



Delaware Weekly Influenza Report

MMWR Week 18 (May 1 - 7, 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 18 (May 1 - 7, 2016) influenza activity decreased in the United States. The most frequently identified influenza virus type reported by public health laboratories during week 18 was influenza B. The percentage of respiratory specimens testing positive for influenza in clinical laboratories decreased. **Widespread** influenza activity was reported by Puerto Rico and three states (Connecticut, Delaware and New York). **Regional** influenza activity was reported by 12 states (Alabama, Kentucky, Maine, Massachusetts, New Hampshire, New Jersey, Ohio, Oklahoma, Pennsylvania, Vermont, Virginia and Wisconsin). **Local** influenza activity was reported by the District of Columbia, Guam and 20 states (Arizona, Arkansas, California, Colorado, Hawaii, Idaho, Iowa, Maryland, Michigan, Minnesota, Montana, Nebraska, New Mexico, North Carolina, North Dakota, South Carolina, Tennessee, Texas, Washington and West Virginia). **Sporadic** influenza activity was reported by the U.S. Virgin Islands and 15 states (Alaska, Florida, Georgia, Illinois, Indiana, Kansas, Louisiana, Mississippi, Missouri, Nevada, Oregon, Rhode Island, South Dakota, Utah and Wyoming). Both national and state data are provisional and subject to change as additional reports are received.

Delaware Influenza Surveillance 2015-2016:

During Week 18 there were 63 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 0.44%**, (baseline is 1.8%). **Nationally, ILI is 1.8%** (national baseline is 2.1%).

Level of Influenza Activity in Delaware, MMWR Week 18:

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.
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.

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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 40-52	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	Wk 17	Wk 18	YTD	YTD Total	YTD County %	
STATEWIDE	A / 2009 H1N1	1	1	0	2	2	2	9	24	58	77	91	67	66	27	15	10	8	5	2	467	2,126		
	A / 2012 H3N2	6	0	2	0	0	0	0	1	2	3	2	0	2	1	0	0	0	0	0	19			
	A / no subtype	3	3	0	0	2	2	7	10	38	91	262	169	135	97	50	36	34	11	9	959			
	A,B co-infection	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2			
	B / Yamagata	3	0	0	0	1	0	1	3	3	2	5	6	3	5	3	8	8	2	4	57			
	B / Victoria	0	0	0	1	0	2	2	1	4	7	5	9	7	5	4	4	8	6	5	70			
	B / no lineage	4	0	1	0	1	0	1	3	13	17	51	57	60	58	60	43	76	64	43	552			
New Castle County	A / 2009 H1N1	1	1	0	0	1	0	8	14	42	61	73	52	52	17	14	6	6	5	2	355	1,400	65.9%	
	A / 2012 H3N2	5	0	1	0	0	0	0	1	1	3	0	0	1	1	0	0	0	0	0	13			
	A / no subtype	1	2	0	0	1	2	2	3	21	64	171	127	85	70	33	18	19	9	7	635			
	A,B co-infection	0	0	0	0	0	0	0	0	0	1*	0	0	0	0	0	0	0	0	0	1			
	B / Yamagata	2	0	0	0	1	0	0	3	3	2	4	6	1	2	2	6	6	1	4	43			
	B / Victoria	0	0	0	0	0	2	2	0	2	1	3	3	3	0	1	0	3	1	1	22			
	B / no lineage	3	0	0	0	0	0	0	1	7	7	25	30	36	34	39	25	49	44	31	331			
Kent County	A / 2009 H1N1	0	0	0	1	1	0	0	5	5	8	5	6	5	3	0	1	0	0	0	40	446	21.0%	
	A / 2012 H3N2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1			
	A / no subtype	2	0	0	0	1	0	3	5	8	19	60	28	32	19	11	14	10	0	2	214			
	B / Yamagata	0	0	0	0	0	0	0	0	0	0	1	0	1	2	1	1	1	0	0	7			
	B / Victoria	0	0	0	1	0	0	0	0	2	0	0	3	1	0	2	2	2	2	1	0			14
	B / no lineage	1	0	1	0	0	0	1	2	4	5	20	22	20	17	19	15	19	13	11	170			
Sussex County	A / 2009 H1N1	0	0	0	1	0	2	1	5	11	8	13	9	9	7	1	3	2	0	0	72	280	13.2%	
	A / 2012 H3N2	1	0	1	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	5			
	A / no subtype	0	1	0	0	0	0	2	2	9	8	31	14	18	8	6	4	5	2	0	110			
	A,B co-infection	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1			
	B / Yamagata	1	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	1	1	0	7			
	B / Victoria	0	0	0	0	0	0	0	1	0	6	2	3	3	5	1	2	3	4	4	34			
	B / no lineage	0	0	0	0	1	0	0	0	2	5	6	5	4	7	2	3	8	7	1	51			

