

A summary of influenza surveillance indicators reported to MDH for the week ending January 12, 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

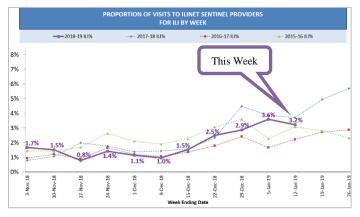
During the week ending January 12, 2019 influenza-like illness (ILI) intensity in Maryland was **MODERATE** and there was **REGIONAL** geographic activity. The proportion of outpatient visits for ILI reported by Sentinel Providers slight decrease. Outpatient visits for ILI reported by Maryland Emergency Departments decreased from last week. The proportion of MRITS respondents reporting ILI decreased. Clinical laboratories reported an increase in the proportion of specimens testing positive for influenza. One hundred and eight specimens tested positive for influenza at the MDH lab. There were 46 influenza-associated hospitalizations. There were two respiratory outbreaks reported to MDH.

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ILI Intensity Levels	Influenza Geographic Activity		
Minimal	No Activity		
Low	Sporadic		
✓ Moderate	Local		
High	✔ Regional		
	Widespread		

### **ILINet Sentinel Providers**

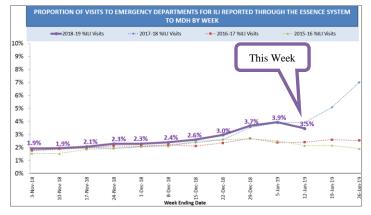
Twenty providers reported a total of 6,040 visits this week. Of those, 194 (3.2%) were visits for ILI. This is above the Maryland baseline of 2.0%.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	40 (21%)	64 (30%)	479 (30%)
Age 5-24	64 (33%)	81 (38%)	608 (38%)
Age 25-49	46 (24%)	36 (17%)	270 (17%)
Age 50-64	32 (16%)	19 (9%)	148 (9%)
Age ≥ 65	12 (6%)	14 (7%)	85 (5%)
Total	194 (100%)	214 (100%)	1,590 (100%)

### Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 53,193 visits this week through the ESSENCE surveillance system. Of those, 1,838 (3.5%) were visits for ILI.



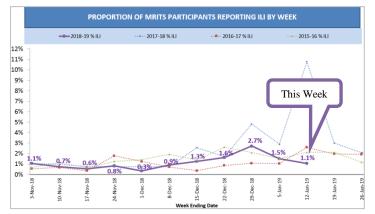
ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	385 (21%)	579 (24%)	4,996 (24%)
Age 5-24	423 (23%)	538 (22%)	6,173 (30%)
Age 25-49	633 (34%)	744 (31%)	5,806 (28%)
Age 50-64	250 (14%)	346 (14%)	2,296 (11%)
Age ≥ 65	147 (8%)	203 (8%)	1,325 (6%)
Total	1,838 (100%)	2,410 (100%)	20,596 (100%)

Neighboring state	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)

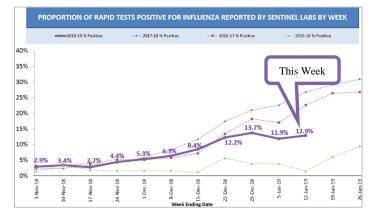
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 567 residents responded to the MRITS survey this week. Of those, 6 (1.1%) reported having ILI and missing 9 cumulative days of regular daily activities.



MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	0 (0%)	0 (0%)	8 (8%)
Age 5-24	3 (50%)	3 (33%)	25 (26%)
Age 25-49	1 (17%)	2 (22%)	27 (28%)
Age 50-64	2 (33%)	1 (11%)	19 (19%)
Age ≥ 65	0 (0%)	3 (33%)	19 (19%)
Total	6 (100%)	9 (100%)	98 (100%)

### **Clinical Laboratory Influenza Testing**

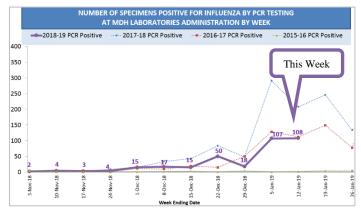
There were 60 clinical laboratories reporting 4,085 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 526 (12.9%) were positive for influenza. Of those testing positive, 453 (86%) were influenza Type A and 73 (14%) were influenza Type B. The <u>reliability of RIDTs</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.



	Т	Raj	sitiv pid F by 1			This Week Number (%)				Last Week Number (%)				Season Number (%)		
	Т	ype.	A				453 (	(86%	)	4	69 (	85%)		2,	018 (	(78%)
	Т	ype	В				73 (	[14%	)		83 (	15%)			554 (	(22%)
	Т	'otal				52	26 (1	.00%	)	55	2 (1	00%)		2,5	72 (1	.00%)
з	8	50	41	79	101	103	195	338	458	552	526					
44	4%	66%	61%	34%	42%	30%	25%	18%	15%	15%	14%	Percer	nt Typ	eB 🔳	Percei	nt Type A
54	4%	34%	39%	66%	58%	70%	75%	82%	85%	85%	86%					
	3-Nov-18	10-Nov-18	17-Nov-18	24-Nov-18	an 1-Dec-18	80 -Dec-188 ek ending D	15-Dec-18	22-Dec-18	29-Dec-18	5-Jan-19	12-Jan-19	19-Jan-19	26-Jan-19	2-Feb-19	9-Feb-19	16-Feb-19

### State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 219 PCR tests for influenza and 108 (49.3%) were positive for influenza. Of those testing positive, 82 (76%) were positive for Type A (H1), 20 (19%) were positive for Type A (H3) and 6 (6%) 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.

