Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to MDH for the week ending December 16, 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 16, 2017, influenza-like illness (ILI) intensity in Maryland was **MINIMAL** and there was **WIDESPREAD** geographic activity. The proportion of outpatient visits for ILI reported by Sentinel Providers remained the same. The proportion of outpatient visits for ILI at Maryland Emergency Departments increased. The proportion of MRITS respondents reporting ILI also increased. Clinical laboratories reported an increase in the proportion of specimens testing positive for influenza. Forty-three specimens tested positive for influenza at the MDH lab. There were 41 influenza-associated hospitalizations. Three respiratory outbreaks were reported to MDH.

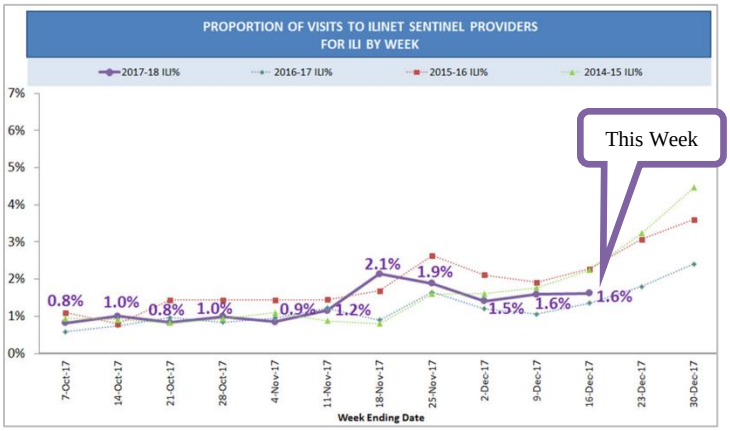
Click here to visit our influenza surveillance web page

ILI Intensity Levels
✔ Minimal
Low
Moderate
High

Influenza Geographic Activity
No Activity
Sporadic
Local
Regional
✔ Widespread

ILINet Sentinel Providers

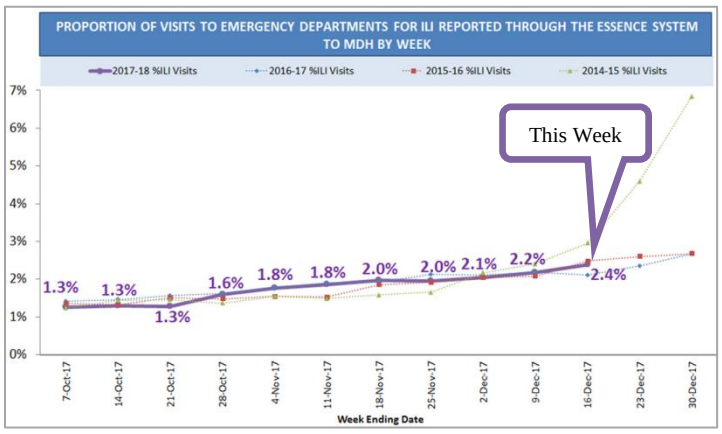
Twenty three sentinel providers reported a total of 6,963 visits this week. Of those, 113 (1.6%) were visits for ILI. This is **below** the Maryland baseline of **2.0%**.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	24 (21%)	31 (26%)	309 (30%)
Age 5-24	54 (48%)	54 (46%)	405 (39%)
Age 25-49	19 (17%)	21 (18%)	199 (19%)
Age 50-64	12 (11%)	8 (7%)	88 (8%)
Age ≥ 65	4 (4%)	4 (3%)	42 (4%)
Total	113 (100%)	118 (100%)	1,043 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 43,293 visits this week through the ESSENCE surveillance system. Of those, 1,028 (2.4%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	380 (37%)	371 (39%)	3,006 (36%)
Age 5-24	258 (25%)	204 (21%)	2,109 (25%)
Age 25-49	211 (21%)	210 (22%)	1,916 (23%)
Age 50-64	105 (10%)	94 (10%)	819 (10%)
Age ≥ 65	74 (7%)	82 (9%)	569 (7%)
Total	1,028 (100%)	961 (100%)	8,419 (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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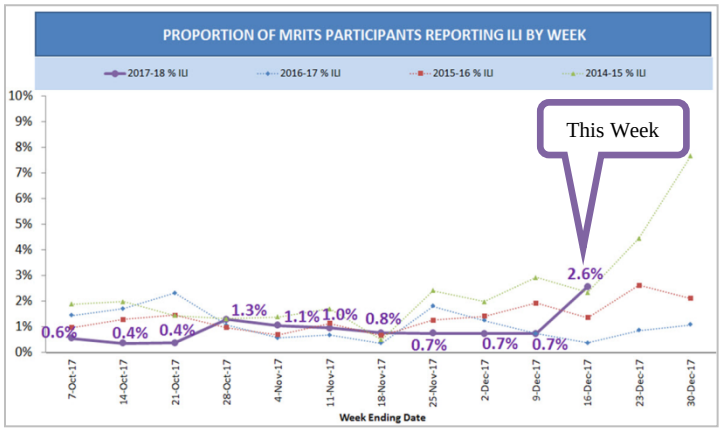
Community-based Influenza Surveillance (MRITS)

