Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to MDH for the week ending April 14, 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 April 14, 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 decreased. The proportion of MRITS respondents reporting ILI increased. Clinical laboratories reported a slight decrease in the proportion of specimens testing positive for influenza. Two hundred forty-nine specimens tested positive for influenza at the MDH lab. There were 57 influenza-associated hospitalizations. The cumulative season number of influenza-associated deaths among hospitalized adults was 101. Three respiratory outbreaks were reported to MDH.

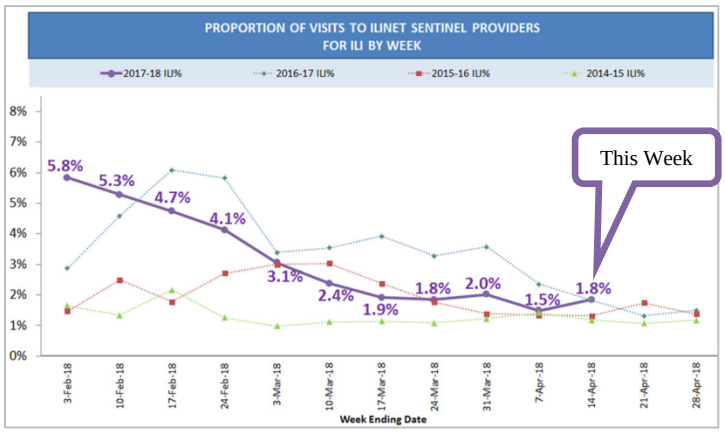
Click here to visit our influenza surveillance web page

ILI Intensity Levels
✔Minimal
Low
Moderate
High

Influenza Geographic Activity
No Activity
Sporadic
✔Local
Regional
Widespread

ILINet Sentinel Providers

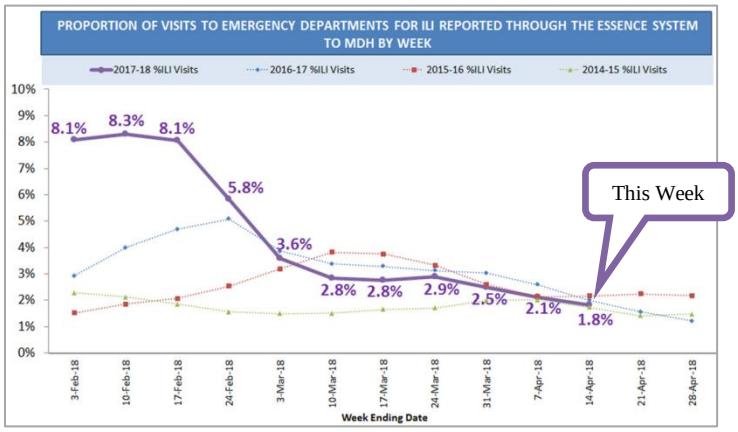
Twenty sentinel providers reported a total of 5,146 visits this week. Of those, 95 (1.8%) were visits for ILI. This is **below** the Maryland baseline of **2.0%**.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	27 (28%)	22 (21%)	1,230 (23%)
Age 5-24	42 (44%)	51 (48%)	2,192(41%)
Age 25-49	9 (9%)	20 (19%)	1,130 (21%)
Age 50-64	7 (7%)	6 (6%)	574 (11%)
Age ≥ 65	10 (11%)	8 (7%)	273 (5%)
Total	95 (100%)	107 (100%)	5,399 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 43,630 visits this week through the ESSENCE surveillance system. Of those, 794 (1.8%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	178 (22%)	208 (23%)	9,925 (24%)
Age 5-24	222 (28%)	198 (22%)	11,764 (28%)
Age 25-49	214 (27%)	277 (31%)	10,876 (26%)
Age 50-64	100 (13%)	126 (14%)	5,238 (12%)
Age ≥ 65	80 (10%)	98 (11%)	4,104 (10%)
Total	794 (100%)	907 (100%)	41,907 (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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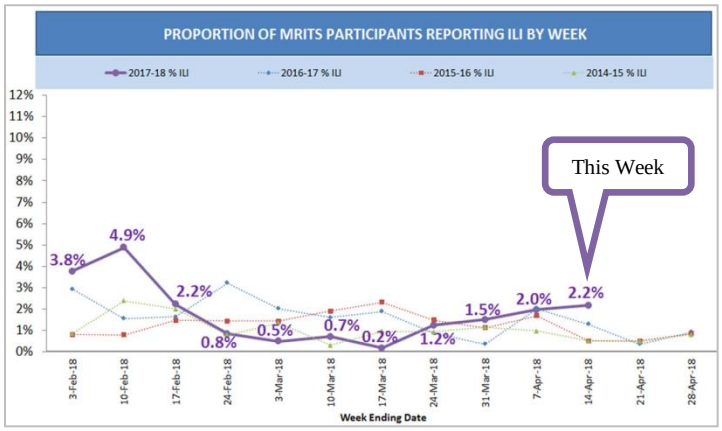
Community-based Influenza Surveillance (MRITS)

