



**Cumulative Results**

Locations	57
Collected	267
Tested	261

**Influenza A 12**

A(H1N1)pdm09	2
A(H3N2)	10

**Influenza B\* 3**

B	3
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**Other Respiratory Pathogens 116**

Adenovirus	3
<i>Mycoplasma pneumoniae</i>	6
Parainfluenza	21
RSV	2
Rhinovirus/Enterovirus	72
Non-influenza Viral Coinfections	11
Non-influenza Bacterial Coinfections - <i>C. pneumo</i> coinfections (1)	1

**No Pathogen Detected 130**

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**

**8 - 21 October 2017 (Surveillance Weeks 41 & 42)**

- During 8 - 21 October 2017, a total of 173 specimens were collected and received from 47 locations. Results were finalized for 167 specimens from 45 locations. During Week 41, four influenza A(H3N2) and two influenza B were detected. During Week 42, one influenza A(H1N1)pmd09 and three influenza A(H3N2) were detected. The influenza percent positive for Week 41 was approximately 6% and during Week 42 was approximately 5%.
- A study recently published in [Clinical Infectious Diseases](#) examined antiviral prescription and clinical data for high risk flu outpatients enrolled in the US Influenza Vaccine Effectiveness Network from 2011-2016. Results showed that only about 15% of these patients were prescribed antiviral drugs. Researchers concluded that efforts need to be made to increase antiviral treatment in order to reduce serious influenza complications (Stewart et al., 2017).
- According to the CDC FluView, influenza activity has remained low in the United States during Week 42. There was one influenza-associated pediatric death reported to the CDC. An individual who was exposed to swine at a fair in Ohio was infected with an influenza A(H1N2) variant. The patient was not hospitalized and has fully recovered. 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 42](#), cited 26 October 2017).

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# DoD Global Respiratory Pathogen Surveillance Program