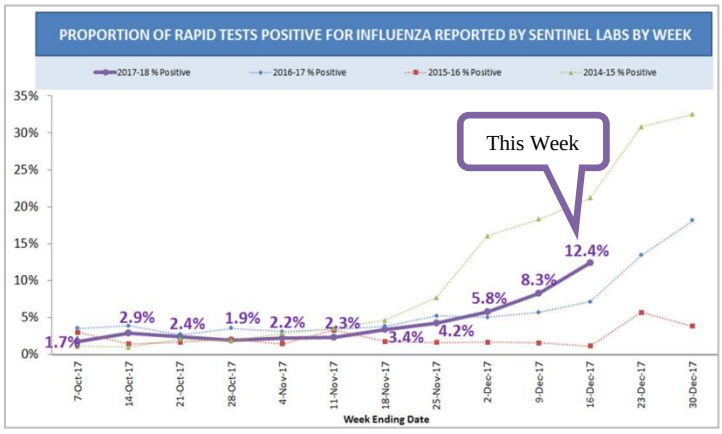
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 546 residents responded to the MRITS survey this week. Of those, 14 (2.6%) reported having ILI and missing 32 cumulative days of regular daily activities.



MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	--	--	3 (5%)
Age 5-24	5 (36%)	3 (75%)	18 (33%)
Age 25-49	7 (50%)	--	12 (22%)
Age 50-64	2 (14%)	1 (25%)	17 (31%)
Age ≥ 65	--	--	5 (9%)
Total	14 (100%)	4 (100%)	55 (100%)

Clinical Laboratory Influenza Testing

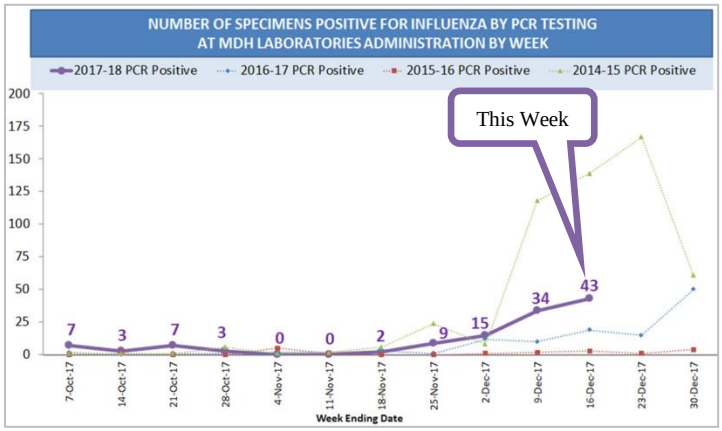
There were 50 clinical laboratories reporting 2,086 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 258 (12.4%) were positive for influenza. Of those testing positive, 209 (81%) were influenza Type A and 49 (19%) were influenza Type B. The reliability of RIDTs depends 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	209 (81%)	130 (81%)	557 (73%)
Type B	49 (19%)	31 (19%)	211 (27%)
Total	258 (100%)	161 (100%)	768 (100%)

