



# DEPARTMENT OF DEFENSE (AFHSB) Seasonal Influenza Surveillance Summary

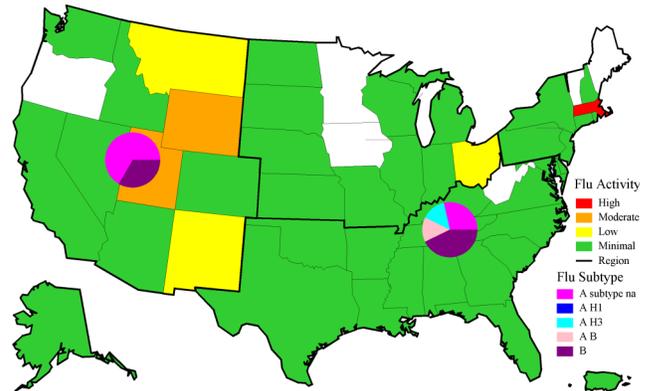


## Northern Command -- Week 43 (23 Oct 2016—29 Oct 2016)

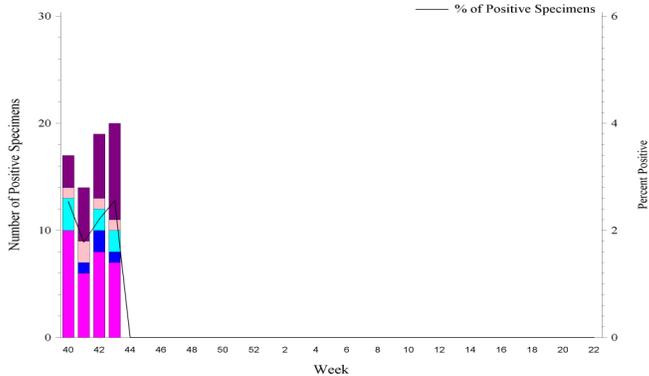
In NORTHCOM during week 43<sup>1,2</sup>

- ◆ Influenza activity was minimal for the majority of NORTHCOM.
- ◆ The percentage of outpatient visits remained below baseline and previous seasons.
- ◆ The percentage of positive lab tests was low at 2.38 for service members and 2.55% for beneficiaries.
- ◆ There was 1 service member influenza hospitalization (RME) reported for week 43.

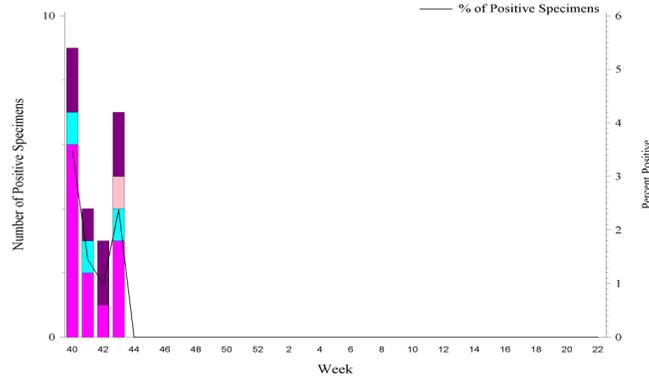
NORTHCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



NORTHCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



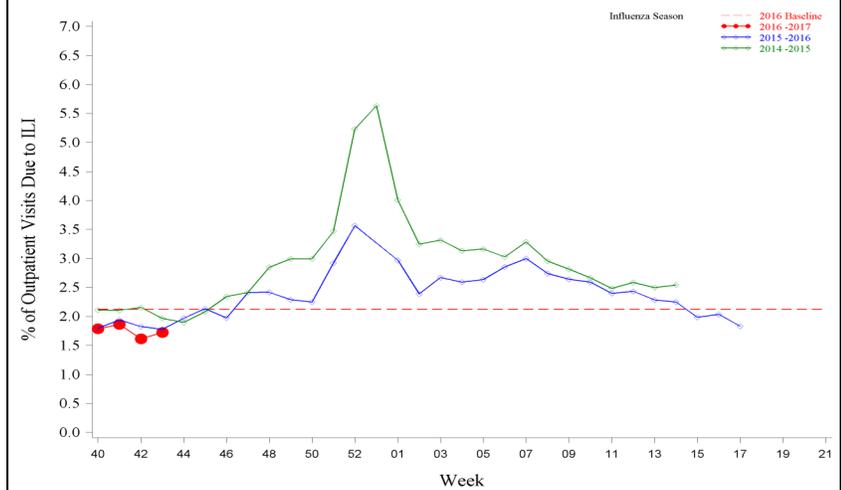
NORTHCOM Service Members, Influenza Positive Specimens Reported to AFHSB



2016 – 2017 NORTHCOM Season Totals<sup>1,2</sup>

|                 | A/H1N1 | A/H3N2 | A/Untyped | Flu B | AB | Overall % Positive |
|-----------------|--------|--------|-----------|-------|----|--------------------|
| Service Members | 0      | 3      | 12        | 7     | 1  | 2.04               |
| Dependents      | 4      | 7      | 31        | 23    | 5  | 2.26               |

NORTHCOM Service Members, 2016-2017 and Previous 2 Influenza Seasons ILI Outpatient Visits



- ◆ NHRC laboratory-confirmed influenza cases, US Military Basic Trainees: As of Week 42

|                           | Week 42 <sup>3</sup> |        |              |       | 2016 – 2017 Recruit Season Totals <sup>3</sup> |        |              |       | No. Tested |
|---------------------------|----------------------|--------|--------------|-------|--|--------|--------------|-------|------------|
|                           | A/H1N1               | A/H3N2 | A/unsubtyped | Flu B | A/H1N1   | A/H3N2 | A/unsubtyped | Flu B |            |
| <b>Ft Benning</b>         |                      |        |              |       |  |        |              |       | 10         |
| <b>Ft Jackson</b>         |                      |        |              |       |  |        |              |       |            |
| <b>Ft Leonard Wood</b>    |                      |        |              |       |  |        |              |       | 1          |
| <b>NRTC Great Lakes</b>   |                      |        |              | 1     |  |        |              | 1     | 4          |
| <b>Lackland AFB</b>       |                      |        |              |       |  |        |              |       |            |
| <b>MCRD Parris Island</b> |                      |        |              |       |  |        |              |       |            |
| <b>MCRD San Diego</b>     |                      |        |              |       |  |        |              |       | 15         |
| <b>CGTC Cape May</b>      |                      |        |              |       |  |        |              |       |            |
| <b>Total</b>              | 0                    | 0      | 0            | 1     | 0  | 0      | 0            | 1     | 30         |

<sup>1</sup>AFHSB, <sup>2</sup>USAFSAM, <sup>3</sup>NHRC, <sup>4</sup>LRMC, <sup>5</sup>PHCR-E, <sup>6</sup>AFRIMS, <sup>7</sup>NMRC-A, <sup>8</sup>USAMRU-K, <sup>9</sup>NAMRU-3, <sup>10</sup>NAMRU-6

For inquiries or comments please contact [dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil](mailto:dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil)

