

U.S. Army Public Health Center

# Army Influenza Activity Report

Week ending 08 February 2020 (week 6)

| Influenza Vaccination<br>Coverage*<br>As of 12 February 2020 |                             |  |  |  |  |  |  |
|--|-----------------------------|--|--|--|--|--|--|
| N/A  | DoD                         |  |  |  |  |  |  |
| 94%  | Army Active Duty            |  |  |  |  |  |  |
| 88%  | Army Guard                  |  |  |  |  |  |  |
|  | Army Reserve                |  |  |  |  |  |  |
| *Data Se   | ource: MEDPROS, ASIMS, MRRS |  |  |  |  |  |  |

#### **SUMMARY**

During week 6, there were 7,105 specimens were submitted for testing, which represents a 10.4% decrease from week 5. Influenza A represented the majority (67%) of positive specimens submitted for testing. At 26%, PHC-A has the highest percentage of positive specimens for influenza A compared to other regions. Additionally, PHC-A accounted for the majority of positive influenza A specimens (53%); 70% of positive influenza A specimens were from non-AD beneficiaries. Beneficiaries younger than 18 years old formed the majority (50%) of total positive respiratory specimens, which was followed by those 18 to 29 years of age (18%). Eleven influenza-associated hospitalizations were reported in week 6.

#### Click to enlarge image

#### **GEOGRAPHIC SPREAD**

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

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

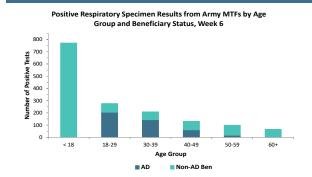
Week Ending Feb 08, 2020 - Week 6



In week 6, widespread activity was reported in Puerto Rico and 48 states. Regional activity was reported in Hawaii and Oregon. Local activity was reported in the District of Columbia. Sporadic activity was reported in the U.S. Virgin Island, and Guam did not report.

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

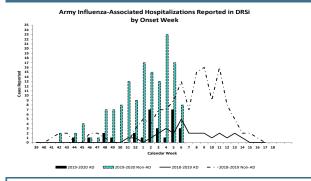
#### **DEMOGRAPHICS**



**AD**: In week 6, 424 positive respiratory specimens from Active Duty (AD) Service Members (SM) were submitted. The majority of positive specimens were among those 18 to 29 years of age (n=204, 48%) and was followed by those 30 to 39 years of age (n=143, 34%).

**Non-AD**: The majority of positive respiratory specimens among non-Active Duty beneficiaries were collected from individuals younger than 18 years of age (n=772, 68%).

#### INFLUENZA-ASSOCIATED HOSPITALIZATIONS



So far this season, 176 hospitalizations have been reported to the DRSi; this is more than double the 73 hospitalizations reported last season during the same period. As of 12 February, 11 influenza-associated hospitalizations with onset dates in week 6 were reported to the DRSi. During week 6 last season, 18 hospitalizations were reported.

\*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

Key: ILI-Influenza-Like Illness; DRSi- Disease Reporting System Internet; ADV-Adenovirus; RSV-Respiratory Syncytial Virus; SM-Service

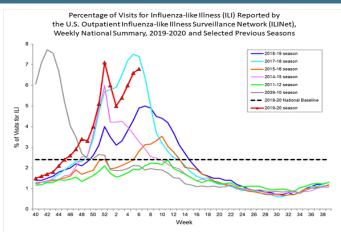
Member; MEDPROS- Medical Protection System; ASIMS- Aeromedical Services Information Management System; MRRS- Medical Readiness

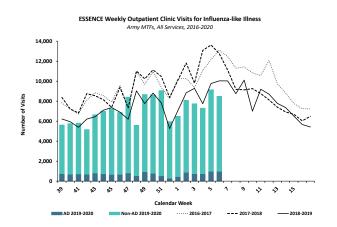
Reporting System



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

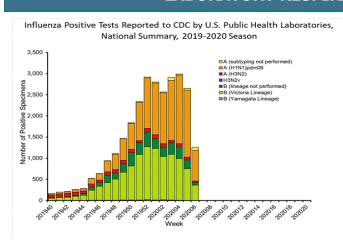
#### **ILI ACTIVITY - ARMY**

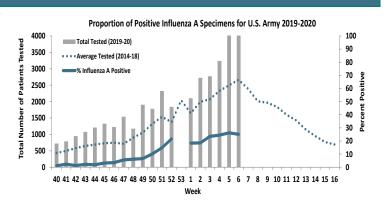




Nationwide in week 6, incident ILI activity was 6.8%. This is above the national baseline of 2.4%. Regionally, the percentage of outpatient visits for ILI ranged from 3.6% to 10.8%. All regions reported a percentage of outpatient visits for ILI above their region-specific baselines. At Army medical treatment facilities, incident ILI activity decreased overall from week 5 to week 6 by 7.3%, while activity for AD SMs increased by 0.1%.

