



DEPARTMENT OF DEFENSE (AFHSB)

Seasonal Influenza Surveillance Summary

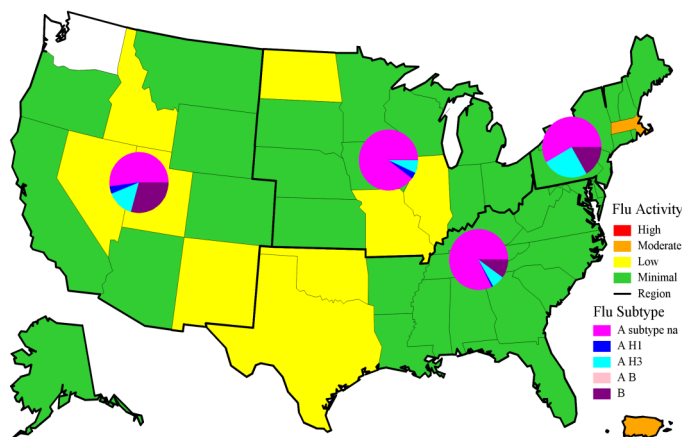
Northern Command -- Week 16 (14 April 2019 — 20 April 2019)



In NORTHCOM during week 16

- ◆ Influenza activity was minimal to low across NORTHCOM, with the exception of Puerto Rico and Massachusetts, which had moderate activity.
- ◆ The percentage of outpatient visits due to ILI continued to decrease and dropped below baseline and was similar to previous seasons.
- ◆ The percentage of positive lab tests continued to decrease to 13.8% for service members and 10.9% for other beneficiaries.
- ◆ Among typed influenza A specimens, influenza A/H3N2 continued to predominate.
- ◆ Seven influenza hospitalizations (RMEs) were reported among service members (2) and other beneficiaries (5). (Season totals: 51 Service members and 268 other beneficiaries)

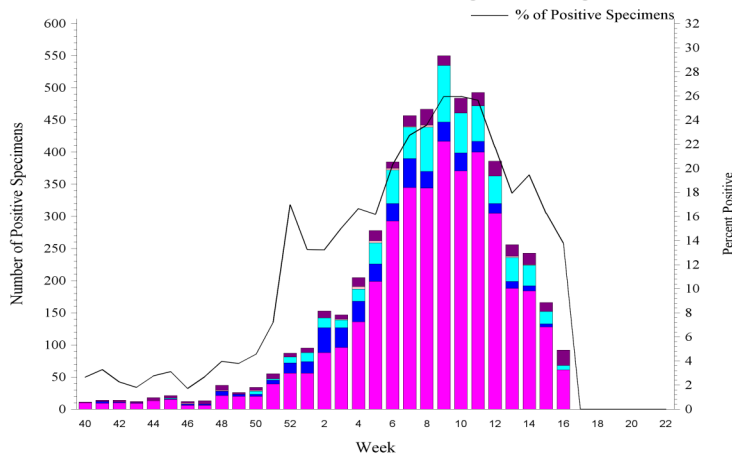
NORTHCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



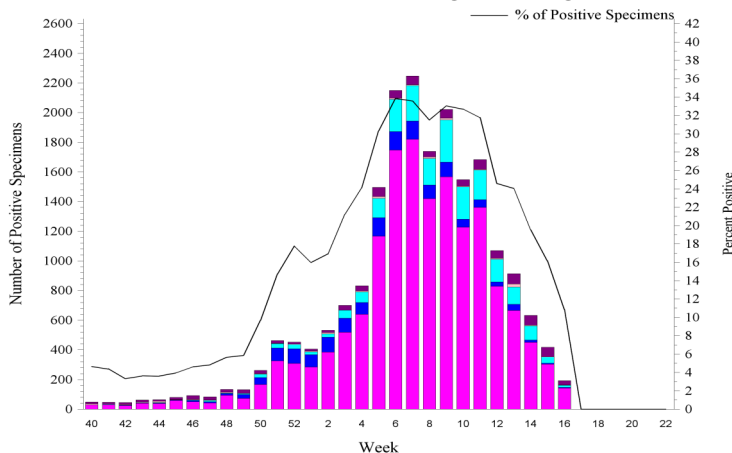
2018 – 2019 NORTHCOM Season Totals

	A/H1N1	A/H3N2	A/Untyped	Flu B	AB	Overall % Positive
Service Members	404	623	3845	318	21	16.29
Dependents	1429	2168	15807	982	153	21.99

