

# Delaware Weekly Influenza Report MMWR Week 5 (January 31 – February 6, 2016) Delaware Division of Public Health

#### National Influenza Synopsis 2015-2016:

National data are updated Friday of each week. Please visit <a href="http://www.cdc.gov/flu/weeklv/">http://www.cdc.gov/flu/weeklv/</a> for the most current information. During MMWR Week 5 (January 31 – February 6, 2016) influenza activity again increased slightly in the United States. The most frequently identified influenza virus type reported by public health laboratories during week 5 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 Puerto Rico and seven states (Arizona, California, Connecticut, Iowa, Kentucky, Massachusetts and New York). Regional influenza activity was reported by Guam and 17 states (Florida, Indiana, Maine, Maryland, Michigan, Minnesota, Nevada, New Hampshire, New Jersey, New Mexico, North Dakota, Pennsylvania, Rhode Island, Texas, Utah, Vermont and Washington). Local influenza activity was reported by 16 states (Alabama, Arkansas, Colorado, Idaho, Illinois, Kansas, Montana, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Virginia, Wisconsin and Wyoming). Sporadic influenza activity was reported by the District of Columbia and nine states (Alaska, Delaware, Georgia, Hawaii, Louisiana, Missouri, Nebraska, South Dakota and West Virginia). No activity was reported by Mississippi. The U.S. Virgin Islands did not report. Both national and state data are provisional and subject to change as additional reports are received.

## **Delaware Influenza Surveillance 2015-2016:**

During MMWR Week 5, there were six laboratory-confirmed cases of influenza reported among Delaware residents, with a total of 38 confirmed cases for the 2015-2016 season. Reports of influenza-like illness (ILI) received from participating providers, facilities and institutions in **Delaware show ILI is 0.26%**, (baseline is 1.8%). **Nationally, ILI is 2.4%** (national baseline is 2.1%).

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

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.

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.<sup>3</sup>

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.

Region = population under surveillance in a defined geographical subdivision of a state. Regions typically include several counties. Regional doesn't apply to states with  $\leq$  four counties.

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<sup>&</sup>lt;sup>1</sup> 2015-2016 Region 3 (DE, DC, MD, PA, VA and WV) baseline = 1.8%.

Laboratory-confirmed case = case confirmed by viral culture or PCR.

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 2015-16

	onfirmed Flu es 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	YTD	YTD Total	YTD County %
	A / 2009 H1N1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	2	2	8		
m	A / 2012 H3N2	0	0	1	0	0	0	0	0	1	0	0	2	2	0	2	0	0	0	8		
STATEWIDE	A / no subtype	0	0	0	0	1	0	0	0	1	0	0	0	0	3	0	0	2	2	9	38	
Į.	B / Yamagata	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2	5	30	
ST/	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1		
	B / no lineage	0	1	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1	0	7		
	A / 2009 H1N1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3		
o o	A / 2012 H3N2	0	0	1	0	0	0	0	0	0	0	0	2	2	0	1	0	0	0	6		
astl	A / no subtype	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	2	5	22	57.9%
New Castle County	B / Yamagata	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	4		37.9%
ž	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1		
	B / no lineage	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	3		
	A / 2009 H1N1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2		
_	A / 2012 H3N2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Kent	A / no subtype	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	3	8	21.1%
ჯ ვ	B / Yamagata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21.170
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	B / no lineage	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3		
	A / 2009 H1N1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3		
× >	A / 2012 H3N2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2		
Sussex	A / no subtype	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	8	21.1%
က္လ လ	B / Yamagata	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	ō	21.1%
	B / Victoria	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	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1		

Table 1b. Influenza positive<sup>1</sup> cases reported<sup>2</sup> statewide and county by age group, Delaware 2015-16

Cas	afirmed Flu ses 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	YTD	YTD Total	YTD County %
ш	0-4 years	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	5		
₽	5-24 years	0	0	0	0	0	0	0	0	3	0	1	1	1	2	1	0	1	3	13		
STATEWIDE	25-49 years	1	1	1	0	1	0	0	1	0	0	0	0	0	1	1	1	1	2	11	38	
T.	50-64 years	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2	1	5		
0,	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	1	0	4		
	0-4 years	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2		
y He	5-24 years	0	0	0	0	0	0	0	0	1	0	1	1	1	2	0	0	1	3	10		
New Castle County	25-49 years	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	5	22	57.9%
န္ ပိ	50-64 years	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2		
Z	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3		
	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3		
	5-24 years	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2		
Kent	25-49 years	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	21.1%
국 §	50-64 years	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	1	0	1		
	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sussex	5-24 years	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1		
ins	25-49 years	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	4	8	21.1%
0, 0	50-64 years	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	3		
	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

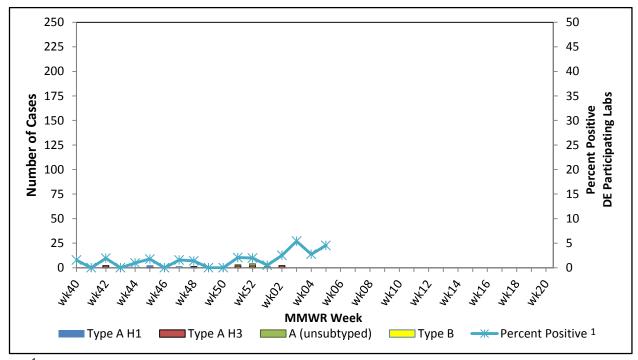
Based on patients with positive nucleic acid or viral culture test results reported to the Division of Public Health.

