



DEPARTMENT OF DEFENSE (AFHSB) Seasonal Influenza Surveillance Summary

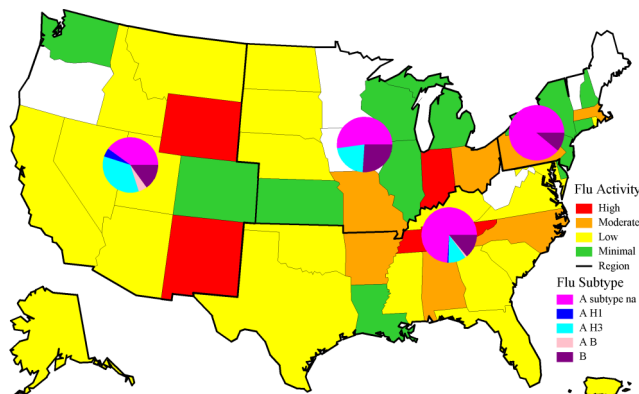


Northern Command -- Week 09 (26 Feb 2017—04 Mar 2017)

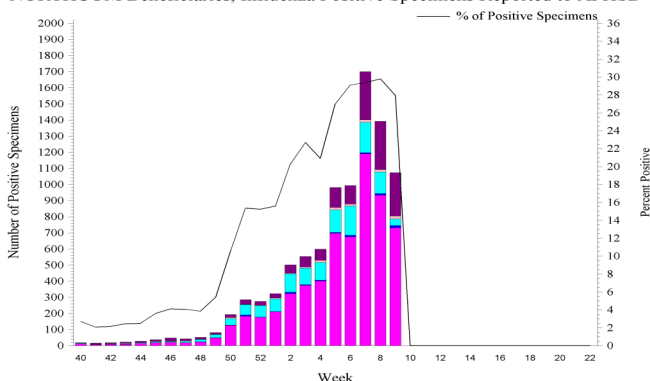
In NORTHCOM during week 09^{1,2}

- ◆ Influenza activity decreased to low to moderate for most of the country.
- ◆ The percentage of outpatient visits due to ILI continued to decrease and dropped below previous seasons, but remained above baseline.
- ◆ The percentage of positive lab tests remained dropped to 15.5% for service members and 28.0% for beneficiaries.
- ◆ A/H3N2 continued to predominate over A/H1N1.
- ◆ One service member and 2 other beneficiary influenza hospitalizations (RMEs) were reported for week 9.

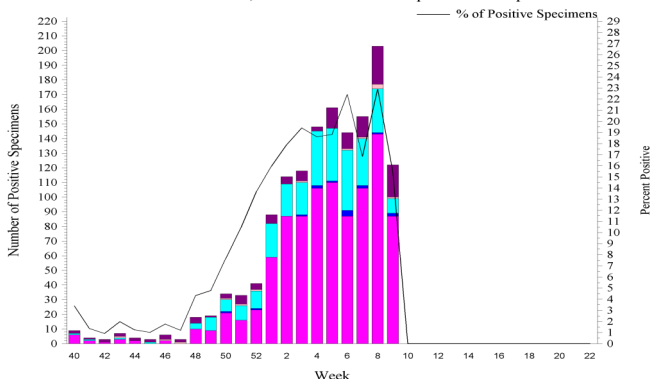
NORTHCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



NORTHCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



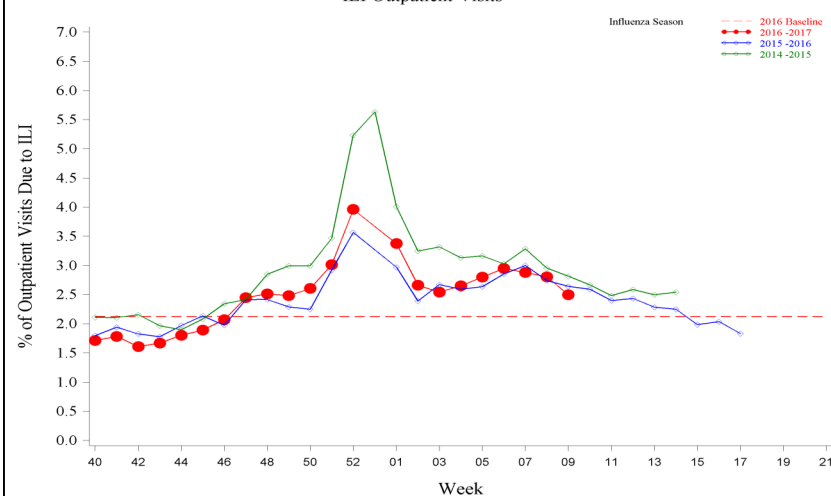
NORTHCOM Service Members, Influenza Positive Specimens Reported to AFHSB



