

Delaware Weekly Influenza Report MMWR WEEK 11 (March 8, 2020- March 14, 2020) Delaware Division of Public Health

National Influenza Synopsis 2019-2020:

National data are updated Friday of each week. Please visit http://www.cdc.gov/flu/weekly/ for the most current information. Geographic spread of influenza during MMWR WEEK 11 (March 8, 2020- March 14, 2020) was reported as follows:

- Sporadic Influenza Activity was reported in the U.S. Virgin Islands
- Local Influenza Activity was reported in the District of Columbia and one state (Hawaii)
- Regional Influenza Activity was reported in two states (Minnesota and Wyoming)
- Widespread Influenza Activity was reported Puerto Rico and 47 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia and Wisconsin)
- Guam did not report.

Summary of International Influenza Activity:

- In the temperate zone of the northern hemisphere, respiratory illness indicators and influenza activity remained elevated overall.
 - o In North America, influenza activity remained elevated influenza A(H1N1)pdm09 and B viruses co-circulating.
 - In Europe, influenza activity continued to increase across the region but appeared to have peaked in some countries.
 - o In Central Asia, influenza activity decreased with detections of all seasonal influenza subtypes.
 - o In Northern Africa, influenza activity continued to increase in Algeria and Tunisia, with detections of influenza A(H1N1)pdm09 and B viruses.
 - o In Western Asia, influenza activity remained elevated overall, though in some countries activity returned to low levels.
 - o In East Asia, influenza-like illness (ILI) and influenza activity appeared to decrease overall.
- In the Caribbean and Central American countries, influenza activity was low across reporting countries with some exceptions. In Mexico, influenza activity appeared to decrease, with influenza A(H1N1)pdm09 viruses most frequently detected. In tropical South American countries, influenza activity remained low.
- In tropical Africa, influenza detections were low across reporting countries.
- In Southern Asia, influenza activity was low overall, though remained elevated in Afghanistan.
- In South East Asia, influenza activity continued to be reported in some countries.
- In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels.
- Worldwide, seasonal influenza A viruses accounted for the majority of detections

Reference: World Health Organization (WHO), 2017. Influenza Update number 362 (03022020). Retrieved February 16, 2020, from

http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/

Reports are updated biweekly.

Delaware Influenza Surveillance 2019-2020:

During MMWR WEEK 11, there were 395 laboratory-confirmed cases of influenza reported among Delaware Residents. Reports of influenza-like-illness (ILI) received from participating providers, facilities, and institutions in Delaware show ILI is 2.28 % compared to Delaware's 2019-2020 baseline of 1.9%. Nationally, 5.8% of visits to a healthcare provider were for ILI, which is an increase from last week, and is still above the 2019-2020 national baseline of 2.4%. All regions remain above their baselines.

Level of Influenza Activity in Delaware, MMWR WEEK 11:

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.

CDC Definitions:

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.

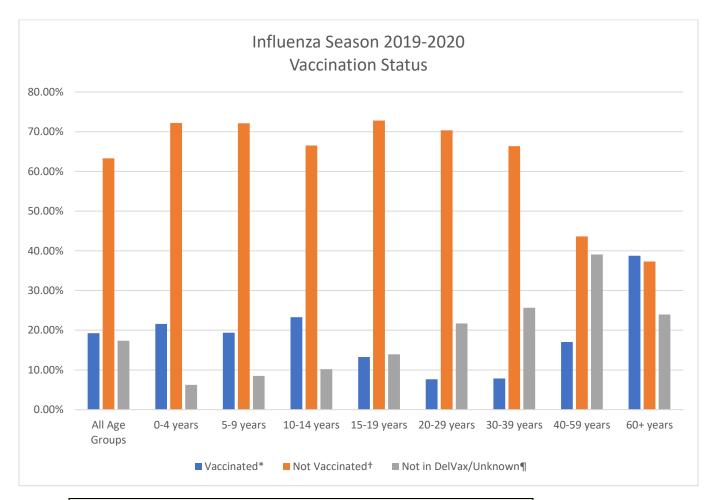
Regional: Outbreaks of influenza or increases in ILI and recent laboratory-confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions.³

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.

