



Delaware Weekly Influenza Report

MMWR Week 12 (March 22 - 28, 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 12 (March 22 - 28, 2015), influenza activity continued to decrease, but remained elevated in the United States. Overall, H3N2 viruses have predominated this season, but influenza B viruses have been most common in recent weeks and accounted for 80% of all influenza viruses reported during the current week. The percentage of deaths due to pneumonia and influenza remained above the epidemic threshold. The geographic spread of influenza was reported as widespread in four states (Connecticut, Massachusetts, New Jersey, and New York). Twenty states and the Virgin Islands reported regional activity, while 22 states, Guam and Puerto Rico reported local activity. Four states (Alaska, Nevada, South Dakota and Utah) reported sporadic 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 12, there were 25 laboratory-confirmed cases of influenza reported among Delaware residents, bringing the total number of laboratory-confirmed cases this season to 2,323. Reports of influenza-like illness (ILI) received from participating providers, facilities and institutions was 0.41%; below the regional baseline of 2.0%. ILI was 2.0% nationally, at the national baseline of 2.0%.

Level of Influenza Activity in Delaware, MMWR Week 12:

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

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 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	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	4	2,323	
	A / 2012 H3N2	175	88	61	48	49	46	45	40	36	26	12	16	14	10	4	1	671		
	A / no subtype	189	241	387	228	141	102	99	58	32	51	23	4	3	1	1	5	1,565		
	B / Yamagata	1	0	0	0	2	1	1	0	0	0	0	3	1	5	5	2	21		
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	3		
	B / no lineage	6	0	0	0	1	1	1	0	1	3	6	4	3	3	13	17	59		
New Castle County	A / 2009 H1N1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1,028	44.3%
	A / 2012 H3N2	42	53	40	33	32	30	27	28	18	23	10	13	11	9	4	1	374		
	A / no subtype	14	70	184	110	70	44	61	19	7	27	11	2	1	1	0	2	623		
	B / Yamagata	1	0	0	0	2	0	1	0	0	0	0	0	0	3	2	1	10		
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1		
	B / no lineage	2	0	0	0	0	0	0	0	0	1	4	2	2	0	7	1	19		
Kent County	A / 2009 H1N1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	855	36.8%
	A / 2012 H3N2	24	17	13	7	9	12	5	9	12	2	2	2	3	0	0	0	117		
	A / no subtype	83	113	177	104	57	43	30	37	21	18	12	2	1	0	1	3	702		
	B / Yamagata	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	3		
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2		
	B / no lineage	3	0	0	0	1	1	1	0	0	1	2	1	0	2	4	12	28		
Sussex County	A / 2009 H1N1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	440	18.9%
	A / 2012 H3N2	109	18	8	8	8	4	13	3	6	1	0	1	0	1	0	0	180		
	A / no subtype	92	58	26	14	14	15	8	2	4	6	0	0	1	0	0	0	240		
	B / Yamagata	0	0	0	0	0	0	0	0	0	0	0	3	1	2	2	0	8		
	B / Victoria	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	4	12		

Table 1b. Influenza positive¹ cases reported² statewide and county by age group, Delaware 2014-15

