



Delaware Weekly Influenza Report

MMWR Week 45 (November 5 - 11, 2017)

Delaware Division of Public Health

National Influenza Synopsis 2017-2018:

National data are updated Friday of each week. Please visit <http://www.cdc.gov/flu/weekly/> for the most current information. During MMWR Week 45 (November 5 - 11, 2017) influenza activity is increasing in the United States. The most frequently identified influenza virus type reported by public health laboratories during week 45 was influenza A. The percentage of respiratory specimens testing positive for influenza in clinical laboratories is increasing. **Regional influenza activity** was reported by Guam, Puerto Rico, and nine states (Arkansas, California, Georgia, Louisiana, Massachusetts, Mississippi, Oklahoma, South Carolina, and Washington). **Local influenza activity** was reported by 13 states (Alaska, Arizona, Colorado, Connecticut, Kentucky, Maine, Maryland, New Mexico, Ohio, Oregon, Pennsylvania, Texas, and Wisconsin). **Sporadic influenza activity** was reported by the U.S. Virgin Islands and 26 states (Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Rhode Island, South Dakota, Tennessee, Utah, Vermont, Virginia, and Wyoming). **No influenza activity** was reported by the District of Columbia and two states (Alabama and West Virginia). Both national and state data are provisional and subject to change as additional reports are received.

Delaware Influenza Surveillance 2017-2018:

During MMWR Week 45, there were four 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 0.19% compared with Delaware's 2017-2018 baseline of 2.0%. Nationally, ILI is 1.9%, below the 2017-2018 national baseline of 2.2%.

Level of Influenza Activity in Delaware, MMWR Week 45:

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 2017-2018 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 2017-18

Confirmed Flu Cases by Subtype / Lineage		Week 40	Week 41	Week 42	Week 43	Week 44	Week 45	YTD	YTD Total	YTD County %
STATEWIDE	A / 2009 H1N1	0	0	0	1	0	0	1	14	
	A / 2012 H3N2	0	0	1	0	1	0	2		
	A / no subtype	0	0	0	4	2	4	10		
	B / Yamagata	0	0	0	0	0	0	0		
	B / Victoria	0	0	0	0	0	0	0		
	B / no lineage	0	0	0	0	1	0	1		
New Castle County	A / 2009 H1N1	0	0	0	1	0	0	1	5	35.7%
	A / 2012 H3N2	0	0	1	0	0	0	1		
	A / no subtype	0	0	0	1	0	1	2		
	B / Yamagata	0	0	0	0	0	0	0		
	B / Victoria	0	0	0	0	0	0	0		
	B / no lineage	0	0	0	0	1	0	1		
Kent County	A / 2009 H1N1	0	0	0	0	0	0	0	6	42.9%
	A / 2012 H3N2	0	0	0	0	0	0	0		
	A / no subtype	0	0	0	3	1	2	6		
	B / Yamagata	0	0	0	0	0	0	0		
	B / Victoria	0	0	0	0	0	0	0		
	B / no lineage	0	0	0	0	0	0	0		
Sussex County	A / 2009 H1N1	0	0	0	0	0	0	0	3	21.4%
	A / 2012 H3N2	0	0	0	0	1	0	1		
	A / no subtype	0	0	0	0	1	1	2		
	B / Yamagata	0	0	0	0	0	0	0		
	B / Victoria	0	0	0	0	0	0	0		
	B / no lineage	0	0	0	0	0	0	0		

Table 1b. Influenza positive¹ cases reported² statewide and county by age group, Delaware 2017-18

