 60 | 183 | | |
| | B / Yamagata | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | | |
| | B / Victoria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | B / no lineage | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 6 | | |
| New Castle County | A / 2009 H1N1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 13.8% |
| | A / 2012 H3N2 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 3 | 6 | 9 | 18 | 39 | | |
| | A / no subtype | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 1 | 7 | | |
| | B / Yamagata | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | | |
| | B / Victoria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | B / no lineage | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | | |
| Kent County | A / 2009 H1N1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 108 | 30.5% |
| | A / 2012 H3N2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 5 | 4 | 8 | 22 | | |
| | A / no subtype | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 16 | 23 | 38 | 83 | | |
| | B / Yamagata | 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 | | |
| | B / no lineage | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | | |
| Sussex County | A / 2009 H1N1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 197 | 55.6% |
| | A / 2012 H3N2 | 0 | 1 | 2 | 0 | 8 | 8 | 12 | 13 | 21 | 21 | 18 | 104 | | |
| | A / no subtype | 0 | 0 | 0 | 2 | 2 | 6 | 8 | 12 | 21 | 21 | 21 | 93 | | |
| | B / Yamagata | 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 | | |
| | B / no lineage | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | | |

Table 1b. Influenza positive¹ cases reported² statewide and county by age group, Delaware 2014-2015

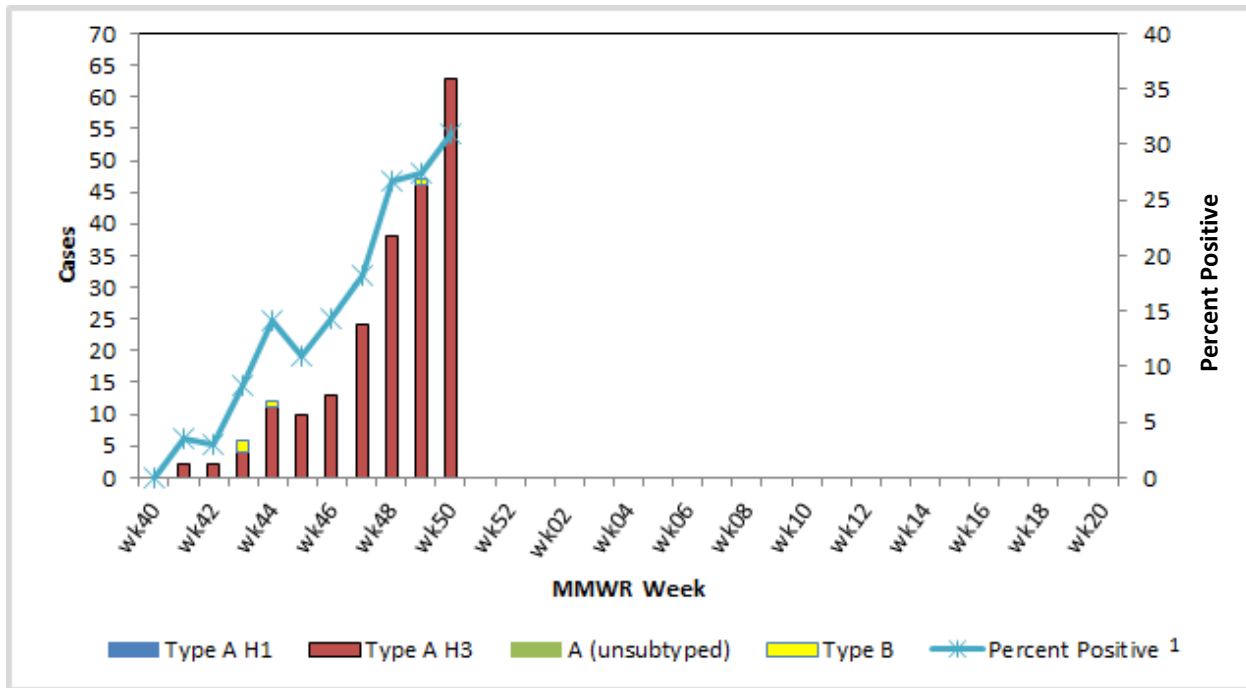
| Confirmed Flu Cases by Age Group | | Wk 40 | Wk 41 | Wk 42 | Wk 43 | Wk 44 | Wk 45 | Wk 46 | Wk 47 | Wk 48 | Wk 49* | Wk 50 | YTD | YTD Total | YTD County % |
|----------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-----|-----------|--------------|
| STATEWIDE | 0-4 years | 0 | 1 | 1 | 2 | 2 | 3 | 4 | 5 | 5 | 8 | 11 | 42 | 354 | |
| | 5-24 years | 0 | 0 | 1 | 3 | 6 | 11 | 8 | 16 | 38 | 27 | 49 | 159 | | |
| | 25-49 years | 0 | 0 | 0 | 0 | 1 | 3 | 5 | 7 | 13 | 26 | 23 | 78 | | |
| | 50-64 years | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 8 | 7 | 8 | 30 | | |
| | 65+ years | 0 | 0 | 0 | 1 | 1 | 0 | 4 | 4 | 8 | 12 | 15 | 45 | | |
| New Castle County | 0-4 years | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 49 | 13.8% |
| | 5-24 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 8 | 14 | | |
| | 25-49 years | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 4 | 5 | 4 | 16 | | |
| | 50-64 years | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 2 | 7 | | |
| | 65+ years | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 8 | | |
| Kent County | 0-4 years | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 3 | 3 | 5 | 14 | 108 | 30.5% |
| | 5-24 years | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | 12 | 12 | 22 | 53 | | |
| | 25-49 years | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 7 | 12 | 24 | | |
| | 50-64 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 5 | | |
| | 65+ years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 6 | 12 | | |
| Sussex County | 0-4 years | 0 | 1 | 1 | 0 | 2 | 2 | 3 | 5 | 2 | 4 | 4 | 24 | 197 | 55.6% |
| | 5-24 years | 0 | 0 | 1 | 3 | 6 | 10 | 8 | 9 | 24 | 12 | 19 | 92 | | |
| | 25-49 years | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 4 | 6 | 14 | 7 | 38 | | |
| | 50-64 years | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 4 | 5 | 4 | 18 | | |
| | 65+ years | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 3 | 6 | 6 | 5 | 25 | | |

