Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to DHMH for the week ending April 29, 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 29, 2017, influenza-like illness (ILI) intensity in Maryland was **MINIMAL** and there was **LOCAL** 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 decreased for the fourth consecutive week. A total of 65 specimens tested positive for influenza at the DHMH lab – a majority of those were positive for influenza Type B. There were 20 influenza-associated hospitalizations and no respiratory outbreaks reported to DHMH. Nationally, influenza activity continued to decrease.

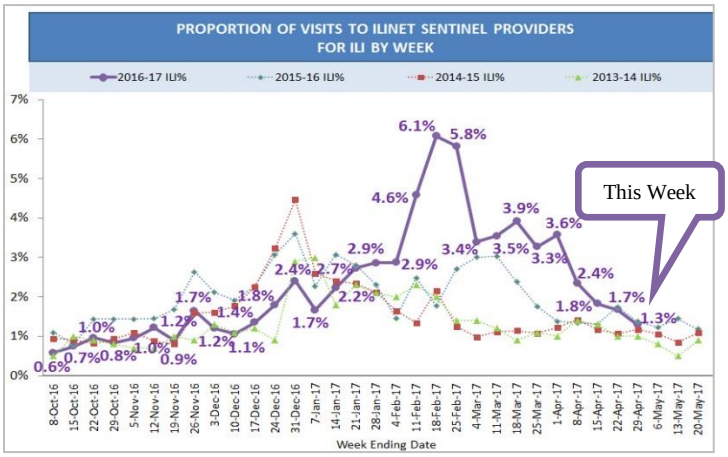
Click here to visit our influenza surveillance web page

ILI Intensity Levels
✔ Minimal
Low
Moderate
High

Influenza Geographic Activity
No Activity
Sporadic
✔ Local
Regional
Widespread

ILINet Sentinel Providers

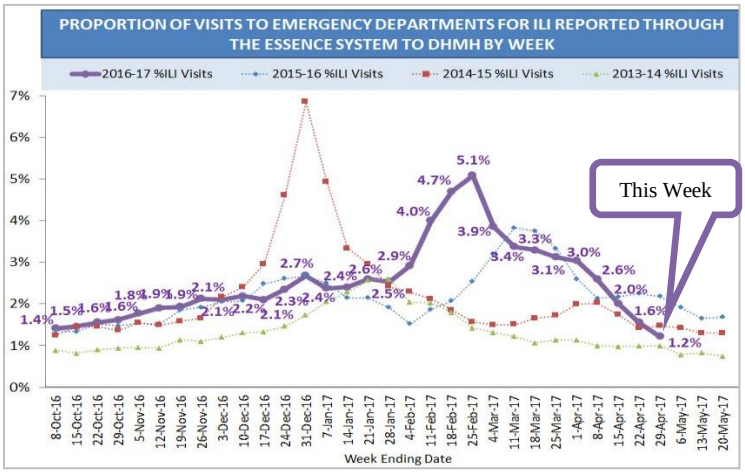
Thirty-four sentinel providers reported a total of 6,495 visits this week. Of those, 84 (1.3%) were visits for ILI. This is **below** the Maryland baseline of **2.2%**.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	16 (19%)	23 (20%)	1211 (20%)
Age 5-24	32 (38%)	35 (31%)	2705 (44%)
Age 25-49	20 (24%)	30 (27%)	1246 (20%)
Age 50-64	7 (8%)	16 (14%)	675 (11%)
Age ≥ 65	9 (11%)	9 (8%)	355 (6%)
Total	84 (100%)	113 (100%)	6192 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 47,288 visits this week through the ESSENCE surveillance system. Of those, 574 (1.2%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	148 (26%)	170 (24%)	9048 (26%)
Age 5-24	179 (31%)	184 (26%)	10725 (30%)
Age 25-49	139 (24%)	197 (28%)	8659 (25%)
Age 50-64	64 (11%)	92 (13%)	3883 (11%)
Age ≥ 65	44 (8%)	71 (10%)	2936 (8%)
Total	574 (100%)	714 (100%)	35251 (100%)

Neighboring states' influenza information:

Delaware	http://dhss.delaware.gov/dph/epi/influenzahome.html
District of Columbia	http://doh.dc.gov/service/influenza
Pennsylvania	http://www.health.pa.gov/My%20Health/Diseases%20and%20Conditions/I-L/Pages/Influenza.aspx#.V-LtaPkrJD8
Virginia	http://www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-surveillance/
West Virginia	http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx

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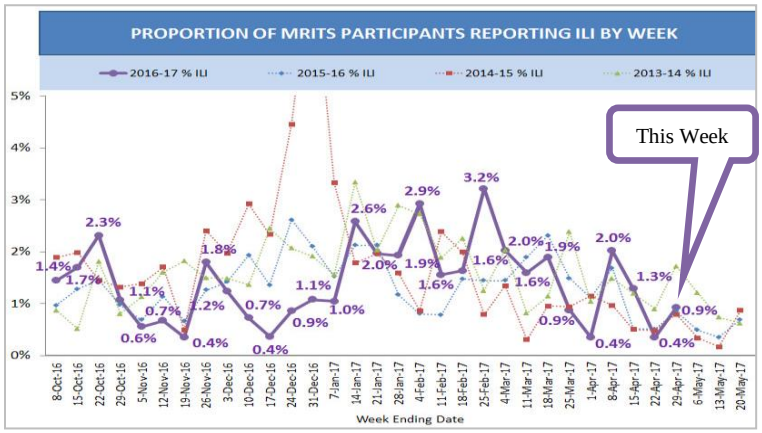
Community-based Influenza Surveillance (MRITS)

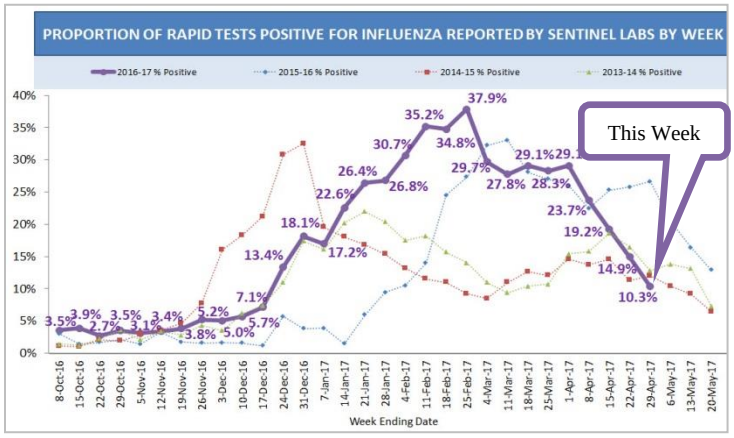
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 543 residents responded to the MRITS survey this week. Of those, 5 (0.9%) reported having ILI, and missing a cumulative 6 days of regular daily activities.



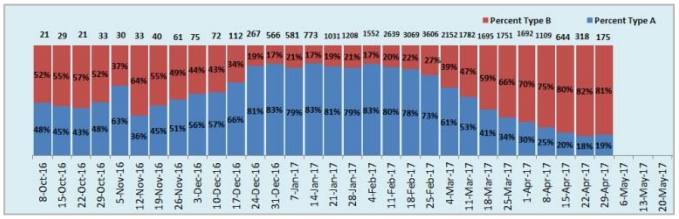
MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	--	--	8 (3%)
Age 5-24	1 (20%)	1 (50%)	72 (30%)
Age 25-49	2 (40%)	--	58 (24%)
Age 50-64	2 (40%)	1 (50%)	60 (25%)
Age ≥ 65	--	--	41 (17%)
Total	5 (100%)	2 (100%)	239 (100%)

Clinical Laboratory Influenza Testing

Thirty-eight clinical laboratories reported performing 1,692 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 175 (10.3%) were positive for influenza. Of those testing positive, 33 (18.9%) were influenza Type A and 142 (81.1%) 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.

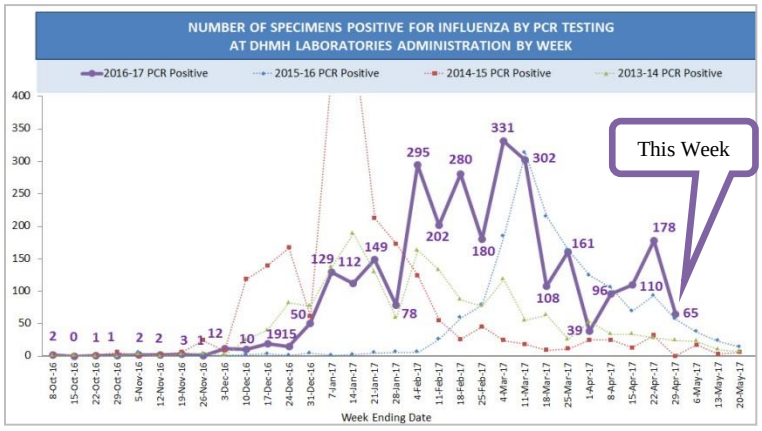


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	33 (19%)	56 (18%)	16851 (62%)
Type B	142 (81%)	262 (82%)	10286 (38%)
Total	175 (100%)	318 (100%)	27137 (100%)