#### LABORATORY RESPIRATORY SPECIMEN TESTING





Nationwide, 1,801 specimens were submitted to CDC in week 4, of which 63% (n=1,129) were positive. Influenza A accounted for 55.7% (n=629) of the total positive specimens submitted to the CDC in week 4, while influenza B accounted for 44.3% (n=500). In the Army population, 25% of 4,170 specimens tested for influenza A were positive.

|                    |         | Week 3 | Week 4 | Week 5 | Week 6 | Season Total |
|--------------------|---------|--------|--------|--------|--------|--------------|
| Test Types Among   | RAT     | 363    | 444    | 799    | 777    | 3482         |
| Positive Influenza | Culture | 8      | 7      | 3      | 1      | 62           |
| A Specimens        | PCR     | 282    | 341    | 359    | 268    | 2376         |

|                     | Influenza A   | 653  | 792  | 1161 | 1046 | 5920  |
|---------------------|---------------|------|------|------|------|-------|
|                     | Influenza B   | 542  | 548  | 525  | 445  | 4821  |
| Army MTF            | Adenovirus    | 20   | 15   | 17   | 10   | 200   |
| Laboratory Results, | Enterovirus   | 0    | 0    | 0    | 0    | 7     |
| 2019-20             | Parainfluenza | 7    | 7    | 4    | 2    | 205   |
| 2019-20             | RSV           | 114  | 110  | 83   | 51   | 1434  |
|                     | Negative      | 4457 | 5140 | 6144 | 5551 | 64965 |
|                     | Total         | 5793 | 6612 | 7934 | 7105 | 77552 |

There were 7,105 respiratory specimens tested in week 6, and 1,554 (21.9%) were positive for any type of respiratory illness. Influenza A accounted for the majority of positive results in week 6 (67.3%, n=1046), and influenza B accounted for 28.6% (n=445). Approximately 4% of specimens were positive for other respiratory illnesses (RSV (3.3%), adenovirus (0.6%), and parainfluenza (0.1%)).

Rapid antigen tests represented 74.3% of positive influenza A tests, followed by PCR tests (25.6%), and cultures (0.1%).

Locations providing week 6 laboratory data as of 12 February 2020: Ft. Belvoir, Ft Benning, Ft Bliss, Ft Bragg, Ft Campbell, Ft Carson, Ft Drum, Ft Eustis, 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. Wainwright, Korea, Landstuhl Regional Medical Center, Redstone Arsenal, Tripler Army Medical Center, the US Military Academy, and Walter Reed National Military Medical Center.