NORTHCOM Service Members, Influenza Positive Specimens Reported to AFHSB

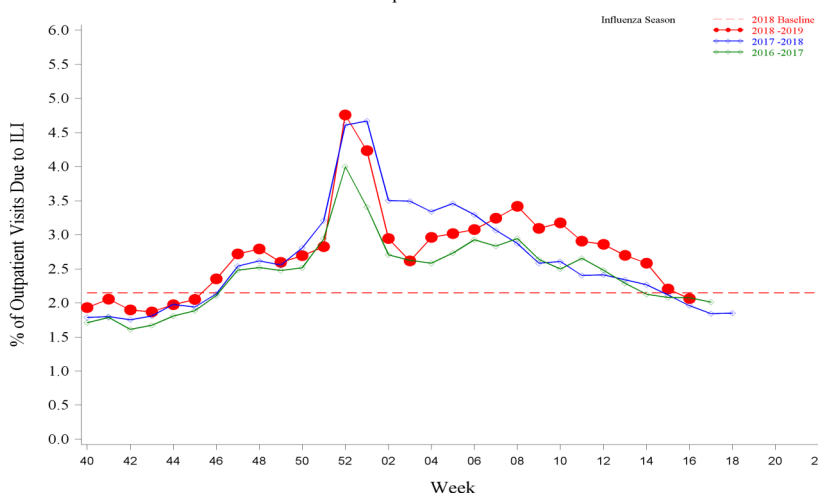


NORTHCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



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



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

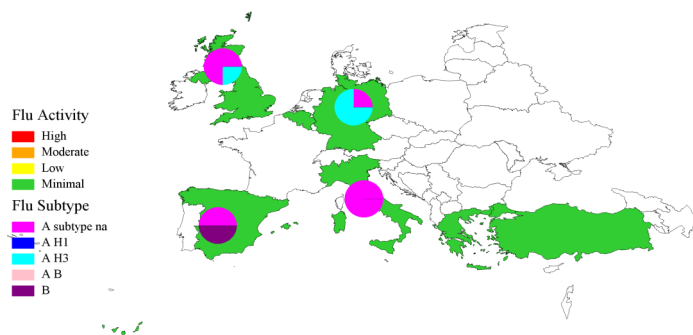


European Command -- Week 16

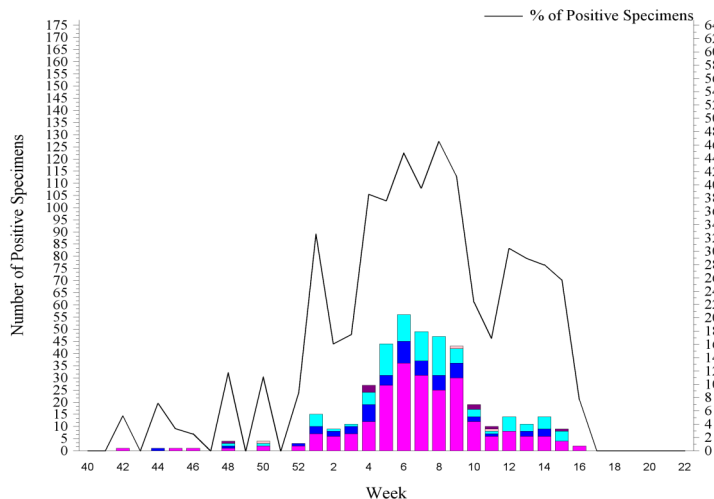
In EUCOM during week 16

- ◆ Influenza activity remained minimal across EUCOM.
- ◆ The percentage of outpatient visits due to ILI decreased to below baseline, but was higher than previous seasons.
- ◆ The percentage of positive lab tests decreased substantially to 7.7% for service members and 16.3% for other beneficiaries.
- ◆ Among typed influenza A specimens, A/H3N2 has predominated.
- ◆ No influenza hospitalizations (RMEs) were reported.
(Season totals: 14 Service members and 35 other beneficiaries)

