# U.S. Army Public Health Center Army Influenza Activity Report

Week ending 26 January 2019 (week 4)

#### Influenza Vaccination Coverage\* As of 30 January 2019 N/A DoD 96% Army Active Duty

#### Army Guard 79% Army Reserve

90%

\*Data Source: MEDPROS, ASIMS, MRR.

## SUMMARY

The number of positive respiratory specimens increased by 13% from surveillance week 3 to surveillance week 4; there were 479 positive specimens in week 3 and 543 in week 4. Influenza A continues to be the most frequently resulted respiratory pathogen, accounting for 414 (76%) of all positive specimens. Respiratory syncytial virus (RSV) activity has been steadily increasing and RSV accounted for 101 (19%) of the positive specimens in week 4. One influenza-associated hospitalization with an onset date in week 4 was reported in the Disease Reporting System internet; the case was an unvaccinated Active Duty Service Member. This brings the total number of influenza-associated hospitalizations for the season to 32 (6 AD &26 non-AD).

## FLUVIEW



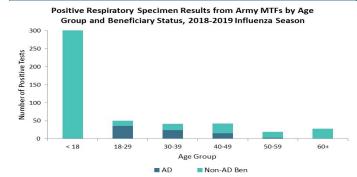
by the Influenza Di

## **GEOGRAPHIC SPREAD**

CDC

In the general U.S. population, widespread influenza activity was reported by 45 states. Regional influenza activity was reported by Puerto Rico and three states (Colorado, Indiana, and W. Virginia), local activity was reported by two states (Alaska and Hawaii), and sporadic activity was reported by the District of Columbia and the US Virgin Islands. Guam did not report to the Centers for Disease Control and Prevention (CDC) in weeks 3 and 4.

## DEMOGRAPHICS



Active Duty (AD): In week 4, 15% (n=80) of the total positive specimens were among AD Service Members. This is a 45% increase when compared to week 3. Forty-five percent (n=36) of the positive specimens were from individuals in the 18-29 age group.

Non-AD: From week 3 to week 4, a 28% increase in the number of positive specimens among non-AD individuals was noted; there were 360 positive specimens in week 3 and 463 in week 4. The majority of the positive specimens, 79% (n=364), were among individuals <18 years old, and this is consistent with the national distribution of influenza cases.

## INFLUENZA-ASSOCIATED HOSPITALIZATIONS



cinated AD Service Member. To date, there have been 32 influenza-associated hospitalizations this season. This is in contrast to the 104 cases reported during the same time period in the 2017-2018 influenza season.

One influenza-associated hospitalization, with an onset date

in week 4, was reported in DRSi; the case was an unvac-

\*DRSi does not capture cases older than 65 years old for influenza-associated hospitalizations.

Additional Resources: Army Influenza Reports; ARD Reports; AFHSC Influenza Reports; NHRC FRI Reports; DoD Pandemic Influenza Watchboard; CDC

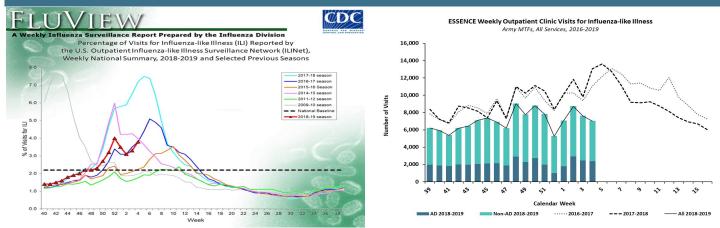
Key: ILI-Influenza-Like Illness; DRSi- Disease Reporting System Internet; NHRC- Naval Health Research Center; ADV-Adenovirus; RSV-Respiratory Syncytial Virus; DED- Disease Epidemiology Division; SM-Service Member

