



Cumulative Results

Locations	92
Collected	3,148
Tested	2,933

Influenza A 661

A(H1N1)pdm09	72
A(H1N1)pdm09 Coinfection	7
A(H1N1)pdm09 & A(H3N2)	1
A(H3N2)	541
A(H3N2) Coinfection	33
A(H3N2) & B	3
A/not subtyped	3
A/not subtyped & B	1

Influenza B* 105

B	99
B & Coinfection	6

Other Respiratory Pathogens 1,068

Adenovirus	44
<i>Chlamydomphila pneumoniae</i>	6
Coronavirus	170
Human Bocavirus	6
Human Metapneumovirus	61
<i>Mycoplasma pneumoniae</i>	26
Parainfluenza	104
RSV	159
Rhinovirus/Enterovirus	360
Non-influenza Viral Coinfections	125
Non-influenza Bacterial Coinfections	7
-C. pneumo coinfections (2)	
-M. pneumo coinfections (5)	

No Pathogen Detected 1,099

Results are preliminary and may change as more results are finalized.
*Influenza B lineages and specimens submitted for sequencing only will be reported in the periodic molecular sequencing reports.

Respiratory Highlights

31 December 2017 - 13 January 2018 (Surveillance Weeks 1 & 2)

- During 31 December 2017 - 13 January 2018, a total of 763 specimens were collected and received from 63 locations. Results were finalized for 631 specimens from 60 locations. The percent influenza positive for Week 1 and 2 were 46% and 51%, respectively. The influenza percent positive for the season is 26%.
- According to the CDC FluView, influenza activity increased during Week 2 in the U.S. with influenza A(H3) remaining the predominant virus type. "The proportion of deaths attributed to pneumonia and influenza (P&I) was at the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System". There were 10 influenza-associated pediatric deaths. The proportion of outpatient Influenza-like Illness (ILI) visits was 6.3%, continuing to exceed the national baseline of 2.2%. All 10 of the Health and Human Services regions reported ILI at or above region-specific baseline levels. New York City, Puerto Rico, and 32 states experienced high ILI activity. Forty-nine states reported widespread

Surveillance Week	A(H1N1)pdm09	A(H1N1)pdm09 & RSV	A(H3N2)	A(H3N2) & B	A(H3N2) & Corona	A(H3N2) & HBoV	A(H3N2) & Para	A(H3N2) & RSV	A(H3N2) & Rhino/Entero	A/not subtyped	A/not subtyped & B	B	B & RSV	Total
Week 1	16	1	125	0	2	0	1	0	5	1	0	19	0	170
Week 2	13	0	83	2	2	1	1	1	2	2	1	23	1	132
Total	29	1	208	2	4	1	2	1	7	3	1	42	1	302

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DoD Global Respiratory Pathogen Surveillance Program

Table 1. Finalized results by region and location for specimens collected during Weeks 1 & 2

Region*		A(H1N1)pdm09	A(H3N2)	A/not subtyped	A(H1N1)pdm09 & RSV	A(H3N2) & B	A(H3N2) & Corona	A(H3N2) & HBoV	A(H3N2) & Para	A(H3N2) & RSV	A(H3N2) & Rhino/Entero	A/not subtyped & B	B	B & RSV	Adenovirus	C. pneumoniae	Coronavirus	HBoV	M. pneumoniae	Parainfluenza	RSV	Rhinovirus/Enterovirus	Adeno & Corona	Adeno & HBoV & Rhino/Entero	Adeno & Para	Corona & HBoV	Corona & RSV	HBoV & RSV	HBoV & RSV & Rhino/Entero	HBoV & Rhino/Entero	hMPV	RSV & Rhino/Entero	No Pathogen	Total		
EUCOM	Landstuhl RMC, Germany	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	1	5	11	
	NAVSTA Rota, Spain	-	1	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2	6		
	RAF Lakenheath, England	-	2	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	6		
	Ramstein AB, Germany	1	-	-	-	-	-	-	-	-	-	-	3	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6		
	SHAPE, Belgium	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
	Spangdahlem AB, Germany	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	
	USAG Baumholder, Germany	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2		
	USAG Grafenwoehr, Germany	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	3		
	USAG Stuttgart, Germany	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	4	6	
	USAG Wiesbaden, Germany	-	2	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	5	
	Vilseck AHC, Germany	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	2	
PACOM	Kadena AB, Japan	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	Misawa AB, Japan	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	
	Yokota AB, Japan	2	6	-	-	-	-	-	-	-	-	-	2	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	2	15	
Region 1	USCG Academy, CT	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Region 2	Ft Drum, NY	-	5	-	-	-	-	-	-	-	-	-	1	-	-	1	3	-	-	-	-	2	2	-	-	-	-	2	-	-	-	-	-	-	6	22
	JB McGuire-Dix-Lakehurst, NJ	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	2	11	
	USMA - West Point, NY	1	6	1	-	-	-	-	-	-	1	-	4	1	-	-	3	-	-	-	3	-	-	-	-	-	1	2	-	-	-	-	-	9	32	
Region 3	Dover AFB, DE	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	3	11	
	JB Andrews, MD	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	
	JB Langley-Eustis, VA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1		
Region 4	Eglin AFB, FL	1	9	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	4	17	
	Ft Bragg, NC	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	3	6	
	Ft Campbell, KY	-	2	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
	Hurlburt Field, FL	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
	Keesler AFB, MS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
	MacDill AFB, FL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2	3	
	Moody AFB, GA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	3		
	NH Camp Lejeune, NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	Robins AFB, GA	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	5	
	Seymour Johnson AFB, NC	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	7	
	Shaw AFB, SC	1	1	-	-	-	-	-	-	-	-	-	1	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	9	
	Tyndall AFB, FL	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	

