



Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to MDH for the week ending March 23, 2019

Prepared by the Division of Infectious Disease Surveillance
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 March 23, 2019 influenza-like illness (ILI) intensity in Maryland was **MODERATE** and there was **WIDESPREAD** geographic activity. The proportion of outpatient visits for ILI reported by Sentinel Providers and outpatient visits for ILI reported by Maryland Emergency Departments decreased. The proportion of MRITS respondents reporting ILI remained similar from last week. Clinical laboratories reported a decrease in the proportion of specimens testing positive for influenza. Three hundred and sixty three specimens tested positive for influenza at the MDH lab. There were 171 influenza-associated hospitalizations. There were eight respiratory outbreaks reported to MDH.

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

ILI Intensity Levels

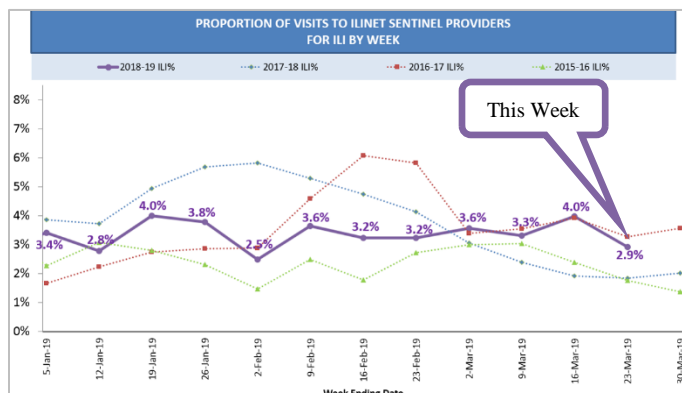
Minimal
Low
✓ Moderate
High

Influenza Geographic Activity

No Activity
Sporadic
Local
Regional
✓ Widespread

ILINet Sentinel Providers

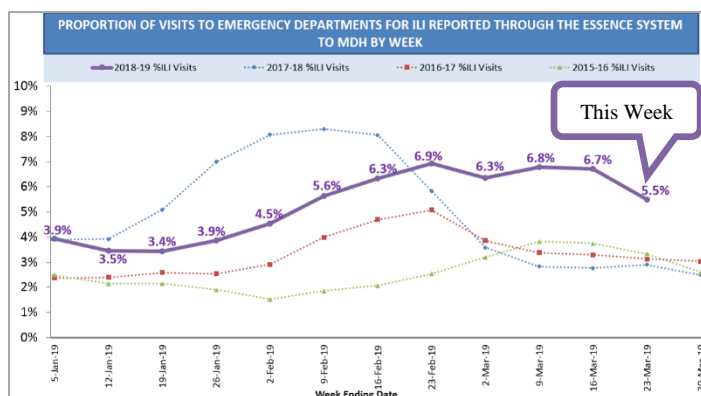
Eighteen providers reported a total of 5,400 visits this week. Of those, 158 (2.9%) were visits for ILI. This is **above** the Maryland baseline of **2.0%**.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	56 (35%)	111 (32%)	1,353 (32%)
Age 5-24	60 (38%)	163 (47%)	1,722 (41%)
Age 25-49	24 (15%)	37 (11%)	596 (14%)
Age 50-64	12 (8%)	25 (7%)	331 (8%)
Age ≥ 65	6 (4%)	13 (4%)	198 (5%)
Total	158 (100%)	349 (100%)	4,200 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 59,298 visits this week through the [ESSENCE surveillance system](#). Of those, 3,253 (5.5%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	547 (17%)	629 (14%)	10,523 (19%)
Age 5-24	1,039 (32%)	1,449 (33%)	16,361 (30%)
Age 25-49	998 (31%)	1,376 (31%)	16,752 (31%)
Age 50-64	415 (13%)	608 (14%)	6,870 (13%)
Age ≥ 65	254 (8%)	308 (7%)	3,597 (7%)
Total	3,253 (100%)	4,370 (100%)	54,103 (100%)

Neighboring states' influenza information:

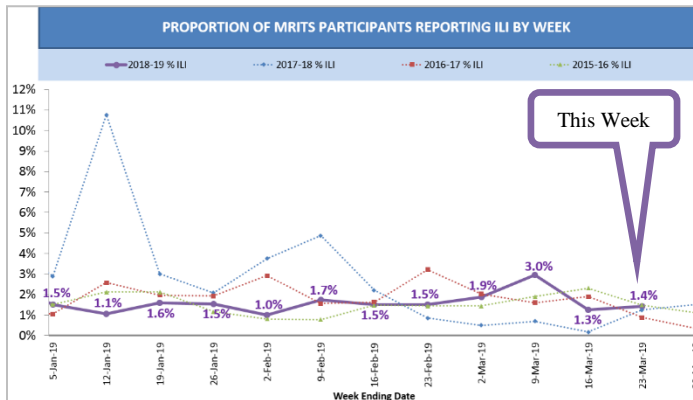
Delaware <http://dhss.delaware.gov/dph/epi/influenzahome.html>
District of Columbia <http://doh.dc.gov/service/influenza>
Pennsylvania <http://www.health.pa.gov/My%20Health/Diseases%20and%20Conditions/I-L/Pages/Influenza.aspx#.V-LtaPkrJD8>
Virginia <http://www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-surveillance/>
West Virginia <http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx>

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Community-based Influenza Surveillance (MRITS)

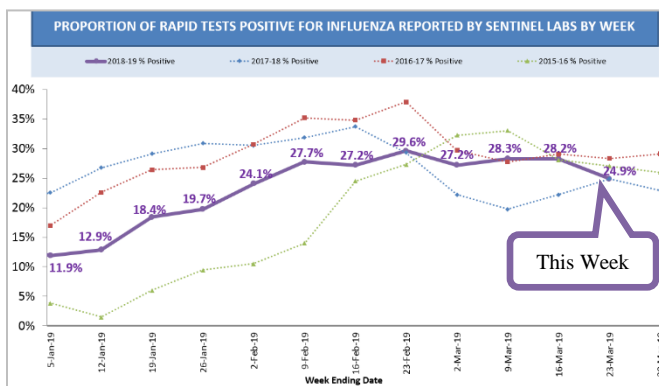
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 560 residents responded to the [MRITS survey](#) this week. Of those, 8 (1.4%) reported having ILI and missing greater than 13 cumulative days of regular daily activities.



MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	0 (0%)	0 (0%)	13 (7%)
Age 5-24	2 (25%)	1 (14%)	50 (26%)
Age 25-49	0 (0%)	1 (14%)	51 (26%)
Age 50-64	2 (25%)	3 (43%)	44 (23%)
Age ≥ 65	4 (50%)	2 (29%)	35 (18%)
Total	8 (100%)	7 (100%)	193 (100%)

Clinical Laboratory Influenza Testing

There were 63 clinical laboratories reporting 7,119 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 1,773 (24.9%) were positive for influenza. Of those testing positive, 1,569 (88%) were influenza Type A and 204 (12%) 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.

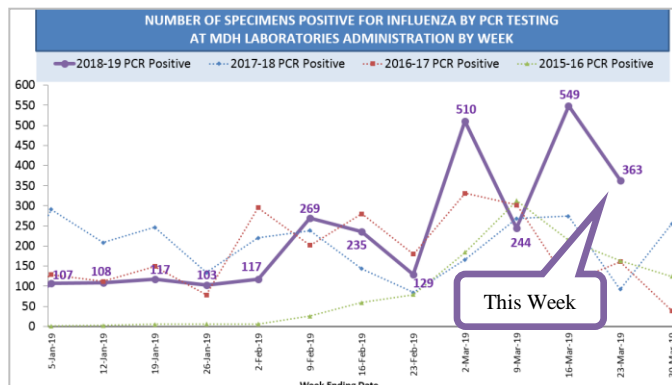


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	1,569 (88%)	2,232 (92%)	19,021 (90%)
Type B	204 (12%)	191 (8%)	2,039 (10%)
Total	1,773 (100%)	2,423 (100%)	21,060 (100%)

Week ending Date	5-Jan-19	12-Jan-19	19-Jan-19	26-Jan-19	2-Feb-19	9-Feb-19	16-Feb-19	23-Feb-19	2-Mar-19	9-Mar-19	16-Mar-19	23-Mar-19	30-Mar-19
Percent Type B	15%	14%	11%	12%	9%	6%	7%	6%	8%	8%	8%	12%	
Percent Type A	85%	86%	89%	88%	91%	94%	93%	94%	92%	92%	92%	88%	

State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 464 PCR tests for influenza and 363 (78.2%) were positive for influenza. Of those testing positive, 158 (44%) were positive for Type A (H1), 199 (55%) were positive for Type A (H3) and 6 (2%) were positive for dual Type A (H1/H3). 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.



