



Delaware Weekly Influenza Report

MMWR Week 14 (March 31 – April 6, 2019)

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. During MMWR Week 14 (March 31 – April 6, 2019) influenza activity continues to decrease but remains elevated in the United States. Influenza A(H1N1)pdm09 viruses predominated from October to mid-February, and influenza A(H3N2) viruses have been more commonly identified since late February. Small numbers of influenza B viruses have also been reported. Geographic spread during week 14 is: **Widespread influenza activity** was reported by 20 states (Arizona, California, Connecticut, **Delaware**, Georgia, Maine, **Maryland**, Massachusetts, Michigan, Nevada, New Hampshire, **New Jersey**, New York, North Carolina, Ohio, Rhode Island, South Carolina, Virginia, Washington and Wisconsin). **Regional influenza activity** was reported by Puerto Rico and 25 states (Arkansas, Colorado, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Montana, New Mexico, North Dakota, Oklahoma, Oregon, **Pennsylvania**, Tennessee, Utah, Vermont, West Virginia and Wyoming). **Local influenza activity** was reported by the District of Columbia and five states (Alabama, Alaska, Nebraska, South Dakota and Texas). **Sporadic influenza activity** was reported by the U.S. Virgin Islands. Guam did not report. Both national and state data are provisional and subject to change as additional reports are received.

Delaware Influenza Surveillance 2018-2019:

During MMWR Week 14 there were 130 laboratory-confirmed cases of influenza reported among Delaware residents, bringing the total to 6,197 for the 2018-2019 season. Reports of influenza-like illness (ILI) received from participating providers, facilities and institutions in Delaware show ILI decreased to 0.66%, below the 2018-2019 baseline of 2.0%. Nationally, ILI decreased to 2.8%, but remains above the national baseline of 2.2%.