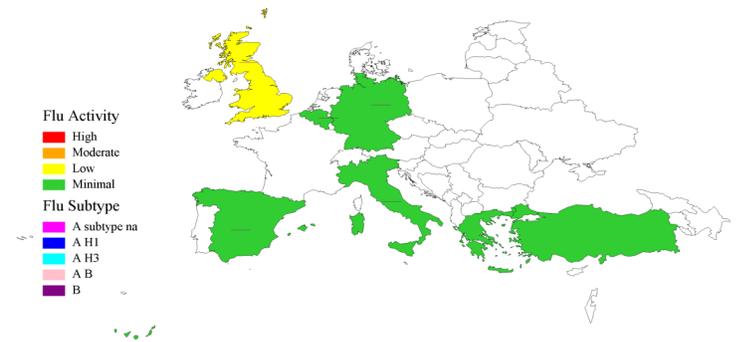


### European Command -- Week 43

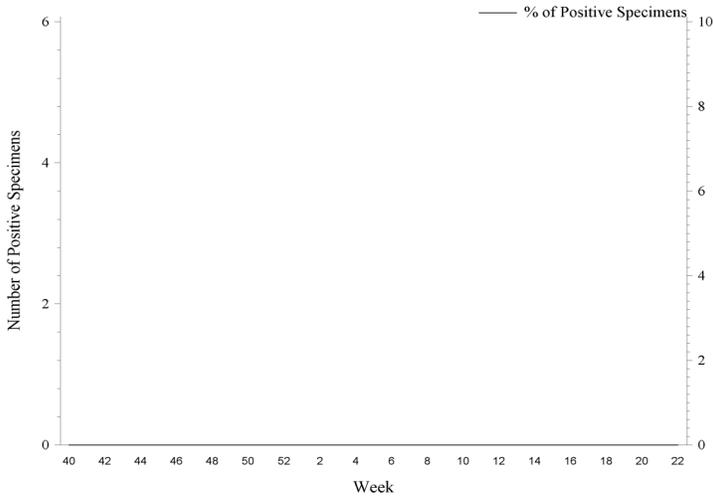
In EUCOM during week 43<sup>4,5</sup>

- ◆ Influenza activity was minimal across EUCOM, with the exception of the UK which had low activity.
- ◆ The percentage of outpatient visits due to ILI was below baseline and similar to previous seasons.
- ◆ There were no reported positive lab tests for week 43 in EUCOM.

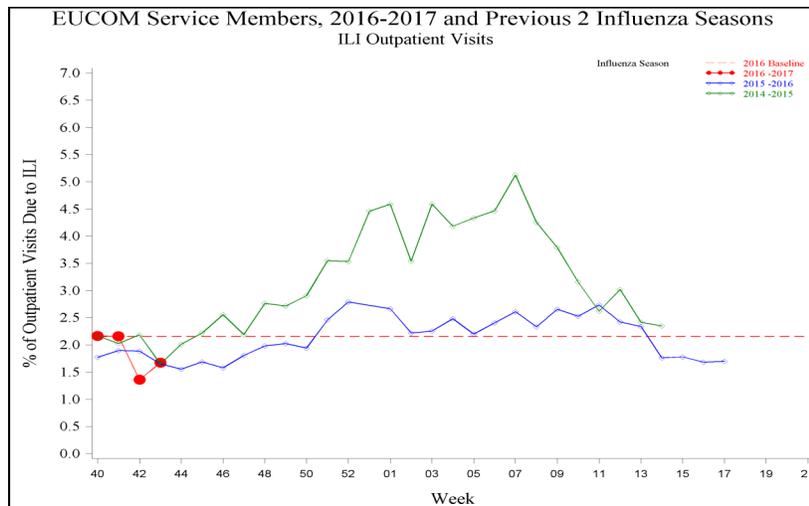
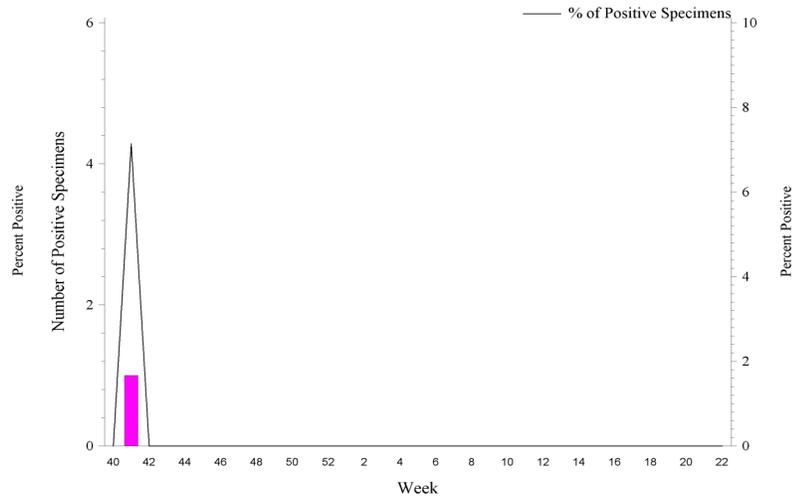
EUCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



