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

Week ending 07 March 2020 (week 10)

# Influenza Vaccination<br/>Coverage\*<br/>As of 12 March 2020N/ADoD96%Army Active Duty87%Army Guard

83% Army Reserve \*Data Source: MEDPROS, ASIMS, MRR.

#### SUMMARY

During week 10, there were 6,179 specimens submitted for testing, which represents an 8% increase from week 9. Influenza A represented the majority (74%) of positive specimens submitted for testing. At 21%, PHC-C had the highest percent-positive rate for specimens tested for influenza A compared to other regions. Additionally, PHC-C accounted for the greatest number of positive influenza A specimens (n=325). Seventy-one percent of positive influenza A specimens were from non-AD beneficiaries. Beneficiaries younger than 18 years old comprised the majority (n=438) of total positive respiratory specimens, and was followed by individuals 18 to 29 years of age (n=124). Two influenza-associated hospitalizations were reported in week 10.

#### Click to enlarge image

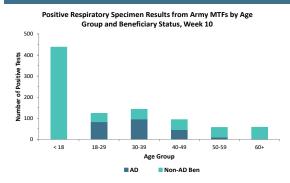
A Weekly Influenza Surveillance Report Prepared by the Influenza Division Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\* Week Ending Mar 07, 2020 - Week 10



#### **GEOGRAPHIC SPREAD**

In week 10, widespread activity was reported in Puerto Rico and 48 states. Regional activity was reported in Oregon. Local activity was reported in the District of Columbia and Hawaii. Sporadic activity was reported in the U.S. Virgin Island, and Guam did not report.





#### DEMOGRAPHICS

**AD**: In week 10, 237 positive respiratory specimens from Active Duty (AD) Service Members (SM) were submitted. The majority of positive specimens were among individuals 30 to 39 years of age (n=96, 41%) and was followed by those 18 to 29 years of age (n=83, 35%).

**Non-AD**: The majority of positive respiratory specimens among non-Active Duty beneficiaries were collected from individuals younger than 18 years of age (n=438, 65%).

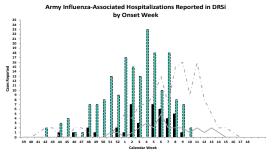
So far this season, 227 hospitalizations have been reported

to the DRSi; this is 79% more than the 127 hospitalizations

reported last season during the same period. As of 10 March, 2 influenza-associated hospitalizations with onset dates in week 10 were reported to the DRSi. During week 10 of the 2018-2019 influenza season, 10 hospitalizations were

### INFLUENZA-ASSOCIATED HOSPITALIZATIONS

reported.



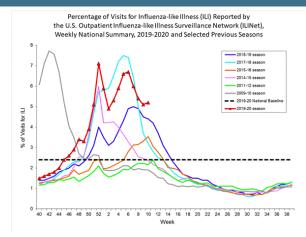
\*DRSi does not capture cases older than 65 years old for influenza-associated hospitalizations.

Additional Resources: <u>APHC Influenza Reports</u>, <u>Centers for Disease Control</u>, <u>Disease Reporting System internet</u>, <u>ESSENCE</u> 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



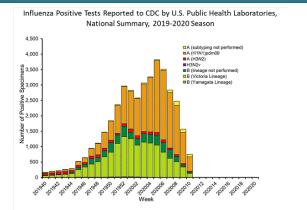
#### U.S. Army Public Health Center Army Influenza Activity Report

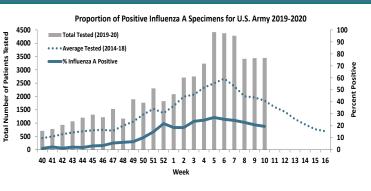
#### **ILI ACTIVITY - UNITED STATES**



Nationwide in week 10, 5.2% of patient visits reported through the U.S Outpatient Influenza-like Illness Surveillance Network were due to influenza-like illness. This is above the national baseline of 2.4%. Regionally, the percentage of outpatient visits for ILI ranged from 3.9% to 8.4%. All regions reported a percentage of outpatient visits for ILI above their region-specific baselines.