Cont'd on page 3

*CONUS locations are based on Health & Human Services regions. Other locations are defined by COCOM.

DoD Global Respiratory Pathogen Surveillance Program

Table 1. Finalized results by region and location for specimens collected during Weeks 1 & 2

Cont'd from page 2

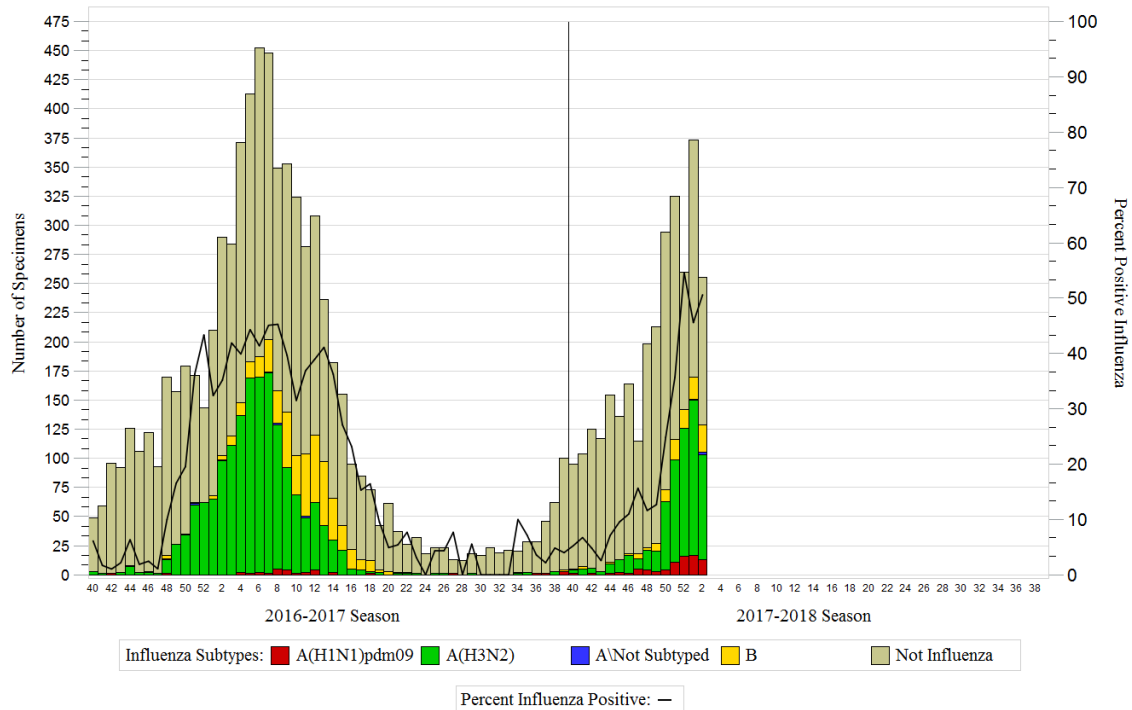
Region*		A(H1N1)pdm09	A(H3N2)	A/not subtyped	A(H1N1)pdm09 & RSV	A(H3N2) & B	A(H3N2) & Corona	A(H3N2) & HBoV	A(H3N2) & Para	A(H3N2) & RSV	A(H3N2) & Rhino/Entero	A/not subtyped & B	B	B & RSV	Adenovirus	C. pneumoniae	Coronavirus	HBoV	M. pneumoniae	Parainfluenza	RSV	Rhinovirus/Enterovirus	Adeno & Corona	Adeno & HBoV & Rhino/Entero	Adeno & Para	Corona & HBoV	Corona & RSV	HBoV & RSV	HBoV & RSV & Rhino/Entero	HBoV & Rhino/Entero	hMPV	RSV & Rhino/Entero	No Pathogen	Total		
Region 5	Scott AFB, IL	-	3	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	7	
	Wright-Patterson AFB, OH	8	62	-	-	1	-	-	1	-	3	-	4	-	1	-	8	-	1	1	10	5	1	1	-	-	2	1	-	-	-	3	-	50	163	
Region 6	Altus AFB, OK	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	4	8
	Cannon AFB, NM	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
	Kirtland AFB, NM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	2		
	Laughlin AFB, TX	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	
	Little Rock AFB, AR	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	
	SAM M C, TX	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	
	Sheppard AFB, TX	1	6	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	1	4	2	-	-	-	-	-	-	-	-	-	-	-	11	27	
	Tinker AFB, OK	2	7	1	1	-	-	-	-	-	-	-	3	-	-	-	-	1	-	-	3	2	-	-	-	-	-	-	-	-	-	2	-	9	31	
	Vance AFB, OK	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	1	1	-	-	-	-	1	-	-	-	-	-	1	3	14	
Region 7	McConnell AFB, KS	2	5	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	11	
	Offutt AFB, NE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	10	
Region 8	Ellsworth AFB, SD	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	6
	FE Warren AFB, WY	-	2	-	-	-	1	-	-	-	-	-	4	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	13	
	Hill AFB, UT	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	11	
	Malmstrom AFB, MT	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
	Minot AFB, ND	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	
	Peterson AFB, CO	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	1	-	-	-	3	13	
	USAF Academy, CO	-	8	-	-	-	1	-	1	-	-	-	-	-	-	-	-	2	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	5	19	
Region 9	Davis-Monthan AFB, AZ	-	5	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	5	13
	Luke AFB, AZ	-	6	-	-	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	2	13	
	Travis AFB, CA	-	5	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	
Region 10	CGS North Bend, OR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	Fairchild AFB, WA	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	4	
	Mt Home AFB, ID	-	1	-	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	4	9	
	NH Bremerton, WA	1	1	-	-	-	-	-	-	-	1	-	3	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	
Total		29	208	3	1	2	4	1	2	1	7	1	42	1	7	1	45	2	1	6	41	19	1	1	1	1	9	1	1	1	13	2	176	631		

