



# Delaware Weekly Influenza Report

## MMWR Week 16 (April 19 – 25, 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 16 (April 19 – 25, 2015), influenza activity continued to decrease in the United States. During week 15, influenza B viruses comprised 88% of influenza positive specimens reported. The proportion of deaths attributed to pneumonia and influenza was below the epidemic threshold. The geographic spread of influenza was reported as widespread in three states. Nine states and Guam reported regional activity, while 14 states and Puerto Rico reported local activity. The District of Columbia, the U.S. Virgin Islands and 21 states reported sporadic activity. Three states reported no influenza 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 16, there were eight laboratory-confirmed cases of influenza reported among Delaware residents, bringing the total number of laboratory-confirmed cases this season to 2,382. Reports of influenza-like illness (ILI) received from participating providers, facilities and institutions was 0.10%; well below the regional baseline of 2.0%. ILI was 1.4% nationally, below the national baseline of 2.0%.

#### Level of Influenza Activity in Delaware, MMWR Week 16:

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

<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 40-50	Wk 51	Wk 52	Wk 53	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15	Wk 16	YTD	YTD Total	YTD County %
STATEWIDE	A / 2009 H1N1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	6	2,382	
	A / 2012 H3N2	175	87	61	48	49	45	45	39	36	24	13	16	14	10	5	3	1	0	0	0	671		
	A / no subtype	189	241	385	228	141	102	99	58	32	50	23	4	3	1	1	3	1	1	1	0	1,563		
	B / Yamagata	1	0	0	0	2	1	1	0	0	0	0	3	1	5	5	4	4	8	2	2	39		
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	1	1	5		
	B / no lineage	6	0	0	0	1	1	1	0	1	3	6	4	3	3	13	16	17	11	7	5	98		
New Castle County	A / 2009 H1N1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	1,049	44.1%
	A / 2012 H3N2	42	52	40	33	32	29	27	28	18	21	11	13	11	9	5	3	1	0	0	0	375		
	A / no subtype	14	70	184	110	70	44	61	19	7	26	11	2	1	1	0	0	0	0	1	0	621		
	B / Yamagata	1	0	0	0	2	0	1	0	0	0	0	0	0	3	2	2	1	4	0	1	17		
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	3		
	B / no lineage	2	0	0	0	0	0	0	0	0	1	4	2	2	0	7	0	2	4	2	5	31		
Kent County	A / 2009 H1N1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	877	36.8%
	A / 2012 H3N2	24	17	13	7	9	12	5	8	12	2	2	2	3	0	0	0	0	0	0	0	116		
	A / no subtype	83	113	175	104	57	43	30	37	21	18	12	2	1	0	1	3	1	1	0	0	702		
	B / Yamagata	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	7		
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2		
	B / no lineage	3	0	0	0	1	1	1	0	0	1	2	1	0	2	4	13	7	5	5	0	46		
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	0	456	19.1%
	A / 2012 H3N2	109	18	8	8	8	4	13	3	6	1	0	1	0	1	0	0	0	0	0	0	180		
	A / no subtype	92	58	26	14	14	15	8	2	4	6	0	0	1	0	0	0	0	0	0	0	240		
	B / Yamagata	0	0	0	0	0	0	0	0	0	0	0	3	1	2	2	1	2	3	0	0	14		
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	B / no lineage	1	0	0	0	0	0	0	0	1	1	0	1	1	1	2	3	8	2	1	0	22		

