



DEPARTMENT OF DEFENSE (AFHSB) Seasonal Influenza Surveillance Summary

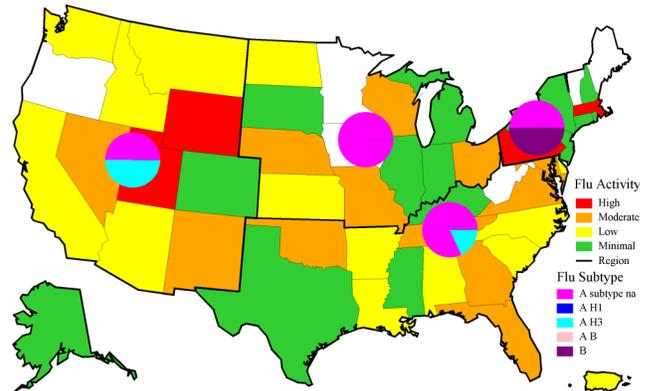


Northern Command -- Week 49 (04 Dec 2016—10 Dec 2016)

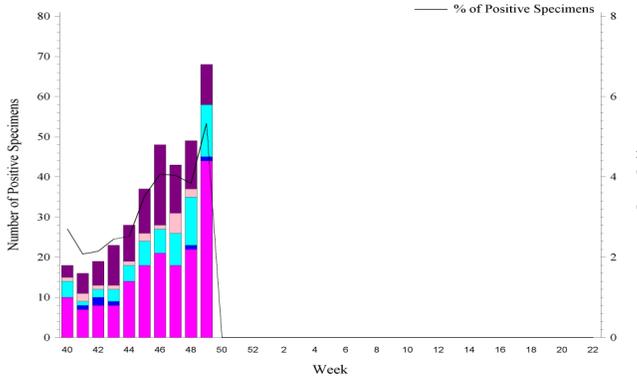
In NORTHCOM during week 49^{1,2}

- ◆ Influenza activity has increased to moderate and high levels in some states.
- ◆ The percentage of outpatient visits due to ILI is above baseline, but remains similar to previous seasons.
- ◆ The percentage of positive lab tests was low at 3.35% for service members and 5.34% for beneficiaries.
- ◆ Among the influenza A specimens subtyped, A/H3N2 is predominating over A/H1N1 this season.
- ◆ There were 3 other beneficiary influenza hospitalization (RME) reported for week 49.

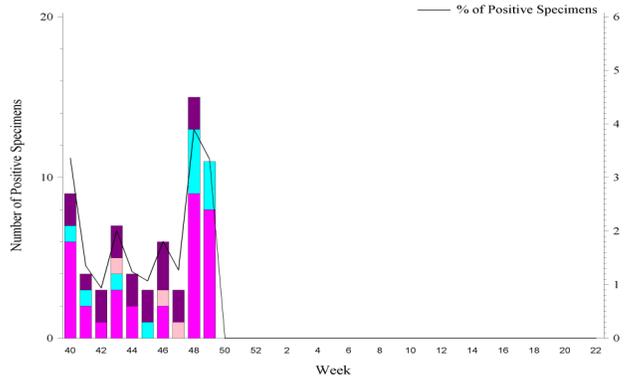
NORTHCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



NORTHCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



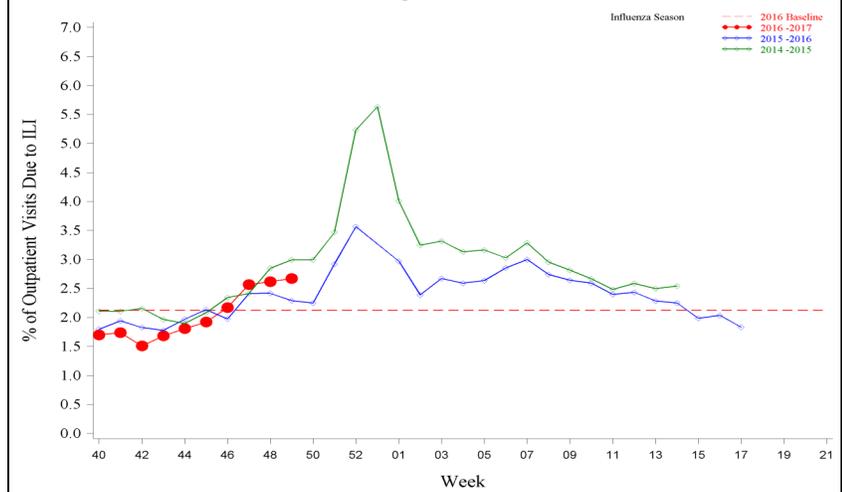
NORTHCOM Service Members, Influenza Positive Specimens Reported to AFHSB