* - being analyzed at CDC

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

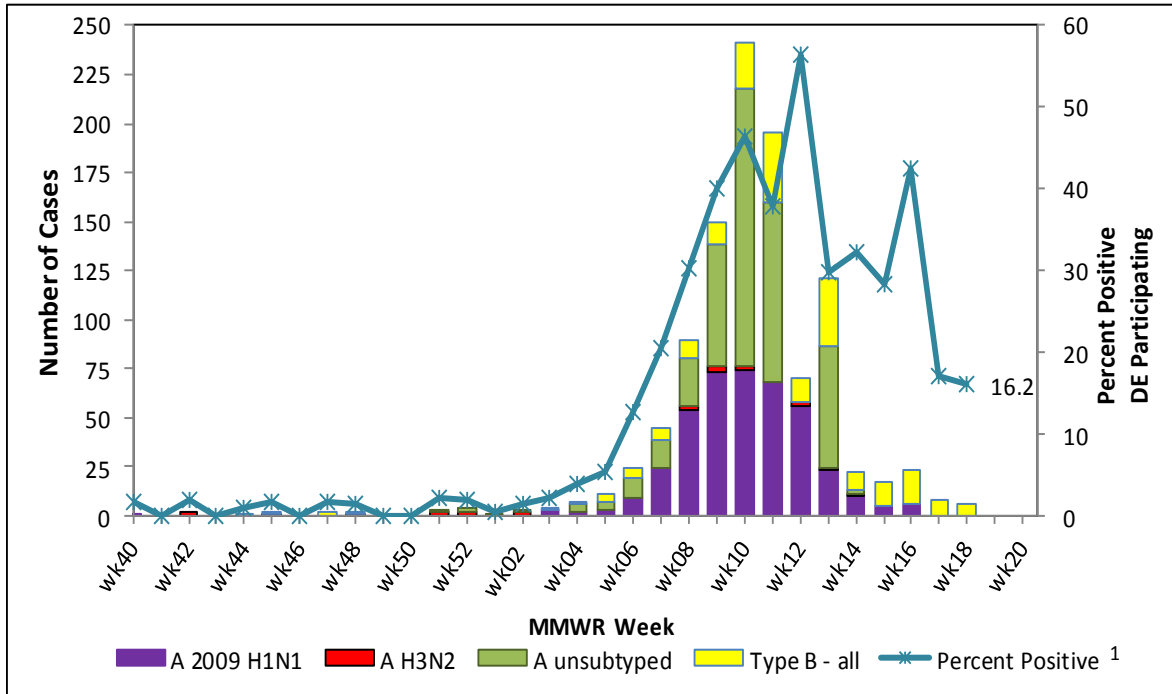
Confirmed Flu Cases by Age Group		Wk 40-52	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15	Wk 16	Wk 17	Wk 18	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	2	0	0	2	1	0	5	7	22	41	76	55	69	36	31	20	32	16	15	430	2,126	
	5-24 years	6	2	1	0	1	3	7	8	34	56	131	105	93	47	37	40	50	34	25	680		
	25-49 years	6	1	1	1	1	2	5	15	37	63	103	79	53	58	30	23	21	15	12	526		
	50-64 years	1	1	0	0	2	1	1	9	15	24	65	39	35	26	24	13	21	12	6	295		
	65+ years	2	0	1	0	1	0	2	3	10	14	41	31	23	26	10	5	10	11	5	195		
New Castle County	0-4 years	2	0	0	0	0	0	3	5	13	35	65	45	51	28	27	13	21	12	12	332	1,400	65.9%
	5-24 years	4	2	0	0	1	3	4	4	23	35	91	68	61	27	22	23	31	25	18	442		
	25-49 years	4	0	0	0	1	1	3	5	23	41	51	48	26	33	17	8	12	10	8	291		
	50-64 years	0	1	0	0	1	0	1	5	9	17	43	32	24	14	16	7	13	8	3	194		
	65+ years	2	0	1	0	0	0	1	3	8	11	26	25	16	22	7	4	6	5	4	141		
Kent County	0-4 years	0	0	0	2	1	0	1	1	3	5	4	6	7	4	4	4	7	2	0	51	446	21.0%
	5-24 years	1	0	1	0	0	0	1	2	5	7	26	25	23	11	14	13	13	7	7	156		
	25-49 years	2	0	0	0	0	0	2	5	8	13	30	18	21	14	9	12	6	2	2	144		
	50-64 years	0	0	0	0	0	0	0	4	2	5	17	6	4	9	4	3	4	1	3	62		
	65+ years	0	0	0	0	1	0	0	0	1	2	9	4	5	3	2	1	2	2	1	33		
Sussex County	0-4 years	0	0	0	0	0	0	1	1	6	1	7	4	11	4	0	3	4	2	3	47	280	13.2%
	5-24 years	1	0	0	0	0	0	2	2	6	14	14	12	9	9	1	4	6	2	0	82		
	25-49 years	0	1	1	1	0	1	0	5	6	9	22	13	6	11	4	3	3	3	2	91		
	50-64 years	1	0	0	0	1	1	0	0	4	2	5	1	7	3	4	3	4	3	0	39		
	65+ years	0	0	0	0	0	0	1	0	1	1	6	2	2	1	1	0	2	4	0	21		

