USAF School of Aerospace Medicine & Defense Health Agency

DoD Global, Laboratory-Based, Influenza Surveillance Program

2016-2017

Cumulative Results

Locations	79
Collected	3,326
Tested	3,162

Influenza A	**996**
A(H1N1)pdm09	9
A(H3N2)	984
A(H3N2) & Influenza B	1
A(H3N2) & RSV	1
A/not subtyped & Rhino/Enterovirus	1
Influenza B*	**101**
B	100
B & Human Metapneumovirus &	1

Other Respiratory Pathogens	**767**
Adenovirus	47
Bordetella pertussis	0
Chlamydophila pneumoniae	3
Coronavirus	91
Human Metapneumovirus	42
Mycoplasma pneumoniae	32
Parainfluenza	125
RSV	144
Rhino/Enterovirus	185
Non-influenza Viral Coinfections	90
Non-influenza Bacterial Coinfections	8
-*M. pneumo* coinfections (8)	

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

Respiratory Highlights
12 - 25 February 2017 (Surveillance Weeks 7 & 8)

- During 12 - 25 February 2017, a total of 570 specimens were collected from 49 locations. Results were finalized for 455 specimens from 44 locations. During Week 7, one influenza A(H1N1)pdm09, 144 influenza A(H3N2) and 28 influenza B viruses were identified. During Week 8, three influenza A(H1N1)pdm09, 91 influenza A(H3N2), one influenza A(H3N2) & Influenza B, and 14 influenza B viruses were identified. Approximately 50% of specimens tested positive for influenza during Week 7. Approximately 50% of specimens tested positive for influenza during Week 8. The influenza percent positive for the season is approximately 35%.

- It is recommended that trivalent vaccines for use in the 2017-2018 northern hemisphere influenza season contain the following: an A/Michigan/45/2015 (H1N1)pdm09-like virus; an A/Hong Kong/4801/2014 (H3N2)-like virus; and a B/Brisbane/60/2008-like virus. It is recommended that quadrivalent vaccines containing two influenza B viruses contain the above three viruses and a B/Phuket/3073/2013-like virus (WHO, cited 3 March 2017).

- According to the CDC, 4.8% of reported outpatient visits were due to influenza-like illness which is above the current national baseline of 2.2%. There were three influenza-associated pediatric deaths reported (CDC, FluView Report Week 7, cited 1 March 2017).

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88ABW-2015-5508 and PA email guidance dated 10 November 2015.

Table 1. Results by region and location for specimens collected during Weeks 7 & 8

Region*		A(H1N1)pdm09	A(H3N2)	A(H3N2) & B	B	Adenovirus	*C. pneumoniae*	Coronavirus	hMNV	*M. pneumoniae*	Parainfluenza	RSV	Rhinovirus/Enterovirus	Adeno & hMNV & Rhino/Entero	Adeno & Rhino/Entero	Corona & hMNV & RSV	hMNV & RSV	RSV & Rhino/Entero	No Pathogen	Total
Deployed	Country 2, Location A	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
PACOM	Osan AB, South Korea	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2
	Yokota AB, Japan	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Region 1	USCG Academy, CT	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Region 2	Ft Drum, NY	-	6	-	9	-	1	-	-	-	-	1	-	-	-	-	-	-	2	19
	JB McGuire-Dix-Lakehurst, NJ	-	7	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	2	12
	USMA - West Point, NY	-	26	-	-	-	-	-	-	-	1	2	1	-	-	-	-	-	11	41
Region 3	Dover AFB, DE	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	6
	JB Anacostia-Bolling, DC	-	6	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
	JB Andrews, MD	-	8	-	4	-	-	1	1	-	-	-	-	-	-	-	-	-	2	16
	JB Langley-Eustis, VA	1	58	1	2	-	-	-	-	-	1	-	1	1	-	-	-	-	22	87
	NCRM - Walter Reed NMMC, MD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Region 4	Columbus AFB, MS	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
	Eglin AFB, FL	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	6
	Ft Bragg, NC	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	Hurlburt Field, FL	-	5	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	1	8
	JB Charleston (AF), SC	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
	Maxwell AFB, AL	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
	Moody AFB, GA	-	3	-	2	-	-	-	-	-	1	1	1	-	-	-	-	-	4	12
	Robins AFB, GA	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8
	Seymour Johnson AFB, NC	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8
	Shaw AFB, SC	-	3	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7

(Cont'd on page 3)

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

Table 1. Results by region and location for specimens collected during Weeks 7 & 8