*CONUS locations are based on Health & Human Services regions. Other locations are defined by COCOM.

Cumulative Laboratory Results

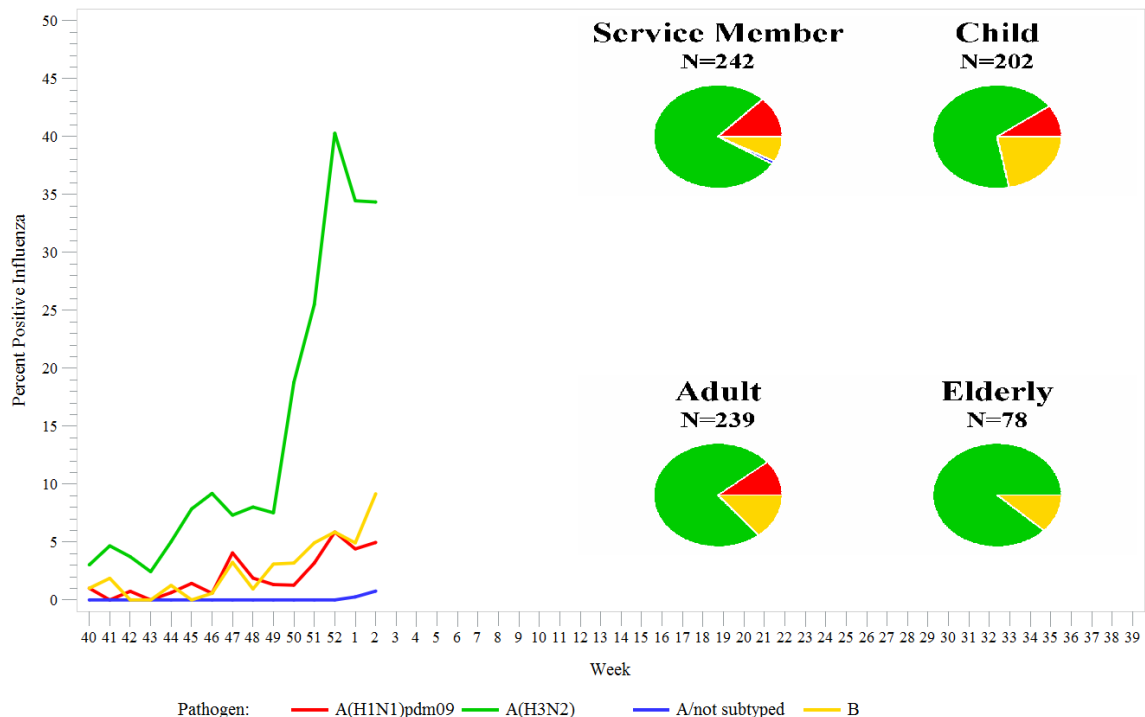
Link to cumulative results by region and location:

Graph 1. Percent influenza positive by week: 2016-2017 surveillance year and through Week 2 of the