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

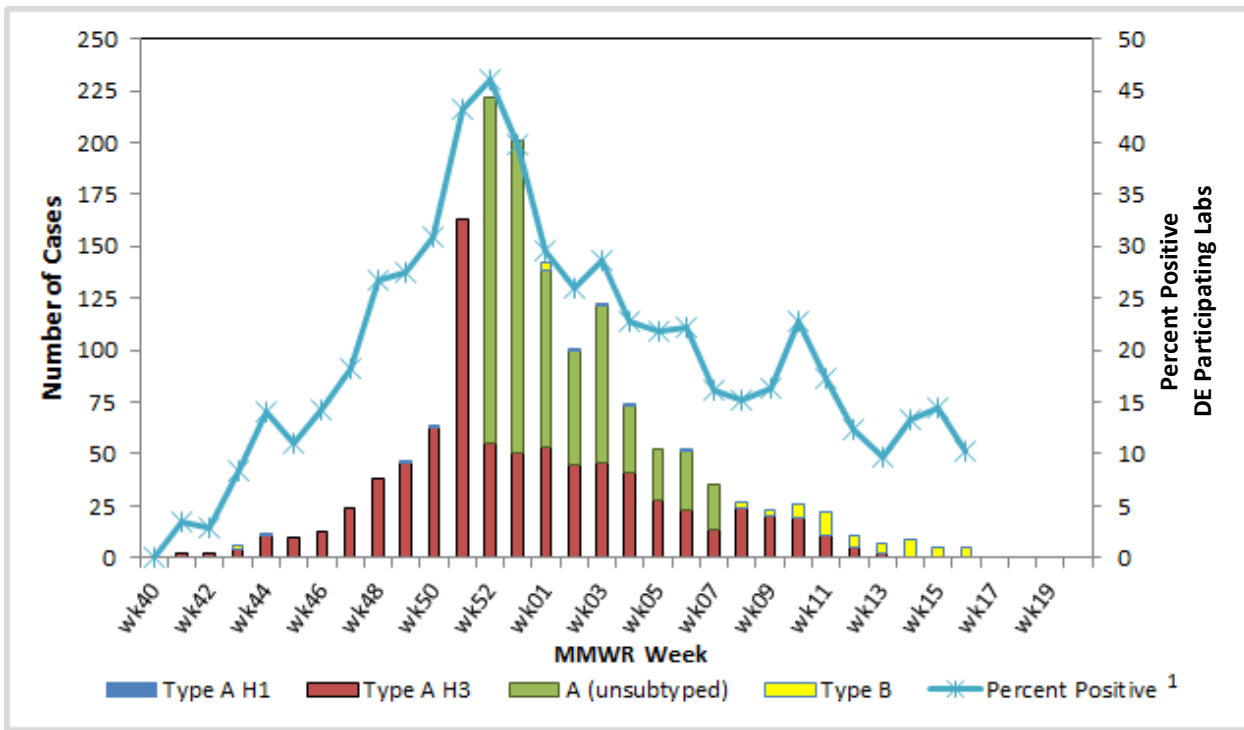
Confirmed Flu Cases by Age Group		Wk 40-50	Wk 51	Wk 52	Wk 53	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15	Wk 16	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	45	58	73	29	24	24	14	17	5	12	4	5	2	2	4	2	5	1	4	0	330	2,382	
	5-24 years	165	153	129	31	39	38	26	21	19	14	10	2	4	4	5	8	9	7	2	6	692		
	25-49 years	83	46	83	58	35	23	32	21	12	10	9	3	7	4	3	6	3	3	5	1	447		
	50-64 years	30	23	49	43	18	21	24	14	14	12	6	8	2	5	6	3	4	6	1	1	290		
	65+ years	48	49	115	115	77	43	50	24	19	29	13	9	7	4	8	7	2	3	1	0	623		
New Castle County	0-4 years	5	21	33	6	7	8	7	4	4	12	2	3	1	1	3	1	0	0	1	0	119	1,049	44.1%
	5-24 years	20	55	70	11	16	14	12	8	2	7	8	1	4	2	2	2	2	5	2	5	243		
	25-49 years	17	18	32	25	21	9	20	12	2	6	2	0	4	1	2	1	1	1	2	1	176		
	50-64 years	7	4	29	23	7	10	17	7	4	5	4	6	1	5	3	0	1	2	0	1	135		
	65+ years	10	25	60	78	53	32	33	16	13	18	10	7	5	4	4	1	0	0	0	0	369		
Kent County	0-4 years	14	26	30	20	16	12	5	12	1	0	2	2	0	1	1	0	2	0	3	0	147	877	36.8%
	5-24 years	53	67	51	16	17	19	10	13	17	4	2	1	0	1	2	4	4	1	0	1	283		
	25-49 years	25	17	47	29	9	11	8	7	5	3	7	1	2	0	1	4	1	2	2	0	181		
	50-64 years	5	13	15	14	9	8	5	5	7	4	2	1	0	0	2	3	1	3	1	0	98		
	65+ years	13	7	48	32	16	7	8	8	3	10	3	0	2	0	2	6	1	1	1	0	168		
Sussex County	0-4 years	5	21	33	6	7	8	7	4	4	12	2	3	1	0	0	1	3	1	0	0	64	456	19.1%
	5-24 years	20	55	70	11	16	14	12	8	2	7	8	1	4	1	1	2	3	1	0	0	161		
	25-49 years	17	18	32	25	21	9	20	12	2	6	2	0	4	3	0	1	1	0	1	0	89		
	50-64 years	7	4	29	23	7	10	17	7	4	5	4	6	1	0	1	0	2	1	0	0	56		
	65+ years	10	25	60	78	53	32	33	16	13	18	10	7	5	0	2	0	1	2	0	0	86		

