



DEPARTMENT OF DEFENSE (AFHSB)

Seasonal Influenza Surveillance Summary

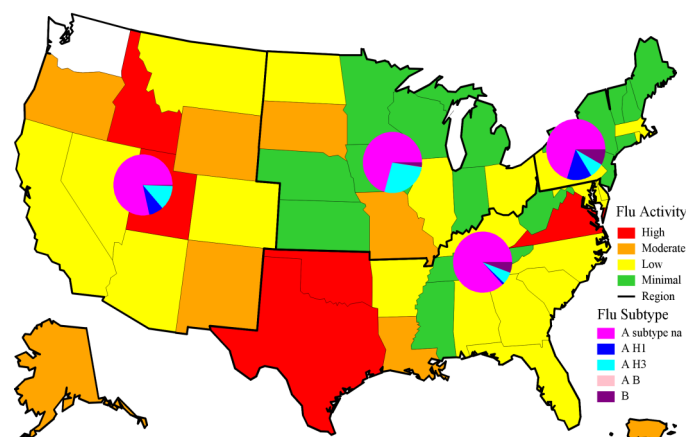
Northern Command -- Week 10 (03 March 2019 — 09 March 2019)



In NORTHCOM during week 10

- ◆ Influenza activity remained low to high for the majority of states. However, activity remained high in Idaho, Utah, Texas, and Virginia and increased to high in Oklahoma.
- ◆ The percentage of outpatient visits due to ILI increased and remained above baseline and previous seasons.
- ◆ The percentage of positive lab tests remained high at 24.9% for service members and 30.7% for other beneficiaries for week 10.
- ◆ Among typed influenza A specimens, influenza A/H3N2 has become the predominate subtype; although during week 10 service members in the Northeast had a slightly higher proportion of A/H1N1.
- ◆ Nine influenza hospitalizations (RMEs) were reported among service members (3) and other beneficiaries (6) for week 10. (Season totals: 36 Service members and 192 other beneficiaries)

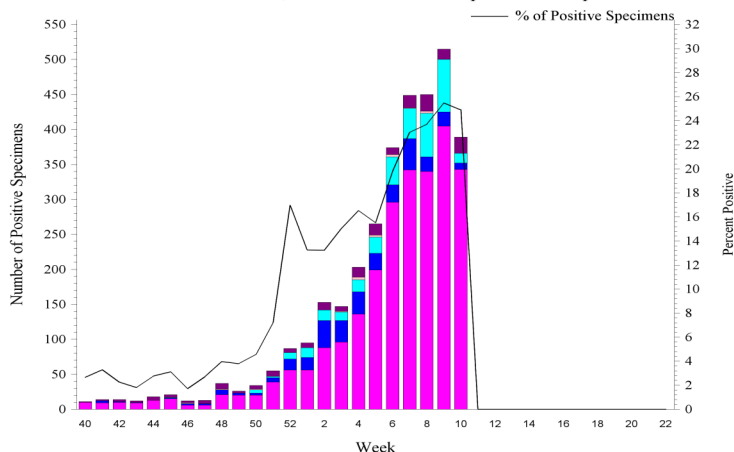
NORTHCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



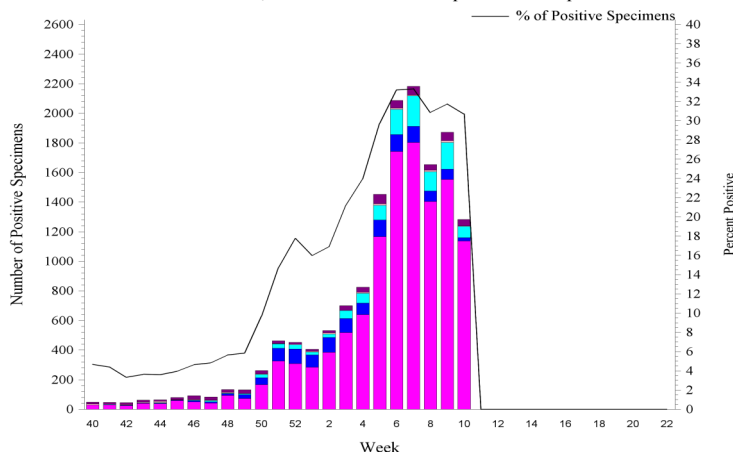
2018 – 2019 NORTHCOM Season Totals

	A/H1N1	A/H3N2	A/Untyped	Flu B	AB	Overall % Positive
Service Members	309	332	2535	200	18	14.53
Dependents	1157	1137	11914	636	111	21.01