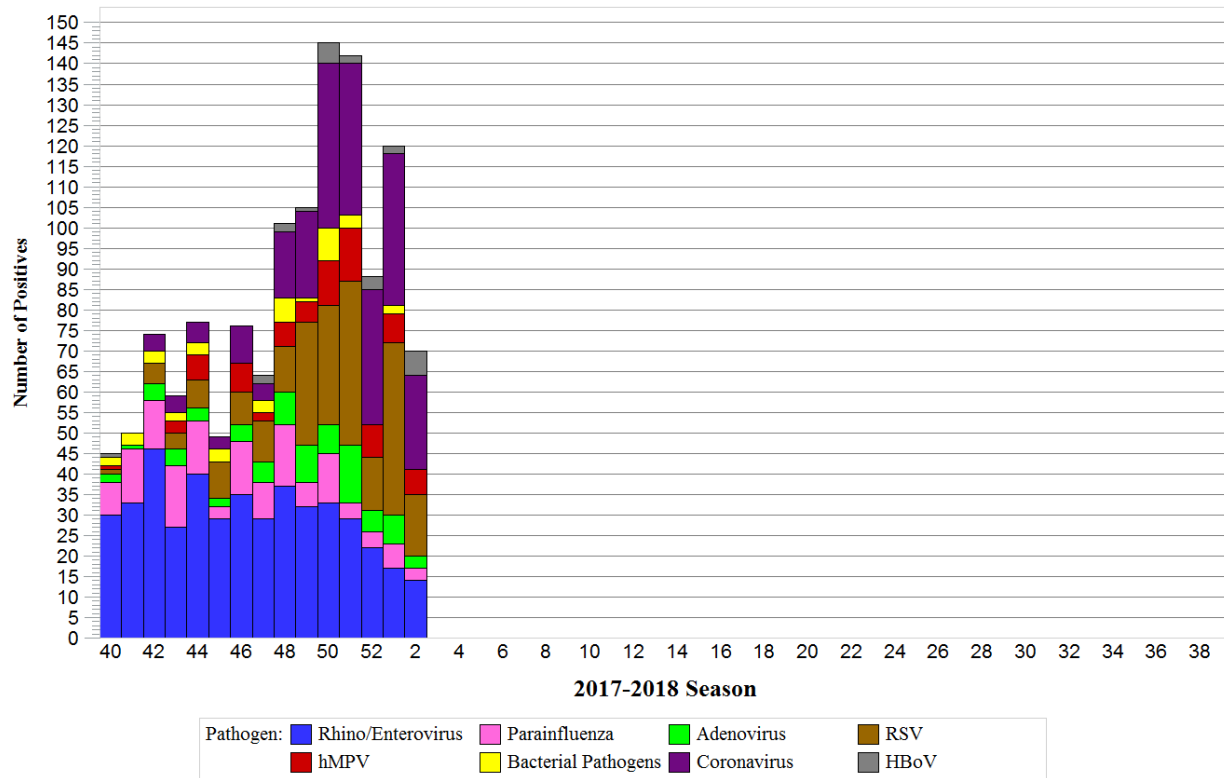


Note: Dual influenza coinfections are excluded from this graph.

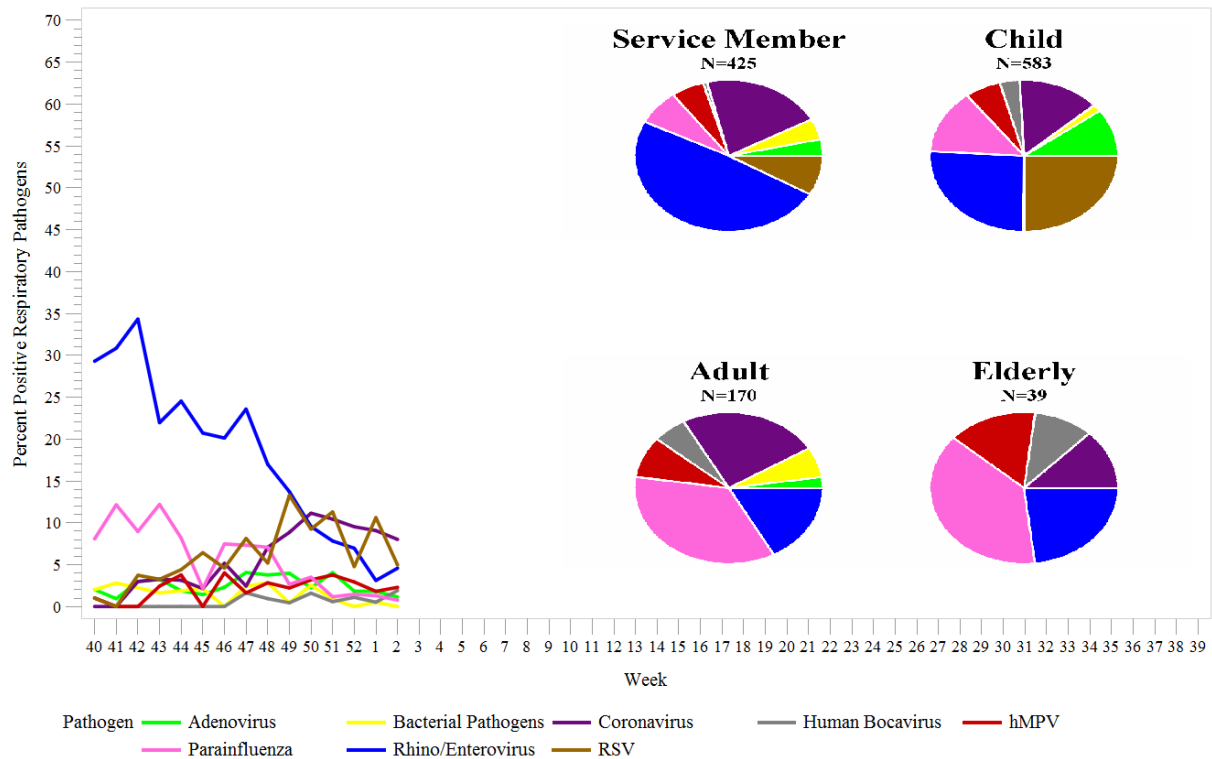
Graph 2. Percent positive for influenza through ILI trends by subtype and beneficiary status through