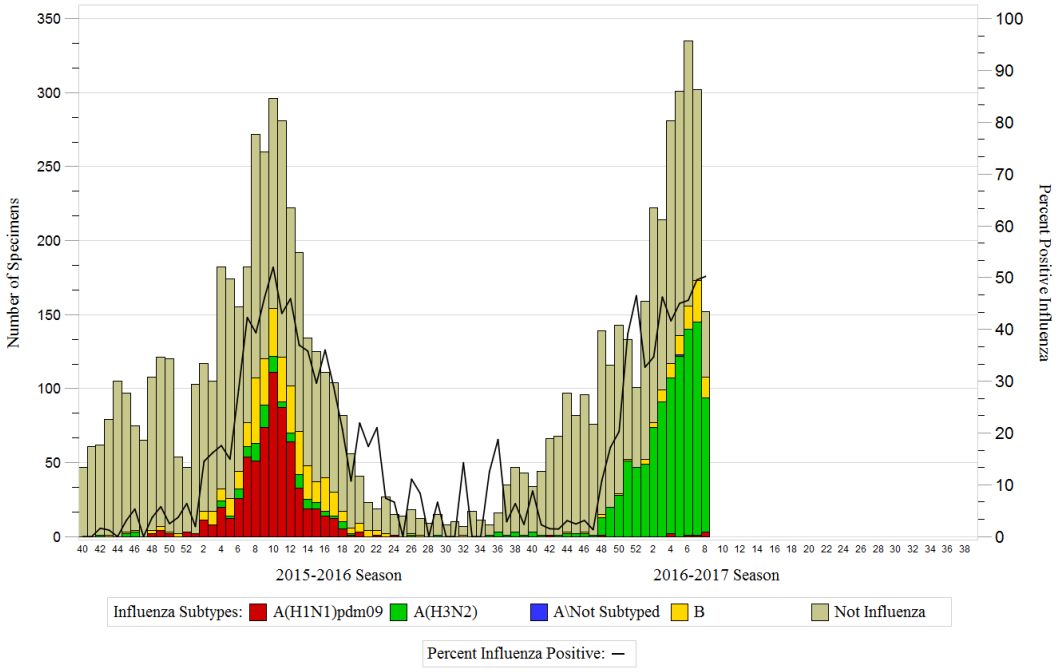
(Cont'd from page 2)

Region*		A(H1N1)pdm09	A(H3N2)	A(H3N2) & B	B	Adenovirus	*C. pneumoniae*	Coronavirus	hMNV	*M. pneumoniae*	Parainfluenza	RSV	Rhinovirus/Enterovirus	Adeno & hMNV & Rhino/Entero	Adeno & Rhino/Entero	Corona & hMNV & RSV	hMNV & RSV	RSV & Rhino/Entero	No Pathogen	Total
Region 5	Scott AFB, IL	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	Wright-Patterson AFB, OH	-	4	-	2	-	-	-	1	-	-	-	-	-	-	-	-	-	4	11
Region 6	Altus AFB, OK	-	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2	5
	Barksdale AFB, LA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Cannon AFB, NM	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	8
	Little Rock AFB, AR	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5
	Sheppard AFB, TX	-	11	-	2	-	-	1	-	-	-	2	-	-	-	-	-	-	7	23
	Tinker AFB, OK	-	15	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	17	38
Region 7	McConnell AFB, KS	-	6	-	-	-	-	1	-	-	-	1	1	-	-	-	1	1	1	12
	Offutt AFB, NE	-	4	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	3	9
Region 8	Ellsworth AFB, SD	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	3
	FE Warren AFB, WY	-	12	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	15
	Hill AFB, UT	-	3	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	4
	Minot AFB, ND	-	6	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	6	13
	Peterson AFB, CO	-	3	-	1	-	-	-	-	-	-	2	-	-	-	-	-	-	4	10
Region 9	Davis-Monthan AFB, AZ	-	4	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	5
	Luke AFB, AZ	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	3
	Nellis AFB, NV	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	2
	Travis AFB, CA	-	2	-	-	-	-	2	-	-	-	5	3	-	-	-	-	-	4	16
	Vandenberg AFB, CA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Region 10	Fairchild AFB, WA	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4
	NH Bremerton, WA	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	2	4
Total		4	235	1	42	2	1	9	5	1	4	17	7	1	1	1	1	1	122	455

**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: 2015-2016 surveillance year and through Week 8 of the 2016-2017 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.

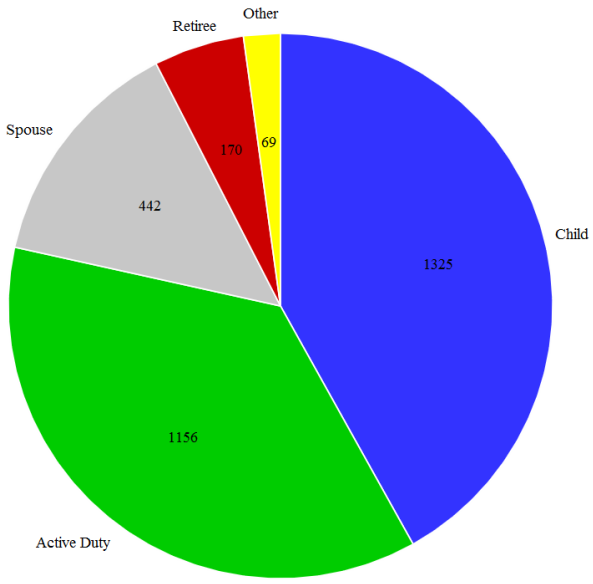
Table 2. ILI by age group for the 2016-2017 surveillance year through Week 8

Age Group	Frequency	Percent
0-5	714	22.58
6-9	239	7.56
10-17	375	11.86
18-24	475	15.02
25-44	988	31.25
45-64	296	9.36
65+	75	2.37