¹ Based on patients with positive nucleic acid or viral culture test results reported to the Division of Public Health.

² Reports are by the date the laboratory results are obtained. As a result, prior weeks' counts may be adjusted to reflect additional cases received.

³ 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.

Figure 1. Confirmed cases¹ of influenza by type and subtype/lineage, Delaware 2014-2015*



¹ Based on patients with positive nucleic acid or viral culture test results reported to the Delaware Division of Public Health.

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

| Hospitalized Flu Cases by Age Group | | Wk 40 | Wk 41 | Wk 42 | Wk 43 | Wk 44 | Wk 45 | Wk 46 | Wk 47 | Wk 48 | Wk 49 | Wk 50 | YTD | YTD Total | YTD County % |
|-------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----------|--------------|
| STATEWIDE | 0-4 years | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 28 | |
| | 5-24 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 3 | | |
| | 25-49 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | | |
| | 50-64 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 4 | | |
| | 65+ years | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 4 | 10 | 18 | | |
| New Castle County | 0-4 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 39.3% |
| | 5-24 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | | |
| | 25-49 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | | |
| | 50-64 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | | |
| | 65+ years | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 6 | | |
| Kent County | 0-4 years | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 21.4% |
| | 5-24 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | | |
| | 25-49 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 50-64 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | | |
| | 65+ years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | | |
| Sussex County | 0-4 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 39.3% |
| | 5-24 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 25-49 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 50-64 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | | |
| | 65+ years | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 5 | 10 | | |

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

| Influenza- Related Deaths | Wk 40 | Wk 41 | Wk 42 | Wk 43 | Wk 44 | Wk 45 | Wk 46 | Wk 47 | Wk 48 | Wk 49 | Wk 50 | YTD Total |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 |