**Questions?** 410-436-7605

#### U.S. Army Public Health Center Army Influenza Activity Report

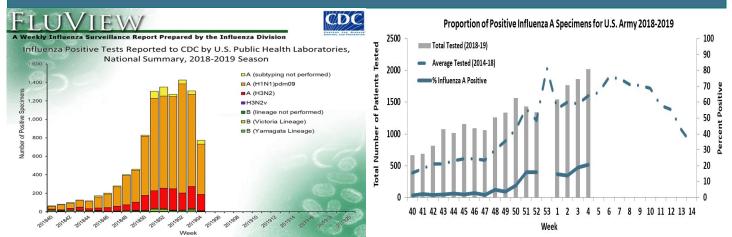
### **ILI ACTIVITY - UNITED STATES**

#### **ILI ACTIVITY - ARMY**



Nationwide in week 4, incidence of ILI activity was 3.8%, which is above the national baseline of 2.2%. ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and cough and/or sore throat. Regionally, the percentage of ILI outpatient visits reported to the CDC ranged from 2.4% to 6.5%. At Army medical treatment facilities, incidence of ILI activity decreased by 8% when compared to the previous week. When compared to week 4 of the 2017-2018 season, there were 46% fewer ILI outpatient visits.

#### LABORATORY RESPIRATORY SPECIMEN TESTING



Nationwide, 1238 specimens were tested and submitted to the CDC during week 4, of which 774 (58%) were positive for influenza A. In the Army population, 72 (17%) of the 414 positive influenza A specimens were among AD Service Members. The remaining 342 (83%) positive specimens were among non-AD population. The majority of the influenza A -positive specimens continue to be reported from RHC-A and RHC-C, with 47% (n=193) and 43% (n=180) cases, respectively. Influenza A activity in RHC-E remains low.

		Week 1	Week 2	Week 3	Week 4	Season Total	ד
Test Types Among	RAT	119	156	224	283	1400	i
Positive Influenza A	Culture	10	13	21	5	82	٧
Specimens	PCR	97	76	106	126	574	i
	Influenza A	226	245	351	414	2056	f
	Influenza B	7	9	16	11	166	7
Army MTF	Adenovirus	6	12	10	11	195	(
Laboratory Results,	Enterovirus	0	1	0	0	5	ĺ
2018-19	Parainfluenza	6	6	5	6	227	e
2010-15	RSV	70	72	97	101	1191	v
	Negative	2925	3189	3310	3474	43025	ľ
	Total	3240	3534	3789	4017	46865	

The number of positive respiratory specimens ncreased by 13% from week 3 to week 4; there were 479 positive specimens in week 3 and 543 n week 4. Influenza A continues to be the most frequently resulted pathogen, accounting for 76% (414) of the cases. Although an overall increasing trend in the number of influenza B specmens between weeks 1 and 4 was noted, influenza B activity remains low. The number of influenza B specimens also decreased by 31% from week 3 to week 4.

Locations providing week 4 laboratory data as of 30 January 2019: Ft Belvoir, Ft Benning, Ft Bliss, Ft Bragg, Ft Campbell, Ft Carson, Ft Drum, Ft Eustis, Ft Gordon, Ft Hood, Ft Huachuca, Ft Irwin, Ft Jackson, Ft Knox, Ft Leavenworth, Ft Lee, Ft Leonard Wood, Ft Meade, Ft Polk, Ft Riley, Ft Rucker, Ft Sam Houston, Ft Sill, Ft Stewart, Ft. Wainwright, Landstuhl, Korea, Redstone Arsenal, Tripler Army Medical Center, Walter Reed National Military Medical Center, and West Point Military Academy.