Demographic Summary

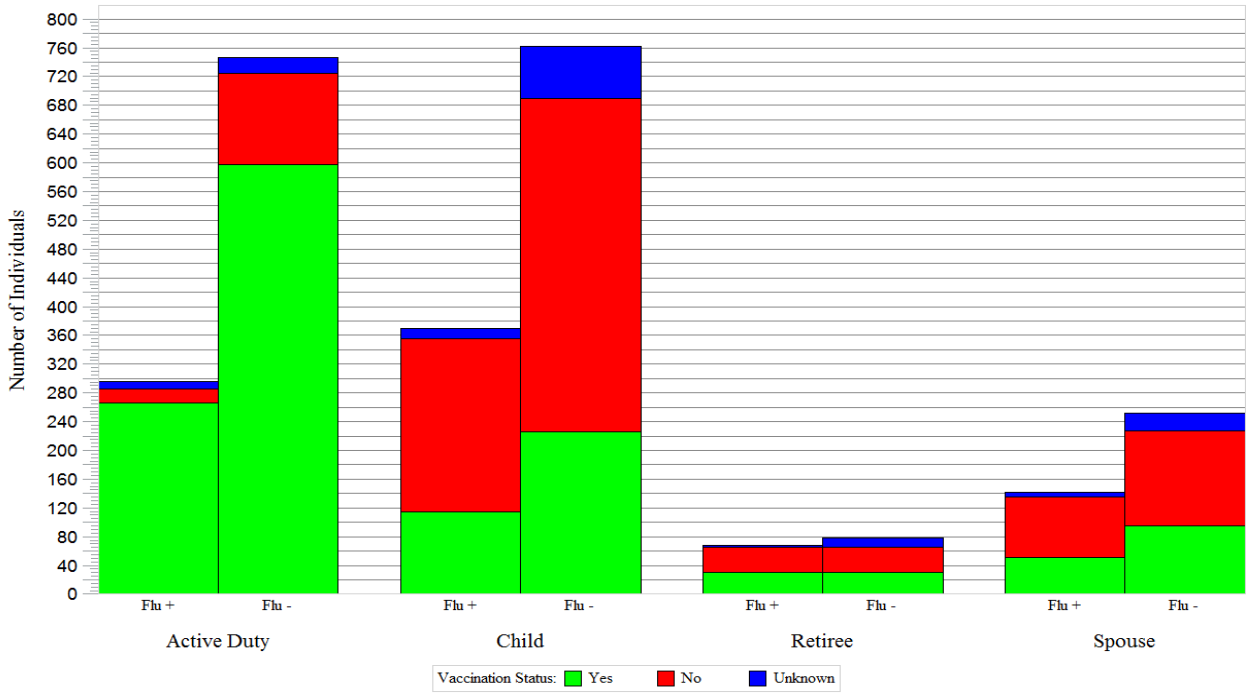
Of 3,162 ILI cases, 1,156 (36.6%) are service members, 1,325 (41.9%) are children, 442 (14.0%) are spouses, and 239 (7.5%) are retirees and other beneficiaries. The median age of ILI cases with known age (n=3,162) is 21 (range 0, 96).

Graph 2. ILI by beneficiary status for the 2016-2017 surveillance year through Week 8



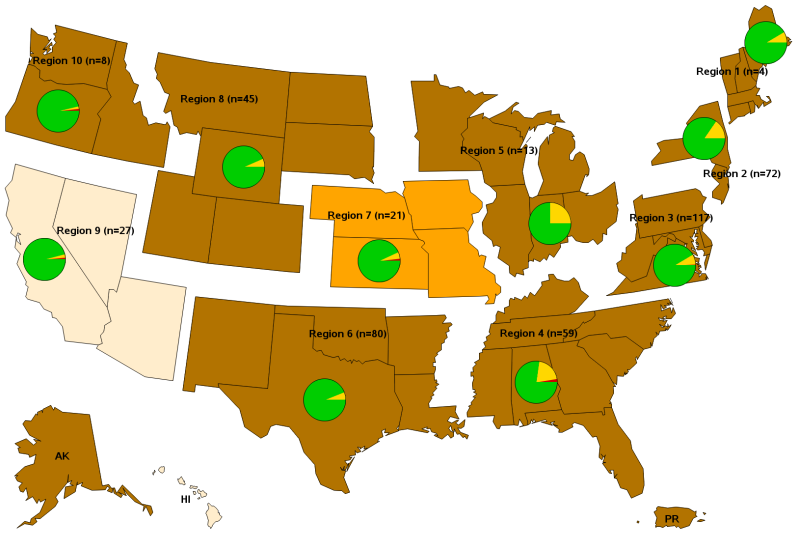
88ABW-2015-5508 and PA email guidance dated 10 November 2015.

Graph 3. Vaccination status by beneficiary type for the 2016-2017 surveillance year through Week 7*



*Vaccination Status by beneficiary type for Week 8 was not available at time of publication.