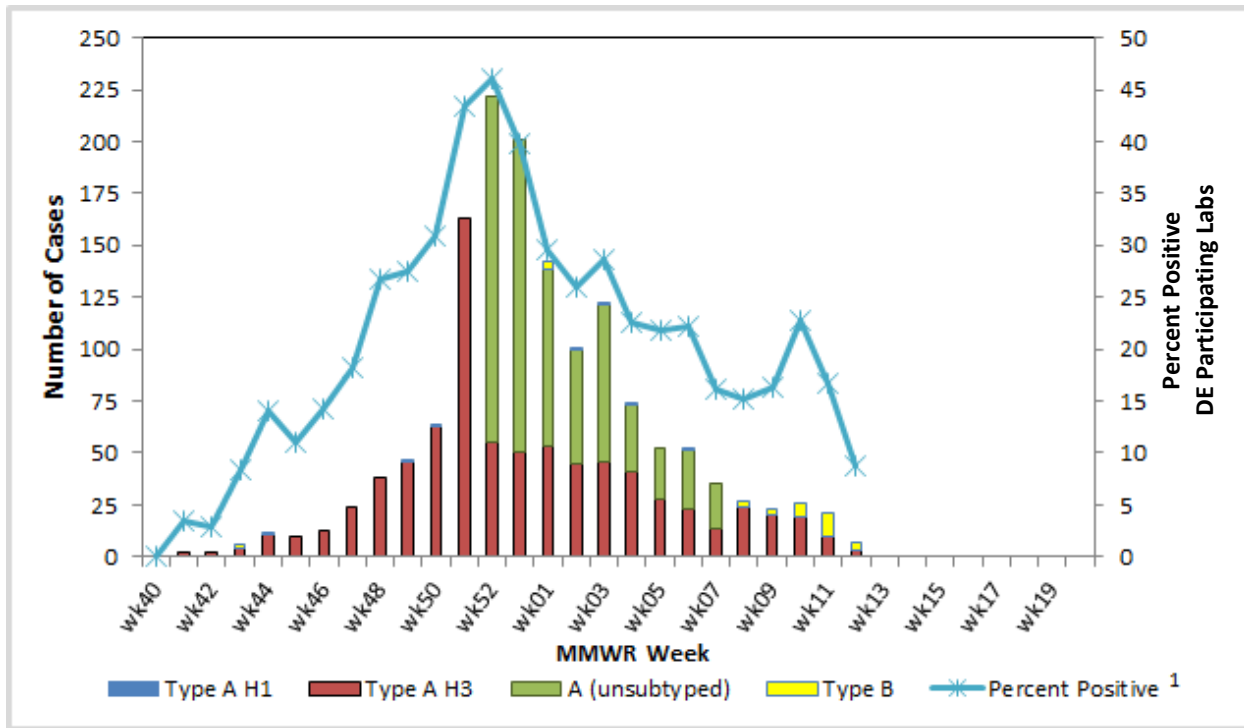
Confirmed Flu Cases by Age Group		Wk 40-50	Wk 51	Wk 52	Wk 53	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	45	58	73	29	24	24	14	17	5	12	4	5	2	0	4	2	314	2,323	
	5-24 years	165	154	129	31	39	38	26	22	19	14	10	2	4	10	5	8	657		
	25-49 years	83	46	84	58	35	23	32	21	12	10	9	3	7	1	3	6	427		
	50-64 years	30	23	49	43	18	21	24	14	14	12	6	8	2	5	6	3	269		
	65+ years	48	49	116	115	77	44	50	24	19	32	12	9	7	0	7	6	606		
New Castle County	0-4 years	5	21	33	6	7	8	7	4	4	12	2	3	1	3	3	1	118	1,028	44.3%
	5-24 years	20	56	70	11	16	14	12	8	2	7	8	1	4	0	2	2	235		
	25-49 years	17	18	32	25	21	9	20	12	2	6	2	0	4	9	2	1	172		
	50-64 years	7	4	29	23	7	10	17	7	4	5	4	6	1	1	3	0	132		
	65+ years	10	25	60	78	53	33	33	16	13	21	9	7	5	3	3	1	371		
Kent County	0-4 years	14	26	30	20	16	12	5	12	1	0	2	2	0	0	1	0	142	855	36.8%
	5-24 years	53	67	51	16	17	19	10	14	17	4	2	1	0	0	2	4	278		
	25-49 years	25	17	48	29	9	11	8	7	5	3	7	1	2	0	1	4	177		
	50-64 years	5	13	15	14	9	8	5	5	7	4	2	1	0	0	2	3	93		
	65+ years	13	7	49	32	16	7	8	8	3	10	3	0	2	0	2	5	165		
Sussex County	0-4 years	26	11	10	3	1	4	2	1	0	0	0	0	1	0	0	1	60	440	18.9%
	5-24 years	92	31	8	4	6	5	4	0	0	3	0	0	0	0	1	2	157		
	25-49 years	41	11	4	4	5	3	4	2	5	1	0	2	1	2	0	1	87		
	50-64 years	18	6	5	6	2	3	2	2	3	3	0	1	1	0	1	0	53		
	65+ years	25	17	7	5	8	4	9	0	3	1	0	2	0	1	2	0	83		

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, these influenza cases will be categorized as Influenza B, no lineage identified.

