



DEPARTMENT OF DEFENSE (AFHSB) Seasonal Influenza Surveillance Summary

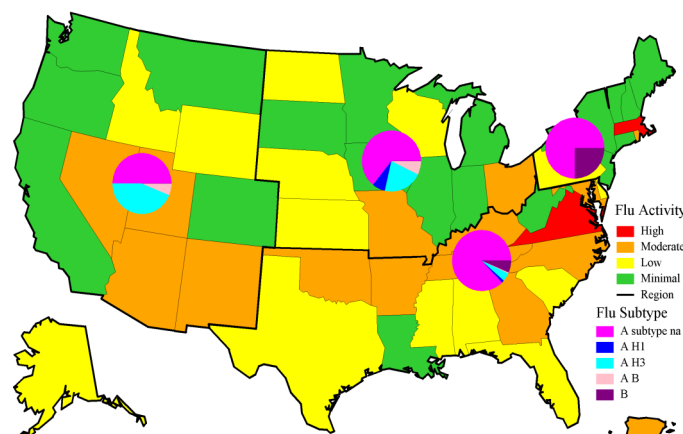


Northern Command -- Week 49 (03 Dec 2017—09 Dec 2017)

In NORTHCOM during week 49

- ◆ Influenza activity was similar to last week and ranged from minimal to high, depending on the state.
- ◆ The percentage of outpatient visits due to ILI remained stable and higher than baseline and previous seasons.
- ◆ The percentage of positive lab tests decreased to 12.8% for service members and increased to 14.5% for other beneficiaries for week 49.
- ◆ Among influenza A specimens that were subtyped, the majority continued to be A/H3N2.
- ◆ No influenza hospitalizations (RMEs) were reported during week 49.

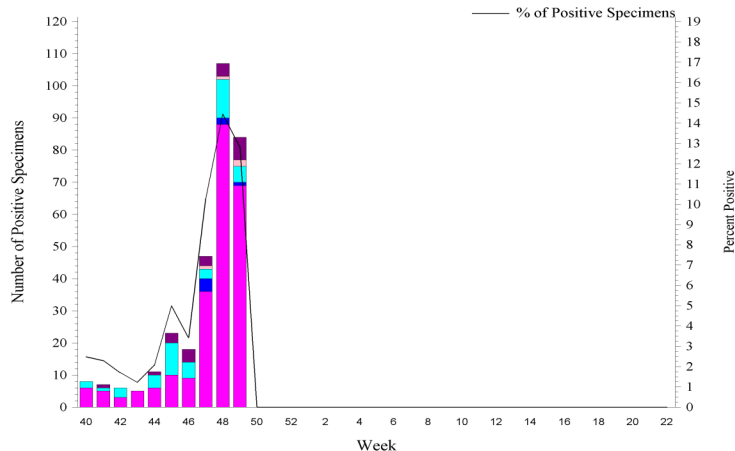
NORTHCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



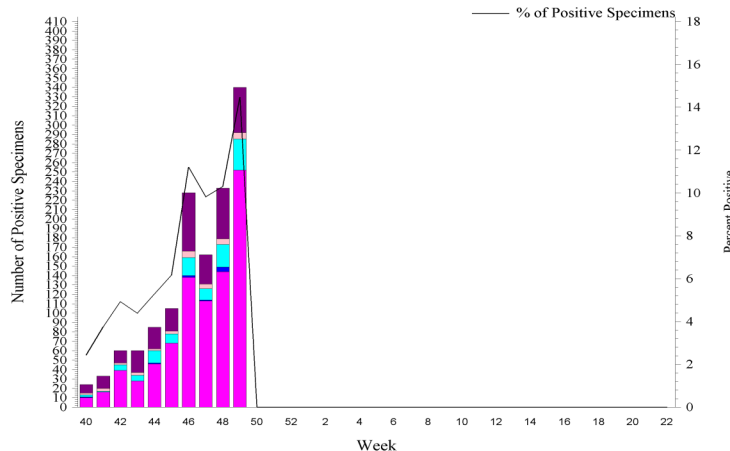
2017 – 2018 NORTHCOM Season Totals

	A/H1N1	A/H3N2	A/Untyped	Flu B	AB	Overall % Positive
Service Members	7	45	237	23	4	6.64
Dependents	10	126	854	300	40	8.29