Map 1. Influenza subtypes and activity level by U.S. region for the 2016-2017 surveillance year through Week 8



HI - Region 9

AK - Region 10

PR - Region 2

Influenza Activity - Past 2 weeks

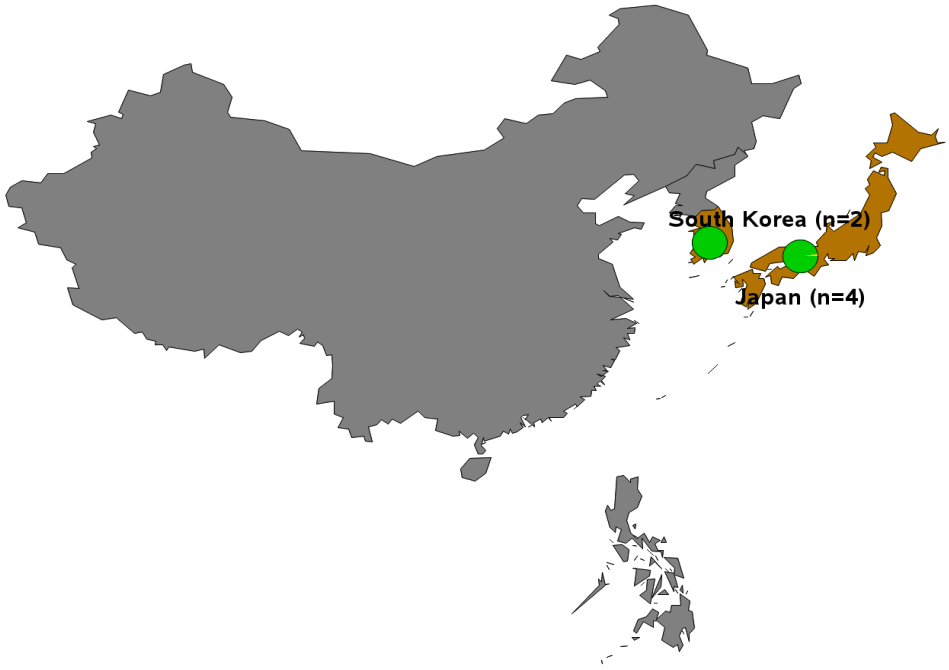
(n = # of finalized results)

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

Influenza Results - Cumulative

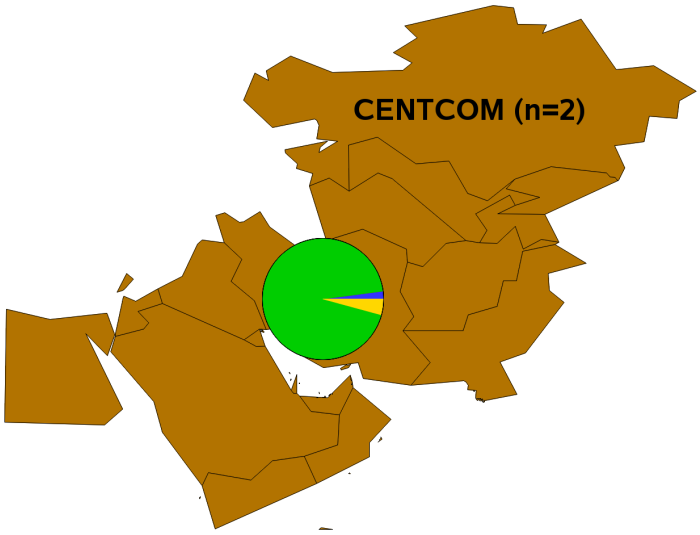
- Influenza A(H3N2)
- Influenza A(H1N1)pdm09
- Influenza B
- Influenza A/not subtyped

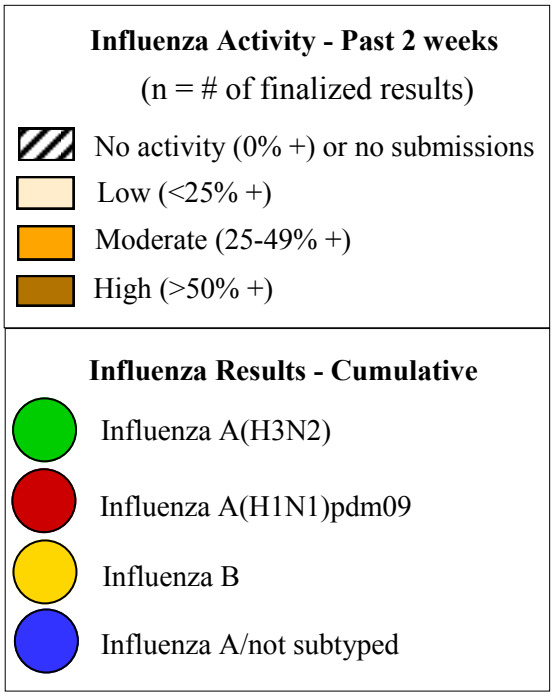
Map 2. Influenza subtypes and activity level by country for the 2016-2017 surveillance year through Week 8 (Pacific)



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

Map 3. Influenza subtypes and activity level for CENTCOM for the 2016-2017 surveillance year through Week 8





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

DoD Global, Laboratory-Based, Influenza Surveillance Program

Laboratory Results—Through Current Surveillance Week 8

Table 3. Cumulative results by region and location for specimens collected during the 2016-2017 surveillance year

