

U.S. Army Public Health Center

# Army Influenza Activity Report

Week ending 28 December 2019 (week 52)

# Influenza Vaccination Coverage\* As of 31 December2019 N/A DoD 88% Army Active Duty 77% Army Guard 73% Army Reserve \*Data Source: MEDPROS, ASIMS, MRRS

#### **SUMMARY**

The number of positive influenza A laboratory results increased by 49% from week 50 to week 52. In week 52, influenza B continues to represent the majority of positive respiratory specimens with 47.8% of the total positive specimens, followed closely by influenza A with 42.5% of the total positive specimens. In week 52, the average age of patients with any positive respiratory test was 20 years old. The number of influenza-associated hospitalizations increased in recent weeks, with fifteen influenza-associated hospitalizations reported with onset dates in week 51 and 52. Of those hospitalized so far this season, 32 (65%) tested positive for influenza B, and 16 (32%) were positive for influenza A. The peak of the influenza season has not yet occurred; to decrease the spread of influenza, ill Service Members should be placed on quarters and the flu vaccine should be administered to unvaccinated individuals.

#### **GEOGRAPHIC SPREAD**

FLUVIEW

CD

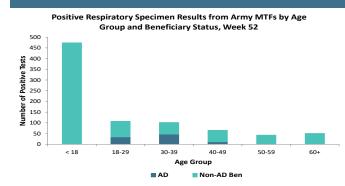
A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\*



In week 52, in the general U.S. population, widespread influenza activity was reported in Puerto Rico and 45 states; regional activity was reported in four states (Kansas, Maine, North Dakota, and Vermont). Local activity was reported in the District of Columbia and Hawaii. Sporadic activity was reported in the U.S. Virgin Islands. Guam did not report.

\*This map indicates geographic spread and does not measure the severity of influenza activity

#### **DEMOGRAPHICS**

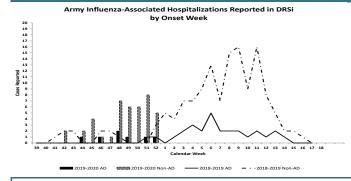


In week 52, the average age of patients with any positive respiratory test was 20 years old (SD 20.0).

**AD**: Of the 842 patients with positive respiratory specimens in week 52, 95 (11%) were AD Service Members. The majority of positive specimens were from Soldiers between 30 to 39 years old (49% [n=47]).

**Non-AD**: 89% of positive respiratory specimens were collected from non-AD individuals in week 52. The majority of positive specimens came from those under age 18 (63% [n=474]). The average age of patients under 18 was 6 years old.

#### INFLUENZA-ASSOCIATED HOSPITALIZATIONS



As of 30 December, 15 influenza-associated hospitalizations were reported with onset dates in weeks 51 and 52. This season, 49 influenza-associated hospitalizations have been reported, with 32 (65%) testing positive for influenza B and 16 (32%) testing positive for influenza A. Among those hospitalized, 10 (20%) were previously vaccinated against flu while 38 (78%) had not received the flu vaccine. The average age of hospitalized cases so far this season is 25.5 years old.\* There have been more influenza-associated hospitalizations (n=49) reported this season than during the same period last season (n=15).

\*DRSi does not capture cases older than 65 years old for influenza-associated hospitalizations.

Additional Resources: APHC Influenza Reports, Centers for Disease Control, Disease Reporting System internet, ESSENCE

Questions?