2016 – 2017 NORTHCOM Season Totals^{1,2}

	A/H1N1	A/H3N2	A/Untyped	Flu B	AB	Overall % Positive
Service Members	15	300	967	142	13	13.07
Dependents	85	1325	6198	1492	137	19.58

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 08

	Week 08 ³				2016 – 2017 Recruit Season Totals ³				No. Tested
	A/H1N1	A/H3N2	A/unsubtyped	Flu B	A/H1N1	A/H3N2	A/unsubtyped	Flu B	
Ft Benning		3				9			103
Ft Jackson						9		1	85
Ft Leonard Wood						4			23
NRTC Great Lakes		4				9		2	74
Lackland AFB									14
MCRD Parris Island		2				15			48
MCRD San Diego		5				9	1		131
CGTC Cape May									61
Total	0	14	0	0	0	55	1	3	539

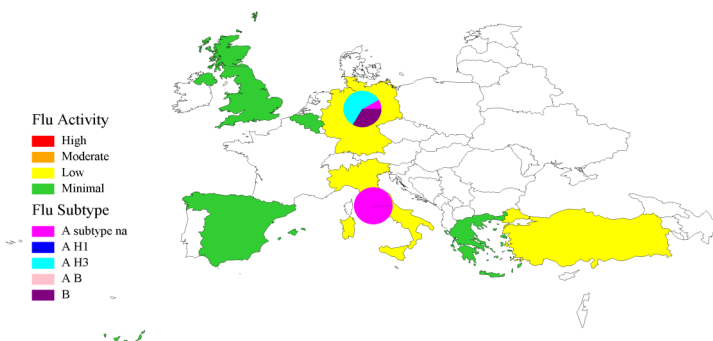
¹AFHSB, ²USAFSAM, ³NHRC, ⁴LRMC, ⁵PHCR-E, ⁶AFRIMS, ⁷NMRC-A, ⁸NAMRU-3, ⁹NAMRU-6

**European Command -- Week 09**

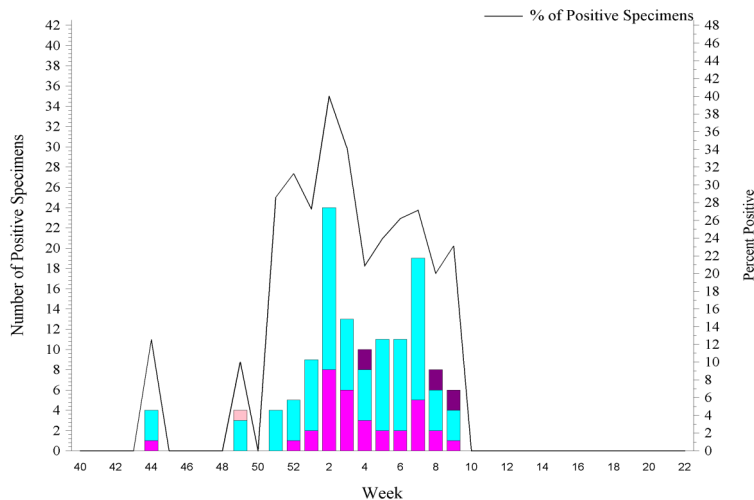
In EUCom during week 09^{4,5}

- ◆ Influenza activity was minimal to low across EUCom.
- ◆ The percentage of outpatient visits due to ILI decreased below previous seasons and was at baseline.
- ◆ The percentage of positive lab tests remained high at 23.1% for service members and 22.2% for beneficiaries for week 09.
- ◆ A/H3N2 continued to predominate over A/H1N1.

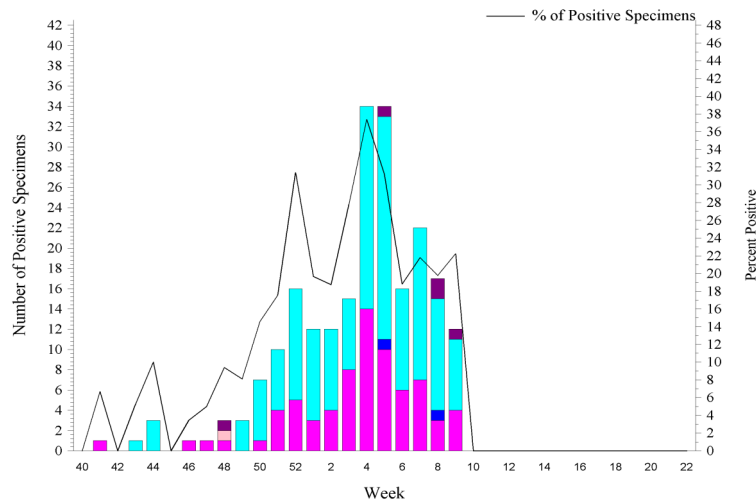
EUCom Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



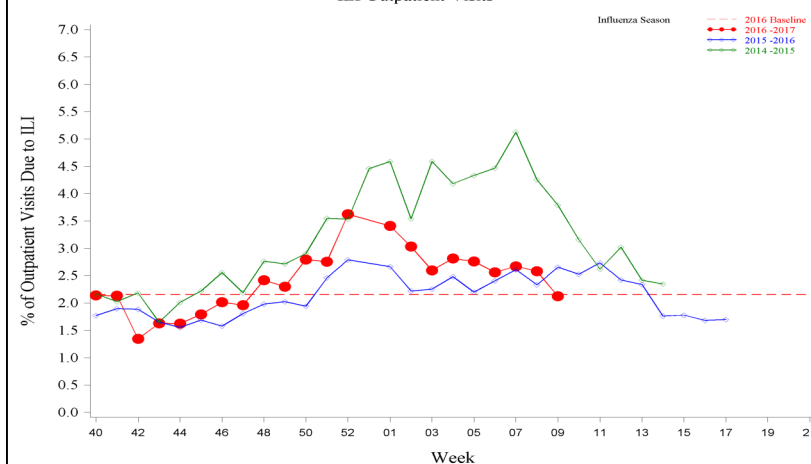
EUCom Service Members, Influenza Positive Specimens Reported to AFHSB



EUCom Beneficiaries, Influenza Positive Specimens Reported to AFHSB



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



2016-2017 EUCom Season Totals^{1,4,5}

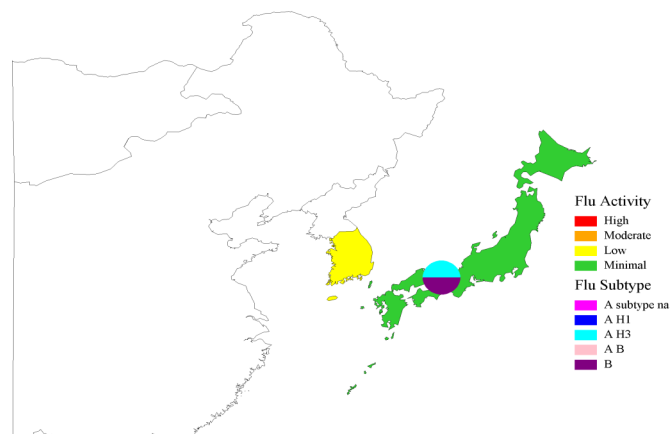
	A/H1N1	A/H3N2	A/Untyped	Influenza B	AB	Overall % Positive
Service Members	0	88	33	6	1	20.00
Dependents	2	139	73	5	1	19.77

¹AFHSB, ²USAFSAM, ³NHRC, ⁴LRMC, ⁵PHCR-E, ⁶AFRIMS, ⁷NMRC-A, ⁸NAMRU-3, ⁹NAMRU-6

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**Pacific Command -- Week 09**In PACOM during week 09^{1,6,7}

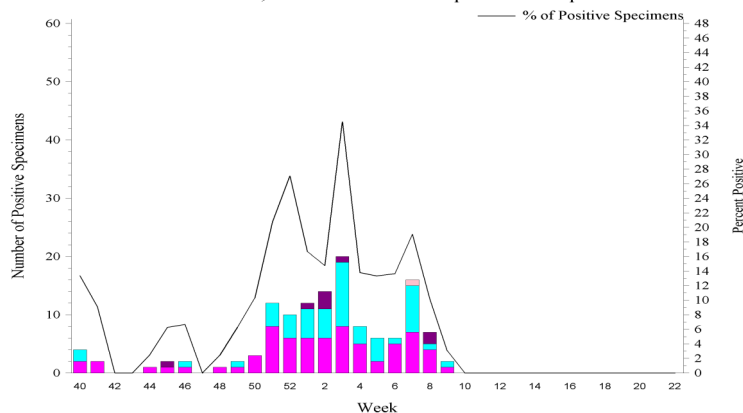
- ◆ Influenza activity remained minimal in Japan and Guam, but low activity was seen for the ROK and Hawaii.
- ◆ The percentage of outpatient visits increased to baseline and was similar to previous seasons.
- ◆ The percentage of positive lab tests decreased to 3.0% for service members, but remained high at 23.1% for other beneficiaries during week 09.
- ◆ Among the influenza A specimens subtyped, A/H3N2 continued to be the predominating subtype.

