



Delaware Weekly Influenza Report

MMWR Week 7 (February 20 – 27, 2016)

Delaware Division of Public Health

National Influenza Synopsis 2015-2016:

National data are updated Friday of each week. Please visit <http://www.cdc.gov/flu/weekly/> for the most current information. During MMWR Week 7 (February 14 - 20, 2016), influenza activity increased in the United States. The most frequently identified influenza virus type reported by public health laboratories during week 7 was influenza A, with influenza A (H1N1)pdm09 viruses predominating. The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased. **Widespread influenza activity** was reported by Guam, Puerto Rico and 21 states (Arizona, California, Connecticut, Iowa, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Pennsylvania, Texas, Utah, Vermont, Virginia and Washington). **Regional influenza activity** was reported by 18 states (Alabama, Florida, Georgia, Hawaii, Idaho, Indiana, Kansas, Maine, Montana, Nebraska, North Carolina, Ohio, Oklahoma, Oregon, Rhode Island, South Dakota, Tennessee and Wyoming). **Local influenza activity** was reported by the District of Columbia and 10 states (Alaska, Arkansas, Colorado, Delaware, Illinois, Louisiana, Mississippi, Missouri, South Carolina and Wisconsin). **Sporadic influenza activity** was reported by the U.S. Virgin Islands and West Virginia. Both national and state data are provisional and subject to change as additional reports are received.

Delaware Influenza Surveillance 2015-2016:

During MMWR Week 7, there were 42 laboratory-confirmed cases of influenza reported among Delaware residents, with a total of 100 confirmed cases for the 2015-16 season. Reports of influenza-like illness (ILI) received from participating providers, facilities and institutions in **Delaware show ILI is 0.04%**, (baseline is 1.8%). **Nationally, ILI is 3.2%** (national baseline is 2.1%).

Level of Influenza Activity in Delaware, MMWR Week 7:

Local	Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of 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.	
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 2015-2016 Region 3 (DE, DC, MD, PA, VA and WV) baseline = 1.8%.

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.

<u>In this report:</u>	<u>page</u>
Influenza positive cases reported statewide and county, by subtype, Delaware 2015-16	2
Influenza positive cases reported statewide and county by age group, Delaware 2015-16	2
Confirmed cases of influenza by type and subtype, Delaware 2015-16	3
Influenza-related hospitalizations, statewide and county, by age group, Delaware 2015-16	3
Influenza-related deaths, Delaware 2015-16	3
Annual number of influenza cases reported by flu season, Delaware 2004-2005 through 2015-16	4
Percentage of visits for influenza-like illness reported by sentinel providers participating in the ILINet, Delaware 2015-16	4
Influenza-like illness reported by ILI reporting partners, Delaware 2015-16	5
Percentage of Delaware emergency department visits related to influenza, Delaware 2015-16	5
Summary of International Influenza Activity	6

Table 1a. Influenza positive¹ cases reported² statewide and county by subtype (A) or lineage (B)³, Delaware 2015-16

Confirmed Flu Cases by Subtype / Lineage		Wk 40	Wk 41	Wk 42	Wk 43	Wk 44	Wk 45	Wk 46	Wk 47	Wk 48	Wk 49	Wk 50	Wk 51	Wk 52	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	YTD	YTD Total	YTD County %			
STATEWIDE	A / 2009 H1N1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	2	2	9	24	41	100				
	A / 2012 H3N2	0	0	1	0	0	0	0	0	1	0	0	2	2	0	2	0	0	0	0	1	9					
	A / no subtype	0	0	0	0	1	0	0	0	1	0	0	0	0	3	0	0	2	2	7	10	26					
	B / Yamagata	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	1	3	8					
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	2	1	6					
	B / no lineage	0	1	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	1	0	1	3			10		
New Castle County	A / 2009 H1N1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	8	14	25	56	56.0%			
	A / 2012 H3N2	0	0	1	0	0	0	0	0	0	0	0	2	2	0	1	0	0	0	0	1	7					
	A / no subtype	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	2	2	3	10					
	B / Yamagata	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	3	6					
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4					
	B / no lineage	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	2	1			4		
Kent County	A / 2009 H1N1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	5	7	24	24.0%			
	A / 2012 H3N2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	A / no subtype	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	3	5	11					
	B / Yamagata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1					
	B / no lineage	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	5					
Sussex County	A / 2009 H1N1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	1	5	9	20	20.0%			
	A / 2012 H3N2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2					
	A / no subtype	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	2	5					
	B / Yamagata	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0			2		
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			1		
	B / no lineage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0			1		