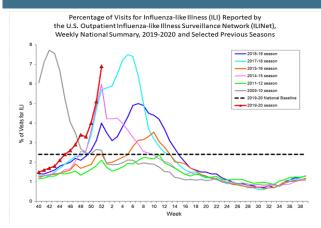
**Key:** ILI-Influenza-Like Illness; DRSi- Disease Reporting System Internet; ADV-Adenovirus; RSV-Respiratory Syncytial Virus; SM-Service Member; MEDPROS- Medical Protection System; ASIMS- Aeromedical Services Information Management System; MRRS- Medical Readiness Reporting System

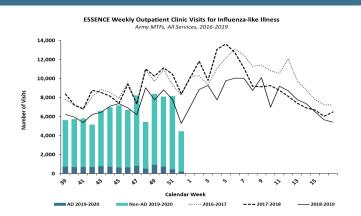
**Email APHC** 

## **Army Influenza Activity Report**

#### **ILI ACTIVITY - UNITED STATES**

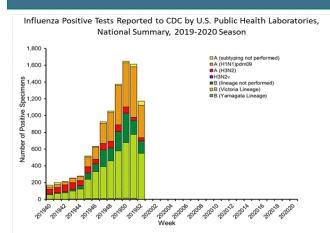
#### **ILI ACTIVITY - ARMY**

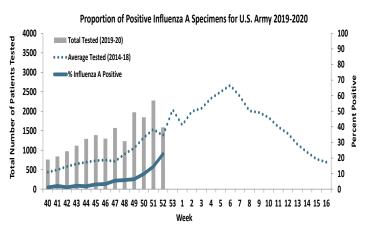




In week 52, 6.9% of outpatients visits nationwide were attributable to ILI. This percentage is above the national baseline (2.4%) and higher than the percentage reported in week 50 (3.9%). The increase in the percentage of ILI patient visits between weeks 51 and 52 may be due to a previously noted seasonal reduction in routine healthcare visits during the holidays occurring in week 52. At Army medical treatment facilities, incident ILI activity remained stable during weeks 50-51 (8,000+ ILI cases), then decreased in week 52 by 45%. A similar trend was noticed in previous seasons.

#### **LABORATORY RESPIRATORY SPECIMEN TESTING**





Nationwide, 1,618 respiratory specimens were submitted to CDC during week 52; 72% were positive for influenza. Influenza A accounted for 40% of positive specimens, and influenza B accounted for 60%. In the Army population, 22.6% of 1585 specimens were positive for influenza A, an increase of 35% from the previous week. In week 52, influenza A accounted for 42.5% of the total positive tests submitted to the Army Public Health Center in week 52, whereas influenza B accounted for 47.8% of the positive laboratory results in week 52.

		Week 49	Week 50	Week 51	Week 52	Season Total
Test Types Among	RAT	43	59	188	193	626
Positive Influenza	Culture	5	3	1	0	25
A Specimens	PCR	79	119	141	165	675

	Influenza A	127	181	330	358	1326
	Influenza B	173	221	346	403	1898
Army MTE	Adenovirus	10	6	10	2	111
Army MTF Laboratory Results,	Enterovirus	0	0	0	0	6
2019-20	Parainfluenza	11	5	11	1	154
2019-20	RSV	103	117	167	78	863
	Negative	3826	3350	4188	2471	36215
	Total	4250	3880	5052	3313	40573

Of the 3313 respiratory labs submitted in week 52, 842 (25.4%) were positive for any type of respiratory illness. Influenza B continues to account for the majority of positive results, with 47.8% (n=403) of all positive lab results in week 52, closely followed by influenza A (42.5%, n=358). The number of positive influenza A tests rapidly increased in recent weeks, with a 45% increase from week 50 to 51, then an 8% increase from week 51 to 52. Influenza B also increased by 36% from week 50 to 51, then increased again by 14% from week 51 to 52. Parainfluenza, adenovirus, and RSV positive tests decreased from week 51 to 52.

RAT and PCR tests are the most commonly used tests.

**Locations providing week 52 laboratory data as of 31 December 2019:** Ft. Belvoir, Ft Benning, Ft Bliss, Ft Campbell, Ft Carson, Ft Gordon, Ft Hood, Ft Huachuca, Ft Irwin, Ft Jackson, Ft Knox, Ft Leavenworth, Ft Lee, Ft Leonard Wood, Ft Meade, Ft Polk, Ft Riley, Ft Rucker, Ft Sam Houston, Ft Stewart, Ft Wainwright, Korea, Landstuhl, Redstone Arsenal, Tripler, and Walter Reed.