Graph 3. Other positive respiratory pathogens through Week 2 of the 2017-2018 surveillance year



Graph 4. Percent positive for respiratory pathogens through ILI trends by week and beneficiary status



Graph 5. Vaccination status by beneficiary type through Week 2 of the 2017-2018 surveillance year (excluding 'Other' beneficiary type)

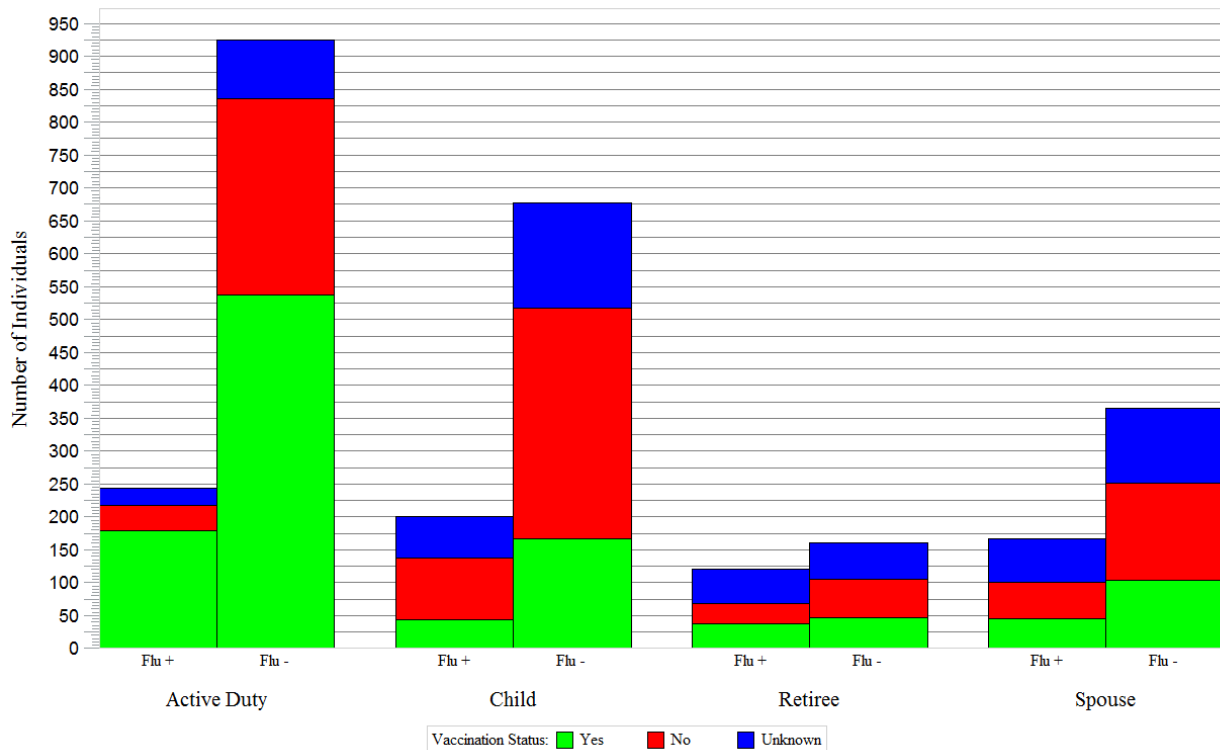


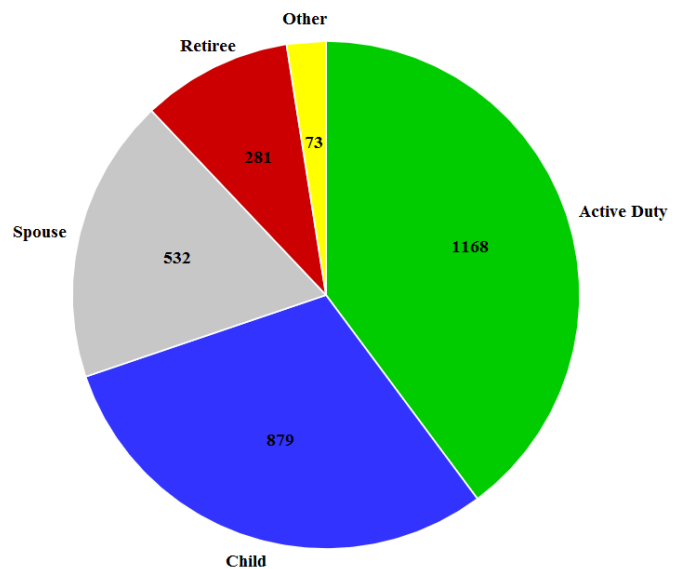
Table 2. ILI by age group through Week 2 of the 2017-2018 surveillance year