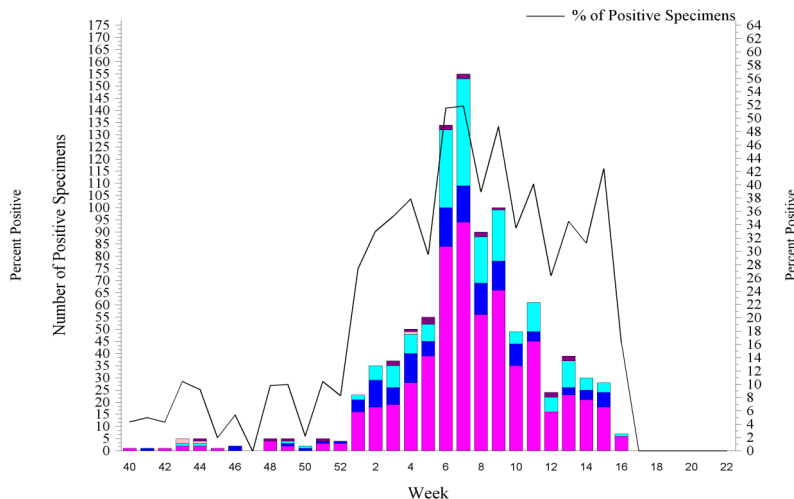
EUCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



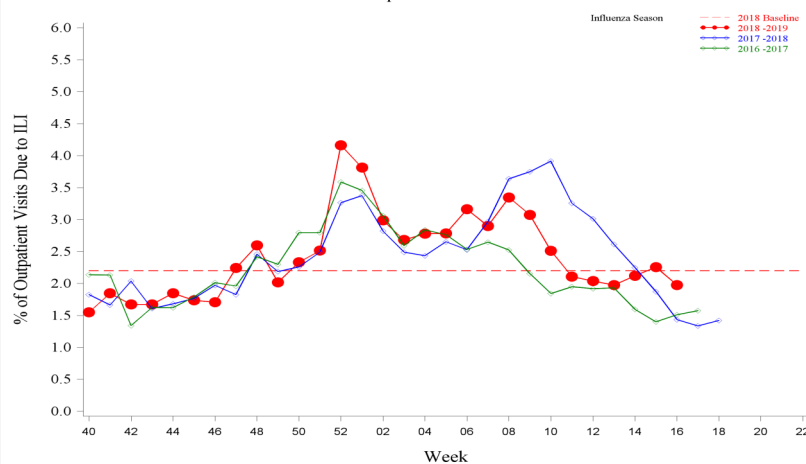
EUCOM Service Members, Influenza Positive Specimens Reported to AFHSB



EUCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



EUCOM Service Members, 2018-2019 and Previous 2 Influenza Seasons

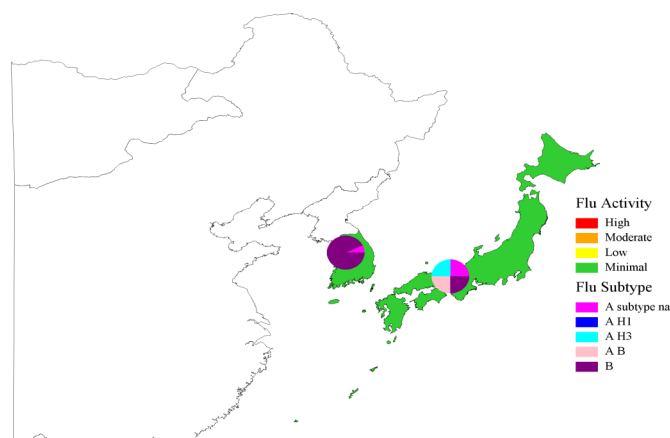


2018-2019 EUCOM Season Totals

	A/H1N1	A/H3N2	A/Untyped	Influenza B	AB	Overall % Positive
Service Members	57	94	233	8	3	26.35
Dependents	130	196	603	21	4	32.86