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

#### LABORATORY RESPIRATORY SPECIMEN TESTING

|        |                                      |               | Influenza     | A               |                | Influenza     | В                      |               | Adenovirus    |                        |
|--------|--------------------------------------|---------------|---------------|-----------------|----------------|---------------|------------------------|---------------|---------------|------------------------|
| Region | Installation                         |               |               | Baseline        | No. Of Booting |               |                        |               |               |                        |
| Region | installation                         | No.<br>Tested | %<br>Positive | %<br>Positive   | No.<br>Tested  | %<br>Positive | Baseline<br>% Positive | No.<br>Tested | %<br>Positive | Baseline<br>% Positive |
|        | Ft. Belvoir                          | 253           | 22.5          | 30.2            | 213            | 18.3          | 0                      | 87            | 8             | 9.3                    |
|        | Ft. Benning                          | 324           | 17.6          | 23.4            | 320            | 7.5           | 0.4                    |               |               |                        |
|        | Ft. Bragg                            | 526           | 27.8          | 44.3            |                |               | 100                    |               |               |                        |
|        | Ft. Campbell                         | 271           | 20.7          | 37.2            | 269            | 9.7           | 0                      |               |               | 100                    |
|        | Ft. Drum                             | 5             | 20            | 100             | 1              | 100           | 100                    |               |               |                        |
|        | Ft. Eustis                           | 66            | 25.8          | 44.6            | 19             | 100           | 100                    |               |               |                        |
|        | Ft. Gordon                           | 193           | 29            | 29.6            | 191            | 3.1           | 0                      |               |               | 100                    |
| PHCA   | Ft. Jackson                          | 168           | 19.6          | 27.7            | 168            | 17.3          | 0                      |               |               |                        |
|        | Ft. Knox                             | 7             | 28.6          | 8.8             | 7              | 28.6          | 0                      |               |               |                        |
|        | Ft. Lee                              | 75            | 12            | 24.2            | 18             | 100           | 100                    |               |               |                        |
|        | Ft. Meade                            | 25            | 32            | 16.7            |                |               |                        |               |               |                        |
|        | Ft. Rucker                           | 52            | 21.2          | 30              | 50             | 2             | 0                      |               |               |                        |
|        | Ft. Stewart                          |               |               | 38.2            |                | _             | 0                      |               |               |                        |
|        | Redstone Arsenal                     | 56            | 17.9          | 39.3            | 56             | 14.3          | 0                      |               |               |                        |
|        | West Point Military Academy          | 246           | 35.8          | 54.7            | 52             | 38.5          | 1.4                    |               |               | 100                    |
|        | Ft. Bliss                            | 319           | 16.3          | 21.8            | 39             | 100           | 0                      |               |               | 2.9                    |
|        |                                      | 197           | 27.4          | 18.4            | 33             | 100           | 100                    |               |               | 2.5                    |
|        | Ft. Carson                           | 251           | 25.5          | 20.9            | 236            | 0.8           | 0.6                    | 44            | 2.3           | 12.5                   |
|        | Ft. Hood                             | 87            | 24.1          | 19.2            | 87             | 16.1          | 7.7                    | 44            | 2.3           | 12.3                   |
|        | Ft. Huachuca                         | 111           | 25.2          | 30.6            | 112            | 2.7           | 0                      |               |               |                        |
| PHCC   | Ft. Irwin                            | 90            |               |                 | 90             |               |                        |               |               |                        |
| Price  | Ft. Leavenworth                      |               | 14.4          | 37.9            |                | 23.3          | 3.4                    |               |               | 100                    |
|        | Ft. Leonard Wood                     | 135           | 4.4           | 15.2            | 136            | 30.9          | 0                      |               |               | 100                    |
|        | Ft. Polk                             | 69            | 17.4          | 20              | 14             | 100           | 100                    |               |               |                        |
|        | Ft. Riley                            | 152           | 8.6           | 29.3            | 152            | 21.1          | 0                      |               |               | 100                    |
|        | Ft. Sam Houston                      | 501           | 30.9          | 31.2            | 505            | 8.1           | 1.4                    |               |               | 100                    |
|        | Ft. Sill                             | 83            | 16.9          | 14.3            | 19             | 100           | 100                    |               |               |                        |
| PHCE   | Landstuhl Regional Medical<br>Center | 41            | 14.6          | 29.2            | 35             | 8.6           | 0                      | 35            | 2.9           | 4.3                    |
|        | Ft. Wainwright                       | 93            | 7.5           | 58.3            | 93             | 16.1          | 0                      |               |               |                        |
| PHCP   | Korea                                | 80            | 11.3          | 42              | 16             | 0             | 0                      | 16            | 6.3           | 0                      |
|        | Tripler Army Medical Center          | 138           | 29.7          | 14.6            | 138            | 5.1           | 0                      | 12            | 0             | 2.7                    |
| D      | turate Heating                       |               | Enteroviru    |                 |                | arainfluer    |                        | <u>.</u>      | RSV           | a 1:                   |
| Region | Installation                         | No.<br>Tested | %<br>Positive | Baseline % Pos. | No.<br>Tested  | %<br>Positive | Baseline<br>% Pos.     | No.<br>Tested | %<br>Positive | Baseline<br>% Pos.     |
|        | Ft. Belvoir                          |               |               |                 | 87             | 0             | 2.7                    | 207           | 6.3           | 7                      |
|        | Ft. Bragg                            |               |               |                 |                |               | 100                    |               |               | 100                    |
| PHCA   | Ft. Campbell<br>Ft. Drum             |               |               |                 |                |               | 100<br>100             | 1             | 100           | 100<br>0               |
| FIICA  | Ft. Gordon                           |               |               |                 |                |               | 100                    |               | 100           | 100                    |
|        | Ft. Stewart                          |               |               |                 |                |               |                        |               |               | 25                     |
|        | West Point Military Academy          |               |               |                 |                |               |                        |               |               |                        |
|        | Ft. Bliss                            |               |               |                 |                |               |                        | 22            | 9.1           | 17.1                   |
|        | Ft. Carson                           |               |               |                 |                |               |                        | 26            | 23.1          | 44.4                   |
|        | Ft. Hood<br>Ft. Leavenworth          |               |               |                 | 46             | 4.3           | 0                      | 64<br>6       | 0             | 6.8<br>12.5            |
| PHCC   | Ft. Leonard Wood                     |               |               | 100             |                |               |                        | 0             | 0             | 12.5                   |
|        | Ft. Polk                             |               |               | 200             |                |               |                        | 6             | 33.3          | 7.1                    |
|        | Ft. Riley                            |               |               |                 |                |               |                        | 44            | 15.9          | 6.3                    |
|        | Ft. Sam Houston                      |               |               |                 | -              |               |                        |               |               | 100                    |
|        | Ft. Sill                             |               |               |                 |                |               |                        | 1             | 0             | 0                      |
| PHCE   | Landstuhl Regional Medical<br>Center |               |               |                 | 35             | 0             | 2.1                    | 44            | 9.1           | 13.4                   |
| Bucc   | Ft. Wainwright                       |               |               |                 | 4.5            |               |                        | 93            | 17.2          | 0.8                    |
| PHCE   | Korea                                | 12            | 0             | 0               | 16             | 0             | 0                      | 15            | 0             | 6.9<br>100             |
| L      | Tripler Army Medical Center          | 12            | L             | 0               | 12             |               | U                      |               | l             | 100                    |