Age Group	Frequency	Percent
0-5	538	18.34
6-9	154	5.25
10-17	212	7.23
18-24	461	15.72
25-44	982	33.48
45-64	375	12.79
65+	208	7.09
Unknown	3	0.10

Demographic Summary

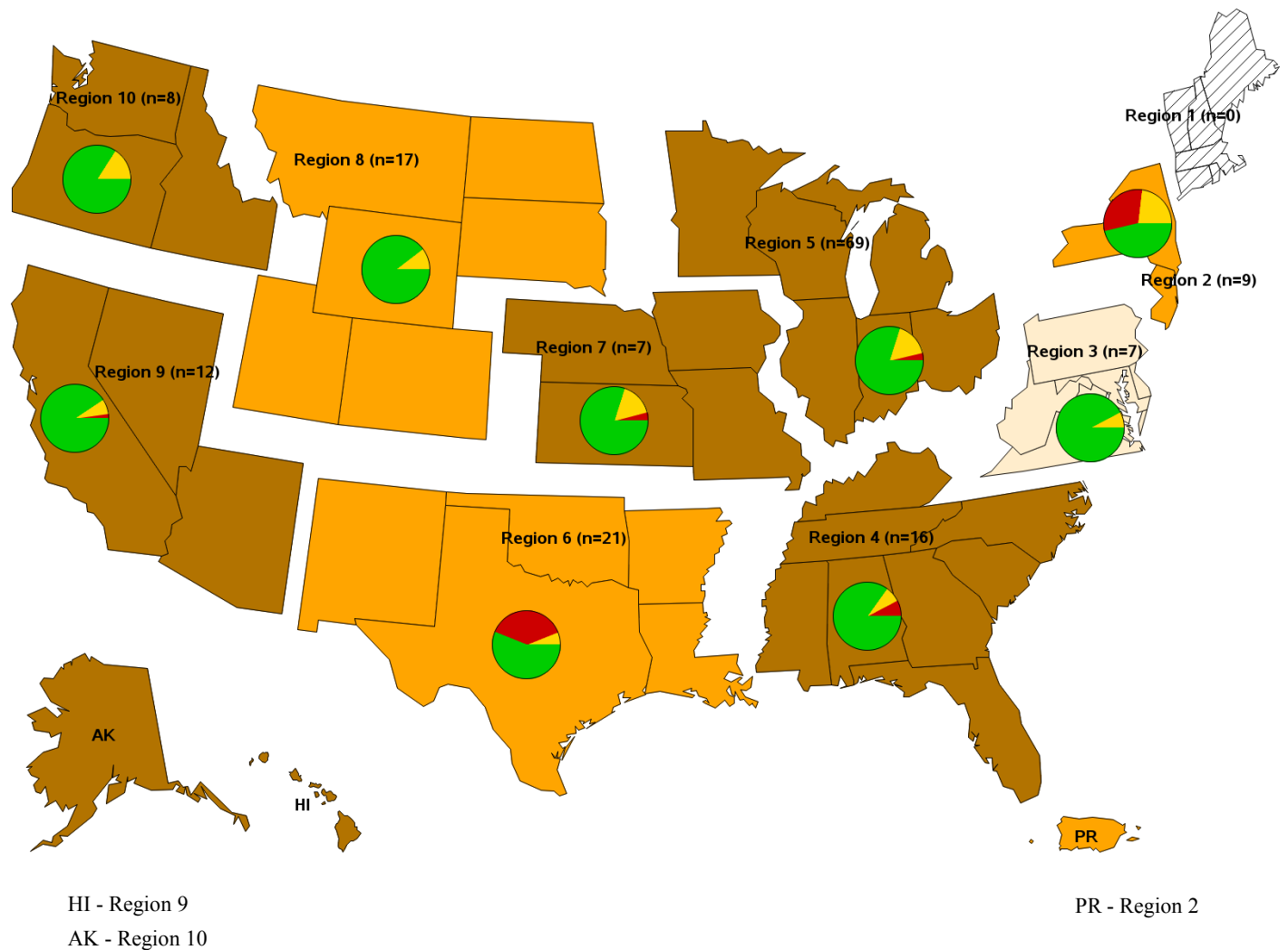
Of 2,933 ILI cases, 1,168 are service members (39.8%), 879 are children (30.0%), 532 are spouses (18.1%), and 354 are retirees and other beneficiaries (12.1%). The median age of ILI cases with known age (n=2,930) is 26 (range 0, 98).

