DEPARTMENT OF DEFENSE (AFHSB)
## Seasonal Influenza Surveillance Summary
Northern Command -- Week 01 (30 December 2018— 05 January 2019)

In NORTHCOM during week 01

♦ Influenza activity increased across the US, with half the country experiencing moderate to high activity.

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

♦ The percentage of positive lab tests decreased to 12.0% for service members and 13.5% for other beneficiaries for week 01.

♦ Overall, among typed influenza A specimens, influenza A/ H1N1 continued to predominate. However, over the past 2 weeks, A/H3N2 has predominated in the Midwest.

♦ Thirteen influenza hospitalizations (RMEs) were reported for week 01 (2 service members and 11 other beneficiaries). (Season totals: 4 Service members and 40 other beneficiaries).

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

Flu Activity
High
Moderate
Low
Minimal
Region

Flu Subtype
A subtype na
A H1
A H3
A B
B
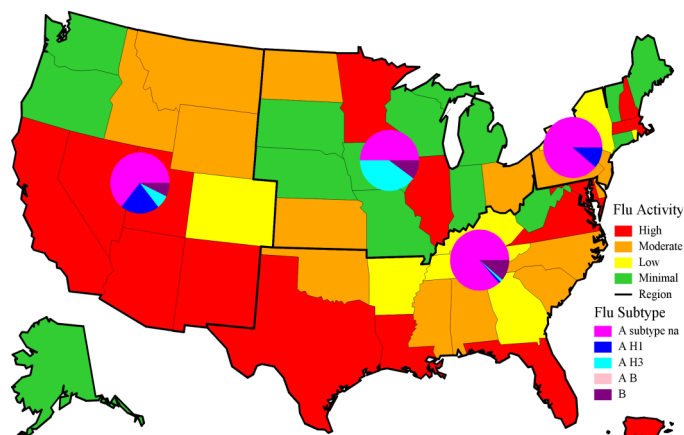
2018 – 2019 NORTHCOM Season Totals

	A/H1N1	A/H3N2	A/Untyped	Flu B	AB	Overall % Positive
Service Members	33	14	277	61	3	4.63
Dependents	244	77	1529	237	47	7.64

NORTHCOM Service Members, Influenza Positive Specimens Reported to AFHSB
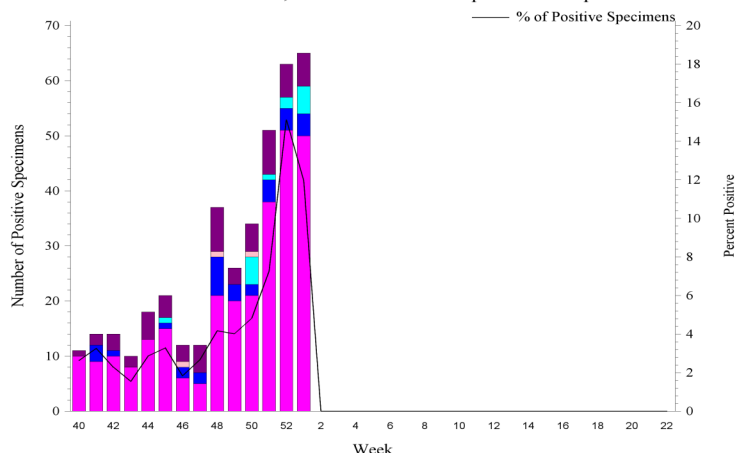
NORTHCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB
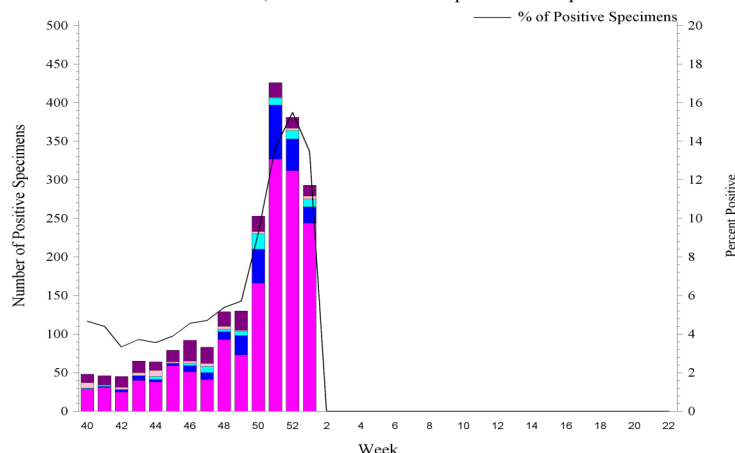
Disclaimer: Medical data from Military Treatment Facilities that are using MHS GENESIS are not available in DMSS. This includes Naval Hospital Oak Harbor, Naval Hospital Bremerton, Air Force Medical Services Fairchild, and Madigan Army Medical Center. Therefore, individuals who are expected to seek care 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
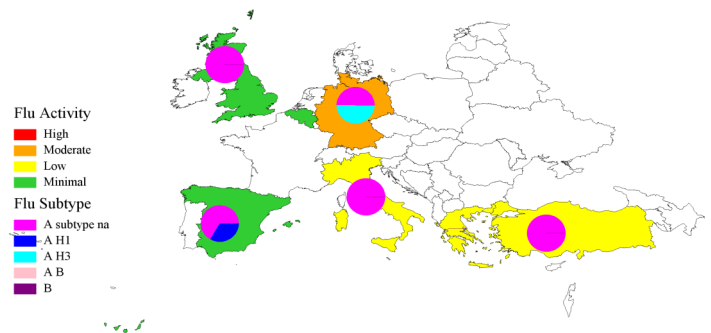ILI Outpatient Visits