## U.S. Army Public Health Center Army Influenza Activity Report

			Influenza	Α		Influenza	В	Adenovirus			
Region	Installation	No. Tested	% Positive	Baseline % Positive	No. Tested	% Positive	Baseline % Positive	No. Tested	% Positive	Baseline % Positive	
	Ft. Belvoir	239	19.2	25.4	118	0.8	100	61	4.9	100	
	Ft. Benning	139	22.3	27.8	139	0	7.4				
	Ft. Bragg	77	26	22.3			100				
	Ft. Campbell	121	19	32.2	121	0	6.1			100	
	Ft. Drum	7	14.3	12.5			100				
	Ft. Eustis	22	31.8	22.1			100				
	Ft. Gordon	78	15.4	26.3	78	0	15.9			100	
RHCA	Ft. Jackson	67	16.4	28.9	65	0	5.6				
-	Ft. Knox	24	20.8	15.8	24	4.2	10.5				
	Ft. Lee	21	4.8	8.8			100				
	Ft. Meade	2	100	18.9							
	Ft. Rucker	4	25	33.3	4	0	0				
	Ft. Sam Houston	278	23.7	30.6	279	1.8	12.7			100	
	Ft. Stewart	70	17.1	29.5	70	1.4	5.6			100	
	Redstone Arsenal	30	40	0	30	0	0				
	West Point	32	21.9	26	13	0	100	1	100	100	
RHCC	Ft. Bliss	204	14.7	22.3	135	0	21.8	40	10	4.3	
	Ft. Carson	100	16	16.1			100				
	Ft. Hood	121	14	32.8	120	0.8	6.6	10	10		
	Ft. Huachuca	14	7.1	8.6	20	5	5.6				
	Ft. Irwin	71	33.8	36	72	0	1.8				
	Ft. Leavenworth	41	31.7	16.9	41	0	9.8				
	Ft. Leonard Wood	33	6.1	27.8	33	0	5.3			100	
	Ft. Polk	46	8.7	26.1			100				
	Ft. Riley	70	10	17.2	63	0	8.8				
	Ft. Sill	28	7.1	27.9			100				
RHCE	Center	41	9.8	16.5	37	0	32.9	37	2.7	2.1	
	Ft. Wainwright	51	39.2	16	51	0	0				
RHCP	Korea	46	26.1	35.3	23	0	4.6	23	4.3	0.9	

			Enteroviru	JS	P	Parainfluer	nza		RSV	
Region	Installation	No. Tested	% Positive	Baseline % Pos.	No. Tested	% Positive	Baseline % Pos.	No. Tested	% Positive	Baseline % Pos.
	Ft. Belvoir				64	3.1	100	130	24.6	35.3
	Ft. Campbell						100			100
	Ft. Drum									50
RHCA	Ft. Gordon						100			100
	Ft. Sam Houston			100						100
	Ft. Stewart							18	5.6	14.3
	West Point						100			100
	Ft. Bliss							134	9.7	26.1
	Ft. Carson							35	40	22.2
	Ft. Hood				10	0		53	15.1	67.6
RHCC	Ft. Leavenworth							9	11.1	18.2
	Ft. Polk							13	7.7	60
	Ft. Riley							31	25.8	10
	Ft. Sill							5	20	23.8
RHCE	Landstuhl Regional				40	7.5	0.7	49	22.4	10.3
	Ft. Wainwright							48	12.5	20
RHCP	Korea			0	23	0	0	22	9.1	7.4
	Tripler Army Medical Center	50	0	2.1	51	2	3.1	3	100	100

No.: Number of specimens tested during MMWR week 4 2019.

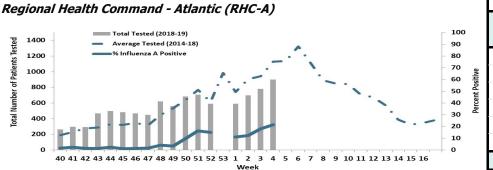
% Pos.: Percentage of positive specimens reported during MMWR week 4, 2019.

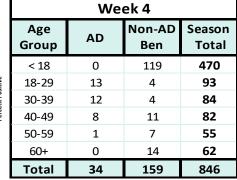
Baseline % Pos.: Percentage of positive specimens reported in MMWR week 4 during influenza seasons from September 2012 - May 2018.

Missing values indicate that specimens were not tested for the disease during the week of interest.

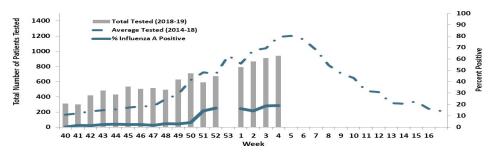
High baseline percent positive values may be due to low numbers of specimens tested.