**Table 1.** Finalized results by region and location for specimens collected during Weeks 41 & 42

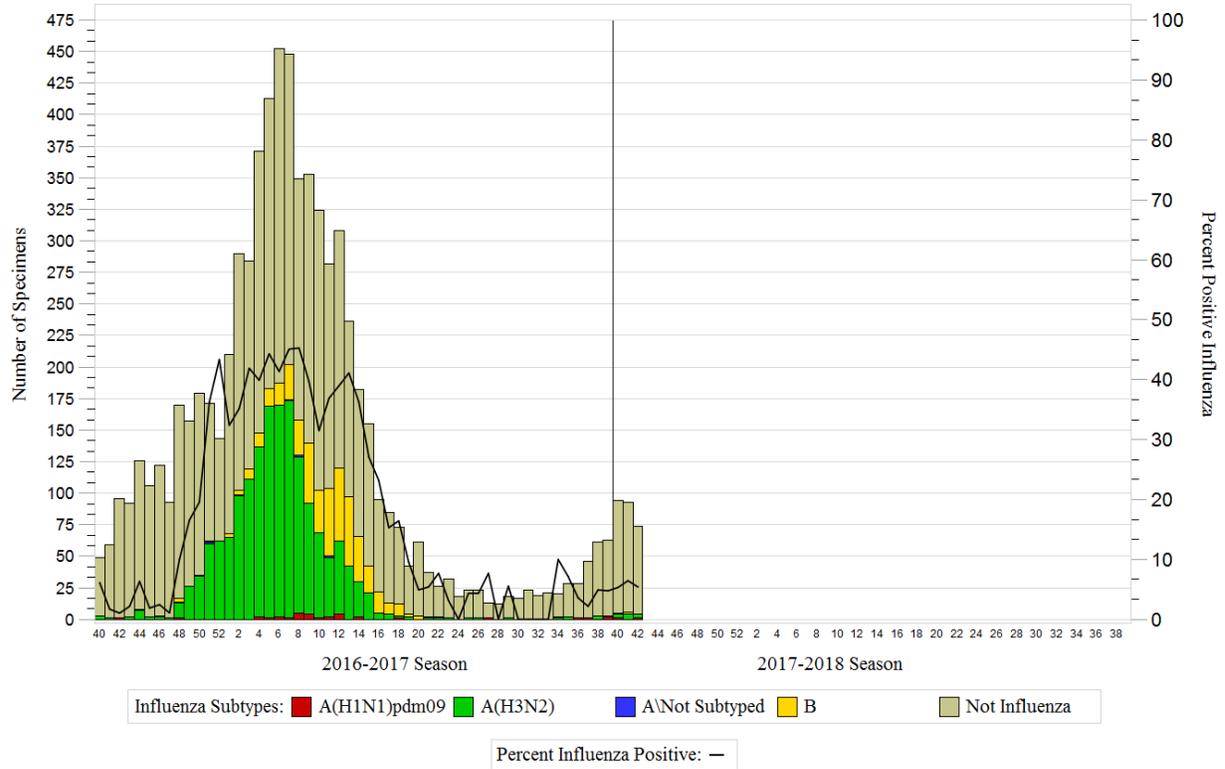
Region*		A(H1N1)pdm09	A(H3N2)	B	Adenovirus	<i>M. pneumoniae</i>	Parainfluenza	RSV	Rhinovirus/Enterovirus	Adeno & Rhino/Enterovirus	Corona & Rhino/Enterovirus	Para & Rhino/Enterovirus	RSV & Rhino/Enterovirus	No Pathogen	Total
EUCOM	Aviano AB, Italy	-	-	1	-	-	-	-	1	-	-	-	-	1	3
	Landstuhl RM C, Germany	-	1	-	-	-	-	-	4	-	-	-	-	4	9
	NSA Naples, Italy	-	-	-	-	-	-	-	1	-	-	-	-	-	1
	RAF Lakenheath, England	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Ramstein AB, Germany	-	-	-	-	-	5	-	-	-	-	-	-	3	8
	SHAPE, Belgium	1	-	-	-	-	-	-	-	-	-	-	-	-	1
	Spangdahlem AB, Germany	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	USAG Baumholder, Germany	-	-	-	-	-	-	-	-	-	-	-	-	2	2
	USAG Grafenwoehr, Germany	-	-	-	-	-	-	-	1	-	-	-	-	7	8
	USAG Vicenza, Italy	-	-	-	-	-	-	-	1	-	-	-	-	-	1
	USAG Wiesbaden, Germany	-	-	-	-	-	-	-	2	-	-	-	-	-	2
Vilseck AHC, Germany	-	-	-	-	-	-	-	1	-	-	-	-	-	1	
PACOM	Kadena AB, Japan	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Misawa AB, Japan	-	-	-	-	-	-	-	1	-	-	-	-	-	1
	Osan AB, South Korea	-	1	-	-	-	-	-	1	-	-	-	-	-	2
	Yokota AB, Japan	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Region 1	USCG Academy, CT	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Region 2	Ft Drum, NY	-	-	-	-	1	-	-	2	-	-	-	-	2	5
	USMA - West Point, NY	-	-	-	-	-	-	-	8	-	1	-	-	6	15
Region 3	JB Andrews, MD	-	1	-	-	-	3	-	1	-	-	1	-	4	10
	JB Langley-Eustis, VA	-	-	-	-	1	1	-	3	1	-	1	-	3	10
Region 4	Columbus AFB, MS	-	-	-	-	-	-	-	1	-	-	-	-	-	1
	Eglin AFB, FL	-	1	1	-	-	-	-	1	-	-	-	-	3	6
	Hurlburt Field, FL	-	-	-	-	1	1	-	-	-	-	-	-	1	3
	Keesler AFB, MS	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Maxwell AFB, AL	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Moody AFB, GA	-	1	-	-	-	1	-	-	-	-	-	1	-	3
	Shaw AFB, SC	-	-	-	-	-	1	1	1	-	-	1	-	1	5
Region 5	Scott AFB, IL	-	-	-	-	-	1	-	-	-	-	-	-	-	1
	Wright-Patterson AFB, OH	-	1	-	-	1	-	-	5	-	-	-	-	20	27
Region 6	Altus AFB, OK	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Cannon AFB, NM	-	-	-	-	-	1	-	-	-	-	-	-	2	3
	Little Rock AFB, AR	-	-	-	-	-	-	-	1	-	-	-	-	-	1
	Sheppard AFB, TX	-	-	-	2	-	-	-	3	-	-	-	-	1	6
	Tinker AFB, OK	-	-	-	-	-	-	-	1	-	-	-	-	2	3
	Vance AFB, OK	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Region 7	McConnell AFB, KS	-	-	-	-	-	-	-	1	-	-	-	-	1	2
	Offutt AFB, NE	-	-	-	-	-	-	-	2	-	-	-	-	2	4
Region 8	Hill AFB, UT	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Peterson AFB, CO	-	-	-	-	-	-	-	-	1	-	1	-	1	3
	USAF Academy, CO	-	-	-	-	-	-	-	-	-	-	-	-	2	2
Region 9	Davis-Monthan AFB, AZ	-	-	-	-	1	-	-	-	-	-	-	-	3	4
	Nellis AFB, NV	-	1	-	-	-	-	-	-	-	-	-	-	-	1
	Vandenberg AFB, CA	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Region 10	Fairchild AFB, WA	-	-	-	-	-	-	1	-	1	-	-	-	2	
<b>Total</b>		1	7	2	2	5	14	1	46	2	2	4	1	80	167

