



# Delaware Weekly Influenza Report

## MMWR Week 5 (February 1 – 7, 2015)

### Delaware Division of Public Health

#### National Influenza Synopsis 2014-2015:

National data are updated Friday of each week. Please visit <http://www.cdc.gov/flu/weekly/> for the most current information. During MMWR Week 5 (February 1 - 7, 2015), flu activity decreased slightly, but remains widespread across most of the United States and severity indicators are still high. Parts of the country that saw earlier increases in flu activity are now experiencing declines while regions where flu activity started later are still experiencing increases in activity. Influenza activity remained elevated in the U.S. The severity of flu disease so far this season is similar to some previous seasons in which influenza A (H3N2) viruses have circulated predominantly. The geographic spread of influenza in 32 states and Puerto Rico was reported as widespread. Guam, the U.S. Virgin Islands and 16 states reported regional activity. The District of Columbia, Alaska and Minnesota reported local activity. Both national and state data are provisional and subject to change as additional reports are received.

#### Delaware Influenza Surveillance 2014-2015:

During MMWR Week 5, there were 65 laboratory-confirmed cases of influenza reported among Delaware residents, bringing the total number of laboratory-confirmed cases this season to 2,076. Reports of influenza-like illness (ILI) received from participating providers, facilities and institutions indicated a “moderate” activity” level in the community. The proportion of outpatient visits for influenza-like illness (ILI) was 1.95% in Delaware, slightly below the regional baseline of 2.0%, and was 4.1% nationally.

#### Level of Influenza Activity in Delaware, MMWR Week 5:

<b>Widespread</b>	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 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.	
<b>No Activity:</b> No laboratory-confirmed cases of influenza and no reported increase in the number of cases of ILI.	
<b>Sporadic:</b> 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.	
<b>Local:</b> Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state.	
<b>Regional:</b> 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. <sup>3</sup>	
<b>Widespread:</b> 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.	

<sup>1</sup> 2014-2015 Region 3 (DE, DC, MD, PA, VA, and WV) baseline = 2.0%.

<sup>2</sup> Laboratory-confirmed case = case confirmed by viral culture or PCR.

<sup>3</sup> 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 positive<sup>1</sup> cases reported<sup>2</sup> statewide and county by subtype (A) or lineage (B)<sup>3</sup>, Delaware 2014-15**

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 53	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	YTD	YTD Total	YTD County %	
STATEWIDE	A / 2009 H1N1	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	4	2,076	
	A / 2012 H3N2	0	1	2	1	9	8	13	23	33	37	47	88	61	48	49	46	45	38	34	583			
	A / no subtype	0	0	0	2	2	7	9	16	40	47	66	241	387	228	140	101	99	59	30	1,474			
	B / Yamagata	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	1	1	0	0	5			
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	B / no lineage	0	0	0	3	0	1	0	0	0	1	1	0	0	0	1	1	1	0	1	10			
New Castle County	A / 2009 H1N1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	888	42.8%	
	A / 2012 H3N2	0	0	0	1	1	0	1	3	6	10	20	53	40	33	32	30	27	28	18	303			
	A / no subtype	0	0	0	0	0	0	0	1	3	3	7	70	184	110	69	44	61	20	6	578			
	B / Yamagata	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	1	0	0	4			
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	B / no lineage	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2			
Kent County	A / 2009 H1N1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	778	37.5%	
	A / 2012 H3N2	0	0	0	0	0	1	0	4	5	5	9	17	13	7	9	12	5	7	10	104			
	A / no subtype	0	0	0	0	0	1	1	4	16	23	38	113	177	104	57	43	30	37	20	664			
	B / Yamagata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1			
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	B / no lineage	0	0	0	1	0	1	0	0	0	0	1	0	0	0	1	1	1	0	0	6			
Sussex County	A / 2009 H1N1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	410	19.7%	
	A / 2012 H3N2	0	1	2	0	8	7	12	16	22	22	18	18	8	8	8	4	13	3	6	176			
	A / no subtype	0	0	0	2	2	6	8	11	21	21	21	58	26	14	14	14	8	2	4	232			
	B / Yamagata	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	0	0	0	0	0			
	B / no lineage	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2			

**Table 1b. Influenza positive<sup>1</sup> cases reported<sup>2</sup> statewide and county by age group, Delaware 2014-15**

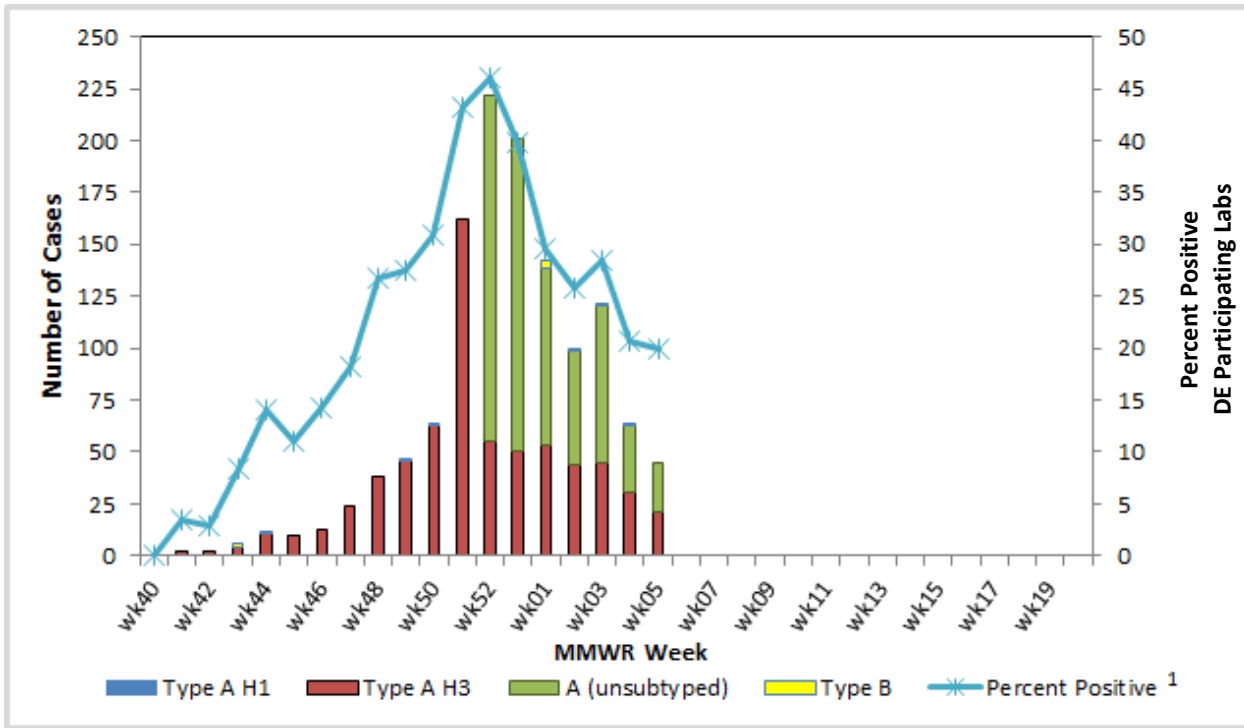
Confirmed Flu Cases by Age Group		Wk 40	Wk 41	Wk 42	Wk 43	Wk 44	Wk 45	Wk 46	Wk 47	Wk 48	Wk 49*	Wk 50	Wk 51	Wk 52	Wk 53	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	0	1	1	2	2	3	4	6	6	8	12	58	73	29	23	24	14	16	4	283	2,076	
	5-24 years	0	0	1	3	6	10	8	17	38	28	54	154	129	31	39	38	27	23	20	604		
	25-49 years	0	0	0	0	1	3	5	7	13	29	24	46	84	58	35	23	32	19	10	378		
	50-64 years	0	0	0	0	1	0	1	5	8	7	8	23	49	43	18	20	24	14	13	220		
	65+ years	0	0	0	1	1	0	4	4	8	13	17	49	116	115	77	44	49	25	18	520		
New Castle County	0-4 years	0	0	0	1	0	0	0	0	0	1	3	21	33	6	6	8	7	3	4	90	888	42.8%
	5-24 years	0	0	0	0	0	0	0	1	2	4	13	56	70	11	16	14	13	9	2	208		
	25-49 years	0	0	0	0	1	0	0	2	4	6	4	18	32	25	21	9	20	12	2	154		
	50-64 years	0	0	0	0	0	0	1	1	2	1	2	4	29	23	7	10	17	7	4	103		
	65+ years	0	0	0	1	0	0	0	0	1	2	6	25	60	78	53	33	32	17	12	305		
Kent County	0-4 years	0	0	0	1	0	1	1	0	3	3	5	26	30	20	16	12	5	12	0	135	778	37.5%
	5-24 years	0	0	0	0	0	1	0	6	12	12	22	67	51	16	17	19	10	14	18	246		
	25-49 years	0	0	0	0	0	1	0	1	3	7	13	17	48	29	9	11	8	5	3	151		
	50-64 years	0	0	0	0	0	0	0	0	2	1	2	13	15	14	9	8	5	5	6	74		
	65+ years	0	0	0	0	0	0	0	1	1	5	6	7	49	32	16	7	8	8	3	140		
Sussex County	0-4 years	0	1	1	0	2	2	3	6	3	4	4	11	10	3	1	4	2	1	0	58	410	19.7%
	5-24 years	0	0	1	3	6	9	8	10	24	12	19	31	8	4	6	5	4	0	0	150		
	25-49 years	0	0	0	0	0	2	5	4	6	16	7	11	4	4	5	3	4	2	5	73		
	50-64 years	0	0	0	0	1	0	0	4	4	5	4	6	5	6	2	2	2	2	3	43		
	65+ years	0	0	0	0	1	0	4	3	6	6	5	17	7	5	8	4	9	0	3	75		

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

<sup>2</sup> Reports are by the date the laboratory results are obtained. As a result, prior weeks' counts may be adjusted to reflect additional cases received.

<sup>3</sup> 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, these influenza cases will be categorized as Influenza B, no lineage identified.

Figure 1. Confirmed cases<sup>1</sup> of influenza by type and subtype/lineage, Delaware 2014-15\*



<sup>1</sup> 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 2014-15

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 53	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	0	0	0	1	0	0	0	1	1	0	0	1	7	2	0	2	0	0	0	15	512	
	5-24 years	0	0	0	0	0	0	0	1	1	1	1	2	6	2	4	0	0	2	1	20		
	25-49 years	0	0	0	0	0	0	0	0	0	2	1	6	7	12	9	5	7	7	1	56		
	50-64 years	0	0	0	0	0	0	0	1	0	3	0	5	18	21	9	6	12	3	3	78		
	65+ years	0	0	0	1	1	0	2	0	0	4	12	27	73	89	58	28	34	14	10	343		
New Castle County	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	363	70.9%
	5-24 years	0	0	0	0	0	0	0	0	1	0	1	2	5	2	3	0	0	2	1	16		
	25-49 years	0	0	0	0	0	0	0	0	0	2	1	4	5	9	7	4	5	7	0	44		
	50-64 years	0	0	0	0	0	0	0	1	0	1	0	0	14	18	6	5	10	3	2	57		
	65+ years	0	0	0	1	0	0	0	0	0	1	6	17	41	67	48	22	29	12	8	242		
Kent County	0-4 years	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	5	101	19.7%
	5-24 years	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0	4		
	25-49 years	0	0	0	0	0	0	0	0	0	0	0	1	2	3	1	1	1	0	0	9		
	50-64 years	0	0	0	0	0	0	0	0	0	1	0	4	4	3	2	1	1	1	1	17		
	65+ years	0	0	0	0	0	0	0	0	0	1	1	2	28	18	5	3	4	4	1	66		
Sussex County	0-4 years	0	0	0	0	0	0	0	1	1	0	0	0	2	1	0	1	0	0	0	6	48	9.4%
	5-24 years	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	1	0	0	1	0	1	0	1	3		
	50-64 years	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	4		
	65+ years	0	0	0	0	1	0	2	0	0	2	5	8	4	4	5	3	1	0	1	35		

Table 3. Influenza-related deaths, Delaware 2014-15

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 53	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	YTD Total
	0	0	0	0	0	0	1	1	0	0	0	0	1	3	5	5	3	1	2	22

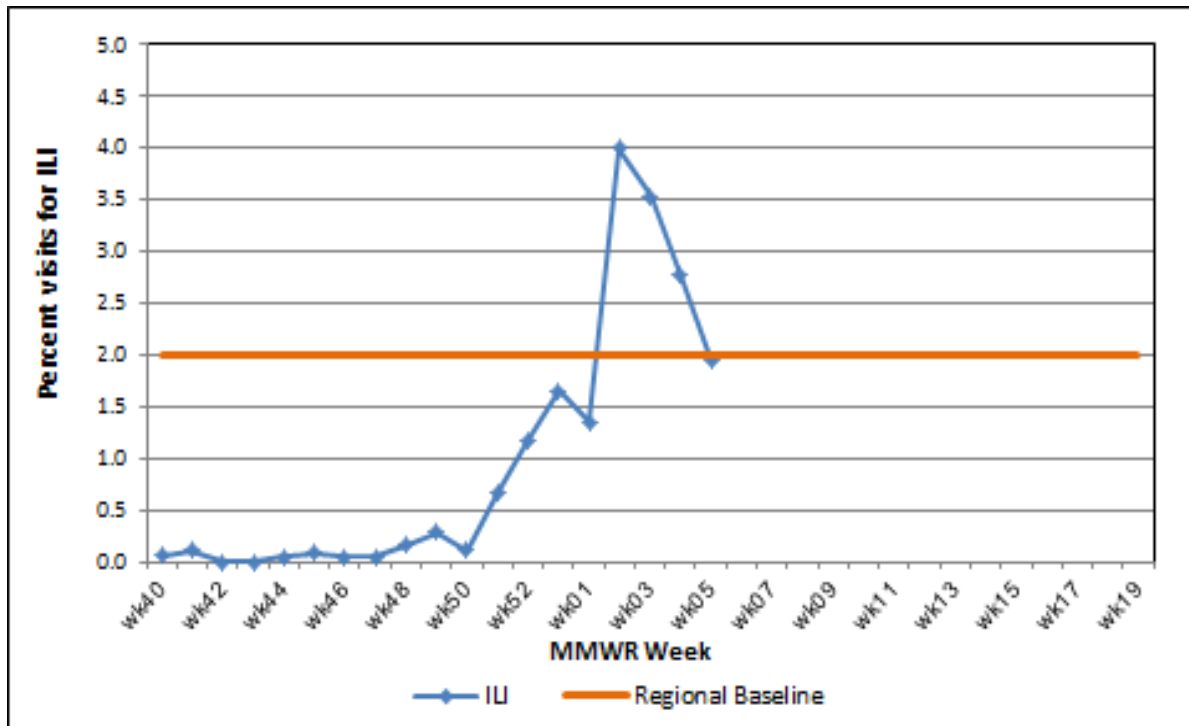
**Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2014-15**

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	1,470
2011 – 2012	262
2012 – 2013	1,773
2013 – 2014	1,842
<b>2014 – 2015 (YTD)</b>	<b>2,076</b>

