

Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to DHMH for the week ending April 8, 2017

Prepared by the Infectious Disease Epidemiology and Outbreak Response Bureau Infectious Disease Bureau – Prevention and Health Promotion Administration Maryland Department of Health and Mental Hygiene

The data presented in this document are provisional and subject to change as additional reports are received.

SUMMARY

During the week ending April 8, 2017, influenza-like illness (ILI) intensity in Maryland was **LOW** and there was **REGIONAL** geographic activity. The proportion of outpatient visits for ILI as reported by Sentinel Providers and Maryland Emergency Departments dropped. The proportion of MRITS respondents reporting ILI increased. The proportion of specimens testing positive for influenza at clinical laboratories dropped. A total of 96 specimens tested positive for influenza at the DHMH lab. There were 115 hospitalizations and 4 respiratory outbreaks reported to DHMH. Nationally, influenza activity decreased but still remained elevated in some regions.

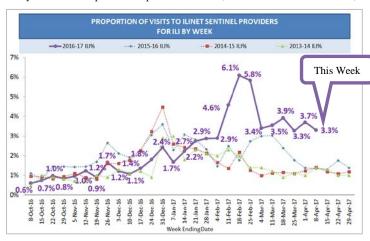
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ILI Intensity Levels		
Minimal		
Low		
Moderate		
High		

Influenza Geographic Activity		
No Activity		
Sporadic		
Local		
✓ Regional		
Widespread		

ILINet Sentinel Providers

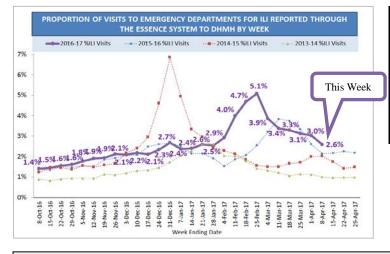
Thirty-three sentinel providers reported a total of 6,183 visits this week. Of those, 204 (3.3%) were visits for ILI. This is above the Maryland baseline of 2.2%.



	ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
	Age 0-4	37 (18%)	46 (13%)	1136 (19%)
,	Age 5-24	79 (39%)	176 (52%)	2565 (44%)
	Age 25-49	43 (21%)	63 (18%)	1165 (20%)
	Age 50-64	35 (17%)	42 (12%)	630 (11%)
	Age ≥ 65	10 (5%)	14 (4%)	330 (6%)
	Total	204 (100%)	341 (100%)	5826 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 46,327 visits this week through the ESSENCE surveillance system. Of those, 1,199 (2.6%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	238 (20%)	286 (20%)	8491 (26%)
Age 5-24	383 (32%)	426 (30%)	10107 (31%)
Age 25-49	310 (26%)	370 (26%)	8102 (25%)
Age 50-64	160 (13%)	179 (13%)	3621 (11%)
Age ≥ 65	108 (9%)	142 (10%)	2720 (8%)
Total	1199 (100%)	1403 (100%)	33041 (100%)

Neighboring states' influenza information:

Delaware http://dhss.delaware.gov/dph/epi/influenzahome.html

 $District\ of\ Columbia\ \ \underline{http://doh.dc.gov/service/influenza}$

 $\underline{\text{http://www.health.pa.gov/My\%20Health/Diseases\%20and\%20Conditions/I-L/Pages/Influenza.aspx\#.V-LtaPkrJD8}$

 $\begin{tabular}{ll} Virginia & \underline{http://www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-surveillance/\\ \end{tabular}$

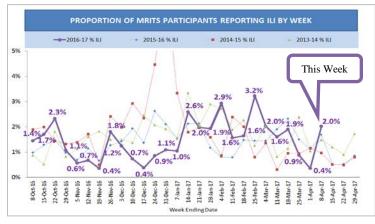
West Virginia http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx

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Community-based Influenza Surveillance (MRITS)

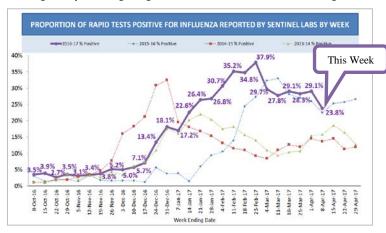
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 544 residents responded to the MRITS survey this week. Of those, 11 (2.0%) reported having ILI and missing a cumulative 25 days of regular daily activities.



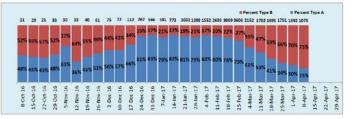
MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	2 (18%)	-	8 (4%)
Age 5-24	5 (45%)		68 (30%)
Age 25-49	2 (18%)	1 (50%)	53 (24%)
Age 50-64	1 (9%)	1 (50%)	55 (24%)
Age ≥ 65	1 (9%)	-	41 (18%)
Total	11 (100%)	2 (100%)	225 (100%)

Clinical Laboratory Influenza Testing

Fifty-two clinical laboratories reported performing 4,521 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 1,075 (23.8%) were positive for influenza. Of those testing positive, 265 (24.7%) were influenza Type A and 810 (75.3%) were influenza Type B. The reliability of RIDTs depends largely on the conditions under which they are used. False-positive (and true-negative) results are more likely to occur when the disease prevalence in the community is low, which is generally at the beginning and end of the influenza season and during the summer.