NORTHCOM Service Members, Influenza Positive Specimens Reported to AFHSB

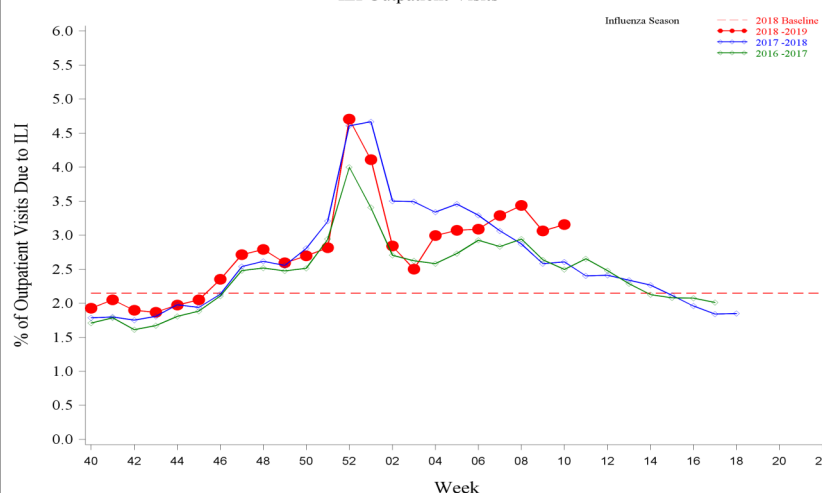


NORTHCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



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

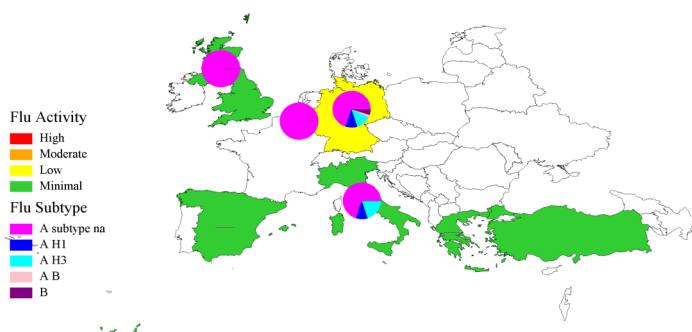


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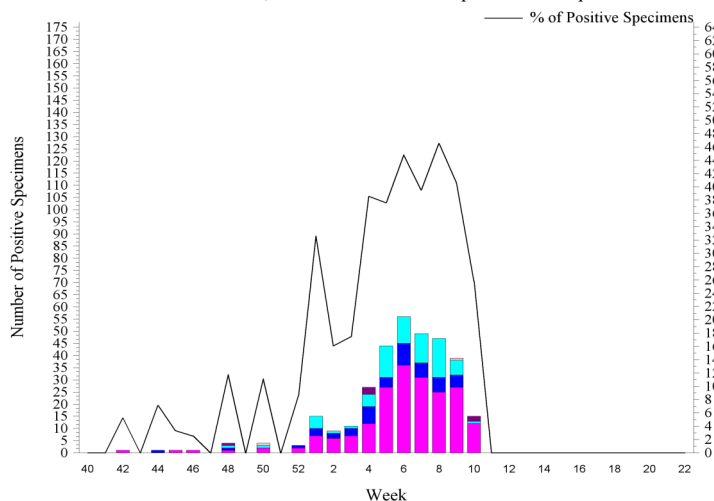
**European Command -- Week 10****In EUCOM during week 10**