Table 1b. Influenza positive¹ cases reported² statewide and county by age group, Delaware 2015-16

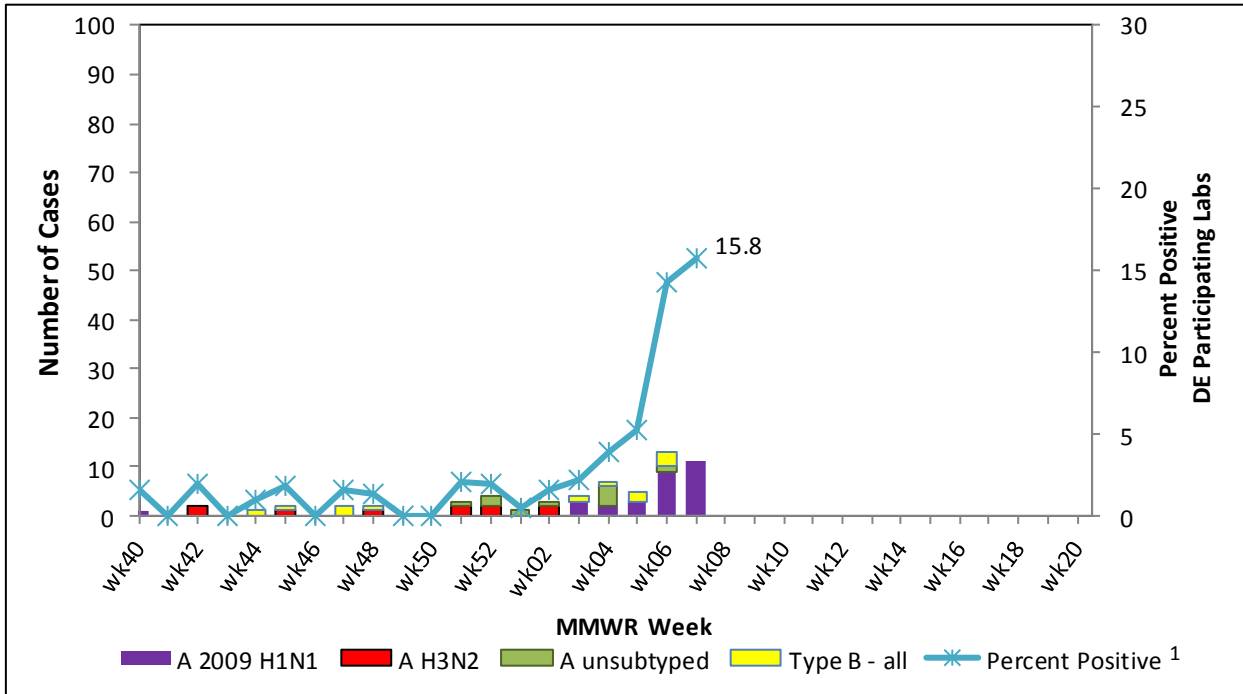
Confirmed Flu Cases by Age Group		Wk 40	Wk 41	Wk 42	Wk 43	Wk 44	Wk 45	Wk 46	Wk 47	Wk 48	Wk 49	Wk 50	Wk 51	Wk 52	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	YTD	YTD Total	YTD County %		
STATEWIDE	0-4 years	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	5	7	17	100			
	5-24 years	0	0	0	0	0	0	0	0	3	0	1	1	1	2	1	0	1	3	7	8	28				
	25-49 years	1	1	1	0	1	0	0	1	0	0	0	0	0	1	1	1	1	2	5	15	31				
	50-64 years	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2	1	1	9	15				
	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	1	0	2	3	9				
New Castle County	0-4 years	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3	5	10	56	56.0%		
	5-24 years	0	0	0	0	0	0	0	1	0	1	1	1	2	0	0	1	3	4	4	18					
	25-49 years	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	3	5	13				
	50-64 years	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	5	8				
	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	1	3	7				
Kent County	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	1	1	5	24	24.0%		
	5-24 years	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	2	5				
	25-49 years	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	9				
	50-64 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4				
	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1				
Sussex County	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	20	20.0%		
	5-24 years	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	2	5				
	25-49 years	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	5	9				
	50-64 years	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3				
	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0			1	