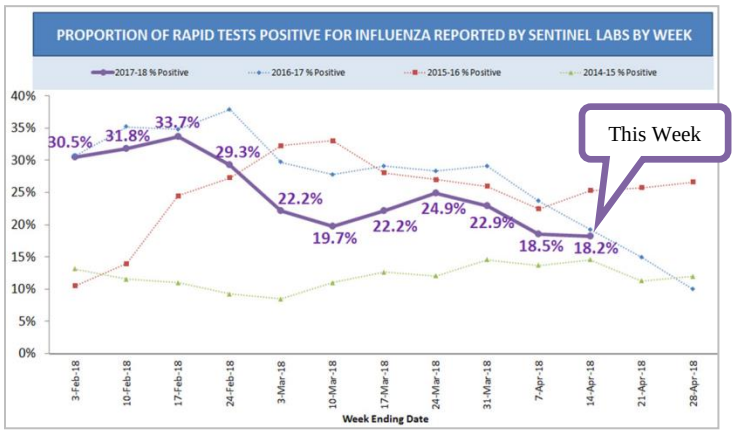
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 552 residents responded to the MRITS survey this week. Of those, 12 (2.2%) reported having ILI and missing greater than 23 cumulative days of regular daily activities.



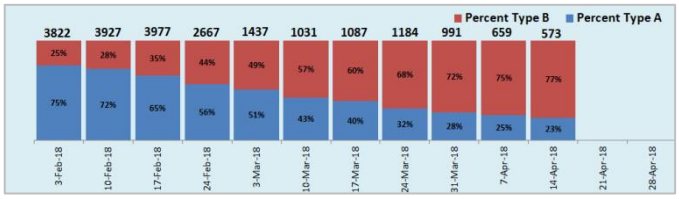
MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	--	--	8 (3%)
Age 5-24	2 (17%)	2 (18%)	82 (30%)
Age 25-49	3 (25%)	3 (27%)	55 (20%)
Age 50-64	5 (42%)	5 (45%)	95 (35%)
Age ≥ 65	2 (17%)	1 (9%)	29 (11%)
Total	12 (100%)	11 (100%)	269 (100%)

Clinical Laboratory Influenza Testing

There were 50 clinical laboratories reporting 3,151 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 573 (18.2%) were positive for influenza. Of those testing positive, 129 (23%) were influenza Type A and 444 (77%) 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.

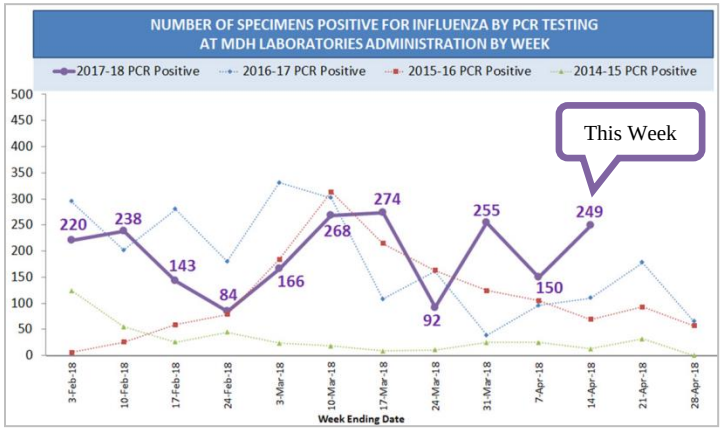


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	129 (23%)	166 (25%)	21,545 (66%)
Type B	444 (77%)	493 (75%)	11,284 (34%)
Total	573 (100%)	659 (100%)	32,829 (100%)