#### LABORATORY RESPIRATORY SPECIMEN TESTING





Nationwide, 1,513 specimens were submitted to CDC in week 10, of which 49% (n=744) were positive. Influenza A accounted for 77.3% (n=575) of the total positive specimens submitted to the CDC in week 10, while influenza B accounted for 22.7% (n=169). In the Army population, 19.5% of 3,450 specimens tested for influenza A were positive, which is above the historical average (2013-2014 season - 2018-2019 season) of 17.5% for week 10.

|                     |               | Week 7 | Week 8 | Week 9 | Week 10 | Season Total |
|---------------------|---------------|--------|--------|--------|---------|--------------|
| Test Types Among    | RAT           | 826    | 609    | 572    | 493     | 5989         |
| Positive Influenza  | Culture       | 6      | 3      | 3      | 2       | 136          |
| A Specimens         | PCR           | 218    | 165    | 141    | 178     | 3112         |
|                     |               |        |        |        |         |              |
|                     | Influenza A   | 1050   | 777    | 716    | 673     | 9237         |
|                     | Influenza B   | 397    | 280    | 241    | 190     | 5957         |
| Army MTF            | Adenovirus    | 8      | 7      | 2      | 13      | 234          |
| Laboratory Results, | Enterovirus   | 0      | 0      | 0      | 0       | 7            |
| 2019-20             | Parainfluenza | 3      | 1      | 0      | 1       | 214          |
| 2019-20             | RSV           | 64     | 42     | 46     | 37      | 1643         |
|                     | Negative      | 5764   | 4774   | 4737   | 5265    | 85221        |
|                     | Total         | 7286   | 5881   | 5742   | 6179    | 102513       |

In week 10, 6,179 respiratory specimens were tested and 14.8% (n=914) were positive for any type of respiratory illness. Influenza A accounted for the majority of positive results in week 10 (73.6%, n=673), and influenza B accounted for 20.8% (n=190). Approximately 5.6% of specimens were positive for other respiratory illnesses: RSV (4.1%), adenovirus (1.4%), and parainfluenza (0.1%).

Rapid antigen tests represented 73.3% of positive influenza A tests, followed by PCR tests (26.4%), and cultures (0.3%).

**Locations providing week 8 laboratory data as of 11 March 2020:** Ft. Belvoir, Ft. Benning, Ft. Bliss, Ft. Bragg, Ft. Campbell, Ft. Carson, Ft. Drum, Ft. Gordon, Ft. Hood, Ft. Huachuca, Ft. Irwin, Ft. Jackson, Ft. Knox, Ft. Leavenworth, Ft. Leonard Wood, Ft. Meade, Ft. Riley, Ft. Rucker, Ft. Sam Houston, Ft. Sill, Ft. Stewart, Ft. Wainwright, Korea, Landstuhl Regional Medical Center, Redstone Arsenal, Tripler Army Medical Center, the US Military Academy, and the Walter Reed National Military Medical Center.