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 2015-16*



¹ Based on patients with positive nucleic acid or viral culture test results reported to the Delaware Division of Public Health.

Table 2. Influenza-related hospitalizations statewide and county, by age group, Delaware 2015-16

Hospitalized Flu Cases by Age Group		Wk 40	Wk 41	Wk 42	Wk 43	Wk 44	Wk 45	Wk 46	Wk 47	Wk 48	Wk 49	Wk 50	Wk 51	Wk 52	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	YTD	YTD Total	YTD County %						
STATEWIDE	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	17							
	5-24 years	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	3			17					
	25-49 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3					17			
	50-64 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4							17	
	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	1	0	1	1	6								
New Castle County	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	14	82.4%						
	5-24 years	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	3			14	82.4%				
	25-49 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2					14	82.4%		
	50-64 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3							14	82.4%
	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	1	1	5								
Kent County	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	17.7%						
	5-24 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			3	17.7%				
	25-49 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1					3	17.7%		
	50-64 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1							3	17.7%
	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1								
Sussex County	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%						
	5-24 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0.0%				
	25-49 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0.0%		
	50-64 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							0	0.0%
	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								

Table 3. Influenza-related deaths, Delaware 2015-16

Influenza-Related Deaths	Wk 40	Wk 41	Wk 42	Wk 43	Wk 44	Wk 45	Wk 46	Wk 47	Wk 48	Wk 49	Wk 50	Wk 51	Wk 52	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	YTD	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

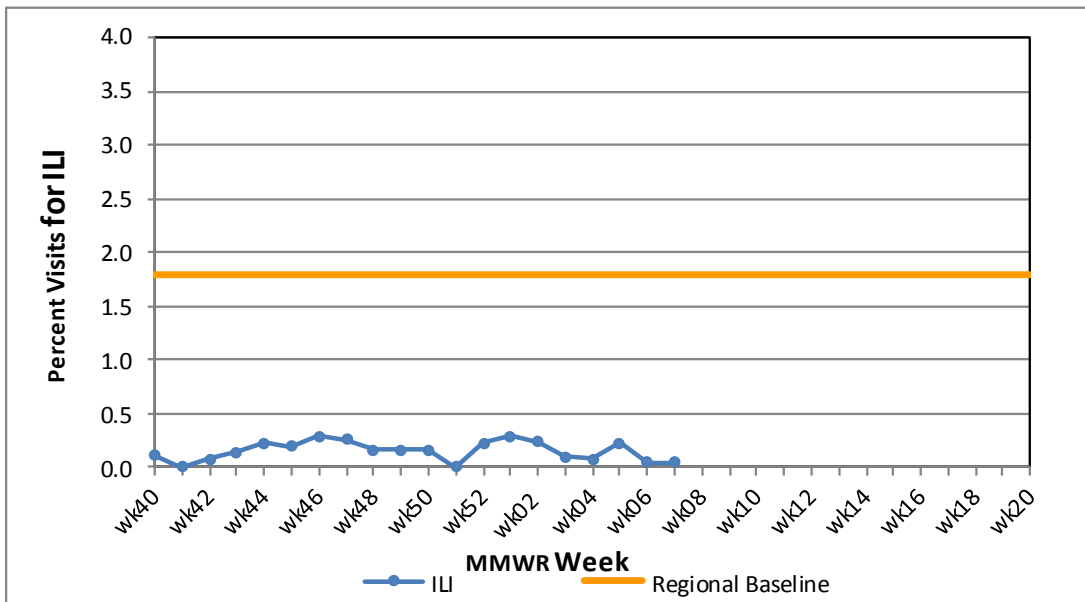
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2015-16

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 (YTD)	100

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.