Level of Influenza Activity in Delaware, MMWR Week 14

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

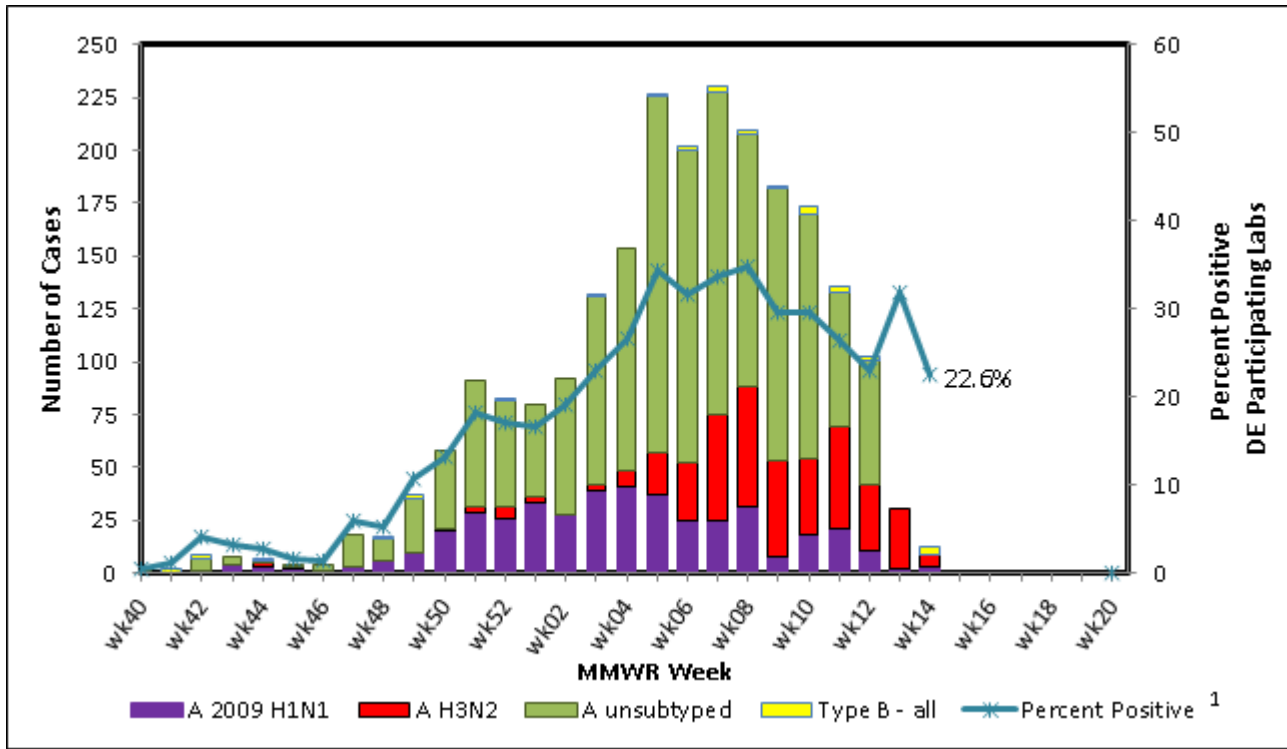


Table 2. Influenza-related hospitalizations statewide and county, by age group, Delaware 2018-19

Hospitalized Flu Cases by Age Group		Wks 40-49	Wk 50	Wk 51	Wk 52	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	1	2	5	4	2	5	5	8	1	12	5	9	9	1	3	4	1	0	77	1,014	
	5-24 years	0	1	5	0	1	2	4	4	5	4	7	4	4	2	4	5	1	0	53		
	25-49 years	7	3	3	4	5	4	7	11	9	8	8	9	8	9	6	3	6	4	114		
	50-64 years	7	9	6	14	9	6	12	14	21	17	27	25	10	37	17	11	11	4	257		
	65+ years	19	5	7	18	24	10	17	30	21	45	48	42	40	54	54	36	31	12	513		
New Castle County	0-4 years	0	1	1	2	1	3	4	6	1	5	4	7	6	0	1	4	1	0	47	508	50.1%
	5-24 years	0	1	4	0	1	2	2	3	3	2	6	1	4	1	4	4	1	0	39		
	25-49 years	3	2	1	2	2	3	5	5	6	7	5	6	4	3	5	2	3	1	65		
	50-64 years	2	6	1	4	2	4	7	6	9	10	14	9	5	18	7	4	7	2	117		
	65+ years	6	2	4	5	11	7	8	19	6	22	28	19	20	24	27	11	14	7	240		
Kent County	0-4 years	0	1	3	1	1	0	0	0	0	4	0	2	0	0	1	0	0	0	13	237	23.4%
	5-24 years	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0	4		
	25-49 years	4	1	2	1	2	0	1	3	2	0	1	1	2	0	1	0	2	2	25		
	50-64 years	4	1	4	7	3	0	1	4	9	5	8	9	2	8	4	4	2	0	75		
	65+ years	10	2	0	6	7	0	1	6	5	9	11	6	10	13	9	13	9	3	120		
Sussex County	0-4 years	1	0	1	1	0	2	1	2	0	3	1	0	3	1	1	0	0	0	17	269	26.5%
	5-24 years	0	0	1	0	0	0	1	1	1	1	1	2	0	1	0	1	0	0	10		
	25-49 years	0	0	0	1	1	1	1	3	1	1	2	2	2	6	0	1	1	1	24		
	50-64 years	1	2	1	3	4	2	4	4	3	2	5	7	3	11	6	3	2	2	65		
	65+ years	3	1	3	7	6	3	8	5	10	14	9	17	10	17	18	12	8	2	153		

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

Influenza-Related Deaths	Wks 40-49	Wk 50	Wk 51	Wk 52	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	YTD
	0	0	0	1	2	2	0	2	4	1	1	2	2	1	1	1	3	1	24