Figure 1. Confirmed cases¹ of influenza by type and subtype/lineage, Delaware 2014-15*



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 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	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	16	614	
	5-24 years	4	2	6	2	4	0	0	2	1	0	1	1	3	1	1	0	28		
	25-49 years	3	6	7	12	9	5	7	7	1	2	2	0	3	2	1	0	67		
	50-64 years	4	5	18	21	9	6	12	4	3	2	2	1	1	3	1	3	95		
	65+ years	20	27	73	89	58	28	35	15	11	25	8	7	3	4	4	1	408		
New Castle County	0-4 years	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	5	443	72.2%
	5-24 years	2	2	5	2	3	0	0	2	1	0	1	1	3	1	1	0	24		
	25-49 years	3	4	5	9	7	4	5	7	0	2	1	0	3	1	1	0	52		
	50-64 years	2	0	14	18	6	5	10	3	2	1	2	1	1	3	0	0	68		
	65+ years	8	17	41	67	48	22	30	11	9	17	8	7	3	4	2	0	294		
Kent County	0-4 years	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	5	117	19.1%
	5-24 years	2	0	1	0	1	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	10		
	50-64 years	1	4	4	3	2	1	1	1	1	1	0	0	0	0	1	3	20		
	65+ years	2	2	28	18	5	3	4	4	1	7	0	0	0	0	0	1	74		
Sussex County	0-4 years	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	6	54	8.8%
	5-24 years	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	5		
	50-64 years	1	1	0	0	1	0	1	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	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	YTD
	0	2	0	0	0	0	1	3	5	5	3	1	2	0	4	2	0	0	0	0	28

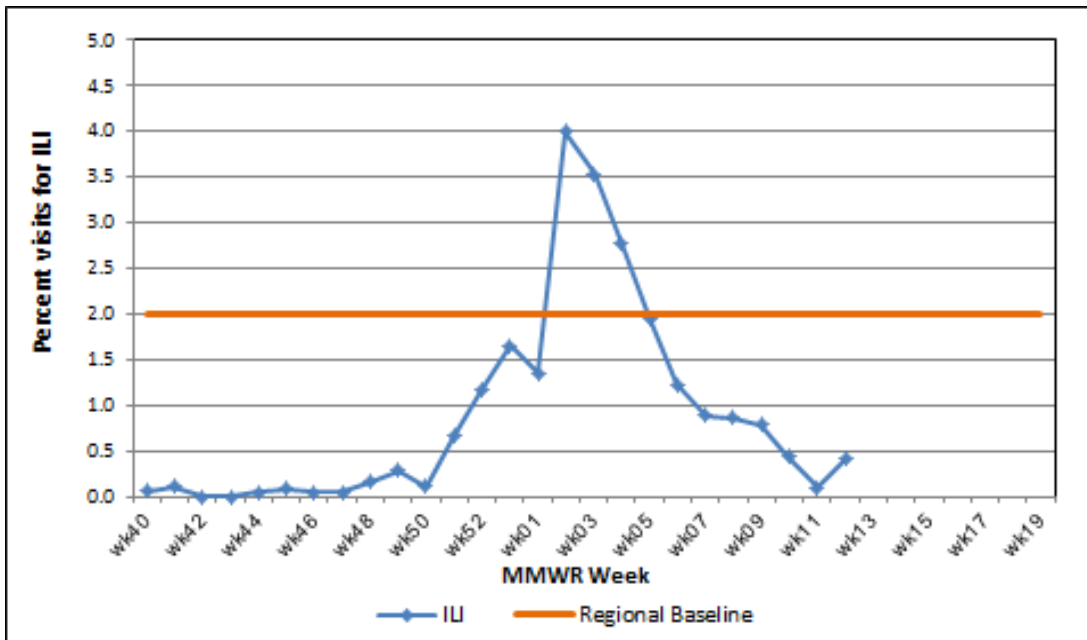
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2014-15

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
2014 – 2015 (YTD)	2,323

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.