State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 124 PCR tests for influenza and 43 (34.7%) were positive for influenza. Of those testing positive, 37 (86.0%) were positive for Type A (H3), 3 (7.0%) were positive for Type A (H1), and 3 (7.0%) 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)	3 (7%)	4 (12%)	11 (9%)
Type A (H3)	37 (86%)	29 (85%)	99 (80%)
Type B (Victoria)	--	--	--
Type B (Yamagata)	3 (7%)	1 (3%)	10 (8%)
Type A (H3N2v)	--	--	3 (2%)
Total	43 (100%)	34 (100%)	123 (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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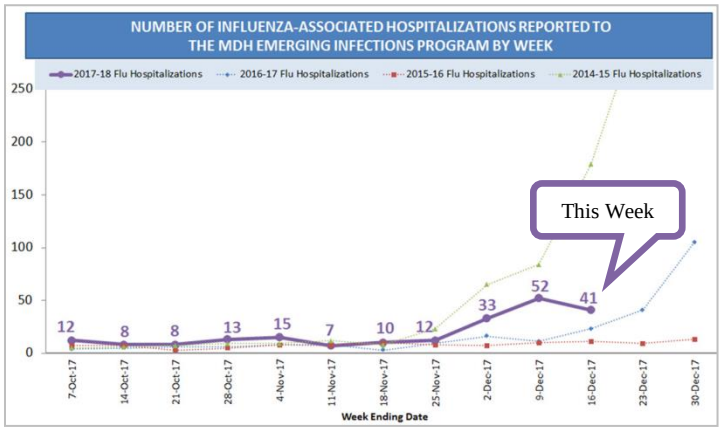
Influenza-associated Hospitalizations

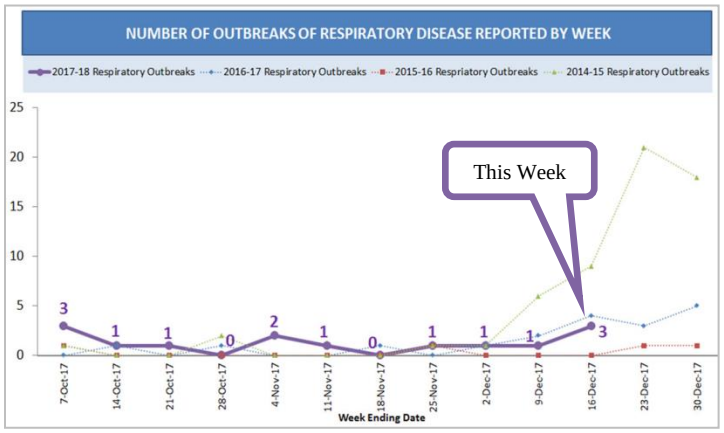
A total of 41 influenza-associated hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.)



Influenza-Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	5 (12%)	3 (6%)	20 (9%)
Age 5-17	3 (7%)	2 (4%)	10 (5%)
Age 18-24	--	1 (2%)	5 (2%)
Age 25-49	7 (17%)	8 (15%)	35 (17%)
Age 50-64	10 (24%)	10 (19%)	46 (22%)
Age ≥ 65	16 (39%)	28 (54%)	95 (45%)
Total	41 (100%)	52 (100%)	211 (100%)

Outbreaks of Respiratory Disease

There were three respiratory outbreaks 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%)	4 (29%)
Influenza-like Illness	3 (100%)	--	6 (43%)
Pneumonia	--	--	4 (29%)
Other Respiratory	--	--	--
Total	3 (100%)	1 (100%)	14 (100%)

National Influenza Surveillance (CDC)

During week 50 (December 10-16, 2017), influenza activity sharply increased in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 50 was influenza A(H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased.
- **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:** One influenza-associated pediatric death was reported.
- **Influenza-associated Hospitalizations:** A cumulative rate of 6.2 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 3.5%, which is above the national baseline of 2.2%. Nine of the 10 regions reported ILI at or above region-specific baseline levels. Ten states experienced high ILI activity; Puerto Rico and eight states experienced moderate ILI activity; New York City, the District of Columbia, and 11 states experienced low ILI activity; and 21 states experienced minimal ILI activity.
- **Geographic Spread of Influenza:** The geographic spread of influenza in 23 states was reported as widespread; Puerto Rico and 23 states reported regional activity; the District of Columbia and four states reported local activity; the U.S. Virgin Islands reported sporadic activity; and Guam did not report.