No.: Number of specimens tested during MMWR week 6 2020.

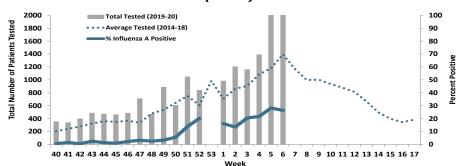
% Pos.: Percentage of positive specimens reported during MMWR week 6 2020.

Baseline % Pos.: Percentage of positive specimens reported in MMWR week 6 during influenza seasons from September 2012 - May 2019.

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

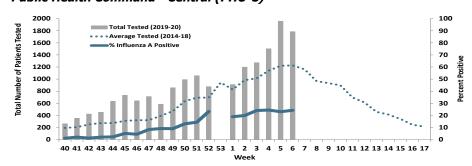
## Proportion of Influenza A Positive Specimens by Week and Region, Army Medical Laboratories, 2019-2020 as Compared to 2014-2018

#### Public Health Command - Atlantic (PHC-A)



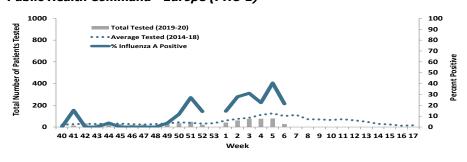
| Week 6       |     |               |                 |  |  |  |  |  |
|--------------|-----|---------------|-----------------|--|--|--|--|--|
| Age<br>Group | AD  | Non-AD<br>Ben | Season<br>Total |  |  |  |  |  |
| < 18         | 0   | 212           | 1087            |  |  |  |  |  |
| 18-29        | 93  | 25            | 384             |  |  |  |  |  |
| 30-39        | 59  | 24            | 327             |  |  |  |  |  |
| 40-49        | 33  | 33            | 306             |  |  |  |  |  |
| 50-59        | 6   | 37            | 202             |  |  |  |  |  |
| 60+          | 0   | 29            | 153             |  |  |  |  |  |
| Total        | 191 | 360           | 2459            |  |  |  |  |  |

