



# DEPARTMENT OF DEFENSE (AFHSB) Seasonal Influenza Surveillance Summary

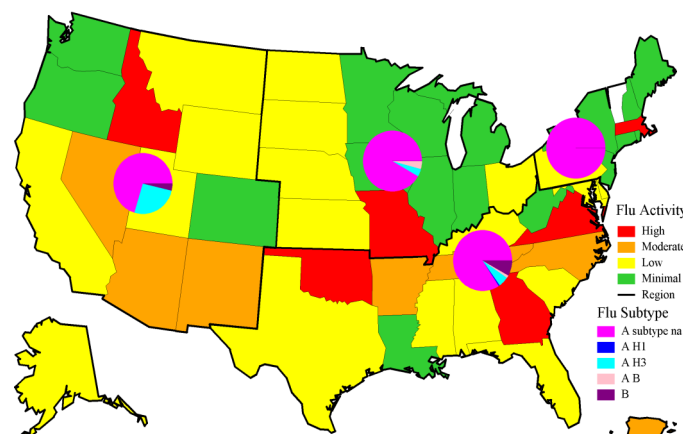


Northern Command -- Week 50 (10 Dec 2017—16 Dec 2017)

In NORTHCOM during week 50

- ◆ Influenza activity increased from last week with the majority of states experiencing low to high activity.
- ◆ The percentage of outpatient visits due to ILI increased and remained above baseline and previous seasons.
- ◆ The percentage of positive lab tests increased to 16.8% for service members and nearly doubled to 24.2% for other beneficiaries for week 50.
- ◆ Among influenza A specimens that were subtyped, the majority continued to be A/H3N2.
- ◆ One influenza hospitalization (RMEs) among a beneficiary was reported during week 50.

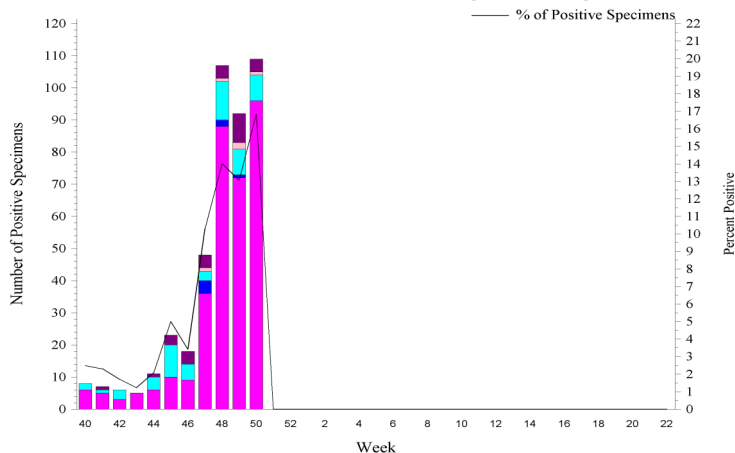
NORTHCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



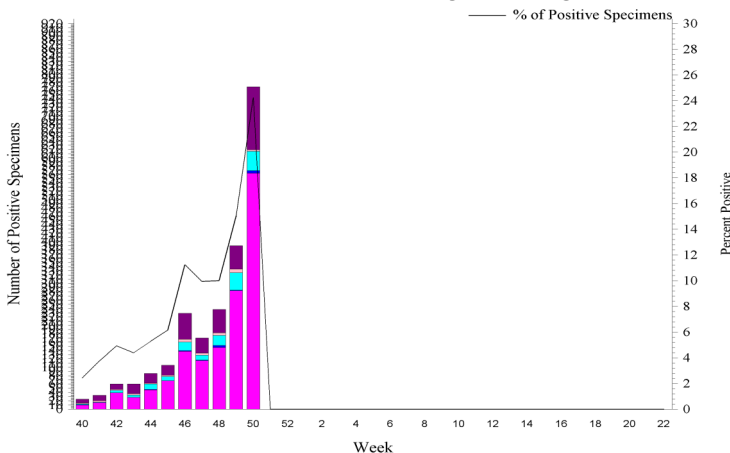
2017 – 2018 NORTHCOM Season Totals

|                 | A/H1N1 | A/H3N2 | A/Untyped | Flu B | AB | Overall % Positive |
|-----------------|--------|--------|-----------|-------|----|--------------------|
| Service Members | 7      | 56     | 336       | 30    | 5  | 7.91               |
| Dependents      | 17     | 182    | 1454      | 465   | 45 | 11.01              |