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

	A/H1N1	A/H3N2	A/Untyped	Flu B	AB	Overall % Positive
Service Members	0	11	33	18	3	2.08
Dependents	6	59	170	98	16	3.42

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 48

	Week 42 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									35
Ft Jackson						5			19
Ft Leonard Wood									7
NRTC Great Lakes								1	16
Lackland AFB									4
MCRD Parris Island									5
MCRD San Diego									42
CGTC Cape May									30
Total	0	0	0	0	0	5	0	1	158

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

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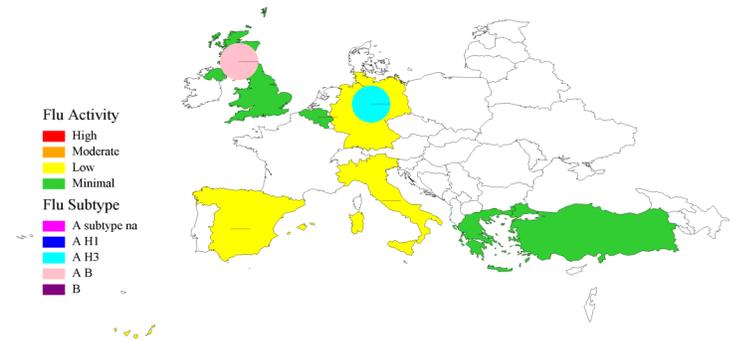


European Command -- Week 49

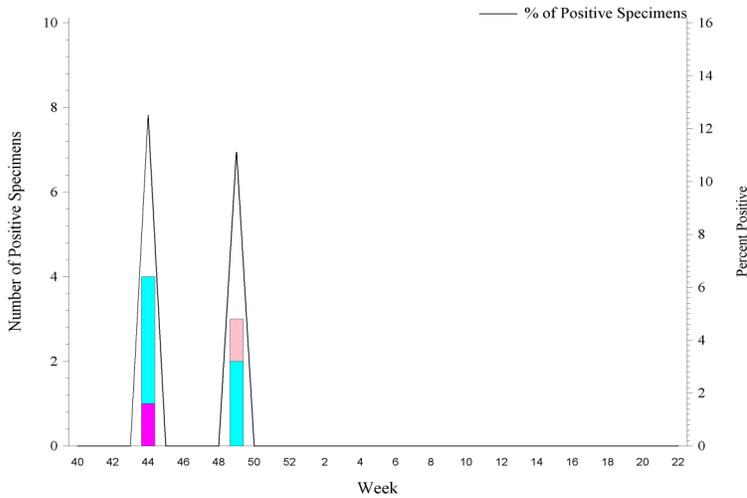
In EUCOM during week 49^{4,5}

- ◆ Influenza activity was minimal to low across EUCOM.
- ◆ The percentage of outpatient visits due to ILI increased above baseline, but was similar to previous seasons.
- ◆ The percentage of positive lab tests was 11.11% for service members and 3.70% for beneficiaries for week 49.
- ◆ Among the influenza A specimens subtyped, only A/H3N2 has been identified.

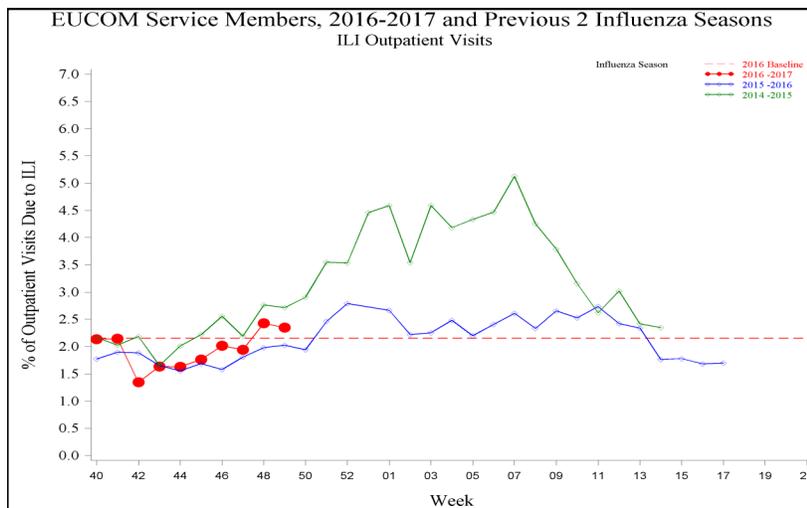
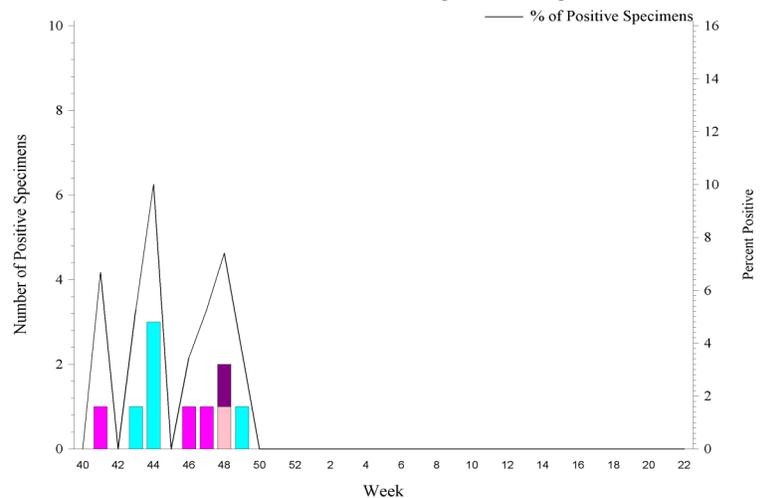
EUCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