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)**

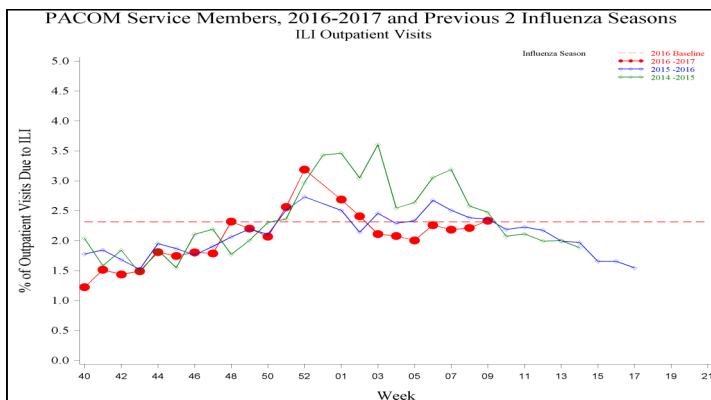
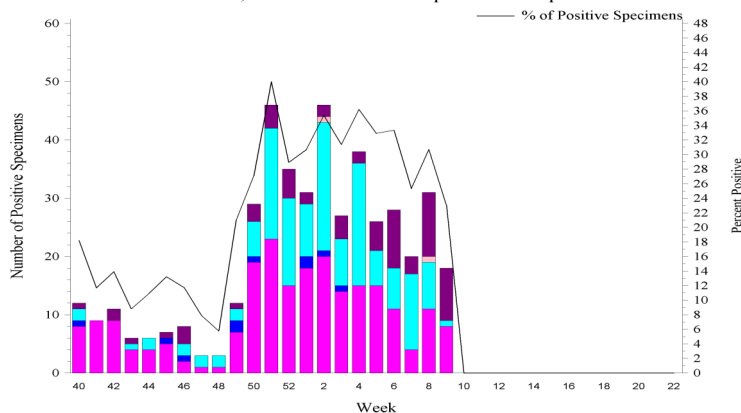
Area Name	Influenza Activity	HL7 Type				
		A(H1)	A(H3)	A Untyped	B	AB
Guam	Minimal	0	0	0	1	0
Hawaii*	Low	0	10	21	19	0

*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^{1,6,7}**

	A/H1N1	A/H3N2	A/Untyped	Flu B	Flu AB	Overall % Positive
Service Members	0	51	70	8	1	12.77
Dependents	10	148	223	69	2	25.13

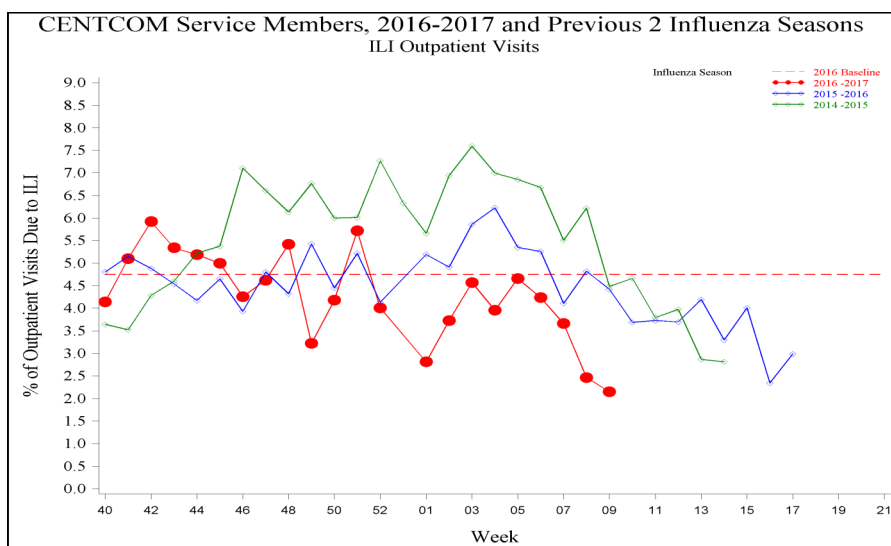
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**Central and Africa Commands -- Week 09**

In CENTCOM and AFRICOM during week 09^{1,8}

- ◆ DMSS continues to have missing TMDS data for weeks 06-09, so caution should be used in interpreting these data.
- ◆ Influenza activity was minimal for locations with available data in CENTCOM.
- ◆ The percentage of outpatient visits due to ILI continued to decreased and was below baseline and previous seasons.

CENTCOM, Influenza Activity, During the Last 2 Weeks

**Southern Command -- Week 09**

In SOUTHCOM during week 09⁹

- ◆ DMSS continues to have missing TMDS data for weeks 06-09, so caution should be used in interpreting these data.
- ◆ Influenza activity was minimal in Honduras this week based on DMSS data.

¹AFHSB, ²USAFSAM, ³NHRC, ⁴LRMC, ⁵PHCR-E, ⁶AFRIMS, ⁷NMRC-A, ⁸NAMRU-3, ⁹NAMRU-6

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)

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