**Indo-Pacific Command -- Week 16****In PACOM during week 16**

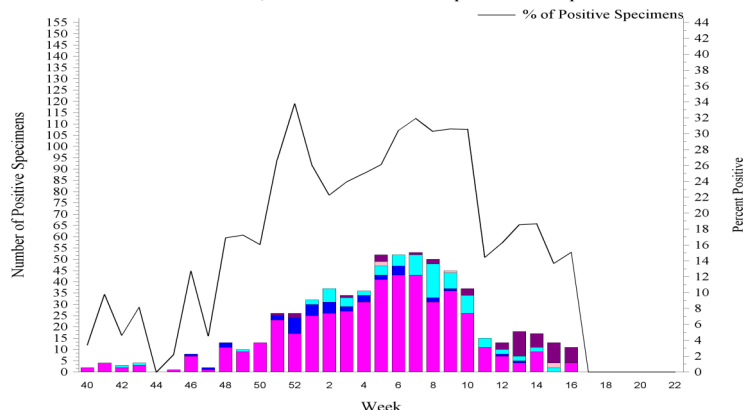
- ◆ Influenza activity was minimal across PACOM.
- ◆ The percentage of outpatient visits due to ILI remained stable and was below baseline and similar to previous seasons.
- ◆ The percentage of positive lab tests increased to 15.1% for service members, but decreased to 21.5% for other beneficiaries.
- ◆ Among typed influenza A specimens, A/H3N2 continued to predominate. Influenza B continued to predominate in the Republic of Korea and Guam during the last two weeks.
- ◆ No influenza hospitalizations (RMEs) were reported.
(Season totals: 3 Service member and 19 other beneficiaries)

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

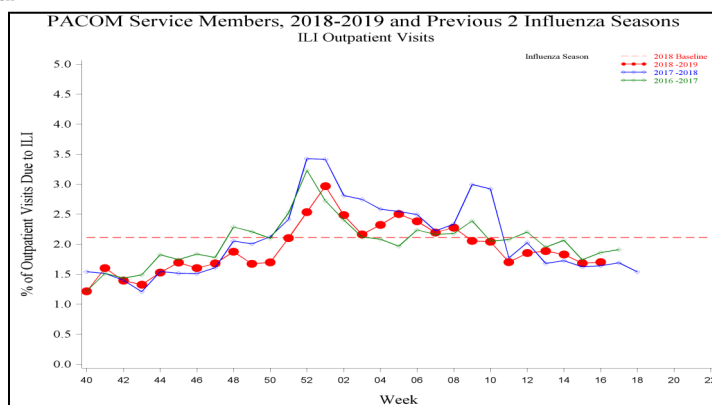
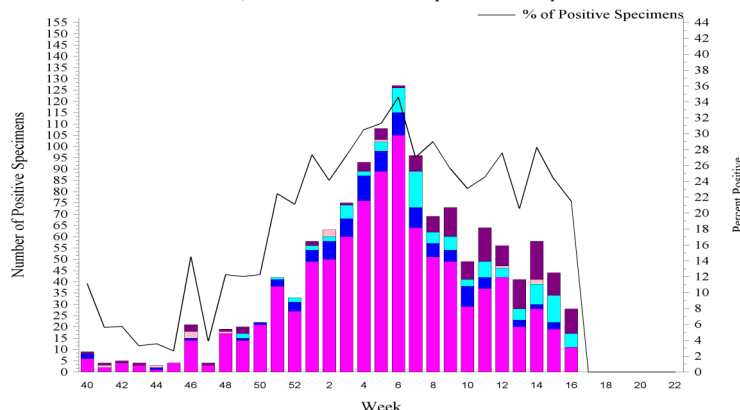
PACOM: Guam and Hawaii Influenza Activity and HL7 Test Positive (MAP: SM+BN, 2 wks)						
Area Name	Influenza Activity	HL7 Type				
		A(H1)	A(H3)	A Untyped	B	AB
Guam	Minimal	0	0	0	11	0
Hawaii*	Minimal	3	17	21	6	1