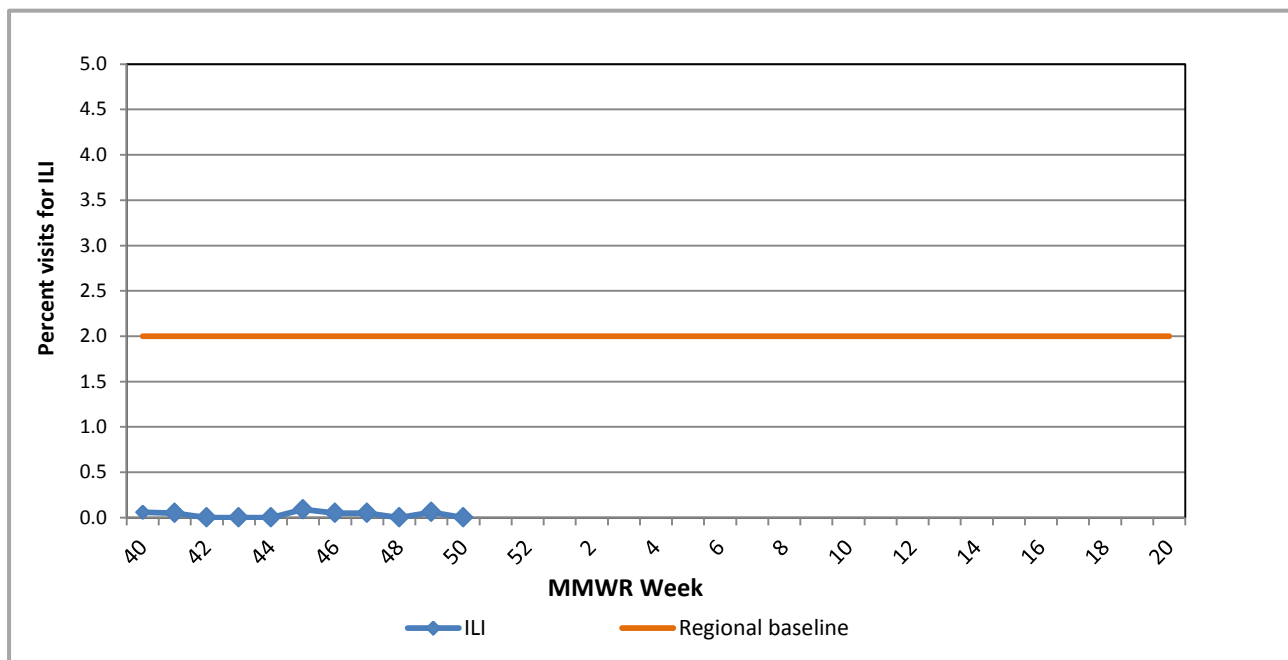
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-2005 through 2014-2015

| Influenza Season | Total Annual 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) | 354 |

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.

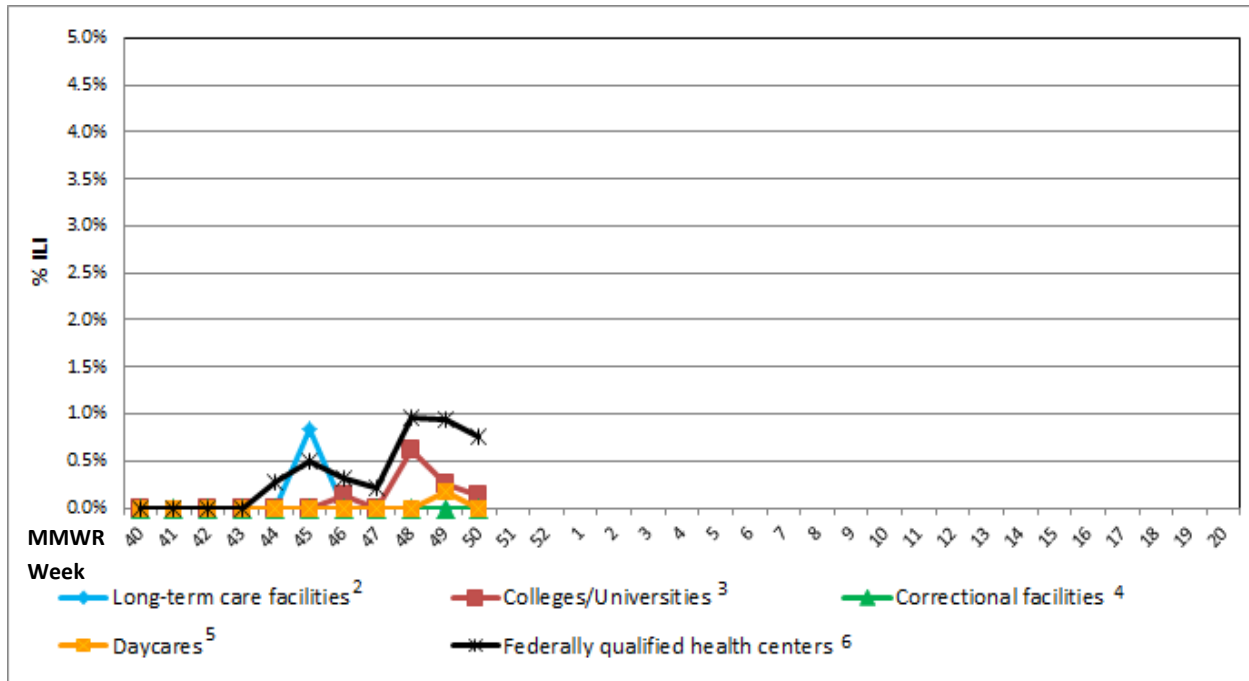
Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2014-2015



¹ Six of 16 sentinel providers reported.

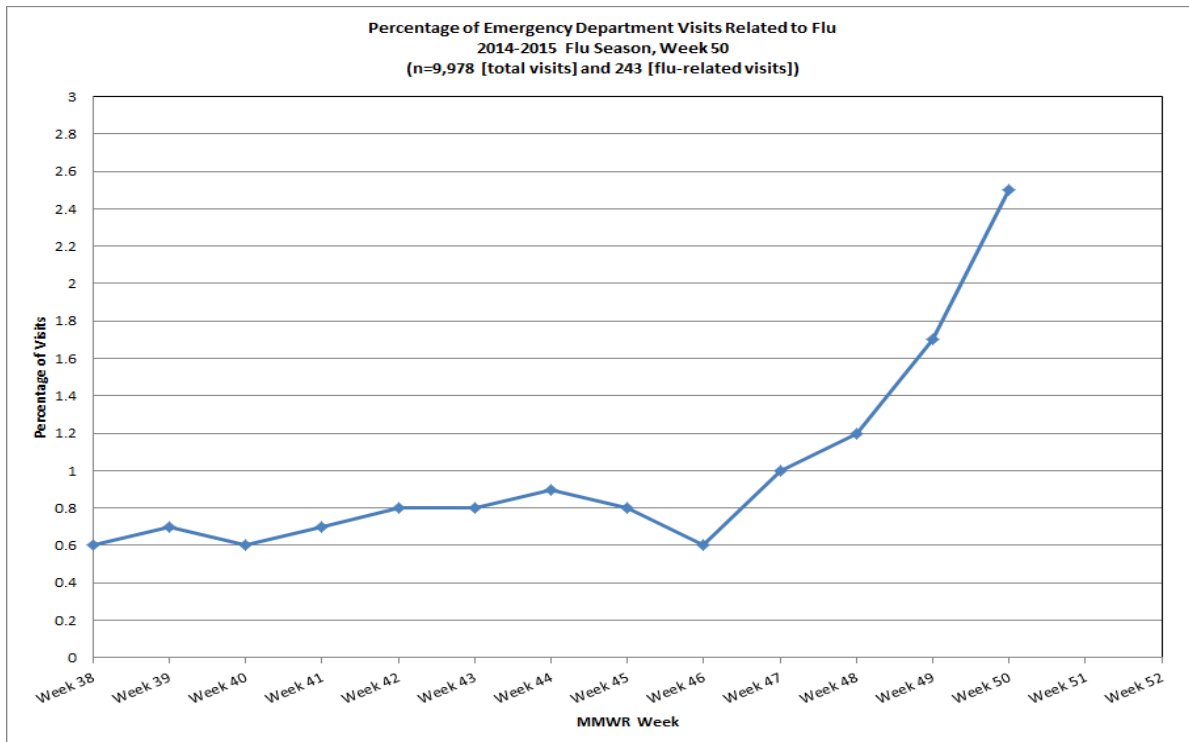
² Regional baseline is calculated by CDC using non-influenza weeks from the previous three influenza seasons. Delaware is a member of Region 3 that includes DE, DC, MD, PA, VA, and WV.

Figure 3. Influenza-like illness reported by ILINet reporting partners¹, Delaware 2014-2015



¹ ILINet reporting partners include long-term care facilities, colleges and universities, correctional facilities, daycare facilities and federally qualified health centers.
² % ILI= percentage of residents with ILI symptoms. Six of 20 LTCFs reported.
³ % ILI= percentage of student visits for ILI; Two universities reported.
⁴ % ILI= percentage of visits for ILI at the correctional facility; Eight of 10 facilities reported.
⁵ % ILI= percentage of children absent with ILI; One daycare provider reported.
⁶ % ILI= percentage of visits for ILI at FQHCs; LaRed (Seaford & Georgetown) and Henrietta Johnson Medical Center (Wilmington & Southbridge).
⁷ 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.

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 increased in the northern hemisphere and in several countries has passed the seasonal threshold. In North America, the levels of influenza activity, mainly associated with A(H3N2) virus, passed the seasonal threshold. In the United States, influenza-like illness (ILI) activity was 2.6% which is above the national baseline of 2.0%. The highest activity levels were seen in the southern states. In Canada, influenza detections increased to 15.2% positivity (compared to 4.6% previously) and hospitalizations due to influenza also increased. In Mexico, acute respiratory infections activity increased slightly while influenza activity remained low. Influenza activity increased in some countries of the Caribbean, decreased in Central America and was low in the tropical countries of South America. In Europe, influenza activity remained low. In eastern Asia, influenza activity increased with influenza A(H3N2) predominating. In northern and western Africa influenza activity increased with influenza B virus predominant. In tropical Asia, influenza activity was low. In the southern hemisphere, influenza activity remained at a low level, but ILI activity remained high in several Pacific Islands.

Reference: World Health Organization (WHO), 2014. Influenza Update number 226. Retrieved on December 18, 2014, from http://www.who.int/influenza/surveillance_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 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 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 flu.delaware.gov or <http://dhss.delaware.gov/dhss/dph/dpc/immunize-flu.html> 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.