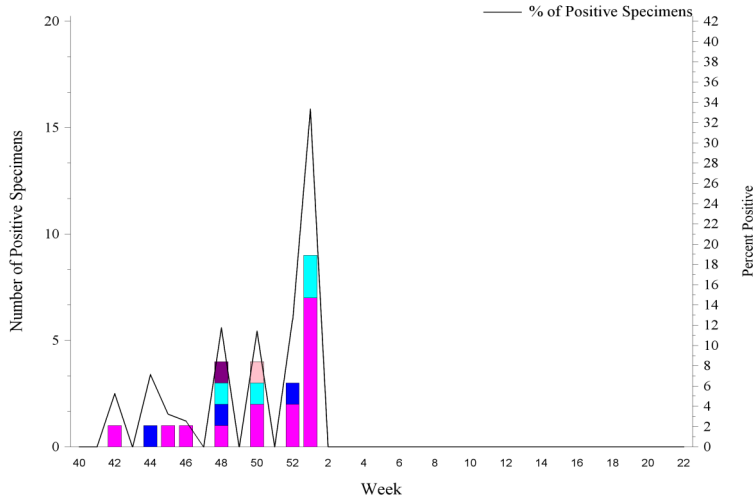Influenza Season
2018 Baseline
2018 -2019
2017 -2018
2016 -2017
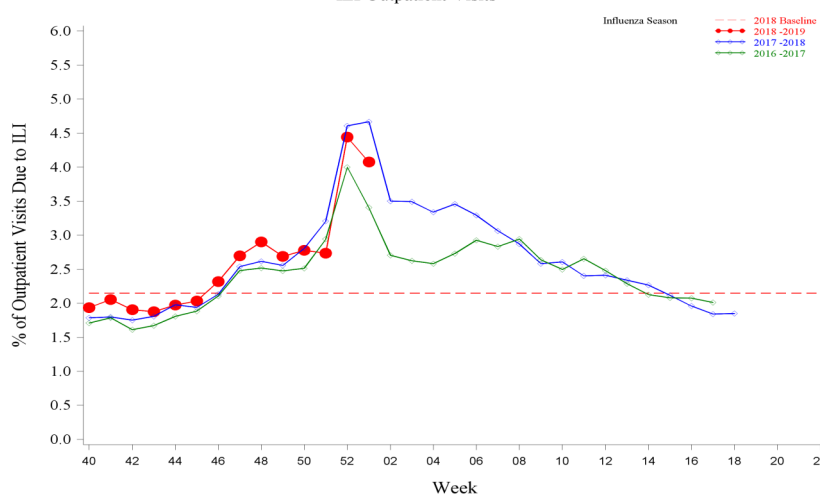
European Command -- Week 01

In EUCOM during week 01

♦ Influenza activity continued to increase in EUCOM. Germany had moderate activity, while Italy, Greece, and Turkey had low activity.