EUCOM Service Members, Influenza Positive Specimens Reported to AFHSB



EUCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



2016-2017 EUCOM Season Totals ^{1,4,5}						
	A/H1N1	A/H3N2	A/Untyped	Influenza B	AB	Overall % Positive
Service Members	0	5	1	0	1	3.95
Dependents	0	5	3	1	1	4.24

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

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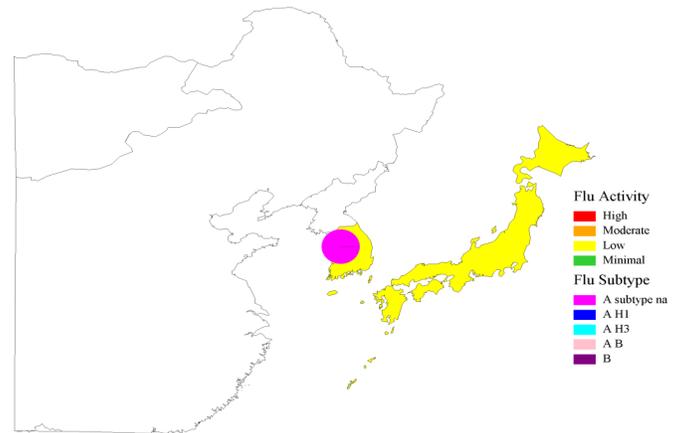


Pacific Command -- Week 49

In PACOM during week 49^{1,6,7}

- ◆ Influenza activity was minimal to low throughout PACOM
- ◆ The percentage of outpatient visits due to ILI remained below baseline and similar to previous seasons.
- ◆ The percentage of positive lab tests was low for service members (3.45%) and high for other beneficiaries (20.75).
- ◆ Among the influenza A specimens subtyped, A/H3N2 has been the predominating subtype.

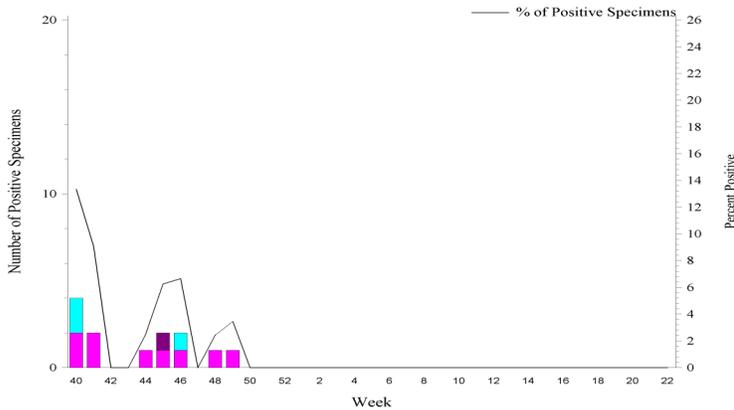
PACOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks South Korea and Japan