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

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

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#### LABORATORY RESPIRATORY SPECIMEN TESTING

|        |  |               | Influenza     | A                         |               | Influenza     | В                      | Adenovirus    |               |                        |  |
|--------|--|---------------|---------------|---------------------------|---------------|---------------|------------------------|---------------|---------------|------------------------|--|
| Region | Installation                           | No.<br>Tested | %<br>Positive | Baseline<br>%<br>Positive | No.<br>Tested | %<br>Positive | Baseline<br>% Positive | No.<br>Tested | %<br>Positive | Baseline<br>% Positive |  |
|        | Ft. Belvoir                            | 461           | 24.3          | 27                        | 255           | 10.6          | 0.6                    | 100           | 7             | 7.7                    |  |
|        | Ft. Benning                            | 251           | 12.4          | 11.8                      | 248           | 3.2           | 1.5                    |               |               |                        |  |
|        | Ft. Bragg                              | 318           | 13.8          | 33.9                      |               |               | 100                    |               |               |                        |  |
|        | Ft. Campbell                           | 193           | 14.5          | 26.1                      | 194           | 8.8           | 0.6                    |               |               | 100                    |  |
|        | Ft. Drum                               | 20            | 40            | 39.1                      | 2             | 100           | 100                    |               |               |                        |  |
|        | Ft. Eustis                             |               |               | 49.3                      |               |               | 100                    |               |               |                        |  |
|        | Ft. Gordon                             | 106           | 17            | 9.7                       | 107           | 0             | 3.4                    |               |               | 100                    |  |
| РНСА   | Ft. Jackson                            | 141           | 13.5          | 25.9                      | 140           | 7.9           | 0                      |               |               |                        |  |
| _      | Ft. Knox                               | 5             | 0             | 18.9                      | 5             | 0             | 0                      |               |               |                        |  |
|        | Ft. Lee                                | 5             |               | 28.4                      |               | -             | 100                    |               |               |                        |  |
|        | Ft. Meade                              | 20            | 30            | 44.4                      |               |               | 100                    |               |               |                        |  |
|        |  |               |               | 25                        | 29            | 0             | 0                      |               |               |                        |  |
|        | Ft. Rucker                             | 31            | 3.2           |                           |               |               |                        |               |               |                        |  |
|        | Ft. Stewart                            | 92            | 9.8           | 30.9                      | 92            | 4.3           | 0.9                    |               |               |                        |  |
|        | Redstone Arsenal                       | 25            | 32            | 0                         | 25            | 8             | 0                      |               |               |                        |  |
|        | U.S. Military Academy                  | 72            | 18.1          | 43.2                      | 2             | 50            | 0                      |               |               | 100                    |  |
|        | Ft. Bliss                              | 250           | 12.4          | 24.2                      | 9             | 44.4          | 0.5                    |               |               | 10.3                   |  |
|        | Ft. Carson                             | 125           | 16            | 27.3                      |               |               | 100                    |               |               |                        |  |
|        | Ft. Hood                               | 278           | 18.7          | 28.4                      | 265           | 1.1           | 0.3                    | 35            | 5.7           | 8.7                    |  |
|        | Ft. Huachuca                           | 68            | 17.6          | 25                        | 69            | 5.8           | 11.1                   |               |               |                        |  |
|        | Ft. Irwin                              | 79            | 7.6           | 19.7                      | 79            | 3.8           | 0                      |               |               |                        |  |
| PHCC   | Ft. Leavenworth                        | 46            | 19.6          | 34.2                      | 46            | 8.7           | 1.3                    |               |               |                        |  |
|        | Ft. Leonard Wood                       | 231           | 23.8          | 34                        | 229           | 13.5          | 0                      |               |               | 100                    |  |
|        | Ft. Polk                               | 25            | 20            | 26.9                      |               |               | 100                    |               |               |                        |  |
|        | Ft. Riley                              | 137           | 9.5           | 17.9                      | 138           | 18.8          | 4.5                    |               |               |                        |  |
|        | Ft. Sam Houston                        | 259           | 27            | 30.2                      | 258           | 1.6           | 1.8                    |               |               | 100                    |  |
|        | Ft. Sill                               | 173           | 30.1          | 35.2                      | 8             | 100           | 100                    |               |               |                        |  |
| PHCE   | Landstuhl Regional Medical<br>Center   | 52            | 9.6           | 16.3                      | 48            | 25            | 1.3                    | 47            | 6.4           | 3.8                    |  |
|        | Ft. Wainwright                         | 73            | 23.3          | 44                        | 72            | 11.1          | 0                      |               |               |                        |  |
| РНСР   | Korea                                  | 40            | 0             | 32.8                      | 20            | 0             | 0                      | 20            | 5             | 10                     |  |
|        | Tripler Army Medical Center            | 145           | 20            | 16.2                      | 146           | 7.5           | 1.4                    | 16            | 0             | 0                      |  |
|        | ,                                      |               | Enteroviru    | IS                        | P             | arainfluer    | ıza                    |               | RSV           | <u> </u>               |  |
| Region | Installation                           | No.<br>Tested | %<br>Positive | Baseline<br>% Pos.        | No.<br>Tested | %<br>Positive | Baseline<br>% Pos.     | No.<br>Tested | %<br>Positive | Baseline<br>% Pos.     |  |
|        | Ft. Belvoir                            |               |               |                           | 100           | 0             | 7.1                    | 250           | 3.6           | 1.3                    |  |
| DUICA  | Ft. Campbell                           |               |               | 100                       |               |               | 100                    | 4             |               | 100                    |  |
| РНСА   | Ft. Drum<br>Ft. Gordon                 |               |               | 100                       |               |               | 100<br>100             | 1             | 0             | 25<br>100              |  |
|        | Ft. Stewart                            |               |               |                           |               |               | 100                    | 6             | 0             | 6.3                    |  |
|        | Ft. Bliss                              |               |               |                           |               |               |                        | 14            | 7.1           | 4.4                    |  |
|        | Ft. Carson                             |               |               |                           |               |               |                        | 23            | 13            | 26.2                   |  |
|        | Ft. Hood                               |               |               |                           | 36            | 2.8           | 4.3                    | 82            | 3.7           | 1.5                    |  |
| PHCC   | Ft. Leavenworth                        |               |               |                           |               |               |                        | 4             | 0             | 18.2                   |  |
|        | Ft. Polk                               |               |               |                           |               |               |                        | 1             | 0             | 0                      |  |
|        | Ft. Riley                              |               |               |                           |               |               | 100                    | 40            | 2.5           | 4.2                    |  |
|        | Ft. Sam Houston                        |               |               |                           |               |               | 100                    |               |               | 100                    |  |
|        | Ft. Sill<br>Landstuhl Regional Medical |               |               |                           |               |               |                        | 5             | 0             | 0                      |  |
| PHCE   | Center                                 |               |               |                           | 48            | 0             | 2.5                    | 63            | 9.5           | 9.6                    |  |
|        | Ft. Wainwright                         |               |               |                           |               |               |                        | 68            | 16.2          | 1.4                    |  |
| PHCP   | Korea<br>Triplor Army Modical Contor   | 10            |               | 0                         | 20            | 0             | 2.5                    | 20            | 15            | 0                      |  |
|        | Tripler Army Medical Center            | 16            | 0             | 0                         | 16            | 0             | 1.4                    |               |               | 100                    |  |