- ◆ Influenza activity was minimal across EUCOM, with the exception of Germany where activity decreased to low.
- ◆ The percentage of outpatient visits due to ILI continued to decrease, but remained above baseline and similar to previous seasons.
- ◆ The percentage of positive lab tests decreased to 25.9% for service members and 39.1% for other beneficiaries for week 10.
- ◆ Among typed influenza A specimens, A/H3N2 remained the predominate subtype in EUCOM.
- ◆ No influenza hospitalizations (RMEs) were reported in EUCOM for week 10. (Season totals: 11 Service members and 31 other beneficiaries)

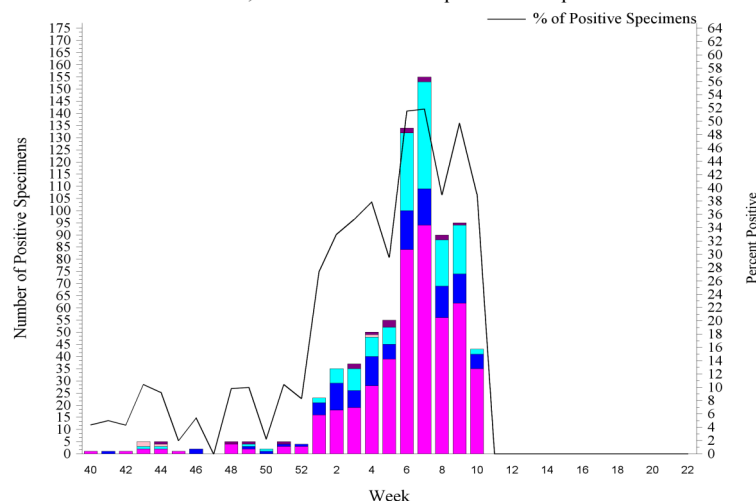
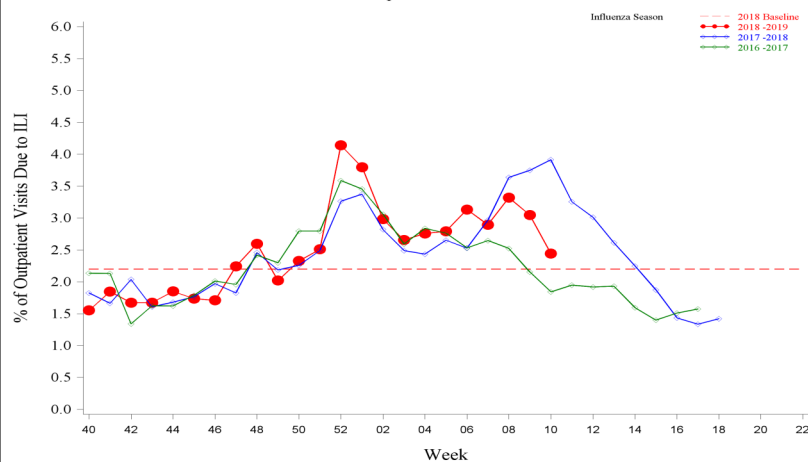
EUCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



EUCOM Service Members, Influenza Positive Specimens Reported to AFHSB



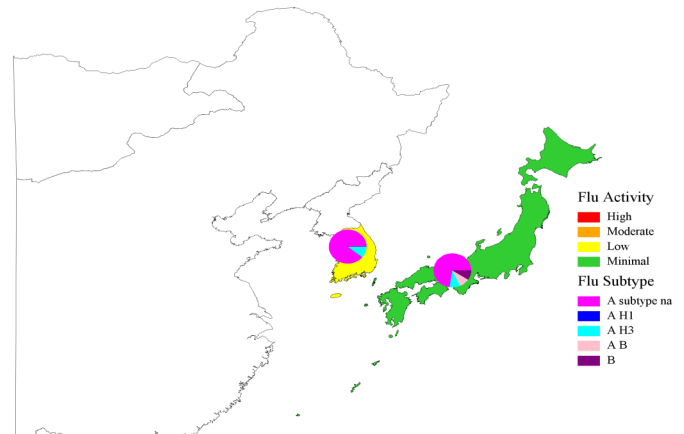
EUCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB

EUCOM Service Members, 2018-2019 and Previous 2 Influenza Seasons
ILI Outpatient Visits**2018-2019 EUCOM Season Totals**

