



Cumulative Results

Locations	63
Collected	404
Tested	389

Influenza A 16

A(H1N1)pdm09	2
A(H3N2)	13
A(H3N2) & Rhino/Enterovirus	1

Influenza B* 3

B	3
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Other Respiratory Pathogens 179

Adenovirus	4
Coronavirus	4
Human Metapneumovirus	2
<i>Mycoplasma pneumoniae</i>	8
Parainfluenza	33
RSV	7
Rhinovirus/Enterovirus	105
Non-influenza Viral Coinfections	15
Non-influenza Bacterial Coinfections	1
-C. pneumo coinfections (1)	

No Pathogen Detected 191

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

15 - 28 October 2017 (Surveillance Weeks 42 & 43)

- During 15 - 28 October 2017, a total of 185 specimens were collected and received from 52 locations. Results were finalized for 173 specimens from 50 locations. During Week 42, one influenza A(H1N1)pdm09 and four influenza A(H3N2) were detected. During Week 43, three influenza A(H3N2) were detected. The influenza percent positive for Week 42 was approximately 5% and during Week 43 was approximately 4%.
- It has been reported that hundreds of suspected influenza A(H1N1) patients have visited a hospital located at the Sher-i-Kashmir Institute of Medical Sciences (SKIMS) in India and two patients have died in three days due to the virus. Test results remain pending for dozens of suspected cases due to the shortage of labs at the institute. Only three patients have tested positive in the past week. An isolated ward has been opened, but no one has been admitted there as of yet. A strategy to combat the situation has not been developed by the government due to the lack of laboratory tests confirming that these patients were infected with influenza A(H1N1) ([ProMED](#), cited 1 November 2017)
- According to the CDC FluView, influenza activity has remained low in the United States during Week 43. There were three human novel influenza A viruses reported. The proportion of outpatient visits for influenza-like illness (ILI) was below the national baseline. ILI was below baseline levels for all 10 regions. (CDC, [Flu View Report Week 43](#), cited 26 October 2017).
- Due to data-related issues, EUCOM data has only been updated up to Week 42. Map 3 (Europe) on page 5 is only updated to Week 42.

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DoD Global Respiratory Pathogen Surveillance Program

Table 1. Finalized results by region and location for specimens collected during Weeks 42 & 43