No.: Number of specimens tested during MMWR week 10 2020.

% Pos.: Percentage of positive specimens reported during MMWR week 10 2020.

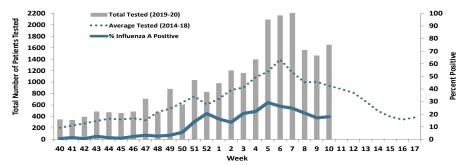
Baseline % Pos.: Percentage of positive specimens reported in MMWR week 10 during influenza seasons from September 2012 - May 2019.

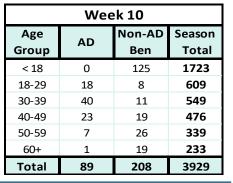
Missing values indicate that specimens were not tested for the disease during the week of interest.

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

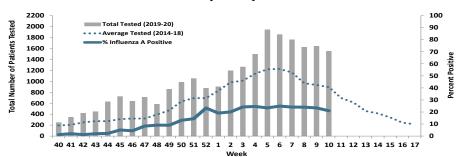
# Proportion of Influenza A Positive Specimens by Week and Region, Army Medical Laboratories, 2019-2020 as Compared to 2014-2018

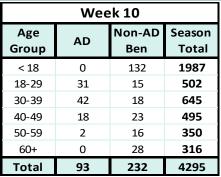
#### Public Health Command - Atlantic (PHC-A)





Public Health Command - Central (PHC-C)





Public Health Command - Europe (PHC-E) 1000 100 Total Number of Patients Tested Total Tested (2019-20) 90 • Average Tested (2014-18) 800 80 % Influenza A Positive 70 600 : Positive 60 50 Percent 400 40 30 200 20 10 o ο 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 Week

| Week 10      |    |               |                 |  |  |  |  |  |  |  |  |
|--------------|----|---------------|-----------------|--|--|--|--|--|--|--|--|
| Age<br>Group | AD | Non-AD<br>Ben | Season<br>Total |  |  |  |  |  |  |  |  |
| < 18         | 0  | 2             | 74              |  |  |  |  |  |  |  |  |
| 18-29        | 0  | 1             | 32              |  |  |  |  |  |  |  |  |
| 30-39        | 1  | 0             | 47              |  |  |  |  |  |  |  |  |
| 40-49        | 0  | 0             | 31              |  |  |  |  |  |  |  |  |
| 50-59        | 0  | 0             | 16              |  |  |  |  |  |  |  |  |
| 60+          | 0  | 1             | 12              |  |  |  |  |  |  |  |  |
| Total        | 1  | 4             | 212             |  |  |  |  |  |  |  |  |