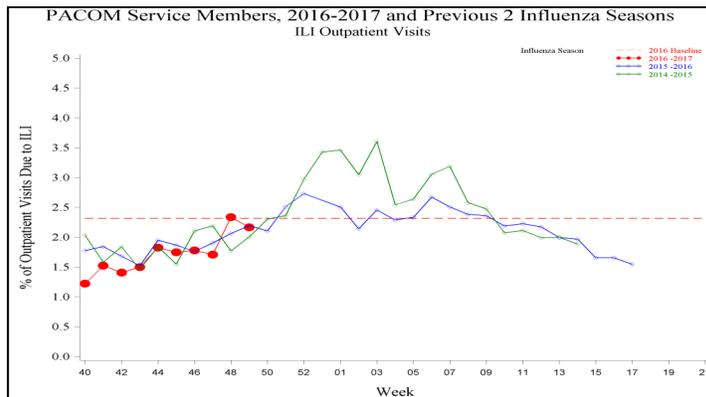
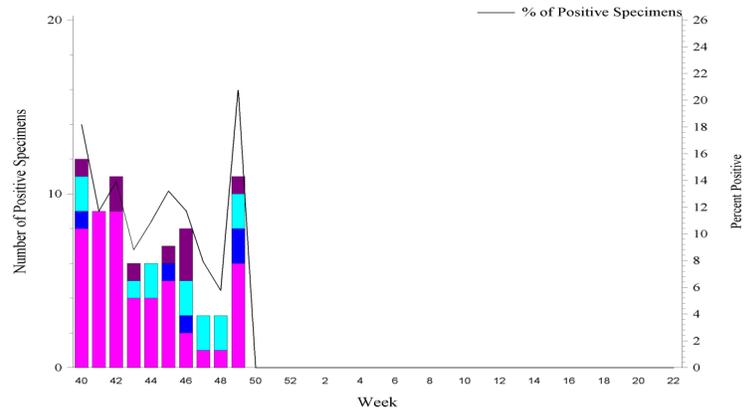
PACOM: Guam and Hawaii Influenza Activity and HL7 Test Positive (MAP: SM+BN, 2 wks)						
Area Name	Influenza Activity	HL7 Type				
		A(H1)	A(H3)	A Untyped	B	AB
Guam	Minimal	0	0	0	0	0
Hawaii*	Minimal	2	4	3	1	0

*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 ^{1,6,7}						
	A/H1N1	A/H3N2	A/Untyped	Flu B	Flu AB	Overall % Positive
Service Members	0	3	9	1	0	4.33
Dependents	5	13	49	9	0	12.48

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

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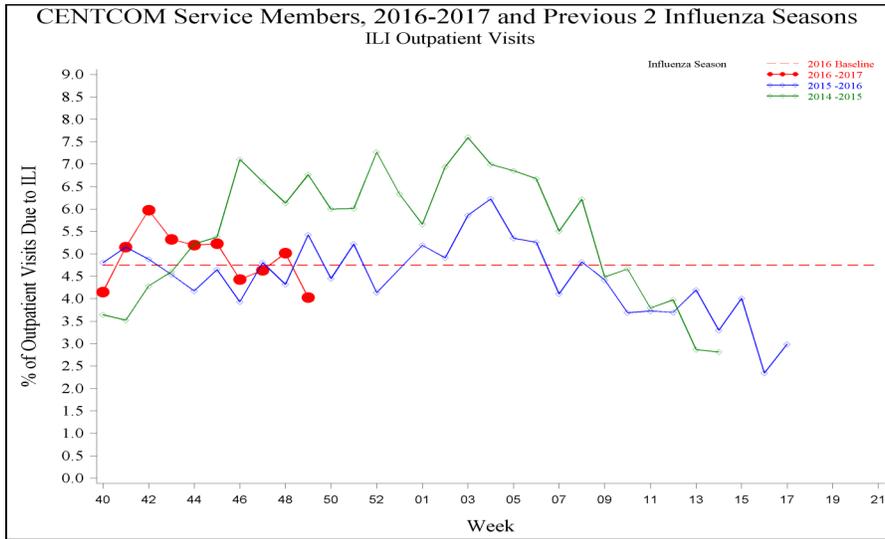
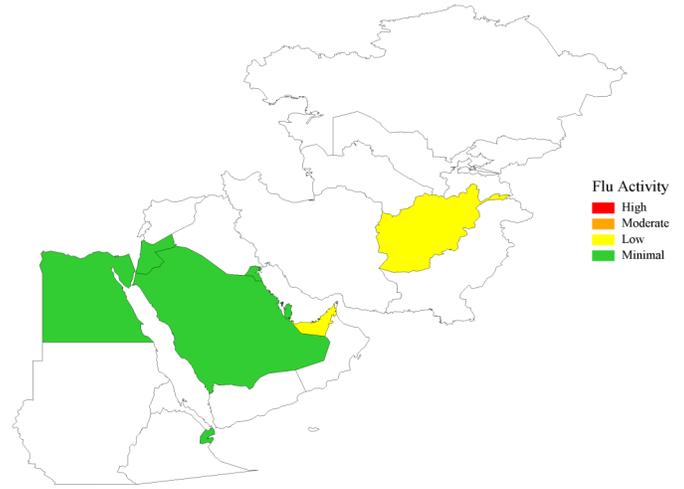


Central and Africa Commands -- Week 49

In CENTCOM and AFRICOM during week 49^{1,8}

- ◆ Influenza activity was minimal to low in CENTCOM.
- ◆ The percentage of outpatient visits due to ILI dropped below baseline and previous seasons.

CENTCOM, Influenza Activity, During the Last 2 Weeks



Southern Command -- Week 49

In SOUTHCOM during week 49⁹

- ◆ 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

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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)

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

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