

U.S. Army Public Health Center

# Army Influenza Activity Report

Week ending 13 April 2019 (week 15)

# Influenza Vaccination Coverage\* As of 18 April 2019 N/A DoD 98% Army Active Duty 89% Army Guard 84% Army Reserve

\*Data Source: MEDPROS, ASIMS, MRRS

#### **SUMMARY**

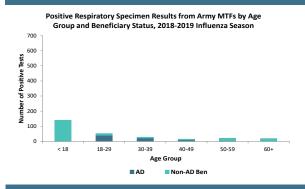
In week 15, a 39% decrease in the number of positive specimens was noted when compared to week 14; there were 450 samples in week 14 and 275 samples in week 15. Positive specimens of parainfluenza increased by 31%, with 13 positive specimens in week 14 and 17 in week 15. Two influenza-associated hospitalizations with an onset date in week 15 were reported in the Disease Reporting System internet; neither were Active Duty Service Members. This brings this flu season's total hospitalizations to 165, a 20% decrease from the 206 total cases reported at this point in the 2017-2018 season. As the influenza season closes, leaders should continue to stress the importance of proper hand hygiene and respiratory etiquette in the prevention of respiratory illnesses.

#### **GEOGRAPHIC SPREAD**



In the general U.S. population, widespread influenza activity was reported by 11 states. Regional activity was reported by Puerto Rico and 20 states, and local activity was reported by the District of Columbia and 17 states. Sporadic activity was reported by U.S. Virgin Islands and two states. Guam did not report to the Centers for Disease Control and Prevention (CDC) in week 15.

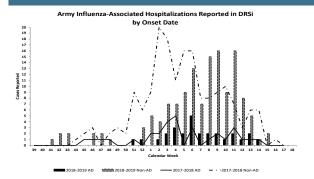
#### **DEMOGRAPHICS**



**Active Duty (AD)**: In week 15, 27% (n=74) of the total positive specimens (n=275) were among AD Service Members (SMs). Fifty-four percent (n=40) of the positive specimens among AD Service Members were from individuals in the 18-29 age group.

**Non-AD:** The majority of the positive specimens continue to result from the non-AD population. In week 15, this group accounted for 73% (n=201) of the total positive specimens. Individuals younger than 18 years were disproportionately affected; they accounted for 70% (n=140) of the positive respiratory specimens among non-AD individuals in week 15.

#### INFLUENZA-ASSOCIATED HOSPITALIZATIONS



Two influenza-associated hospitalizations, with an onset date in week 15, were reported in DRSi; both cases were non-AD individuals. There have been 165 hospitalizations for the season: 28 AD SMs and 137 non-AD individuals. At this time during the last influenza season, 206 hospitalizations were reported.

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

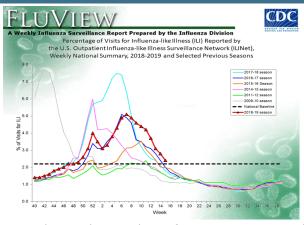
Additional Resources: Army Influenza Reports; ARD Reports; AFHSB Influenza Reports; NHRC FRI Reports; DoD Pandemic Influenza Watchboard; CDC

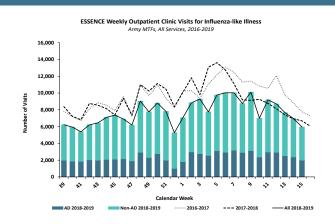
**Key:** ILI- Influenza-Like Illness; DRSi- Disease Reporting System Internet; NHRC- Naval Health Research Center; RSV-Respiratory Syncytial Virus; DEP- Disease Epidemiology Program





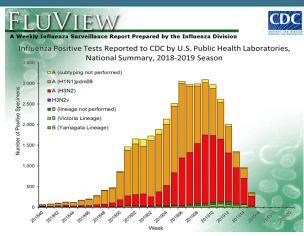
#### **ILI ACTIVITY - ARMY**

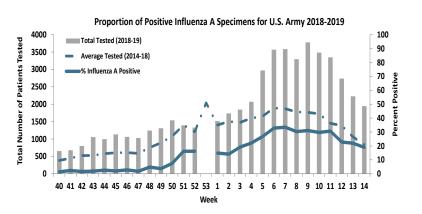




Nationwide in week 15, incidence of ILI activity was 2.4%, which is above the national baseline of 2.2%. Regionally, the percentage of ILI outpatient visits reported to the CDC ranged from 1.0% to 3.5%. At Army medical treatment facilities, overall incidence of ILI activity decreased by 14% when compared to the previous week. ILI activity among the AD population also decreased by 16% from week 14 to week 15. When compared to week 15 of the 2017-2018 season, there were 11% fewer ILI outpatient visits in week 15 of the current season.

