Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to DHMH for the week ending March 4, 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 March 4, 2017, influenza-like illness (ILI) intensity in Maryland was **MODERATE** and there was **WIDESPREAD** geographic activity. The proportion of outpatient visits for ILI decreased sharply as reported by both Sentinel Providers and Maryland Emergency Departments. The proportion of MRITS respondents reporting ILI also decreased. The proportion of specimens testing positive for influenza at clinical laboratories decreased but remained high, with an increasing proportion of specimens testing positive for influenza Type B. A total of 331 specimens tested positive for influenza at the DHMH lab. There were 202 hospitalizations and 13 respiratory outbreaks reported to DHMH. Nationally, influenza activity decreased but remained high.

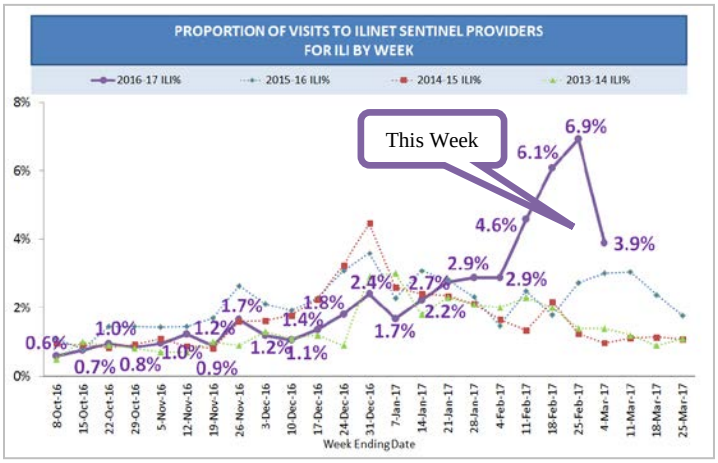
Click here to visit our influenza surveillance web page

ILI Intensity Levels
Minimal
Low
✔ Moderate
High

Influenza Geographic Activity
No Activity
Sporadic
Local
Regional
✔ Widespread

ILINet Sentinel Providers

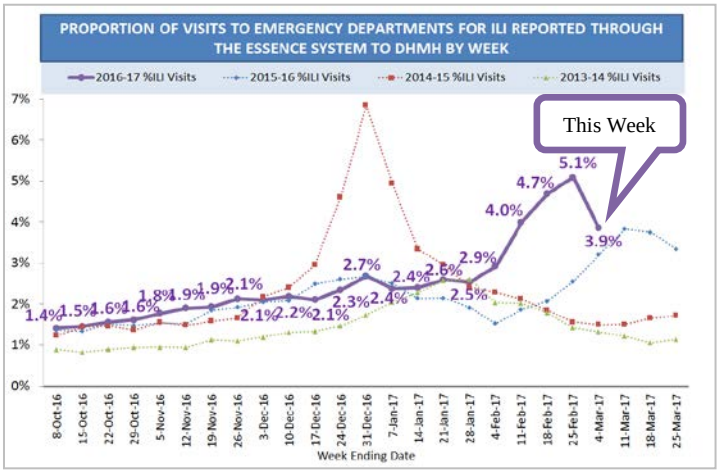
Thirty-five sentinel providers reported a total of 7,272 visits this week. Of those, 282 (3.9%) were visits for ILI. This is well **above** the Maryland baseline of **2.2%**.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	33 (12%)	83 (15%)	882 (21%)
Age 5-24	132 (47%)	282 (49%)	1843 (43%)
Age 25-49	58 (21%)	110 (19%)	851 (20%)
Age 50-64	41 (15%)	59 (10%)	428 (10%)
Age ≥ 65	18 (6%)	36 (6%)	259 (6%)
Total	282 (100%)	570 (100%)	4263 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 45,194 visits this week through the ESSENCE surveillance system. Of those, 1,743 (3.9%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	355 (20%)	469 (19%)	7054 (27%)
Age 5-24	558 (32%)	876 (35%)	7839 (30%)
Age 25-49	448 (26%)	651 (26%)	6248 (24%)
Age 50-64	203 (12%)	297 (12%)	2718 (10%)
Age ≥ 65	179 (10%)	239 (9%)	2081 (8%)
Total	1743 (100%)	2532 (100%)	25940 (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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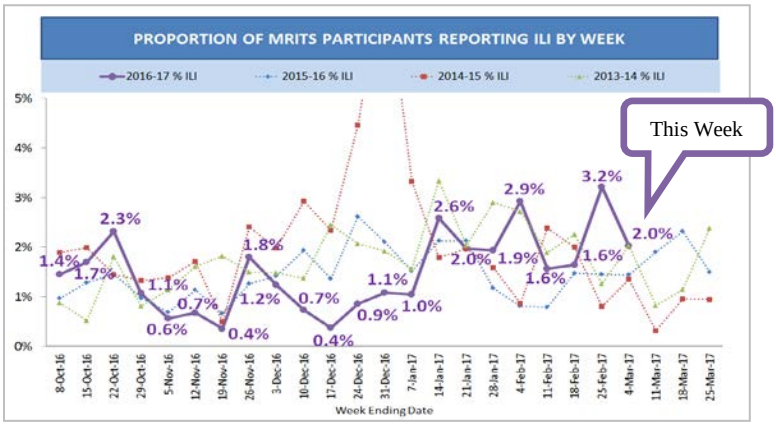
Community-based Influenza Surveillance (MRITS)

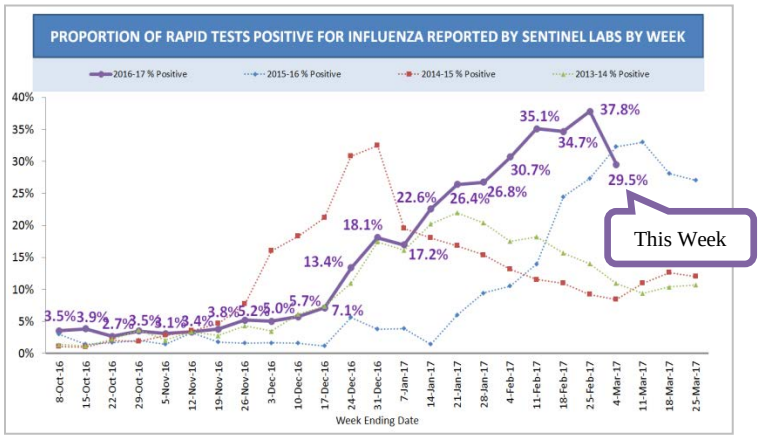
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 593 residents responded to the MRITS survey this week. Of those, 12 (2.0%) reported having ILI and missing a cumulative 39 days of regular daily activities.



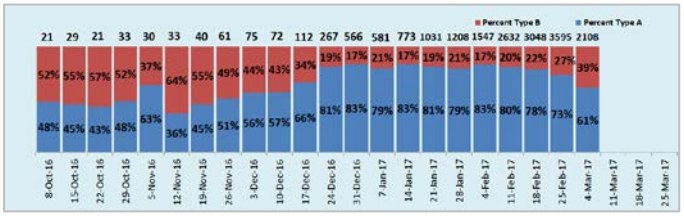
MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	--	2 (11%)	6 (3%)
Age 5-24	4 (33%)	5 (26%)	53 (28%)
Age 25-49	3 (25%)	2 (11%)	47 (25%)
Age 50-64	1 (8%)	5 (26%)	45 (24%)
Age ≥ 65	4 (33%)	5 (26%)	36 (19%)
Total	12 (100%)	19 (100%)	187 (100%)

Clinical Laboratory Influenza Testing

Fifty-one clinical laboratories reported performing 7,141 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 2,108 (29.5%) were positive for influenza. Of those testing positive, 1,289 (61.1%) were influenza Type A and 819 (38.9%) 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.

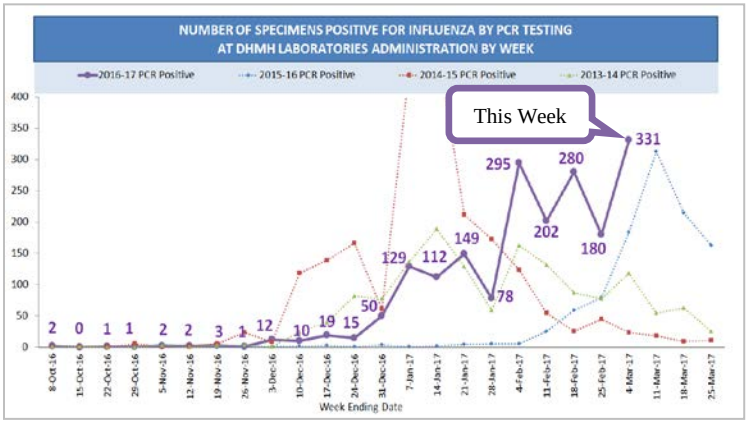


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	1289 (61%)	2612 (73%)	13535 (76%)
Type B	819 (39%)	983 (27%)	4348 (24%)
Total	2108 (100%)	3595 (100%)	17883 (100%)



State Laboratories Administration Influenza Testing

The DHMH Laboratories Administration performed a total of 497 PCR tests for influenza and 331 (66.6%) specimens tested positive. Of those testing positive, 262 (79.2%) were positive for Type A (H3), 4 (1.2%) were positive for Type A (H1), 51 (15.4%) were positive for Type B (Yamagata), and 12 (3.6%) were positive for Type B (Victoria). Additionally, 2 (0.6%) specimens were positive for influenza Type B, but the lineages could not be determined. 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)	4 (1%)	--	36 (2%)
Type A (H3)	262 (79%)	160 (89%)	1620 (86%)
Type B (Victoria)	12 (4%)	3 (2%)	44 (2%)
Type B (Yamagata)	51 (15%)	17 (9%)	172 (9%)
Type B (Lineage unknown)	2 (1%)	--	2 (<1%)
Total	331 (100%)	180 (100%)	1874 (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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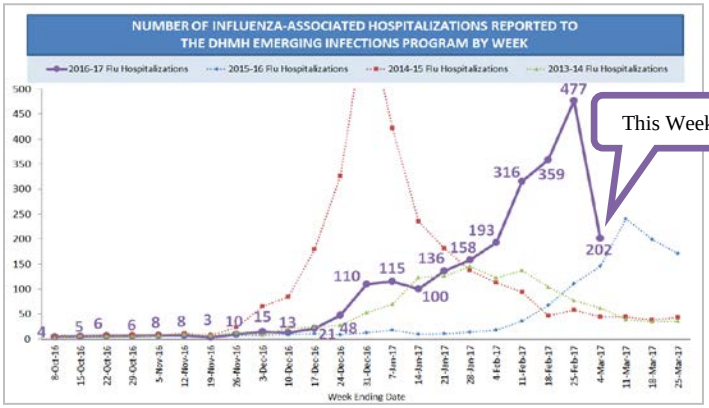
Influenza-associated Hospitalizations

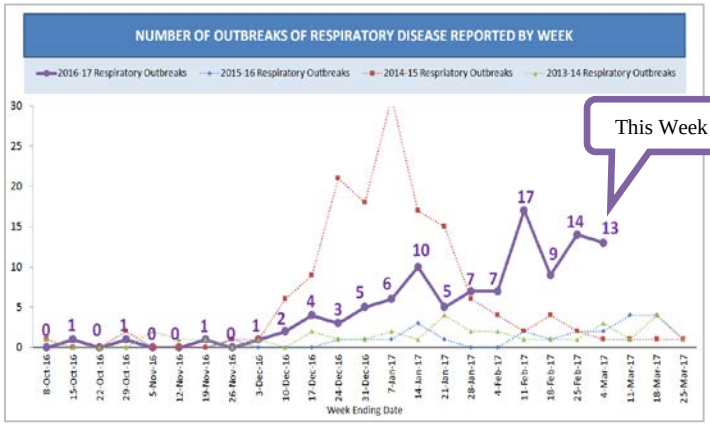
A total of 202 hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.)



Influenza-Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	14 (7%)	41 (9%)	146 (6%)
Age 5-17	12 (6%)	32 (7%)	144 (6%)
Age 18-24	5 (2%)	12 (3%)	59 (3%)
Age 25-49	24 (12%)	50 (10%)	242 (10%)
Age 50-64	38 (19%)	80 (17%)	422 (18%)
Age ≥ 65	109 (54%)	262 (55%)	1300 (56%)
Total	202 (100%)	477 (100%)	2313 (100%)

Outbreaks of Respiratory Disease

There were 13 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	12 (92%)	11 (79%)	74 (70%)
Influenza-like Illness	1 (8%)	3 (21%)	25 (24%)
Pneumonia	--	--	7 (7%)
Other Respiratory	--	--	--
Total	13 (100%)	14 (100%)	106 (100%)

National Influenza Surveillance (CDC)

During week 9 (February 26-March 4, 2017), influenza activity decreased, but remained elevated in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 9 was influenza A (H3). 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 above the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** Eight influenza-associated pediatric deaths were reported.
- **Influenza-associated Hospitalizations:** A cumulative rate for the season of 43.5 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 3.6%, which is above the national baseline of 2.2%. Eight of ten regions reported ILI at or above their region-specific baseline levels. 14 states experienced high ILI activity; 12 states experienced moderate ILI activity; eight states experienced low ILI activity; New York City, Puerto Rico, and 16 states experienced minimal ILI activity; and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico and 39 states was reported as widespread; Guam and eight states reported regional activity; the District of Columbia and two states reported local activity; one state reported sporadic activity; and the U.S. Virgin Islands reported no activity.