



Cumulative Results

Locations	27
Collected	64
Tested	62

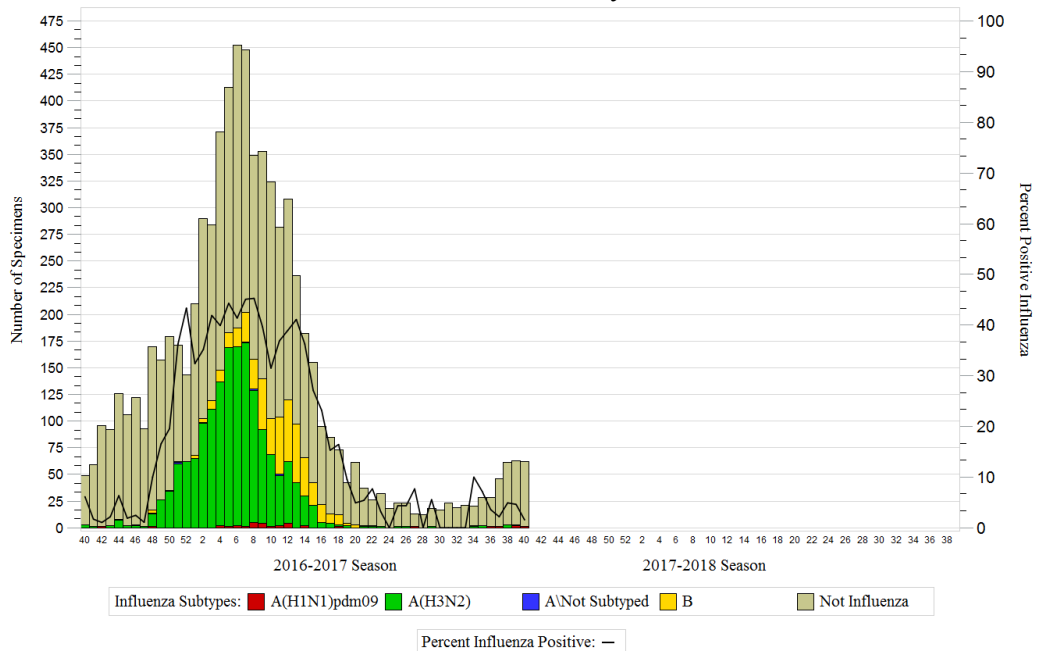
Influenza A	1
A(H1N1)pdm09	1
A(H3N2)	0
A/not subtyped	0
Influenza B*	0
B	0
Other Respiratory Pathogens	26
Adenovirus	1
<i>Chlamydomphila pneumoniae</i>	0
Coronavirus	0
Human Metapneumovirus	0
<i>Mycoplasma pneumoniae</i>	0
Parainfluenza	3
RSV	1
Rhinovirus/Enterovirus	19
Non-influenza Viral Coinfections	1
Non-influenza Bacterial Coinfections	1
-C. pneumo coinfections (1)	
No Pathogen Detected	35

Respiratory Highlights

1 - 7 October 2017 (Surveillance Week 40)

- During 1-7 October 2017, a total of 64 specimens were collected and received from 27 locations. Results were finalized for 62 specimens from 27 locations. There was one influenza A(H1N1)pdm09 identified at Eglin AFB, FL.
- During Week 40, influenza activity was low in the U.S. The most frequently identified type reported by public health laboratories was influenza A. The percentage of respiratory specimens testing positive for influenza in clinical laboratories is low. The proportion of outpatient visits for influenza-like illness (ILI) was 1.4%, which is below the national baseline of 2.2%. The geographic spread of influenza in Guam was reported as widespread; two states reported local activity; the District of Columbia and 38 states reported sporadic activity; 10 states reported no activity; and Puerto Rico and the U.S. Virgin Islands did not report (CDC, [Flu View Report Week 40](#), cited 13 October 2017).
- A recent report by Europe’s I-MOVE + (Integrated Monitoring of Vaccines in Europe plus) hospital network, demonstrates low vaccine effectiveness (VE) for elderly patients hospitalized with influenza A(H3N2) during the 2016-2017 season. VE for hospitalization with A(H3N2) was 17% for person’s ≥ 65 years and 10% for those ≥80 years. The 2017-2018 season could potentially see low VE again for influenza A(H3N2) strains as that component did not change from last season and an A(H3N2) season seems possible with the WHO reporting that, “influenza A(H3N2) viruses were the predominating strain worldwide in August 2017” (Eurosurveillance, [Low 2016/17 season vaccine effectiveness against hospitalised influenza A\(H3N2\) among elderly: awareness warranted for 2017/18 season](#)).

Graph 1. Percent influenza positive by week: 2016-2017 surveillance year and through Week 40 of the 2017-2018 surveillance year



Note: Dual influenza coinfections 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.

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.