#### LABORATORY RESPIRATORY SPECIMEN TESTING





Nationwide, 831 specimens were tested and submitted to the CDC during week 15, of which 353 (42%) were positive for influenza. In the Army population, the majority of the influenza A-positive specimens continue to be reported from RHC-A and RHC-C, with 56% (n=120) and 36% (n=77) of the positive specimens, respectively. Influenza A activity in these regions was also markedly lower in week 15 when compared to week 14; there was a 38% and 41% decrease in the number of positive influenza A specimens in RHC-A and RHC-C, respectively.

|                      |               | Week 12 | Week 13 | Week 14 | Week 15 | Season Total |
|----------------------|---------------|---------|---------|---------|---------|--------------|
| Test Types Among     | RAT           | 398     | 352     | 274     | 157     | 7072         |
| Positive Influenza A | Culture       | 16      | 5       | 22      | 4       | 474          |
| Specimens            | PCR           | 211     | 134     | 73      | 52      | 3657         |
|                      | Influenza A   | 625     | 491     | 369     | 213     | 11203        |
|                      | Influenza B   | 30      | 47      | 34      | 32      | 484          |
| Army MTF             | Adenovirus    | 24      | 14      | 14      | 6       | 429          |
| Laboratory Results,  | Enterovirus   | 0       | 0       | 0       | 0       | 5            |
| 2018-19              | Parainfluenza | 14      | 12      | 13      | 17      | 379          |
| 2010-19              | RSV           | 33      | 24      | 20      | 7       | 1820         |
|                      | Negative      | 4258    | 3717    | 3398    | 2881    | 91265        |
|                      | Total         | 4984    | 4305    | 3848    | 3156    | 105585       |

The number of positive respiratory specimens decreased by 39% from week 14 to week 15; there were 450 positive specimens in week 14 and 275 in week 15. All respiratory pathogens, except parainfluenza and enterovirus, decreased in the number of positive specimens from week 14 to week 15: influenza A, influenza B, adenovirus, and respiratory syncytial virus decreased by 42%, 6%, 57%, and 65%, respectively. Positive specimens of parainfluenza increased by 31% while the number of positive enterovirus specimens remained at zero.

Locations providing week 15 laboratory data as of 17 April 2019: 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 Sill, Ft Stewart, Ft. Wainwright, Landstuhl Regional Medical Center, Korea, Redstone Arsenal, Tripler Army Medical Center, the United States Military Academy, and Walter Reed National Military Medical Center.