#### Proportion of Influenza A Positive Specimens by Week and Region, Army Medical Laboratories, 2018-2019 as Compared to 2014-2018



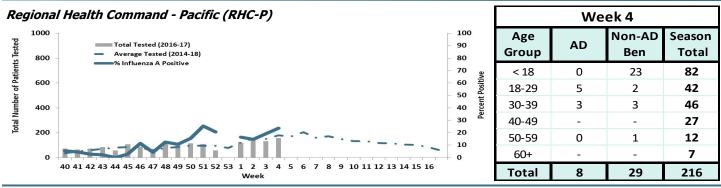


Regional Health Command - Central (RHC-C)



	Week 4											
Age Group	AD	Non-AD Ben	Season Total									
< 18	0	107	512									
18-29	11	7	98									
30-39	7	9	98									
40-49	8	14	77									
50-59	2	7	65									
60+	0	8	83									
Total	28	152	933									

Regional Health Command - Europe (RHC-E) Week 4 Non-AD Age Season 1000 100 AD Total Tested (2018-19) Total Number of Patients Tested 90 Group Ben Total Average Tested (2014-18) 800 80 6 Influenza A Positive 0 < 18 2 20 70 600 60 Positive 18-29 1 0 13 50 30-39 1 0 17 400 40 Percent 30 7 40-49 200 20 50-59 4 10 0 0 0 60+ 40 41 42 43 44 45 46 47 48 49 50 51 52 53 з 5 7 9 10 11 12 13 14 15 16 1 2 4 6 8 2 2 Week Total 61



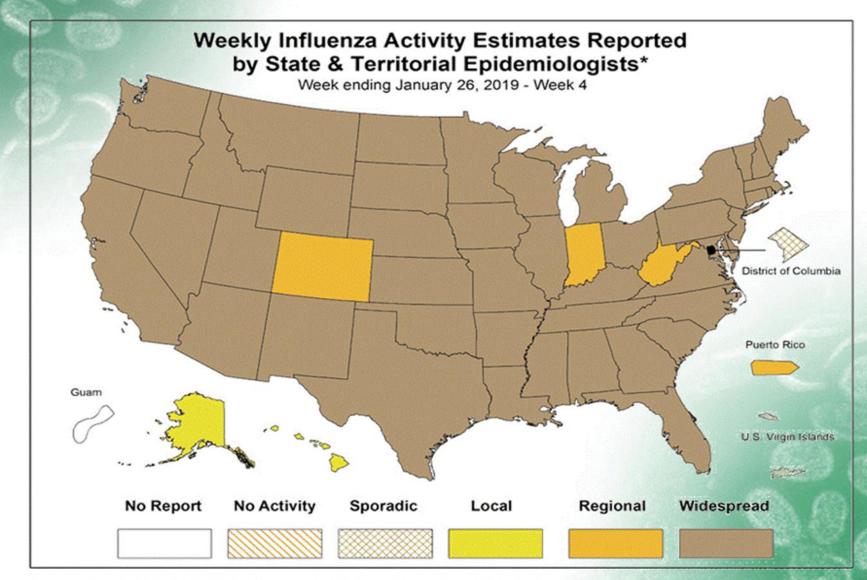
Number of Positive Influenza A Specimens by Duty Status and Region

Region	Week 49		Week 50		We	eek 51	W	eek 52	w	eek 1	w	eek 2	w	eek 3	w	eek 4
	AD	Non-AD	AD	Non-AD	AD	Non-AD	AD	Non-AD	AD	Non-AD	AD	Non-AD	AD	Non-AD	AD	Non-AD
RHC-A	4	15	12	54	17	97	20	68	13	52	22	64	23	116	34	159
RHC-C	0	18	2	28	2	82	9	104	17	112	10	115	22	149	28	152
RHC-E	0	1	1	1	-	-	1	1	6	6	3	8	4	12	2	2
RHC-P	4	7	7	11	13	15	8	4	7	13	7	16	7	18	8	29
CENTCOM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