State Laboratories Administration Influenza Testing

The DHMH Laboratories Administration performed a total of 144 PCR tests for influenza and 65 (45.1%) specimens tested positive. Of those testing positive, 4 (6.2%) were positive for Type A (H3), 1 (1.5%) was positive for Type A (H1), 51 (78.5%) were positive for Type B (Yamagata), and 9 (13.8%) were positive for Type B (Victoria). 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)	1 (2%)	1 (1%)	50 (2%)
Type A (H3)	4 (6%)	58 (33%)	2153 (73%)
Type B (Victoria)	9 (14%)	19 (11%)	108 (4%)
Type B (Yamagata)	51 (78%)	99 (56%)	617 (21%)
Dual – Type A (H3)/ B (Yamagata)	--	1 (1%)	5 (<1%)
Total	65 (100%)	178 (100%)	2933 (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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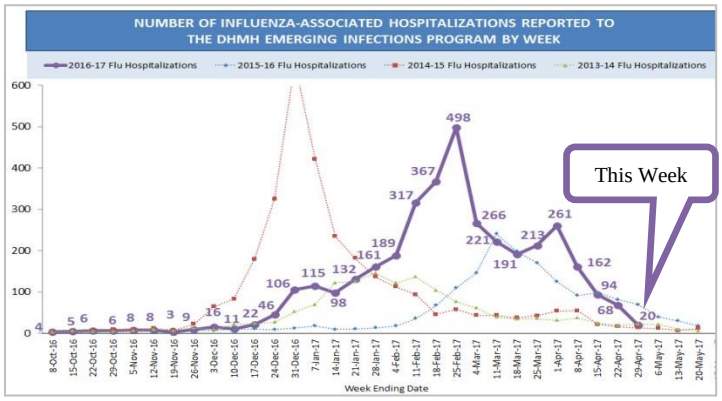
Influenza-associated Hospitalizations

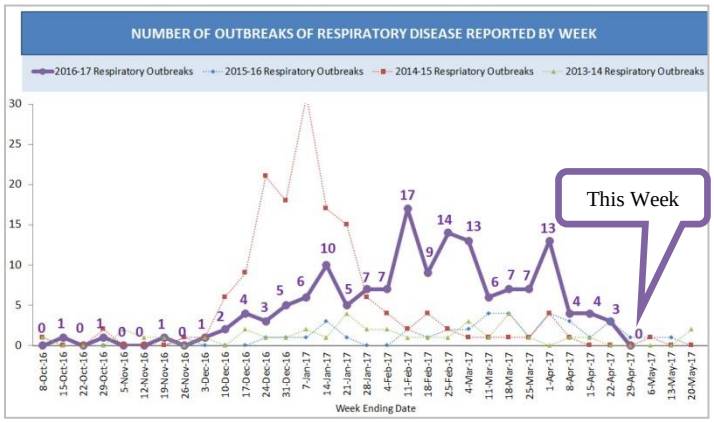
A total of 20 influenza-associated hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.)



Influenza-Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	1 (5%)	3 (4%)	237 (7%)
Age 5-17	--	2 (3%)	235 (6%)
Age 18-24	--	--	97 (3%)
Age 25-49	4 (20%)	12 (18%)	412 (11%)
Age 50-64	5 (25%)	14 (21%)	691 (19%)
Age ≥ 65	10 (50%)	37 (54%)	1951 (54%)
Total	20 (100%)	68 (100%)	3623 (100%)

Outbreaks of Respiratory Disease

There were no 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	--	3 (100%)	107 (71%)
Influenza-like Illness	--	--	34 (23%)
Pneumonia	--	--	9 (6%)
Other Respiratory	--	--	--
Total	--	3 (100%)	150 (100%)

National Influenza Surveillance (CDC)

During week 17 (April 23-29, 2017), influenza activity decreased in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus type reported by public health laboratories during week 17 was influenza B. The percentage of respiratory specimens testing positive for influenza in clinical laboratories decreased.
- **Novel Influenza A Virus** One human infection with a novel influenza A virus was reported.
- **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:** Ten influenza-associated pediatric deaths were reported, seven that occurred during the 2016-2017 season and three that occurred during the 2015-2016 season.
- **Influenza-associated Hospitalizations:** A cumulative rate for the season of 63.8 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 1.4%, which is below the national baseline of 2.2%. All ten regions reported ILI below their region-specific baseline levels. Four states experienced low ILI activity; New York City, Puerto Rico, and 46 states experienced minimal ILI activity; and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in three states was reported as widespread; Guam and eight states reported regional activity; the District of Columbia, Puerto Rico, and 20 states reported local activity; 19 states reported sporadic activity; and the U.S. Virgin Islands reported no activity.