*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



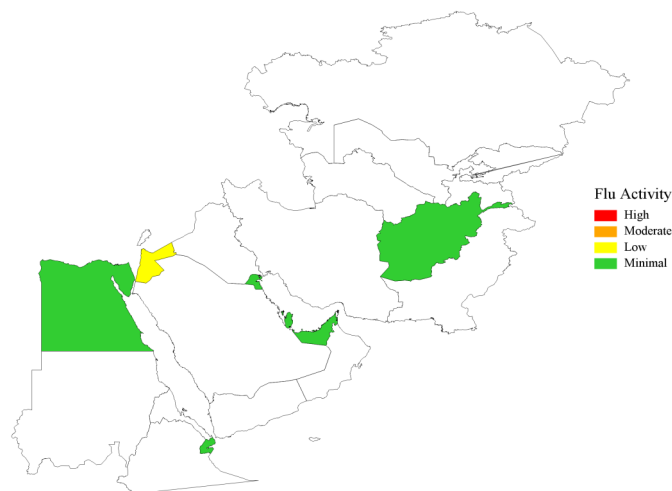
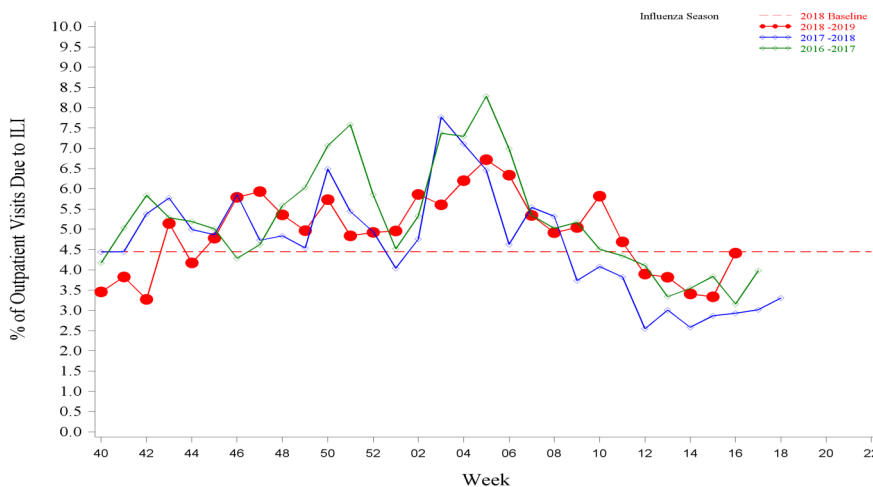
2018-2019 PACOM Season Totals						
	A/H1N1	A/H3N2	A/Untyped	Flu B	Flu AB	Overall % Positive
Service Members	39	77	457	49	5	21.61
Dependents	106	105	933	135	13	22.60

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

**Central and Africa Command -- Week 16****In CENTCOM and AFRICOM during week 16**

- ◆ Influenza activity was minimal in CENTCOM countries with available data, except for Jordan which had low activity.
- ◆ The overall percentage of outpatient visits due to ILI increased above previous seasons, but was at baseline.
- ◆ In Afghanistan, influenza activity remained minimal, but the percentage of outpatient visits due to ILI increased to 4.8%.
- ◆ In Kuwait, influenza activity remained minimal, but the percentage of outpatient visits due to ILI increased to 4.4%.
- ◆ In Djibouti, influenza activity remained minimal, but the percentage of outpatient visits due to ILI increased to 11.5%.
- ◆ No influenza hospitalizations (RMEs) were reported. (Season totals: 0 Service members)

CENTCOM, Influenza Activity, During the Last 2 Weeks

CENTCOM Service Members, 2018-2019 and Previous 2 Influenza Seasons
ILI Outpatient Visits**Southern Command -- Week 16****In SOUTHCOM during week 16:**

- ◆ Influenza activity in Honduras decreased to minimal, but the percentage of outpatient visits due to ILI increased to 10.0%.
- ◆ Influenza activity was minimal in Cuba. The percentage of outpatient visits due to ILI decreased to 0.8% for service members and 2.8% 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	17
Dependents	0	0	2	1	0	20

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)