EUCOM Service Members, Influenza Positive Specimens Reported to AFHSB



EUCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



| 2016-2017 EUCOM Season Totals <sup>1,4,5</sup> |        |        |           |             |    |                    |
|--|--------|--------|-----------|-------------|----|--------------------|
|  | A/H1N1 | A/H3N2 | A/Untyped | Influenza B | AB | Overall % Positive |
| Service Members                                | 0      | 0      | 0         | 0           | 0  | 0.0                |
| Dependents                                     | 0      | 0      | 1         | 0           | 0  | 1.39               |

<sup>1</sup>AFHSB, <sup>2</sup>USAFSAM, <sup>3</sup>NHRC, <sup>4</sup>LRMC, <sup>5</sup>PHCR-E, <sup>6</sup>AFRIMS, <sup>7</sup>NMRC-A, <sup>8</sup>USAMRU-K, <sup>9</sup>NAMRU-3, <sup>10</sup>NAMRU-6

For inquiries or comments please contact [dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil](mailto:dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil)



### Pacific Command -- Week 43

In PACOM during week 43<sup>1,6,7</sup>

- ◆ Influenza activity was minimal throughout PACOM
- ◆ The percentage of outpatient visits due to ILI was below baseline and similar to previous seasons.
- ◆ The percentage of positive lab tests dropped to 6.67% among beneficiaries. There were no reported positive lab tests for service members.

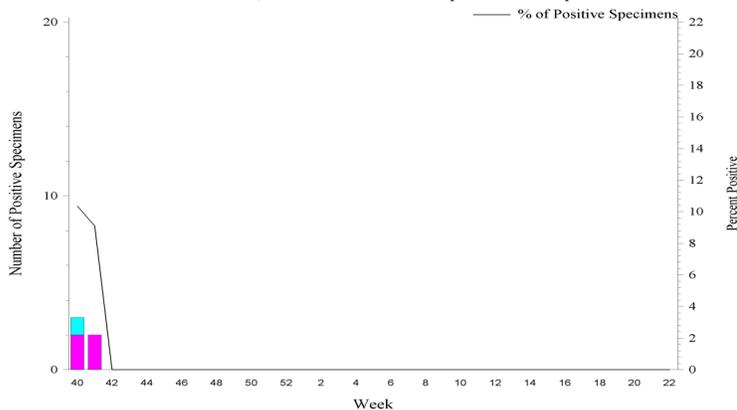
PACOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks South Korea and Japan



