Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to MDH for the week ending December 2, 2017

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

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

SUMMARY

During the week ending December 2, 2017, influenza-like illness (ILI) intensity in Maryland was **MINIMAL** and there was **LOCAL** geographic activity. The proportion of outpatient visits for ILI reported by Sentinel Providers decreased. The proportion of outpatient visits for ILI at Maryland Emergency Departments was low. The proportion of MRITS respondents reporting ILI was also low. Clinical laboratories reported an increase in the proportion of specimens testing positive for influenza. Fifteen specimens tested positive for influenza at the MDH lab. There were 26 influenza-associated hospitalizations. One respiratory outbreak was reported to MDH.

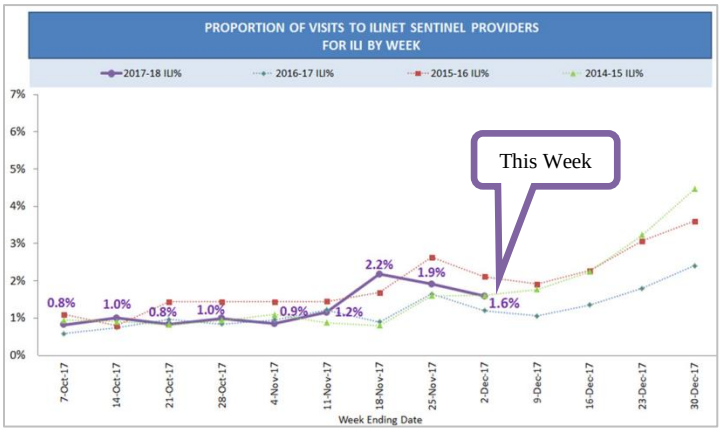
Click here to visit our influenza surveillance web page

ILI Intensity Levels
✔Minimal
Low
Moderate
High

Influenza Geographic Activity
No Activity
Sporadic
✔Local
Regional
Widespread

ILINet Sentinel Providers

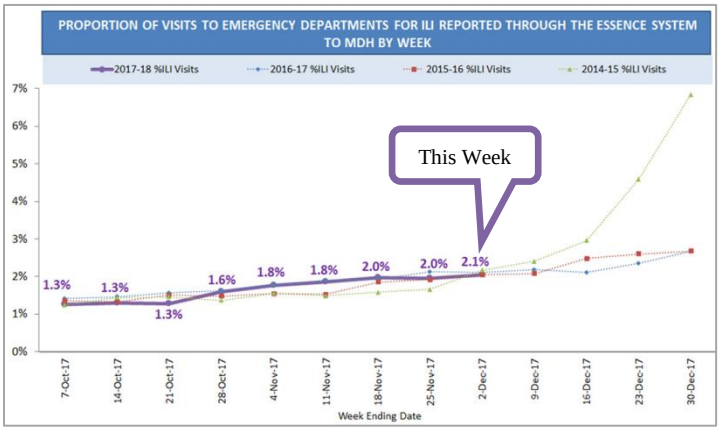
Twenty one sentinel providers reported a total of 6,780 visits this week. Of those, 108 (1.6%) were visits for ILI. This is **below** the Maryland baseline of **2.0%**.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	36 (33%)	32 (31%)	254 (31%)
Age 5-24	42 (39%)	37 (36%)	297 (37%)
Age 25-49	21 (19%)	12 (12%)	159 (20%)
Age 50-64	6 (6%)	12 (12%)	68 (8%)
Age ≥ 65	3 (3%)	9 (9%)	34 (4%)
Total	108 (100%)	102 (100%)	812 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 44,241 visits this week through the ESSENCE surveillance system. Of those, 908 (2.1%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	322 (35%)	288 (39%)	2,255 (35%)
Age 5-24	233 (26%)	196 (26%)	1,647 (26%)
Age 25-49	204 (22%)	147 (20%)	1,495 (23%)
Age 50-64	92 (10%)	67 (9%)	620 (10%)
Age ≥ 65	57 (6%)	46 (6%)	413 (6%)
Total	908 (100%)	744 (100%)	6,430 (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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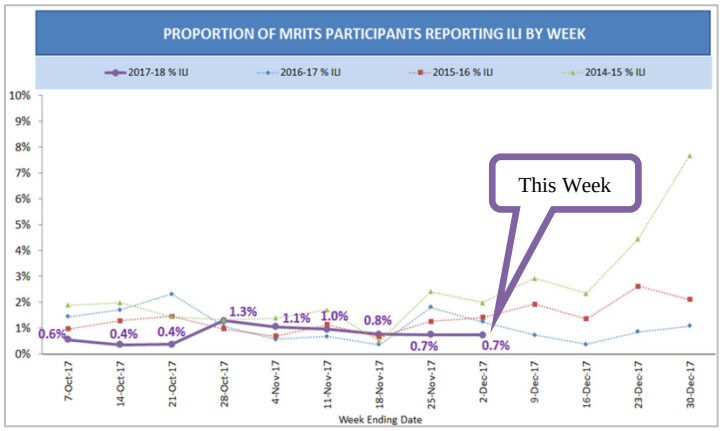
Community-based Influenza Surveillance (MRITS)