\*NOTE: Madigan AMC data is also received weekly, but cannot be included at this time due to reporting limitations from MHS Genesis.

# U.S. Army Public Health Center Army Influenza Activity Report

	LABORATORY	/ RESP	IRATO	RY SPE	CIMEN	TESTI	NG BY L	OCATIO	ON		
			Influenza			Influenza		Adenovirus			
Region	Installation	No. Tested	% Positive	Baseline % Positive	No. Tested	%	Baseline % Positive	No. Tested	% Positive	Baseline % Positive	
	Ft. Belvoir	121	7.4	10.9	45	100	2.3			5.5	
	Ft. Benning	205	31.2	22.1	207	21.3	0				
	Ft. Bragg	7	0	14.3			100				
	Ft. Campbell	211	13.3	13.1	211	20.9	0			100	
	Ft. Drum			33.3			100			100	
	Ft. Eustis			7.1							
	Ft. Gordon	12	33.3	6.6	12	8.3	0			100	
PHCA	Ft. Jackson	59	15.3	23.8	60	15	0				
	Ft. Knox	2	50	0	2	0	0				
	Ft. Lee	9		20	3	100	100				
	Ft. Meade	5	40	100							
	Ft. Rucker	14	21.4	0	14	14.3	0				
	Ft. Stewart	58	13.8	8.1	57	19.3					
	Redstone Arsenal	13	7.7	0	13	23.1	0				
	West Point Military Academy	13	0	22.2	13	23.1	0				
	Ft. Bliss	292	10.3	24.7	284	26.8	0			3.8	
	Ft. Carson	115	6.1	24.6	204	20.8	100			5.8	
	Ft. Hood				16	6.2	2	15	6.7	0	
		18		2	16	6.3		15	6.7	0	
	Ft. Huachuca	2		0	2	20.0					
PHCC	Ft. Irwin	26		0	26	30.8	0				
FILCE	Ft. Leavenworth	27	48.1	6.7	27	0					
	Ft. Leonard Wood	52	9.6	0	52	15.4	0				
	Ft. Polk	67	29.9	5.7	15	100	100				
	Ft. Riley	75	9.3	7.8	75	21.3	0				
	Ft. Sam Houston	442	26.7	9.9	442	20.4	1.7			100	
	Ft. Sill	24	16.7	0	13	100	100		_	_	
PHCE	Landstuhl Reg. Med. Cen.	6		5.6	6			6	0	0	
DUCD	Ft. Wainwright	43		15.4	43	25.6			_		
PHCP	Korea	28		33.3	20			20	5	5.3	
	Tripler Army Medical Center	58	17.2 Enteroviru	4.9	58	5.2 arainfluer		7	0 <b>RSV</b>	9.1	
Region	Installation	No.	%	Baseline	No.	%	Baseline	No.	%	Baseline	
inegion.		Tested	Positive	% Pos.	Tested	Positive	% Pos.	Tested	Positive	% Pos.	
	Ft. Belvoir						3.5	22	13.6	22.5	
	Ft. Campbell						100			100	
PHCA	Ft. Drum						100			100	
	Ft. Gordon Ft. Stewart						100	13	15.4	100 16.7	
	West Point Military Academy							15	15.4	10.7	
	Ft. Bliss							283	15.5	7.1	
	Ft. Carson							15	20		
	Ft. Hood				17	5.9	33.3	16	6.3		
PHCC	Ft. Leavenworth							2	0		
	Ft. Polk							5	0		
	Ft. Riley			100			100	24	54.2	11.1	
	Ft. Sam Houston Ft. Sill			100			100	4	50	100 33.3	
PHCE	Landstuhl Reg. Med. Cen.				6	0	5.6	11	18.2	23.1	
	Ft. Wainwright							43	9.3		
PCHP	Korea			0	20			21	19		
	Tripler Army Medical Center	7	0	0	7	0	6.3			100	

No.: Number of specimens tested during MMWR week 52 2019.