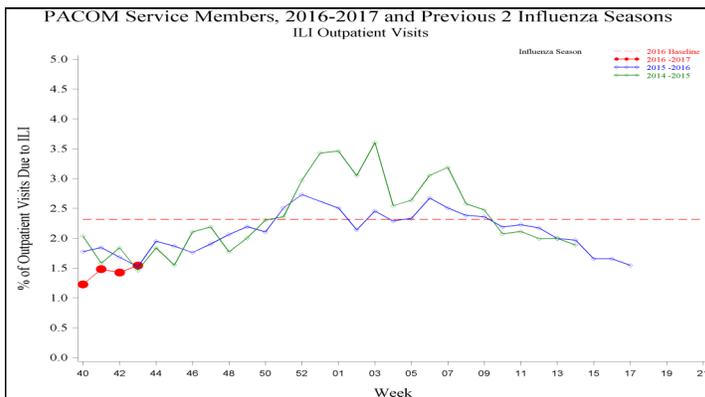
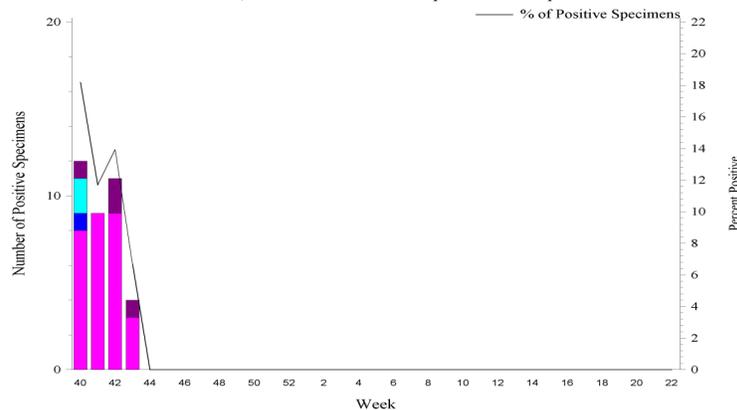
| PACOM: Guam and Hawaii Influenza Activity and HL7 Test Positive (MAP: SM+BN, 2 wks) |                    |          |       |           |   |    |
|---|--------------------|----------|-------|-----------|---|----|
| Area Name   | Influenza Activity | HL7 Type |       |           |   |    |
|   |                    | A(H1)    | A(H3) | A Untyped | B | AB |
| Guam  | Minimal            | 0        | 0     | 8         | 1 | 0  |
| Hawaii*   | Minimal            | 0        | 0     | 0         | 1 | 0  |

\*Hawaii HL7 Type counts may include samples received from Guam, but tested in Hawaii

PACOM Service Members, Influenza Positive Specimens Reported to AFHSB



PACOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



| 2016-2017 PACOM Season Totals <sup>1,6,7</sup> |        |        |           |       |        |                    |
|--|--------|--------|-----------|-------|--------|--------------------|
|  | A/H1N1 | A/H3N2 | A/Untyped | Flu B | Flu AB | Overall % Positive |
| Service Members                                | 0      | 1      | 4         | 0     | 0      | 5.68               |
| Dependents                                     | 1      | 2      | 29        | 4     | 0      | 12.77              |

<sup>1</sup>AFHSB, <sup>2</sup>USAFSAM, <sup>3</sup>NHRC, <sup>4</sup>LRMC, <sup>5</sup>PHCR-E, <sup>6</sup>AFRIMS, <sup>7</sup>NMRC-A, <sup>8</sup>USAMRU-K, <sup>9</sup>NAMRU-3, <sup>10</sup>NAMRU-6

For inquiries or comments please contact [dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil](mailto:dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil)