| Pub             | lic H           | ealth Command - Pacific (PHC-P)  |                       |          | Week 10      |    |               |                 |  |  |
|-----------------|-----------------|--|-----------------------|----------|--------------|----|---------------|-----------------|--|--|
| Patients Tested | 1000 -<br>800 - | Total Tested (2019-20)<br>•••• Average Tested (2014-18)                                  | - 100<br>- 90<br>- 80 |          | Age<br>Group | AD | Non-AD<br>Ben | Season<br>Total |  |  |
| tients          |                 | Influenza A Positive   |                       | ve       | < 18         | 0  | 24            | 252             |  |  |
| r of Pa         | 600 -           |  | - 60                  | Positive | 18-29        | 6  | 1             | 188             |  |  |
| umbe            | 400 -           |  | - 40                  | Ē        | 30-39        | 5  | 5             | 186             |  |  |
| Total N         |                 |  | - 30                  | Ье       | 40-49        | 2  | 2             | 91              |  |  |
| 4               | 200 -           |  | - 20<br>- 10          |          | 50-59        | 0  | 1             | 52              |  |  |
|                 | 0 -             |  | 0                     |          | 60+          | 0  | 0             | 30              |  |  |
|                 |                 | 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17<br>Week | 7                     |          | Total        | 13 | 33            | 799             |  |  |

| Region  | Week 3 |        | Week 4 |        | Week 5 |        | Week 6 |        | Week 7 |        | Week 8 |        | Week 9 |        | Week 10 |        |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|
|         | AD     | Non-AD | AD      | Non-AD |
| PHC-A   | 49     | 189    | 64     | 245    | 201    | 408    | 199    | 369    | 145    | 412    | 97     | 228    | 74     | 176    | 89      | 208    |
| PHC-C   | 73     | 232    | 85     | 282    | 102    | 352    | 122    | 340    | 88     | 335    | 77     | 312    | 84     | 300    | 93      | 232    |
| PHC-E   | 9      | 14     | 9      | 8      | 16     | 23     | 6      | 17     | 8      | 16     | 4      | 10     | 8      | 12     | 1       | 4      |
| PHC-P   | 49     | 38     | 51     | 55     | 32     | 55     | 16     | 41     | 7      | 39     | 14     | 35     | 17     | 45     | 13      | 33     |
| CENTCOM | -      | -      | -      | -      | -      | -      | -      | -      | 2      | -      | -      | -      | -      | -      | -       | -      |

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

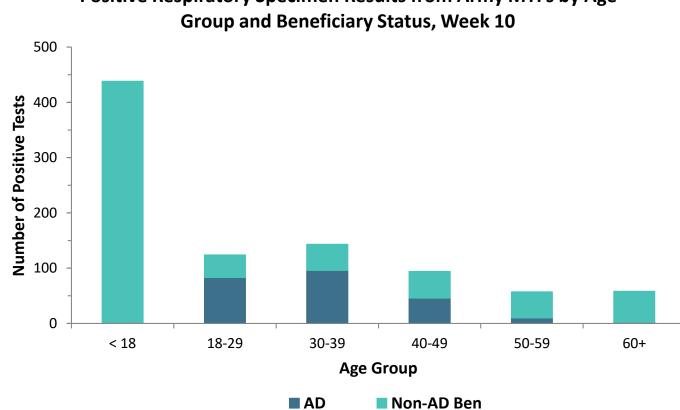
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\*

