



Delaware Weekly Influenza Report

MMWR Week 44 (October 28 – November 3, 2018)

Delaware Division of Public Health

National Influenza Synopsis 2018-2019:

National data are updated Friday of each week. Please visit <http://www.cdc.gov/flu/weekly/> for the most current information. Influenza activity in the United States remains low, although small increases in activity were reported. Influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B viruses continue to co-circulate, with influenza A(H1N1)pdm09 viruses reported most commonly by public health laboratories since September 30, 2018. **Regional influenza activity** was reported by **Maryland** and Texas. **Local influenza activity** was reported by Guam and six states (Connecticut, Kentucky, Massachusetts, New Hampshire, North Dakota and Oregon). **Sporadic influenza activity** was reported by the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 40 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, **Delaware**, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, **New Jersey**, New Mexico, New York, North Carolina, Ohio, Oklahoma, **Pennsylvania**, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, Wisconsin and Wyoming). **No influenza activity** was reported by Mississippi and Virginia. Both national and state data are provisional and subject to change as additional reports are received.

Delaware Influenza Surveillance 2018-2019:

During MMWR Week 44, there were 19 laboratory-confirmed cases of influenza reported among Delaware residents, bringing the total to 42 for the 2018-2019 season. Reports of influenza-like illness (ILI) received from participating providers, facilities and institutions in Delaware show ILI is 0.15% compared with Delaware’s 2018-2019 baseline of 2.0%. Nationally, ILI is 1.8%, below the 2018-2019 national baseline of 2.2%.

Level of Influenza Activity in Delaware, MMWR Week 44:

| | |
|---|--|
| 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. | |
| <p>No Activity: No laboratory-confirmed cases of influenza and no reported increase in the number of cases of ILI.</p> <p>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.</p> <p>Local: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state.</p> <p>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</p> <p>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.</p> | |

¹ 2018-2019 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 2018-19

| Confirmed Flu Cases by Subtype / Lineage | | Week 40 | Week 41 | Week 42 | Week 43 | Week 44 | YTD | YTD Total | YTD County % |
|--|----------------|---------|---------|---------|---------|---------|-----|-----------|--------------|
| STATEWIDE | A / 2009 H1N1 | 1 | 0 | 1 | 4 | 2 | 8 | 42 | |
| | A / 2012 H3N2 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | A / no subtype | 4 | 3 | 2 | 3 | 17 | 29 | | |
| | Co-infection | 0 | 1 | 0 | 1 | 0 | 2 | | |
| | B / Yamagata | 0 | 0 | 2 | 0 | 0 | 2 | | |
| | B / Victoria | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | B / no lineage | 1 | 0 | 0 | 0 | 0 | 1 | | |
| New Castle County | A / 2009 H1N1 | 1 | 0 | 0 | 3 | 1 | 5 | 14 | 33.3% |
| | A / 2012 H3N2 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | A / no subtype | 1 | 1 | 0 | 3 | 4 | 9 | | |
| | Co-infection | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | B / Yamagata | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | B / Victoria | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | B / no lineage | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Kent County | A / 2009 H1N1 | 0 | 0 | 0 | 1 | 1 | 2 | 20 | 47.6% |
| | A / 2012 H3N2 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | A / no subtype | 3 | 2 | 2 | 0 | 9 | 16 | | |
| | Co-infection | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | B / Yamagata | 0 | 0 | 2 | 0 | 0 | 2 | | |
| | B / Victoria | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | B / no lineage | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Sussex County | A / 2009 H1N1 | 0 | 0 | 1 | 0 | 0 | 1 | 8 | 19.0% |
| | A / 2012 H3N2 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | A / no subtype | 0 | 0 | 0 | 0 | 4 | 4 | | |
| | Co-infection | 0 | 1 | 0 | 1 | 0 | 2 | | |
| | B / Yamagata | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | B / Victoria | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | B / no lineage | 1 | 0 | 0 | 0 | 0 | 1 | | |