Summary of Figures for the MMWR WEEK 11 Report:

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- Figure 3B: County-Specific Percentage of ED visits Due to ILI/Influenza by MMRW Week, Delaware 2019-2020

Table 1: Influenza Season 2019-2020 – "Vaccination Status of Confirmed Cases"



*Received influenza vaccination this season per DelVax

†Not vaccinated for influenza this season per DelVax

¶No record in the Delaware Immunization Registry (DelVax)

Table 1A: Comparison of the 2018-2019 MMWR WEEK 11 and the 2019-2020 MMWR WEEK 11 Confirmed¹ Influenza Cases Reported Statewide by County and Age Group

| Confirmed Flu Cases by Age Group | | 2018-2019 Influenza Season | | | | | | 2019-2020 Influenza Season | | | | | |
|--|-------|----------------------------|-----------------|-----------------------------|------------------|------------------------------------|------------|----------------------------|-----------------------------|------------------|------------------------------------|--|--|
| | | WEEK 11 | Total Counts | County Percentage (%) | YTD ² | YTD County Percentage (%) | WEEK 11 | Total Counts | County Percentage (%) | YTD ² | YTD County Percentage (%) | | |
| DE | 0-4 | 116 | 478 | | 5587 | | 78 | 395 | | 6862 | | | |
| | 5-9 | 63 | | | | | 50 | | | | | | |
| | 10-14 | 28 | | | | | 29 | | | | | | |
| STATEWIDE | 15-19 | 18 | | | | | 25 | | | | | | |
| ATE | 20-29 | 33 | | | | | 45 | | | | | | |
| ıs | 30-39 | 38 | | | | | 43 | | | | | | |
| | 40-59 | 68 | | | | | 67 | | | | | | |
| | 60+ | 114 | | | | | 62 | | | | | | |
| | 0-4 | 41 | 172 | 38.68 | 2161 | 38.68 | 36 | 151 | 38.23 | 3114 | | | |
| ₹ | 5-9 | 17 | | | | | 7 | | | | | | |
| n n | 10-14 | 9 | | | | | 5 | | | | | | |
| New Castle County | 15-19 | 6 | | | | | 7 | | | | 45.38 | | |
| astl | 20-29 | 10 | | | | | 25 | | | | | | |
| ς̈́ | 30-39 | 14 | | | | | 20 | | | | | | |
| Š | 40-59 | 28 | | | | | 27 | | | | | | |
| | 60+ | 47 | | | | | 24 | | | | | | |
| | 0-4 | 38 | 139 | 36.01 | 1453 | 36.01 | 25 | 130 | 32.91 | 1747 | 25.46 | | |
| | 5-9 | 30 | | | | | 24 | | | | | | |
| ıty | 10-14 | 8 | | | | | 9 | | | | | | |
| no | 15-19 | 6 | | | | | 7 | | | | | | |
| Kent County | 20-29 | 13 | | | | | 13 | | | | | | |
| જ | 30-39 | 7 | | | | | 14 | | | | | | |
| | 40-59 | 18 | | | | | 22 | | | | | | |
| | 60+ | 19 | | | | | 16 | | | | | | |
| | 0-4 | 37 | 167 | 35.31 | 1973 | 35.31 | 13 | 114 | 28.86 | 2001 | 29.16 | | |
| Sussex County | 5-9 | 16 | | | | | 19 | | | | | | |
| | 10-14 | 11 | | | | | 15 | | | | | | |
| | 15-19 | 6 | | | | | 11 | | | | | | |
| | 20-29 | 10 | | | | | 7 | | | | | | |
| Sus | 30-39 | 17 | | | | | 9 | | | | | | |
| | 40-59 | 22 | | | | | 18 | | | | | | |
| | 60+ | 48 | | | | | 22 | | | | | | |

¹Influenza Cases are confirmed via PCR testing

²YTD stands for "Year to Date" and represents the cumulative number of cases through the current MMWR Week being assessed for the 2018-19 and 2019-20 influenza seasons, respectively.