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 40-52	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	Wk 17	Wk 18	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	0	0	0	0	0	0	0	1	2	6	6	9	5	2	3	5	4	1	1	45	365	
	5-24 years	1	0	0	0	0	0	1	1	1	7	12	5	5	2	3	6	3	1	2	50		
	25-49 years	0	0	0	0	0	0	2	1	3	9	10	5	7	8	5	2	4	1	1	58		
	50-64 years	0	0	0	0	0	0	1	3	6	11	22	14	14	7	8	0	3	6	1	96		
	65+ years	2	0	1	0	1	1	1	7	11	19	20	11	15	5	2	7	9	4	4	116		
New Castle County	0-4 years	0	0	0	0	0	0	0	1	0	6	5	9	5	1	3	3	2	1	0	36	286	78.4%
	5-24 years	1	0	0	0	0	0	1	1	1	4	10	4	5	2	3	5	3	1	2	43		
	25-49 years	0	0	0	0	0	0	1	1	2	7	9	5	6	5	4	2	1	1	1	45		
	50-64 years	0	0	0	0	0	0	1	2	3	7	19	11	11	5	5	0	2	5	1	72		
	65+ years	2	0	1	0	0	0	1	1	6	8	14	18	8	14	4	1	4	5	3	90		
Kent County	0-4 years	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	1	0	0	5	49	13.4%
	5-24 years	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	3		
	25-49 years	0	0	0	0	0	0	1	0	1	2	0	0	1	2	1	0	2	0	0	10		
	50-64 years	0	0	0	0	0	0	0	1	1	2	2	3	1	2	2	0	1	0	0	15		
	65+ years	0	0	0	0	1	0	0	0	0	2	4	2	2	0	0	1	2	1	1	16		
Sussex County	0-4 years	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	1	4	30	8.2%
	5-24 years	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	4		
	25-49 years	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	3		
	50-64 years	0	0	0	0	0	0	0	0	2	2	1	0	2	0	1	0	0	1	0	9		
	65+ years	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1	0	1	3	0	10		

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

Influenza-related Deaths	Wk 40-52	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	Wk 17	Wk 18	YTD
	0	0	0	0	0	0	0	0	0	0	0	1	2	0	1	0	0	2	0	6

