Delaware Weekly Influenza Report
MMWR Week 41 (October 9 – 15 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 41 (October 9 - 15, 2016) influenza activity was low in the United States. The most frequently identified influenza virus type reported by public health laboratories during week 41 was influenza A. The percentage of respiratory specimens testing positive for influenza in clinical laboratories is low. For geographic spread, **widespread influenza activity** was reported by Guam. **Local influenza activity** was reported by New Hampshire. **Sporadic influenza activity** was reported by the U.S. Virgin Islands and 41 states. **No influenza activity** was reported by the District of Columbia and eight states (Alabama, Delaware, Illinois, Kansas, Mississippi, Nebraska, Rhode Island and South Carolina). Puerto Rico did not report. Both national and state data are provisional and subject to change as additional reports are received.

Delaware Influenza Surveillance 2016-2017:

During MMWR Week 41 there were no 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 0.07% and Delaware's 2016-2017 baseline is 2.2%. Nationally, ILI is 1.2% and the 2016-2017 national baseline is 2.2%.

Level of Influenza Activity in Delaware, MMWR Week 41:

No Activity	No laboratory-confirmed cases of influenza and no reported increase in the number of cases of ILI.

Influenza-like illness (ILI) is defined as patients presenting with fever of 100º F or greater, cough and/or sore throat in the absence of a known cause other than influenza.

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.

[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[1] cases reported[2] statewide and county by subtype (A) or lineage (B)[3], Delaware 2016-17

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

Table 1b. Influenza positive[1] cases reported[2] statewide and county by age group, Delaware 2016-17

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

MMWR Week 41 = October 9 - 15, 2016

Figure 1. Confirmed cases[1] of influenza by type and subtype/lineage, Delaware 2016-17*

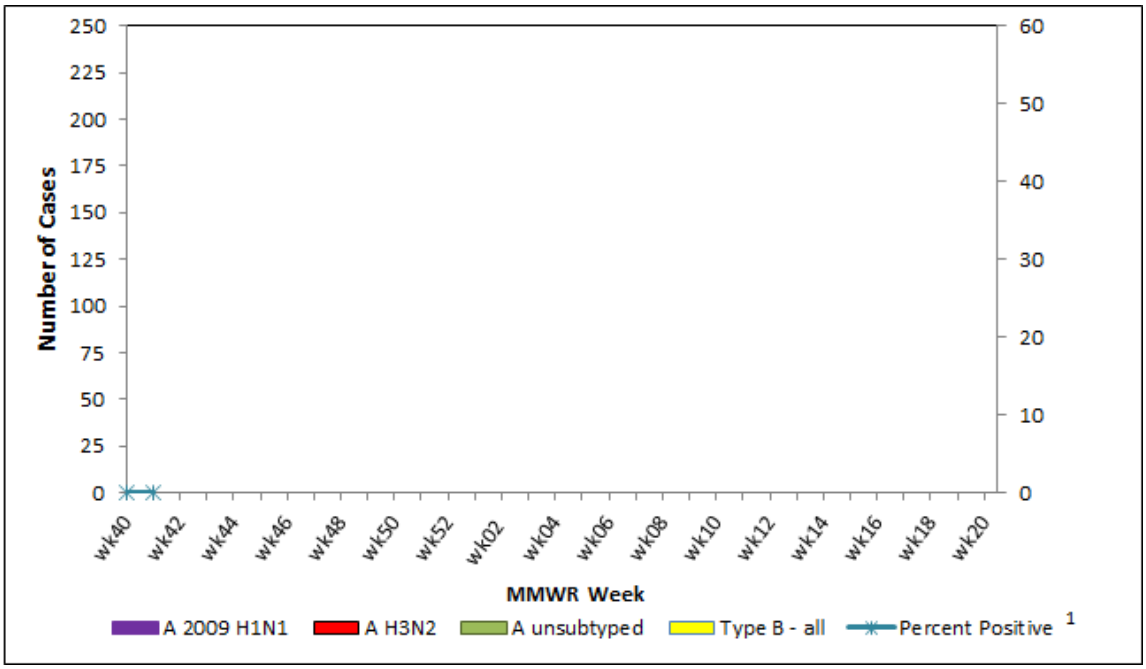


Table 2. Influenza-related hospitalizations statewide and county, by age group, Delaware 2016-17

