

Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to MDH for the week ending November 25, 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 November 25, 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 increased. 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. Nine specimens tested positive for influenza at the MDH lab. There were 9 influenza-associated hospitalizations. One respiratory outbreak was reported to MDH.

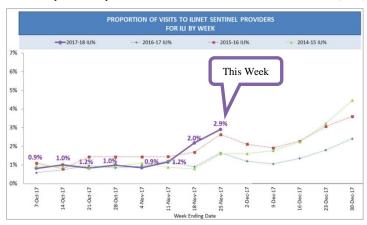
Click here to visit our influenza surveillance web page



| Influenza Geographic Activity | | | | |
|----------------------------------|--|--|--|--|
| No Activity | | | | |
| Sporadic | | | | |
| ✓ Local | | | | |
| Local | | | | |
| Regional | | | | |

ILINet Sentinel Providers

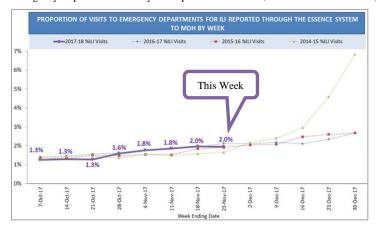
19 sentinel providers reported a total of 3,481 visits this week. Of those, 101 (2.9%) were visits for ILI. This is above the Maryland baseline of 2.0%.



| ILI Visits To Sentinel Providers By Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|--|-------------------------|-------------------------|----------------------|
| Age 0-4 | 32 (32%) | 46 (31%) | 218 (31%) |
| Age 5-24 | 37 (37%) | 46 (31%) | 255 (36%) |
| Age 25-49 | 11 (11%) | 36 (24%) | 137 (19%) |
| Age 50-64 | 12 (12%) | 12 (8%) | 62 (9%) |
| Age ≥ 65 | 9 (9%) | 7 (5%) | 31 (4%) |
| Total | 101 (100%) | 147 (100%) | 703 (100%) |

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 38,152 visits this week through the ESSENCE surveillance system. Of those, 744 (2.0%) were visits for ILI.



| ILI Visits To Emergency Departments By Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|-------------------------|-------------------------|----------------------|
| Age 0-4 | 288 (39%) | 338 (42%) | 1,933 (35%) |
| Age 5-24 | 196 (26%) | 185 (23%) | 1,414 (26%) |
| Age 25-49 | 147 (20%) | 161 (20%) | 1,291 (23%) |
| Age 50-64 | 67 (9%) | 75 (9%) | 528 (10%) |
| Age ≥ 65 | 46 (6%) | 50 (6%) | 356 (6%) |
| Total | 744 (100%) | 809 (100%) | 5.522 (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/

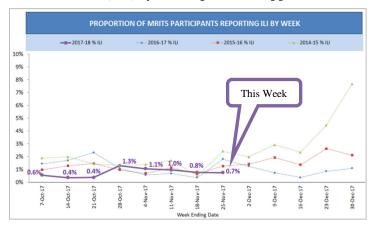
West Virginia http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx

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Community-based Influenza Surveillance (MRITS)

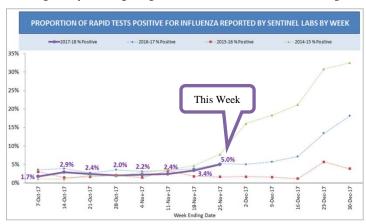
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 536 residents responded to the MRITS survey this week. Of those, 4 (0.7%) reported having ILI and missing greater than 3 cumulative days of regular daily activities.



| MRITS Respondents Reporting ILI By Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|-------------------------|-------------------------|----------------------|
| Age 0-4 | | 1 (25%) | 3 (9%) |
| Age 5-24 | 2 (50%) | - | 9 (27%) |
| Age 25-49 | | 1 (25%) | 5 (15%) |
| Age 50-64 | 2 (50%) | 2 (50%) | 12 (36%) |
| Age ≥ 65 | | - | 4 (12%) |
| Total | 4 (100%) | 4 (100%) | 33 (100%) |

Clinical Laboratory Influenza Testing

There were 43 clinical laboratories reporting 1,244 influenza diagnostic tests performed, mostly rapid influenza diagnostic tests (RIDTs). Of those, 62 (5.0%) were positive for influenza. Of those testing positive, 38 (61%) were influenza Type A and 24 (39%) were influenza Type B. The <u>reliability of RIDTs</u> 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.