♦ The percentage of outpatient visits decreased, but remained above baseline and previous seasons.

♦ The percentage of positive lab tests more than doubled to 33.3% for service members and 33.0% for other beneficiaries for week 01.

♦ No influenza hospitalizations (RMEs) was reported for week 01. (Season totals: 1 Service members and 0 other beneficiaries)
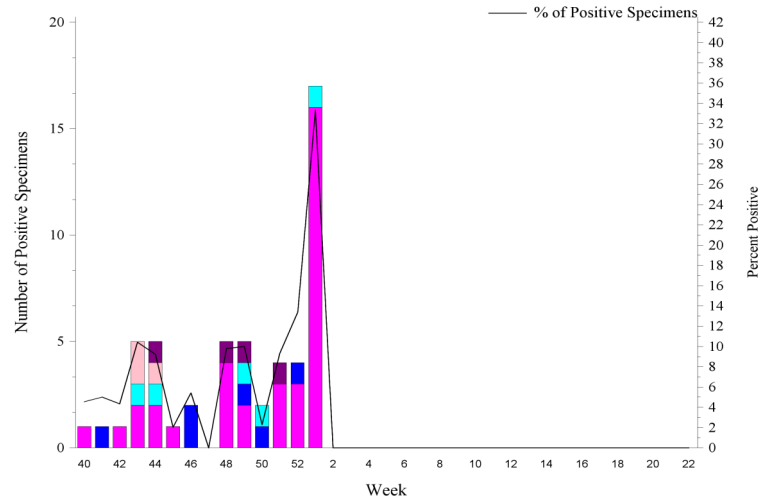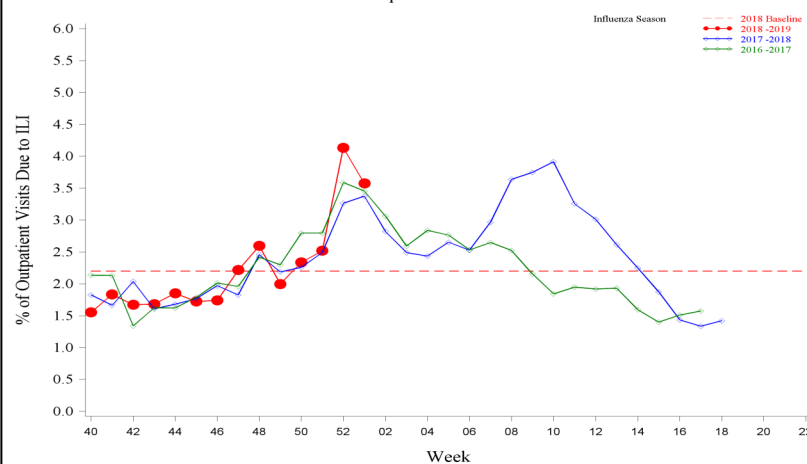
EUCOM Service Members, Influenza Activity and Virus Subtype,During the Last 2 Weeks

Flu Activity
- High
- Moderate
- Low
- Minimal

Flu Subtype
- A subtype na
- A H1
- A H3
- A B
- B

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

Influenza Season
- 2018 Baseline
- 2018 -2019
- 2017 -2018
- 2016 -2017

2018-2019 EUCOM Season Totals						
	A/H1N1	A/H3N2	A/Untyped	Influenza B	AB	Overall % Positive
Service Members	3	4	15	1	1	6.52
Dependents	6	5	35	4	3	8.66

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

Indo-Pacific Command -- Week 01

In PACOM during week 01

♦ Influenza activity increased in PACOM, with the Republic of Korea, Japan, and Hawaii with low activity.

♦ The percentage of outpatient visits due to ILI continued to increase and was above baseline and similar to previous seasons.

♦ The percentage of positive lab tests decreased to 25.5% for service members, but increased to 25.1% for other beneficiaries during week 01.