Region*		A(H1N1)pdm09	A(H3N2)	A/not subtyped & Rhino/Entero	A(H3N2) & B	A(H3N2) & RSV	B	B & hMNV & Rhino/Entero	Adenovirus	*C. pneumoniae*	Coronavirus	hMNV	*M. pneumoniae*	Parainfluenza	RSV	Rhinovirus/Enterovirus	Non-Influenza Viral Coinfection	Non-Influenza Bacterial Coinfection	No Pathogen	Total
Deployed	Country 1, Location A	-	3	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	7	12
	Country 1, Location B	-	6	-	-	-	1	-	-	-	1	-	-	-	1	-	1	-	5	15
	Country 1, Location D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Country 2, Location A	-	31	1	-	-	1	-	-	-	6	-	-	-	-	6	2	-	12	59
EUCOM	Incirlik AB, Turkey	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	3
PACOM	CFA Okinawa, Japan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
	Eielson AFB, AK	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	5	6
	JB Elmendorf-Richardson, AK	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	3	5
	JR Marianas - Andersen AFB, Guam	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	2
	Kadena AB, Japan	-	4	-	-	-	-	-	-	-	-	1	-	3	-	2	-	1	20	31
	Kunsan AB, South Korea	-	2	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	1	5
	Misawa AB, Japan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Osan AB, South Korea	-	4	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	7	12
	Tripler AMC, HI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Yokota AB, Japan	-	27	-	-	-	1	-	1	-	3	1	2	-	2	7	4	-	49	97
Region 1	Hanscom AFB, MA	-	2	-	-	-	-	-	-	-	-	-	1	2	-	-	1	-	2	8
	USCG Academy, CT	-	9	-	-	-	1	-	-	-	1	1	1	-	-	3	-	2	5	23
Region 2	CGAS Borinquen, PR	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	Ft Drum, NY	-	11	-	-	-	22	-	5	1	1	8	1	6	7	1	2	-	24	89
	JB McGuire-Dix-Lakehurst, NJ	-	39	-	-	-	-	-	2	-	6	7	2	7	5	9	5	-	60	142
	USMA - West Point, NY	-	86	-	-	-	3	-	10	-	5	3	1	6	12	6	4	-	105	241
Region 3	Dover AFB, DE	-	9	-	-	-	-	-	1	-	1	-	1	-	1	1	-	-	28	42
	JB Anacostia-Bolling, DC	-	11	-	-	-	2	-	-	-	-	-	-	-	1	-	-	-	-	14
	JB Andrews, MD	-	20	-	-	-	5	-	-	-	2	1	-	1	2	1	2	-	29	63
	JB Langley-Eustis, VA	1	85	-	1	-	4	-	-	-	3	3	2	5	19	25	9	-	100	257
	NCRM - Walter Reed NMMC, MD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	NMC Portsmouth, VA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	3
	US Naval Academy, MD	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Region 4	Columbus AFB, MS	-	4	-	-	-	1	-	-	-	1	-	-	-	-	1	-	-	13	20
	Eglin AFB, FL	-	10	-	-	-	1	-	2	-	1	-	1	-	5	9	3	-	23	55
	Ft Bragg, NC	1	7	-	-	-	4	-	-	-	1	-	1	3	2	6	4	3	25	57
	Ft Campbell, KY	1	15	-	-	-	2	1	2	-	-	1	-	-	3	-	4	-	11	40
	Hurlburt Field, FL	-	12	-	-	-	-	-	1	-	1	-	1	1	-	-	-	-	10	26
	JB Charleston (AF), SC	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	10
	Keesler AFB, MS	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	1	-	8	13
	MacDill AFB, FL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	3	4
	Maxwell AFB, AL	-	3	-	-	-	1	-	-	-	-	-	-	-	1	-	1	-	-	9	15
	Moody AFB, GA	-	18	-	-	-	5	-	1	-	1	1	-	4	6	5	8	1	33	83
	NH Beaufort, SC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
	NH Camp Lejeune, NC	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	6
	NH Jacksonville, FL	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3
	Patrick AFB, FL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Robins AFB, GA	-	17	-	-	-	6	-	-	-	-	-	2	-	2	1	-	-	14	42
	Seymour Johnson AFB, NC	2	11	-	-	-	1	-	2	-	-	-	1	1	1	1	-	-	8	28
	Shaw AFB, SC	-	15	-	-	-	10	-	1	-	5	1	1	3	1	3	-	-	27	67
Region 5	Scott AFB, IL	-	2	-	-	-	1	-	-	-	-	-	1	2	1	1	-	1	7	16
	Wright-Patterson AFB, OH	-	7	-	-	-	2	-	-	-	-	1	1	1	-	1	2	-	18	33

(Cont'd on page 8)

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

Laboratory Results—Through Current Surveillance Week 8

Table 3. Cumulative results by region and location for specimens collected during the 2016-2017 surveillance year *(Cont'd from page 7)*