NORTHCOM Service Members, Influenza Positive Specimens Reported to AFHSB

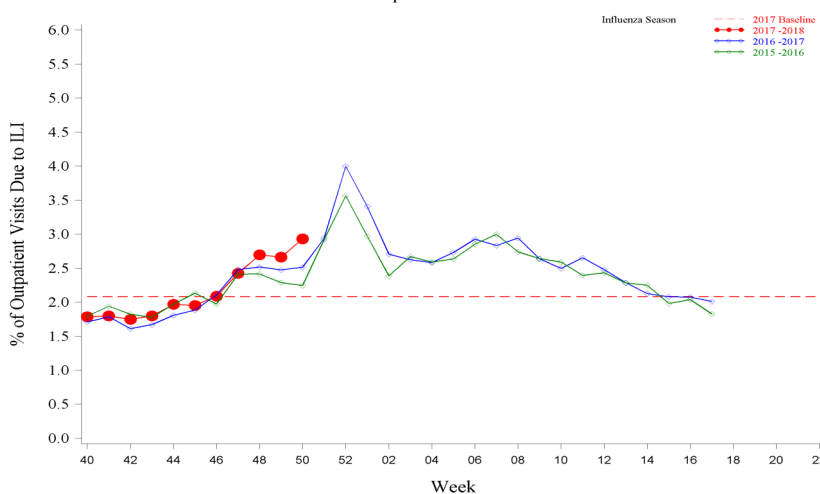


NORTHCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



Disclaimer: Medical data from Military Treatment Facilities that are using MHS GENESIS are not available in DMSS. This includes Naval Hospital Oak Harbor, Naval Hospital Bremerton, Air Force Medical Services Fairchild, and Madigan Army Medical Center. Therefore, individuals who are expected to seek care at one of these facilities are currently being removed from the study population as we will not capture their medical encounters.

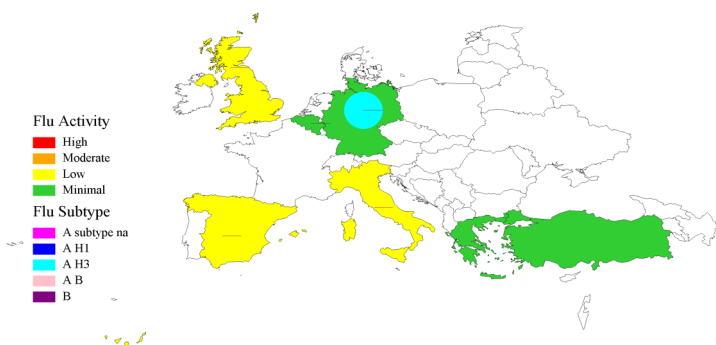
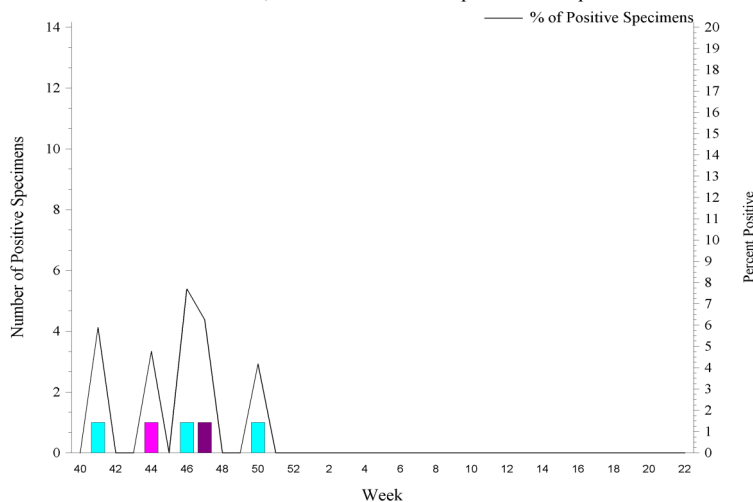
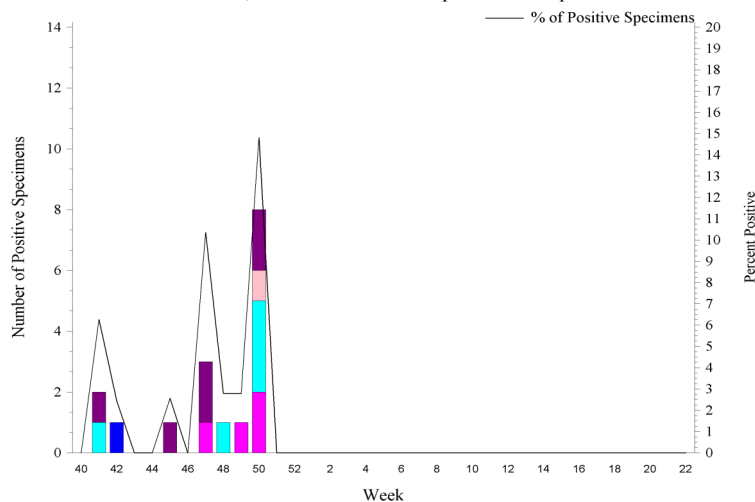
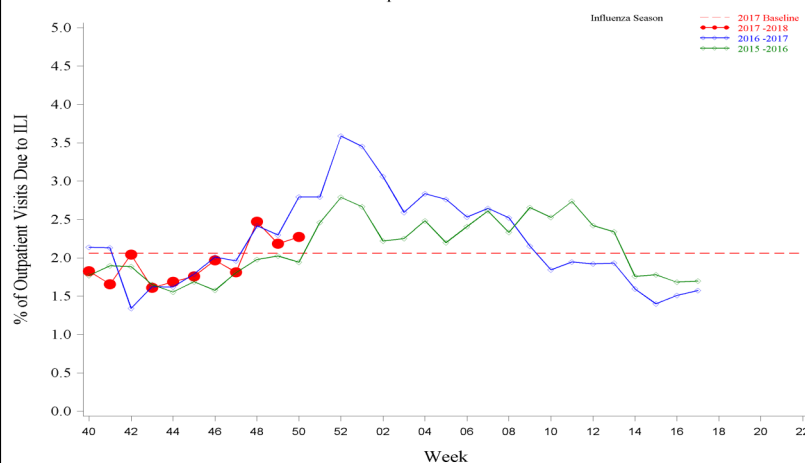
NORTHCOM Service Members, 2017-2018 and Previous 2 Influenza Seasons ILI Outpatient Visits



