

A summary of influenza surveillance indicators reported to MDH for the week ending May 19, 2018

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 May 19, 2018, 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 reported by Maryland Emergency Departments remained unchanged. The proportion of MRITS respondents reporting ILI remained unchanged. Clinical laboratories reported a decrease in the proportion of specimens testing positive for influenza. Eight specimens tested positive for influenza at the MDH lab. There were 2 influenza-associated hospitalizations. The cumulative season number of influenza-associated deaths among hospitalized adults was 123. There was 1 respiratory outbreak reported to MDH.

ILI Intensity Levels

✓ Minimal

Low

Moderate

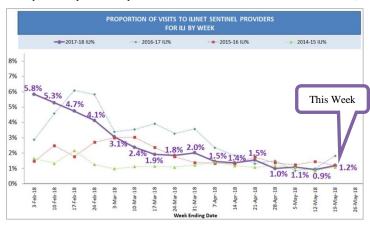
High

Influenza Geographic Activity		
No Activity		
Sporadic		
<b>✓</b> Local		
Regional	I	
Regional		

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#### **ILINet Sentinel Providers**

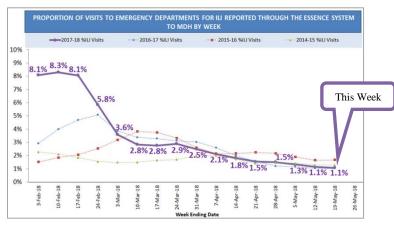
Twenty sentinel providers reported a total of 5,967 visits this week. Of those, 71 (1.2%) were visits for ILI. This is below the Maryland baseline of 2.0%.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	25 (35%)	14 (25%)	1,319 (23%)
Age 5-24	26 (37%)	26 (46%)	2,362 (41%)
Age 25-49	7 (10%)	7 (12%)	1,194 (21%)
Age 50-64	10 (14%)	9 (16%)	624 (11%)
Age ≥ 65	3 (4%)	1 (2%)	291 (5%)
Total	71 (100%)	57 (100%)	5,790 (100%)

### Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 42,119 visits this week through the ESSENCE surveillance system. Of those, 451 (1.1%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	137 (30%)	133 (26%)	10,667 (24%)
Age 5-24	120 (27%)	169 (33%)	12,625 (28%)
Age 25-49	103 (23%)	118 (23%)	11,585 (26%)
Age 50-64	46 (10%)	49 (10%)	5,568 (12%)
Age ≥ 65	45 (10%)	36 (7%)	4,359 (10%)
Total	451 (100%)	505 (100%)	44,804 (100%)

### Neighboring states' influenza information:

Delaware <a href="http://dhss.delaware.gov/dph/epi/influenzahome.html">http://dhss.delaware.gov/dph/epi/influenzahome.html</a>

District of Columbia <a href="http://doh.dc.gov/service/influenza">http://doh.dc.gov/service/influenza</a>

Pennsylvania http://www.health.pa.gov/My%20Health/Diseases%20and%20Conditions/I-L/Pages/Influenza.aspx#.V-LtaPkrJD8

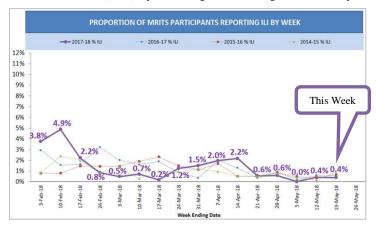
Virginia http://www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-surveillance/

West Virginia <a href="http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx">http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx</a>

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#### Community-based Influenza Surveillance (MRITS)

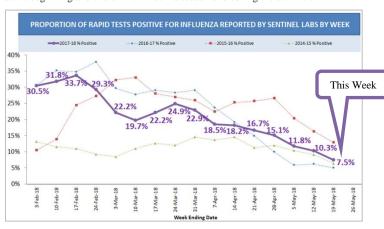
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 517 residents responded to the MRITS survey this week. Of those, 2 (0.4%) reported having ILI and missing 5 cumulative days of regular daily activities.



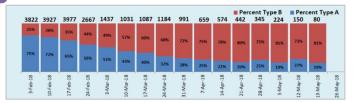
MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	1 (50%)	1	10 (4%)
Age 5-24	-	1 (50%)	85 (30%)
Age 25-49			55 (20%)
Age 50-64	-	1 (50%)	98 (35%)
Age ≥ 65	1 (50%)		31 (11%)
Total	2 (100%)	2 (100%)	279 (100%)

### **Clinical Laboratory Influenza Testing**

There were 43 clinical laboratories reporting 1,064 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 80 (7.5%) were positive for influenza. Of those testing positive, 15 (19%) were influenza Type A and 65 (81%) 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.