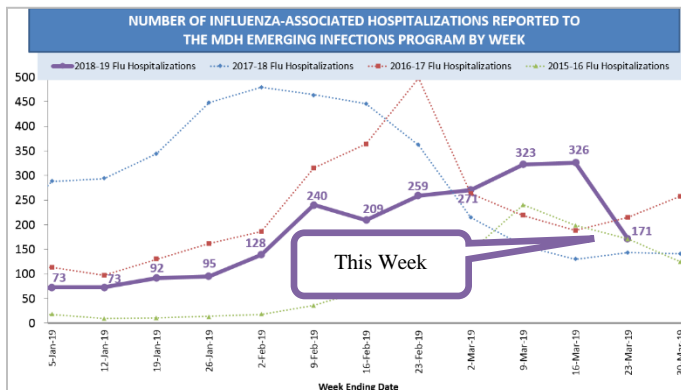
Positive PCR Tests by Type (Subtype)	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A (H1)	158 (44%)	330 (60%)	2,052 (69%)
Type A (H3)	199 (55%)	205 (37%)	846 (28%)
Type B (Victoria)	0 (0%)	1 (<1%)	63 (2%)
Type B (Yamagata)	0 (0%)	12 (2%)	24 (1%)
Dual Type A (H1/H3)	6 (2%)	1 (<1%)	8 (<1%)
Total	363 (100%)	549 (100%)	2,993 (100%)

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Influenza-associated Hospitalizations

A total of 171 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.) This surveillance is conducted as a component of the Maryland Emerging Infections Program.



Influenza-Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	13 (8%)	31 (10%)	213 (8%)
Age 5-17	7 (4%)	20 (6%)	134 (5%)
Age 18-24	4 (2%)	5 (2%)	52 (2%)
Age 25-49	28 (16%)	57 (17%)	437 (17%)
Age 50-64	38 (22%)	89 (27%)	692 (28%)
Age ≥ 65	81 (47%)	124 (38%)	979 (39%)
Total	171 (100%)	326 (100%)	2,507 (100%)

Influenza-associated Deaths

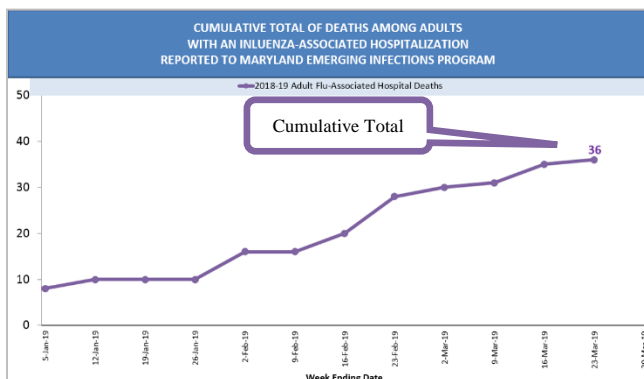
An influenza-associated death is one with a clinically compatible illness and a positive influenza test of any kind.

Pediatric Deaths: The total number of pediatric (< 18 years of age) deaths reported this influenza season is 1.

Influenza-associated pediatric mortality is a reportable condition in Maryland. Pediatric deaths are tracked without regard to hospitalization.

Adult Deaths Among Hospitalized Patients: A cumulative season total of 36 deaths have been reported among adults admitted to Maryland hospitals.

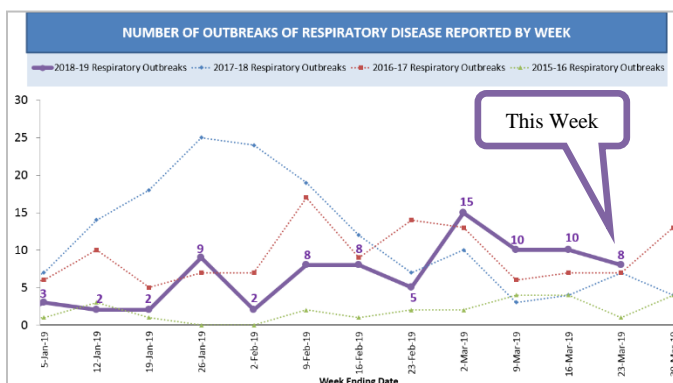
Influenza-associated adult mortality is *not* a reportable condition in Maryland. However, surveillance for mortality in hospitalized adults is conducted as a component of the Maryland Emerging Infections Program.



