



Cumulative Results

Locations	68
Collected	1,126
Tested	1,075

Respiratory Highlights

27 December 2015 - 9 January 2016 (Surveillance Weeks 52 & 1)

- During 27 December 2015 - 9 January, a total of 116 specimens were collected and received from 41 locations. Results were finalized for 83 specimens from 32 locations. During Week 52, two influenza A(H1N1)pdm09 viruses were identified. No influenza viruses were identified during Week 1.
- During week 52 (27 December 2015 - 2 January 2016), influenza activity increased slightly in the United States. **Viral Surveillance:** The most frequently identified influenza virus type reported during Week 52 was influenza A, with influenza A(H1N1)pdm09 viruses predominating. The percentage of respiratory specimens testing positive for influenza in clinical laboratories was low. **Novel Influenza A Virus:** One human infection with a novel influenza A virus was reported. **Pneumonia and Influenza (P&I) Mortality:** The proportion of deaths attributed to P&I was below their system-specific epidemic threshold. **Influenza-Associated Pediatric Deaths:** Two influenza-associated pediatric deaths were reported. **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 2.8%, which is above the national baseline (2.1%). **Geographic Spread of Influenza:** The geographic spread of influenza in Guam and two states were reported as widespread; six states reported regional activity; 13 states reported local activity; the U.S. Virgin Islands and 27 states reported sporadic activity; the District of Columbia and two states reported no influenza activity; and Puerto Rico did not report (CDC FluView Report Week 52, cited 13 January 2016).

Influenza A	16
A(H1N1)pdm09	10
A(H3N2)	6
A/not subtyped	0

Influenza B*	11
B	11

Other Respiratory Pathogens	349
Adenovirus	57
<i>Bordetella pertussis</i>	1
<i>Chlamydomydia pneumoniae</i>	0
Coronavirus	24
Human Metapneumovirus	5
<i>Mycoplasma pneumoniae</i>	27
Parainfluenza	67
RSV	33
Rhino/Enterovirus	94
Non-influenza Co-infections	41

Table 1. Results by region and location for specimens collected during Weeks 52 & 1