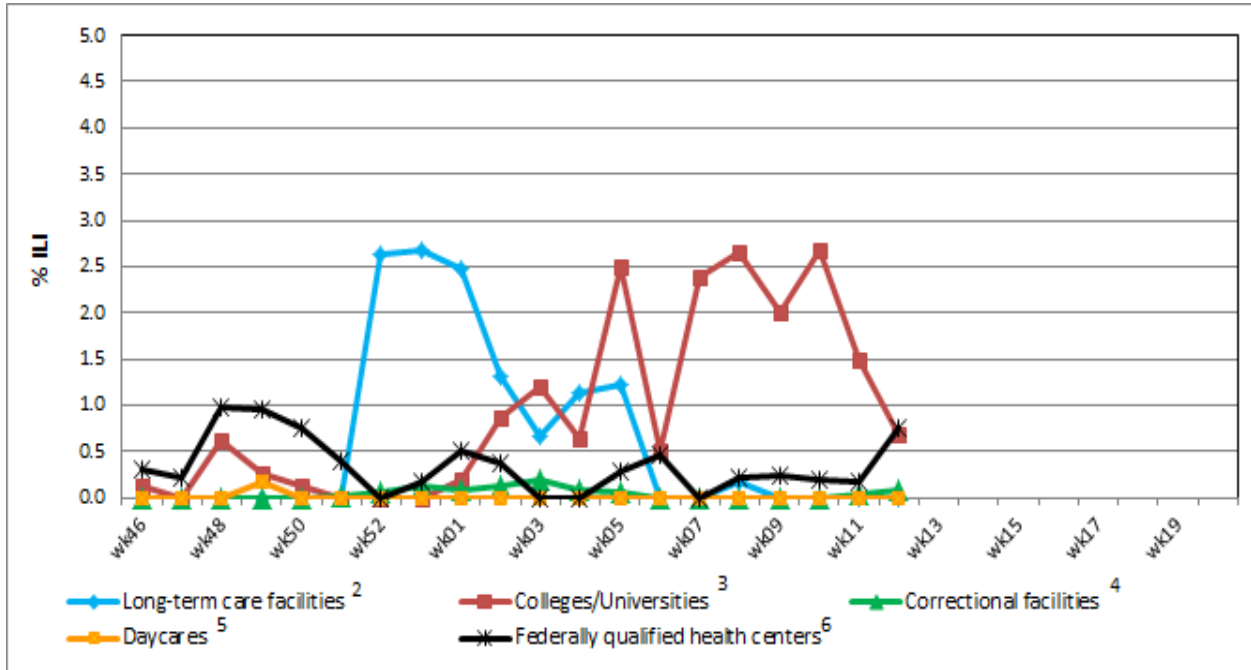
Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2014-15



¹ Seven of 16 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 2014-15



¹ ILINet reporting partners include long-term care facilities, colleges / universities, correctional facilities, daycare facilities and federally qualified health centers (FQHCs).