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

Table 3. Influenza-related deaths, Delaware 2016-17

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

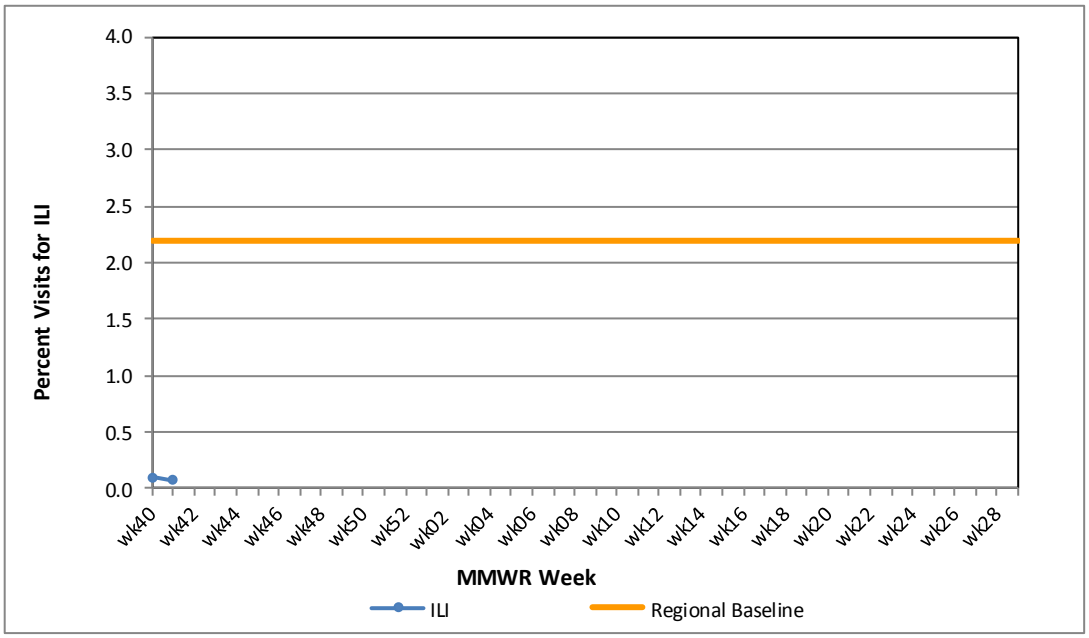
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2016-17

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)	**0**

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.

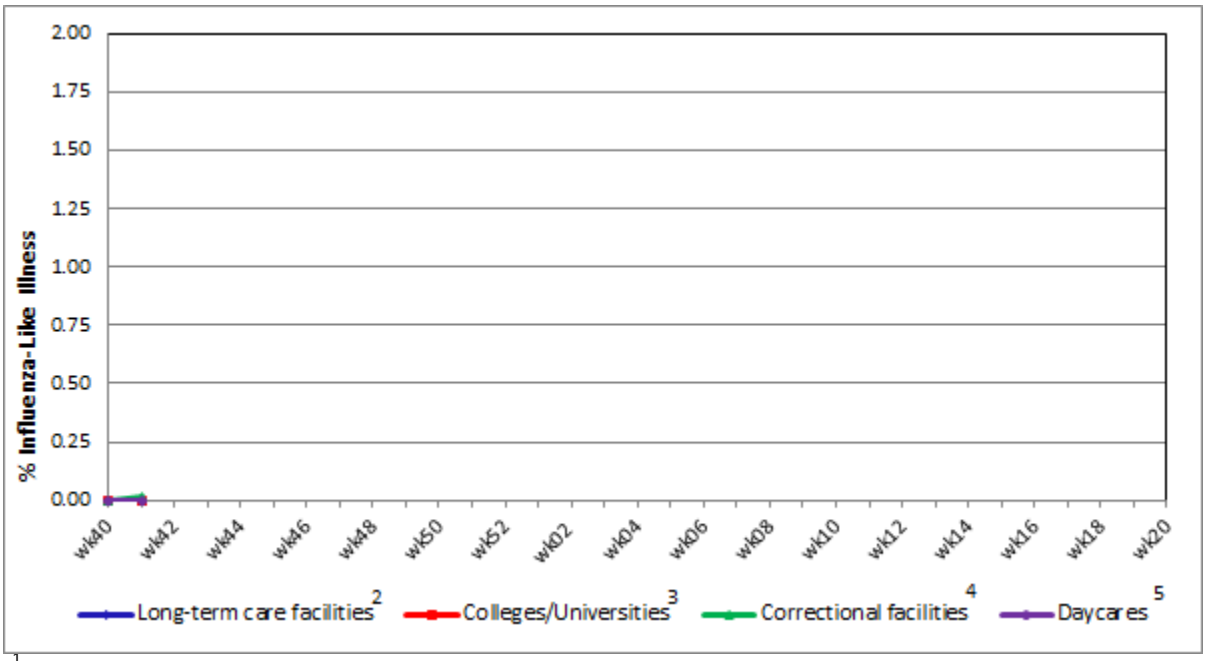
Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers[1] participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2016-17



[1] Eleven 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 influenza surveillance ILI reporting partners[1], Delaware 2016-17



[1] ILINet reporting partners include long-term care facilities, colleges / universities, correctional facilities and daycare facilities. Federally qualified health centers are now CDC ILINet sentinel providers.