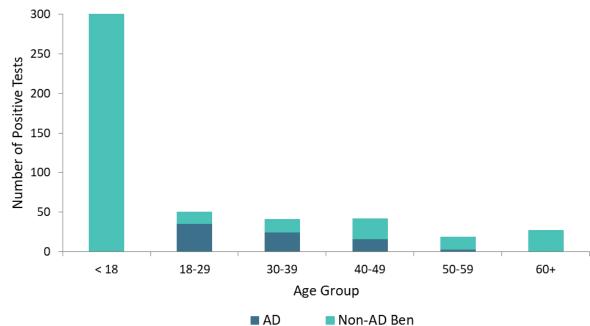




## A Weekly Influenza Surveillance Report Prepared by the Influenza Division



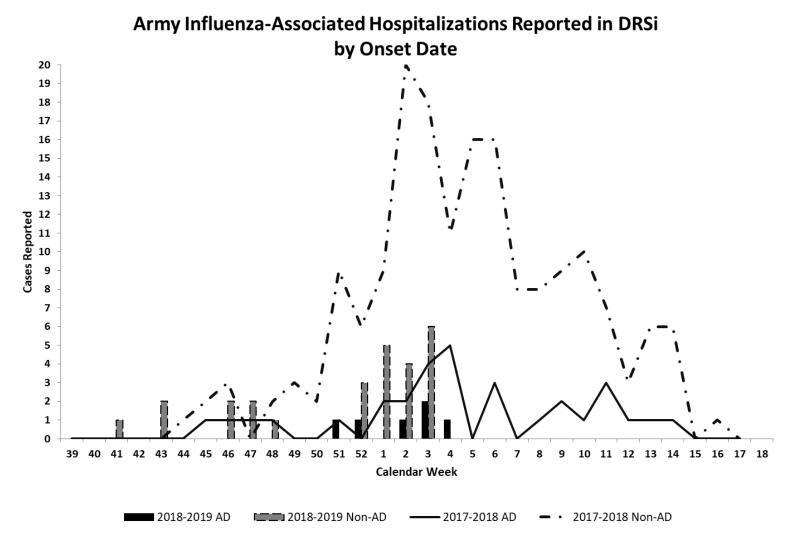
\* This map indicates geographic spread & does not measure the severity of influenza activity



## Positive Respiratory Specimen Results from Army MTFs by Age Group and Beneficiary Status, 2018-2019 Influenza Season

Week 4										
Age Group	AD	Non-AD Ben	Season Total							
< 18	0	364	1084							
18-29	36	14	246							
30-39	25	16	245							
40-49	16	26	193							
50-59	3	16	136							
60+	0	27	152							
Total	80	463	2056							





**Note:** *Reportable influenza cases are defined as only cases that have been hospitalized and are under the age of 65. See <u>Armed Forces</u> <u>Reportable Medical Events Guidelines and Case Definitions for more information.</u>* 

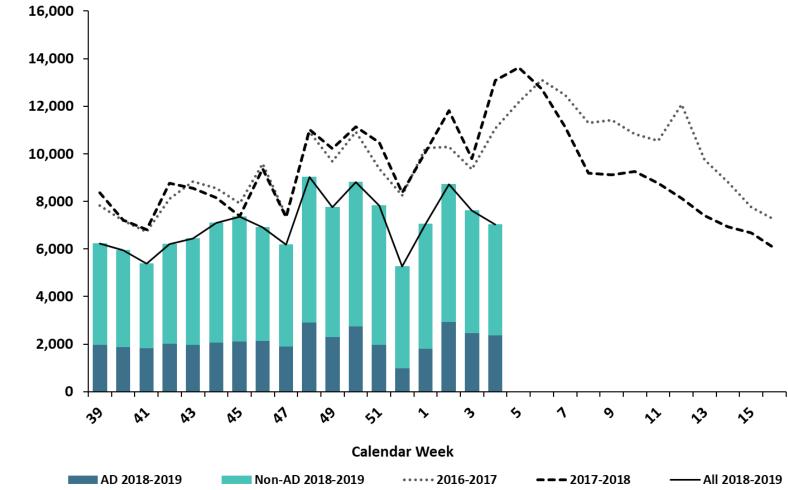
Data as of 31 January 2019.



#### A Weekly Influenza Surveillance Report Prepared by the Influenza Division Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2018-2019 and Selected Previous Seasons 8.0 2017-18 season 2016-17 season 7.0 2015-16 Season 2014-15 season 2011-12 season 6.0 2009-10 season National Baseline 2018-19 season % of Visits for ILI 0 0 0 5.0 2.0 1.0 0.0 12 14 16 18 20 22 24 26 28 30 40 50 52 2 6 8 10 32 34 36 38 48 Week