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

## Cumulative Laboratory Results

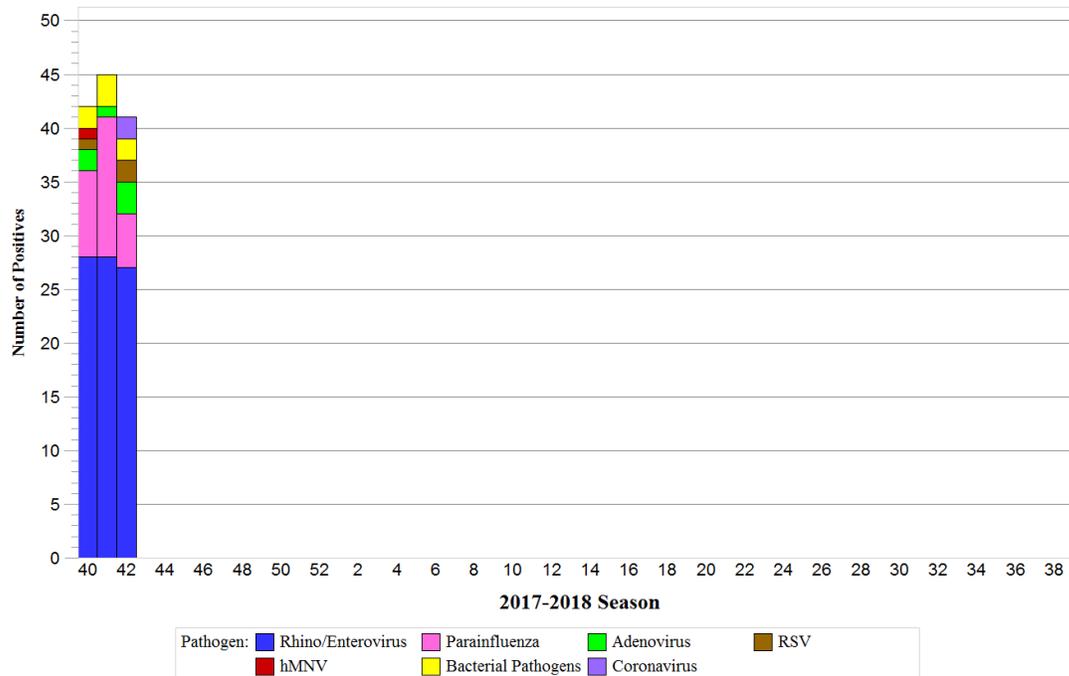
Link to cumulative results by region and location: <https://gumbo2.wpafb.af.mil/epi-consult/influenza/LabResultsChart.cfm>

**Graph 1.** Percent influenza positive by week: 2016-2017 surveillance year and through Week 42 of the 2017-2018 surveillance year