Table 1b. Influenza positive¹ cases reported² statewide and county by age group, Delaware 2018-19

| Confirmed Flu Cases by Age Group | | Week 40 | Week 41 | Week 42 | Week 43 | Week 44 | YTD | YTD Total | YTD County % |
|----------------------------------|-------------|---------|---------|---------|---------|---------|-----|-----------|--------------|
| STATEWIDE | 0-4 years | 0 | 1 | 1 | 0 | 3 | 5 | 42 | |
| | 5-24 years | 1 | 1 | 2 | 1 | 4 | 9 | | |
| | 25-49 years | 3 | 1 | 0 | 2 | 4 | 10 | | |
| | 50-64 years | 0 | 1 | 2 | 2 | 3 | 8 | | |
| | 65+ years | 2 | 0 | 0 | 3 | 5 | 10 | | |
| | | | | | | | | | |
| New Castle County | 0-4 years | 0 | 0 | 0 | 0 | 1 | 1 | 14 | 33.3% |
| | 5-24 years | 0 | 0 | 0 | 0 | 1 | 1 | | |
| | 25-49 years | 2 | 0 | 0 | 2 | 0 | 4 | | |
| | 50-64 years | 0 | 1 | 0 | 1 | 2 | 4 | | |
| | 65+ years | 0 | 0 | 0 | 3 | 1 | 4 | | |
| | | | | | | | | | |
| Kent County | 0-4 years | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 47.6% |
| | 5-24 years | 0 | 1 | 2 | 0 | 3 | 6 | | |
| | 25-49 years | 1 | 1 | 0 | 0 | 3 | 5 | | |
| | 50-64 years | 0 | 0 | 2 | 1 | 0 | 3 | | |
| | 65+ years | 2 | 0 | 0 | 0 | 4 | 6 | | |
| | | | | | | | | | |
| Sussex County | 0-4 years | 0 | 1 | 1 | 0 | 2 | 4 | 8 | 19.0% |
| | 5-24 years | 1 | 0 | 0 | 1 | 0 | 2 | | |
| | 25-49 years | 0 | 0 | 0 | 0 | 1 | 1 | | |
| | 50-64 years | 0 | 0 | 0 | 0 | 1 | 1 | | |
| | 65+ years | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | | | | | | | | |

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, those influenza cases are categorized as Influenza B, no lineage identified.

Figure 1. Confirmed cases¹ of influenza by type and subtype/lineage, Delaware 2018-2019 influenza season*