Influenza-Associated Deaths	Cumulative Season Total
Pediatric Deaths (Age < 18)	1
Adult Deaths (in hospitalized cases)	36

Outbreaks of Respiratory Disease

There were eight 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	7 (88%)	8 (80%)	66 (67%)
Influenza-like Illness	0 (0%)	1 (10%)	16 (16%)
Pneumonia	1 (13%)	1 (10%)	16 (16%)
Other Respiratory	0 (0%)	0 (0%)	0 (0%)
Total	8 (100%)	10 (100%)	98 (100%)

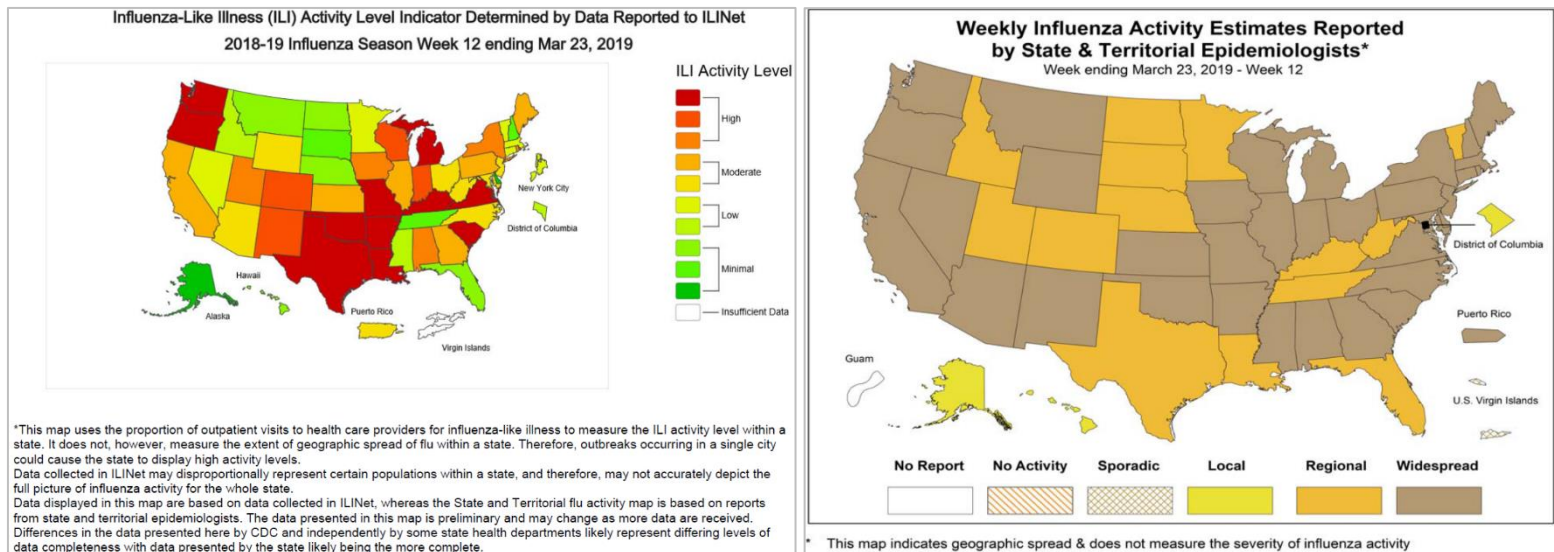
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National Influenza Surveillance (CDC)

Influenza activity decreased but remains elevated in the United States. Influenza A(H1N1)pdm09 viruses predominated from October to mid-February and influenza A(H3N2) viruses have been more commonly identified since late February. Small numbers of influenza B viruses have also been reported.

- **Viral Surveillance:** The percentage of respiratory specimens testing positive for influenza viruses in clinical laboratories decreased. Nationally, during the most recent three weeks, influenza A(H3) viruses were reported more frequently than influenza A(H1N1)pdm09 viruses and in all 10 HHS Regions.
- **Influenza-like Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) decreased to 3.8%, and remains above the national baseline of 2.2%. All 10 regions reported ILI at or above their region-specific baseline level.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico and 34 states was reported as widespread; 14 states reported regional activity; the District of Columbia and two states reported local activity; the U.S. Virgin Islands reported sporadic activity; and Guam did not report.
- **Influenza-associated Hospitalizations:** A cumulative rate of 52.5 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The highest hospitalization rate is among adults 65 years and older (167.0 hospitalizations per 100,000 population).
- **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:** One influenza-associated pediatric death was reported to CDC during week 12.
- **Outpatient Illness Surveillance:** Nationwide during week 12, 3.8% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is above the national baseline of 2.2%. (*ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and cough and/or sore throat.*)



Where to get an influenza vaccination

Interested in getting a flu vaccine for the 2018-19 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.