	A/H1N1	A/H3N2	A/Untyped	Influenza B	AB	Overall % Positive
Service Members	48	73	198	6	2	27.02
Dependents	110	153	470	17	4	32.90

**Indo-Pacific Command -- Week 10****In PACOM during week 10**

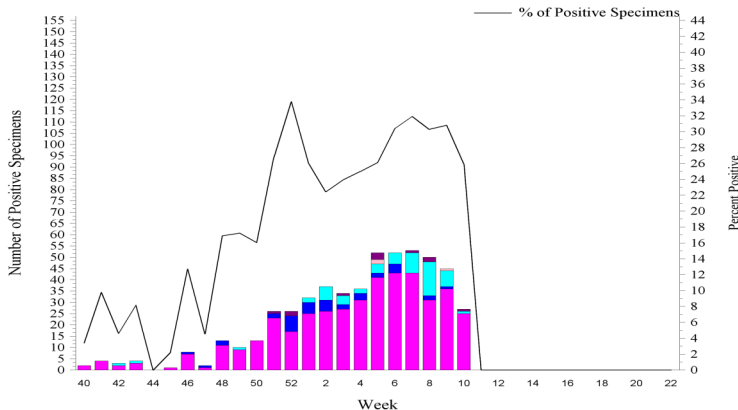
- ◆ Influenza activity remained minimal in Japan and Guam and low in the Republic of Korea and Hawaii.
- ◆ The percentage of outpatient visits due to ILI decreased slightly and was below baseline and similar to a previous season.
- ◆ The percentage of positive lab tests decreased to 26.0% for service members and 22.5% for other beneficiaries during week 10.
- ◆ Among typed influenza A specimens, A/H3N2 predominated in recent weeks in PACOM.
- ◆ No influenza hospitalizations (RMEs) were reported for week 10. (Season totals: 3 Service member and 15 other beneficiaries)

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

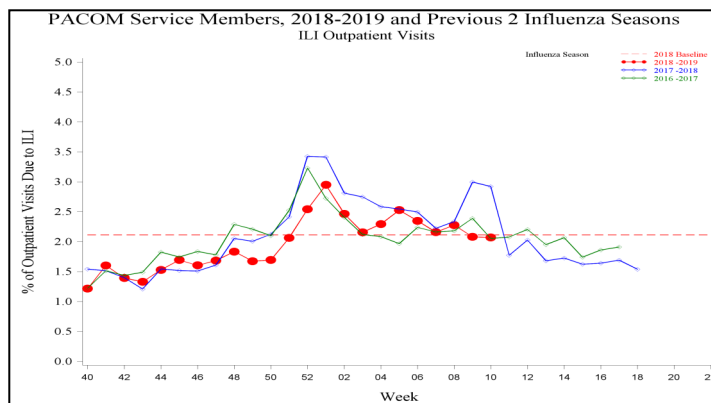
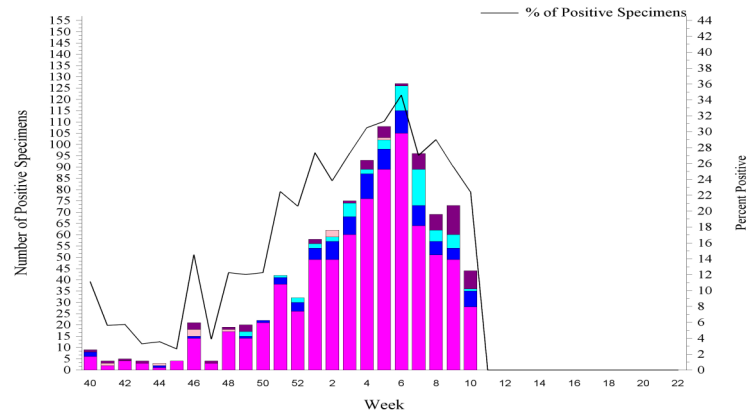
PACOM: Guam and Hawaii Influenza Activity and HL7 Test Positive (MAP: SM+BN, 2 wks)						
Area Name	Influenza Activity	HL7 Type				
		A(H1)	A(H3)	A Untyped	B	AB
Guam	Minimal	0	0	4	7	0
Hawaii*	Low	13	7	55	4	0