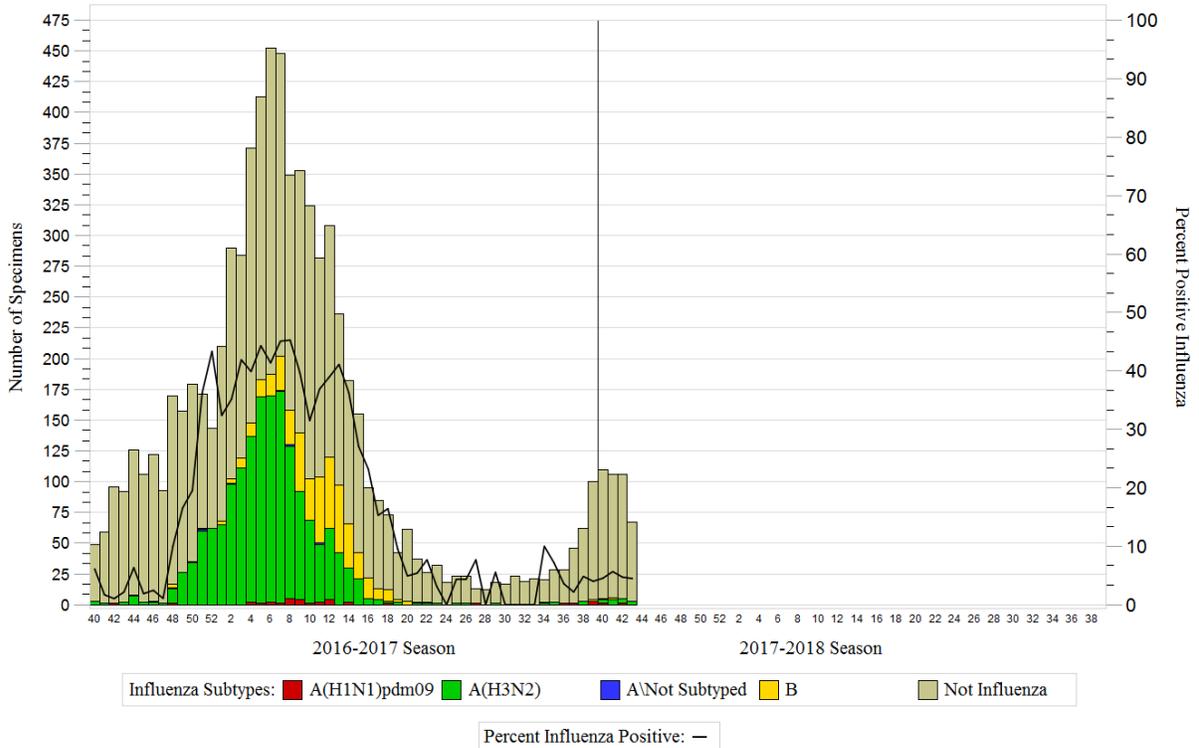
Region*		A(H1N1)pdm09	A(H3N2)	Adenovirus	Coronavirus	hMPV	M. pneumoniae	Parainfluenza	RSV	Rhinovirus/Enterovirus	Adeno & Corona & Rhino/Enterovirus	Adeno & Para	Adeno & Rhino/Enterovirus	Corona & Rhino/Enterovirus	Para & Rhino/Enterovirus	RSV & Rhino/Enterovirus	No Pathogen	Total
EUCOM	Aviano AB, Italy	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
	Landstuhl RM C, Germany	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
	Ramstein AB, Germany	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2
	SHAPE, Belgium	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	Spangdahlem AB, Germany	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	USAG Baumholder, Germany	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	USAG Grafenwoehr, Germany	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	USAG Vicenza, Italy	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
	USAG Wiesbaden, Germany	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
PACOM	JB Elmendorf-Richardson, AK	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
	Misawa AB, Japan	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
	Yokota AB, Japan	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2
Region 1	USCG Academy, CT	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Region 2	Ft Drum, NY	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2
	JB McGuire-Dix-Lakehurst, NJ	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
	USMA - West Point, NY	-	-	-	-	-	-	1	7	-	-	-	1	-	-	-	-	6
Region 3	JB Andrews, MD	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	4
	JB Langley-Eustis, VA	-	-	-	-	-	-	1	1	4	-	-	1	-	-	-	-	8
Region 4	Columbus AFB, MS	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
	Eglin AFB, FL	-	1	-	-	-	-	1	1	-	-	-	-	-	-	-	-	4
	Ft Bragg, NC	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	2
	Hurlburt Field, FL	-	-	-	1	-	1	-	-	1	-	-	1	-	-	-	-	5
	Keesler AFB, MS	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	Maxwell AFB, AL	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	2
	Moodys AFB, GA	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1	3
	Robins AFB, GA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	Seymour Johnson AFB, NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Region 5	Shaw AFB, SC	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	4
	Scott AFB, IL	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Region 6	Wright-Patterson AFB, OH	-	1	-	-	-	1	1	-	5	-	1	-	-	-	-	-	21
	Barksdale AFB, LA	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
	Cannon AFB, NM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
	Little Rock AFB, AR	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	4
	Sheppard AFB, TX	-	-	1	1	1	1	-	-	4	-	-	-	-	-	-	-	5
	Tinker AFB, OK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	Vance AFB, OK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Region 7	Offutt AFB, NE	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Region 8	Ellsworth AFB, SD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	FE Warren AFB, WY	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2
	Hill AFB, UT	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
	Minot AFB, ND	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
	Peterson AFB, CO	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
	USAF Academy, CO	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	6
Region 9	Davis-Monthan AFB, AZ	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
	Luke AFB, AZ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	Nellis AFB, NV	-	1	-	-	-	-	1	-	-	-	-	-	-	1	-	-	3
	Vandenberg AFB, CA	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Region 10	CGS North Bend, OR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	Fairchild AFB, WA	-	-	-	-	-	-	-	4	1	-	-	-	-	-	-	-	5
	NH Bremerton, WA	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	2
Total	1	7	2	4	2	4	11	6	44	1	1	3	1	3	1	82	173	