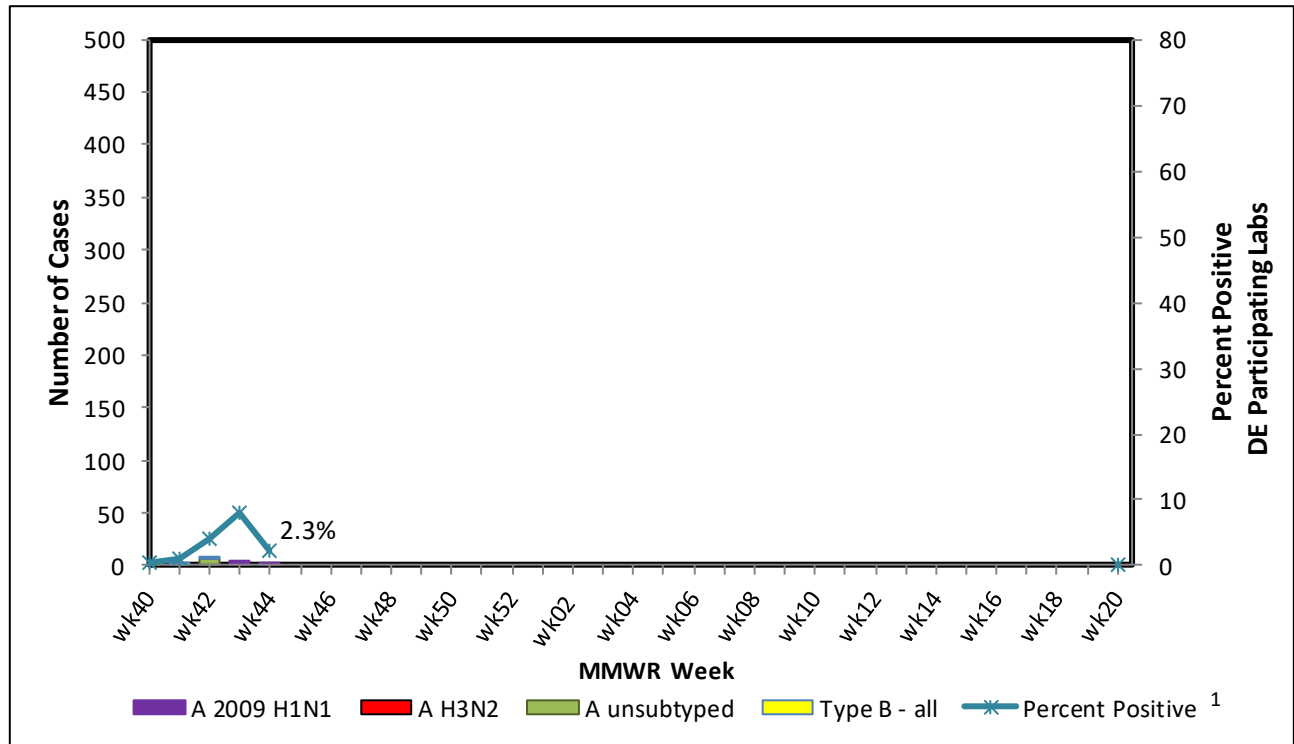


Table 2. Influenza-related hospitalizations statewide and county, by age group, Delaware 2018-19

| Hospitalized Flu Cases by Age Group | | Week 40 | Week 41 | Week 42 | Week 43 | Week 44 | YTD | YTD Total | YTD County % |
|-------------------------------------|-------------|---------|---------|---------|---------|---------|-----|-----------|--------------|
| STATEWIDE | 0-4 years | 0 | 0 | 1 | 0 | 0 | 1 | 15 | |
| | 5-24 years | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 25-49 years | 0 | 1 | 0 | 1 | 1 | 3 | | |
| | 50-64 years | 0 | 0 | 1 | 2 | 1 | 4 | | |
| | 65+ years | 0 | 0 | 0 | 2 | 5 | 7 | | |
| New Castle County | 0-4 years | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 33.3% |
| | 5-24 years | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 25-49 years | 0 | 0 | 0 | 1 | 0 | 1 | | |
| | 50-64 years | 0 | 0 | 0 | 1 | 0 | 1 | | |
| | 65+ years | 0 | 0 | 0 | 2 | 1 | 3 | | |
| Kent County | 0-4 years | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 53.3% |
| | 5-24 years | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 25-49 years | 0 | 1 | 0 | 0 | 1 | 2 | | |
| | 50-64 years | 0 | 0 | 1 | 1 | 0 | 2 | | |
| | 65+ years | 0 | 0 | 0 | 0 | 4 | 4 | | |
| Sussex County | 0-4 years | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 13.3% |
| | 5-24 years | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 25-49 years | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 50-64 years | 0 | 0 | 0 | 0 | 1 | 1 | | |
| | 65+ years | 0 | 0 | 0 | 0 | 0 | 0 | | |

Table 3. Influenza-related deaths, Delaware 2018-19

| Influenza-Related Deaths | Week 40 | Week 41 | Week 42 | Week 43 | Week 44 | YTD |
|--------------------------|---------|---------|---------|---------|---------|-----|
| | 0 | 0 | 0 | 0 | 0 | 0 |

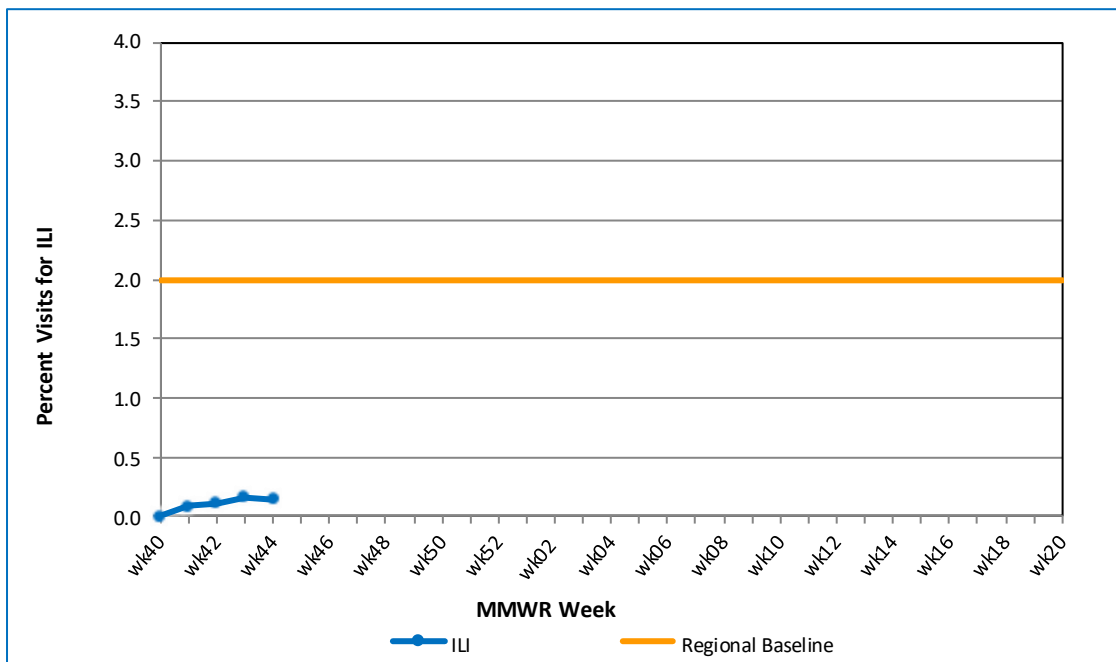
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2018-19

| 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 | 1,479 |
| 2011 – 2012 | 267 |
| 2012 – 2013 | 1,781 |
| 2013 – 2014 | 1,842 |
| 2014 – 2015 | 2,390 |
| 2015 – 2016 | 1,842 |
| 2016 – 2017 | 4,590 |
| 2017 – 2018 | 9,051 |
| 2018 – 2019 (YTD) | 42 |

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 Delaware 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.

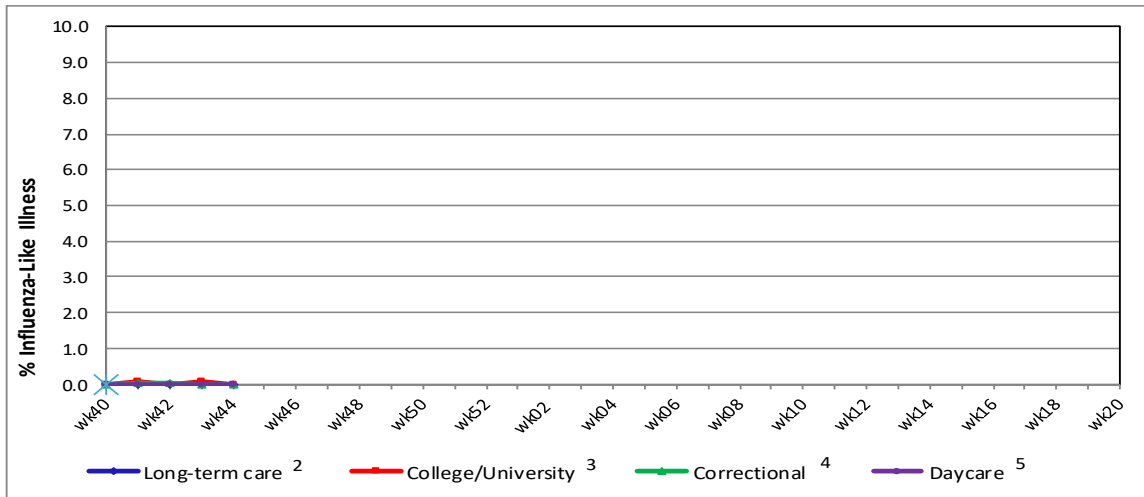
Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2018-19



¹ Ten of 12 sentinel providers reported.

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

Figure 3. Influenza-like illness reported by influenza surveillance ILI reporting partners¹, Delaware 2018-19



- ¹ ILINet reporting partners include long-term care facilities, colleges / universities, correctional facilities and daycare facilities.
- ² % ILI= percentage of residents with ILI symptoms. Six long-term care facilities reported.
- ³ % ILI= percentage of student visits for ILI; Two universities reported.
- ⁴ % ILI= percentage of visits for ILI at the correctional facility; Nine correctional facilities reported.
- ⁵ % ILI= percentage of children absent with ILI; One daycare provider reported.

Figure 4a. Percentage of emergency department (ED) visits due to ILI/Flu by MMWR Week, Delaware, 2018-19

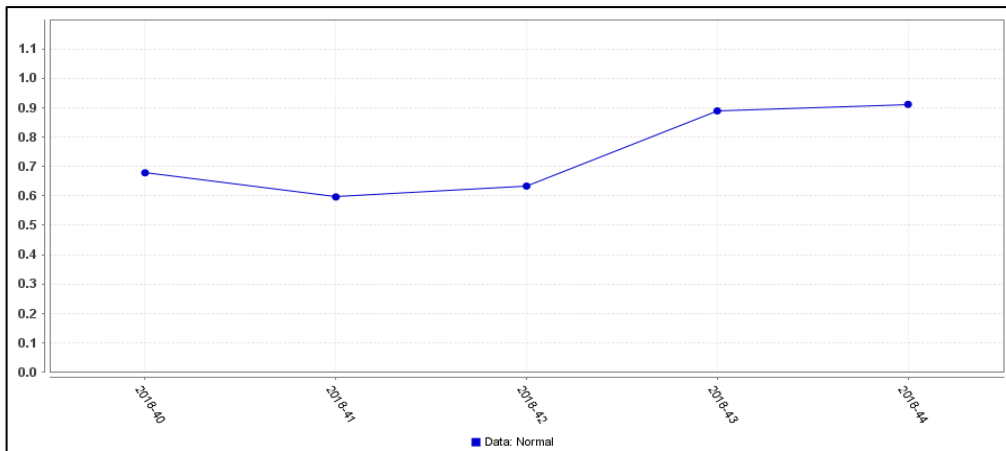
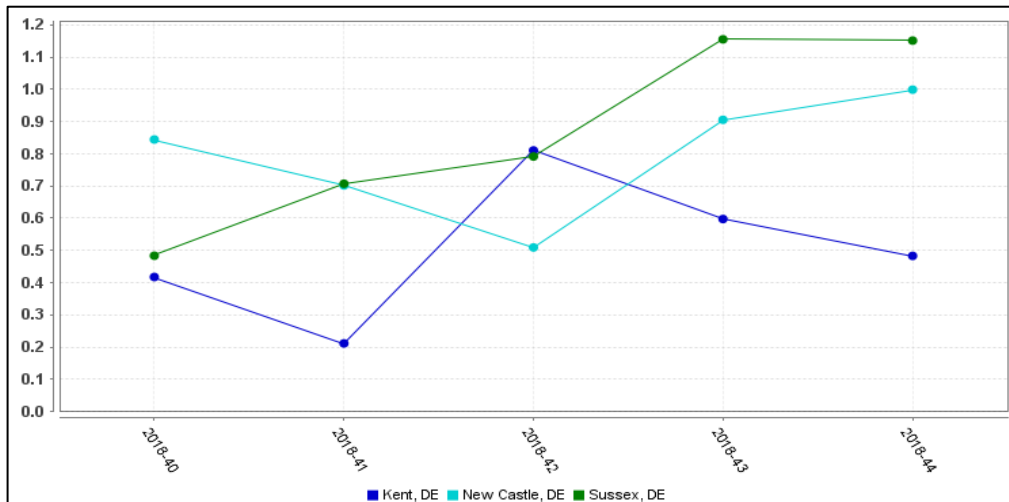


Figure 4b. County-specific percentages of ED visits due to ILI/Flu by MMWR Week, Delaware 2018-19



Summary of International Influenza Activity

Worldwide, seasonal influenza subtype A viruses accounted for the majority of detections.

In the temperate zone of the northern hemisphere influenza activity remained at inter-seasonal levels.

For North America, influenza activity continued at low levels in Canada and the United States, with influenza A(H1N1)pdm09 and B co-circulating. In México, increased influenza and SARI activity was reported with influenza A(H1N1)pdm09 predominating.

In the Caribbean, Influenza virus activity decreased, and low RSV activity was reported throughout most of the sub-region. In Central America, epidemiologic indicators remained at moderate levels and influenza circulation was reported to increase throughout the sub-region.

Throughout the European Region, influenza activity was low. Both influenza A and B type viruses were detected at low numbers.

Increased influenza detections were reported in some countries of Southern and Southeast Asia.

In the temperate zones of the southern hemisphere, influenza activity appeared to decrease overall.

Reference: World Health Organization (WHO), 2017. Influenza Update number 327 (10/29/2018). Retrieved October 31, 2018, from http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/ Reports are updated biweekly.

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 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, up-to-date influenza data available.

- For general information on influenza, visit flu.delaware.gov or <http://dhss.delaware.gov/dhss/dph/dpc/immunize-flu.html>.
- For specific information on DPH flu clinics, visit <http://dhss.delaware.gov/dhss/dph/fluclinics.html>.
- For questions on Delaware's weekly flu report, call the DPH Office of Infectious Disease Epidemiology: 302-744-4990.
- For questions regarding influenza vaccination, please call 302-744-1060.