<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 40-50	Wk 51	Wk 52	Wk 53	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15	Wk 16	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	3	1	7	2	0	2	0	0	0	0	0	0	0	0	1	0	2	0	0	0	18	620	
	5-24 years	4	2	6	2	4	0	0	2	1	0	1	1	3	1	1	0	0	1	0	0	30		
	25-49 years	3	6	7	12	9	5	7	7	1	2	2	0	3	2	1	0	1	0	0	0	68		
	50-64 years	4	5	18	21	9	6	12	4	3	2	2	1	1	3	1	3	1	2	0	0	98		
	65+ years	20	27	73	89	58	27	35	15	11	22	9	7	3	4	5	1	0	0	0	0	406		
New Castle County	0-4 years	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	444	71.6%
	5-24 years	2	2	5	2	3	0	0	2	1	0	1	1	3	1	1	0	0	1	0	1	25		
	25-49 years	3	4	5	9	7	4	5	7	0	2	1	0	3	1	1	0	1	0	0	0	53		
	50-64 years	2	0	14	18	6	5	10	3	2	1	2	1	1	3	0	0	0	0	0	0	68		
	65+ years	8	17	41	67	48	21	30	11	9	14	9	7	3	4	3	0	0	0	0	0	292		
Kent County	0-4 years	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	9	121	19.5%
	5-24 years	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4		
	25-49 years	0	1	2	3	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	12		
	50-64 years	1	4	4	3	2	1	1	1	1	1	0	0	0	0	1	3	1	2	0	0	227		
	65+ years	2	2	28	18	5	3	4	4	1	7	0	0	0	0	0	1	0	0	0	0	75		
Sussex County	0-4 years	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	7	55	8.9%
	5-24 years	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	1	0	0	1	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	5		
	50-64 years	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4		
	65+ years	10	8	4	4	5	3	1	0	1	1	0	0	0	0	2	0	0	0	0	0	39		

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

Influenza-Related Deaths	Wk 40-46	Wk 47	Wk 48	Wk 49	Wk 50	Wk 51	Wk 52	Wk 53	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15	Wk 16	YTD
	0	2	0	0	0	0	1	3	5	5	3	1	2	0	4	2	0	0	0	0	0	0	0	0	28

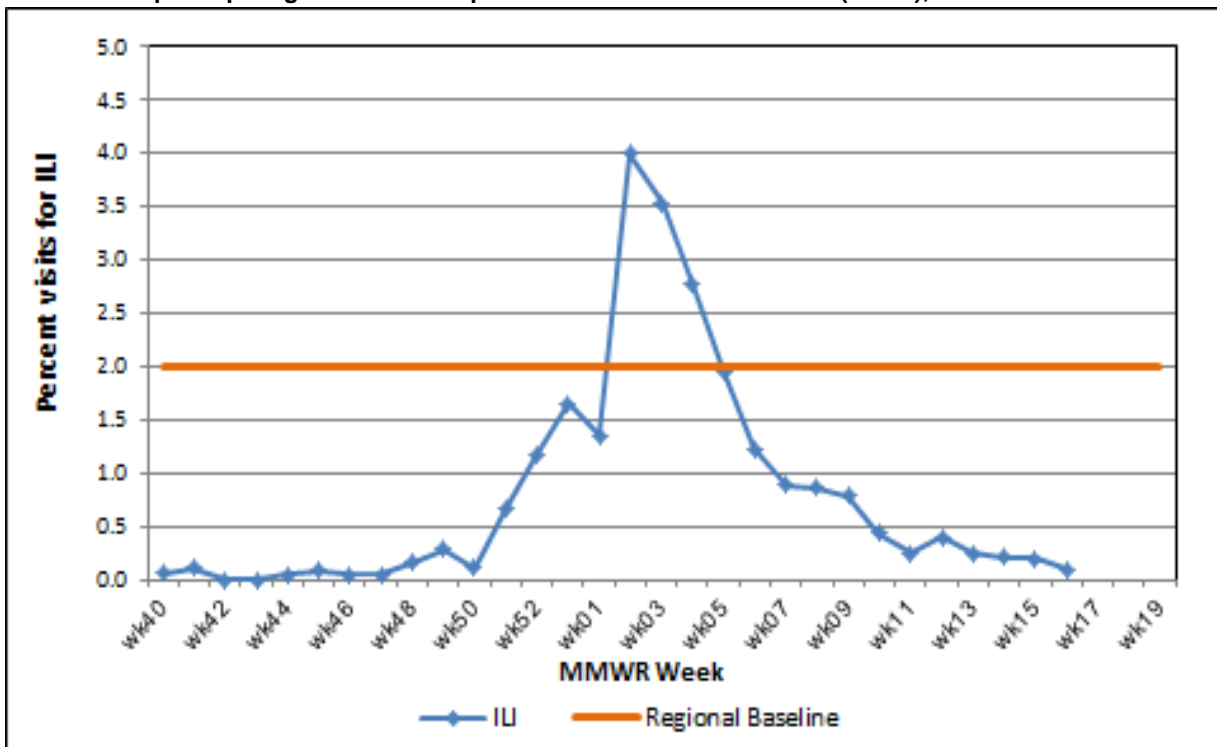
**Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2014-15**