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

Cumulative Laboratory Results

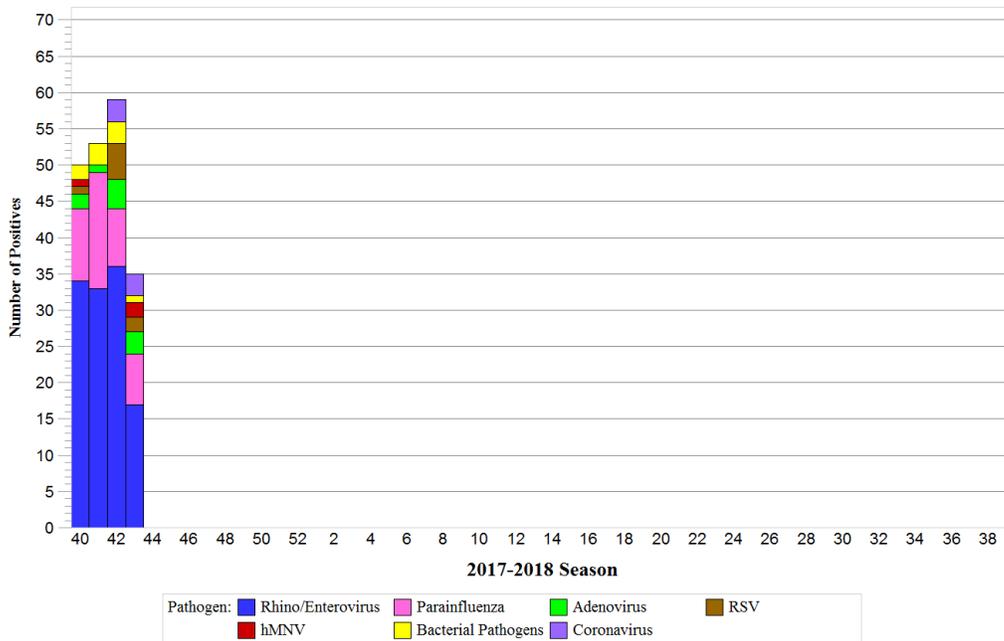
Link to cumulative results by region and location: <https://gumbo2.wpafb.af.mil/epi-consult/influenza/LabResultsChart.cfm>

Graph 1. Percent influenza positive by week: 2016-2017 surveillance year and through Week 43 of the 2017-2018 surveillance year



Note: Dual influenza coinfections are excluded from this graph.

Graph 2. Other positive respiratory pathogens for the 2017-2018 surveillance year through Week 43



Graph 3. Vaccination status by beneficiary type for the 2017-2018 surveillance year through Week 43 (excluding 'Other' beneficiary type)

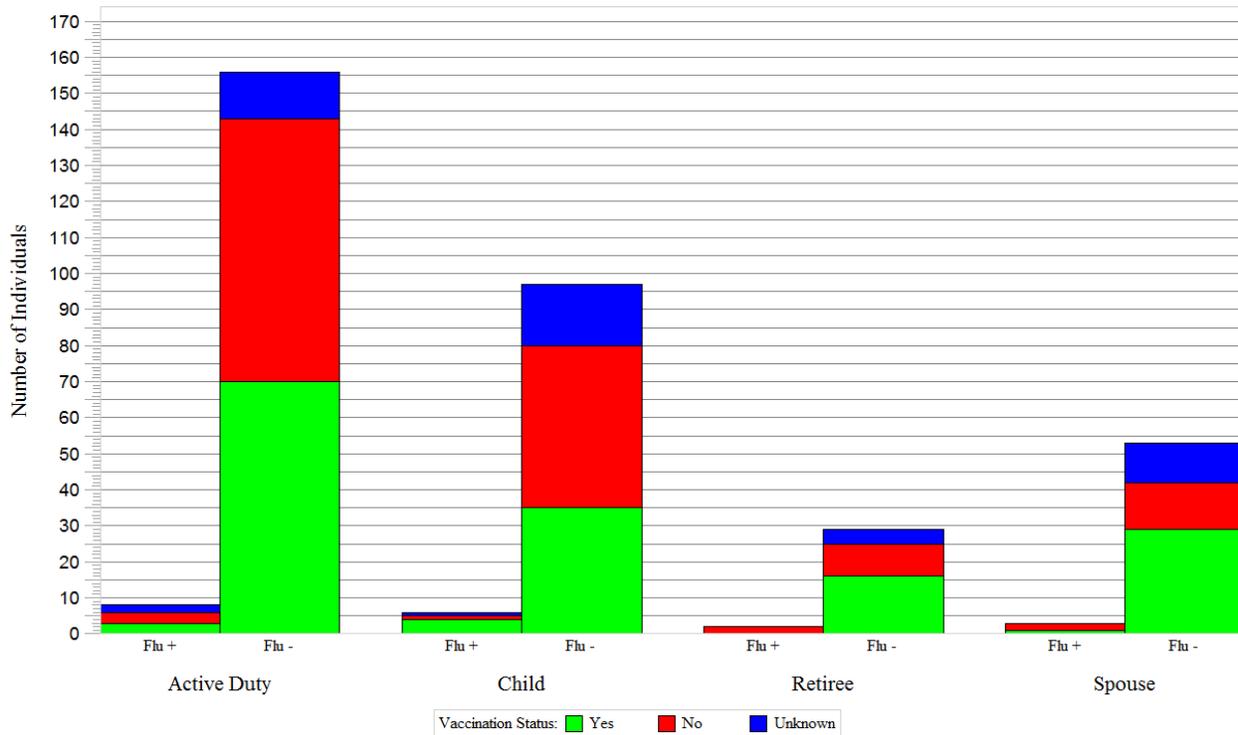
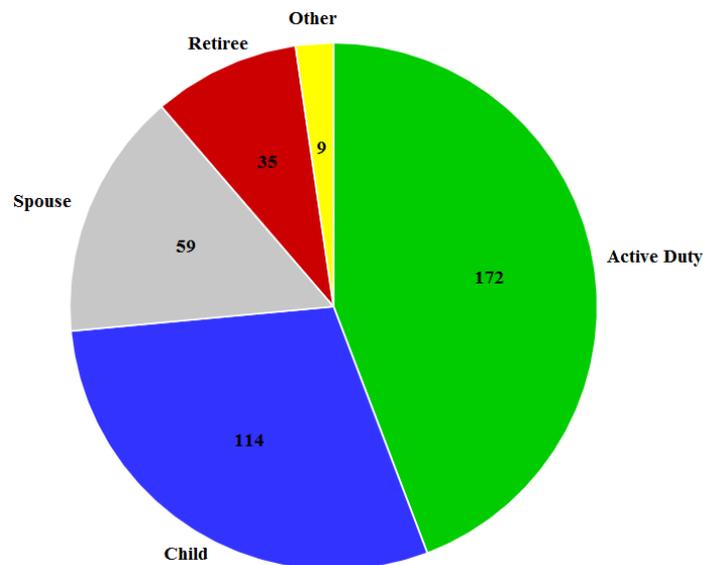