#### LABORATORY RESPIRATORY SPECIMEN TESTING

|        |                             |               | Influenza .   | A                         |               | Influenza     | В                      |               | Adenoviru     | S                      |
|--------|-----------------------------|---------------|---------------|---------------------------|---------------|---------------|------------------------|---------------|---------------|------------------------|
| 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                 | 237           | 21.5          | 3.1                       | 125           | 5.6           | 100                    | 56            | 3.6           | 100                    |
|        | Ft. Benning                 | 56            | 10.7          | 1.3                       | 57            | 1.8           | 5.3                    |               |               |                        |
|        | Ft. Bragg                   | 85            | 20            | 4                         |               |               | 100                    |               |               |                        |
|        | Ft. Campbell                | 78            | 9             | 0                         | 80            | 0             | 4.5                    |               |               | 100                    |
|        | Ft. Drum                    | 16            | 18.8          | 12.5                      |               |               | 100                    |               |               |                        |
|        | Ft. Eustis                  | 23            | 30.4          | 12.5                      |               |               |                        |               |               |                        |
|        | Ft. Gordon                  | 54            | 5.6           | 0                         | 53            | 0             | 21.1                   |               |               | 100                    |
| RHCA   | Ft. Jackson                 | 41            | 22            | 5.7                       | 41            | 0             | 5.7                    |               |               |                        |
| KHCA   | Ft. Knox                    | 14            | 0             | 0                         | 14            | 0             | 0                      |               |               |                        |
|        | Ft. Lee                     | 19            | 26.3          | 0                         |               |               | 100                    |               |               |                        |
|        | Ft. Meade                   | 6             | 16.7          | 0                         |               |               |                        |               |               |                        |
|        | Ft. Rucker                  | 11            | 9.1           | 25                        | 7             | 0             | 0                      |               |               |                        |
|        | Ft. Sam Houston             | 188           | 6.4           | 0                         | 188           | 3.7           | 7.9                    |               |               |                        |
|        | Ft. Stewart                 | 46            | 8.7           | 0                         | 46            | 4.3           | 2.6                    |               |               |                        |
|        | Redstone Arsenal            | 7             | 28.6          | 0                         | 8             | 12.5          | 14.3                   |               |               |                        |
|        | West Point Military Academy | 20            | 20            | 0                         | 13            | 7.7           | 100                    |               |               | 100                    |
|        | Ft. Bliss                   | 91            | 8.8           | 1.9                       | 73            | 0             | 4.2                    | 15            | 6.7           | 11.1                   |
|        | Ft. Carson                  | 70            | 10            | 0                         |               |               | 100                    |               |               |                        |
|        | Ft. Hood                    | 105           | 5.7           | 0                         | 105           | 1.9           | 0                      | 19            | 5.3           |                        |
|        | Ft. Huachuca                | 21            | 23.8          | 0                         | 22            | 0             | 0                      |               |               |                        |
| RHCC   | Ft. Irwin                   | 22            | 13.6          | 10                        | 23            | 0             | 0                      |               |               |                        |
| KHCC   | Ft. Leavenworth             | 25            | 36            | 7.7                       | 25            | 0             | 14.3                   |               |               |                        |
|        | Ft. Leonard Wood            | 64            | 23.4          | 28.6                      | 64            | 0             | 0                      |               |               | 100                    |
|        | Ft. Polk                    | 57            | 21.1          | 37.5                      |               |               | 100                    |               |               |                        |
|        | Ft. Riley                   | 27            | 0             | 0                         | 27            | 0             | 4.3                    |               |               |                        |
|        | Ft. Sill                    | 17            | 0             | 0                         | 1             | 100           | 100                    |               |               |                        |
| RHCE   | Landstuhl Regional Medical  | 30            | 20            | 10.3                      | 24            | 0             | 3.2                    | 24            | 8.3           | 3.2                    |
|        | Ft. Wainwright              | 36            | 2.8           | 6                         | 37            | 21.6          | 22.9                   |               |               |                        |
| RHCP   | Korea                       | 35            | 14.3          | 8                         | 21            | 4.8           | 0                      | 21            | 0             | 0                      |
|        | Tripler Army Medical Center | 88            | 4.5           | 0                         | 63            | 1.6           | 4.8                    | 62            | 0             | 7                      |

|        |                             |        | Enteroviru | IS       | P      | arainfluer | ıza      | RSV    |          |          |  |
|--------|-----------------------------|--------|------------|----------|--------|------------|----------|--------|----------|----------|--|
| Region | Installation                | No.    | %          | Baseline | No.    | %          | Baseline | No.    | %        | Baseline |  |
|        |                             | Tested | Positive   | % Pos.   | Tested | Positive   | % Pos.   | Tested | Positive | % Pos.   |  |
|        | Ft. Belvoir                 |        |            |          | 64     | 10.9       | 100      | 131    | 1.5      | 9.1      |  |
|        | Ft. Campbell                |        |            |          |        |            | 100      |        |          | 100      |  |
|        | Ft. Drum                    |        |            |          |        |            | 100      | 1      | 0        | 0        |  |
| RHCA   | Ft. Gordon                  |        |            |          |        |            | 100      |        |          |          |  |
|        | Ft. Sam Houston             |        |            |          |        |            | 100      |        |          |          |  |
|        | Ft. Stewart                 |        |            |          |        |            | 100      | 7      | 0        | 0        |  |
|        | West Point Military Academy |        |            |          |        |            | 100      |        |          | 100      |  |
|        | Ft. Bliss                   |        |            |          |        |            |          | 72     | 1.4      | 3.4      |  |
|        | Ft. Carson                  |        |            |          |        |            |          | 26     | 11.5     | 0        |  |
|        | Ft. Hood                    |        |            |          | 19     | 0          |          | 43     | 2.3      | 54.9     |  |
| RHCC   | Ft. Leavenworth             |        |            |          |        |            |          | 3      | 0        | 50       |  |
| KHCC   | Ft. Leonard Wood            |        |            |          |        |            | 100      |        |          |          |  |
|        | Ft. Polk                    |        |            |          |        |            |          | 7      | 0        | 0        |  |
|        | Ft. Riley                   |        |            |          |        |            |          | 13     | 0        | 9.1      |  |
|        | Ft. Sill                    |        |            |          |        |            |          |        |          | 0        |  |
| RHCE   | Landstuhl Regional Medical  |        |            |          | 26     | 7.7        | 0        | 25     | 0        | 11.8     |  |
|        | Ft. Wainwright              |        |            |          |        |            |          | 36     | 0        | 3.9      |  |
| RHCP   | Korea                       |        |            | 0        | 21     | 23.8       | 0        | 20     | 0        | 8.7      |  |
|        | Tripler Army Medical Center | 62     | 0          | 0        | 65     | 4.6        | 0        |        |          | 100      |  |