#### **ESSENCE Weekly Outpatient Clinic Visits for Influenza-like Illness**

Army MTFs, All Services, 2016-2019

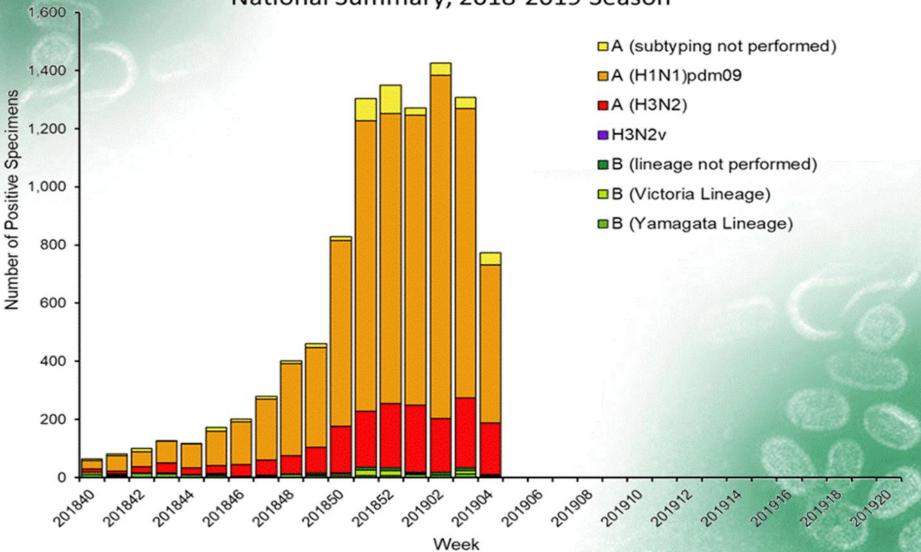


Clinic visits for ILI are obtained from ESSENCE. Data as of 30 January 2019.

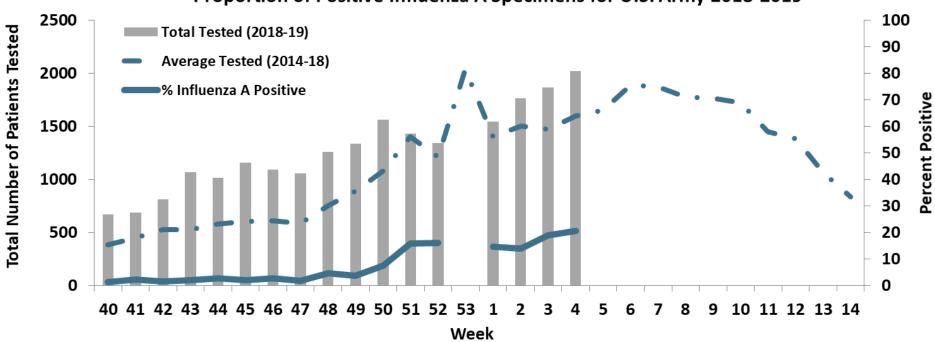
Number of Visits

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, 2018-2019 Season







## Proportion of Positive Influenza A Specimens for U.S. Army 2018-2019

		Week 52	Week 1	Week 2	Week 3	Season Total
Test Types Among	RAT	147	119	156	209	1102
Positive Influenza A	Culture	3	10	13	11	67
Specimens	PCR	65	95	68	88	419
	Influenza A	215	224	237	308	1588
	Influenza B	9	7	9	16	155
Army MTF	Adenovirus	15	6	9	4	175
Laboratory Results,	Enterovirus	0	0	1	0	5
2018-19	Parainfluenza	8	6	6	3	219
2010-15	RSV	67	69	69	84	1073
	Negative	2421	2914	3113	2913	39145
	Total	2735	3226	3444	3328	42360

Region	We	eek 49	We	eek 50	We	eek 51	We	eek 52	W	eek 1	W	eek 2	W	eek 3	W	eek 4
	AD	Non-AD														
RHC-A	4	15	12	54	17	97	20	68	13	52	22	64	23	116	34	159
RHC-C	0	18	2	28	2	82	9	104	17	112	10	115	22	149	28	152
RHC-E	0	1	1	1	-	-	1	1	6	6	3	8	4	12	2	2
RHC-P	4	7	7	11	13	15	8	4	7	13	7	16	7	18	8	29
CENTCOM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number of Positive Influenza A Specimens by Duty Status and Region