Region*		A(H1N1)pdm09	A(H3N2)	A/not subtyped & Rhino/Entero	A(H3N2) & B	A(H3N2) & RSV	B	B & hMNV & Rhino/Entero	Adenovirus	*C. pneumoniae*	Coronavirus	hMNV	*M. pneumoniae*	Parainfluenza	RSV	Rhinovirus/Enterovirus	Non-Influenza Viral Coinfection	Non-Influenza Bacterial Coinfection	No Pathogen	Total
Region 6	Altus AFB, OK	-	6	-	-	-	-	-	1	-	1	1	-	-	5	5	3	-	32	54
	Barksdale AFB, LA	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-	6	9
	Cannon AFB, NM	-	9	-	-	-	-	-	-	-	1	-	1	1	-	3	1	-	18	34
	Ft Polk, LA	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	3
	JBSA Lackland, TX	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
	Laughlin AFB, TX	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	2	4
	Little Rock AFB, AR	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	10
	Sheppard AFB, TX	-	54	-	-	-	2	-	-	-	8	2	-	6	2	6	-	-	55	135
	Tinker AFB, OK	-	80	-	-	1	8	-	2	-	7	-	1	5	5	6	2	-	88	205
	Vance AFB, OK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12
Region 7	McConnell AFB, KS	-	23	-	-	-	-	-	-	-	4	-	1	3	2	5	2	-	18	58
	Offutt AFB, NE	1	31	-	-	-	3	-	1	-	4	-	-	1	1	5	1	-	35	83
Region 8	Ellsworth AFB, SD	-	11	-	-	-	-	-	-	-	3	-	-	3	-	3	-	-	22	42
	FE Warren AFB, WY	-	32	-	-	-	1	-	2	-	3	-	1	2	6	3	-	-	29	79
	Hill AFB, UT	-	26	-	-	-	1	-	-	-	2	-	-	5	3	4	-	-	28	69
	Malmstrom AFB, MT	-	7	-	-	-	1	-	-	-	-	-	1	-	-	1	-	-	5	15
	Minot AFB, ND	-	18	-	-	-	2	-	-	-	1	1	1	-	2	2	2	-	15	44
	Peterson AFB, CO	-	17	-	-	-	3	-	-	-	2	-	-	1	9	3	4	-	20	59
	USAF Academy, CO	-	1	-	-	-	-	-	-	-	-	1	-	-	1	1	-	-	2	6
Region 9	Beale AFB, CA	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
	Davis-Monthan AFB, AZ	-	11	-	-	-	-	-	-	-	-	-	-	5	-	4	5	-	19	44
	Edwards AFB, CA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
	Luke AFB, AZ	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	1	-	7	12
	Nellis AFB, NV	1	3	-	-	-	2	-	3	-	1	-	-	4	3	5	6	-	18	46
	Travis AFB, CA	-	53	-	-	-	-	-	-	1	4	4	-	6	10	12	3	-	34	127
	Vandenberg AFB, CA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4
Region 10	CGS North Bend, OR	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4
	Fairchild AFB, WA	2	15	-	-	-	1	-	2	-	3	-	-	4	2	4	-	-	39	72
	JB Lewis-McChord, WA	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	3
	Mt Home AFB, ID	-	22	-	-	-	-	-	1	1	1	-	1	23	10	12	4	-	65	140
	NH Bremerton, WA	-	66	-	-	-	1	-	6	-	3	-	2	7	7	5	4	-	22	123
Total		9	984	1	1	1	100	1	47	3	91	42	32	125	144	185	90	8	1298	3162

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

Monthly EUCOM Respiratory Surveillance Supplemental Report Through 25 February 2017

In cooperation and agreement with U.S. Army Public Health Command Region-Europe (PHCR-E), the DoD Global, Laboratory-based, Influenza Surveillance Program has analyzed data from surveillance sites that submit specimens to Landstuhl Regional Medical Center (LRMC), Germany. LRMC's laboratory is the forward laboratory for military sites in Europe. Lab results are preliminary and may change as more results are received.

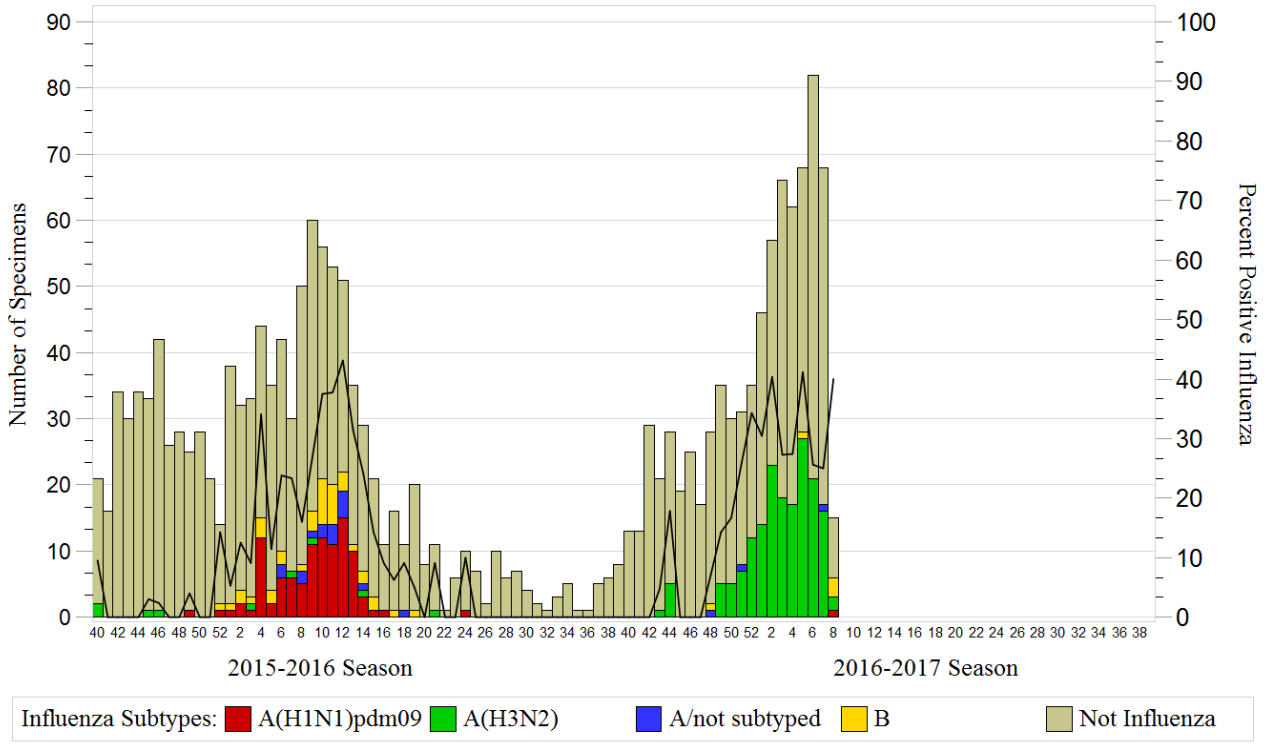
Table 4. Results by region and location for specimens collected and finalized during Weeks 5-8