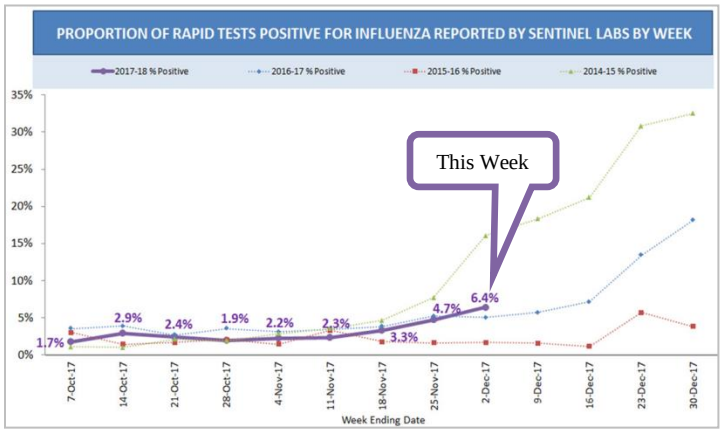
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 543 residents responded to the MRITS survey this week. Of those, 4 (0.7%) reported having ILI and missing greater than 7 cumulative days of regular daily activities.



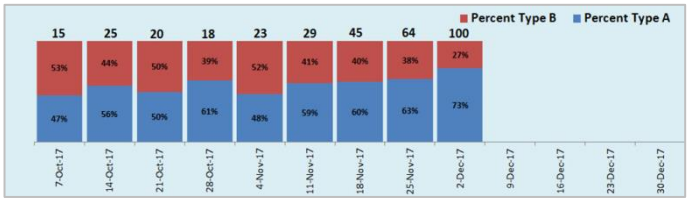
MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	--	--	3 (8%)
Age 5-24	1 (25%)	2 (50%)	10 (27%)
Age 25-49	--	--	5 (14%)
Age 50-64	2 (50%)	2 (50%)	14 (38%)
Age ≥ 65	1 (25%)	--	5 (14%)
Total	4 (100%)	4 (100%)	37 (100%)

Clinical Laboratory Influenza Testing

There were 46 clinical laboratories reporting 1,565 influenza diagnostic tests , mostly rapid influenza diagnostic tests (RIDTs). Of those, 100 (6.4%) were positive for influenza. Of those testing positive, 73 (73%) were influenza Type A and 27 (27%) 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.

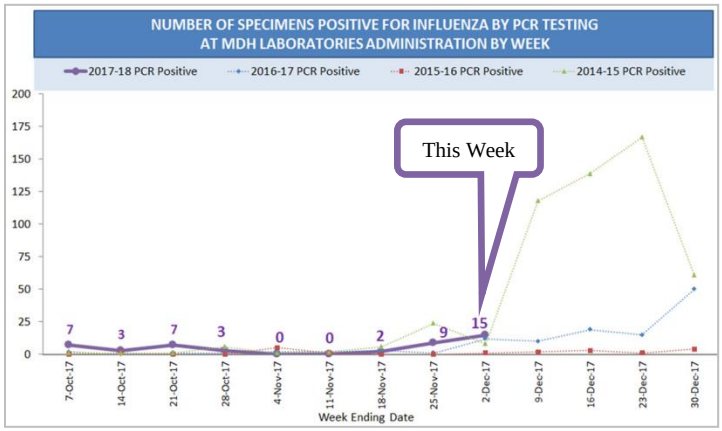


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	73 (73%)	40 (63%)	210 (62%)
Type B	27 (27%)	24 (38%)	129 (38%)
Total	100 (100%)	64 (100%)	339 (100%)