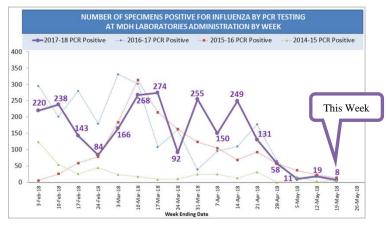


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	15 (19%)	40 (27%)	21,816 (64%)
Туре В	65 (81%)	110 (73%)	12,255 (36%)
Total	80 (100%)	150 (100%)	34,071 (100%)



#### State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 57 PCR tests for influenza and 8 (14.0%) were positive for influenza. Of those testing positive, 1 (12.5%) was positive for Type A (H1), 4 (50.0%) were positive for Type B (Yamagata), and 3 (37.5%) were positive for Type B (Victoria). 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.

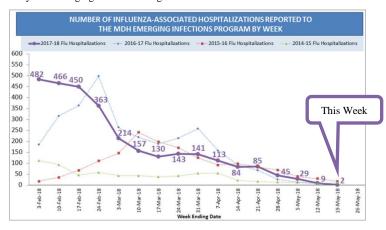


Positive PCR Tests by Type (Subtype)	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A (H1)	1 (13%)		601 (17%)
Type A (H3)			1,967 (56%)
Type B (Victoria)	3 (38%)	4 (21%)	139 (4%)
Type B (Yamagata)	4 (50%)	15 (79%)	776 (22%)
Dual Type A (H1/H3)			4 (<1%)
Dual Type A(H3)/B			11 (<1%)
Type A (H3N2v)			3 (<1%)
Total	8 (100%)	19 (100%)	3,501 (100%)

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#### **Influenza-associated Hospitalizations**

A total of 2 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	1 (50%)	-	293 (6%)
Age 5-17			227 (5%)
Age 18-24		-	131 (3%)
Age 25-49		4 (44%)	598 (12%)
Age 50-64	1 (50%)	2 (22%)	1,032 (22%)
Age ≥ 65		3 (33%)	2,512 (52%)
Total	2 (100%)	9 (100%)	4,793 (100%)

#### **Influenza-associated Deaths**

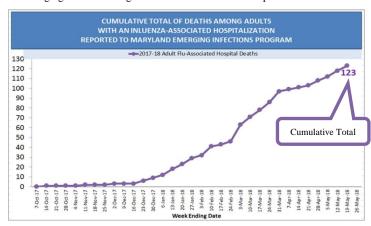
An influenza-associated death is one with a clinically compatible illness and a positive influenza test of any kind.

Pediatric Deaths: The total number of pediatric (< 18 years of age) deaths reported this influenza season is 3.

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

Adult Deaths Among Hospitalized Patients: A total of 123 deaths have been reported among adults admitted to Maryland hospitals this influenza season.

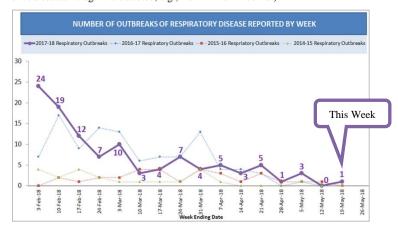
Influenza-associated adult mortality is not a reportable condition in Maryland. However, adult mortality surveillance is conducted as a component of the Maryland Emerging Infections Program's influenza-associated hospitalization surveillance.



Influenza-Associated Deaths	Cumulative Season Total
Pediatric Deaths (Age < 18)	3
Adult Deaths (in hospitalized cases)	123

### **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.)



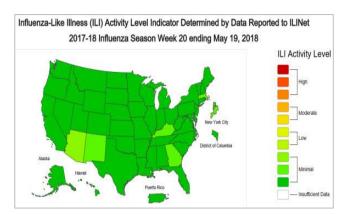
Respiratory Outbreaks by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Influenza		1	153 (80%)
Influenza-like Illness		1	24 (13%)
Pneumonia	1 (100%)	-	15 (8%)
Other Respiratory		-	
Total	1 (100%)		192 (100%)

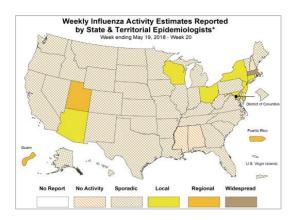
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#### National Influenza Surveillance (CDC)

During week 20 (May 13-19, 2018), influenza activity continued to decrease in the United States.

- O <u>Viral Surveillance:</u> Overall, influenza A(H3) viruses have predominated this season. Since early March, influenza B viruses have been more frequently reported than influenza A viruses. 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 Influenza-associated Pediatric Deaths: One influenza-associated pediatric death was reported.
- Influenza-associated Hospitalizations: A cumulative rate of 106.6 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 1.2%, which is below the national baseline of 2.2%.
   All 10 regions reported ILI below region-specific baseline levels. New York City, the District of Columbia, Puerto Rico and all 50 states experienced minimal ILI activity.
- Geographic Spread of Influenza: The geographic spread of influenza in one state was reported as widespread; Guam, Puerto Rico and one state reported regional activity; seven states reported local activity; the District of Columbia, the U.S. Virgin Islands and 37 states reported sporadic activity; and four states reported no influenza activity.





Interested in getting a flu vaccine for the 2017-18 influenza season? Go to <a href="https://phpa.health.maryland.gov/influenza/Pages/getvaccinated.aspx">https://phpa.health.maryland.gov/influenza/Pages/getvaccinated.aspx</a> 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.