



Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to DHMH for the week ending March 12, 2016

Prepared by the Infectious Disease Epidemiology and Outbreak Response 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 12, 2016, influenza-like illness (ILI) intensity in Maryland was **MODERATE** and there was **WIDESPREAD** geographic spread. The proportion of outpatient visits for ILI reported by Sentinel Providers was similar to last week, while the proportion reported by Maryland Emergency Departments increased substantially. The proportion of MRITS respondents reporting ILI also went up. The proportion of specimens testing positive for influenza at clinical laboratories increased slightly. There was an increase in the number of specimens testing positive for influenza at the DHMH lab. There were 140 influenza-associated hospitalizations reported. Four respiratory outbreaks were reported. Nationally, influenza activity is increasing.

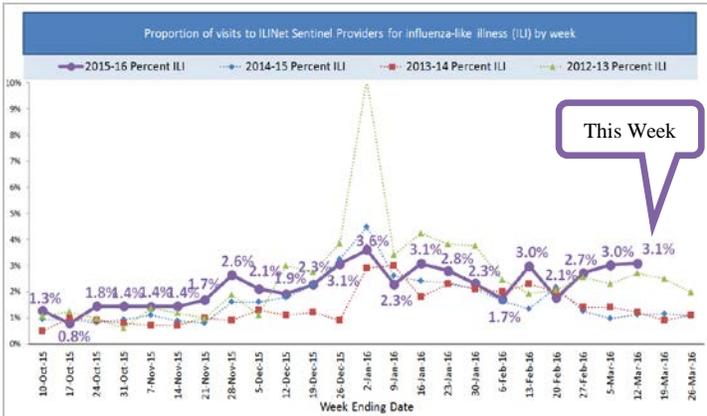
[Click here to visit our influenza surveillance web page](#)

ILI Intensity Levels
Minimal
Low
✓ Moderate
High

Influenza Geographic Spread
No Activity
Sporadic
Local
Regional
✓ Widespread

ILINet Sentinel Providers

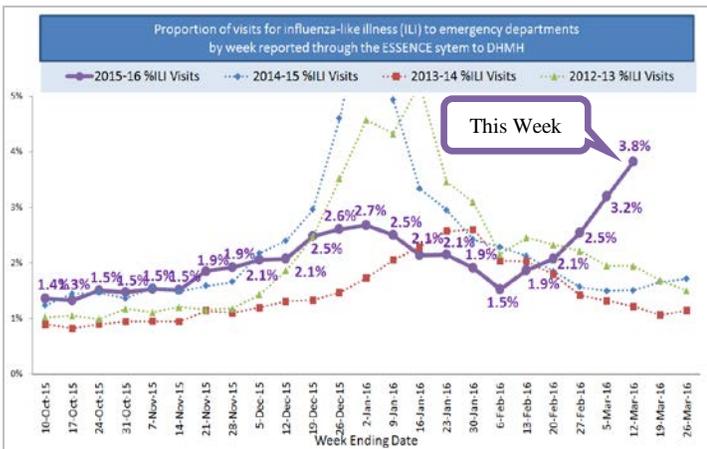
Twenty-three sentinel providers reported a total of 7,639 visits this week. Of those, 236 (3.1%) were visits for ILI. This is **above** the Maryland baseline of **1.8%**.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	48 (20%)	45 (17%)	867 (25%)
Age 5-24	114 (48%)	125 (47%)	1287 (36%)
Age 25-49	47 (20%)	60 (23%)	785 (22%)
Age 50-64	21 (9%)	29 (11%)	416 (12%)
Age ≥ 65	6 (3%)	7 (3%)	178 (5%)
Total	236 (100%)	266 (100%)	3533 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 52,770 visits this week through the [ESSENCE surveillance system](#). Of those, 2,019 (3.8%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	440 (22%)	380 (24%)	6963 (30%)
Age 5-24	614 (30%)	455 (29%)	6886 (30%)
Age 25-49	626 (31%)	473 (30%)	5853 (25%)
Age 50-64	228 (11%)	195 (12%)	2275 (10%)
Age ≥ 65	111 (5%)	88 (6%)	1290 (6%)
Unknown	--	--	--
Total	2019 (100%)	1591 (100%)	23267(100%)

Neighboring states' influenza information:

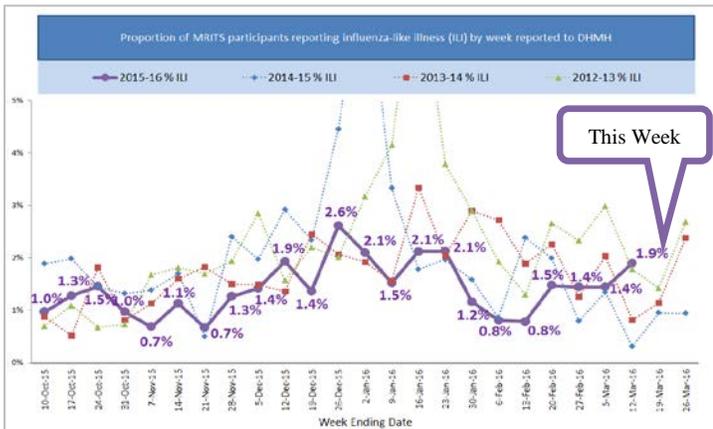
- Delaware <http://dhss.delaware.gov/dph/epi/influenzahome.html>
- District of Columbia <http://doh.dc.gov/service/influenza>
- Pennsylvania [http://www.portal.state.pa.us/portal/server.pt/community/influenza_\(flu\)/14161](http://www.portal.state.pa.us/portal/server.pt/community/influenza_(flu)/14161)
- Virginia <http://www.vdh.state.va.us/Epidemiology/flu/>
- West Virginia <http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx>

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Community-based Influenza Surveillance (MRITS)

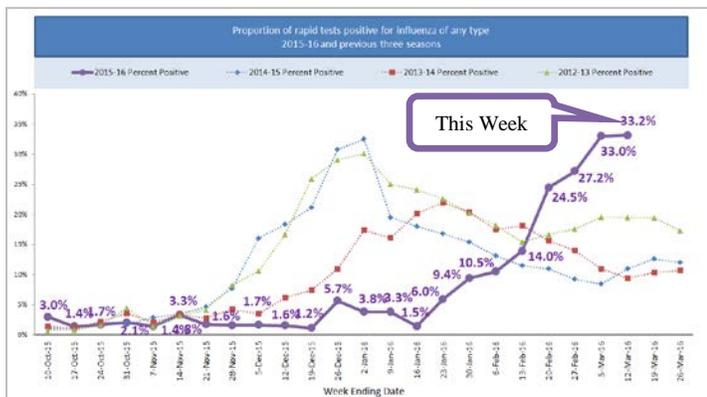
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 632 residents responded to the [MRITS survey](#) this week. Of those, 12 (1.9%) reported having ILI and missing a cumulative 31 days of regular daily activities.



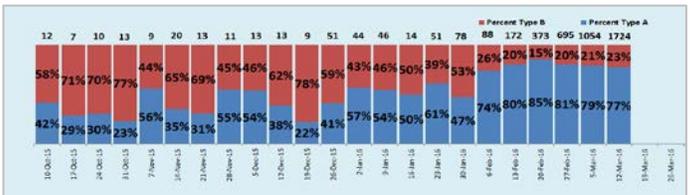
MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	--	1 (11%)	12 (6%)
Age 5-24	1 (11%)	1 (11%)	43 (21%)
Age 25-49	3 (33%)	3 (33%)	52 (26%)
Age 50-64	5 (56%)	3 (33%)	70 (35%)
Age ≥ 65	--	1 (11%)	25 (12%)
Total	9 (100%)	9 (100%)	202 (100%)

Clinical Laboratory Influenza Testing

Forty-six clinical laboratories reported performing 5,197 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 1,724 (33.2%) were positive for influenza. Of those testing positive, 1,332 (77.3%) were influenza type A and 392 (22.7%) 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.

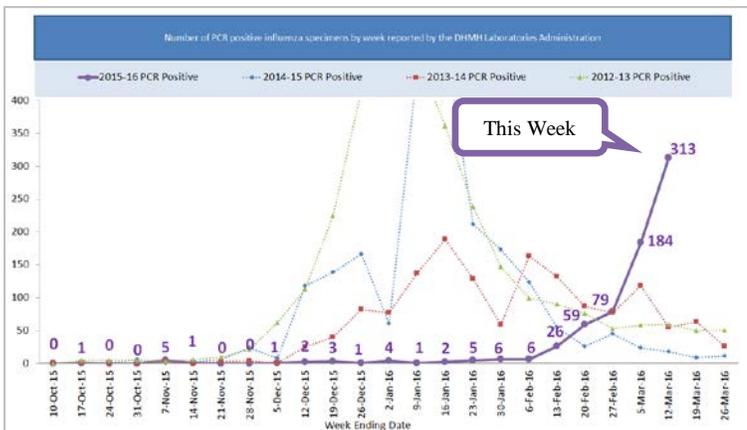


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	1332 (77%)	831 (79%)	3435 (76%)
Type B	392 (23%)	223 (21%)	1085 (24%)
Total	1724 (100%)	1054 (100%)	4520 (100%)



State Laboratories Administration Influenza Testing

The DHMH Laboratories Administration performed a total of 426 PCR tests for influenza and 313 (73.5%) specimens tested positive for influenza. Of those testing positive, 262 (83.7%) were type A (H1), 9 (2.9%) were type A (H3), 24 (7.7%) were type B (Yamagata), and 18 (5.8%) were 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 lab performs genetic sequencing for a subset of the specimens they receive and can detect genes associated with antiviral resistance within those sequences.