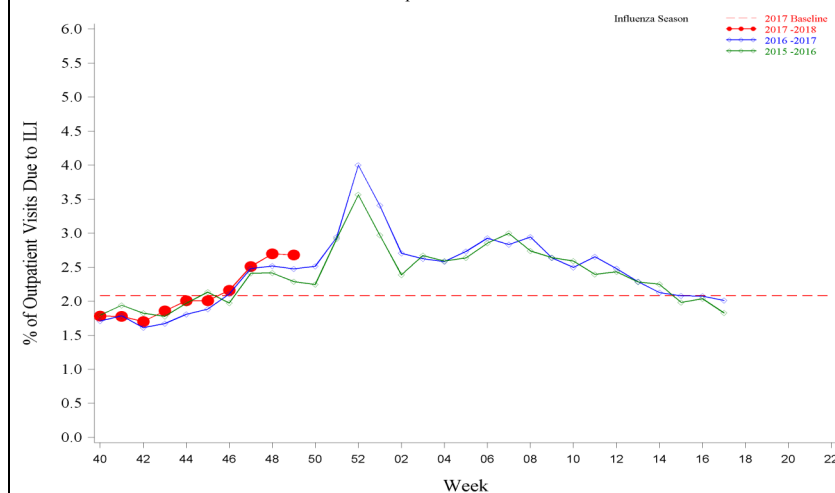
NORTHCOM Service Members, Influenza Positive Specimens Reported to AFHSB



NORTHCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



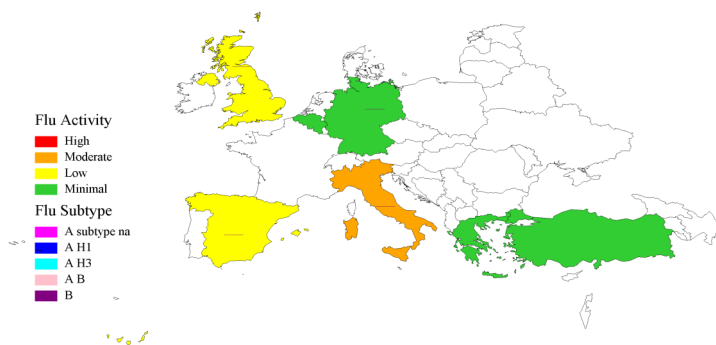
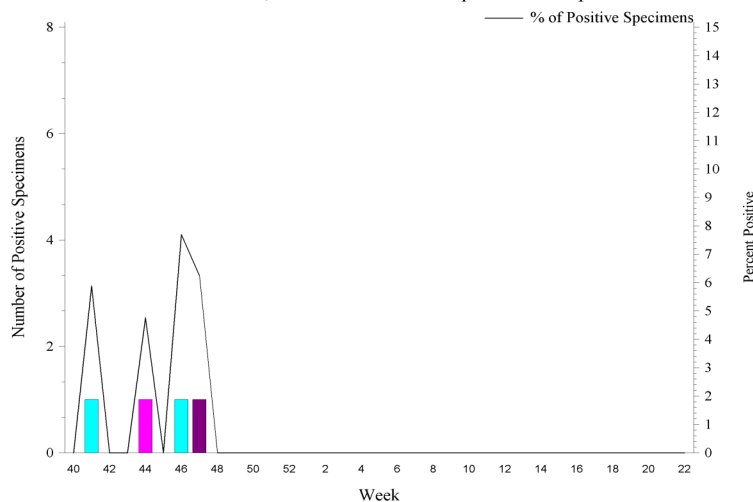
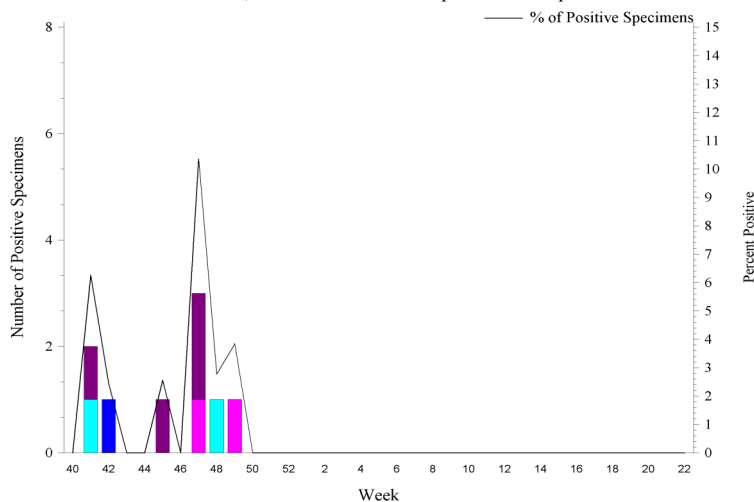
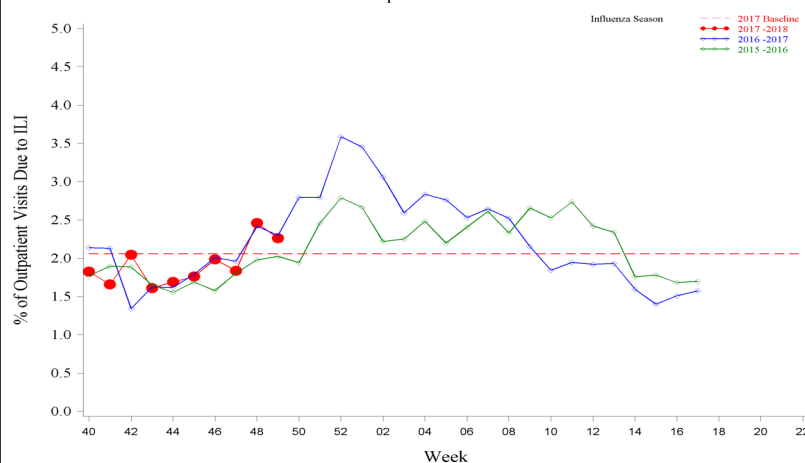
NORTHCOM Service Members, 2017-2018 and Previous 2 Influenza Seasons
ILI Outpatient Visits



For inquiries or comments please contact dha.ncr.health-surv.mbx.afhs-commcenter@mail.mil

**European Command -- Week 49****In EUCOM during week 49**

- ◆ Influenza activity increased to moderate in Italy, but remained minimal to low for the rest of EUCOM.
- ◆ The percentage of outpatient visits due to ILI decreased during week 49, but remained above baseline and similar to previous seasons.
- ◆ The number of specimens tested for influenza continued to be small for EUCOM. Of those tested during week 49, the percentage of positive lab tests was 3.9% for other beneficiaries.
- ◆ No influenza hospitalizations (RMEs) have been reported this season for EUCOM.

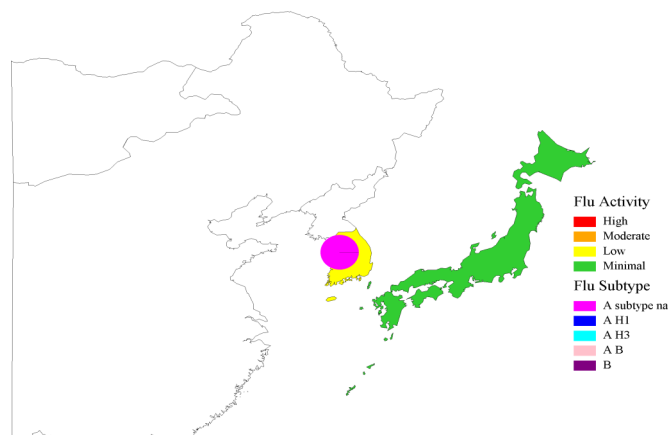
EUCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks**EUCOM Service Members, Influenza Positive Specimens Reported to AFHSB****EUCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB****EUCOM Service Members, 2017-2018 and Previous 2 Influenza Seasons
ILI Outpatient Visits****2017-2018 EUCOM Season Totals**

	A/H1N1	A/H3N2	A/Untyped	Influenza B	AB	Overall % Positive
Service Members	0	2	1	1	0	2.42
Dependents	1	2	2	4	0	2.88

**Pacific Command -- Week 49****In PACOM during week 49**

- ◆ Influenza activity remained minimal in Guam and Japan, however Hawaii and the Republic of Korea had low activity.
- ◆ The percentage of outpatient visits due to ILI remained stable and below baseline and previous seasons.
- ◆ The percentage of positive lab tests increased for week 49 to 14.7% for service members and 13.8% 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 49.