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



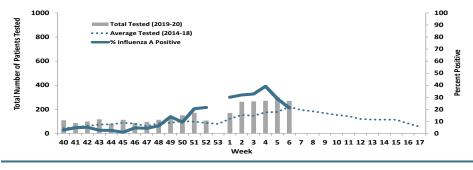
| Week 6       |     |               |                 |  |  |  |  |  |
|--------------|-----|---------------|-----------------|--|--|--|--|--|
| Age<br>Group | AD  | Non-AD<br>Ben | Season<br>Total |  |  |  |  |  |
| •            |     |               |                 |  |  |  |  |  |
| < 18         | 0   | 200           | 1219            |  |  |  |  |  |
| 18-29        | 33  | 10            | 324             |  |  |  |  |  |
| 30-39        | 48  | 29            | 427             |  |  |  |  |  |
| 40-49        | 19  | 28            | 313             |  |  |  |  |  |
| 50-59        | 9   | 32            | 251             |  |  |  |  |  |
| 60+          | 1   | 23            | 207             |  |  |  |  |  |
| Total        | 110 | 322           | 2741            |  |  |  |  |  |

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



| Week 6       |                 |   |     |  |  |  |  |
|--------------|-----------------|---|-----|--|--|--|--|
| Age<br>Group | Season<br>Total |   |     |  |  |  |  |
| < 18         | 0               | 1 | 42  |  |  |  |  |
| 18-29        | 0               | 0 | 20  |  |  |  |  |
| 30-39        | 0               | 1 | 27  |  |  |  |  |
| 40-49        | 1               | 2 | 18  |  |  |  |  |
| 50-59        | 0               | 1 | 14  |  |  |  |  |
| 60+          | 0               | 0 | 4   |  |  |  |  |
| Total        | 1               | 5 | 125 |  |  |  |  |

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



| Week 6       |    |               |                 |  |  |  |  |  |
|--------------|----|---------------|-----------------|--|--|--|--|--|
| Age<br>Group | AD | Non-AD<br>Ben | Season<br>Total |  |  |  |  |  |
| < 18         | 0  | 23            | 169             |  |  |  |  |  |
| 18-29        | 7  | 4             | 153             |  |  |  |  |  |
| 30-39        | 7  | 3             | 140             |  |  |  |  |  |
| 40-49        | 2  | 2             | 72              |  |  |  |  |  |
| 50-59        | 0  | 4             | 37              |  |  |  |  |  |
| 60+          | 0  | 5             | 24              |  |  |  |  |  |
| Total        | 16 | 41            | 595             |  |  |  |  |  |

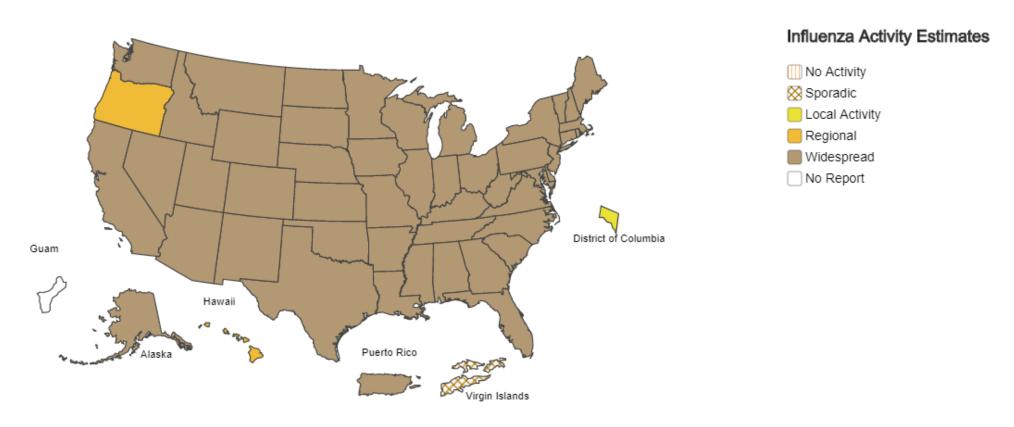
#### Number of Positive Influenza A Specimens by Duty Status and Public Health Command

