



Delaware Weekly Influenza Report

MMWR Week 43 (October 23 – 29 2016)

Delaware Division of Public Health

National Influenza Synopsis 2016-2017:

National data are updated Friday of each week. Please visit <http://www.cdc.gov/flu/weekly/> for the most current information. During MMWR Week 43 (October 23 - 29, 2016) influenza activity was low in the United States. The most frequently identified influenza virus subtype reported by public health laboratories during week 43 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories was low. For geographic spread: **widespread influenza activity** was reported by Guam, **regional influenza activity** was reported by Puerto Rico and **local influenza activity** was reported by three states (Alabama, Maine and New Hampshire). **Sporadic influenza activity** was reported by the District of Columbia, the U.S. Virgin Islands and 39 states. **No influenza activity** was reported by eight states (Illinois, Kentucky, Mississippi, Nebraska, Rhode Island, South Carolina, Vermont and Wyoming). Both national and state data are provisional and subject to change as additional reports are received.

Delaware Influenza Surveillance 2016-2017:

During MMWR Week 43 there were three 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 0.30% and Delaware's 2016-2017 baseline is 2.2%. Nationally, ILI is 1.3% and the 2016-2017 national baseline is 2.2%.

Level of Influenza Activity in Delaware, MMWR Week 43:

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 2016-2017 Region 3 (DE, DC, MD, PA, VA and WV) baseline = 2.2%.

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.

In this report:	page
Table 1a. Influenza positive cases reported statewide and county, by subtype / lineage and MMWR week, Delaware 2016-17	2
Table 1b. Influenza positive cases reported statewide and county, by age group and MMWR week, Delaware 2016-17	2
Figure 1. Confirmed cases of influenza by type and subtype / lineage, by MMWR week, Delaware 2016-17	3
Table 2. Influenza-related hospitalizations, statewide and county, by age group and MMWR week, Delaware 2016-17	3
Table 3. Influenza-related deaths by MMWR week, Delaware 2016-17	3
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2016-17	4
Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers participating in CDC's ILINet, Delaware 2016-17	4
Figure 3. Influenza-like illness reported by ILI reporting partners by MMWR week, Delaware 2016-17	5
Figure 4a. Percentage of emergency department (ED) visits due to ILI/Flu by MMWR week, Delaware 2016-17	5
Figure 4b. County-specific percentages of ED visits due to ILI/Flu by MMWR week, Delaware 2016-17	5
Summary of International Influenza Activity	6

Table 1a. Influenza positive¹ cases reported² statewide and county, by subtype (A) / lineage (B)³ and MMWR week, Delaware 2016-17

Confirmed Flu Cases by Subtype / Lineage		Week 40	Week 41	Week 42	Week 43	YTD	YTD Total	YTD County %
STATEWIDE	A / 2009 H1N1	0	0	0	0	0	4	
	A / 2012 H3N2	0	0	0	2	2		
	A / no subtype	0	0	1	1	2		
	B / Yamagata	0	0	0	0	0		
	B / Victoria	0	0	0	0	0		
	B / no lineage	0	0	0	0	0		
New Castle County	A / 2009 H1N1	0	0	0	0	0	2	50%
	A / 2012 H3N2	0	0	0	2	2		
	A / no subtype	0	0	0	0	0		
	B / Yamagata	0	0	0	0	0		
	B / Victoria	0	0	0	0	0		
	B / no lineage	0	0	0	0	0		
Kent County	A / 2009 H1N1	0	0	0	0	0	2	50%
	A / 2012 H3N2	0	0	0	0	0		
	A / no subtype	0	0	1	1	2		
	B / Yamagata	0	0	0	0	0		
	B / Victoria	0	0	0	0	0		
	B / no lineage	0	0	0	0	0		
Sussex County	A / 2009 H1N1	0	0	0	0	0	0	0%
	A / 2012 H3N2	0	0	0	0	0		
	A / no subtype	0	0	0	0	0		
	B / Yamagata	0	0	0	0	0		
	B / Victoria	0	0	0	0	0		
	B / no lineage	0	0	0	0	0		