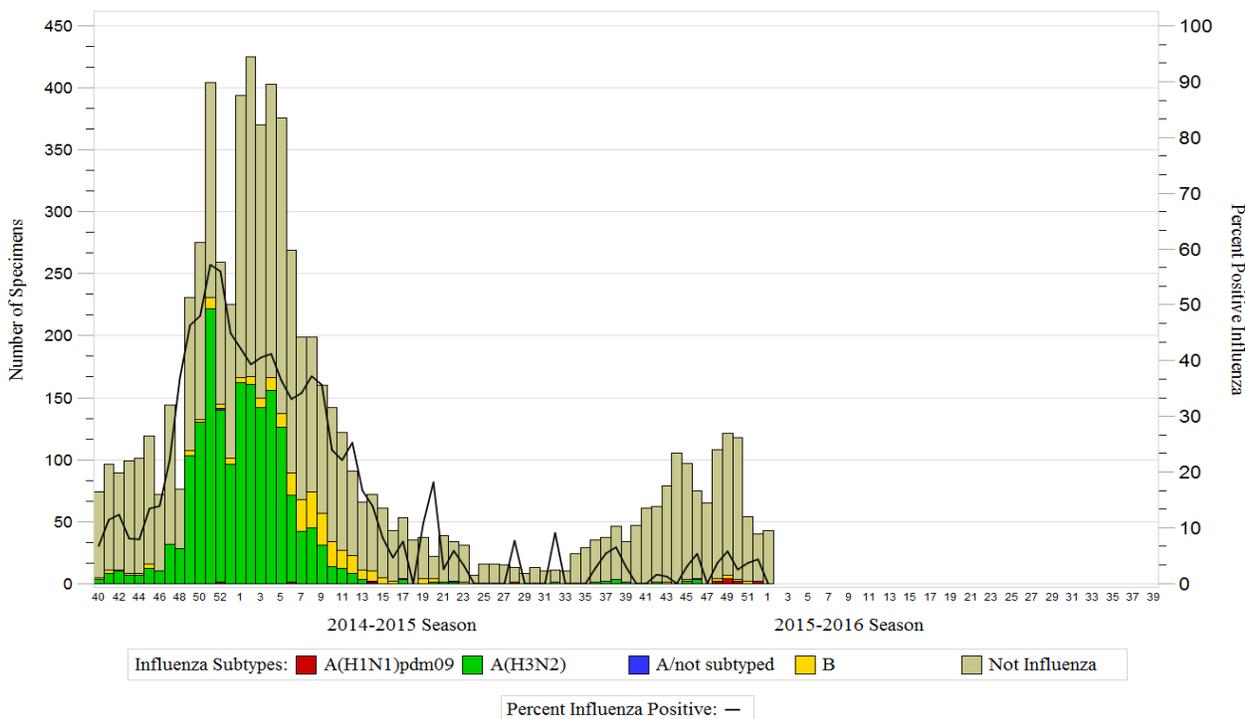
Region*	Location	A(H1N1)pdm09	Adenovirus	Coronavirus	hMPV	M. pneumoniae	Parainfluenza	RSV	Rhinovirus/Enterovirus	Adeno & RSV	Adeno & Rhino/Entero	Corona & RSV	No Pathogen	Total
PACOM	Yokota AB, Japan	1	-	-	-	-	-	-	-	-	-	-	-	1
Region 1	Hanscom AFB, MA	-	1	-	-	-	-	-	-	-	-	-	-	1
Region 2	JB McGuire-Dix-Lakehurst, NJ	-	-	-	-	1	-	-	-	-	-	-	-	1
	USMA - West Point, NY	-	4	1	-	-	-	-	-	-	-	-	-	2
Region 3	JB Langley-Eustis, VA	-	1	1	-	-	-	1	-	-	-	-	-	3
	NMC Portsmouth, VA	-	-	-	-	-	-	-	-	-	-	-	-	1
Region 4	Columbus AFB, MS	-	1	-	-	-	-	-	-	-	-	-	-	2
	Eglin AFB, FL	-	-	-	-	-	-	-	1	-	-	-	-	2
	Ft Bragg, NC	-	-	1	-	-	-	1	-	-	-	-	-	3
	Ft Campbell, KY	-	-	-	-	-	-	-	-	-	-	-	-	3
	Keesler AFB, MS	-	-	-	-	-	-	-	-	-	-	-	-	1
	MacDill AFB, FL	-	-	-	-	-	1	-	-	-	-	-	-	1
	Moody AFB, GA	-	1	-	1	-	-	1	-	-	-	-	-	4
	NH Beaufort, SC	-	-	-	-	-	-	-	-	-	-	-	-	1
	Robins AFB, GA	-	-	-	-	-	-	-	-	-	-	-	-	1
	Seymour Johnson AFB, NC	-	-	-	-	-	-	-	1	-	-	-	-	1
Region 5	Wright-Patterson AFB, OH	-	-	-	-	-	-	-	1	-	-	-	-	1
Region 6	Altus AFB, OK	-	-	-	-	-	-	-	-	-	-	-	-	1
	Cannon AFB, NM	-	-	-	-	-	-	-	1	-	-	-	-	1
	Little Rock AFB, AR	-	-	-	-	-	-	-	-	-	-	-	-	3
	Sheppard AFB, TX	-	-	-	-	-	-	-	-	-	-	-	-	2
	Tinker AFB, OK	-	-	-	-	-	1	1	-	-	-	-	-	2
Region 7	McConnell AFB, KS	-	-	-	-	-	-	-	3	-	-	-	-	2
	Offutt AFB, NE	-	-	-	-	-	-	-	-	-	-	-	-	3
Region 8	Ellsworth AFB, SD	-	-	-	-	-	-	-	-	1	-	-	-	1
	FE Warren AFB, WY	-	-	1	-	-	1	-	-	-	-	-	-	2
	Hill AFB, UT	-	-	-	1	-	-	-	-	-	-	-	-	2
	Peterson AFB, CO	-	-	2	-	-	-	-	-	1	-	-	-	3
Region 9	Edwards AFB, CA	-	-	-	-	-	-	-	-	-	-	-	-	1
	Nellis AFB, NV	1	-	-	-	-	-	1	-	-	-	-	-	1
	Travis AFB, CA	-	-	1	1	1	1	-	1	-	-	-	-	6
Region 10	Mt Home AFB, ID	-	-	-	-	-	-	-	-	-	-	-	-	1
Total		2	8	7	3	3	4	5	8	1	1	1	1	40

Lab data are current as of 11 January 2016. Results are preliminary and may change as more results are received. *Influenza B lineages will be reported in the periodic molecular sequencing reports.

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

Laboratory Results - Cumulative for Season

Graph 1. Percent influenza positive by week: 2014-2015 surveillance year and through Week 1 of the 2015-2016 surveillance year



Note: Dual influenza co-infections are excluded from this graph. Specimens with pending results are used in the denominator to calculate percent positive, but are not displayed in the graph.

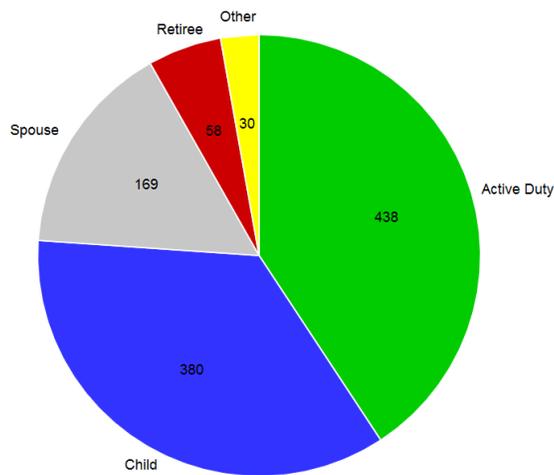
Table 2. ILI by age group for the 2015-2016 surveillance year through Week 1

Age Group	Frequency	Percent
0-5	248	23.07
6-9	56	5.21
10-17	78	7.26
18-24	196	18.23
25-44	375	34.88
45-64	95	8.84
65+	27	2.51

Demographic Summary

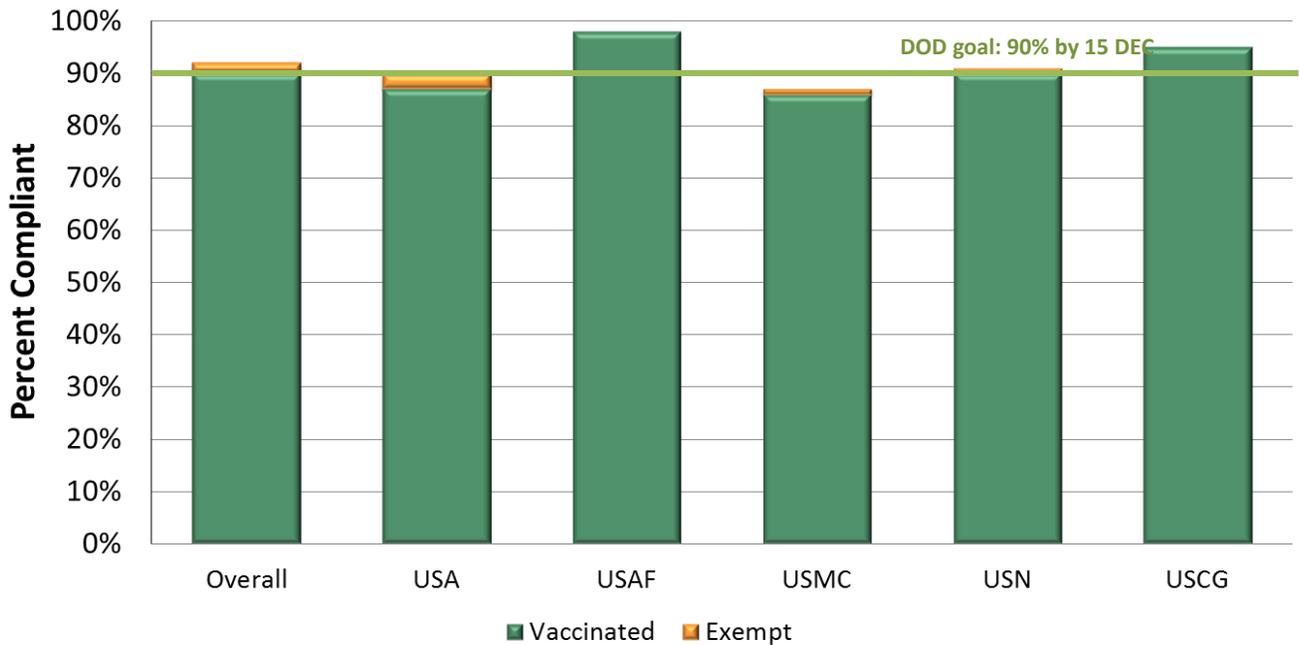
Of 1,075 ILI cases, 438 are service members (40.7%), 380 are children (35.4%), 169 are spouses (15.7%), and 88 (8.2%) are retirees and other beneficiaries. The median age of ILI cases with known age (n=1,075) is 23 (range 0, 93).

Graph 2. ILI by beneficiary status for the 2015-2016 surveillance year through Week 1



DoD Global, Laboratory-Based, Influenza Surveillance Program

Graph 3. Influenza Immunization Status by Service

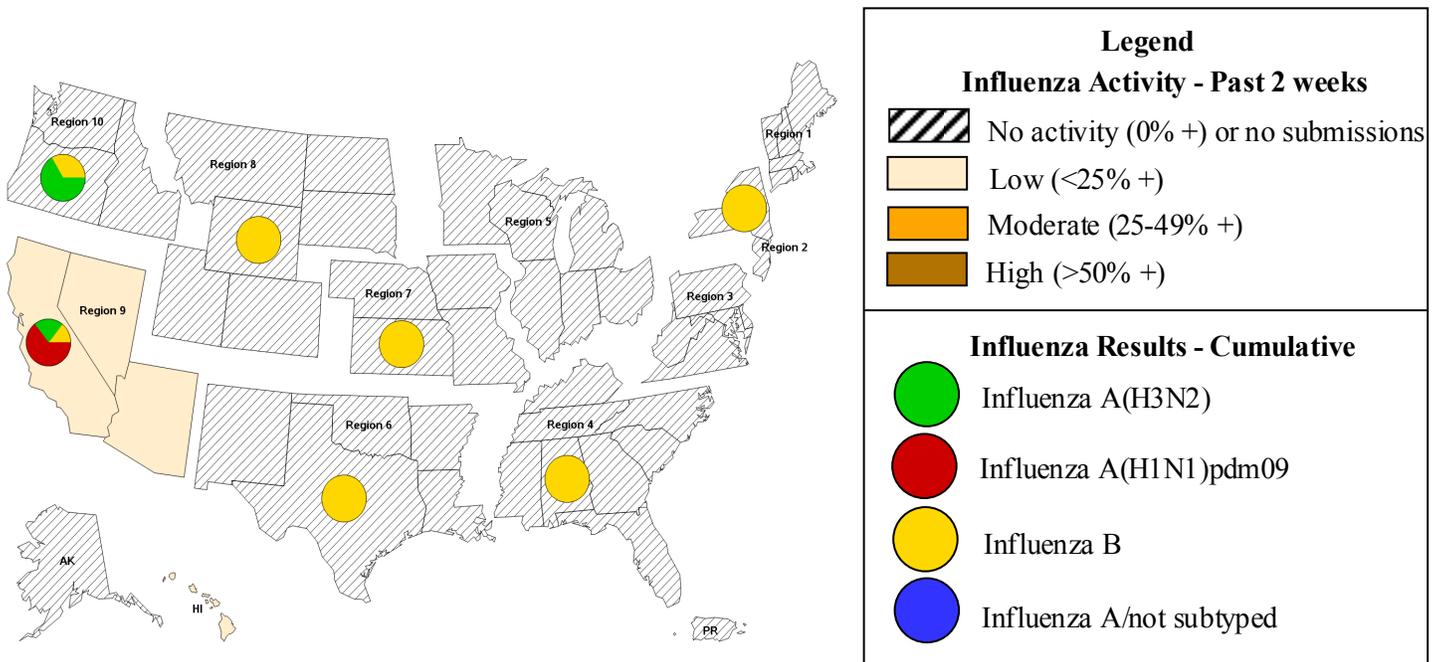


As of 6 Jan

No exemptions noted reflect less than 1% of force exempted

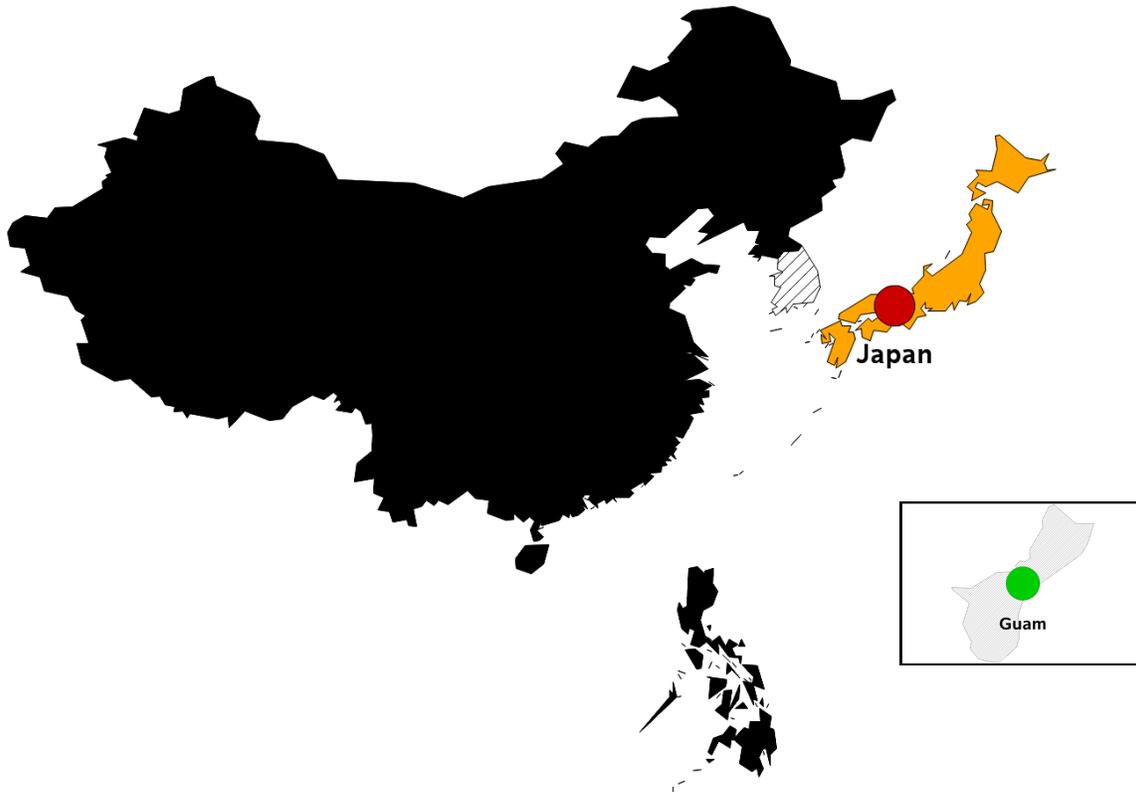
Data Sources: Army - MEDPROS, Air Force - ASIMS, Navy, Marine Corps & Coast Guard - MRRS

Map 1. Influenza subtypes and activity level by region for the 2015-2016 surveillance year through Week 1

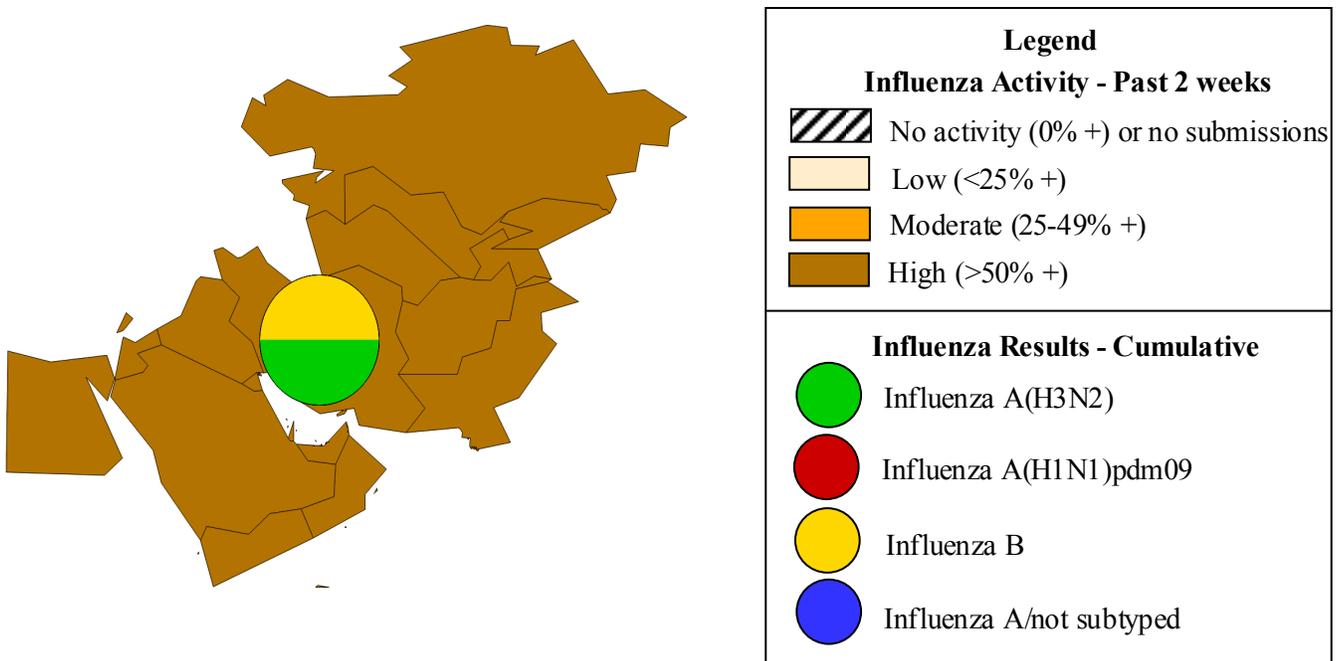


DoD Global, Laboratory-Based, Influenza Surveillance Program

Map 2. Influenza subtypes and activity level by country for the 2015-2016 surveillance year through Week 1 (Pacific)*



Map 3. Influenza subtypes and activity level for CENTCOM for the 2015-2016 surveillance year through Week 1*



Note - Specimens for CENTCOM were tested at USAFSAM or Landstuhl Regional Medical Center (LRMC).

*Due to the receipt of a small number of specimens from these areas that subsequently tested positive for influenza, flu activity level appears inflated.

Laboratory Results—Through Current Surveillance Week 1

Table 3. Cumulative results by region and location for specimens collected during the 2015-2016 surveillance year

Region*		A(H1N1)pdm09	A(H3N2)	B	Adenovirus	B. pertussis	Coronavirus	hMPV	M. pneumoniae	Parainfluenza	RSV	Rhinovirus/Enterovirus	Non-Influenza Co-Infection	No Pathogen	Total	
PACOM	CFA Okinawa, Japan	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	Eielson AFB, AK	-	1	-	-	-	-	-	-	-	-	-	-	-	4	
	JB Elmendorf-Richardson, AK	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	JR Marianas - Andersen AFB, Guam	-	1	-	-	-	-	-	-	-	-	-	-	1	2	
	Kadena AB, Japan	-	-	-	-	-	-	-	-	-	-	2	-	-	10	
	Misawa AB, Japan	-	-	-	-	-	-	-	-	-	1	2	-	-	4	
	Osan AB, South Korea	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
	Yokota AB, Japan	1	-	-	-	-	-	-	1	1	1	-	-	1	14	
Region 1	Hanscom AFB, MA	-	-	-	2	-	-	-	-	2	-	-	-	-	11	
	NHCNE Newport, RI	-	-	-	-	-	-	-	-	-	-	1	-	-	3	
	USCG Academy, CT	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
Region 2	Ft Drum, NY	-	-	-	-	-	-	-	-	-	-	2	-	-	3	
	JB McGuire-Dix-Lakehurst, NJ	-	-	-	-	-	-	-	2	-	-	4	-	-	7	
	USMA - West Point, NY	-	-	2	7	-	2	-	2	1	1	1	3	-	51	
Region 3	Dover AFB, DE	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
	JB Anacostia-Bolling, DC	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	JB Andrews, MD	-	-	-	-	-	-	-	1	-	-	-	-	-	1	
	JB Langley-Eustis, VA	-	-	-	4	-	2	-	-	3	5	2	1	7	24	
	NCRM - Walter Reed NMMC, MD	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
Region 4	NMC Portsmouth, VA	-	-	-	1	-	1	-	5	1	1	2	1	14	26	
	CGS Mobile, AL	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	Columbus AFB, MS	-	-	-	1	-	-	-	-	-	-	2	-	-	12	
	Eglin AFB, FL	-	-	-	4	-	-	-	-	4	2	3	-	-	14	
	Ft Bragg, NC	-	-	-	1	-	1	-	-	-	3	-	1	14	20	
	Ft Campbell, KY	-	-	-	-	-	1	-	-	2	-	3	-	-	15	
	Hurlburt Field, FL	-	-	-	-	-	-	-	-	-	-	-	2	-	6	
	Keesler AFB, MS	-	-	-	-	-	-	-	1	-	-	2	-	-	19	
	MacDill AFB, FL	-	-	-	-	-	-	-	-	2	1	-	-	-	4	
	Maxwell AFB, AL	-	-	-	1	-	-	-	-	1	2	1	-	-	15	
	Moody AFB, GA	-	-	2	5	-	1	1	2	2	3	7	1	12	36	
	NH Beaufort, SC	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	NH Camp Lejeune, NC	-	-	-	-	-	-	-	-	1	-	-	-	-	2	
	NH Jacksonville, FL	-	-	-	2	-	-	-	-	-	-	1	-	-	5	
	Robins AFB, GA	-	-	-	-	-	-	-	1	1	1	-	-	-	5	
	Seymour Johnson AFB, NC	-	-	-	1	-	-	-	-	-	2	2	6	11	11	
	Shaw AFB, SC	-	-	-	-	-	1	-	2	-	-	4	2	6	15	
	Tyndall AFB, FL	-	-	-	-	-	1	-	-	-	-	-	1	1	3	
	Region 5	Scott AFB, IL	-	-	-	2	-	-	-	1	-	1	-	-	15	19
		Wright-Patterson AFB, OH	-	-	-	1	-	-	-	-	-	-	3	-	1	5
Region 6	Altus AFB, OK	-	-	-	2	-	1	-	-	2	-	1	2	24	32	
	Barksdale AFB, LA	-	-	-	-	-	-	-	-	-	-	-	-	2	2	
	Cannon AFB, NM	-	-	-	1	-	-	-	-	-	-	2	-	-	13	
	Laughlin AFB, TX	-	-	-	-	-	1	-	-	-	-	-	-	2	3	
	Little Rock AFB, AR	-	-	-	-	-	1	-	-	-	-	-	-	8	9	
	Sheppard AFB, TX	-	-	2	3	-	-	1	3	1	-	5	2	40	57	
	Tinker AFB, OK	-	-	-	1	-	-	-	1	5	2	3	5	19	36	
	Vance AFB, OK	-	-	-	1	-	-	-	-	1	-	1	-	-	27	
Region 7	Ft Leavenworth, KS	-	-	1	-	-	-	-	-	-	-	1	-	8	10	
	McConnell AFB, KS	-	-	-	1	-	-	-	2	2	-	6	1	23	35	
	Offutt AFB, NE	-	-	-	2	-	-	-	-	3	-	1	-	28	34	
Region 8	Ellsworth AFB, SD	-	-	-	1	-	-	-	1	3	-	2	-	16	23	
	FE Warren AFB, WY	-	-	-	-	1	1	-	-	3	-	2	-	14	21	
	Hill AFB, UT	-	-	1	1	-	-	2	1	-	-	6	-	33	44	
	Malmstrom AFB, MT	-	-	-	-	-	-	-	-	-	-	1	-	1	2	
	Minot AFB, ND	-	-	-	-	-	-	-	-	1	-	1	-	2	4	
	Peterson AFB, CO	-	-	-	1	-	3	-	-	-	-	1	1	13	19	
	USAF Academy, CO	-	-	-	-	-	-	-	-	4	-	1	-	9	14	
Region 9	Davis-Monthan AFB, AZ	-	-	-	-	-	1	-	-	-	-	-	-	7	8	
	Edwards AFB, CA	-	-	-	-	-	-	-	-	-	-	-	-	5	5	
	Luke AFB, AZ	-	-	-	-	-	-	-	-	-	-	-	-	7	7	
	Nellis AFB, NV	9	2	2	6	-	3	-	7	3	5	4	-	35	76	
	Travis AFB, CA	-	1	-	2	-	2	1	1	4	2	7	3	23	46	
	USCG Island Alameda, CA	-	-	-	-	-	-	-	-	-	-	-	-	3	3	
Region 10	Vandenberg AFB, CA	-	-	-	-	-	-	-	-	-	-	-	-	6	6	
	Fairchild AFB, WA	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
	JB Lewis-McChord, WA	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
	Mt Home AFB, ID	-	-	-	-	-	-	-	-	-	-	-	-	5	5	
Total	NH Bremerton, WA	-	1	1	3	-	1	-	1	10	3	6	5	31	62	
		10	6	11	57	1	24	5	27	67	33	94	41	699	1075	

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

Background

The DoD-wide program was established by the Global Emerging Infections Surveillance and Response System (GEIS) in 1997. The surveillance network includes the 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-6 (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 the Division of Global Emerging Infections Surveillance and Response System (GEIS) Operations, a Division of the Armed Forces Health Surveillance Center (AFHSC).

Sentinel Site Surveillance at USAFSAM

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. USAFSAM manages the surveillance program that includes global surveillance among DoD beneficiaries at over 80 sentinel sites (including deployed locations) and many non-sentinel sites (please see map on the left). Unique sentinel sites include three DoD overseas medical research laboratories (AFRIMS, NAMRU-6, USAMRU-K) and the US Army Public Health Command Region South (PHCR-S). These sites collect specimens from local residents in surrounding countries that may not otherwise be covered in existing surveillance efforts.

Since the 2006-2007 season, Landstuhl Regional Medical Center (LRMC) has served EUCOM as a USAFSAM contributing laboratory. The initiative seeks to provide more timely results and efficient transport of specimens.

For an expanded view of this report, visit our website. Also available on the website is a list of previous weekly surveillance reports, program information (including an educational briefing and instruction pamphlets for clinic staff), and an overview of historical data. Please visit the AFHSC/GEIS website for an overview of influenza surveillance at all collaborating organizations.

Errata:

[DoD Global, Laboratory-Based,
Influenza Surveillance Program](https://gumbo2.wpafb.af.mil/epi-consult/influenza/index.cfm)
[https://gumbo2.wpafb.af.mil/
epi-consult/influenza/index.cfm](https://gumbo2.wpafb.af.mil/epi-consult/influenza/index.cfm)

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

For Laboratory Services
937-938-3163; DSN 798-3163



Collaborating Partners

In addition to all participating DoD military sentinel sites, several collaborating partners (described above) may be further understood by reviewing the partner's website.