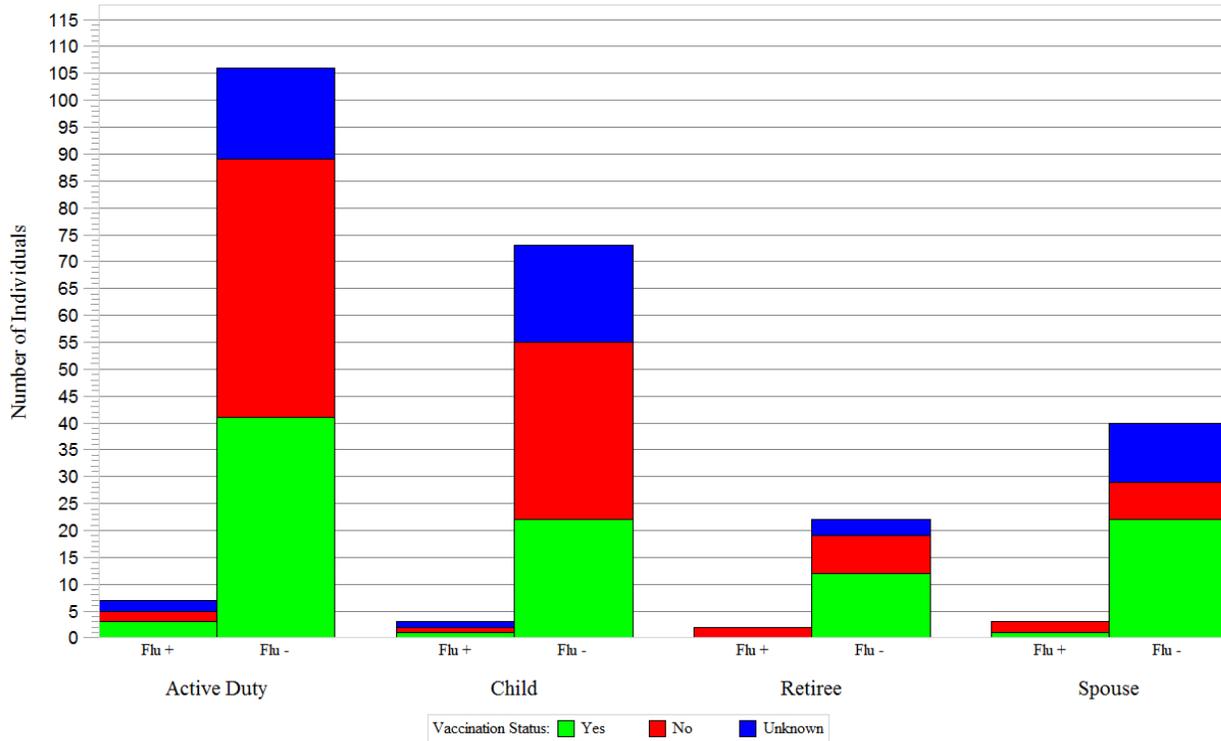


Note: Dual influenza coinfections are excluded from this graph.

**Graph 2.** Other positive respiratory pathogens for the 2017-2018 surveillance year through Week 42



**Graph 3.** Vaccination status by beneficiary type for the 2017-2018 surveillance year through Week 42



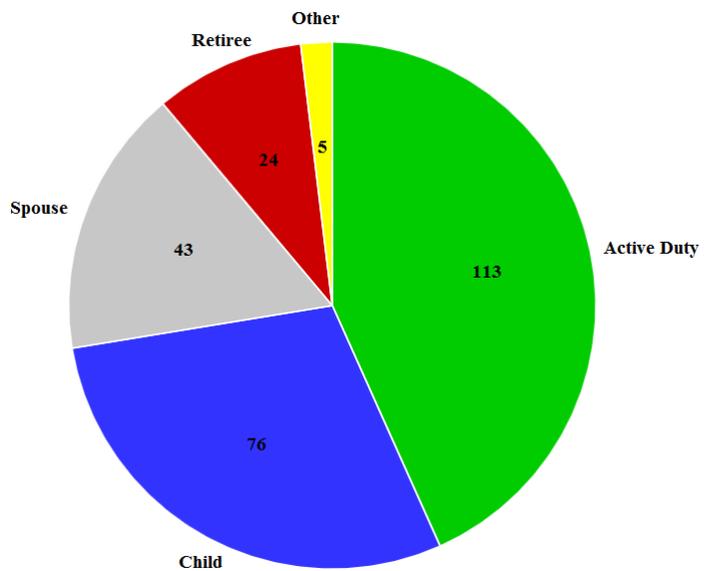
**Table 2.** ILI by age group for the 2017-2018 surveillance year through Week 42