Table 2. ILI by age group for the 2017-2018 surveillance year through Week 43

Age Group	Frequency	Percent
0-5	84	21.59
6-9	12	3.08
10-17	24	6.17
18-24	82	21.08
25-44	128	32.90
45-64	31	7.97
65+	28	7.20

Graph 4. ILI by beneficiary status for the 2017-2018 surveillance year through Week 43

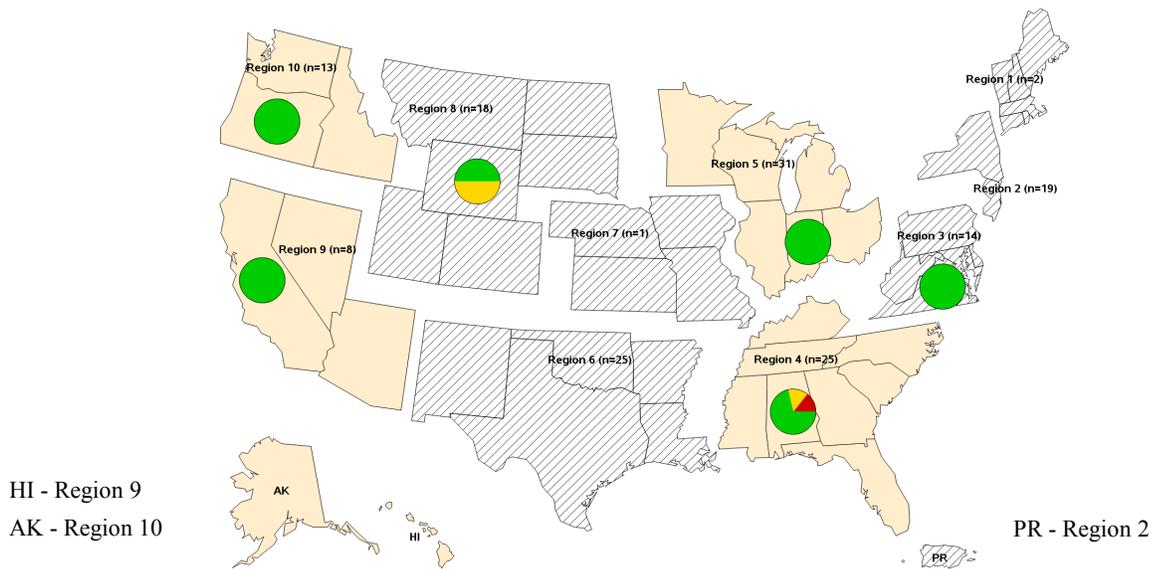


Demographic Summary

Of 389 ILI cases, 172 are service members (44.2%), 114 are children (29.3%), 59 are spouses (15.2%), and 44 are retirees and other beneficiaries (11.3%). The median age of ILI cases with known age (n=389) is 24 (range 0, 87).