| Region  | We | eek 51 | We | eek 52 | w  | eek 1  | w  | eek 2  | W  | eek 3  | W  | eek 4  | W   | eek 5  | W   | eek 6  |
|---------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|-----|--------|-----|--------|
| Region  | AD | Non-AD | AD  | Non-AD | AD  | Non-AD |
| PHC-A   | 33 | 113    | 23 | 146    | 29 | 129    | 44 | 119    | 49 | 189    | 64 | 238    | 197 | 395    | 191 | 360    |
| PHC-C   | 36 | 116    | 23 | 180    | 25 | 147    | 74 | 165    | 73 | 232    | 85 | 282    | 100 | 351    | 110 | 322    |
| PHC-E   | 7  | 6      | 0  | 3      | 3  | 3      | 7  | 10     | 9  | 14     | 9  | 8      | 15  | 17     | 1   | 5      |
| PHC-P   | 6  | 29     | 7  | 16     | 14 | 37     | 54 | 30     | 49 | 38     | 51 | 55     | 32  | 54     | 16  | 41     |
| CENTCOM | -  | -      | -  | -      | -  | -      | -  | -      | -  | -      | -  | -      | -   | -      | -   | -      |

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

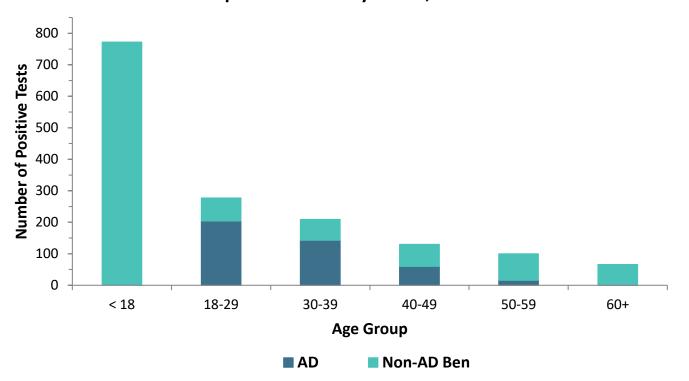
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\*

Week Ending Feb 08, 2020 - Week 6



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

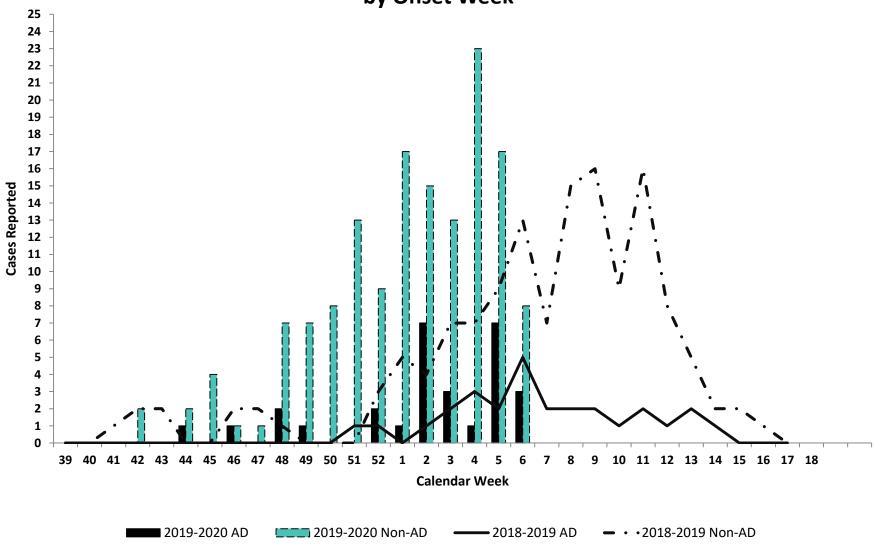
## Positive Respiratory Specimen Results from Army MTFs by Age Group and Beneficiary Status, Week 6



| Week 6                         |     |      |       |  |  |  |  |  |
|--------------------------------|-----|------|-------|--|--|--|--|--|
| Age AD Non-AD Season Ben Total |     |      |       |  |  |  |  |  |
| < 18                           | 0   | 772  | 6896  |  |  |  |  |  |
| 18-29                          | 204 | 73   | 2141  |  |  |  |  |  |
| 30-39                          | 143 | 66   | 1496  |  |  |  |  |  |
| 40-49                          | 60  | 70   | 831   |  |  |  |  |  |
| 50-59                          | 16  | 84   | 635   |  |  |  |  |  |
| 60+                            | 1   | 65   | 588   |  |  |  |  |  |
| Total                          | 424 | 1130 | 12587 |  |  |  |  |  |

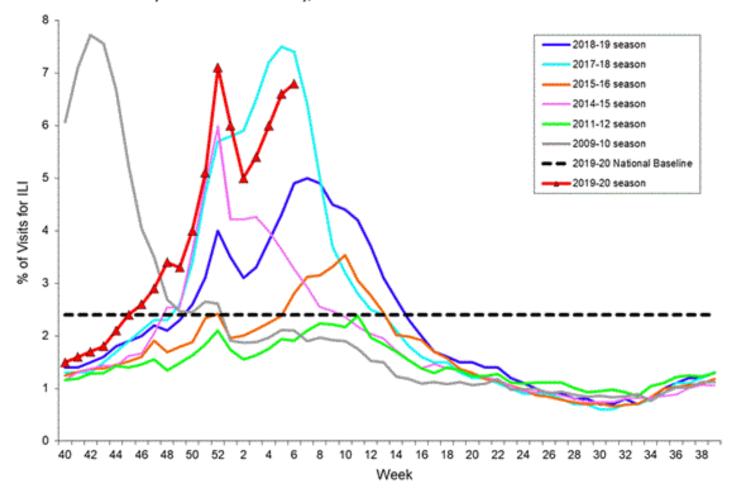


## Army Influenza-Associated Hospitalizations Reported in DRSi by Onset Week



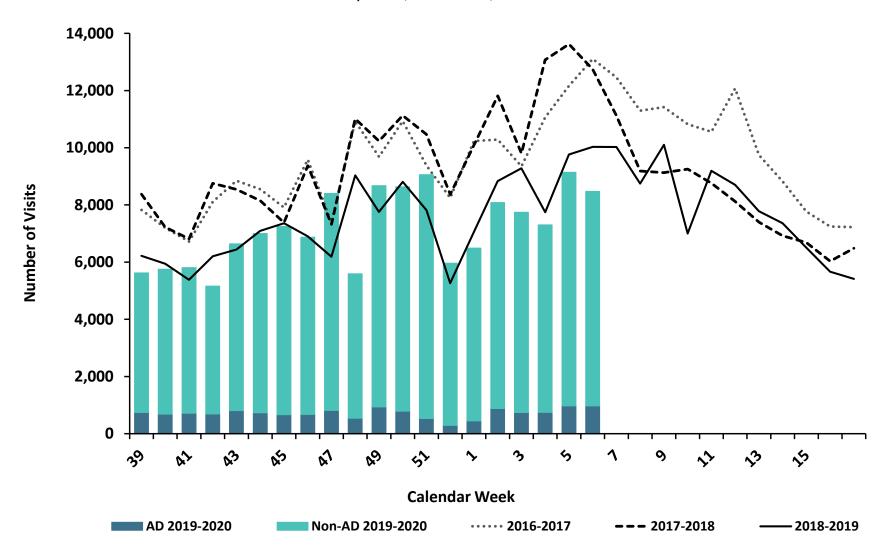
**Note:** Reportable influenza cases are defined as only cases that have been hospitalized and are under the age of 65. Data as of 12 February 2020.