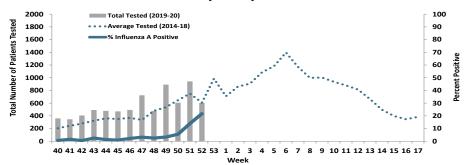
Baseline % Pos.: Percentage of positive specimens reported in MMWR week 52 during influenza seasons from September 2012 - May 2019.

 ${\it Missing values indicate that specimens were not tested for the disease during the week of interest.}$ 

<sup>%</sup> Pos.: Percentage of positive specimens reported during MMWR week 52 2019.

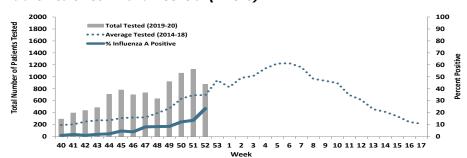
# Proportion of Influenza A Positive Specimens by Week and Public Health Command, Army Medical Laboratories, 2019-2020 as Compared to 2014-2019





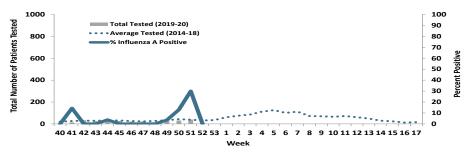
	Wee	k 52	
Age Group	AD	Non-AD Ben	Season Total
< 18	0	61	193
18-29	2	8	50
30-39	9	12	49
40-49	6	12	50
50-59	0	11	29
60+	0	9	28
Total	17	113	399

#### Public Health Command - Central (PHC-C)



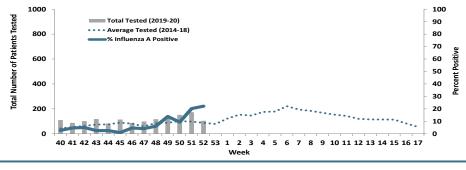
	Wee	k 52	
Age Group	AD	Non-AD Ben	Season Total
< 18	0	73	390
18-29	3	12	88
30-39	16	19	103
40-49	2	34	90
50-59	1	21	55
60+	0	24	57
Total	22	183	783

#### Public Health Command - Europe (PHC-E)



	Wee	k 52	
Age Group	AD	Non-AD Ben	Season Total
< 18	0	0	7
18-29	0	0	4
30-39	0	0	4
40-49	0	0	2
50-59	0	0	2
60+	0	0	1
Total	0	0	20

#### Public Health Command - Pacific (PHC-P)



	Wee	k 52	
Age Group	AD	Non-AD Ben	Season Total
< 18	0	7	35
18-29	2	3	29
30-39	4	0	27
40-49	0	1	13
50-59	1	1	12
60+	0	4	8
Total	7	16	124

#### Number of Positive Influenza A Specimens by Duty Status and Public Health Command

Pagion	Region Week 45 Week 46		We	Week 47 Week 48		Week 49		Week 50		Week 51		Week 52				
ricgion .	AD	Non-AD	AD	Non-AD	AD	Non-AD	AD	Non-AD	AD	Non-AD	AD	Non-AD	AD	Non-AD	AD	Non-AD
PHC-A	2	2	1	10	5	18	1	11	7	22	10	23	28	102	17	113
PHC-C	10	27	3	25	5	54	6	47	16	62	26	104	36	117	22	183
PHC-E	0	0	0	0	0	0	0	0	0	1	0	4	7	5	0	0
PHC-P	0	1	3	1	2	2	3	4	9	10	7	7	6	29	7	16
CENTCOM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

