

Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to DHMH for the week ending May 20, 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 May 20, 2017, influenza-like illness (ILI) intensity in Maryland was **MINIMAL** and there was **SPORADIC** geographic activity. The proportion of outpatient visits for ILI reported by Sentinel Providers increased, while the proportion reported by Maryland Emergency Departments was unchanged. The proportion of MRITS respondents reporting ILI also did not change. The proportion of specimens testing positive for influenza at clinical laboratories decreased. There were 2 specimens that tested positive for influenza at the DHMH lab. There were 5 influenza-associated hospitalizations and no respiratory outbreaks were reported to DHMH. Nationally, influenza activity continued to decrease.

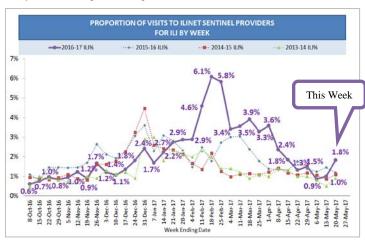
Click here to visit our influenza surveillance web page

| | ILI Intensity Levels | | | | |
|---|----------------------|--|--|--|--|
| | ✓ Minimal | | | | |
| I | Low | | | | |
| I | Moderate | | | | |
| | High | | | | |

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

ILINet Sentinel Providers

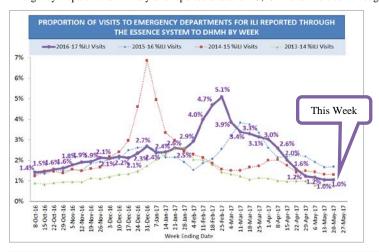
Thirty-four sentinel providers reported a total of 5,339 visits this week. Of those, 97 (1.8%) were visits for ILI. This is below the Maryland baseline of 2.2%.



| ILI Visits To Sentinel Providers By Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|--|-------------------------|-------------------------|----------------------|
| Age 0-4 | 21 (22%) | 20 (27%) | 1271 (20%) |
| Age 5-24 | 40 (41%) | 23 (31%) | 2806 (43%) |
| Age 25-49 | 21 (22%) | 18 (24%) | 1306 (20%) |
| Age 50-64 | 12 (12%) | 5 (7%) | 701 (11%) |
| Age ≥ 65 | 3 (3%) | 8 (11%) | 370 (6%) |
| Total | 97 (100%) | 74 (100%) | 6454 (100%) |

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 45,101 visits this week through the ESSENCE surveillance system. Of those, 469 (1.0%) were visits for ILI.



| ILI Visits To Emergency Departments By Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|-------------------------|-------------------------|----------------------|
| Age 0-4 | 131 (28%) | 110 (24%) | 9440 (26%) |
| Age 5-24 | 152 (32%) | 139 (30%) | 11179 (30%) |
| Age 25-49 | 112 (24%) | 116 (25%) | 9014 (25%) |
| Age 50-64 | 40 (9%) | 48 (10%) | 4028 (11%) |
| Age ≥ 65 | 34 (7%) | 46 (10%) | 3056 (8%) |
| Total | 469 (100%) | 459 (100%) | 36717 (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/

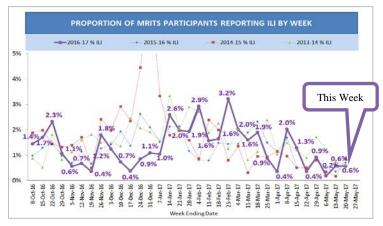
West Virginia http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx

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Community-based Influenza Surveillance (MRITS)

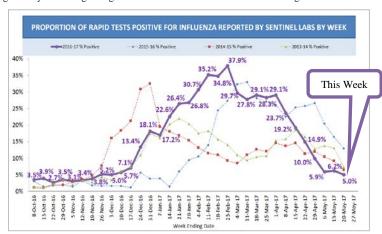
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 529 residents responded to the MRITS survey this week. Of those, 3 (0.6%) reported having ILI, and missing 5 days of regular daily activities.



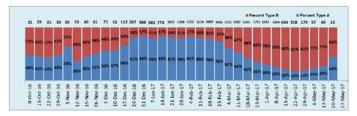
| MRITS Respondents Reporting ILI By Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|-------------------------|-------------------------|----------------------|
| Age 0-4 | | | 9 (4%) |
| Age 5-24 | 1 (33%) | 1 (33%) | 74 (30%) |
| Age 25-49 | | 1 | 58 (24%) |
| Age 50-64 | 2 (67%) | 2 (67%) | 64 (26%) |
| Age ≥ 65 | | | 41 (17%) |
| Total | 3 (100%) | 3 (100%) | 246 (100%) |

Clinical Laboratory Influenza Testing

Thirty-five clinical laboratories reported performing 359 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 18 (5.0%) were positive for influenza. Of those testing positive, 8 (44.4%) were influenza Type A and 10 (55.6%) 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.