State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 276 PCR tests for influenza and 249 (90.2%) were positive for influenza. Of those testing positive, 74 (29.7%) were positive for Type A (H3), 33 (13.3%) were positive for Type A (H1), 116 (46.6%) were positive for Type B (Yamagata), and 26 (10.4%) 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)	33 (13%)	31 (21%)	577 (18%)
Type A (H3)	74 (30%)	48 (32%)	1,911 (58%)
Type B (Victoria)	26 (10%)	19 (13%)	101 (3%)
Type B (Yamagata)	116 (47%)	48 (32%)	668 (20%)
Dual Type A (H1/H3)	--	1 (1%)	3 (<1%)
Dual Type A(H3)/B	--	3 (2%)	11 (<1%)
Type A (H3N2v)	--	--	3 (<1%)
Total	249 (100%)	150 (100%)	3,274 (100%)

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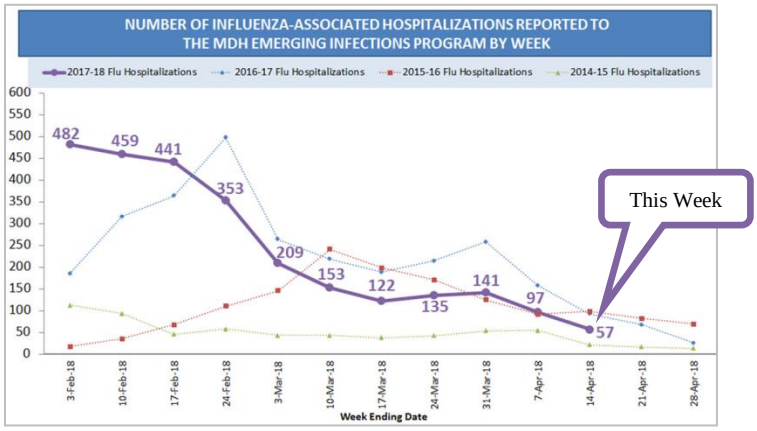
Influenza-associated Hospitalizations

A total of 57 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.

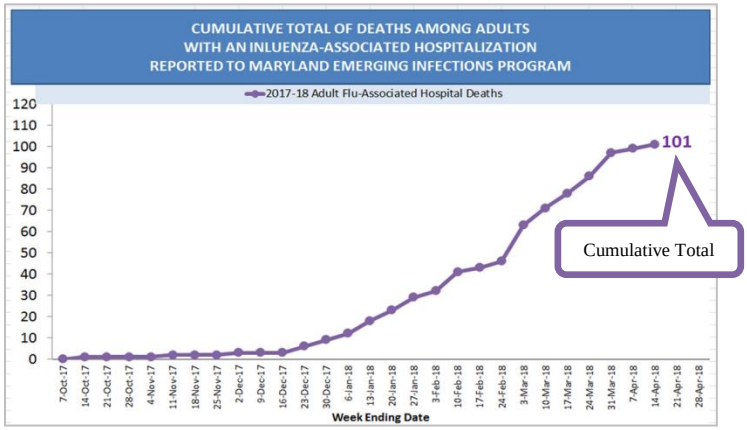


Influenza-Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	2 (4%)	7 (7%)	282 (6%)
Age 5-17	1 (2%)	3 (3%)	213 (5%)
Age 18-24	--	2 (2%)	116 (3%)
Age 25-49	6 (11%)	9 (9%)	562 (12%)
Age 50-64	19 (33%)	18 (19%)	969 (21%)
Age ≥ 65	29 (51%)	58 (60%)	2,400 (53%)
Total	57 (100%)	97 (100%)	4,542 (100%)

Influenza-associated Deaths

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

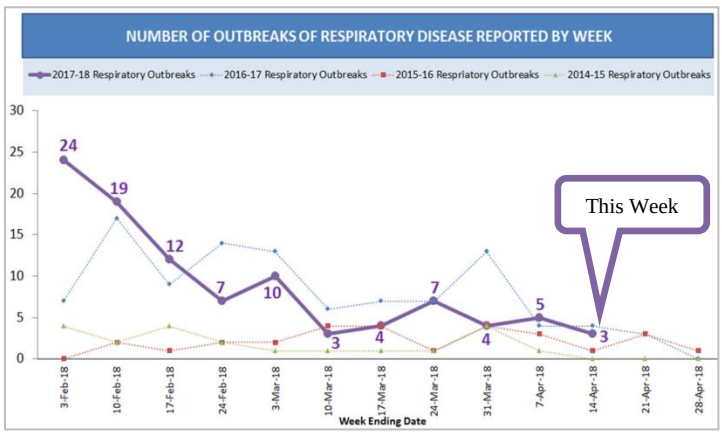
Pediatric Deaths: The total number of pediatric (< 18 years of age) deaths reported this influenza season is 3.
Influenza-associated pediatric mortality is a reportable condition in Maryland. Pediatric deaths are tracked without regard to hospitalization.
Adult Deaths Among Hospitalized Patients: A total of 101 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)	101

Outbreaks of Respiratory Disease

There were three 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	3 (100%)	5 (100%)	145 (80%)
Influenza-like Illness	--	--	24 (13%)
Pneumonia	--	--	13 (7%)
Other Respiratory	--	--	--
Total	3 (100%)	5 (100%)	182 (100%)

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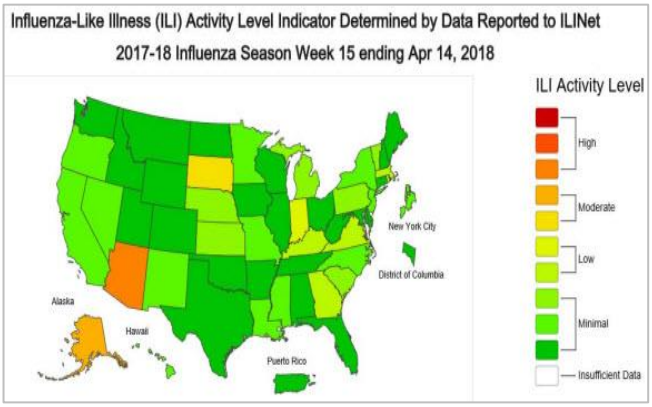
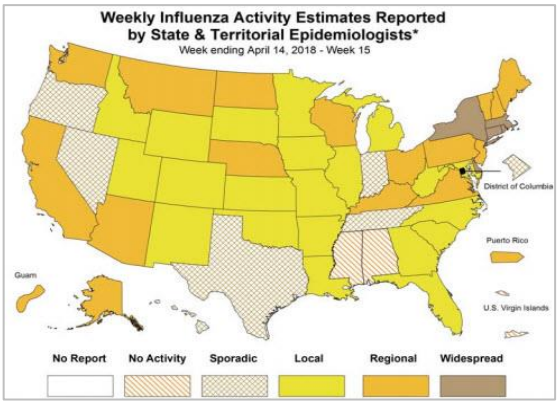
National Influenza Surveillance (CDC)

During week 15 (April 8-14, 2018), influenza activity decreased in the United States.

- **Viral Surveillance:** 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.
- **Influenza-associated Pediatric Deaths:** Five influenza-associated pediatric deaths were reported.
- **Influenza-associated Hospitalizations:** A cumulative rate of 103.7 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 1.8%, which is below the national baseline of 2.2%. One of 10 regions reported ILI at or above their region-specific baseline level. One state experienced high ILI activity; two states experienced moderate ILI activity; six states experienced low ILI activity; and New York City, the District of Columbia, Puerto Rico, and 41 states experienced minimal ILI activity.
- **Geographic Spread of Influenza:** The geographic spread of influenza in five states was reported as widespread; Guam, Puerto Rico and 16 states reported regional activity; 21 states reported local activity; the District of Columbia and six states reported sporadic activity; and the U.S. Virgin Islands and two states reported no influenza activity.





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.