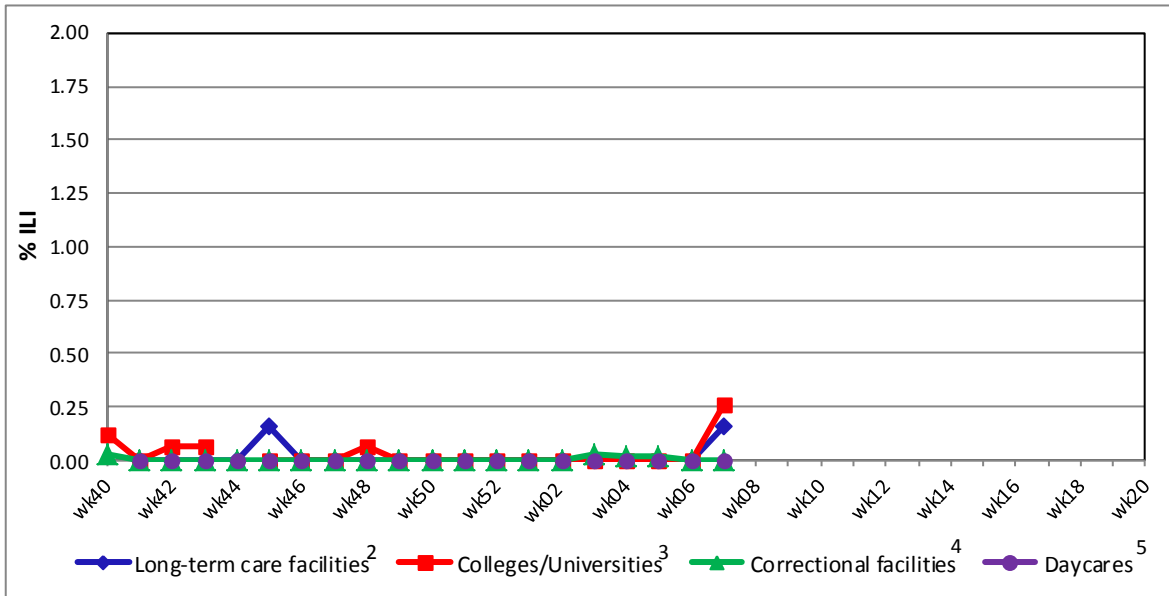
Figure 2. Percentage of visits for influenza-like illness (ILI) reported by sentinel providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2015-16



¹ Nine of 17 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 includes DE, DC, MD, PA, VA and WV.

Figure 3. Influenza-like illness reported by influenza surveillance ILI reporting partners¹, Delaware 2015-16



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.