*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

**2018-2019 PACOM Season Totals**

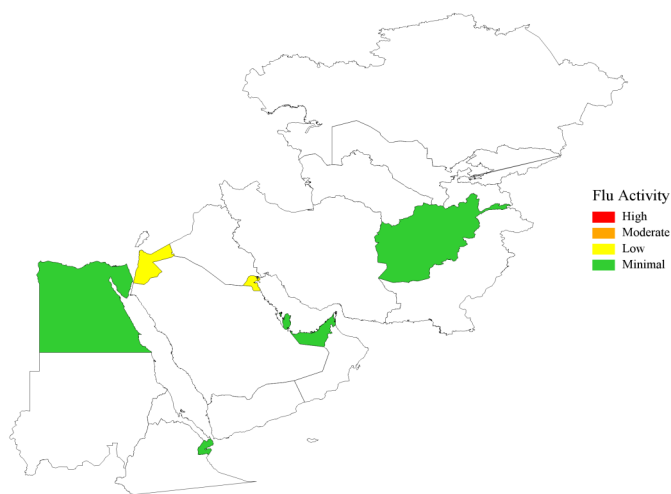
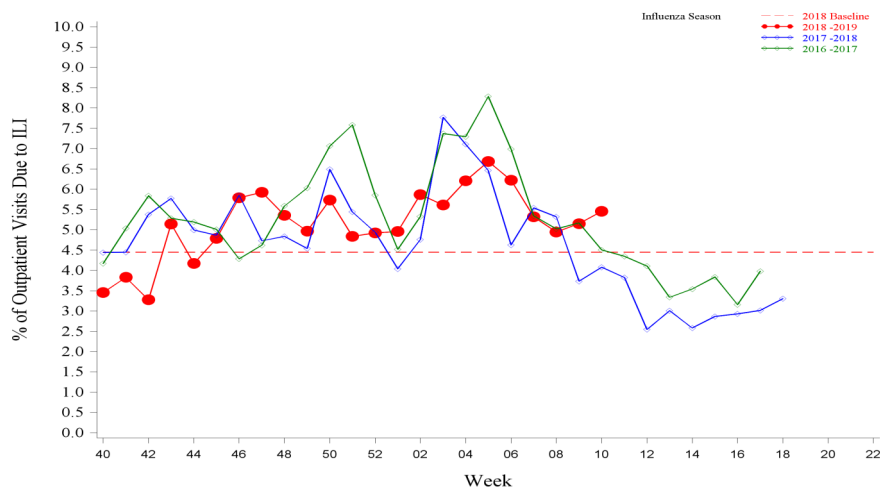
	A/H1N1	A/H3N2	A/Untyped	Flu B	Flu AB	Overall % Positive
Service Members	37	58	421	11	3	22.62
Dependents	91	60	773	60	10	21.99

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**Central and Africa Command -- Week 10****In CENTCOM and AFRICOM during week 10**

- ◆ Influenza activity was minimal in CENTCOM countries with available data, with the exception of Jordan and Kuwait which had low activity. However, data for this region only goes through 06MAR2019 due to delays in receiving the TMDS data.
- ◆ The overall percentage of outpatient visits due to ILI continued to increase and was above baseline and previous seasons.
- ◆ In Afghanistan, influenza activity decreased to minimal and the percentage of outpatient visits due to ILI was 2.8%.
- ◆ In Kuwait, influenza activity decreased to minimal, but the percentage of outpatient visits due to ILI increased to 9.4%.
- ◆ In Djibouti, influenza activity remained minimal and the percentage of outpatient visits due to ILI was stable at 1.7%.
- ◆ No influenza hospitalizations (RMEs) were reported for week 10. (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 10****In SOUTHCOM during week 10:**

- ◆ Influenza activity in Honduras increased to low for week 10. The percentage of outpatient visits due to ILI decreased to 0.0% for week 10. However, data for this country only goes through 06MAR2019 due to delays in receiving the TMDS data.
- ◆ Influenza activity remained minimal in Cuba for week 10. The percentage of outpatient visits due to ILI increased to 2.5% for service members, but decreased to 0.7% 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	13
Dependents	0	0	2	1	0	16

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)