No.: Number of specimens tested during MMWR week 15 2019.

% Positive: Percentage of positive specimens reported during MMWR week 15, 2019.

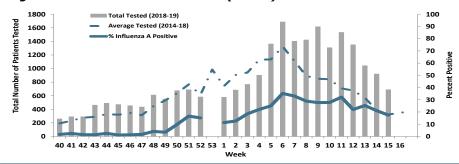
Baseline % Pos.: Percentage of positive specimens reported in MMWR week 15 during influenza seasons from September 2012 - May 2018.

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

High baseline percent positive values may be due to low numbers of specimens tested.

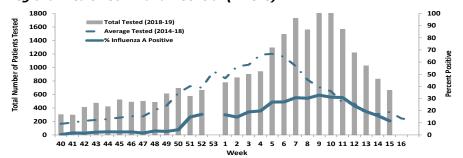
### Proportion of Influenza A Positive Specimens by Week and Region, Army Medical Laboratories, 2018-2019 as Compared to 2014-2018

#### Regional Health Command - Atlantic (RHC-A)



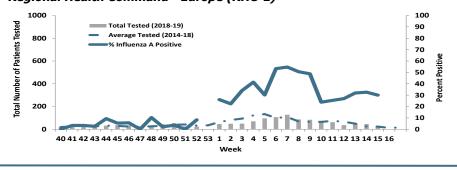
|       | Week 15 |        |        |  |  |  |  |  |  |  |  |  |
|-------|---------|--------|--------|--|--|--|--|--|--|--|--|--|
| Age   | AD      | Non-AD | Season |  |  |  |  |  |  |  |  |  |
| Group | AD      | Ben    | Total  |  |  |  |  |  |  |  |  |  |
| < 18  | 0       | 57     | 2839   |  |  |  |  |  |  |  |  |  |
| 18-29 | 12      | 3      | 616    |  |  |  |  |  |  |  |  |  |
| 30-39 | 13      | 2      | 522    |  |  |  |  |  |  |  |  |  |
| 40-49 | 8       | 3      | 346    |  |  |  |  |  |  |  |  |  |
| 50-59 | 2       | 11     | 280    |  |  |  |  |  |  |  |  |  |
| 60+   | 0       | 9      | 238    |  |  |  |  |  |  |  |  |  |
| Total | 35      | 85     | 4841   |  |  |  |  |  |  |  |  |  |

#### Regional Health Command - Central (RHC-C)



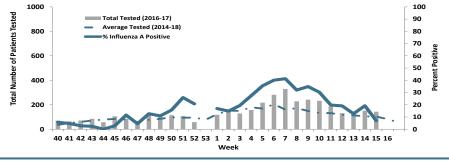
|              | Wee | k 15          |                 |
|--------------|-----|---------------|-----------------|
| Age<br>Group | AD  | Non-AD<br>Ben | Season<br>Total |
| < 18         | 0   | 31            | 2902            |
| 18-29        | 17  | 4             | 858             |
| 30-39        | 8   | 2             | 460             |
| 40-49        | 0   | 3             | 298             |
| 50-59        | 1   | 5             | 210             |
| 60+          | 0   | 6             | 338             |
| Total        | 26  | 51            | 5066            |