♦ No influenza hospitalizations (RMEs) were reported for week 01. (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	0	42	2	0
Hawaii*	Low	1	2	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

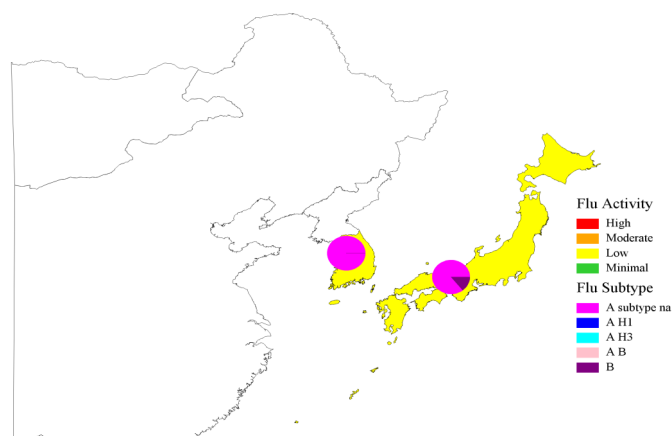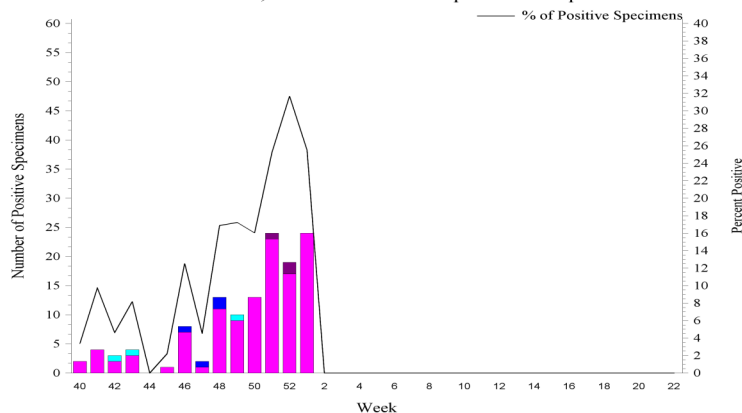PACOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB
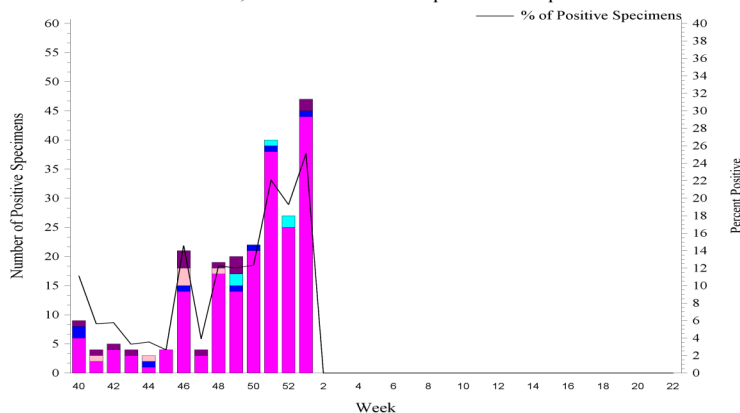
PACOM Service Members, 2018-2019 and Previous 2 Influenza Seasons
ILI Outpatient Visits

Influenza Season
- 2018 Baseline
- 2018-2019
- 2017-2018
- 2016-2017
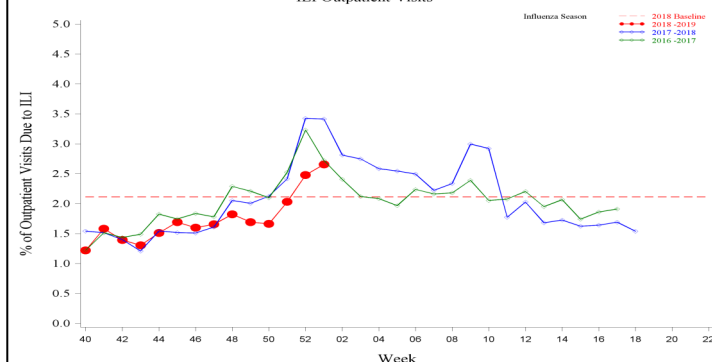
2018-2019 PACOM Season Totals						
	A/H1N1	A/H3N2	A/Untyped	Flu B	Flu AB	Overall % Positive
Service Members	4	3	117	3	0	14.21
Dependents	8	5	196	14	6	12.41

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Central and Africa Command -- Week 01

In CENTCOM and AFRICOM during week 01

♦ Influenza activity ranged from minimal to high in CENT-COM locations with available data.