DoD Global Respiratory Pathogen Surveillance Program

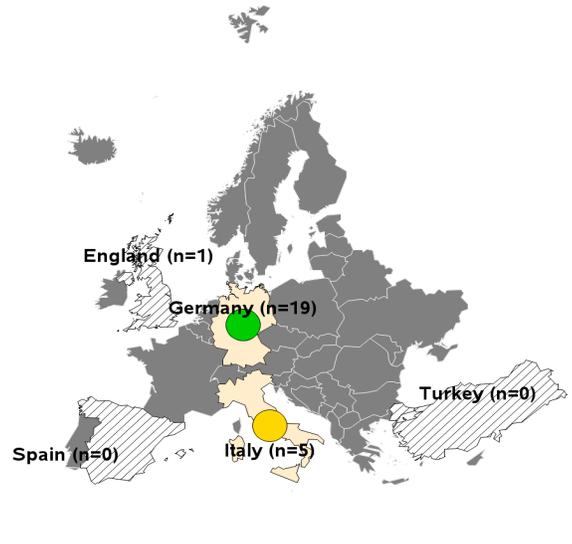
Map 1. Influenza subtypes and activity level by U.S. region for the 2017-2018 surveillance year through Week 43



Map 2. Influenza subtypes and activity level by country for the 2017-2018 surveillance year through Week 43 (Pacific)



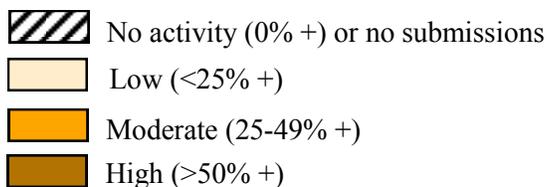
Map 3. Influenza subtypes and activity level by country for the 2017-2018 surveillance year through Week 42 (Europe)



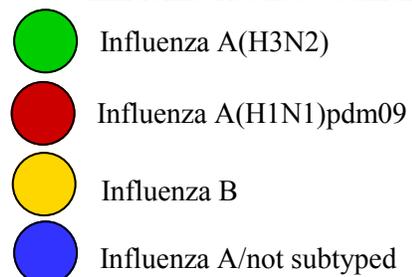
Note - Countries shaded in gray do not contain sentinel sites and are only displayed for geographical perspective.

Legend

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



Influenza Results - Cumulative



DoD Global Respiratory Pathogen Surveillance Program

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).

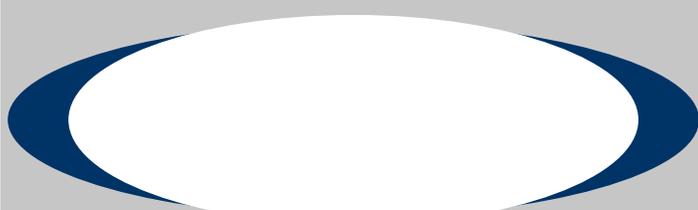
Sentinel Site Surveillance

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.

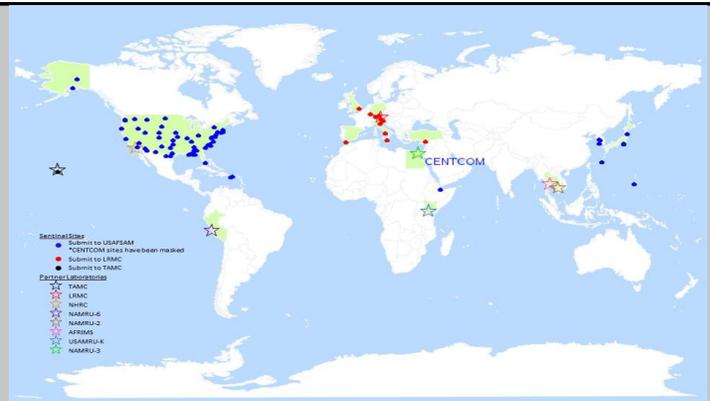
Errata:



For Public Health Services
937-938-3196; DSN 798-3196

For Laboratory Services
937-938-4140; DSN 798-4140

USAFSAM.PHRFlu@us.af.mil



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.