#### Regional Health Command - Europe (RHC-E)



|              | Week 15 |               |                 |  |  |  |  |  |  |  |  |  |
|--------------|---------|---------------|-----------------|--|--|--|--|--|--|--|--|--|
| Age<br>Group | AD      | Non-AD<br>Ben | Season<br>Total |  |  |  |  |  |  |  |  |  |
| < 18         | 0       | 4             | 179             |  |  |  |  |  |  |  |  |  |
| 18-29        | 1       | 0             | 92              |  |  |  |  |  |  |  |  |  |
| 30-39        | 0       | 1             | 75              |  |  |  |  |  |  |  |  |  |
| 40-49        | 0       | 0             | 37              |  |  |  |  |  |  |  |  |  |
| 50-59        | 0       | 0             | 15              |  |  |  |  |  |  |  |  |  |
| 60+          | 0       | 0             | 7               |  |  |  |  |  |  |  |  |  |
| Total        | 1       | 5             | 405             |  |  |  |  |  |  |  |  |  |

#### Regional Health Command - Pacific (RHC-P)



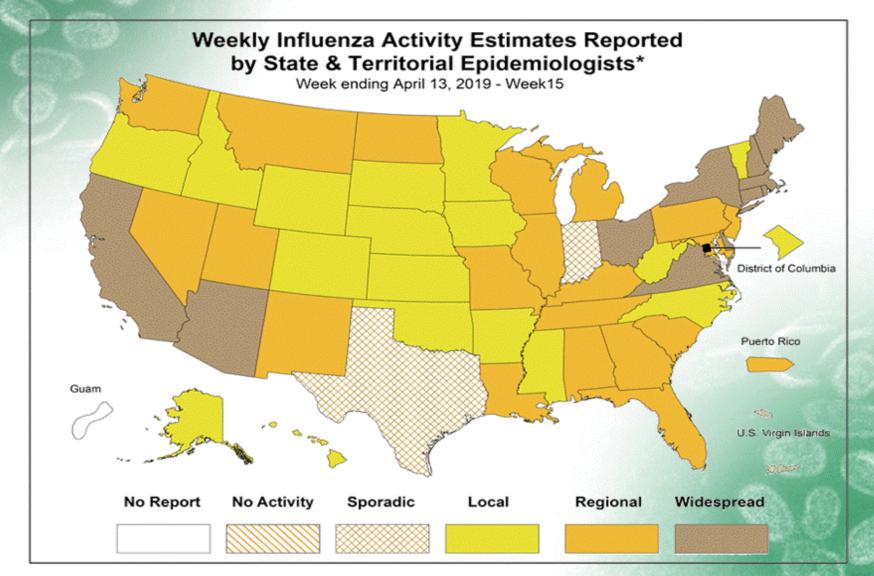
|              | Wee | k 15          |                 |
|--------------|-----|---------------|-----------------|
| Age<br>Group | AD  | Non-AD<br>Ben | Season<br>Total |
| < 18         | 0   | 4             | 454             |
| 18-29        | 3   | 2             | 175             |
| 30-39        | 0   | 0             | 131             |
| 40-49        | 1   | 0             | 68              |
| 50-59        | 0   | 0             | 30              |
| 60+          | 0   | 0             | 33              |
| Total        | 4   | 6             | 891             |

| Region  | Week 8 |        | Week 9 |        | Week 10 |        | Week 11 |        | Week 12 |        | Week 13 |        | Week 14 |        | Week 15 |        |
|---------|--------|--------|--------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
|         | AD     | Non-AD | AD     | Non-AD | AD      | Non-AD | AD      | Non-AD | AD      | Non-AD | AD      | Non-AD | AD      | Non-AD | AD      | Non-AD |
| RHC-A   | 81     | 330    | 83     | 365    | 86      | 277    | 85      | 407    | 58      | 239    | 51      | 212    | 55      | 139    | 35      | 85     |
| RHC-C   | 70     | 401    | 102    | 501    | 104     | 482    | 121     | 360    | 111     | 182    | 53      | 145    | 45      | 86     | 26      | 51     |
| RHC-E   | 19     | 25     | 12     | 29     | 5       | 10     | 3       | 13     | 4       | 6      | 4       | 11     | 5       | 10     | 1       | 5      |
| RHC-P   | 14     | 59     | 26     | 58     | 23      | 47     | 10      | 27     | 5       | 20     | 6       | 9      | 6       | 23     | 4       | 6      |
| CENTCOM | -      | -      | -      | -      | -       | -      | -       | -      | -       | -      | -       | -      | -       | -      | -       | -      |