Week Ending Mar 07, 2020 - Week 10



Influenza Activity Estimates

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

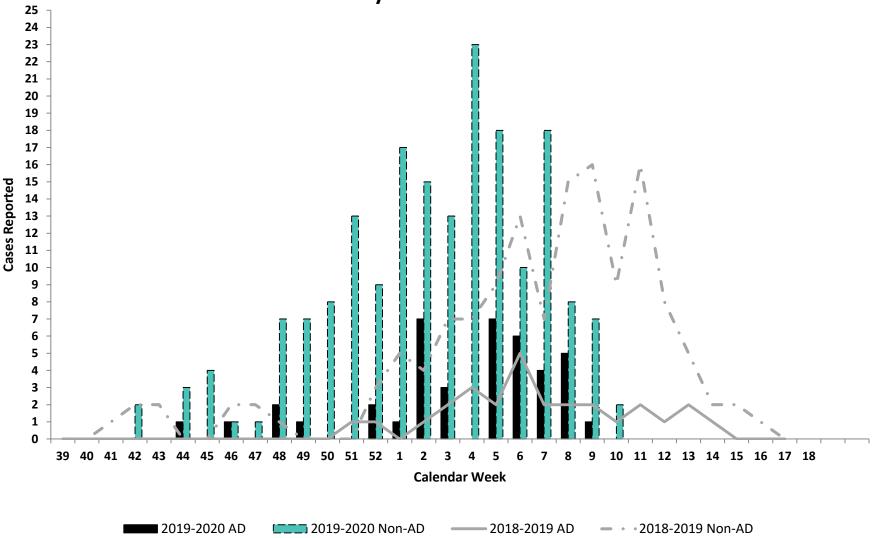


|              | W   | eek 10        |                 |
|--------------|-----|---------------|-----------------|
| Age<br>Group | AD  | Non-AD<br>Ben | Season<br>Total |
| < 18         | 0   | 438           | 9392            |
| 18-29        | 83  | 41            | 2803            |
| 30-39        | 96  | 47            | 2115            |
| 40-49        | 46  | 48            | 1243            |
| 50-59        | 10  | 47            | 911             |
| 60+          | 2   | 56            | 828             |
| Total        | 237 | 677           | 17292           |

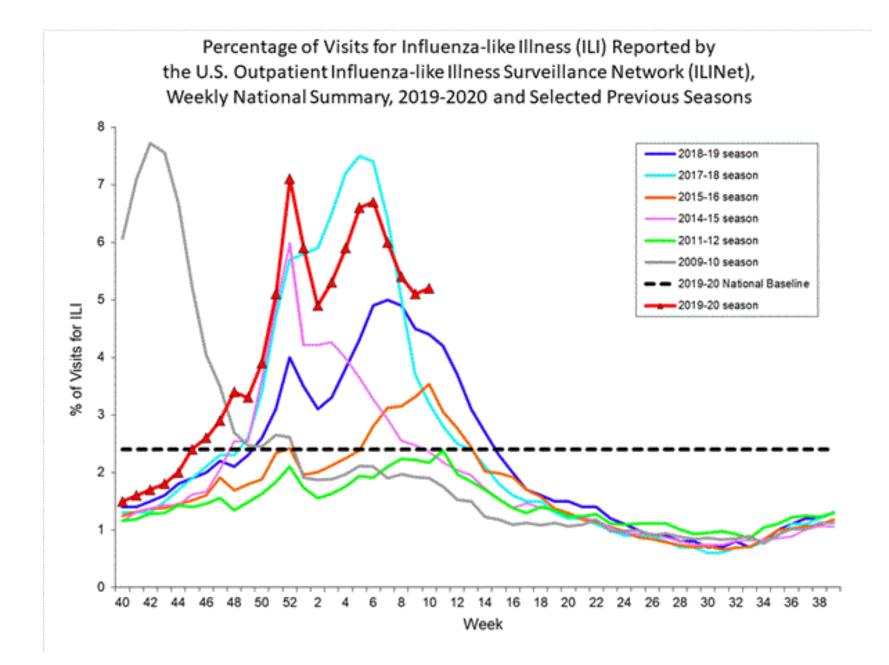
Positive Respiratory Specimen Results from Army MTFs by Age