Graph 6. ILI by beneficiary status through Week 2 of the 2017-2018 surveillance year



DoD Global Respiratory Pathogen Surveillance Program

Map 1. Influenza subtypes and activity level by U.S. region through Week 2 of the 2017-2018 surveillance year



Legend

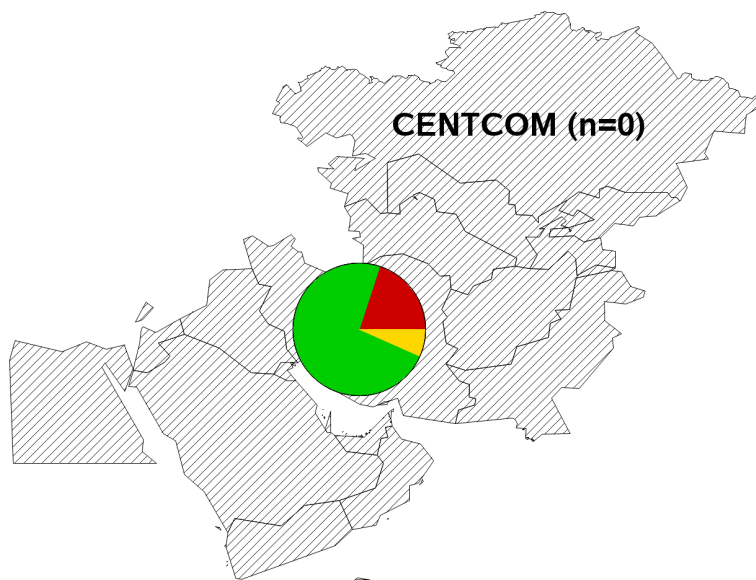
Influenza Activity - Past 2 weeks (n = # of submissions)

- No activity (0%+) or no submissions
- Low (<25%+)
- Moderate (25-49%+)
- High (>50%+)

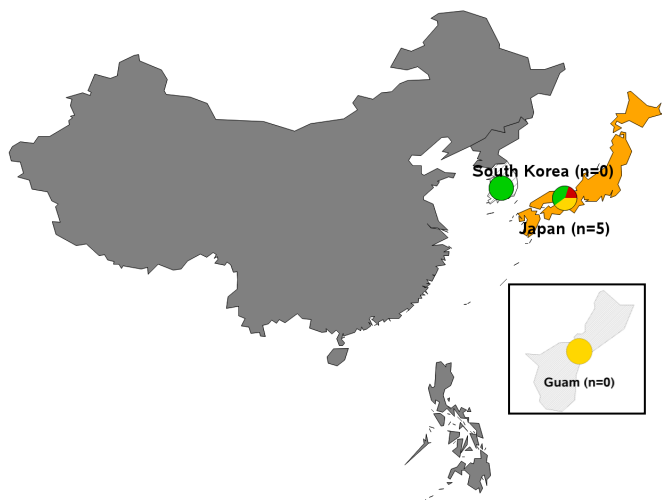
Influenza Results - Cumulative

- Influenza A(H3N2)
- Influenza A(H1N1)pdm09
- Influenza B
- Influenza A/not subtyped

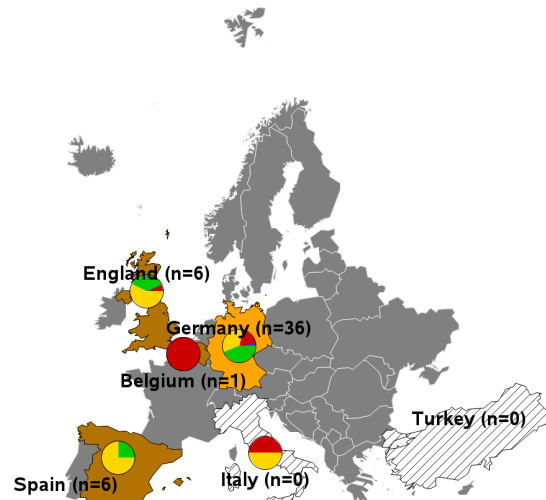
Map 2. Influenza subtypes and activity level for CENTCOM through Week 2 of the 2017-2018 surveillance year



Map 3. Influenza subtypes and activity level by country through Week 2 of the 2017-2018 surveillance year (Pacific)



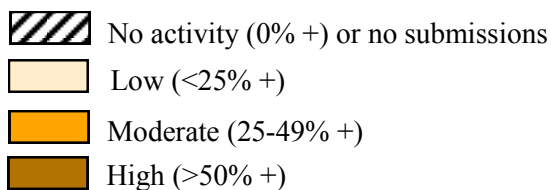
Map 4. Influenza subtypes and activity level by country through Week 2 of the 2017-2018 surveillance year (Europe)



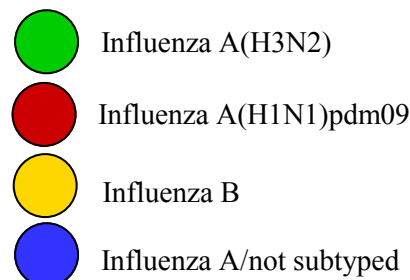
Note - Countries shaded in gray do not contain submitting sites and are only displayed for geographical perspective.