# FLUVIEW

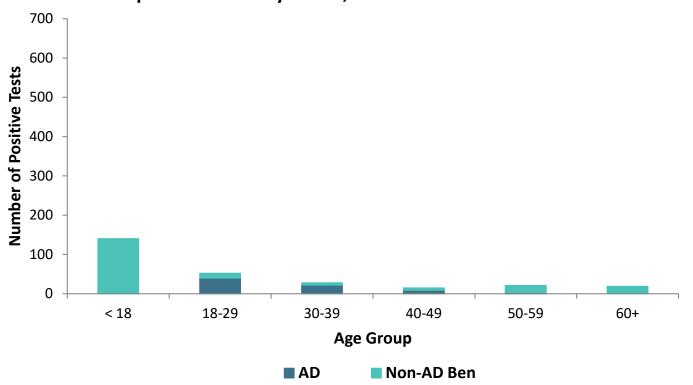


### A Weekly Influenza Surveillance Report Prepared by the Influenza Division



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

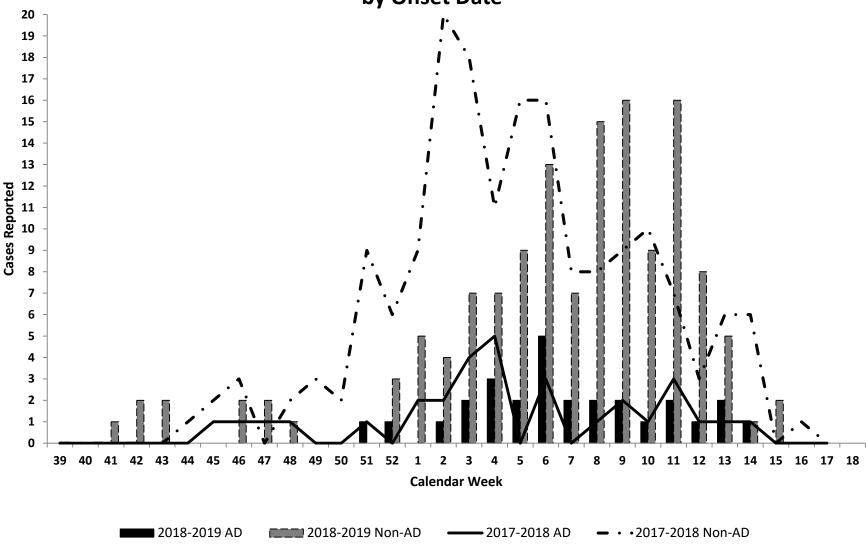
### Positive Respiratory Specimen Results from Army MTFs by Age Group and Beneficiary Status, 2018-2019 Influenza Season



|              | We | eek 15        |                 |
|--------------|----|---------------|-----------------|
| Age<br>Group | AD | Non-AD<br>Ben | Season<br>Total |
| < 18         | 0  | 140           | 6374            |
| 18-29        | 40 | 12            | 1741            |
| 30-39        | 22 | 6             | 1188            |
| 40-49        | 9  | 6             | 749             |
| 50-59        | 3  | 18            | 535             |
| 60+          | 0  | 19            | 616             |
| Total        | 74 | 201           | 11203           |



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



**Note:** Reportable influenza cases are defined as only cases that have been hospitalized and are under the age of 65. See <u>Armed Forces</u> <u>Reportable Medical Events Guidelines and Case Definitions</u> for more information.

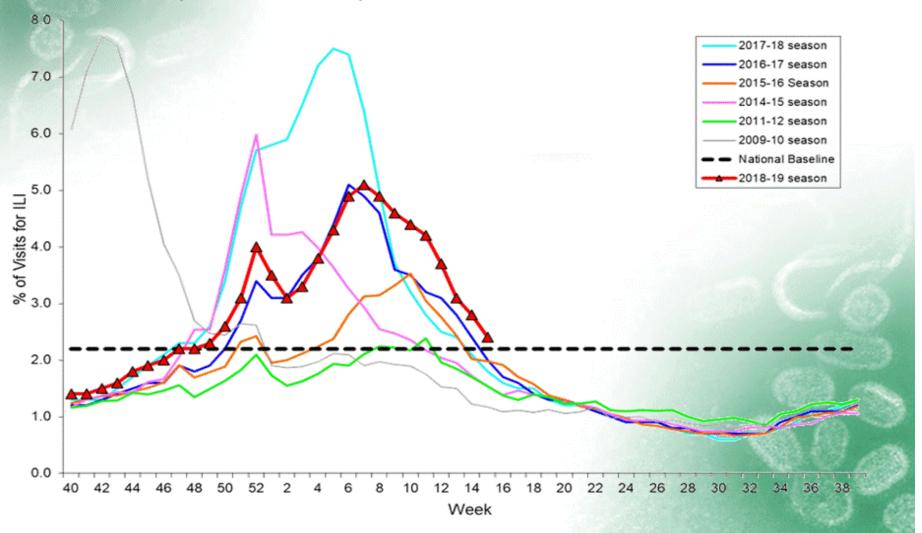
Data as of 18 April 2019.