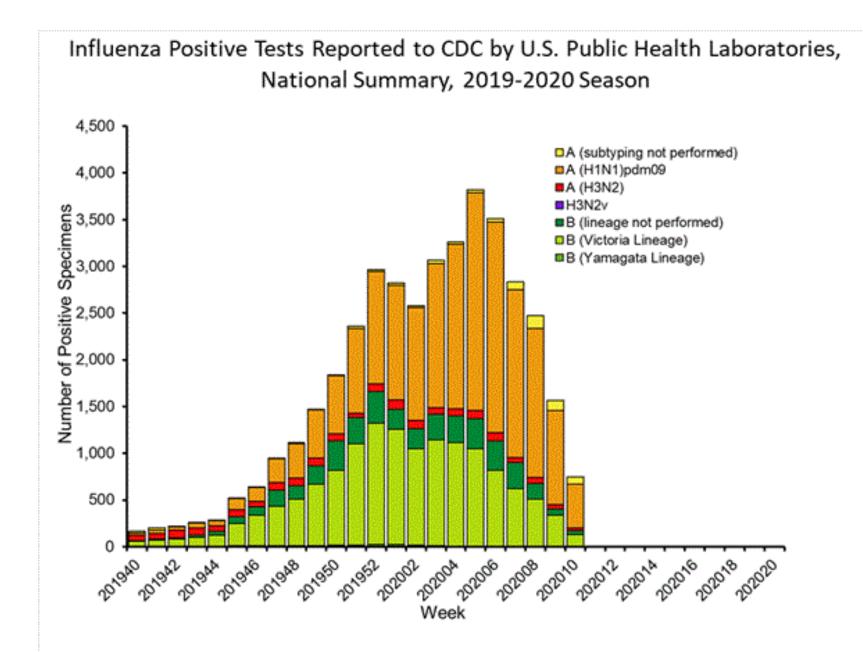


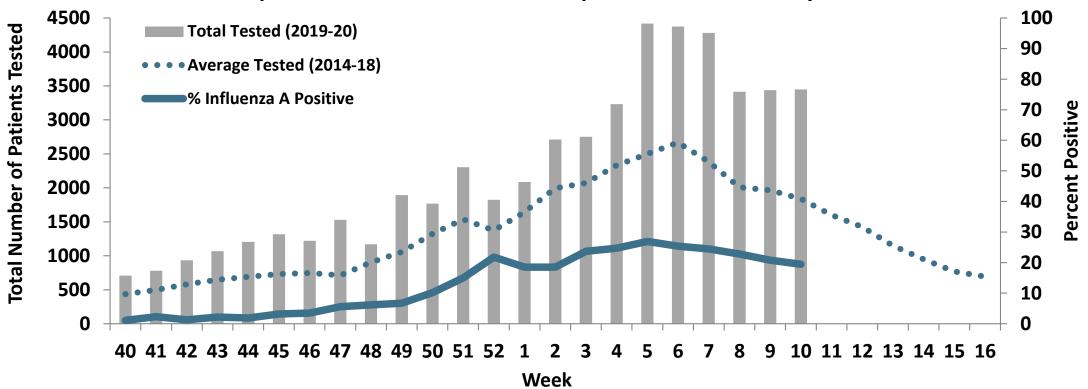
# Army Influenza-Associated Hospitalizations Reported in DRSi by Onset Week



**Note:** *Reportable influenza cases are defined as only cases that have been hospitalized and are under the age of 65. Data as of 10 March 2020.* 







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

# Laboratory Respiratory Specimen Testing: Weeks 7 – 10

|                    |         | Week 7 | Week 8 | Week 9 | Week 10 | Season Total |
|--------------------|---------|--------|--------|--------|---------|--------------|
| Test Types Among   | RAT     | 826    | 609    | 572    | 493     | 5989         |
| Positive Influenza | Culture | 6      | 3      | 3      | 2       | 136          |
| A Specimens        | PCR     | 218    | 165    | 141    | 178     | 3112         |

|                                | Influenza A   | 1050 | 777  | 716  | 673  | 9237   |
|--------------------------------|---------------|------|------|------|------|--------|
|                                | Influenza B   | 397  | 280  | 241  | 190  | 5957   |
|                                | Adenovirus    | 8    | 7    | 2    | 13   | 234    |
| Army MTF                       | Enterovirus   | 0    | 0    | 0    | 0    | 7      |
| Laboratory Results,<br>2019-20 | Parainfluenza | 3    | 1    | 0    | 1    | 214    |
| 2019-20                        | RSV           | 64   | 42   | 46   | 37   | 1643   |
|                                | Negative      | 5764 | 4774 | 4737 | 5265 | 85221  |
|                                | Total         | 7286 | 5881 | 5742 | 6179 | 102513 |

| Region  | Week 3 |        | Week 4 |        | Week 5 |        | Week 6 |        | Week 7 |        | Week 8 |        | Week 9 |        | Week 10 |        |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|
| Region  | AD     | Non-AD | AD      | Non-AD |
| PHC-A   | 49     | 189    | 64     | 245    | 201    | 408    | 199    | 369    | 145    | 412    | 97     | 228    | 74     | 176    | 89      | 208    |
| PHC-C   | 73     | 232    | 85     | 282    | 102    | 352    | 122    | 340    | 88     | 335    | 77     | 312    | 84     | 300    | 93      | 232    |
| PHC-E   | 9      | 14     | 9      | 8      | 16     | 23     | 6      | 17     | 8      | 16     | 4      | 10     | 8      | 12     | 1       | 4      |
| PHC-P   | 49     | 38     | 51     | 55     | 32     | 55     | 16     | 41     | 7      | 39     | 14     | 35     | 17     | 45     | 13      | 33     |
| CENTCOM | -      | -      | -      | -      | -      | -      | -      | -      | 2      | -      | -      | -      | -      | -      | -       | -      |

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