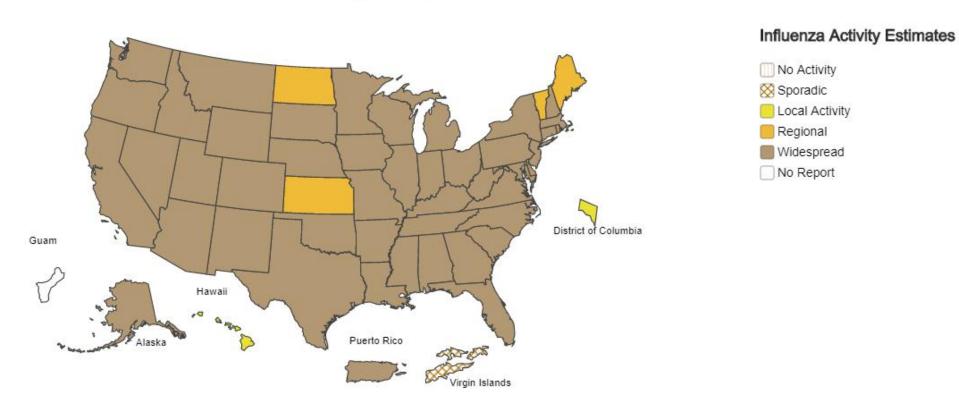




## A Weekly Influenza Surveillance Report Prepared by the Influenza Division

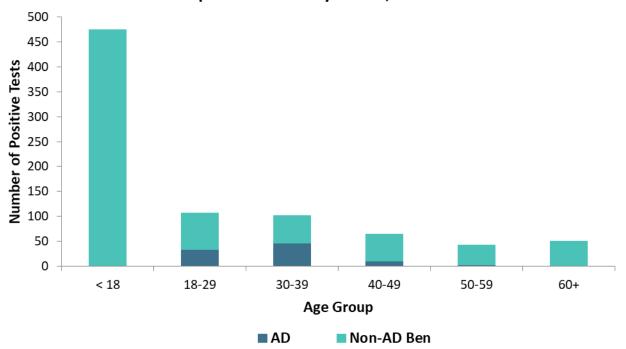
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\*

Week Ending Dec 28, 2019 - Week 52



\*This map indicates geographic spread and does not measure the severity of influenza activity.

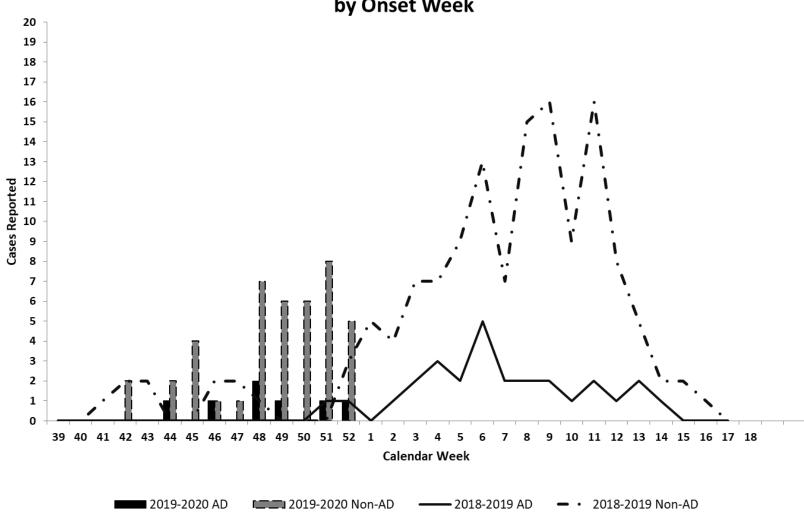
### Positive Respiratory Specimen Results from Army MTFs by Age Group and Beneficiary Status, Week 52



	W	eek 52	
Age Group	AD	Non-AD Ben	Season Total
< 18	0	474	2892
18-29	34	73	575
30-39	47	55	393
40-49	11	54	194
50-59	3	40	155
60+	0	51	149
Total	95	747	4358