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	1,479
2011 – 2012	267
2012 – 2013	1,781
2013 – 2014	1,842
<b>2014 – 2015 (YTD)</b>	<b>2,382</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.

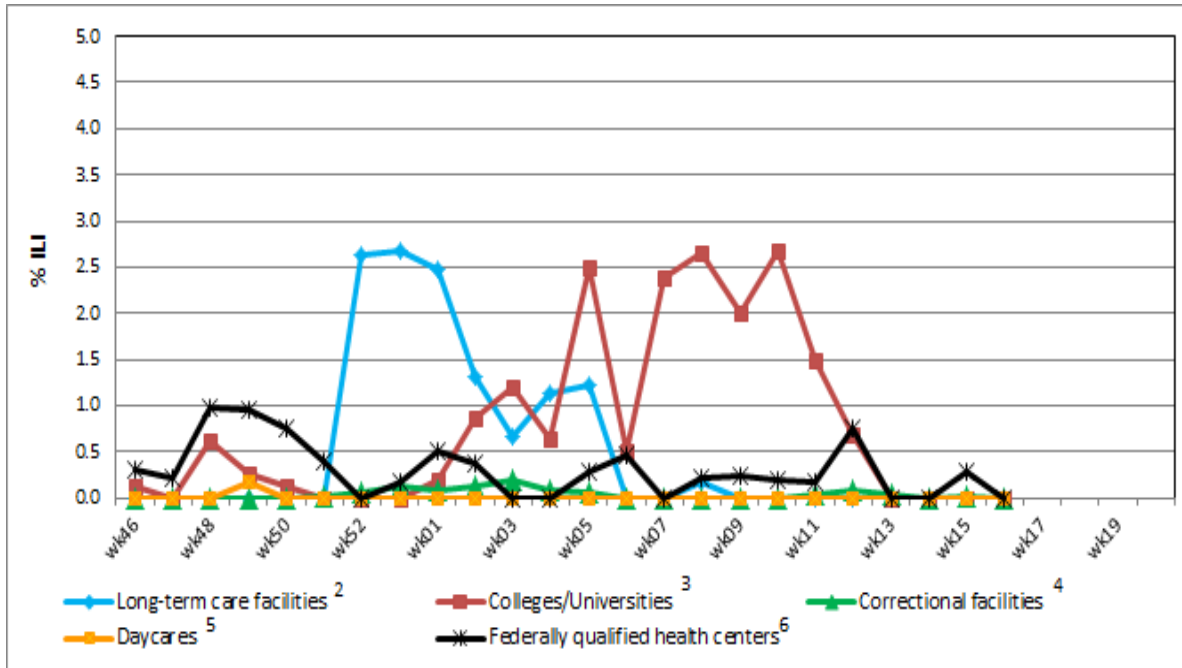
**Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers<sup>1</sup> participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2014-15**



<sup>1</sup> Eight 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 (FQHCs).

<sup>2</sup> % ILI= percentage of residents with ILI symptoms. Six long-term care facilities reported.