Region		A(H1N1)pdm09	A(H3N2)	A/not subtyped	A(H3N2) & Rhino/Entero	B	Adenovirus	hMNV	Parainfluenza	RSV	Rhinovirus/ Enterovirus	Adeno & Rhino/Entero	hMNV & RSV	Para & RSV	Para & Rhino/Entero	RSV & Rhino/Entero	No Pathogen	Total
Deployed	Country 6, Location A	-	3	-	1	-	-	-	-	-	-	-	-	-	-	-	-	4
EUCOM	Landstuhl RMC, Germany	1	23	-	-	2	1	1	2	4	8	-	-	1	-	1	25	69
	NAS Sigonella, Italy	-	3	-	-	-	-	-	-	1	1	-	-	-	-	-	-	5
	NAVSTA Rota, Spain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
	NSA Naples, Italy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
	RAF Lakenheath, England	-	3	-	-	-	1	1	-	-	2	1	-	-	-	-	15	23
	Ramstein AB, Germany	-	12	-	-	-	-	-	-	1	-	-	-	-	-	-	8	21
	Spangdahlem AB, Germany	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2
	USAG Stuttgart, Germany	-	3	-	-	1	-	2	-	2	2	-	-	-	-	-	7	17
	USAG Vicenza, Italy	-	7	1	-	-	-	-	-	1	-	-	-	-	-	-	13	22
	Vilseck AHC, Germany	-	10	-	-	1	-	3	6	14	3	-	1	1	1	-	25	65
Total		1	65	1	1	4	2	7	8	23	17	1	1	2	1	1	98	233

Table 5. Cumulative results by region and location for specimens collected during the 2016-2017 surveillance year