MMWR Week 5 = January 31 - February 6, 2016

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

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 cases<sup>1</sup> of influenza by type and subtype/lineage, Delaware 2015-16\*



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

Cas	oitalized Flu ses 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	YTD	YTD Total	YTD County %
	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
STATEWIDE	5-24 years	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1		
1 2	25-49 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Ι¥	50-64 years	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	2	0	1	0	1	0	4		
	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
y the	5-24 years	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1		
New Castle County	25-49 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	80.0%
န္ ပိ	50-64 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Z	65+ years	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3		
	0-4 years	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		
Kent County	25-49 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	20.0%
국 §	50-64 years	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	1	0	1		
	0-4 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
nty sex	5-24 years	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sussex	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		
	65+ years	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-	Wk	YTD																	
Related	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	
Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

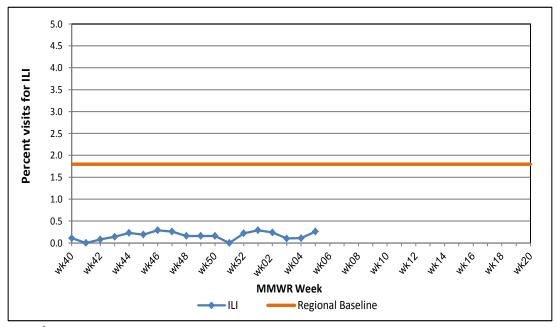
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2015-16

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)	38

### 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.

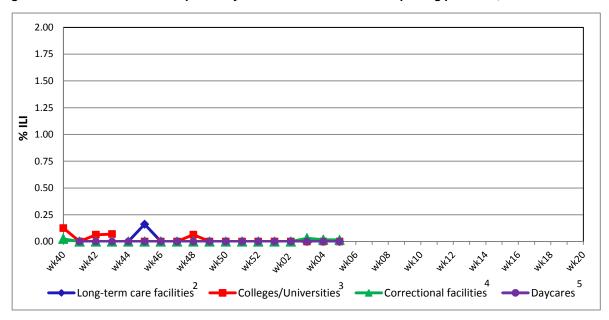
Figure 2. Percentage of visits for influenza-like illness (ILI) reported by sentinel providers<sup>1</sup> participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2015-16



<sup>&</sup>lt;sup>1</sup> Seven of 17 sentinel providers reported.

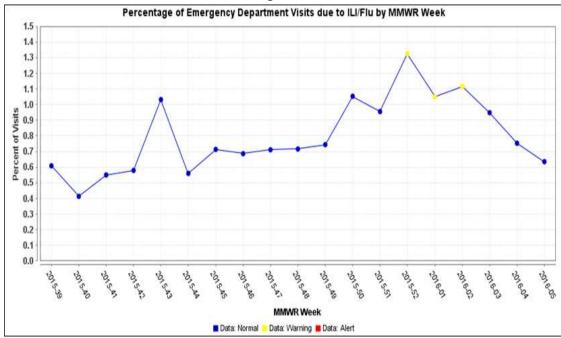
<sup>&</sup>lt;sup>2</sup> Regional baseline is calculated by CDC using non-influenza weeks from the previous three influenza seasons. Delaware is in Region 3 that includes DE, DC, MD, PA, VA and WV.

Figure 3. Influenza-like illness reported by influenza surveillance ILI reporting partners<sup>1</sup>, Delaware 2015-16



<sup>&</sup>lt;sup>1</sup> 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.

Figure 4.



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

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

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

<sup>5 %</sup> ILI= percentage of children absent with ILI; No daycare providers reported.

#### **Summary of International Influenza Activity**

Globally, increasing levels of influenza activity continued to be reported in the temperate zones of the northern hemisphere with influenza A(H1N1)pdm09 as the most detected virus. In North America, a slight increase of influenza A(H1N1)pdm09 was reported, but overall levels were still low. Influenza detections slightly increased in the United States and Canada with influenza A(H1N1)pdm09 predominating. RSV activity continued to increase in the United States. On February 1, the United States reported severe respiratory illness including deaths among young- to middle-aged adults with influenza A(H1N1)pdm09 infection.

In tropical countries of the Americas, Central America and the Caribbean, influenza and other respiratory virus activity were overall at low levels in most countries. Puerto Rico and Guadeloupe reported increased influenza and ILI activities in recent weeks. In Costa Rica, influenza activity continued at high but decreasing levels.

Increasing influenza A(H1N1)pdm09 activity continued to be reported in Europe. Some countries in northern and eastern Europe reported a sharp increase in influenza like illness (ILI) and an increase in severe cases due to influenza A(H1N1)pdm09. A few countries in Europe reported an increase in activity predominantly of influenza B virus.

In eastern Asia influenza activity was increasing in Japan and the Republic of Korea due to predominantly influenza A(H1N1)pdm09 virus. In North China, influenza A(H3N2) and B were the predominant circulating viruses detected. In western Asia, influenza activity remained at high levels in Israel but appeared to have peaked in Jordan, Oman and Iran. In Tropical Asia, countries in Southern and South East Asia continued to report ongoing low influenza activity.

Few influenza virus detections were reported by countries in tropical Africa. In the temperate countries of the southern hemisphere respiratory virus activity remained low.

**Source:** World Health Organization (WHO), 2016. Influenza Update Number 256 (2/8/16). Retrieved on February 9, 2016, from <a href="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/</a> 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 <a href="flu.delaware.gov">flu.delaware.gov</a> or <a href="http://dhss.delaware.gov/dhss/dph/dpc/immunize-flu.html">http://dhss.delaware.gov/dhss/dph/dpc/immunize-flu.html</a>.
- > 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.