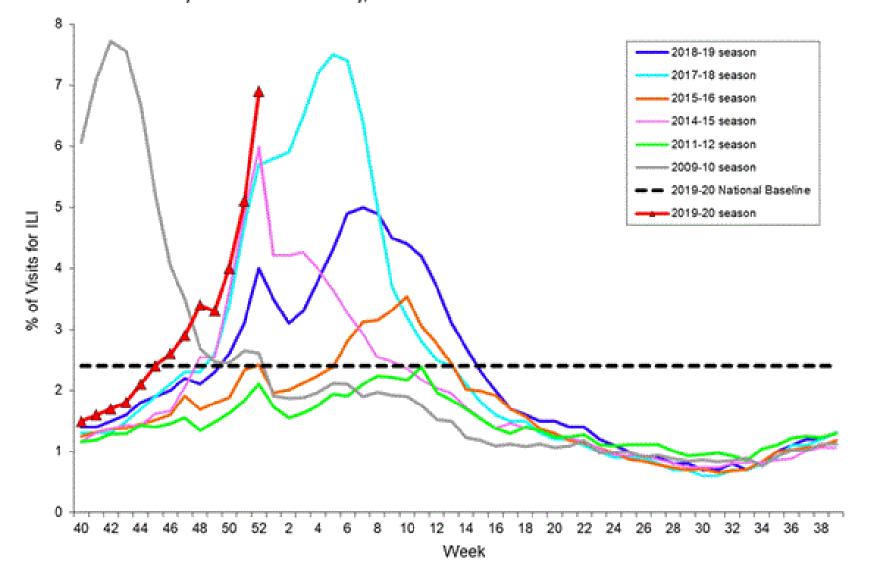
USAPHC





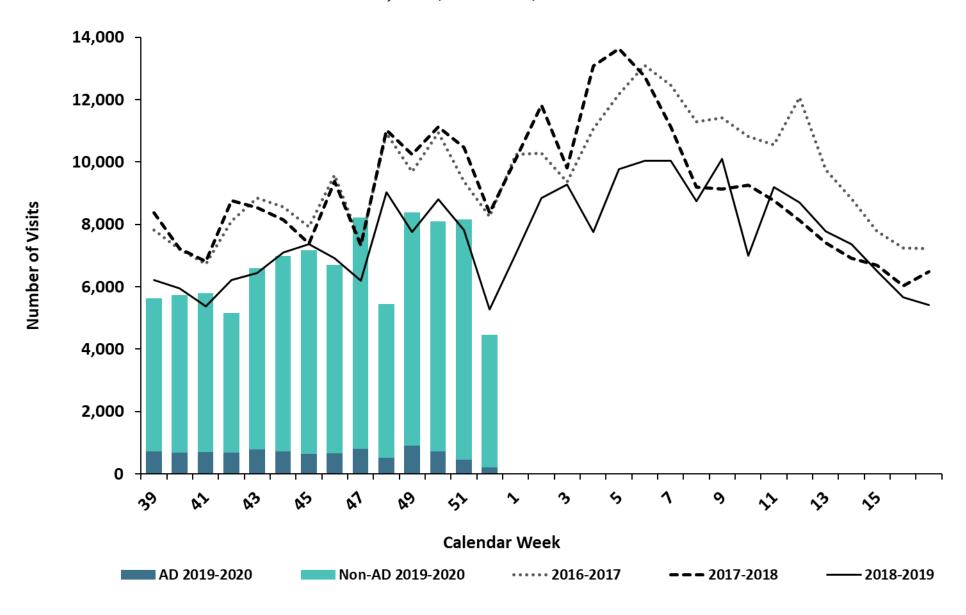
**Note:** Reportable influenza cases are defined as only cases that have been hospitalized and are under the age of 65. Data as of 31 December 2019.

Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2019-2020 and Selected Previous Seasons

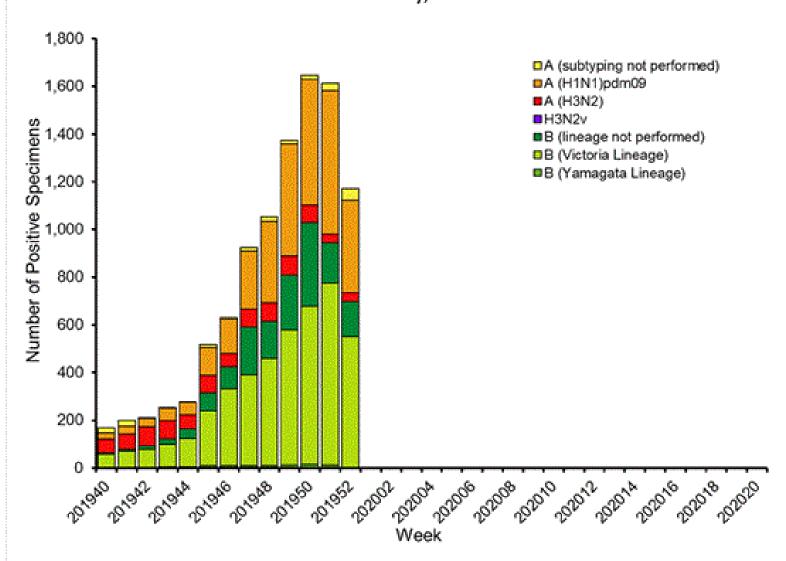


# **ESSENCE** Weekly Outpatient Clinic Visits for Influenza-like Illness

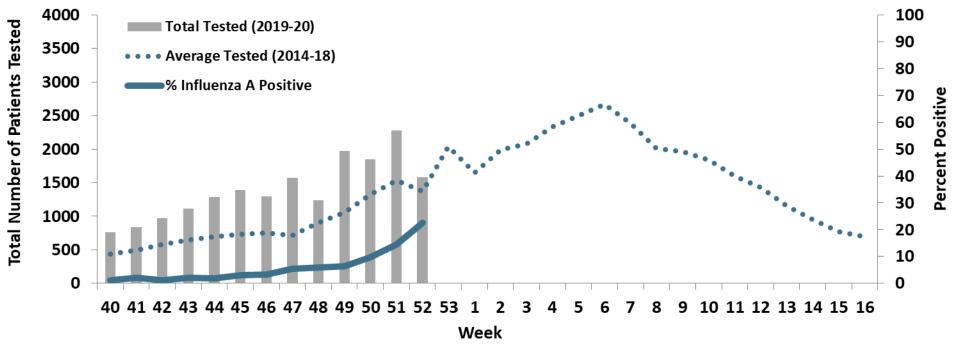
Army MTFs, All Services, 2016-2019



# Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, 2019-2020 Season



Proportion of Positive Influenza A Specimens for U.S. Army 2019-2020



# **Laboratory Respiratory Specimen Testing – Weeks 49 – 52**

		Week 49	Week 50	Week 51	Week 52	<b>Season Total</b>
<b>Test Types Among</b>	RAT	43	59	188	193	626
Positive Influenza	Culture	5	3	1	0	25
A Specimens	PCR	79	119	141	165	675

	Influenza A	127	181	330	358	1326
	Influenza B	173	221	346	403	1898
Army MTE	Adenovirus	10	6	10	2	111
Army MTF Laboratory Results,	Enterovirus	0	0	0	0	6
2019-20	Parainfluenza	11	5	11	1	154
2019-20	RSV	103	117	167	78	863
	Negative	3826	3350	4188	2471	36215
	Total	4250	3880	5052	3313	40573

# Number of Positive Influenza A Specimens by Duty Status and Public Health Command

Region	Week 45		Week 46		Week 47		Week 48		Week 49		Week 50		Week 51		Week 52	
	AD	Non-AD														
PHC-A	2	2	1	10	5	18	1	11	7	22	10	23	28	102	17	113
PHC-C	10	27	3	25	5	54	6	47	16	62	26	104	36	117	22	183
PHC-E	0	0	0	0	0	0	0	0	0	1	0	4	7	5	0	0
PHC-P	0	1	3	1	2	2	3	4	9	10	7	7	6	29	7	16
CENTCOM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-