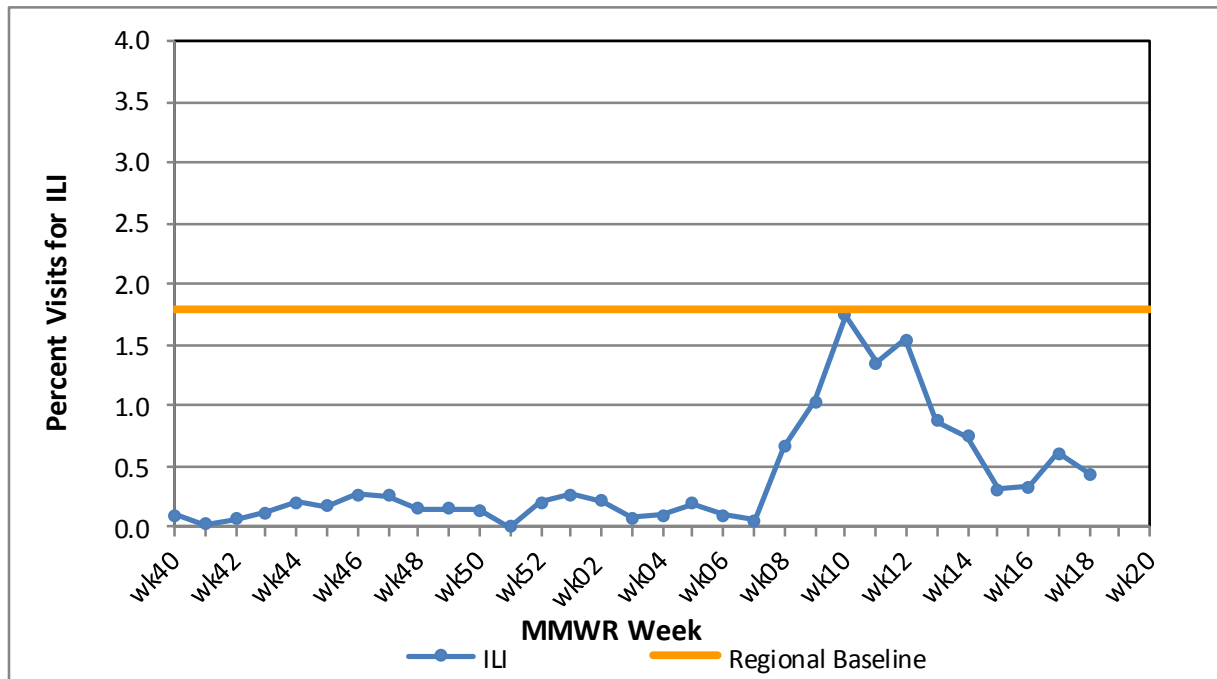
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2015-16

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)	2,126

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.

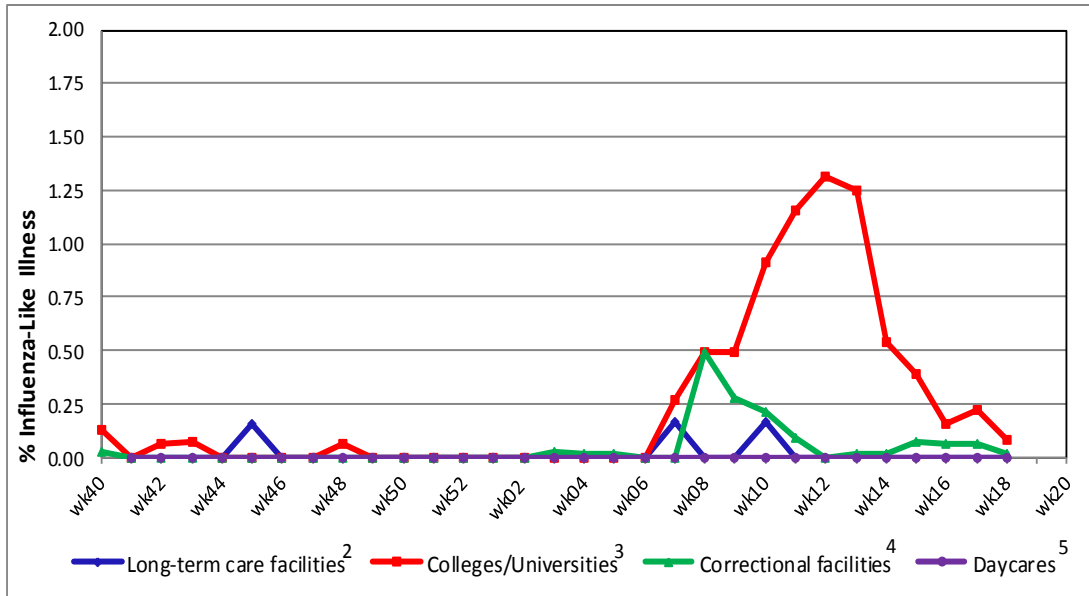
Figure 2. Percentage of visits for influenza-like illness (ILI) reported by sentinel providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2015-16



¹ Five of 17 sentinel providers reported.