Age Group	Frequency	Percent
0-5	56	21.46
6-9	8	3.07
10-17	16	6.13
18-24	60	22.99
25-44	77	29.50
45-64	25	9.58
65+	19	7.28

### Demographic Summary

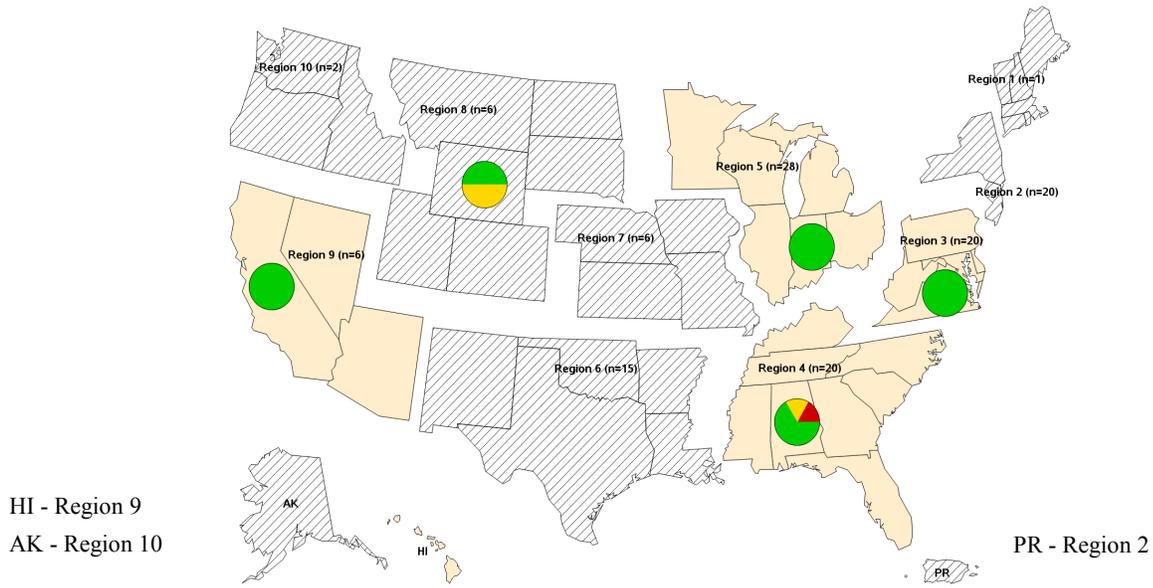
Of 261 ILI cases, 113 are service members (43.3%), 76 are children (29.1%), 43 are spouses (16.5%), and 29 are retirees and other beneficiaries (11.1%). The median age of ILI cases with known age (n=261) is 24 (range 0, 87).