State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 92 PCR tests for influenza and 15 (16.3%) were positive for influenza. Of those testing positive, 10 (66.7%) were positive for Type A (H3), 1 (6.7%) was positive for Type A (H1), and 4 (26.7%) were positive for Type B (Yamagata). PCR testing is more reliable than RIDT. The MDH 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 (7%)	2 (22%)	4 (9%)
Type A (H3)	10 (67%)	7 (78%)	33 (72%)
Type B (Victoria)	--	--	--
Type B (Yamagata)	4 (27%)	--	6 (13%)
Type A (H3N2v)	--	--	3 (7%)
Total	15 (100%)	9 (100%)	46 (100%)

Where to get an influenza vaccination

Interested in getting a flu vaccine for the 2017-18 influenza season? Go to https://phpa.health.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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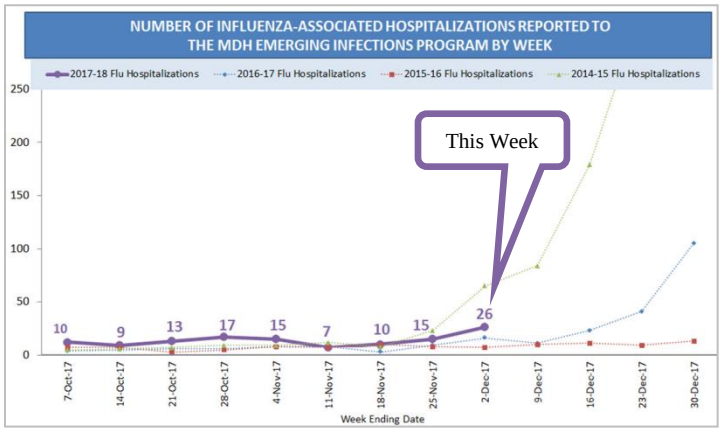
Influenza-associated Hospitalizations

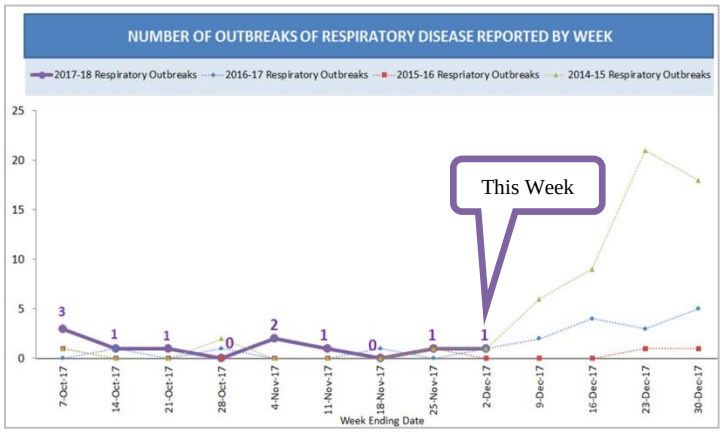
A total of 26 influenza-associated hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.)



Influenza-Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	3 (12%)	1 (7%)	13 (10%)
Age 5-17	--	1 (7%)	6 (5%)
Age 18-24	1 (4%)	--	7 (6%)
Age 25-49	6 (23%)	1 (7%)	19 (15%)
Age 50-64	3 (12%)	2 (13%)	26 (21%)
Age ≥ 65	13 (50%)	10 (67%)	53 (43%)
Total	26 (100%)	15 (100%)	124 (100%)

Outbreaks of Respiratory Disease

There was one respiratory outbreak reported to MDH 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	1 (100%)	1 (100%)	3 (30%)
Influenza-like Illness	--	--	3 (30%)
Pneumonia	--	--	4 (40%)
Other Respiratory	--	--	--
Total	1 (100%)	1 (100%)	10 (100%)

National Influenza Surveillance (CDC)

During week 48 (November 26-December 2, 2017), overall influenza activity increased slightly in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus type reported by public health laboratories during week 48 was influenza A. The percentage of respiratory specimens testing positive for influenza in clinical laboratories declined slightly.
- **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:** Two influenza-associated pediatric deaths were reported.
- **Influenza-associated Hospitalizations:** A cumulative rate of 3.0 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 2.3%, which is above the national baseline of 2.2%. Regions 1, 4, 6 and 7 reported ILI at or above region-specific baseline levels. Three states experienced high ILI activity; Puerto Rico and three states experienced moderate ILI activity; the District of Columbia and six states experienced low ILI activity; and New York City and 38 states experienced minimal ILI activity.
- **Geographic Spread of Influenza:** The geographic spread of influenza in seven states was reported as widespread; Puerto Rico and 18 states reported regional activity; 18 states reported local activity; and the District of Columbia, the U.S. Virgin Islands and seven states reported sporadic activity; and Guam did not report.