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

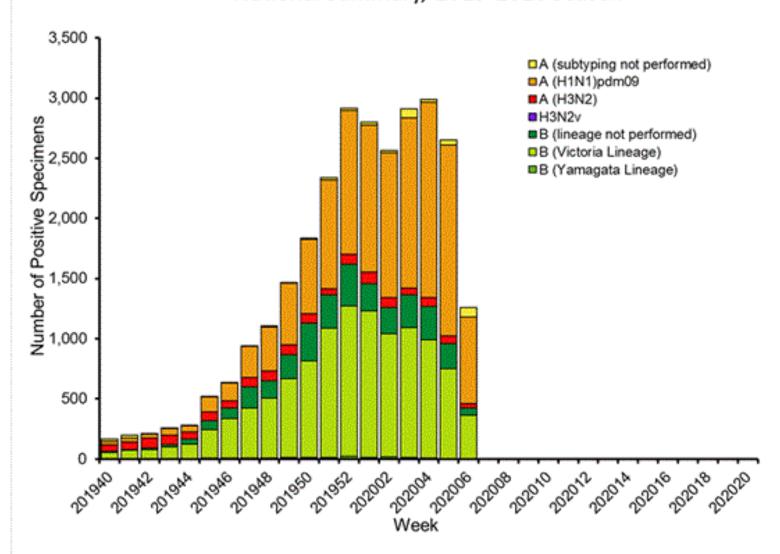


#### **ESSENCE Weekly Outpatient Clinic Visits for Influenza-like Illness**

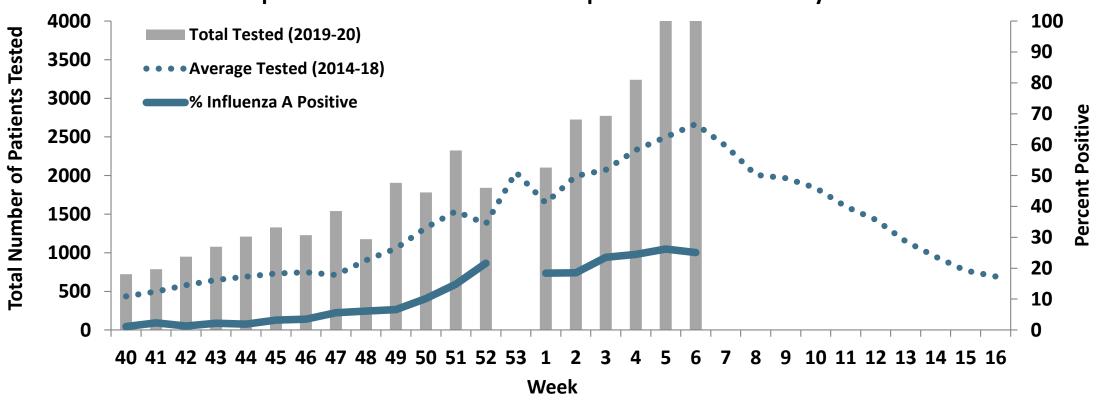
Army MTFs, All Services, 2016-2020



## 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 3 – 6**

|                         |             | Week 3 | Week 4 | Week 5 | Week 6        | <b>Season Total</b> |
|-------------------------|-------------|--------|--------|--------|---------------|---------------------|
| <b>Test Types Among</b> | RAT         | 363    | 444    | 799    | 777           | 3482                |
| Positive Influenza      | Culture     | 8      | 7      | 3      | 1             | 62                  |
| A Specimens             | PCR         | 282    | 341    | 359    | 268           | 2376                |
|                         |             |        |        |        |               |                     |
|                         | Influenza A | 653    | 792    | 1161   | 1046          | 5920                |
|                         | Influenza B | E42    | E /10  | EDE    | <i>11</i> / E | 4021                |

Army MTF
Laboratory Results,
2019-20

|    | Influenza A   | 653  | 792  | 1161 | 1046 | 5920  |
|----|---------------|------|------|------|------|-------|
|    | Influenza B   | 542  | 548  | 525  | 445  | 4821  |
|    | Adenovirus    | 20   | 15   | 17   | 10   | 200   |
|    | Enterovirus   | 0    | 0    | 0    | 0    | 7     |
| S, | Parainfluenza | 7    | 7    | 4    | 2    | 205   |
|    | RSV           | 114  | 110  | 83   | 51   | 1434  |
|    | Negative      | 4457 | 5140 | 6144 | 5551 | 64965 |
|    | Total         | 5793 | 6612 | 7934 | 7105 | 77552 |

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

| Region  | Week 51 |        | Week 52 |        | Week 1 |        | Week 2 |        | Week 3 |        | Week 4 |        | Week 5 |        | Week 6 |        |
|---------|---------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|         | 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   | 33      | 113    | 23      | 146    | 29     | 129    | 44     | 119    | 49     | 189    | 64     | 238    | 197    | 395    | 191    | 360    |
| PHC-C   | 36      | 116    | 23      | 180    | 25     | 147    | 74     | 165    | 73     | 232    | 85     | 282    | 100    | 351    | 110    | 322    |
| PHC-E   | 7       | 6      | 0       | 3      | 3      | 3      | 7      | 10     | 9      | 14     | 9      | 8      | 15     | 17     | 1      | 5      |
| PHC-P   | 6       | 29     | 7       | 16     | 14     | 37     | 54     | 30     | 49     | 38     | 51     | 55     | 32     | 54     | 16     | 41     |
| CENTCOM | -       | -      | -       | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      |