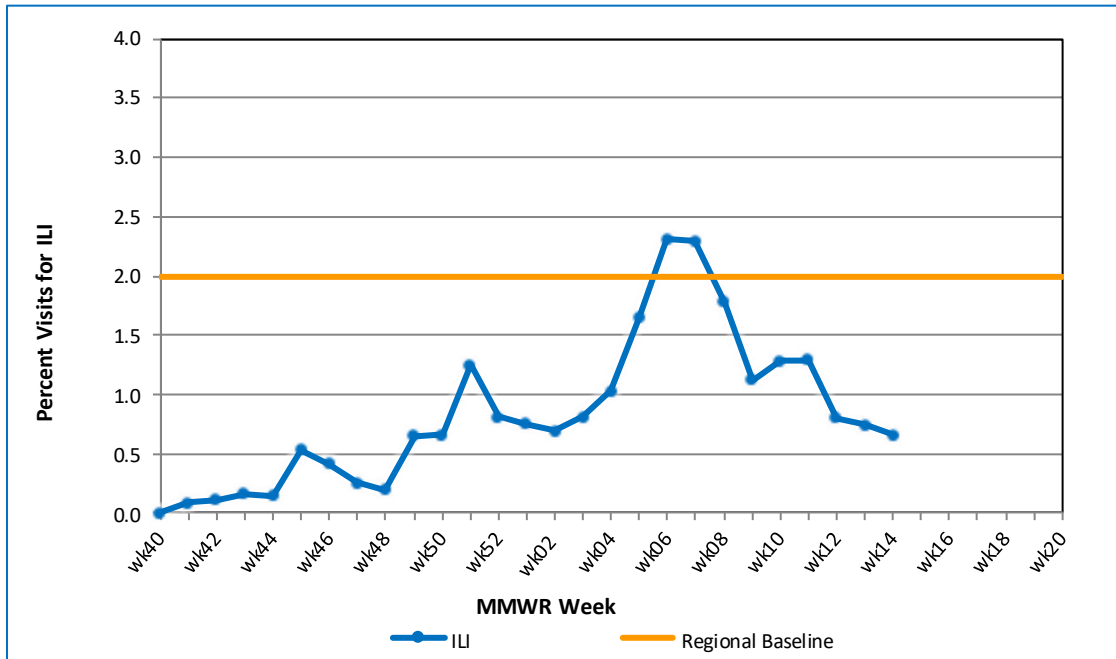
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2018-19

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)	6,197

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.

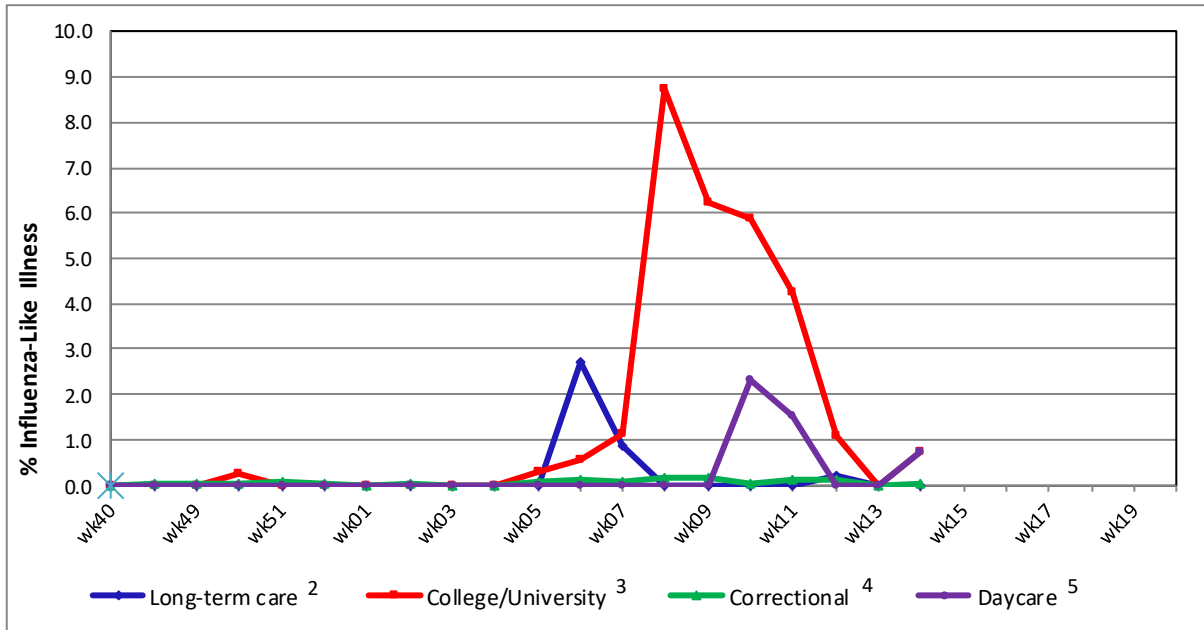
Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2018-19