Legend

Influenza Activity - Past 2 weeks (n = # of submissions)



Influenza Results - Cumulative



Background

The DoD-wide program was established by the Global Emerging Infections Surveillance and Response System (GEIS) in 1997. The surveillance network includes the Defense Health Agency/Armed Forces Health Surveillance Branch—Air Force Satellite Cell (DHA/AFHSB-AF) and U.S. Air Force School of Aerospace Medicine (USAFSAM) (sentinel site respiratory surveillance), the Naval Health Research Center (recruit and shipboard population-based respiratory surveillance), the Naval Medical Research Unit (NAMRU-3) in Cairo, Egypt, the Naval Medical Research Unit (NAMRU-2) in Phnom Penh, Cambodia, the Armed Forces Research Institute of Medical Sciences (AFRIMS) in Bangkok, Thailand, the Naval Medical Research Unit (NAMRU-6) in Lima, Peru, and the United States Army Medical Research Unit-Kenya (USAMRU-K) located in Nairobi, Kenya. This work is supported by the Air Force and GEIS Operations, a Division of the Armed Forces Health Surveillance Branch (AFHSB).

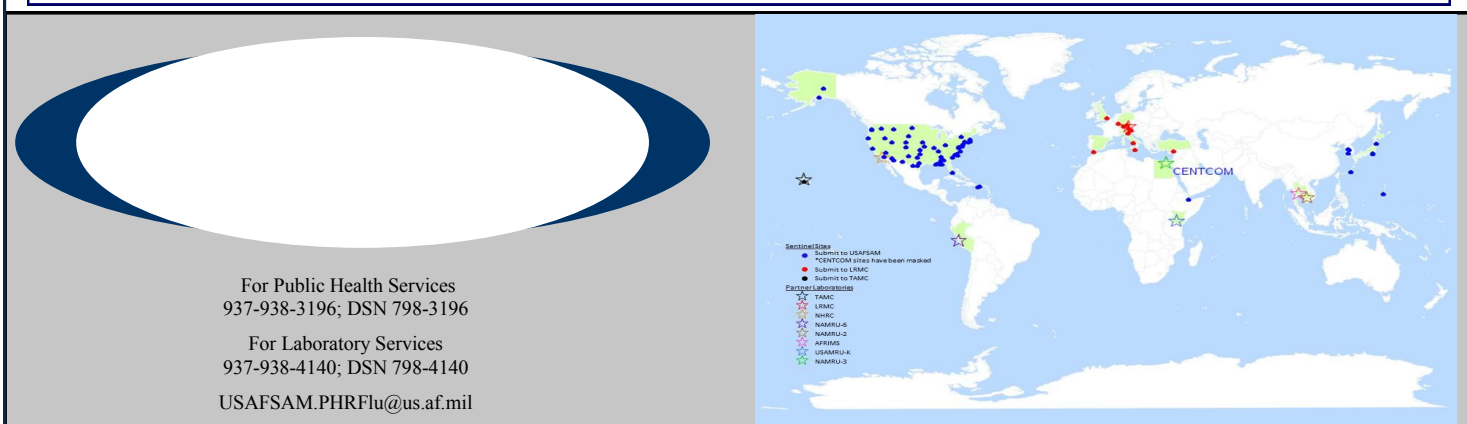
Sentinel Site Surveillance

In 1976, the U.S. Air Force Medical Service began conducting routine, global, laboratory-based, influenza surveillance. Air Force efforts expanded to DoD-wide in 1997. DHA/AFHSB-AF and USAFSAM manages the surveillance program that includes global surveillance among DoD beneficiaries at 79 sentinel sites (including deployed locations) and many non-sentinel sites (please see map below). Collaborating partner laboratories include five DoD overseas medical research laboratories (AFRIMS, NAMRU-2, NAMRU-3, NAMRU-6, USAMRU-K) who collect specimens from local residents in surrounding countries that may not otherwise be covered in existing surveillance efforts. Additionally, the Naval Health Research Center (NHRC) in San Diego, CA collects specimens from DoD recruit training centers and conducts surveillance along the Mexico border.

Landstuhl Regional Medical Center (LRMC) and Tripler Army Medical Center (TAMC) assist the program by processing DoD specimens for the EUCOM region and the State of Hawaii, respectively. EUCOM respiratory data is obtained from LRMC and incorporated into our weekly report. This process seeks to provide more timely results and efficient transport of specimens.

Available on our website (listed below) is a list of previous weekly surveillance reports, program information (including an educational briefing and instruction pamphlets for clinic staff), and a dashboard containing respiratory data for our sentinel sites.

Errata:



Collaborating Partners

In addition to all participating DoD military sentinel sites, collaborating laboratories and medical centers (described above) may be further understood by reviewing the sites' website. Click on the sites' icon to be directed to their webpage.