**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.

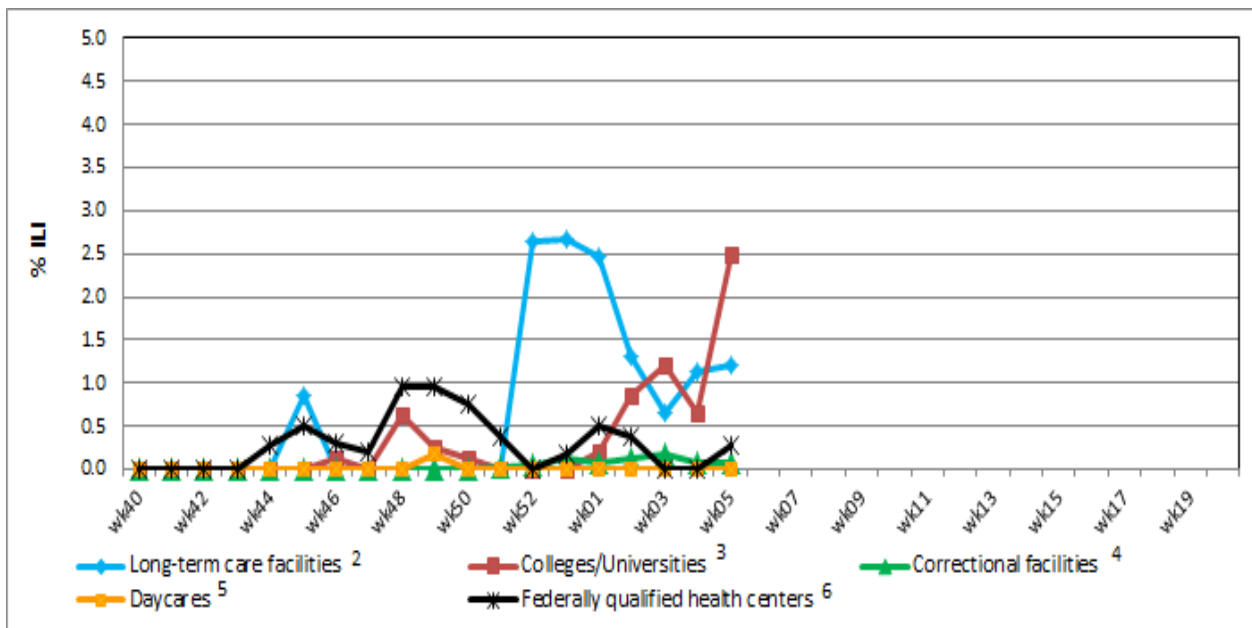
**Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers<sup>1</sup> participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2014-15**



<sup>1</sup> 12 of 16 sentinel providers reported.

<sup>2</sup> 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 partners<sup>1</sup>, Delaware 2014-15**



<sup>1</sup> ILINet reporting partners include long-term care facilities, colleges / universities, correctional facilities, daycare facilities and federally qualified health centers.

<sup>2</sup> % ILI= percentage of residents with ILI symptoms. Eight of 20 LTCFs reported.

<sup>3</sup> % ILI= percentage of student visits for ILI; Three universities reported.

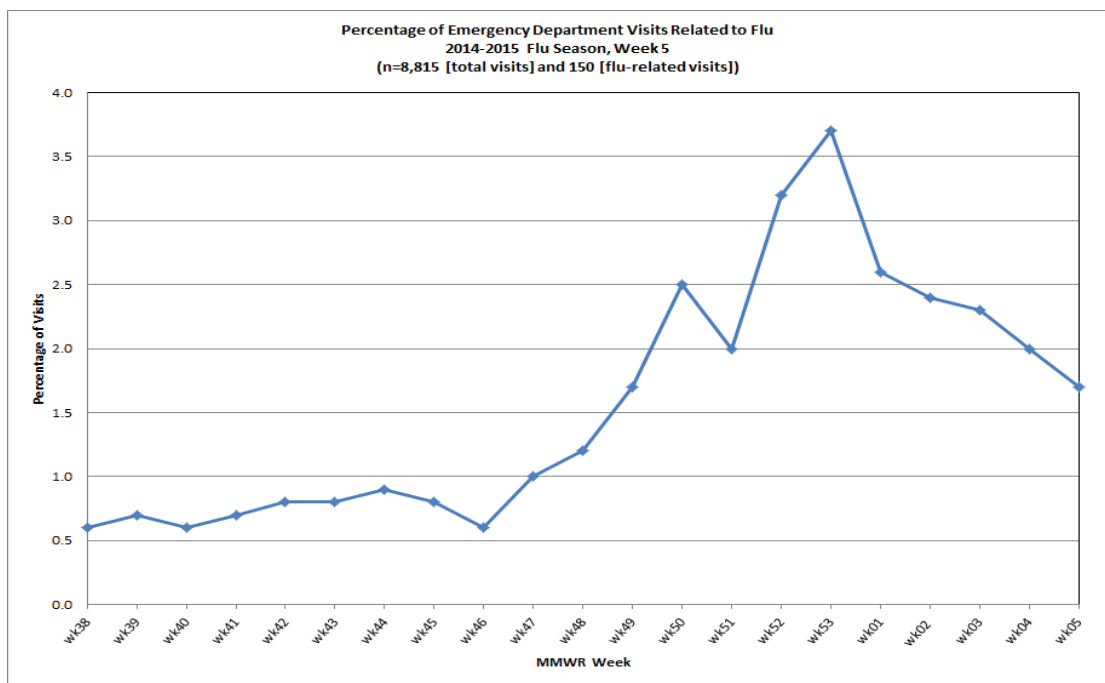
<sup>4</sup> % ILI= percentage of visits for ILI at the correctional facility; Ten facilities reported.

