

Delaware Weekly Influenza Report MMWR Week 52 (December 20, 2020-December 26, 2020) Delaware Division of Public Health

National Influenza Synopsis 2020-2021:

National data are updated Friday of each week. Please visit https://www.cdc.gov/flu/weekly/ for the most current information. The percentage of respiratory specimens testing positive increase to 0.3% this week. No new influenza-associated pediatric deaths were reported to the CDC this week. The total for the 2020-2021 season is one influenza associated pediatric death. For this flu season, geographic spread of influenza will not be reported per official CDC communication.

Summary of International Influenza Activity:

- The current influenza surveillance data should be interpreted with caution as the ongoing COVID-19 pandemic has influenced to varying extents health seeking behaviors, staffing/routines in sentinel sites, as well as testing priorities and capacities in Member States. The various hygiene and physical distancing measures implemented by Member States to reduce SARS-CoV-2 virus transmission have likely played a role in reducing influenza virus transmission.
- Globally, despite continued or even increased testing for influenza in some countries, influenza activity remained at lower levels than expected for this time of the year.
- In the temperate zone of the northern hemisphere, influenza activity remained below interseasonal levels, though sporadic detections of influenza A and B viruses were reported in some countries.
- In the temperate zones of the southern hemisphere, influenza activity was reported at interseasonal level.
- In the Caribbean and Central American countries, sporadic influenza B detections were reported in some reporting countries. Severe acute respiratory infection (SARI) activity, likely due to COVID-19, continued to decrease in most reporting countries.
- In tropical South America, there were no influenza detections in this reporting period.
- In tropical Africa, influenza activity was reported in some countries of Western Africa.
- In Southern Asia, influenza detections continued to be reported in Afghanistan and India.
- In South East Asia, influenza detections of predominately influenza A(H3N2) continued to be reported in Cambodia, Lao People's Democratic Republic (PDR) and Thailand.
- Worldwide, influenza A and B viruses were detected in similar proportions.

Sources:

Centers for Disease Control and Prevention (CDC). 2020. Decreased Influenza Activity During the COVID-19 Pandemic — United States, Australia, Chile, and South Africa, 2020. https://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/

Delaware Influenza Surveillance 2020-2021:

During MMWR Week 52, there was 2 laboratory-confirmed case of influenza reported among Delaware Residents. Reports of influenza-like-illness (ILI) received from participating providers, facilities, and institutions in Delaware show ILI is .71% compared to Delaware's 2020-2021 baseline of 1.9%. Nationally, 1.6% of visits to a healthcare provider were for ILI, which is below the 2020-2021 national baseline of 2.6%. All regions were below baselines.

Level of Influenza Activity in Delaware, MMWR Week 52:

SPORADIC

CDC Definitions:

No Activity: No laboratory-confirmed cases² 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.

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.

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 does not apply to states with \leq four counties.

Summary of Figures for the MMWR Week 52 Report:

| | <u>Page</u> |
|--|-------------|
| Table 1: Comparison of the 2019-2020 MMWR Week 52 and the 2020-2021 MMWR Week 52 Confirmed Influenza Cases Reported Statewide by County and Age Group | 4 |
| Table 2: Comparison of the 2019-2020 MMWR Week 52 and the 2020-2021 MMWR Week 52 Confirmed Influenza Cases Reported Statewide by Age | 5 |
| Table 3: Comparison of the 2019-2020 MMWR Week 52 and the 2020-2021 MMWR Week 52 Confirmed Influenza Cases Reported Statewide by County and subtype/lineage | 6 |
| Figure 1: Confirmed Cases of Influenza by Type and Subtype/Lineage, Delaware 2020-2021 Influenza Season | 7 |
| Table 4: Comparison of the 2019-2020 MMWR Week 52 and the 2020-2021 MMWR Week 52 Influenzarelated Hospitalizations and Deaths | 7 |
| Table 5: Annual Number of Influenza Cases Reported by Flu Season, Delaware 2004-05 through 2020-21 | 8 |
| Figure 2: Percentage of Visits for Influenza-Line Illness Reported by Sentinel Providers participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2020-2021 | 9 |
| Figure 3: Percentage of Emergency Department (ED) Visits Due to ILI/Influenza by MMWR Week, Delaware 2020-2021 | 10 |
| | |

Table 1: Comparison of the 2019-2020 MMWR Week 52 and the 2020-2021 MMWR Week 52 Confirmed¹ Influenza Cases Reported Statewide by County

| | | 2019-2020 Influen | za Season | 2020-2021 Influenza Season | | | |
|-------------------------------------|---------|-------------------|---------------------------|----------------------------|------|---------------------------|--|
| Confirmed Flu Cases by County | Week 52 | YTD ² | YTD County Percentage (%) | Week 52 | YTD² | YTD County Percentage (%) | |
| STATEWIDE | 470 | 1083 | | 2 | 7 | | |
| New Castle County | 190 | 494 | 45.6% | 1 | 3 | 43% | |
| Kent County | 139 | 320 | 29.5% | 1 | 3 | 43% | |
| Sussex | 141 | 269 | 24.8% | 0 | 1 | 14% | |

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 2019-20 and 2020-21 influenza seasons, respectively.