Confirmed Flu Cases by Age Group		Week 40	Week 41	Week 42	Week 43	Week 44	Week 45	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	0	0	0	0	1	1	2	14	
	5-24 years	0	0	0	1	1	0	2		
	25-49 years	0	0	0	2	0	0	2		
	50-64 years	0	0	0	0	0	1	1		
	65+ years	0	0	1	2	2	2	7		
		0	0	0	0	0	0	0		
New Castle County	0-4 years	0	0	0	0	0	1	1	5	35.7%
	5-24 years	0	0	0	0	0	0	0		
	25-49 years	0	0	0	1	0	0	1		
	50-64 years	0	0	0	0	0	0	0		
	65+ years	0	0	1	1	1	0	3		
		0	0	0	0	0	0	0		
Kent County	0-4 years	0	0	0	0	0	0	0	6	42.9%
	5-24 years	0	0	0	1	1	0	2		
	25-49 years	0	0	0	1	0	0	1		
	50-64 years	0	0	0	0	0	1	1		
	65+ years	0	0	0	1	0	1	2		
		0	0	0	0	0	0	0		
Sussex County	0-4 years	0	0	0	0	1	0	1	3	21.4%
	5-24 years	0	0	0	0	0	0	0		
	25-49 years	0	0	0	0	0	0	0		
	50-64 years	0	0	0	0	0	0	0		
	65+ years	0	0	0	0	1	1	2		
		0	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 will be categorized as Influenza B, no lineage identified.

Figure 1. Confirmed cases¹ of influenza by type and subtype/lineage, Delaware 2017-18*

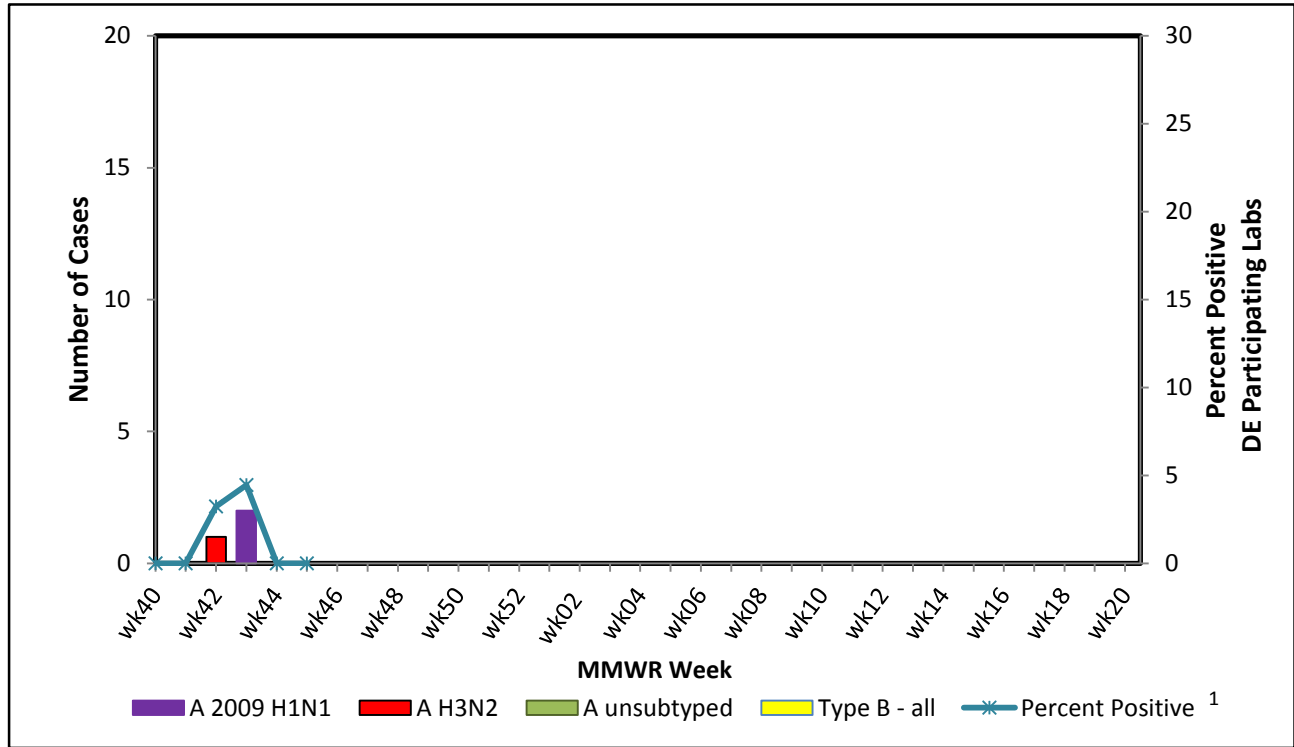


Table 2. Influenza-related hospitalizations statewide and county, by age group, Delaware 2017-18