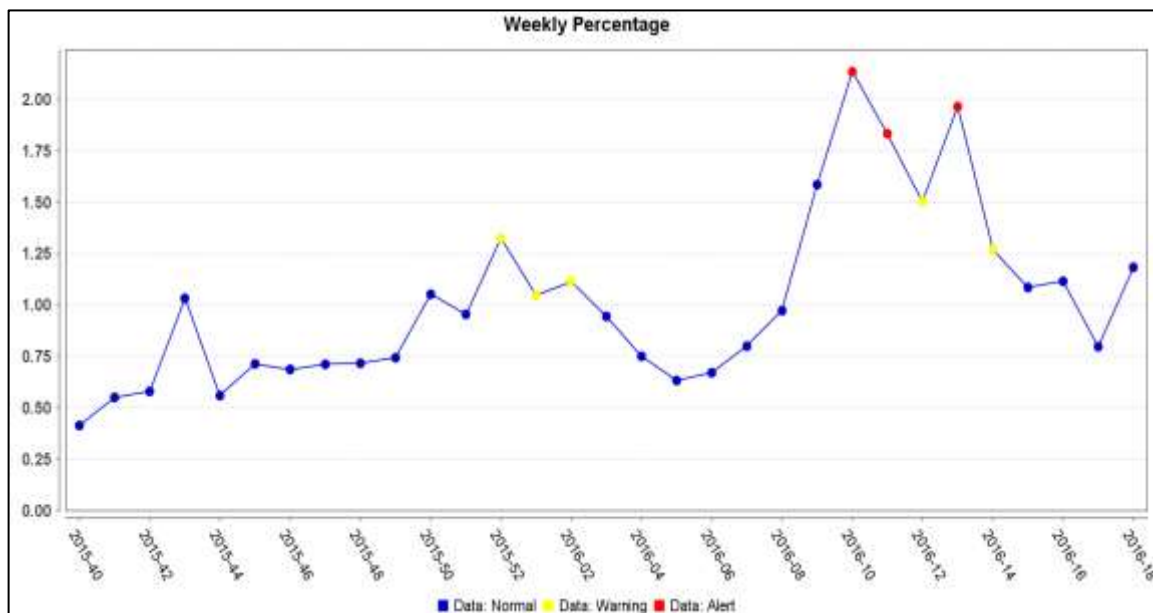
² Regional baseline is calculated by CDC using non-influenza weeks from the previous three influenza seasons. Delaware is in Region 3 that includes DE, DC, MD, PA, VA and WV.

Figure 3. Percentage of influenza-like illness (ILI) 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. Five long-term care facilities reported.
³ % ILI= percentage of student visits for ILI; One university 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, 2015-16



Summary of International Influenza Activity

In the Northern Hemisphere, influenza activity continued to decrease. A predominance of influenza B virus activity continued to be reported in parts of North America, in Northern Temperate Asia, South-East Asia and in parts of Europe. In the Southern Hemisphere, slight increases in influenza-like illness (ILI) activity were reported in a few countries.

In North America, decreasing influenza activity continued. Co-circulation of influenza A (predominantly influenza A(H1N1)pdm09) and influenza B was observed, with an increase of influenza B detections and ILI in Canada. The level of ILI in the United States and pneumonia in Mexico continued to decrease and approach the threshold for the end of the season.

In the Caribbean, low influenza and other respiratory virus activity were reported in most countries. In Central America, influenza and other respiratory virus activity remained low and within expected levels, except in Guatemala and El Salvador.

In Europe, influenza activity continued to decrease. Most countries reported low intensity, with a shift towards circulation of type B influenza virus.

In northern temperate Asia, influenza activity also decreased with increasing proportions of influenza B virus. In tropical countries of South Asia, influenza activity remained low.

In parts of tropical South America, low but increasing influenza A(H1N1)pdm09 activity was reported. In Brazil, influenza activity was already above expected levels for this time of year with influenza A(H1N1)pdm09 virus predominating. In temperate South America, an increase in ILI and SARI activities were reported in Argentina and Paraguay.

In the rest of the temperate countries of the Southern Hemisphere, influenza virus activity remained low.

Source: World Health Organization (WHO), 2016. Influenza Update Number 262 (4/18/16 – based on data up to 4/17/16). Retrieved on 5/6/16 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.