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

♦ In Afghanistan, influenza activity increased to high and the percentage of outpatient visits due to ILI continued to increased to 8.7%.

♦ In Kuwait, influenza activity decreased to minimal and the percentage of outpatient visits due to ILI remained similar to last week at 4.1%.

♦ In Djibouti, influenza activity remained minimal and the percentage of outpatient visits due to ILI remained high, but similar to last week at 8.6%.

♦ No influenza hospitalizations (RMEs) were reported for week 01. (Season totals: 0 Service members)

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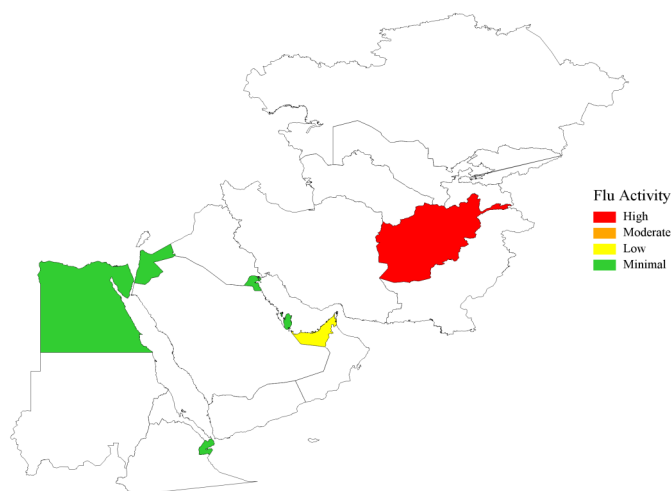
Flu Activity
- High
- Moderate
- Low
- Minimal

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

Influenza Season
- 2018 Baseline
- 2018 -2019
- 2017 -2018
- 2016 -2017
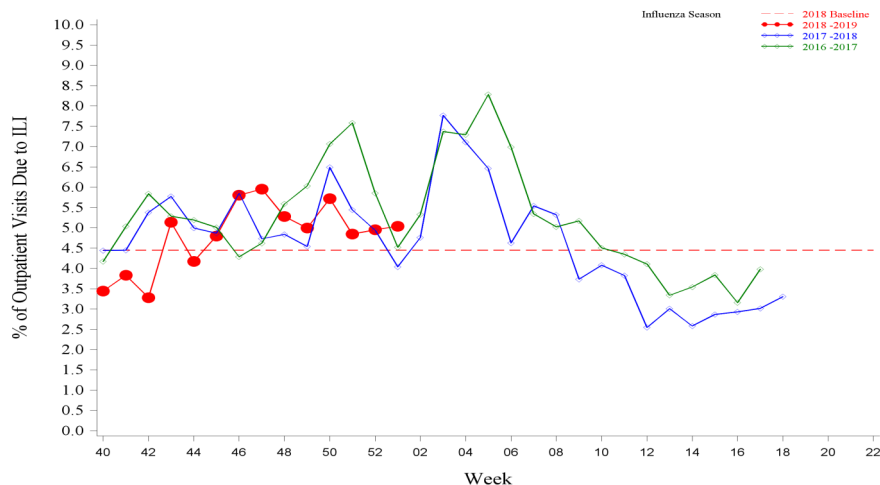
Southern Command -- Week 01

In SOUTHCOM during week 01

♦ Influenza activity was minimal in Honduras for week 01. The percentage of outpatient visits due to ILI decreased to 6.3% for week 01.

♦ Influenza activity remained minimal in Cuba for week 01. The percentage of outpatient visits due to ILI increased to 1.8% for service members, but decreased to 0.5% 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	1	1	0	9

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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)