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

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

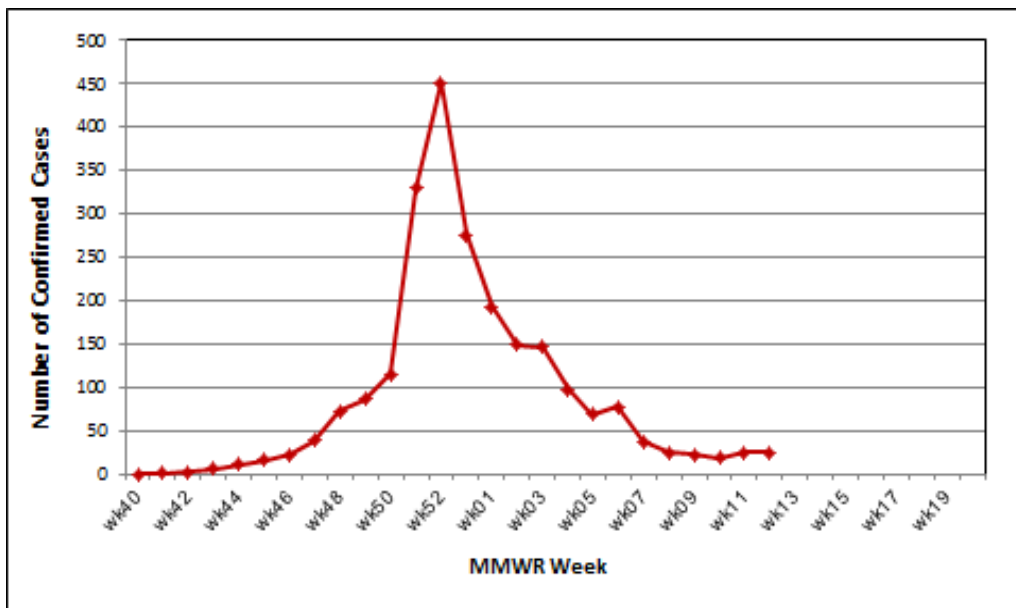
⁴ % ILI= percentage of visits for ILI at the correctional facility; Ten facilities reported.

⁵ % ILI= percentage of children absent with ILI; One daycare provider reported.

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

⁷ 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

Globally, influenza activity remained elevated in the northern hemisphere with influenza A(H3N2) viruses predominating, although some countries in Asia, Europe and North Africa reported high levels of activity associated with influenza A(H1N1)pdm09 viruses. In North America, influenza activity was decreasing but remained above the threshold. Influenza A(H3N2) viruses predominated so far this season. In the United States, flu activity may continue in parts of the country for a few more weeks, however most states are on the downward curve of flu activity and nationally, flu activity has peaked. The pneumonia and influenza mortality remained above the epidemic threshold for the week. The influenza detection rate continued to decrease to 10.6% positivity from the peak of 30.4% positivity at the end of the 2014. ILI outpatient visits (2.2%) declined as well, but remained above the 2.0% national baseline. In Canada, all influenza indicators remained similar to or decreased from previous weeks except for influenza like illness (ILI). ILI was above the threshold but exhibited an overall decreasing pattern from the peak around the end of 2014. In tropical countries of the Americas, influenza activity remained low with mainly A(H3N2) viruses detected. Overall influenza activity in the Caribbean, Central America and the tropical countries of South America remained low, with influenza A(H3N2) viruses predominating.

In Europe, influenza activity appeared to have peaked in many countries; 39 out of 40 countries reported decreased (27) or stable (12) activity. Influenza A(H1N1)pdm09, A(H3N2) and B viruses continued to circulate in the region, with slightly increased B virus detections. Influenza A(H3N2) continued to dominate. In northern Africa and the middle East, influenza activity continued to decrease with influenza A(H1N1)pdm09 viruses predominating, except in Egypt, where there was co-circulation with influenza A(H3N2) and influenza B viruses. In the temperate countries of eastern Asia, influenza A(H3N2) was predominant Asia with very little influenza A(H1N1)pdm09 virus activity, while in western Asia, influenza A(H1N1)pdm09 and influenza B were predominant. In the southern hemisphere, influenza activity continued at inter-seasonal levels.

Reference: World Health Organization (WHO), 2015. Influenza Update number 233 (3/23/15). Retrieved on March 26, 2015, 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 influenza data available. Please visit us at 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.