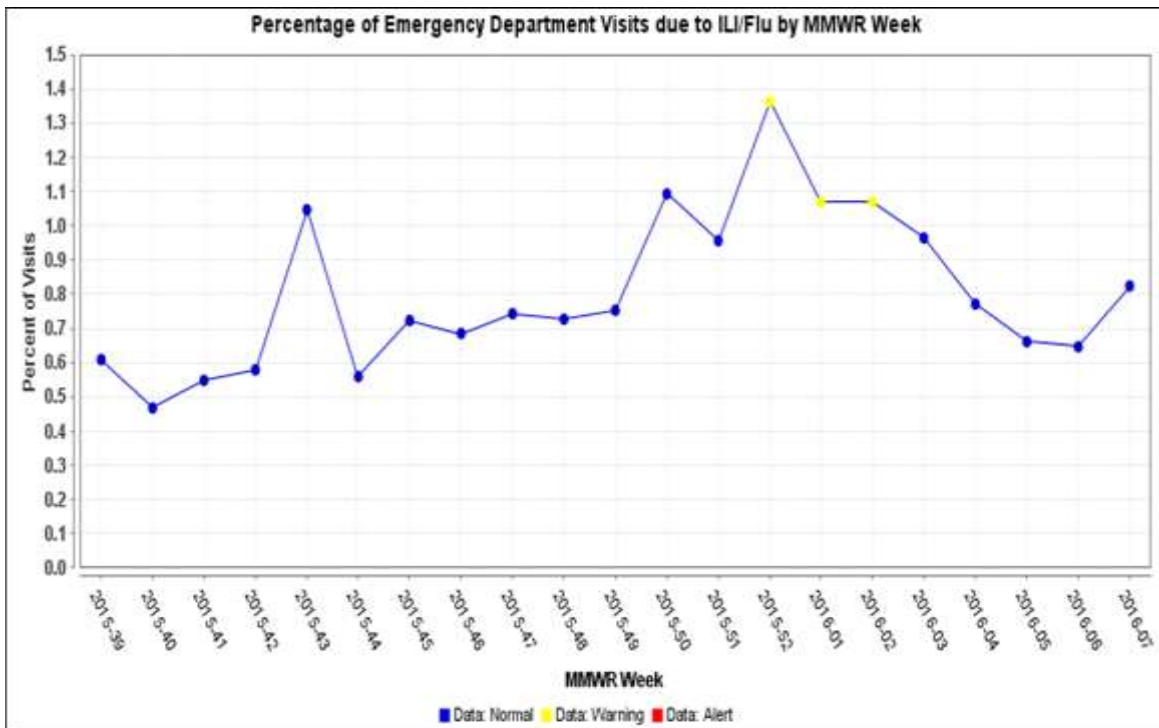
² % ILI= percentage of residents with ILI symptoms. Seven long-term care facilities reported.

³ % ILI= percentage of student visits for ILI; Two universities reported.

⁴ % ILI= percentage of visits for ILI at the correctional facility; Ten correctional facilities reported.

⁵ % ILI= percentage of children absent with ILI; No daycare providers reported.

Figure 4.



Summary of International Influenza Activity

In North America overall, moderate influenza and other respiratory virus activity was reported. Influenza activity maintained an increasing trend in the U.S. and Canada with influenza A(H1N1)pdm09 predominating, and in Mexico with influenza A(H3N2) predominating. High ILI and RSV activity continued in the U.S.

In most tropical countries of the Americas and Central America, influenza and other respiratory virus activity were at low levels. In the Caribbean, low influenza and other respiratory virus activity were reported in most countries, except for increasing respiratory viruses in Cuba. ILI activity in Puerto Rico and pneumonia activity in Jamaica continued increasing. Mexico reported low levels of A(H3N2) virus activity.

High levels of influenza activity have been reported in some countries in Europe. In northern, eastern and southern Europe, increasing influenza A(H1N1)pdm09 activity continued to be reported. Greece and Ireland reported high-intensity influenza activity and Finland, the Russian Federation and Ukraine reported very high activity. Influenza A(H1N1)pdm09 viruses predominated.

In East Africa in Mauritius increasing influenza A(H1N1)pdm09 activity was reported. In northern Africa, Algeria and Morocco reported increasing influenza A(H1N1)pdm09 virus activity during this period.

In the temperate countries of northern Asia, activity was ongoing with various proportions of circulating seasonal influenza viruses. In central and western Asia, increasing activity predominantly of influenza A(H1N1)pdm09 virus was observed. In tropical Asia, countries in Southern and South East Asia continued to report ongoing low influenza activity.

In the temperate countries of the Southern Hemisphere respiratory virus activity remained low.

Source: World Health Organization (WHO), 2016. Influenza Update Number 257 (2/22/16). Retrieved on February 26, 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.