**Graph 4.** ILI by beneficiary status for the 2017-2018 surveillance year through Week 42

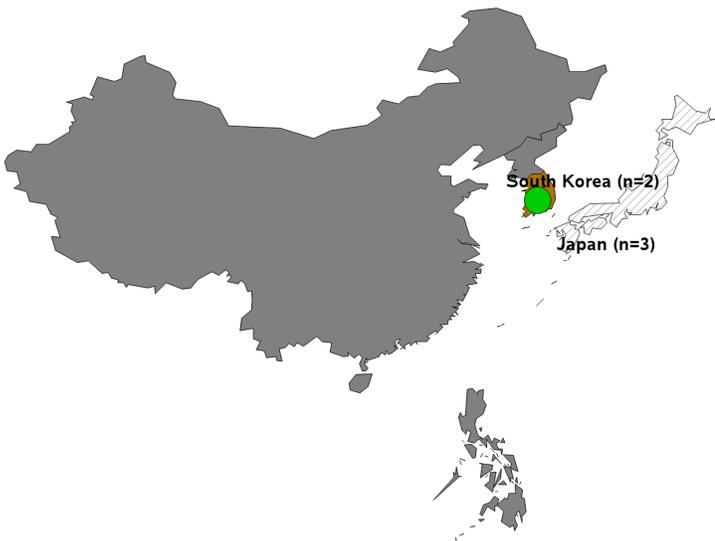


# DoD Global Respiratory Pathogen Surveillance Program

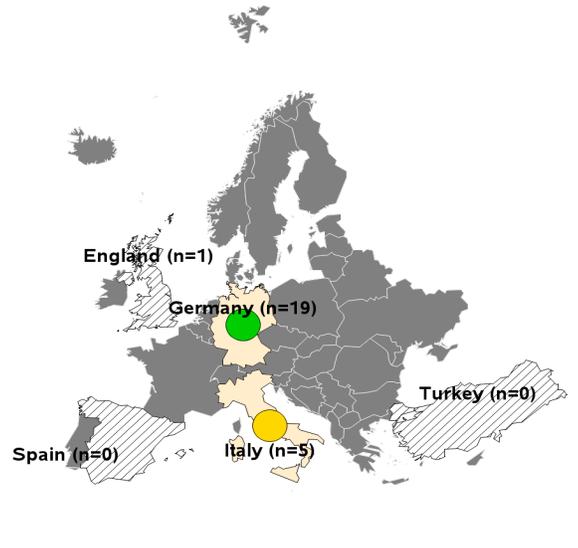
**Map 1.** Influenza subtypes and activity level by U.S. region for the 2017-2018 surveillance year through Week 42



**Map 2.** Influenza subtypes and activity level by country for the 2017-2018 surveillance year through Week 42 (Pacific)



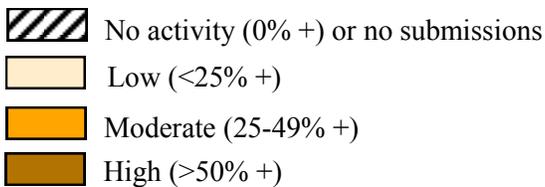
**Map 3.** Influenza subtypes and activity level by country for the 2017-2018 surveillance year through Week 42 (Europe)



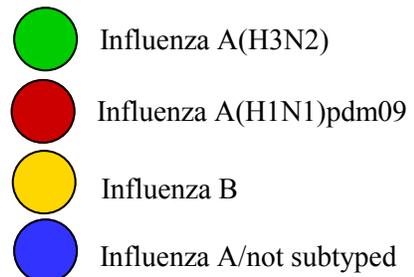
Note - Countries shaded in gray do not contain sentinel sites and are only displayed for geographical perspective.

## Legend

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



### Influenza Results - Cumulative



## 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).

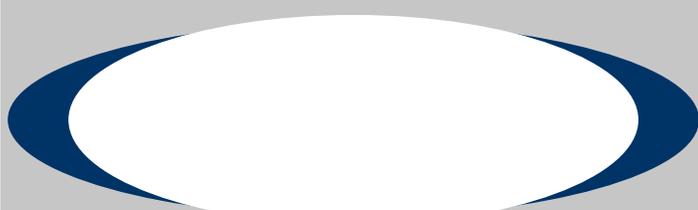
## Sentinel Site Surveillance

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.

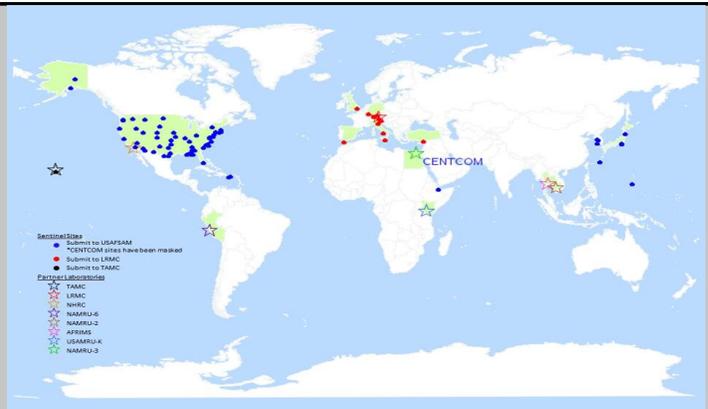
Errata:



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.