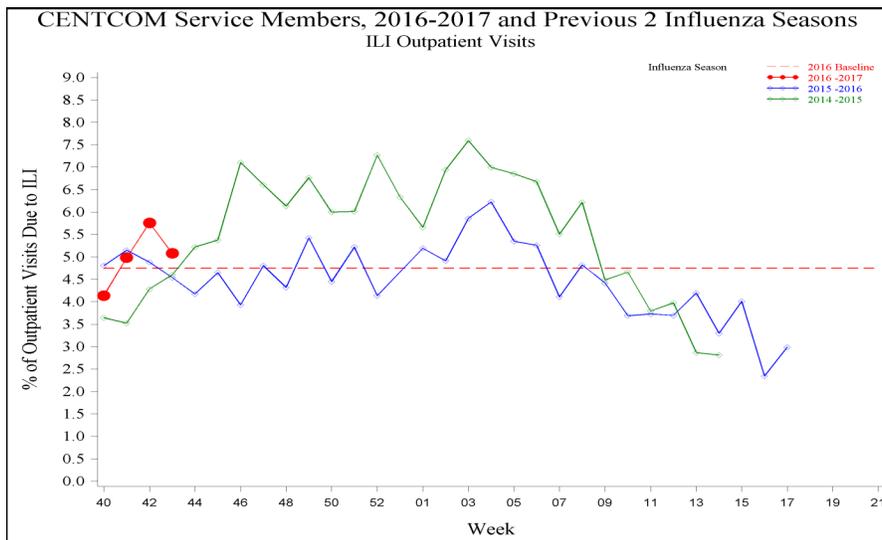
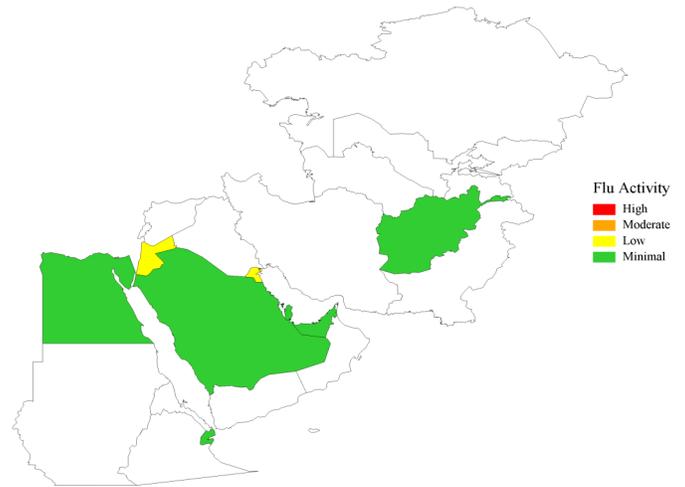


### Central and Africa Commands -- Week 43

In CENTCOM and AFRICOM during week 43<sup>1,8,9</sup>

- ◆ Influenza activity was minimal to low throughout CENTCOM.
- ◆ The percentage of outpatient visits due to ILI was above baseline and previous seasons, but dropped from last week.

CENTCOM, Influenza Activity, During the Last 2 Weeks



### Southern Command -- Week 43

In SOUTHCOM during week 43<sup>10</sup>

- ◆ There were no ILI encounters in Honduras this week based on DMSS data.

<sup>1</sup>AFHSB, <sup>2</sup>USAFSAM, <sup>3</sup>NHRC, <sup>4</sup>LRMC, <sup>5</sup>PHCR-E, <sup>6</sup>AFRIMS, <sup>7</sup>NMRC-A, <sup>8</sup>USAMRU-K, <sup>9</sup>NAMRU-3, <sup>10</sup>NAMRU-6

For inquiries or comments please contact [dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil](mailto:dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil)

## **Description:**

Maps, figures and tables are stratified by Combatant Commands (CCMD). The map provides a measure of influenza activity by state or country within each CCMD for the past two weeks for service members. Influenza activity is defined by the percentage of outpatient visits associated with an Influenza-like Illness (ILI) for each week compared to baseline levels of influenza activity. Additionally, a pie graph by US region or country is generated to display the distribution of influenza types and subtype identified from positive laboratory tests for the past two weeks combined.

## **Influenza activity: Percentage of Outpatient Visits Associated with ILI:**

The percentage of all outpatient visits for ILI is calculated each week for all service members, regardless of component. These data are presented as a map of the past two weeks' activity and a figure to display the entire season's data compared to the two prior seasons and baseline. For the map, the activity level compares the mean reported percent of visits due to ILI for the past two weeks to the mean reported percent of visits due to ILI during baseline weeks. Baseline weeks are defined as non-influenza weeks (weeks 22-39) over the past 3 years.