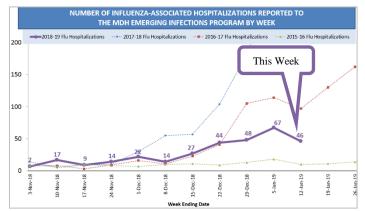


Positive PCR Tests by Type (Subtype)	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A (H1)	82 (76%)	85 (79%)	268 (75%)
Туре А (НЗ)	20 (19%)	17 (16%)	53 (15%)
Type B (Victoria)	6 (6%)	4 (4%)	31 (9%)
Type B (Yamagata)	0 (0%)	1 (1%)	5 (1%)
Dual Type A (H1/H3)	0 (0%)	0 (0%)	0 (0%)
Total	108 (100%)	107 (100%)	357 (100%)

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### Influenza-associated Hospitalizations

A total of 46 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.



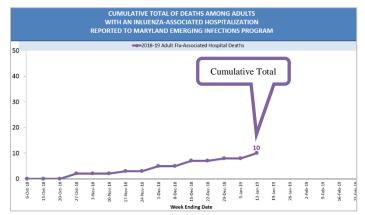
Influenza- Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	3 (7%)	7 (10%)	46 (14%)
Age 5-17	3 (7%)	1 (1%)	16 (5%)
Age 18-24	1 (2%)	1 (1%)	9 (3%)
Age 25-49	7 (15%)	14 (21%)	64 (19%)
Age 50-64	15 (33%)	23 (34%)	93 (28%)
Age ≥ 65	17 (37%)	21 (31%)	110 (33%)
Total	46 (100%)	67 (100%)	338 (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: No pediatric (< 18 years of age) deaths were reported this week.

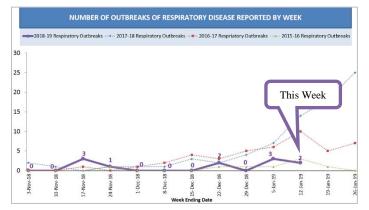
Influenza-associated pediatric mortality is a reportable condition in Maryland. Pediatric deaths are tracked without regard to hospitalization. **Adult Deaths Among Hospitalized Patients:** A cumulative season total of 10 deaths have been reported among adults admitted to Maryland hospitals. Influenza-associated 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)	0
Adult Deaths (in hospitalized cases)	10

#### **Outbreaks of Respiratory Disease**

There were two 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.)



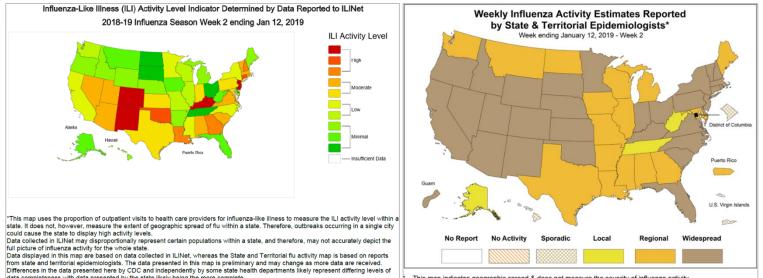
Respiratory Outbreaks by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Influenza	2 (100%)	1 (33%)	4 (19%)
Influenza-like Illness	0 (0%)	1 (33%)	7 (33%)
Pneumonia	0 (0%)	1 (33%)	10 (48%)
Other Respiratory	0 (0%)	0 (0%)	0 (0%)
Total	2 (100%)	3 (100%)	21 (100%)

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### National Influenza Surveillance (CDC)

Influenza activity remains elevated in the United States. Influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B viruses continue to co-circulate..

- Viral Surveillance: The percentage of respiratory specimens testing positive for influenza viruses in clinical laboratories decreased slightly. Influenza A 0 viruses have predominated in the United States since the beginning of October. Influenza A(H1N1)pdm09 viruses have predominated in most areas of the country, however influenza A(H3) viruses have predominated in the southeastern United States (HHS Region 4).
- 0 Influenza-like Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) decreased from 3.5% to 3.1%, but 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 Guam and 30 states was reported as widespread; Puerto Rico and 16 states 0 reported regional activity; three states reported local activity; and the District of Columbia, the U.S. Virgin Islands and one state reported sporadic activity.
- 0 Influenza-associated Hospitalizations: A cumulative rate of 12.4 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The highest hospitalization rate is among adults 65 years and older (31.9 hospitalizations per 100,000 population).
- Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic 0 threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- Influenza-associated Pediatric Deaths: Three influenza-associated pediatric deaths were reported to CDC during week 2.  $\cap$
- Outpatient Illness Surveillance: Nationwide during week 2, 3.1% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance 0 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.)



This map indicates geographic spread & does not measure the severity of influenza activity

#### Where to get an influenza vaccination

data completeness with data presented by the state likely being the more complete

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.