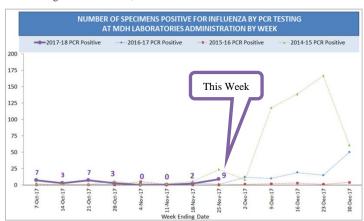


| Positive Rapid Flu Tests by Type | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|--|-------------------------|-------------------------|----------------------|
| Type A | 38 (61%) | 26 (59%) | 133 (57%) |
| Туре В | 24 (39%) | 18 (41%) | 102 (43%) |
| Total | 62 (100%) | 44 (100%) | 235 (100%) |



State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 53 PCR tests for influenza and 9 (17.0%) were positive for influenza. Of those testing positive, 7 (77.8%) were positive for Type A (H3) and 2 (22.2%) were positive for Type A (H1). 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) | 2 (22%) | - | 3 (10%) |
| Type A (H3) | 7 (78%) | 2 (100%) | 23 (74%) |
| Type B (Victoria) | | - | - |
| Type B (Yamagata) | | | 2 (6%) |
| Type A (H3N2v) | | | 3 (10%) |
| Total | 9 (100%) | 2 (100%) | 31 (100%) |

Where to get an influenza vaccination

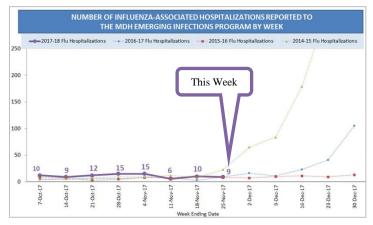
Interested in getting a flu vaccine for the 2017-18 influenza season? Go to https://phpa.health.maryland.gov/influenza/Pages/getvaccinated.aspx and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.

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Influenza-associated Hospitalizations

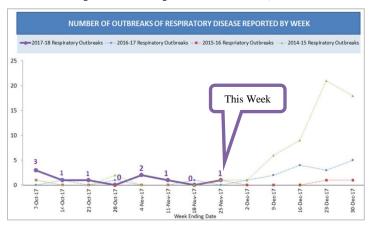
A total of 9 influenza-associated hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.)



| Influenza- Associated Hospitalizations by Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|--|-------------------------|-------------------------|----------------------|
| Age 0-4 | 1 (11%) | 2 (20%) | 10 (11%) |
| Age 5-17 | 1 (11%) | - | 6 (7%) |
| Age 18-24 | | - | 6 (7%) |
| Age 25-49 | | 2 (20%) | 12 (14%) |
| Age 50-64 | 1 (11%) | | 19 (22%) |
| Age ≥ 65 | 6 (67%) | 6 (60%) | 35 (40%) |
| Total | 9 (100%) | 10 (100%) | 88 (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%) | - | 2 (22%) |
| Influenza-like Illness | - | - | 3 (33%) |
| Pneumonia | | - | 4 (44%) |
| Other Respiratory | | | |
| Total | 1 (100%) | | 9 (100%) |

National Influenza Surveillance (CDC)

During week 47 (November 19-25, 2017), influenza activity increased in the United States.

- Viral Surveillance: The most frequently identified influenza virus type reported by public health laboratories during week 47 was influenza A. The
 percentage of respiratory specimens testing positive for influenza in clinical laboratories is increasing.
- 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.
- O Influenza-associated Pediatric Deaths: No influenza-associated pediatric deaths were reported.
- Influenza-associated Hospitalizations: A cumulative rate of 2.0 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; one state experienced moderate ILI activity; 10 states experienced low ILI activity; the District of Columbia, New York City and 36 states experienced minimal ILI activity; and Puerto Rico had insufficient data.
- Geographic Spread of Influenza: The geographic spread of influenza in four states was reported as widespread; Guam and 10 states reported regional
 activity; Puerto Rico and 24 states reported local activity; and the District of Columbia, the U.S. Virgin Islands and 12 states reported sporadic activity.