<sup>5</sup> % ILI= percentage of children absent with ILI; One daycare provider reported.

<sup>6</sup> % ILI= percentage of visits for ILI at FQHCs; LaRed (Seaford & Georgetown) and Henrietta Johnson Medical Center (Wilmington & Southbridge).

<sup>7</sup> The regional baseline is calculated by CDC using non-influenza weeks from the previous three influenza seasons. Delaware is part of Region 3 that also includes DC, MD, PA, VA and WV.

**Figure 4. Percentage of Delaware emergency department visits related to influenza (flu)\*, 2014-15**



\* Two syndromes are represented in this graph. Influenza-like illness (ILI) syndrome is defined as a chief complaint with fever and cough and/or sore throat. The flu syndrome is defined as any chief complaint regarding influenza.

## **Summary of International Influenza Activity**

Globally influenza activity remained high in the northern hemisphere with influenza A(H3N2) viruses predominating so far this season. Antigenic characterization of most recent A(H3N2) viruses thus far indicated differences from the A(H3N2) virus used in the influenza vaccines for the northern hemisphere 2014-2015.

In North America, the influenza activity seemed to have peaked. Influenza A(H3N2) virus predominated this season. In the United States, ILI activity (4.1%) decreased this week and remained above the national baseline of 2%. Influenza detections (17.5% positivity) continued to decrease. Influenza A (not subtyped) and influenza A(H3) predominated. Influenza-associated hospitalization rates among adults aged ≥65 years are higher this season as compared to the 2012-13 season (an influenza A/H3 predominant season) and the percentage of deaths due to pneumonia and influenza (8.5%) remained above the epidemic threshold. RSV continues at a high level and is still increasing. In Canada, ILI activity was similar to the previous week and continued slightly above expected levels.

In tropical countries of the Americas, influenza activity was low in most countries of the Caribbean, Central America and in the tropical countries of South America. In Europe, the influenza season is well under way, particularly in western and central countries in the WHO European Region. Influenza A(H3N2) was the dominant virus detected this season. In the temperate countries of Asia, influenza activity appeared to have peaked in northern China, but was still increasing in Japan and the Republic of Korea. Influenza A(H3N2) virus predominated so far. In tropical Asia, influenza activity increased in south China; Hong Kong and India. In the southern hemisphere, influenza activity remained at inter-seasonal levels.

Reference: World Health Organization (WHO), 2015. Influenza Update number 230 (2/9/15). Retrieved on February 13, 2015, from [http://www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/) Reports are updated biweekly.

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**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 influenza data available. Please visit us at [flu.delaware.gov](http://flu.delaware.gov) or <http://dhss.delaware.gov/dhss/dph/dpc/immunize-flu.html> for general information on the flu or specific information on DPH flu clinics.

- For questions on Delaware's weekly flu report, call the DPH Office of Infectious Disease Epidemiology at 302-744-4990.
- For questions regarding influenza vaccination information, please call 302-744-1060.