DoD Global Respiratory Pathogen Surveillance Program

Table 1. Finalized results by region and location for specimens collected during Week 40

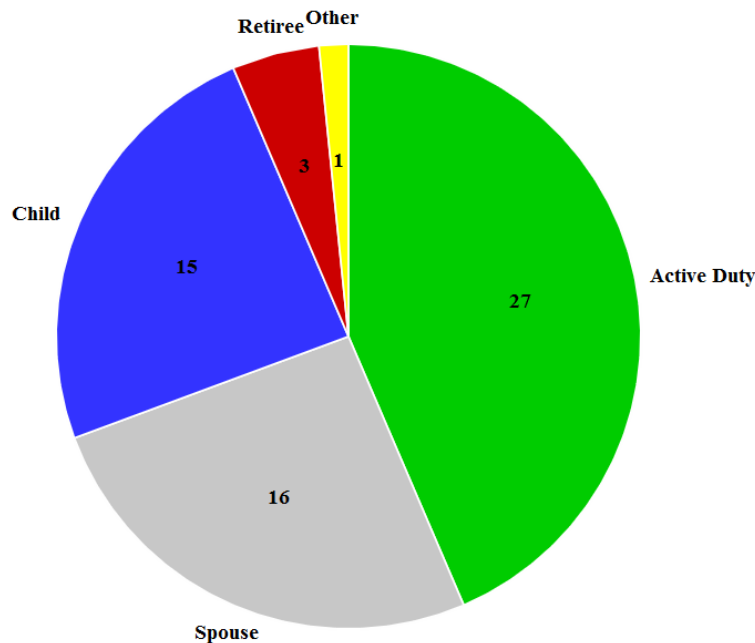
Region*		A(H1N1)pdm09	Adenovirus	Parainfluenza	RSV	Rhinovirus/Enterovirus	Adeno & C. pneumo	hMPV & Rhino/Entero	No Pathogen	Total
EUCOM	Landstuhl RM C, Germany	-	-	-	-	-	-	-	1	1
	USAG Baumholder, Germany	-	-	-	-	-	-	-	1	1
PACOM	Yokota AB, Japan	-	-	-	-	-	-	-	1	1
Region 2	JB M cGuire-Dix-Lakehurst, NJ	-	-	-	-	1	-	-	-	1
	USM A - West Point, NY	-	1	-	-	2	-	-	5	8
Region 3	Dover AFB, DE	-	-	-	-	-	-	-	1	1
	JB Langley-Eustis, VA	-	-	-	-	2	-	-	-	2
Region 4	Eglin AFB, FL	1	-	-	-	-	-	-	-	1
	Ft Bragg, NC	-	-	-	-	-	-	-	3	3
	Hurlburt Field, FL	-	-	-	1	-	-	-	-	1
	Keesler AFB, M S	-	-	-	-	-	-	1	1	2
	NH Camp Lejeune, NC	-	-	1	-	-	-	-	-	1
	Robins AFB, GA	-	-	-	-	-	-	-	1	1
	Shaw AFB, SC	-	-	-	-	2	-	-	-	2
Region 5	Wright-Patterson AFB, OH	-	-	2	-	4	-	-	12	18
Region 6	Laughlin AFB, TX	-	-	-	-	-	1	-	-	1
	Vance AFB, OK	-	-	-	-	1	-	-	2	3
Region 7	M cConnell AFB, KS	-	-	-	-	1	-	-	-	1
	Offutt AFB, NE	-	-	-	-	-	-	-	1	1
Region 8	Hill AFB, UT	-	-	-	-	2	-	-	-	2
	M inot AFB, ND	-	-	-	-	1	-	-	-	1
	Peterson AFB, CO	-	-	-	-	1	-	-	1	2
	USAF Academy, CO	-	-	-	-	-	-	-	1	1
Region 9	Davis-M onthan AFB, AZ	-	-	-	-	-	-	-	1	1
	Luke AFB, AZ	-	-	-	-	1	-	-	1	2
Region 10	Fairchild AFB, WA	-	-	-	-	1	-	-	-	1
	NH Bremerton, WA	-	-	-	-	-	-	-	2	2
Total		1	1	3	1	19	1	1	35	62

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

Table 2. ILI by age group for the 2017-2018 surveillance year through Week 40

Age Group	Frequency	Percent
0-5	11	17.74
6-9	3	4.84
10-17	3	4.84
18-24	17	27.42
25-44	18	29.03
45-64	8	12.9
65+	2	3.23

Graph 2. ILI by beneficiary status for the 2017-2018 surveillance year through Week 40



Demographic Summary

Of 62 ILI cases, 27 are service members (43.5%), 15 are children (24.2%), 16 are spouses (25.8%), and four (6.5%) are retirees and other beneficiaries. The median age of ILI cases with known age (n=62) is 22.5 (range 0, 72).

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.

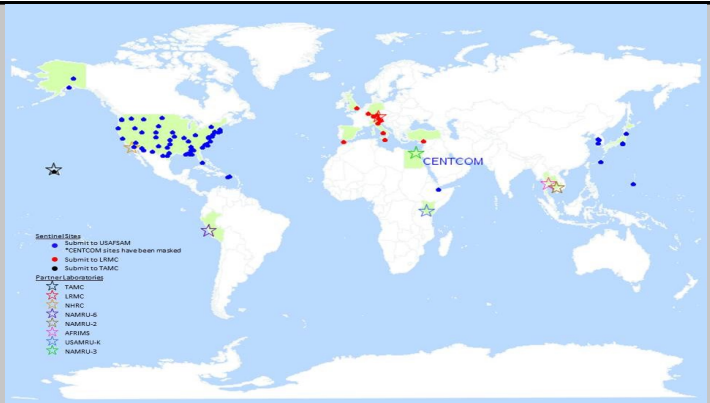
Errata:



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.