Table 2: Comparison of the 2019-2020 MMWR Week 52 and the 2020-2021 MMWR Week 52 Confirmed¹ Influenza Cases Reported Statewide by Age

| | 2019-2020 Influenza Season | | | | | 2020-2021 Influenza Season | | | | | |
|-----------|----------------------------|---------|-----------------|-----------------------------|------------------|------------------------------------|---------|-----------------|-----------------------------|------------------|------------------------------------|
| | rmed ases by Group | Week 52 | Total Counts | County Percentage (%) | YTD ² | YTD County Percentage (%) | Week 52 | Total Counts | County Percentage (%) | YTD ² | YTD County Percentage (%) |
| | 0-4 | 131 | | | 1083 | | 0 | 2 | | 7 | |
| ĕ | 5-24 | 184 | | | | | 0 | | | | |
| ē | 25-49 | 99 | 470 | | | | 0 | | | | |
| STATEWIDE | 50-64 | 33 | | | | | 0 | | | | |
| Ø | 65+ | 23 | | | | | 0 | | | | |

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 2019-20 and 2020-21 influenza seasons, respectively.

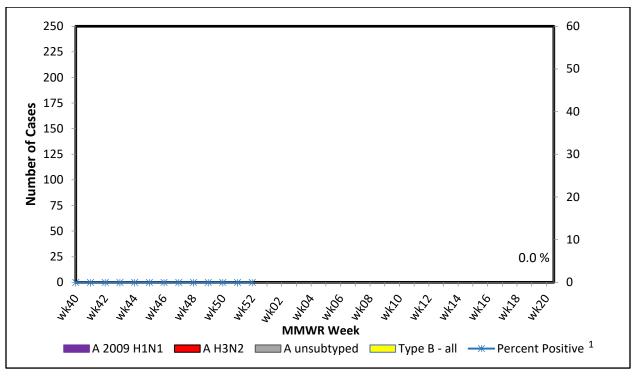
^{*}Cell counts with less than 10 cases are suppressed. Due to suppression guidelines, stratification by age group, within each county, is not shown in the table above.

Table 3: Comparison of the 2019-2020 MMWR Week 52 and the 2020-2021 MMWR Week 52 Confirmed¹ Influenza Cases Reported Statewide by County and subtype/lineage

| Confirmed Flu Cases by Subtype / Lineage | | 2019-2020 Ini | luenza Season | 2020-2021 Influenza Season | | | |
|--|---------------------------|---------------|---------------|----------------------------|--------------|--|--|
| | | Week 52 | Total Counts | Week 52 | Total Counts | | |
| | A / 2009 H1N1 | 8 | | 0 | | | |
| | A / 2012 H3N2 | 1 | | 0 | | | |
| IDE | A / no subtype | 39 | | 2 | | | |
| EW. | Co-infection | 0 | 470 | 0 | 2 | | |
| STATEWIDE | B / Yamagata | 0 | | 0 | | | |
| S | B / Victoria | 29 | | 0 | | | |
| | B / no lineage | 156 | | 0 | | | |
| | A / 2009 H1N1 | 6 | | 0 | | | |
| | A / 2012 H3N2 | 1 | | 0 | | | |
| tle . | A / no subtype | 5 | | 1 | | | |
| ew Castl County | Co-infection | 0 | 190 | 0 | 1 | | |
| New Castle County | B / Yamagata | 0 | | 0 | | | |
| | B / Victoria | 21 | | 0 | | | |
| | B / no lineage | 55 | | 0 | | | |
| | A / 2009 H1N1 | 1 | | 0 | | | |
| | A / 2012 H3N2 | 0 | | 0 | | | |
| # F | A / no subtype | 4 | | 0 | | | |
| Kent County | Co-infection ² | 0 | 139 | 0 | 1 | | |
| • | B / Yamagata | 0 | | 0 | | | |
| | B / Victoria | 3 | | 0 | | | |
| | B / no lineage | 60 | | 1 | | | |
| | A / 2009 H1N1 | 1 | | 0 | | | |
| | A / 2012 H3N2 | 0 | | 0 | | | |
| ex aty | A / no subtype | 30 | | 0 | | | |
| Sussex | Co-infection | 0 | 141 | 0 | 0 | | |
| 0 | B / Yamagata | 0 | | 0 | | | |
| | B / Victoria | 5 | | 0 | | | |
| | B/ no lineage | 41 | | 0 | | | |