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. Seven 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

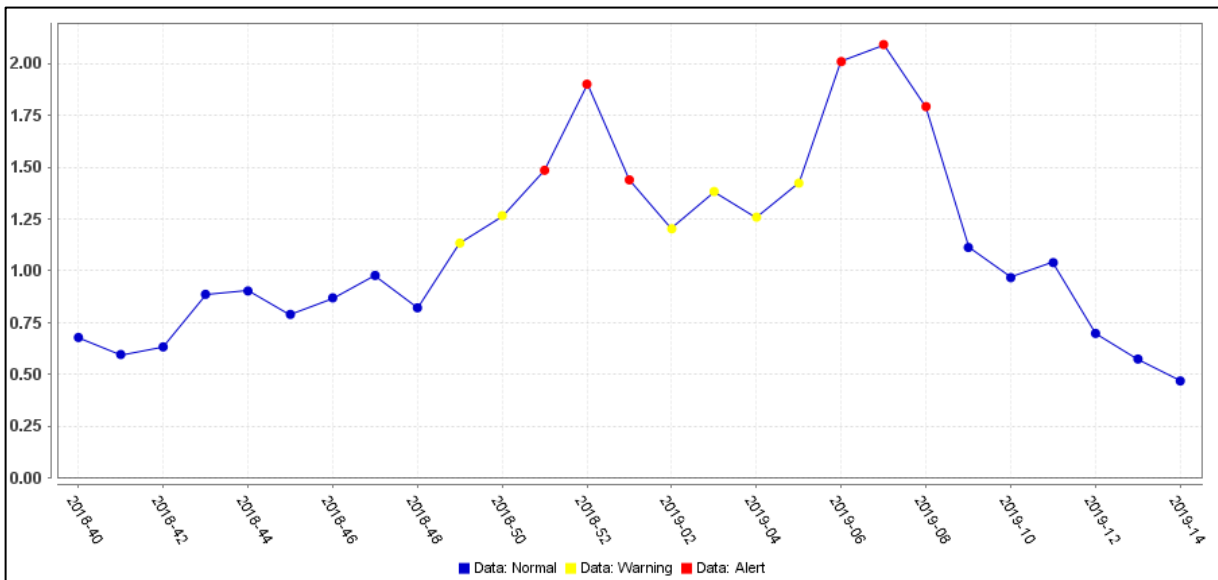


Figure 4b. County-specific percentages of ED visits due to ILI/Flu by MMWR Week, Delaware 2018-19