There are four activity levels reported on each map. The activity level corresponds to the number of standard deviations (SD) below, at or above the mean for the current week compared to the mean of the baseline weeks. Activity levels are classified as minimal, low, moderate, and high. Minimal activity corresponds to an influenza percentage that is less than 2 SD above the mean. Low activity corresponds to an influenza percentage that is equal to or greater than 2 SD above the mean, but less than 4 SD above the mean. Moderate activity corresponds to an influenza percentage that is equal to or greater than 4 SD above the mean, but less than 6 SD above the mean. High activity corresponds to an influenza percentage that is equal to or greater than 6 SD above the mean.

## **Influenza Positive Specimens:**

Lab results from PCR, viral culture, and rapid influenza assays are reported. Although the inclusion of rapid tests may underestimate the weekly and cumulative percent positive estimates due to false negatives, visibility of the positive rapid results provides valuable information for this surveillance report. Influenza types/subtypes are categorized as influenza A not subtyped (A subtype na), influenza A/H1 (A H1), influenza A/H3 (A H3), influenza A and B co-infection (A B), and influenza B (B).

Map: Each US region or country with available data contains a pie chart that displays the distribution of influenza types and subtypes for that area for the past two weeks combined. Two weeks of data are combined instead of using just the current week's data due to delays in reporting of laboratory results.

Figure and Table: Each week, using the total number of influenza laboratory tests performed and the positive test results, the proportions positive for each serotype of influenza are calculated for service members and dependents separately.

## **Data Sources and Case Definitions:**

Medical encounter and demographic data from the Armed Forces Health Surveillance Branch's (AFHSB) Defense Medical Surveillance System (DMSS) are used to generate this report. In addition, health-level 7 (HL-7) format laboratory data is provided by the Navy and Marine Corps Public Health Center (NMCPHC) EpiData Center Division. For the past seasons and baseline calculations, ICD-9 codes from outpatient encounters are used to identify influenza activity. The outcome of influenza activity based on ICD-9 codes is defined using the combined codes for ILI (79.99, 382.9, 460, 461.9, 465.8, 465.9, 466.0, 486, 487.0, 487.1, 487.8, 488, 490, 780.6, or 786.2). For the current season, ICD-10 codes from outpatient encounters are used to identify influenza activity. The outcome of influenza activity based on ICD-10 codes is defined using the combined codes for ILI (B97.89, H66.9, H66.90, H66.91, H66.92, H66.93, J00, J01.9, J01.90, J06.9, J09, J09.X, J09.X1, J09.X2, J09.X3, J09.X9, J10, J10.0, J10.00, J10.01, J10.08, J10.1, J10.2, J10.8, J10.81, J10.82, J10.83, J10.89, J11, J11.0, J11.00, J11.08, J11.1, J11.2, J11.8, J11.81, J11.82, J11.83, J11.89, J12.89, J12.9, J18, J18.1, J18.8, J18.9, J20.9, J40, R05, R50.9). An individual can only be counted as a case once per week.

## **NORTHCOM Regions:**

The regions on the NORTHCOM map (bold, black outlines) are defined using the four US Census regions, with the exception of Hawaii and Guam which are a part of PACOM. *Northeast:* Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, Pennsylvania, Puerto Rico, and the U.S. Virgin Islands. *South:* Delaware, the District of Columbia, Maryland, Virginia, West Virginia, Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Arkansas, Louisiana, Texas., and Oklahoma. *Midwest:* Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota. *West:* New Mexico, Colorado, Montana, Utah, Wyoming, Arizona, California, Nevada, Alaska, Idaho, Oregon, and Washington.

**(All data are preliminary and subject to change as updated data is received)**

[<sup>1</sup>AFHSB](#), [<sup>2</sup>USAFSAM](#), [<sup>3</sup>NHRC](#), [<sup>4</sup>LRMC](#), [<sup>5</sup>PHCR-E](#), [<sup>6</sup>AFRIMS](#), [<sup>7</sup>NMRC-A](#), [<sup>8</sup>USAMRU-K](#), [<sup>9</sup>NAMRU-3](#), [<sup>10</sup>NAMRU-6](#)

For inquiries or comments please contact [dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil](mailto:dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil)