DEPARTMENT OF DEFENSE (AFHSB)
## Seasonal Influenza Surveillance Summary
Northern Command -- Week 52 (23 December— 29 December 2018)

In NORTHCOM during week 52

♦ Influenza activity remained similar to last week with activity ranging from minimal to high, depending on the state. However, Massachusetts, Florida, and Texas all had high activity.

♦ The percentage of outpatient visits due to ILI increased substantially this week, but remained similar to previous seasons and above baseline.

♦ The percentage of positive lab tests doubled to 14.9% for service members and increased to 15.3% for other beneficiaries for week 52.

♦ Among typed influenza A specimens, influenza A/H1N1 continued to predominate.

♦ No influenza hospitalizations (RMEs) were reported for week 52. (Season totals: 0 Service members and 21 other beneficiar-
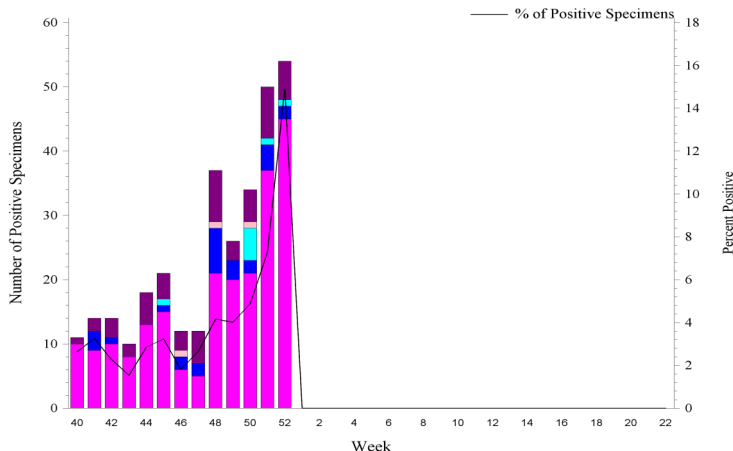
NORTHCOM Service Members, Influenza Activity and Virus Subtype,During the Last 2 Weeks
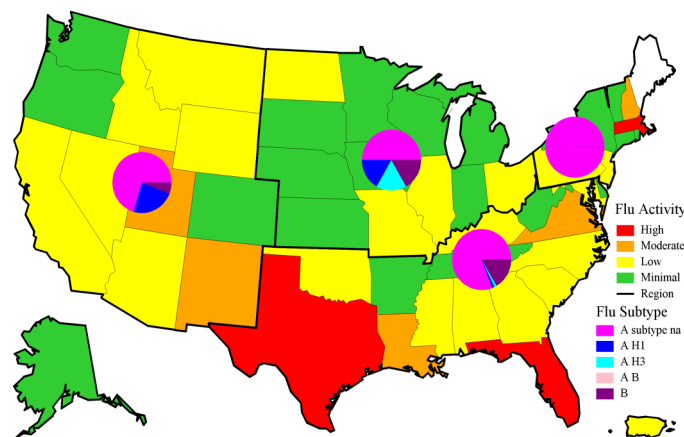
2018 – 2019 NORTHCOM Season Totals						
	A/H1N1	A/H3N2	A/Untyped	Flu B	AB	Overall % Positive
Service Members	27	8	220	55	3	4.02
Dependents	197	58	1246	223	42	6.99

NORTHCOM Service Members, Influenza Positive Specimens Reported to AFHSB
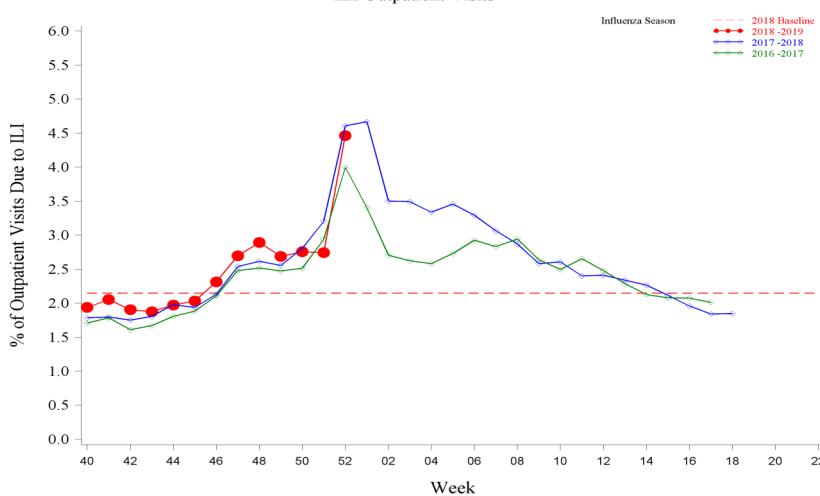

NORTHCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB
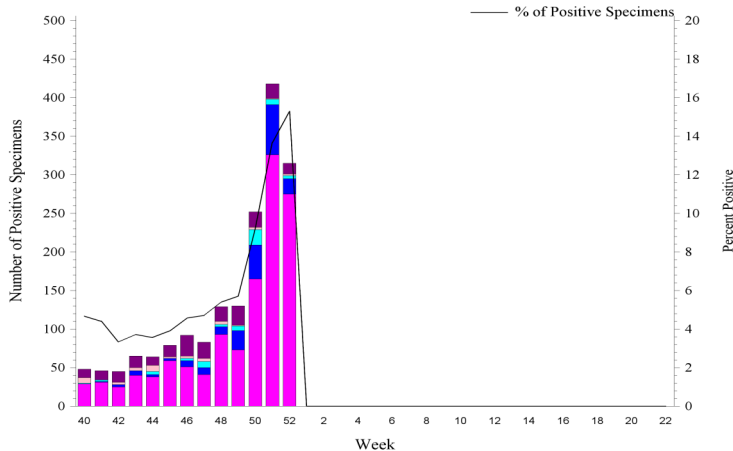
Disclaimer: Medical data from Military Treatment Facilities that are using MHS GENESIS are not available in DMSS. This includes Naval Hospital Oak Harbor, Naval Hospital Bremerton, Air Force Medical Services Fairchild, and Madigan Army Medical Center. Therefore, individuals who are expected to seek care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

NORTHCOM Service Members, 2018-2019 and Previous 2 Influenza Seasons
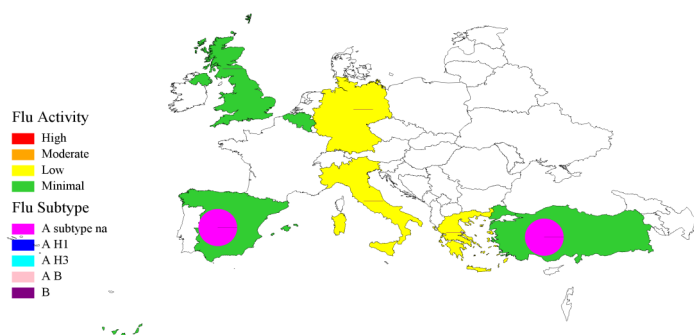ILI Outpatient Visits

Indo-Pacific Command -- Week 52

In PACOM during week 52

♦ Influenza activity remained minimal across PACOM, with the exception of the Republic of Korea, where activity increased to low.

♦ The percentage of outpatient visits due to ILI increased above baseline, but remained below previous seasons.

♦ The percentage of positive lab tests continued to increase to 31.7% for service members and remained high at 19.6% for other beneficiaries during week 52.

♦ One influenza hospitalization (RMEs) among a service member in Guam was reported for week 51 and none were reported for week 52. (Season totals: 2 Service member and 4 other beneficiaries)

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

Flu Activity
- High
- Moderate
- Low
- Minimal

Flu Subtype
- A subtype na
- A H1
- A H3
- A B
- B
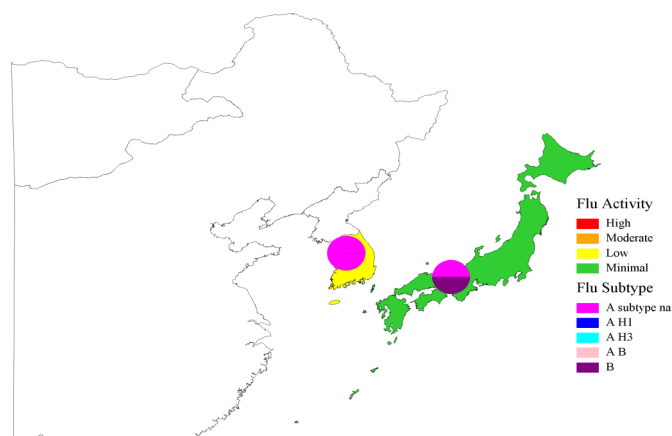
PACOM: Guam and Hawaii Influenza Activity and HL7 Test Positive (MAP: SM+BN, 2 wks)						
Area Name	Influenza Activity	HL7 Type				
		A(H1)	A(H3)	A Untyped	B	AB
Guam	Minimal	0	1	40	2	0
Hawaii*	Minimal	0	1	9	0	0
*Hawaii HL7 Type counts may include samples received from Guam, but tested in Hawaii						

PACOM Service Members, Influenza Positive Specimens Reported to AFHSB

PACOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB

PACOM Service Members, 2018-2019 and Previous 2 Influenza Seasons
ILI Outpatient Visits

Influenza Season
- 2018 Baseline
- 2018 -2019
- 2017-2018
- 2016 -2017
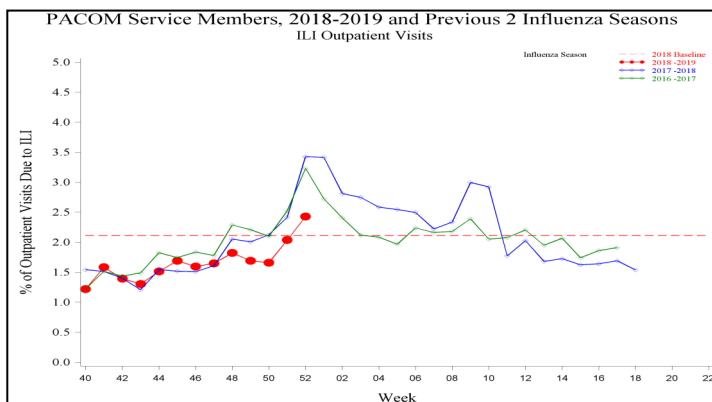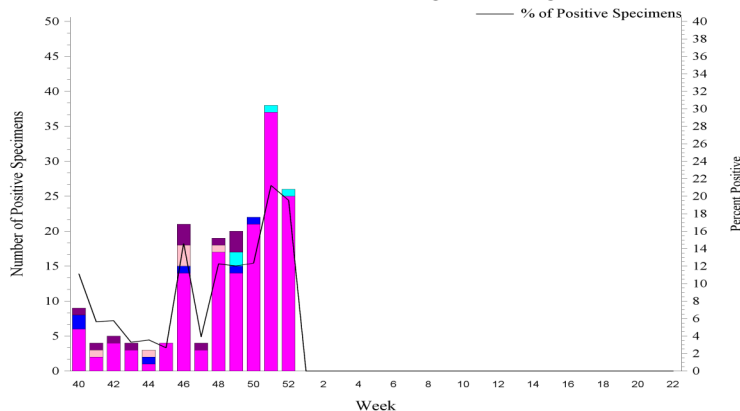
2018-2019 PACOM Season Totals						
	A/H1N1	A/H3N2	A/Untyped	Flu B	Flu AB	Overall % Positive
Service Members	4	3	93	3	0	12.94
Dependents	6	4	151	12	6	10.85

For inquiries or comments please contact dha.ncr.health-surv.list.ib-alert-response@mail.mil

Central and Africa Command -- Week 52
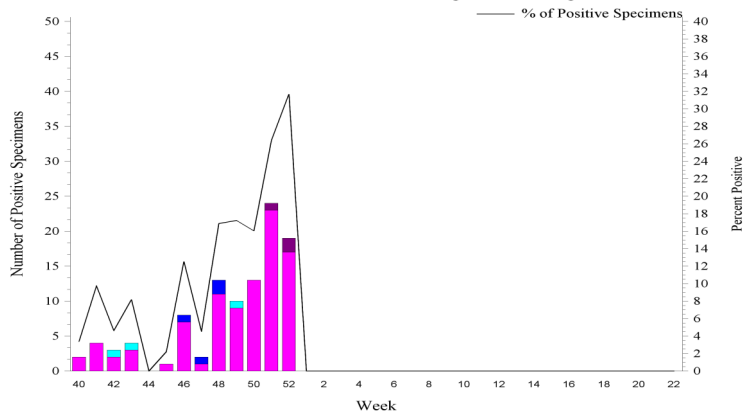
In CENTCOM and AFRICOM during week 52

- ♦ Influenza activity ranged from minimal to moderate in CENTCOM locations with available data.

- ♦ The overall percentage of outpatient visits due to ILI increased slightly and was above baseline and similar to previous seasons.

- ♦ In Afghanistan, influenza activity remained moderate and the percentage of outpatient visits due to ILI increased to 6.9%.

- ♦ In Djibouti, influenza activity remained minimal and the percentage of outpatient visits due to ILI more than doubled to 8.7%.

- ♦ In Kuwait, influenza activity was low and the percentage of outpatient visits due to ILI decreased to 4.0%.

- ♦ No influenza hospitalizations (RMEs) were reported for week 52. (Season totals: 0 Service members)

CENTCOM, Influenza Activity, During the Last 2 Weeks
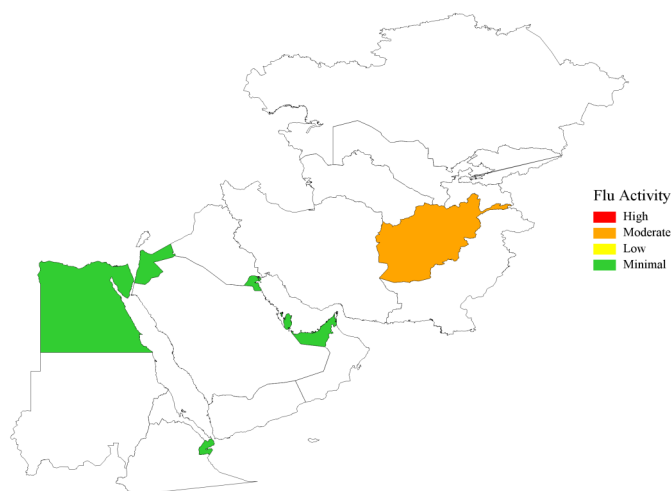
Flu Activity
High
Moderate
Low
Minimal

CENTCOM Service Members, 2018-2019 and Previous 2 Influenza Seasons
ILI Outpatient Visits

Influenza Season
2018 Baseline
2018 -2019
2017 -2018
2016 -2017
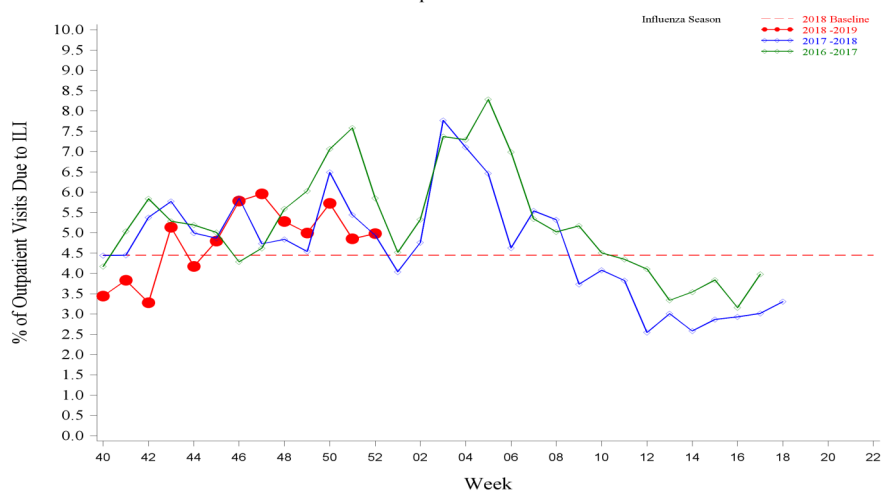
Southern Command -- Week 52

In SOUTHCOM during week 52

- ♦ Influenza activity was minimal in Honduras for week 52. However, the percentage of outpatient visits due to ILI more than doubled to 7.5% for week 52.

- ♦ Influenza activity remained minimal in Cuba for week 52. The percentage of outpatient visits due to ILI decreased to 0.8% for service members, but increased to 2.4% for other beneficiaries.

2018-2019 Cuba Season Totals						
	A/H1N1	A/H3N2	A/Untyped	Flu B	Flu AB	Total Tested
Service Members	0	0	0	0	0	5
Dependents	0	0	0	1	0	8

For inquiries or comments please contact dha.ncr.health-surv.list.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)