## FLUVIEW



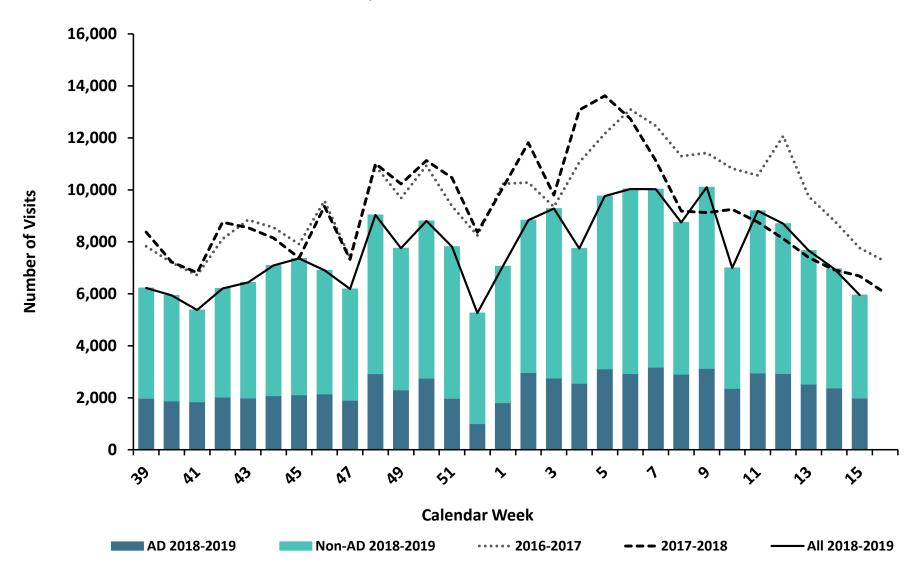
#### A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2018-2019 and Selected Previous Seasons



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

Army MTFs, All Services, 2016-2019



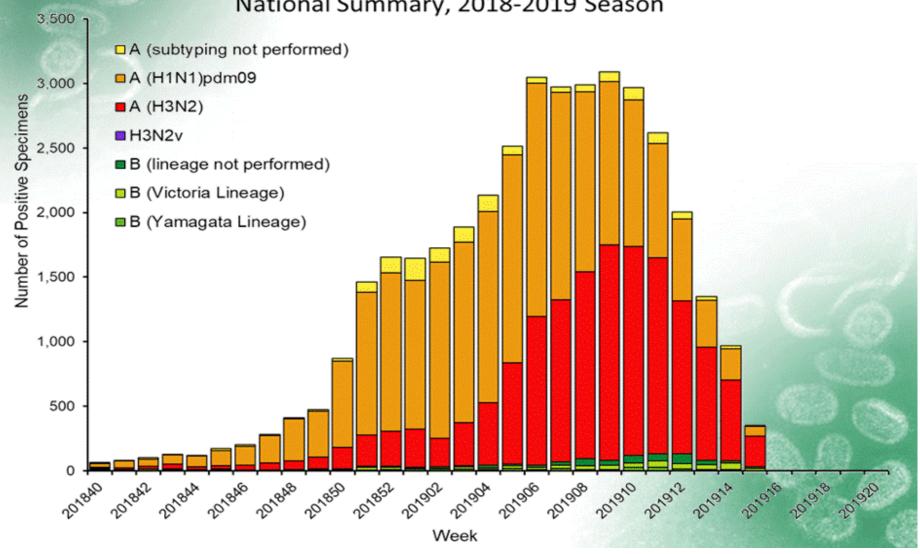
Clinic visits for ILI are obtained from ESSENCE. Data as of 18 April 2019.