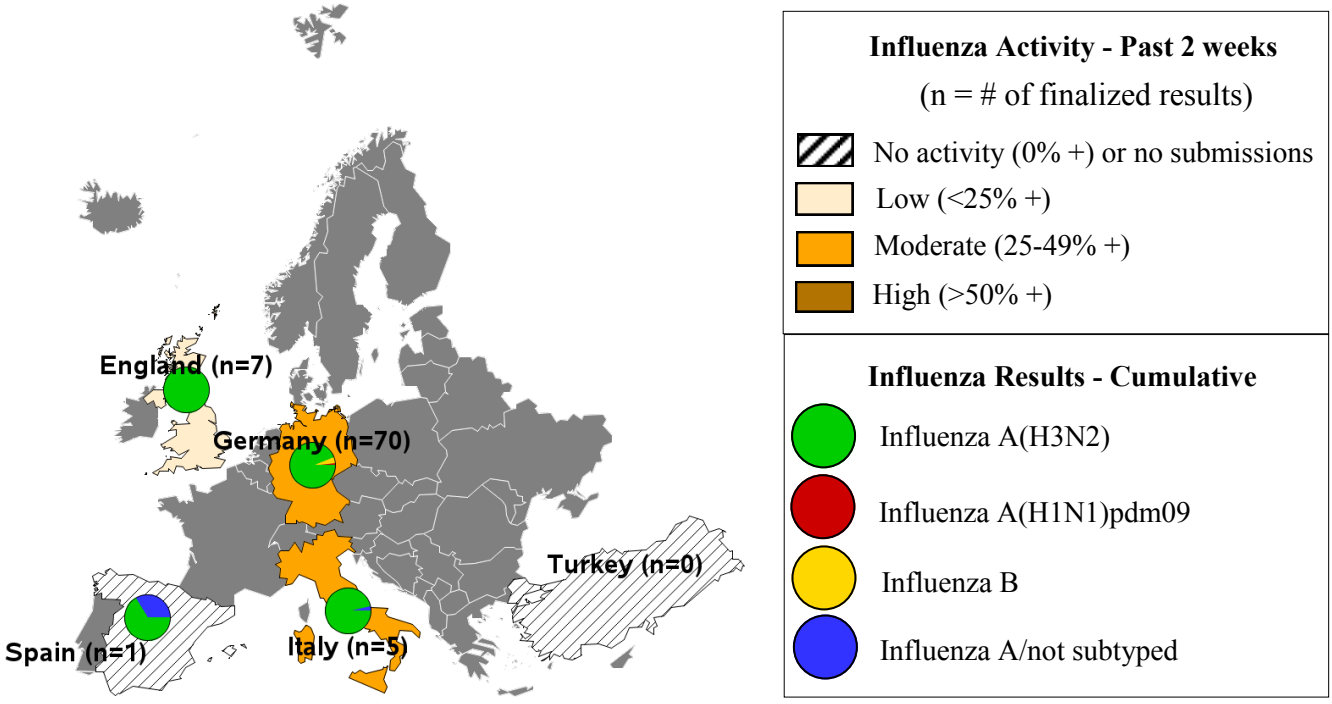
Region		A(H1N1)pdm09	A(H3N2)	A/not subtyped	A(H3N2) & Adeno	A(H3N2) & hMNV &	A(H3N2) & RSV	A(H3N2) & Rhino/Entero	B	Adenovirus	hMNV	Parainfluenza	RSV	Rhinovirus/ Enterovirus	Adeno & RSV	Adeno & RSV & Rhino/Entero	Adeno & Rhino/Entero	hMNV & RSV	hMNV & Rhino/Entero	Para & RSV	Para & Rhino/Entero	RSV & Rhino/Entero	No Pathogen	Total
Deployed	Country 2, Location A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Country 6, Location A	-	3	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	9	16
EUCOM	Aviano AB, Italy	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	10	12
	Landstuhl RMC, Germany	1	45	-	-	-	2	1	3	1	4	6	14	27	1	-	1	-	-	1	-	3	89	199
	NAS Sigonella, Italy	-	4	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	6
	NAVSTA Rota, Spain	-	2	1	-	-	-	-	-	-	1	2	5	7	-	-	-	-	-	-	-	-	19	37
	NSA Naples, Italy	-	8	-	-	-	-	1	-	-	1	-	3	6	-	-	-	-	-	-	-	-	21	40
	RAF Lakenheath, England	-	23	-	-	-	-	1	-	2	8	2	13	21	-	1	1	-	1	-	-	2	59	134
	Ramstein AB, Germany	-	16	1	-	-	-	-	-	-	4	1	11	14	-	-	1	-	-	-	-	-	25	73
	Spangdahlem AB, Germany	-	1	-	-	-	-	1	-	-	-	-	1	2	-	-	-	-	-	-	-	-	3	8
	USAG Stuttgart, Germany	-	17	-	-	-	-	-	1	-	4	2	5	7	-	-	-	-	-	-	-	-	16	52
	USAG Vicenza, Italy	-	14	1	2	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	22	42
	Vilseck AHC, Germany	-	29	-	-	1	-	-	1	-	5	12	26	24	-	-	-	1	-	1	2	-	66	168
Total		1	162	3	2	1	2	6	5	3	27	25	80	115	1	1	3	1	1	2	2	5	340	788

Graph 4. Percent influenza positive by week: 2016-2017 surveillance year and through Week 8 of the 2016-2017 surveillance year (EUCOM)



Note: Dual influenza coinfections have been excluded from the graph.

Map 4. Influenza subtypes and activity level by country for the 2016-2017 surveillance year through Week 8(Europe)



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

USAF School of Aerospace Medicine & Defense Health Agency

DoD Global, Laboratory-Based, Influenza 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 over 95 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. This process seeks to provide more timely results and efficient transport of specimens.

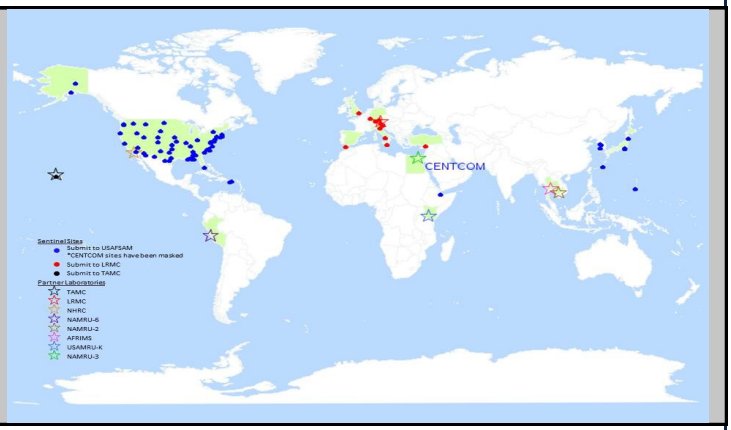
Available on our website (listed below) is a list of previous weekly surveillance reports, program information (including an educational briefing and instruction pamphlets for clinic staff), and a dashboard containing respiratory data for our sentinel sites.

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.

88ABW-2015-5508 and PA email guidance dated 10 November 2015.