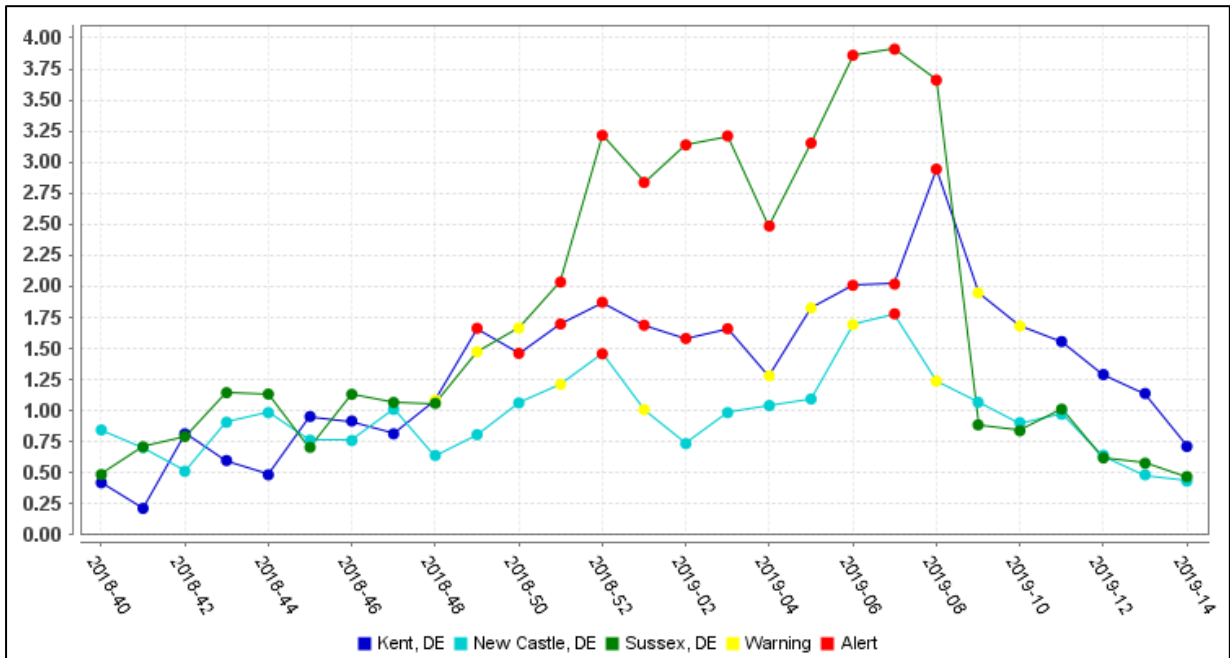


Figure 5a. Number of ED visits due to Respiratory Syncytial Virus (RSV) by MMWR Week, Delaware, 2018-19

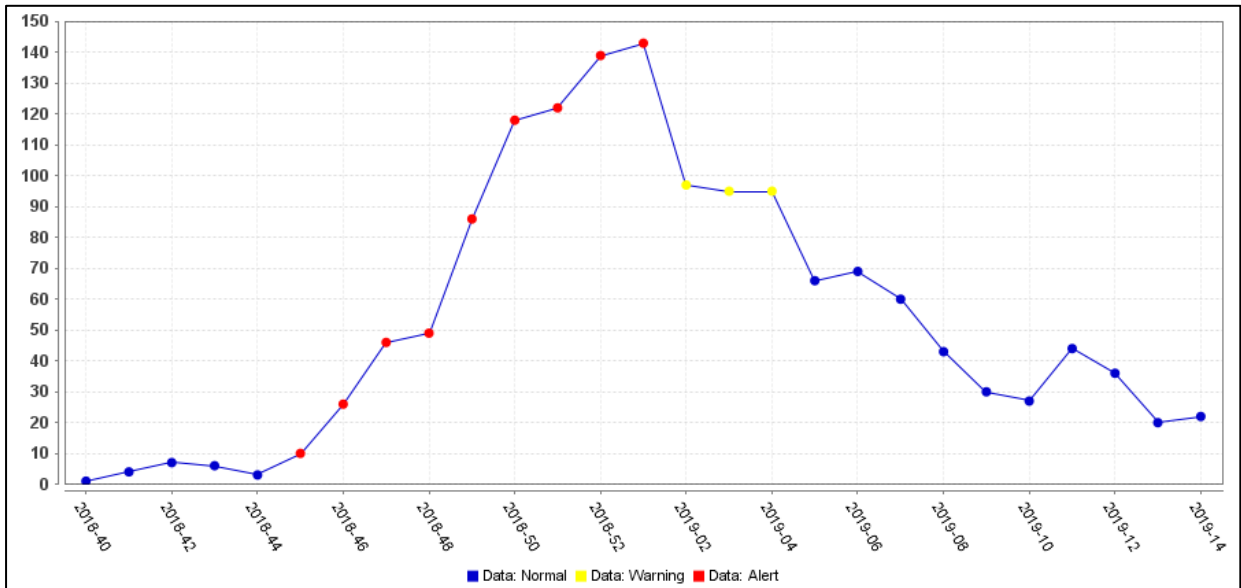
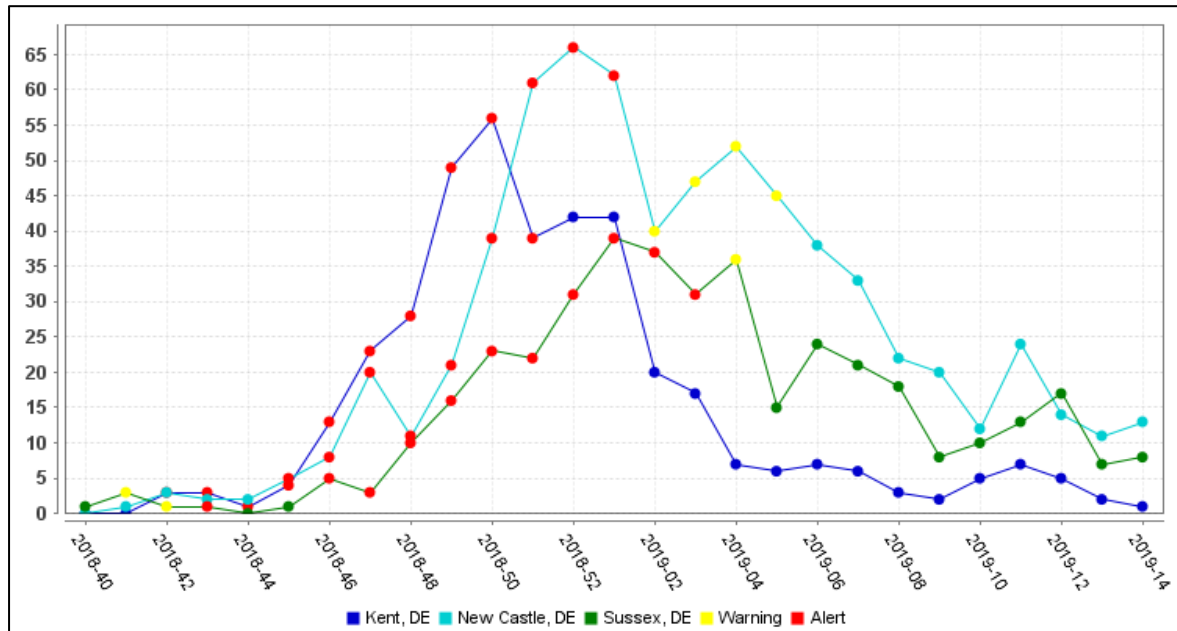


Figure 5b. County-specific numbers of ED visits due to RSV by MMWR Week, Delaware, 2018-19



Summary of Worldwide Influenza Activity

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

In the temperate zone of the northern hemisphere influenza activity decreased overall. In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels, with the exception of some parts of Australia where influenza activity remained above inter-seasonal levels.

In North America, influenza activity appeared to decrease with influenza A(H3N2) the dominant virus, followed by influenza A(H1N1)pdm09.

In the United States and Canada, influenza A(H3N2) viruses caused an increased amount of the activity. In Mexico, influenza activity continued decreasing.

In the Caribbean, Central American countries, and the tropical countries of South America, influenza and RSV activity were low in general.

In Europe, influenza activity decreased across the continent. Both influenza A viruses co-circulated.

In North Africa, influenza activity was still reported in some countries.

In Western Asia, influenza activity appeared to decrease overall, with exception of some countries where activity remained elevated. In East Asia, although decreased influenza activity continued to be reported. Increased detections of influenza A(H3N2) and B (Victoria-lineage) viruses were reported in the recent weeks. In Southern Asia, influenza appeared to decrease with influenza A(H1N1)pdm09 virus predominating.

Reference: World Health Organization (WHO), 2019. Influenza Update number 338 (4/1/2019). Retrieved 4/5/19 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.