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

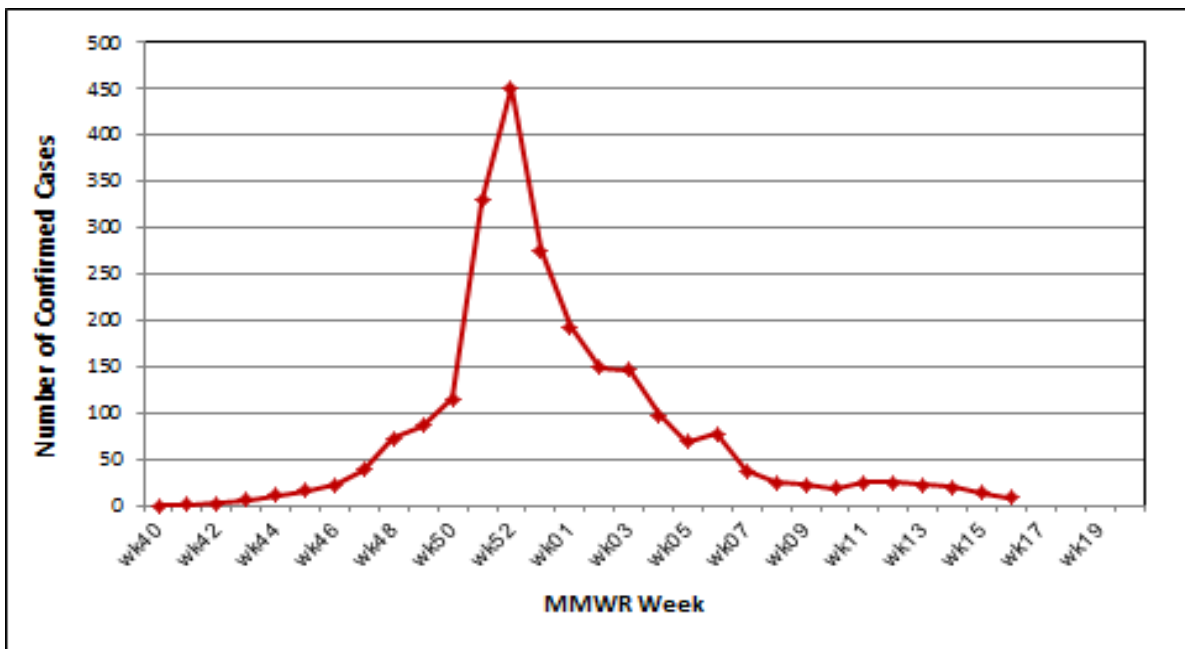
<sup>4</sup> % ILI= percentage of visits for ILI at the correctional facility; Ten facilities reported.

<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. Number of confirmed influenza cases by MMWR week, Delaware 2014-15



**Note:** Data on the percentage of Delaware emergency department visits related to influenza (formerly Figure 4) are not available from MMWR week 5 on.

## **Summary of International Influenza Activity**

Influenza activity declined further in the northern hemisphere and was low in most regions globally. While influenza A(H3N2) viruses predominated this season in the northern hemisphere, the proportions of influenza A(H1N1)pdm09 and B viruses increased during the past few weeks. In North America, influenza activity continued to decrease. While influenza A(H3N2) had predominated this season, influenza B was the dominant virus during the recent weeks. In the United States, ILI activity (1.4%) continued to decrease this week and was below the national baseline at 2.0%. Influenza detections (7.6% positivity) continued to decrease and 88% of all influenza positive specimens reported this week were influenza B. The proportion of deaths attributed to pneumonia and influenza is below the epidemic threshold. In Canada, ILI activity increased this week and is above expected levels. No region reported widespread influenza/ILI activity. In tropical countries of the Americas, influenza activity was low in most countries.

In Europe, influenza activity continued to decrease in most countries. Influenza A(H3N2) predominated this season, but the proportion of influenza B detections was predominant in the last weeks. In northern Africa and the Middle East, influenza activity continued to decrease in most of the region. Influenza A viruses remained predominant in the region.

In western Asia, influenza activity continued to decrease or remained low in most countries in the region, with a predominance of influenza A viruses. In the temperate countries of Asia, influenza activity continued to decrease except in the Republic of Korea where activity remained high. In tropical Asia, influenza activity mainly due to influenza A(H1N1)pdm09 viruses seemed to be declining in India. In the southern hemisphere, influenza activity remained at inter-seasonal levels.

**Reference:** World Health Organization (WHO), 2015. Influenza Update number 235 (4/20/15). Retrieved on April 22, 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.