For inquiries or comments please contact [dha.ncr.health-surv.mbx.afhs-commcenter@mail.mil](mailto:dha.ncr.health-surv.mbx.afhs-commcenter@mail.mil)

**European Command -- Week 50****In EUCOM during week 50**

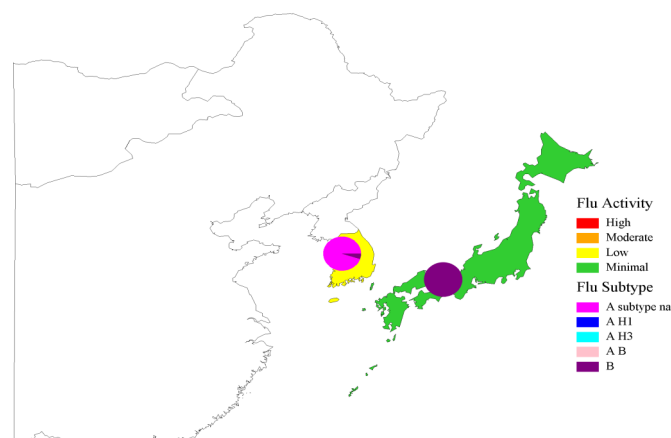
- ◆ Influenza activity in EUCOM remained stable from last week with minimal to low activity.
- ◆ The percentage of outpatient visits due to ILI increased slightly during week 50 and remained above baseline and similar to previous seasons.
- ◆ The percentage of positive lab tests increased to 4.2% for service members and 14.8% for other beneficiaries.
- ◆ No influenza hospitalizations (RMEs) have been reported this season for 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****EUCOM Service Members, 2017-2018 and Previous 2 Influenza Seasons  
ILI Outpatient Visits****2017-2018 EUCOM Season Totals**

|                 | A/H1N1 | A/H3N2 | A/Untyped | Influenza B | AB | Overall % Positive |
|-----------------|--------|--------|-----------|-------------|----|--------------------|
| Service Members | 0      | 3      | 1         | 1           | 0  | 2.58               |
| Dependents      | 1      | 2      | 2         | 4           | 0  | 4.52               |