Positive PCR Tests by Type (Subtype)	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A (H1)	262 (84%)	166 (90%)	605 (87%)
Type A (H3)	9 (3%)	4 (2%)	24 (3%)
Type B (Victoria)	18 (6%)	7 (4%)	27 (4%)
Type B (Yamagata)	24 (8%)	7 (4%)	43 (6%)
Total	313 (100%)	184 (100%)	699 (100%)

Gene Mutation Associated w/ Antiviral Resistance	This Week Number (%)	Last Week Number (%)	Season Number (%)
Detected	1 (1%)	--	1 (<1%)
Not Detected	138 (99%)	46 (100%)	263 (100%)
Total	139 (100%)	46 (100%)	264 (100%)

Where to get an influenza vaccination

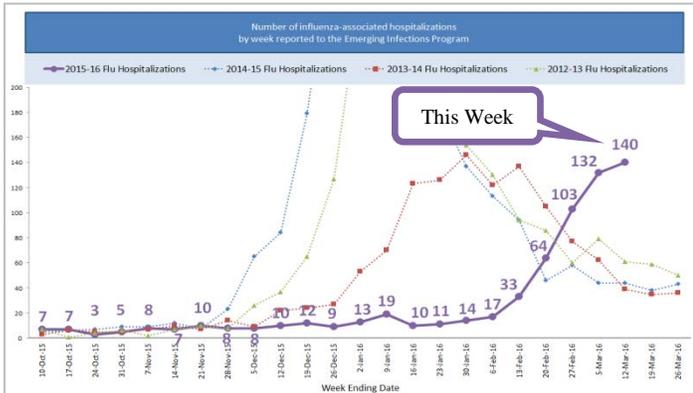
Interested in getting a flu vaccine for the 2015-16 influenza season? Go to <http://dhhm.maryland.gov/flumd/Pages/getvaccinated.aspx> and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.

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Influenza-associated Hospitalizations

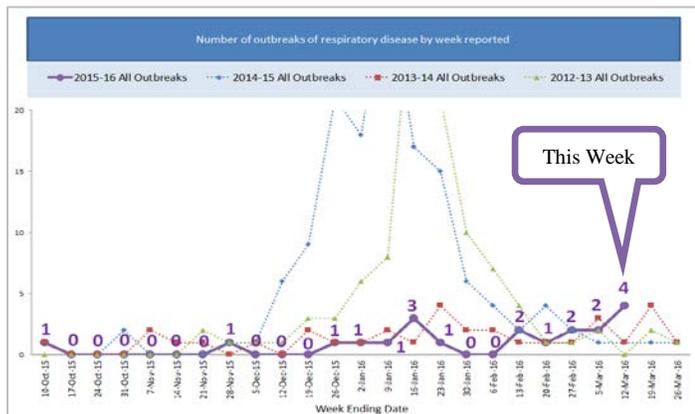
There were 140 influenza-associated hospitalizations reported to DHMH this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g. RIDT or PCR, is considered an “influenza-associated hospitalization” for purposes of influenza surveillance.)



Influenza-Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	17 (12%)	10 (8%)	72 (11%)
Age 5-17	13 (9%)	10 (8%)	46 (7%)
Age 18-24	1 (1%)	7 (5%)	18 (3%)
Age 25-49	33 (24%)	19 (14%)	134 (21%)
Age 50-64	33 (24%)	52 (39%)	187 (29%)
Age ≥ 65	43 (31%)	34 (26%)	193 (30%)
Total	140 (100%)	132 (100%)	650 (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	3 (75%)	2 (100%)	6 (30%)
Influenza-like Illness	--	--	4 (20%)
Pneumonia	1 (25%)	--	10 (50%)
Other Respiratory	--	--	--
Total	4 (100%)	2 (100%)	20 (100%)

National Influenza Surveillance (CDC)

During week 10 (March 6-12, 2016), influenza activity increased in the United States.

- Viral Surveillance:** The most frequently identified influenza virus type reported by public health laboratories during week 10 was influenza A, with influenza A (H1N1)pdm09 viruses predominating. 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 their system-specific epidemic threshold in both the NCHS Mortality Surveillance System and the 122 Cities Mortality Reporting System.
- Influenza-associated Pediatric Deaths:** Eight influenza-associated pediatric deaths were reported.
- Influenza-associated Hospitalizations:** A cumulative rate for the season of 14.5 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 3.7%, which is above the national baseline of 2.1%. All 10 regions reported ILI at or above region-specific baseline levels. New York City, Puerto Rico, and 14 states experienced high ILI activity; 13 states experienced moderate ILI activity; 11 states experienced low ILI activity; 12 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 40 states was reported as widespread; Guam and 10 states reported regional activity; the District of Columbia reported local activity; and the U.S. Virgin Islands did not report.