# FLUVIEW

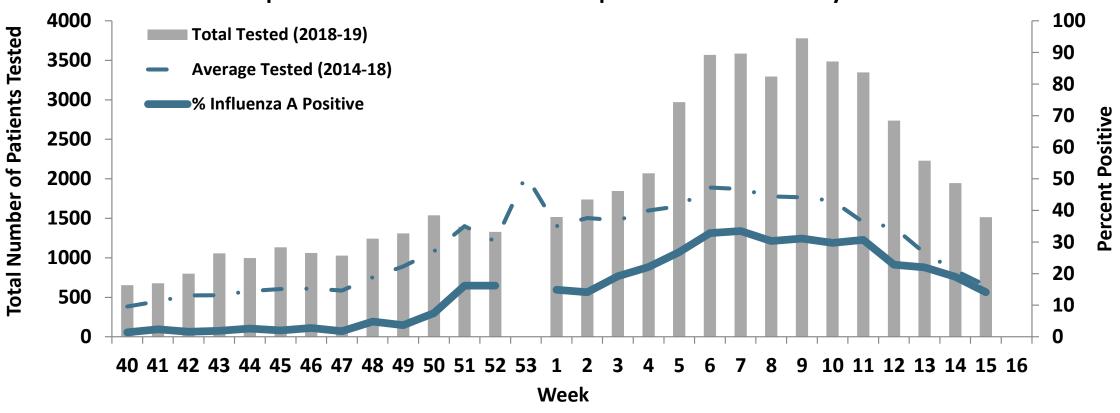


#### A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories,
National Summary, 2018-2019 Season



### **Proportion of Positive Influenza A Specimens for U.S. Army 2018-2019**



|                              |               | Week 12 | Week 13 | Week 14 | Week 15 | Season Total |
|------------------------------|---------------|---------|---------|---------|---------|--------------|
| <b>Test Types Among</b>      | RAT           | 398     | 352     | 274     | 157     | 7072         |
| Positive Influenza A         | Culture       | 16      | 5       | 22      | 4       | 474          |
| Specimens                    | PCR           | 211     | 134     | 73      | 52      | 3657         |
|                              | Influenza A   | 625     | 491     | 369     | 213     | 11203        |
|                              | Influenza B   | 30      | 47      | 34      | 32      | 484          |
| Army MTE                     | Adenovirus    | 24      | 14      | 14      | 6       | 429          |
| Army MTF Laboratory Results, | Enterovirus   | 0       | 0       | 0       | 0       | 5            |
| 2018-19                      | Parainfluenza | 14      | 12      | 13      | 17      | 379          |
| 2010-19                      | RSV           | 33      | 24      | 20      | 7       | 1820         |
|                              | Negative      | 4258    | 3717    | 3398    | 2881    | 91265        |
|                              | Total         | 4984    | 4305    | 3848    | 3156    | 105585       |

### Number of Positive Influenza A Specimens by Duty Status and Region

| Region  | Week 8 |        | Week 9 |        | Week 10 |        | Week 11 |        | Week 12 |        | Week 13 |        | Week 14 |        | Week 15 |        |
|---------|--------|--------|--------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
|         | AD     | Non-AD | AD     | Non-AD | AD      | Non-AD | AD      | Non-AD | AD      | Non-AD | AD      | Non-AD | AD      | Non-AD | AD      | Non-AD |
| RHC-A   | 81     | 330    | 83     | 365    | 86      | 277    | 85      | 407    | 58      | 239    | 51      | 212    | 55      | 139    | 35      | 85     |
| RHC-C   | 70     | 401    | 102    | 501    | 104     | 482    | 121     | 360    | 111     | 182    | 53      | 145    | 45      | 86     | 26      | 51     |
| RHC-E   | 19     | 25     | 12     | 29     | 5       | 10     | 3       | 13     | 4       | 6      | 4       | 11     | 5       | 10     | 1       | 5      |
| RHC-P   | 14     | 59     | 26     | 58     | 23      | 47     | 10      | 27     | 5       | 20     | 6       | 9      | 6       | 23     | 4       | 6      |
| CENTCOM | -      | -      | -      | -      | -       | -      | -       | -      | -       | -      | -       | -      | -       | -      | -       | -      |