¹Influenza Cases are confirmed via PCR testing

Figure 1: Confirmed Cases of Influenza by Type and Subtype/Lineage, Delaware 2020-2021 Influenza Season



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

During MMWR Week 52 for the 2020-2021 Influenza season, there were zero confirmed cases of Influenza reported by ILINet providers.

Table 4: Comparison of the 2019-2020 MMWR Week 40 and the 2020-2021 MMWR Week 52 Influenza-related Hospitalizations and Deaths Statewide

| Hospitalizations and Deaths due | 2019-2020 Influenza Season | | | | 2020-2021 Influenza Season | | | |
|---------------------------------|----------------------------|---------------------|------------------------|------------|----------------------------|---------------------|-----------------------|------------|
| to Influenza | | | | YTD | | | | YTD |
| | | | Percentage | Percentage | | | Percentage | Percentage |
| | Week | YTD | of | of | Week | YTD | of | of |
| | 52 | Totals ¹ | Confirmed | Confirmed | 52 | Totals ¹ | Confirmed | Confirmed |
| | | | Cases (%) ² | Cases | | | Case (%) ² | Cases |
| | | | | $(\%)^3$ | | | | $(\%)^3$ |
| | | | | | | | | |
| Hospitalizations | 31 | 65 | 6.5 | 6 | 0 | 1 | .5 | 0.14 |
| Deaths | 0 | 0 | 0 | 0 | 1 | 1 | .5 | 0.14 |

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

²Percentage of cases confirmed during the single MMWR Week

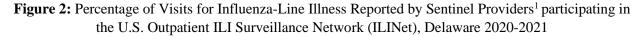
³Percentage of cases for the cumulative count of confirmed cases through the influenza season to the current MMWR Week.

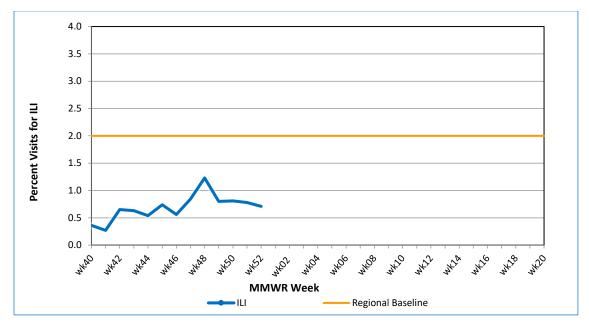
Table 5: Annual Number of Influenza Cases Reported by Flu Season, Delaware 2004-05 through 2020-21

| 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 | 1,843 |
| 2014 - 2015 | 2,390 |
| 2015 - 2016 | 1,843 |
| 2016 - 2017 | 4,590 |
| 2017 - 2018 | 9,050 |
| 2018 – 2019 | 6,387 |
| 2019 – 2020 | 7,075 |
| 2020-2021 (YTD) | 7 |

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.





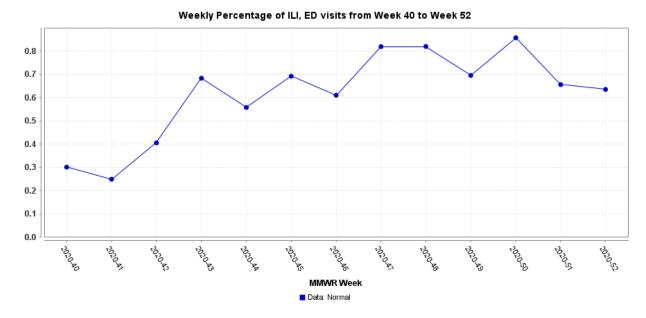
Delaware's regional baseline² for healthcare visits relating to ILI symptoms in the 2020-2021 Influenza Season is 2.0 % and the national baseline³ is 2.6%. In MMWR Week 52, the amount of ILI related visits reported by sentinel provider was .71%.

¹six 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.

Figure 3: Percentage of Emergency Care Visits Due to ILI/Influenza by MMWR Week 52, Delaware 2020-2021



Syndromic data collected from ESSENCE shows that from Week 40 through Week 52, the percentage of ED visits due to ILI/Flu symptoms has been low.

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.