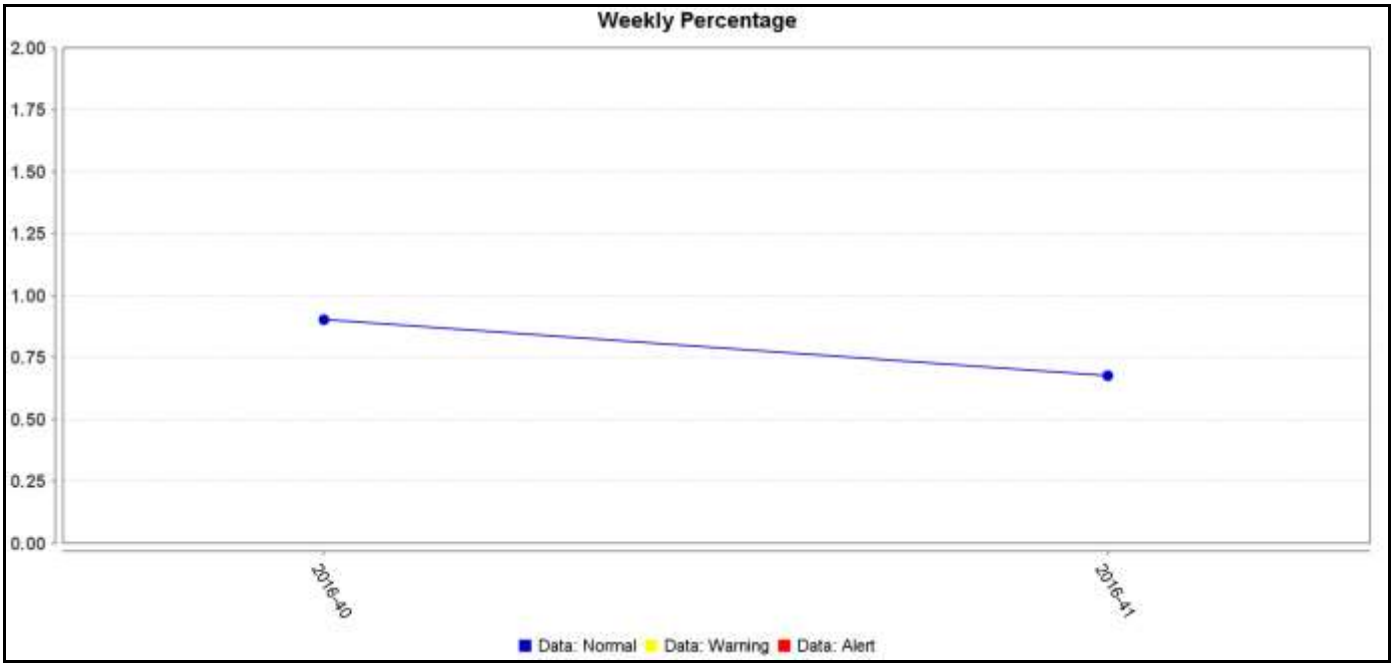
[2] % ILI= percentage of residents with ILI symptoms. Seven long-term care facilities reported.

[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; No daycare providers reported.

Figure 4. Percentage of emergency department 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) and other respiratory virus activity increased with RSV predominating, while influenza remained low. National ILI activity slightly increased, but similar to previous seasons for the same time of the year.

In the Caribbean, low influenza and other respiratory virus activity were reported throughout most of the sub-region except in Cuba and French Guiana. In Central America, influenza virus activity remained low but detections of RSV increased in several countries. Most epidemiological indicators remained low or decreasing.

As is usual for this time of year, influenza activity is low in the European Region.

In temperate South America, influenza and respiratory syncytial virus (RSV) activity decreased throughout most of the sub-region. In most countries in tropical South America, respiratory virus activities remained low.

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 generally low with predominantly influenza B detections. In Southeast Asia, a decreasing trend in influenza detection was observed overall.

In tropical countries of Africa, Ghana and Senegal reported slightly increased influenza activity. In the temperate countries of Southern Africa, influenza detections decreased with A(H1N1)pdm09 virus dominant.

In Oceania, influenza virus activity decreased in the last few weeks and influenza A(H3N2) remained the dominant circulating influenza virus. In Australia, activity decreased but was still high; while in New Zealand ILI rates remained below the seasonal baseline level.

Reference: World Health Organization (WHO), 2016. Influenza Update number 274 (10/17/16). Retrieved October 21, 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.