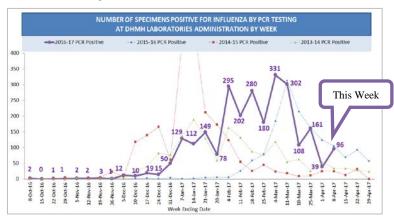


	Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
l	Туре А	265 (25%)	510 (30%)	16614 (64%)
	Туре В	810 (75%)	1182 (70%)	9352 (36%)
	Total	1075 (100%)	1692 (100%)	25966 (100%)



State Laboratories Administration Influenza Testing

The DHMH Laboratories Administration performed a total of 162 PCR tests for influenza and 96 (59.3%) specimens tested positive. Of those testing positive, 43 (44.8%) were positive for Type A (H3), 2 (2.1%) were positive for Type A (H1), 42 (43.8%) were positive for Type B (Yamagata), 8 (8.3%) were positive for Type B (Victoria), and 1 (1.0%) was positive for both Type A (H3) and Type B (Yamagata). PCR testing is more reliable than RIDT. The DHMH testing identifies subtypes of influenza A and lineages of influenza B, information that is not available from the RIDT results. The table below summarizes results by type, subtype, and lineage.



Positive PCR Tests by Type (Subtype)	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A (H1)	2 (2%)		45 (2%)
Type A (H3)	43 (45%)	27 (69%)	2048 (79%)
Type B (Victoria)	8 (8%)	2 (5%)	76 (3%)
Type B (Yamagata)	42 (44%)	10 (26%)	408 (16%)
Dual – Type A (H3)/ B (Yamagata)	1 (1%)		3 (<1%)
Total	96 (100%)	39 (100%)	2580 (100%)

Where to get an influenza vaccination

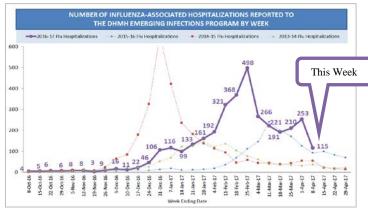
Interested in getting a flu vaccine for the 2016-17 influenza season? Go to http://phpa.dhmh.maryland.gov/influenza/Pages/getvaccinated.aspx and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.

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Influenza-associated Hospitalizations

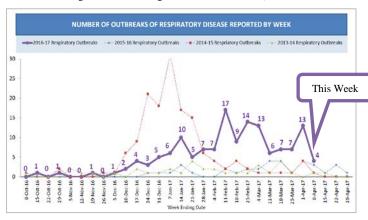
A total of 115 hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.)



Influenza- Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	7 (6%)	12 (5%)	225 (7%)
Age 5-17	9 (8%)	17 (7%)	218 (6%)
Age 18-24	1 (1%)	10 (4%)	96 (3%)
Age 25-49	11 (10%)	40 (16%)	386 (11%)
Age 50-64	22 (19%)	58 (23%)	643 (19%)
Age ≥ 65	65 (57%)	116 (46%)	1826 (54%)
Total	115 (100%)	253 (100%)	3394 (100%)

Outbreaks of Respiratory Disease

There were 4 respiratory outbreaks reported to DHMH this week. (Disease outbreaks of any kind are reportable in Maryland. Respiratory outbreaks may be reclassified once a causative agent is detected, e.g., from ILI to influenza.)



Respiratory Outbreaks by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Influenza	2 (50%)	10 (77%)	101 (71%)
Influenza-like Illness	1 (25%)	3 (23%)	34 (24%)
Pneumonia	1 (25%)		8 (6%)
Other Respiratory			
Total	4 (100%)	13 (100%)	143 (100%)

National Influenza Surveillance (CDC)

During week 14 (April 2-8, 2017), influenza activity decreased but remained elevated in the United States.

- Viral Surveillance: The most frequently identified influenza virus type reported by public health laboratories during week 14 was influenza B. The
 percentage of respiratory specimens testing positive for influenza in clinical laboratories decreased.
- Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic
 threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- Influenza-associated Pediatric Deaths: Five influenza-associated pediatric deaths were reported, four that occurred during the 2016-2017 season and one that occurred during the 2010-2011 season.
- Influenza-associated Hospitalizations: A cumulative rate for the season of 59.4 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 2.6%, which is above the national baseline of 2.2%. Five of ten regions reported ILI at or above their region-specific baseline levels. Two states experienced high ILI activity; seven states experienced moderate ILI activity; New York City and 11 states experienced low ILI activity; Puerto Rico and 30 states experienced minimal ILI activity; and the District of Columbia had insufficient data.
- Geographic Spread of Influenza: The geographic spread of influenza in 18 states was reported as widespread; Guam, Puerto Rico, and 18 states reported regional activity; the District of Columbia and 12 states reported local activity; two states reported sporadic activity; and the U.S. Virgin Islands reported no activity.