**Pacific Command -- Week 50****In PACOM during week 50**

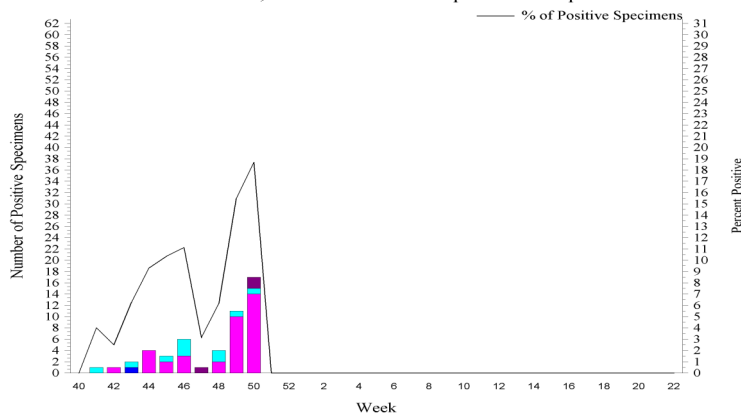
- ◆ Influenza activity remained minimal in Guam and Japan and low in Hawaii and the Republic of Korea.
- ◆ The percentage of outpatient visits due to ILI decreased and remained below baseline and previous seasons.
- ◆ The percentage of positive lab tests continued to increase and was 18.7% for service members and 23.5% for other beneficiaries.
- ◆ Among influenza A specimens that were subtyped, the majority continued to be A/H3N2.
- ◆ No influenza hospitalization (RMEs) were report in PACOM during week 50.

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

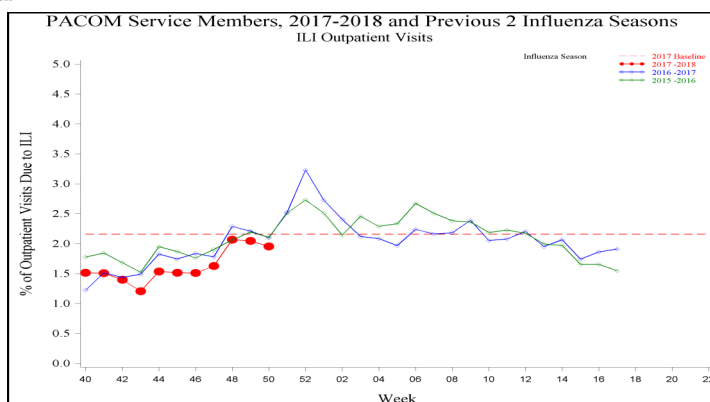
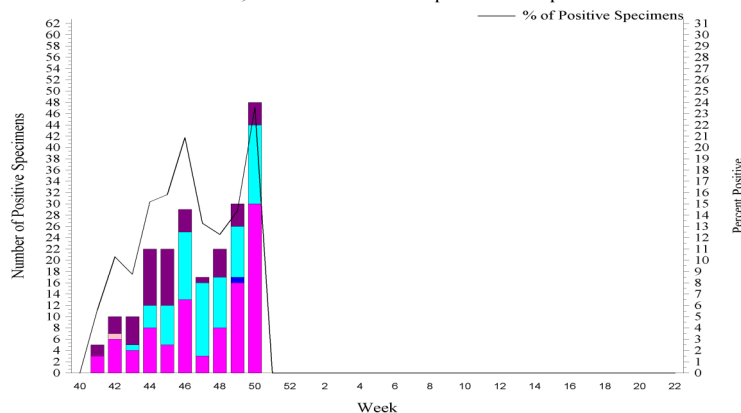
| PACOM: Guam and Hawaii Influenza Activity and HL7 Test Positive (MAP: SM+BN, 2 wks) |                    |          |       |           |   |    |
|---|--------------------|----------|-------|-----------|---|----|
| Area Name   | Influenza Activity | HL7 Type |       |           |   |    |
|   |                    | A(H1)    | A(H3) | A Untyped | B | AB |
| <b>Guam</b>   | Minimal            | 0        | 0     | 0         | 0 | 0  |
| <b>Hawaii*</b>  | Low                | 1        | 25    | 38        | 6 | 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

**2017-2018 PACOM Season Totals**

|                 | A/H1N1 | A/H3N2 | A/Untyped | Flu B | Flu AB | Overall % Positive |
|-----------------|--------|--------|-----------|-------|--------|--------------------|
| Service Members | 1      | 10     | 36        | 3     | 0      | 9.75               |
| Dependents      | 1      | 69     | 96        | 48    | 1      | 14.15              |



## Central Command -- Week 50

In CENTCOM during week 50

- ◆ Complete TMDS data for week 48-50 is currently not available. Therefore, the CENTCOM map and figure are not presented as the data will be inaccurate.

## Southern Command -- Week 50

In SOUTHCOM during week 50

- ◆ Complete TMDS data for week 48-50 is currently not available. Therefore, SOUTHCOM data is incomplete and will not be provided.

## 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)**