Table 1b. Influenza positive¹ cases reported² statewide and county, by age group and MMWR week, Delaware 2016-17

Confirmed Flu Cases by Age Group		Week 40	Week 41	Week 42	Week 43	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	0	0	0	0	0	4	
	5-24 years	0	0	0	0	0		
	25-49 years	0	0	1	1	2		
	50-64 years	0	0	0	1	1		
	65+ years	0	0	0	1	1		
		0	0	0	0	0		
New Castle County	0-4 years	0	0	0	0	0	2	50%
	5-24 years	0	0	0	0	0		
	25-49 years	0	0	0	0	0		
	50-64 years	0	0	0	1	1		
	65+ years	0	0	0	1	1		
		0	0	0	0	0		
Kent County	0-4 years	0	0	0	0	0	2	50%
	5-24 years	0	0	0	0	0		
	25-49 years	0	0	1	1	2		
	50-64 years	0	0	0	0	0		
	65+ years	0	0	0	0	0		
		0	0	0	0	0		
Sussex County	0-4 years	0	0	0	0	0	0	0%
	5-24 years	0	0	0	0	0		
	25-49 years	0	0	0	0	0		
	50-64 years	0	0	0	0	0		
	65+ years	0	0	0	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, by MMWR week, Delaware 2016-17*

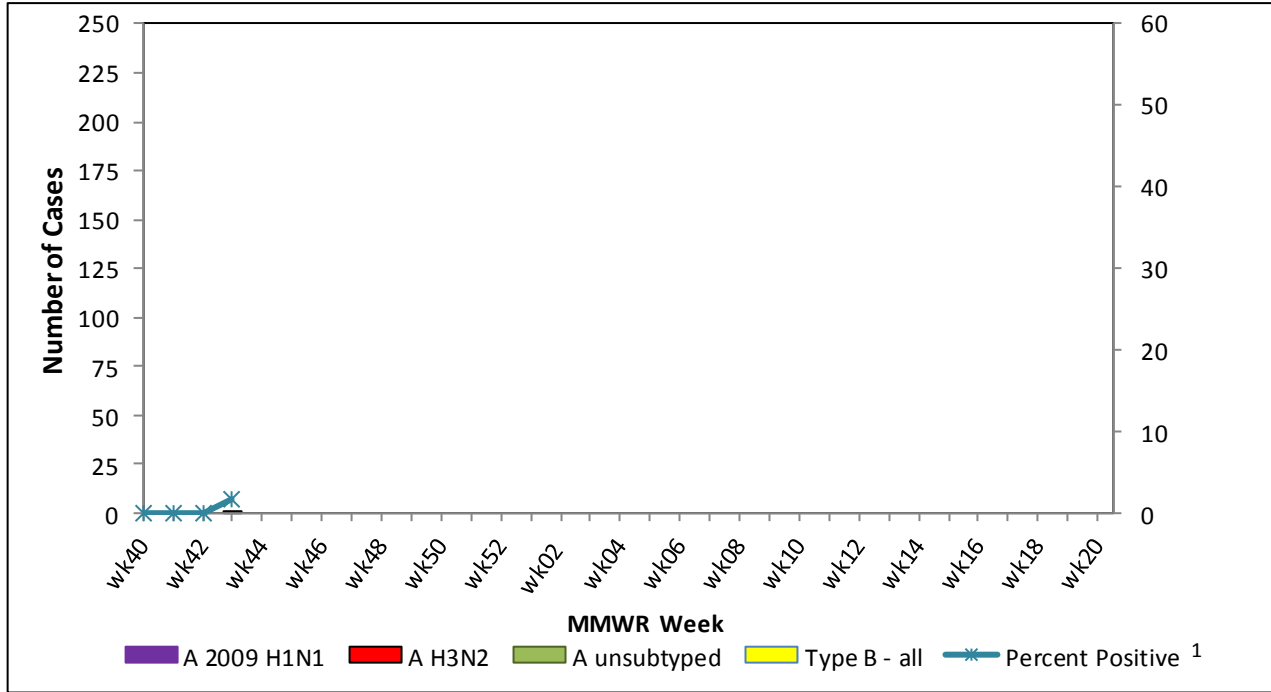


Table 2. Influenza-related hospitalizations statewide and county, by age group and MMWR week, Delaware 2016-17

Hospitalized Flu Cases by Age Group		Week 40	Week 41	Week 42	Week 43		YTD Total	YTD County %
STATEWIDE	0-4 years	0	0	0	0	0	1	
	5-24 years	0	0	0	0	0		
	25-49 years	0	0	0	0	0		
	50-64 years	0	0	0	0	0		
	65+ years	0	0	0	1	1		
New Castle County	0-4 years	0	0	0	0	0	1	100%
	5-24 years	0	0	0	0	0		
	25-49 years	0	0	0	0	0		
	50-64 years	0	0	0	0	0		
	65+ years	0	0	0	1	1		
Kent County	0-4 years	0	0	0	0	0	0	0%
	5-24 years	0	0	0	0	0		
	25-49 years	0	0	0	0	0		
	50-64 years	0	0	0	0	0		
	65+ years	0	0	0	0	0		
Sussex County	0-4 years	0	0	0	0	0	0	0%
	5-24 years	0	0	0	0	0		
	25-49 years	0	0	0	0	0		
	50-64 years	0	0	0	0	0		
	65+ years	0	0	0	0	0		

Table 3. Influenza-related deaths by MMWR week, Delaware 2016-17

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

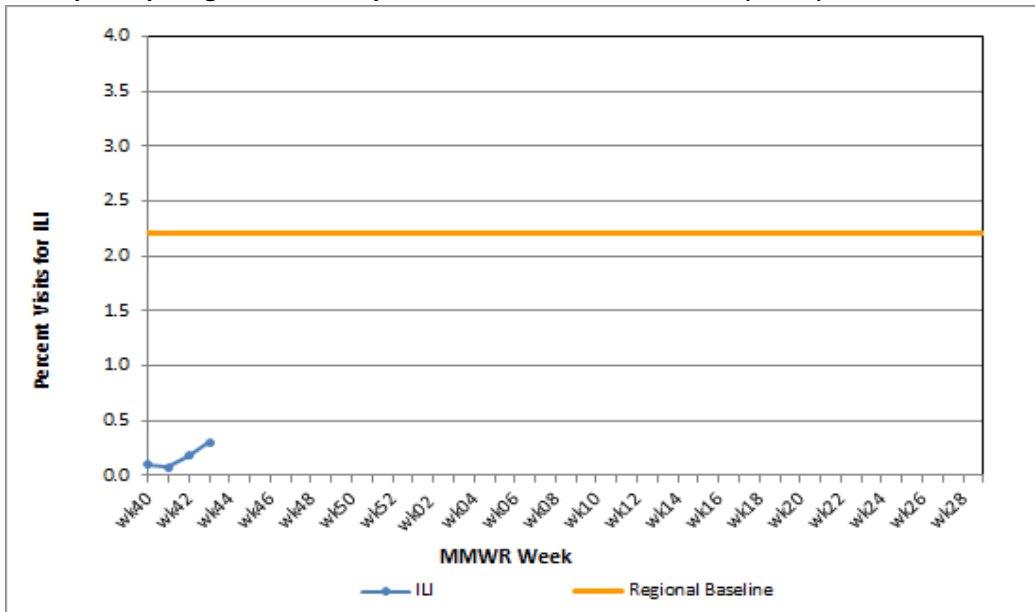
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2016-17

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	2,251
2016 – 2017 (YTD)	4

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.

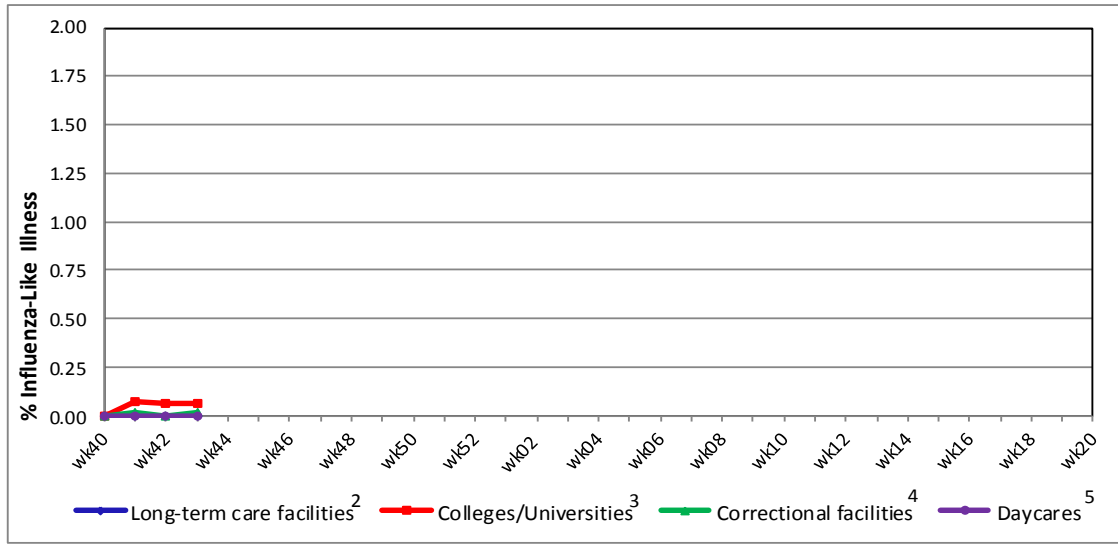
Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers¹ participating in CDC’s Outpatient ILI Surveillance Network (ILINet), Delaware 2016-17



¹ Twelve of 18 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 ILI surveillance reporting partners¹ by MMWR week, Delaware 2016-17



- 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; Three 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 2016-17

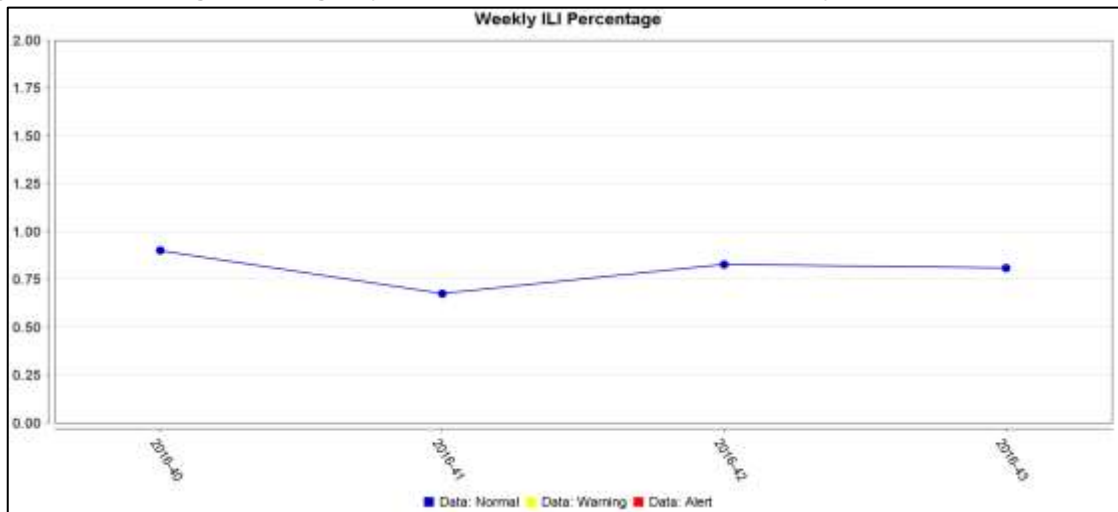
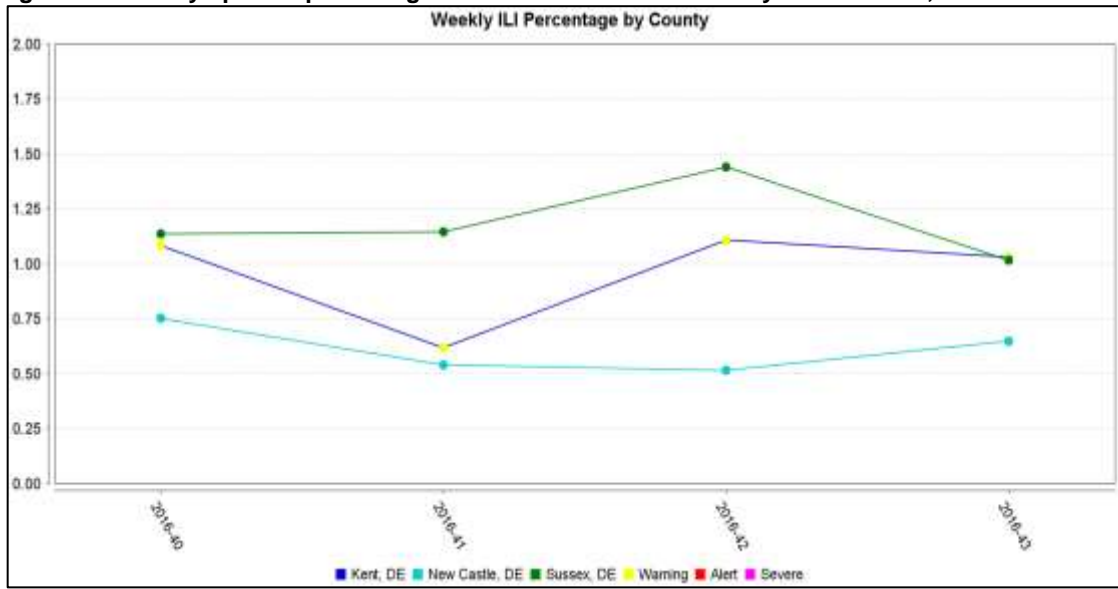


Figure 4b. County-specific percentages of ED visits due to ILI/Flu by MMWR week, Delaware 2016-17



Summary of International Influenza Activity

In North America influenza and other respiratory virus activity remained low. In the United States, respiratory syncytial virus (RSV) activity increased. In the Caribbean, low influenza and other respiratory virus activity were reported throughout most of the sub-region with the exception of Cuba and Jamaica. In Central America low influenza activity was reported, but RSV circulation remained active in Costa Rica and Nicaragua, as well as in El Salvador

In Europe, influenza activity was low with few influenza virus detections and ILI levels below seasonal thresholds. In northern temperate Asia, influenza activity remained low with predominantly influenza A(H3N2) detections in northern China. In tropical countries of south Asia, influenza activity was low. In Southeast Asia, a decreasing trend in influenza detection was observed.

In tropical South America, respiratory virus activities remained low. In temperate South America, influenza and RSV activity decreased throughout the sub-region. In temperate countries of Southern Africa, influenza detections continued to decrease. Tropical Africa reported slightly increased influenza A(H3N2) virus activity.

In Oceania, influenza virus activity continued to decrease in the last few weeks and influenza A(H3N2) remained the dominant circulating influenza virus. In Australia, activity decreased from the peak in September.

Reference: World Health Organization (WHO), 2016. Influenza update number 275 (10/31/16). Retrieved November 2, 2016, from http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/. Reports are updated biweekly.

NOTE: The 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.