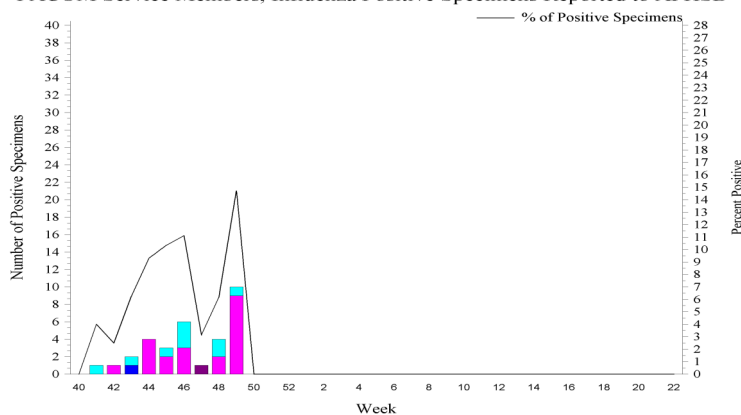
PACOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks South Korea and Japan



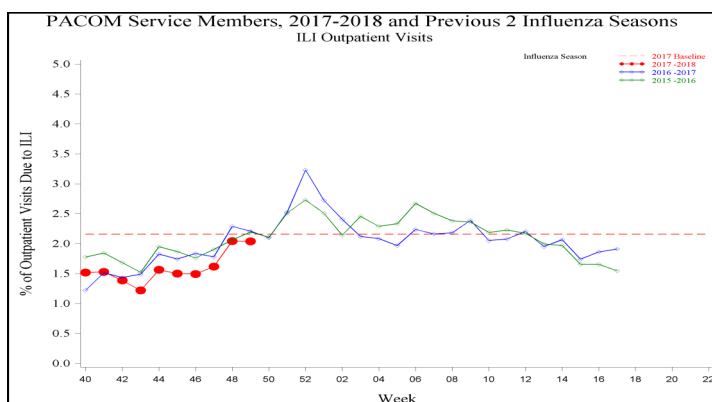
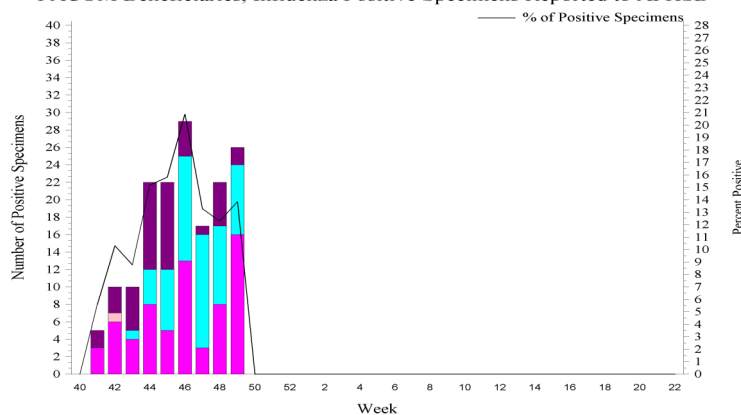
PACOM: Guam and Hawaii Influenza Activity and HL7 Test Positive (MAP: SM+BN, 2 wks)						
Area Name	Influenza Activity	HL7 Type				
		A(H1)	A(H3)	A Untyped	B	AB
Guam	Minimal	0	0	0	0	0
Hawaii*	Low	0	24	7	5	0

*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	9	21	1	0	7.64
Dependents	0	54	66	42	1	12.60



Central Command -- Week 49

In CENTCOM during week 49

- ◆ Complete TMDS data for week 48 and 49 is currently not available. Therefore, the CENTCOM map and figure are not presented as the data will be inaccurate.

Southern Command -- Week 49

In SOUTHCOM during week 49

- ◆ Complete TMDS data for week 48 and 49 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)