Table 1B: Comparison of the 2018-2019 MMWR WEEK 11 and the 2019-2020 MMWR WEEK 11 Confirmed¹ Influenza Cases Reported Statewide by County and subtype/lineage

| Confirmed Flu Cases by Subtype / Lineage | | 2018-2019 Ini | fluenza Season | 2019-2020 Influenza Season | | | |
|--|---------------------------|---------------|----------------|----------------------------|--------------|--|--|
| | | WEEK 11 | Total Counts | WEEK 11 | Total Counts | | |
| STATEWIDE | A / 2009 H1N1 | 30 | | 335 | | | |
| | A / 2012 H3N2 | 54 | | 0 | | | |
| | A / no subtype | 377 | | 248 | | | |
| | Co-infection | 0 | 478 | 0 | 395 | | |
| TAT | B / Yamagata | 0 | | 0 | | | |
| | B / Victoria | 0 | | 0 | | | |
| | B / no lineage | 15 | | 112 | | | |
| | A / 2009 H1N1 | 11 | | 22 | | | |
| | A / 2012 H3N2 | 26 | | 0 | | | |
| <u>.</u> | A / no subtype | 133 | | 96 | | | |
| Cast | Co-infection | 0 | 172 | 0 | 151 | | |
| New Castle County | B / Yamagata | 0 | | 0 | | | |
| | B / Victoria | 1 | | 0 | | | |
| | B / no lineage | 1 | | 33 | | | |
| | A / 2009 H1N1 | 10 | | 8 | | | |
| | A / 2012 H3N2 | 13 | | 0 | | | |
| t t | A / no subtype | 115 | | 88 | | | |
| Kent County | Co-infection ² | 0 | 139 | 0 | 130 | | |
| | B / Yamagata | 0 | | 0 | | | |
| | B / Victoria | 0 | | 0 | | | |
| | B / no lineage | 1 | | 34 | | | |
| Sussex County | A / 2009 H1N1 | 9 | | 5 | | | |
| | A / 2012 H3N2 | 15 | | 0 | | | |
| | A / no subtype | 129 | | 64 | | | |
| | Co-infection | 0 | 167 | 0 | 114 | | |
| | B / Yamagata | 0 | | 0 | | | |
| | B / Victoria | 1 | | 0 | | | |
| | B/ no lineage | 13 | | 45 | | | |

¹Influenza Cases are confirmed via PCR testing

Confirmed Cases of Influenza by Type and Subtype/Lineage, Delaware 2019-2020 Influenza Season

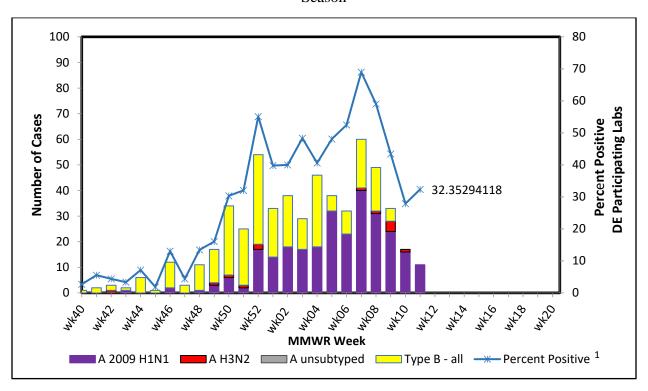


Figure 1: During MMWR WEEK 11 for the 2019-2020 Influenza season, there were 11 confirmed cases of Influenza reported by ILINet providers. Eleven were identified as Flu A/H1N1. The percent positive for samples tested was 32.35 %.

¹Percent Positive represents the amount of specimens that tested positive for influenza out of all samples tested for that MMWR week.

Table 2: Comparison of the 2018-2019 MMWR WEEK 11 and the 2019-2020 MMWR WEEK 11 Influenza-related Hospitalizations and Deaths Statewide

| Hospitalizations and Deaths due | 2 | 018-2019 | Influenza Se | ason | 2019-2020 Influenza Season | | | | |
|---------------------------------|------------|----------------------------|---|--|----------------------------|----------------------------|--|--|--|
| to Influenza | WEEK 11 | YTD Totals ¹ | Percentage of Confirmed Cases (%) ² | YTD Percentage of Confirmed Cases (%) ³ | WEEK 11 | YTD Totals ¹ | Percentage of Confirmed Case (%) ² | YTD Percentage of Confirmed Cases (%) ³ | |
| Hospitalizations | 60 | 781 | 12.55 | 13.9 | 20 | 353 | 5.06 | 5.14 | |
| Deaths | 0 | 14 | 0 | .2 | 0 | 11 | 0 | .16 | |

¹YTD stands for "Year to Date" and represents the cumulative number of cases through the current MMWR Week that were hospitalized or died

Table 3: Annual Number of Influenza Cases Reported by Flu Season, Delaware 2004-05 through 2019-

| 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 | 9,050 | | | | |
| 2018 - 2019 | 6,387 | | | | |
| 2019 - 2020 (YTD) | <mark>6,862</mark> | | | | |

²Percentage of cases confirmed during the single MMWR Week

³Percentage of cases for the cumulative count of confirmed cases through the influenza season to the current MMWR Week.

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.

Percentage of Visits for Influenza-Line Illness Reported by Sentinel Providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2019-2020

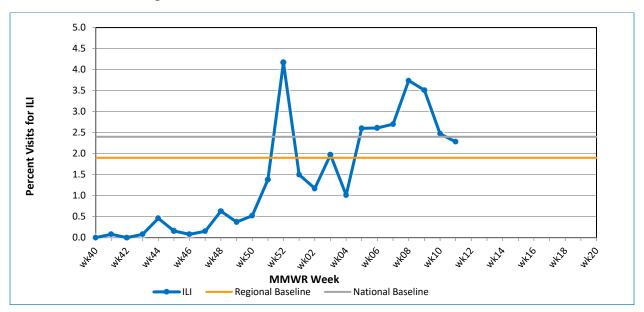


Figure 2: Delaware's regional baseline² for healthcare visits relating to ILI symptoms in the 2019-2020 Influenza Season is 1.9% and the national baseline³ is 2.4%. In MMWR WEEK 11, the amount of ILI related visits reported by sentinel providers decreased from 2.47% to 2.28% for WEEK 11.

¹seven of twelve sentinel providers reported

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

³The National baseline is calculated by the CDC using non-influenza weeks from the previous three influenza seasons.

Percentage of Emergency Care Visits Due to ILI/Influenza by MMWR Week, Delaware 2019-2020

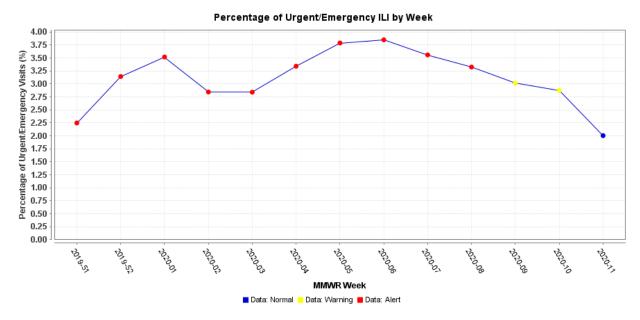


Figure 3A: Syndromic data collected from ESSENCE shows that in the weeks preceding the start of the 2019-2020 Influenza season and through MMWR WEEK 11, there is a decreasing trend in the percentage of ED visits due to ILI/Flu symptoms.

County-Specific Percentage of ED visits Due to ILI/Influenza by MMRW Week, Delaware 2019-20

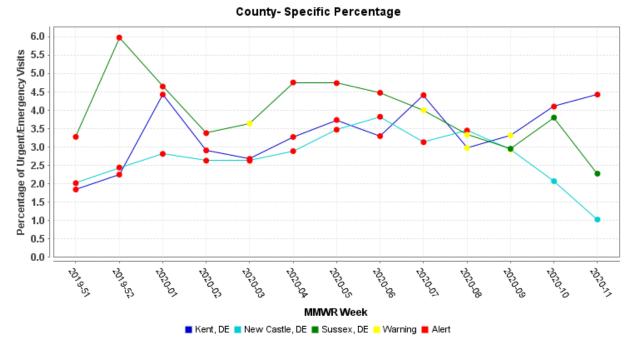


Figure 3B: Syndromic data collected from ESSENCE shows that in the weeks preceding the start of the 2019-2020 Influenza season and through MMWR WEEK 11 stratified by Delaware's three counties.

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 <u>flu.delaware.gov</u> or <u>http://dhss.delaware.gov/dhss/dph/dpc/immunize-flu.html.</u>
- 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 at 302-744-4990.
- For questions regarding influenza vaccination, please call 302-744-1060.