Hospitalized Flu Cases by Age Group		Week 40	Week 41	Week 42	Week 43	Week 44	Week 45	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	0	0	0	0	0	0	0	5	
	5-24 years	0	0	0	0	0	0	0		
	25-49 years	0	0	0	0	0	0	0		
	50-64 years	0	0	0	0	0	0	0		
	65+ years	0	0	1	2	1	0	5		
New Castle County	0-4 years	0	0	0	0	0	0	0	3	60%
	5-24 years	0	0	0	0	0	0	0		
	25-49 years	0	0	0	0	0	0	0		
	50-64 years	0	0	0	0	0	0	0		
	65+ years	0	0	1	1	1	0	3		
Kent County	0-4 years	0	0	0	0	0	0	0	2	40%
	5-24 years	0	0	0	0	0	0	0		
	25-49 years	0	0	0	0	0	0	0		
	50-64 years	0	0	0	0	0	0	0		
	65+ years	0	0	0	1	0	1	2		
Sussex County	0-4 years	0	0	0	0	0	0	0	0	0%
	5-24 years	0	0	0	0	0	0	0		
	25-49 years	0	0	0	0	0	0	0		
	50-64 years	0	0	0	0	0	0	0		
	65+ years	0	0	0	0	0	0	0		

Table 3. Influenza-related deaths, Delaware 2017-18

Influenza-Related Deaths	Week 40	Week 41	Week 42	Week 43	Week 44	Week 45	YTD
	0	0	0	0	0	0	0

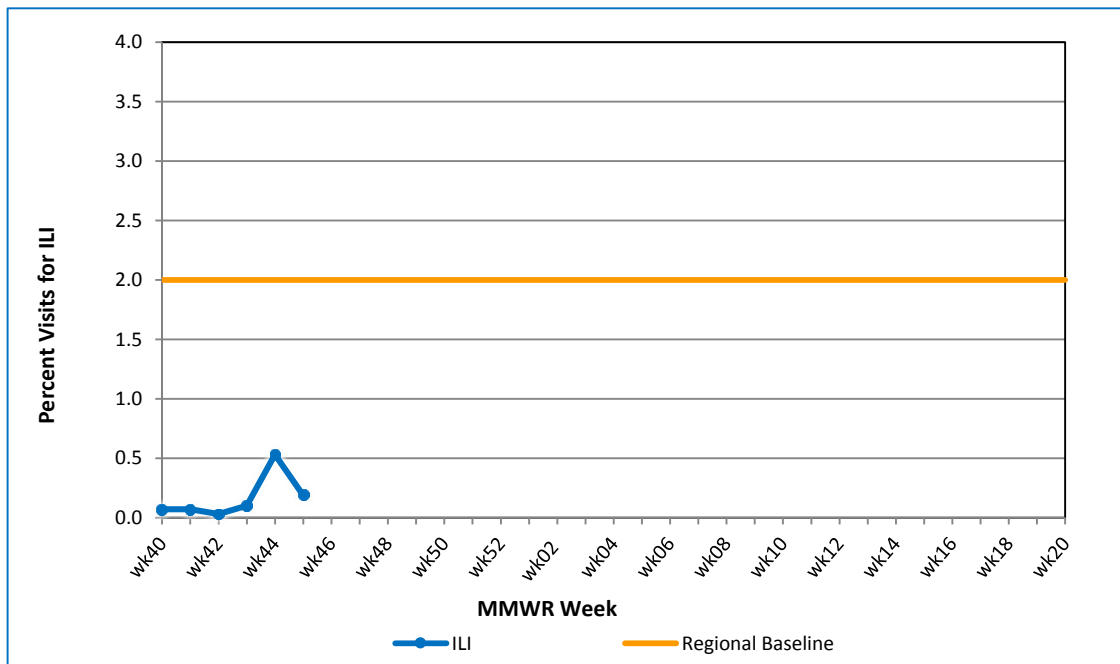
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2017-18

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 (YTD)	14

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.

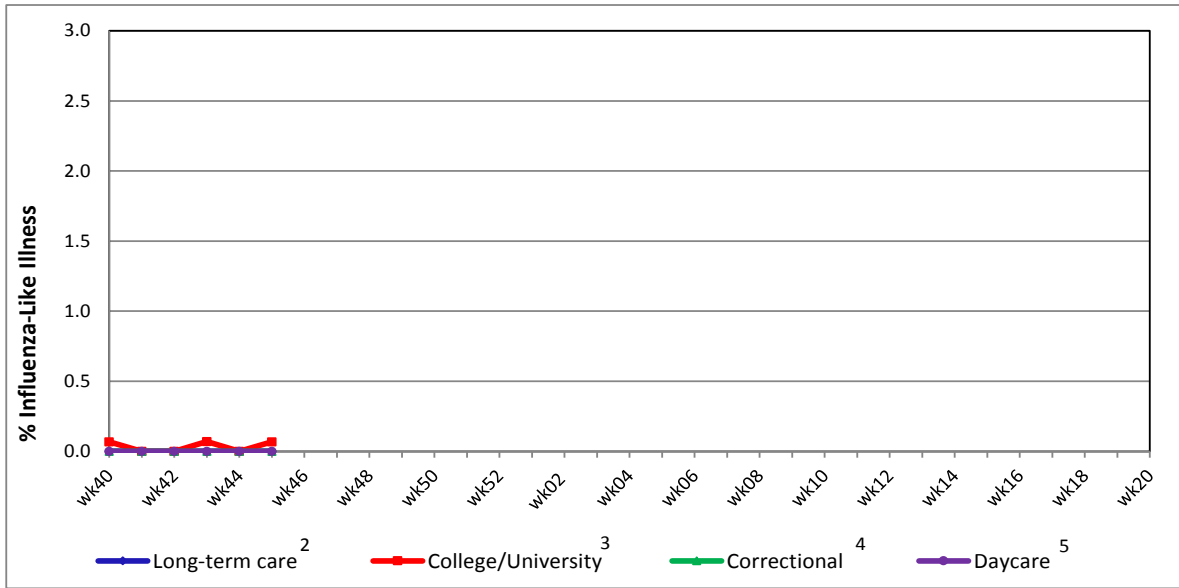
Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2017-18



¹ Thirteen of 14 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 2017-18



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 2017-18

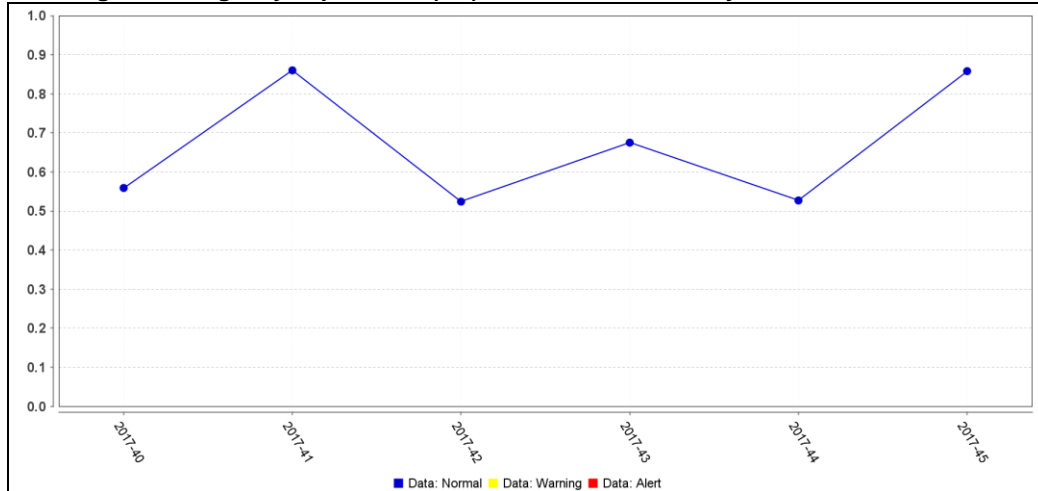
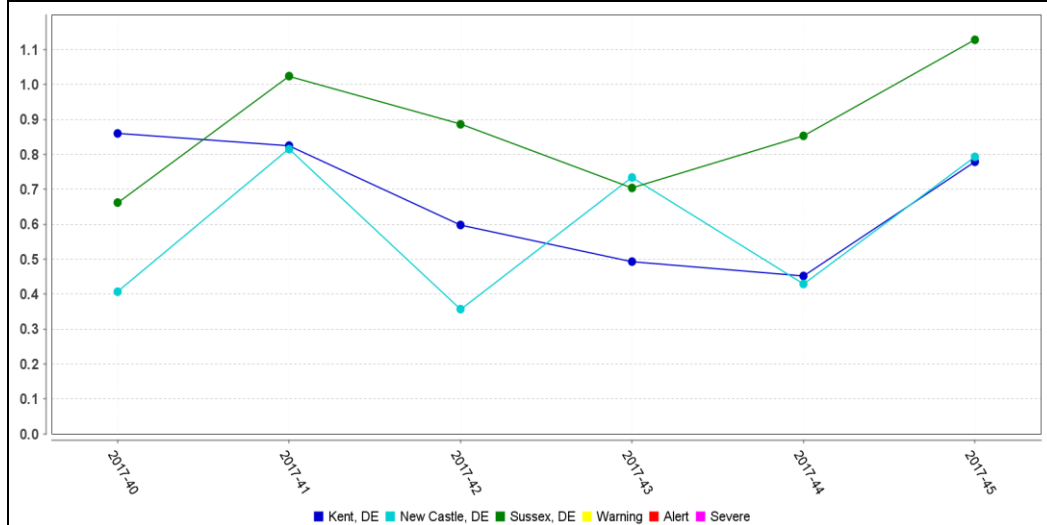


Figure 4b. County-specific percentages of ED visits due to ILI/Flu by MMWR Week, Delaware 2017-18



Summary of International Influenza Activity

Worldwide, influenza A(H3N2) and B viruses accounted for the majority of influenza detections. Declining levels of influenza activity were reported in the temperate zone of the southern hemisphere and in some countries of South and South East Asia. In Central America and the Caribbean, low influenza activity was reported in a few countries. Influenza activity remained at low levels in the temperate zone of the northern hemisphere.

In North America, overall influenza virus activity remained low with detections of predominantly influenza A(H3N2) and B viruses in the past few weeks.

In the Caribbean and Central American countries, respiratory illness indicators and influenza activity remained low in general but RSV activity remained high in several countries.

In temperate South America, influenza and respiratory syncytial virus (RSV) activity continued a downward trend throughout most of the sub-region. In tropical countries of South America, influenza and RSV activity remained at low levels overall.

In Europe, influenza activity remained low, with detections of predominantly influenza A(H3N2) and B viruses in the past weeks.

In Western Asia, influenza activity continued to increase in Oman, with influenza A(H1N1)pdm09 virus predominantly detected followed by a small proportion of A(H3N2) and B viruses. In Central Asia, ILI and severe acute respiratory infection (SARI) indicators appeared to increase in Kazakhstan, Tajikistan and Uzbekistan, with few influenza detections. In Southern Asia, influenza activity remained low in general. Influenza A(H1N1)pdm09 and A(H3N2) virus detections continued to be reported in India. In South East Asia, influenza activity decreased in most of the countries, with the exception of Cambodia where an increasing trend of influenza activity continued to be reported, with influenza A(H3N2) viruses predominant.

In Northern Africa, little to no influenza virus detections was reported. In Western and Middle Africa, influenza detections continued to be reported, with all seasonal influenza subtypes present in the region. In Eastern Africa, little influenza activity was reported with exception of Réunion Island where influenza detections and influenza like illness (ILI) activity remained elevated, with influenza A and B viruses co-circulating. In Southern Africa, influenza activity continued to decrease in South Africa, with influenza B viruses most frequently detected.

In Oceania, seasonal influenza activity continued to decline, with influenza A(H3N2) predominant, followed by B viruses.

Reference: World Health Organization (WHO), 2017. Influenza Update number 301 (10/30/17). Retrieved November 3, 2017, 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.