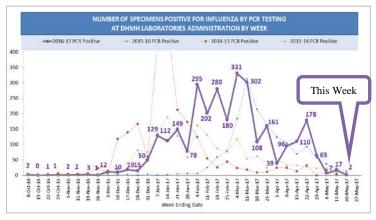


| Positive Rapid Flu Tests by Type | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|--|-------------------------|-------------------------|----------------------|
| Type A | 8 (44%) | 11 (28%) | 16884 (62%) |
| Туре В | 10 (56%) | 29 (73%) | 10372 (38%) |
| Total | 18 (100%) | 40 (100%) | 27256 (100%) |



State Laboratories Administration Influenza Testing

The DHMH Laboratories Administration performed a total of 38 PCR tests for influenza and 2 (5.3%) specimens tested positive. Both positive specimens were Type B (Yamagata). 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) | | | 50 (2%) |
| Type A (H3) | | 3 (18%) | 2161 (73%) |
| Type B (Victoria) | | 3 (18%) | 111 (4%) |
| Type B (Yamagata) | 2 (100%) | 11 (65%) | 632 (21%) |
| Dual – Type A (H3)/ B (Yamagata) | | | 5 (<1%) |
| Total | 2 (100%) | 17 (100%) | 2959 (100%) |

Where to get an influenza vaccination

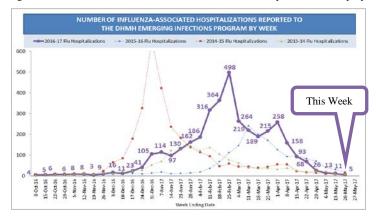
Interested in getting a flu vaccine for the 2016-17 influenza season? Go to http://phpa.dhmh.maryland.gov/influenza/Pages/getvaccinated.aspx and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.

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Influenza-associated Hospitalizations

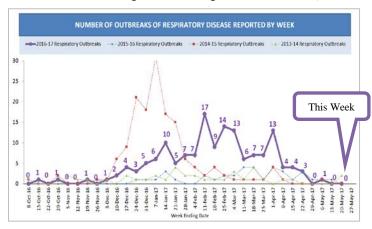
A total of 5 influenza-associated hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.)



| Influenza- Associated Hospitalizations by Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|--|-------------------------|-------------------------|----------------------|
| Age 0-4 | - | 1 (9%) | 235 (6%) |
| Age 5-17 | - | | 235 (6%) |
| Age 18-24 | - | | 97 (3%) |
| Age 25-49 | 1 (20%) | 1 (9%) | 410 (11%) |
| Age 50-64 | | 3 (27%) | 691 (19%) |
| Age ≥ 65 | 4 (80%) | 6 (55%) | 1963 (54%) |
| Total | 5 (100%) | 11 (100%) | 3631 (100%) |

Outbreaks of Respiratory Disease

There were no 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 | | | 107 (71%) |
| Influenza-like Illness | | | 34 (23%) |
| Pneumonia | | | 10 (7%) |
| Other Respiratory | | | |
| Total | | | 151 (100%) |

National Influenza Surveillance (CDC)

During week 20 (May 14-20, 2017), influenza activity decreased in the United States.

- O <u>Viral Surveillance:</u> The most frequently identified influenza virus type reported by public health laboratories during week 20 was influenza B. 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 below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- O <u>Influenza-associated Pediatric Deaths:</u> Three influenza-associated pediatric deaths were reported.
- Influenza-associated Hospitalizations: A cumulative rate for the season of 65.2 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 1.3%, which is below the national baseline of 2.2%. All ten regions reported ILI below their region-specific baseline levels. One state experienced low ILI activity; New York City, Puerto Rico, and 49 states experienced minimal ILI activity; and the District of Columbia had insufficient data.
- O Geographic Spread of Influenza: The geographic spread of influenza in Guam and two states was reported as regional; Puerto Rico and nine states reported local activity; the District of Columbia and 34 states reported sporadic activity; and the U.S. Virgin Islands and five states reported no activity.

