

2010-11 Influenza Season, as of
1 April 2011

Questions or comments:
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2011-12 Vaccine Selection

Trivalent formulation for the 2011-12 influenza season will remain the same as the 2010-11 influenza season.

Vaccine and Antiviral Resistance

Influenza Vaccine

Circulating strains from DoD and civilian populations are well-matched to the 2010-11 vaccine.

(Reference USAFSAM, CDC)

During well-matched years, clinical trials show vaccine effectiveness to be between 70-90% among healthy adults. (Reference: CDC)

Antiviral Resistance

CDC findings indicate a high-level of resistance to adamantanes among circulating influenza A isolates, but the A/pH1, A/H3, and B isolates remain susceptible to neuraminidase inhibitors (oseltamivir and zanamivir).

Resources

To access, double-click titles

Surveillance Programs

- DoD Influenza-like Illness (AFHSC)
- Sentinel-based (USAFSAM)
- Population-based (NHRC)
- European Region (PHCR-E/LRMC)
- Acute Respiratory Disease (PHC)
- MHS Lab-based (NMCPHC)

Related Links

- Pandemic Influenza Watchboard
- AFHSC
- CDC Influenza Update
- Historical Army Influenza reports

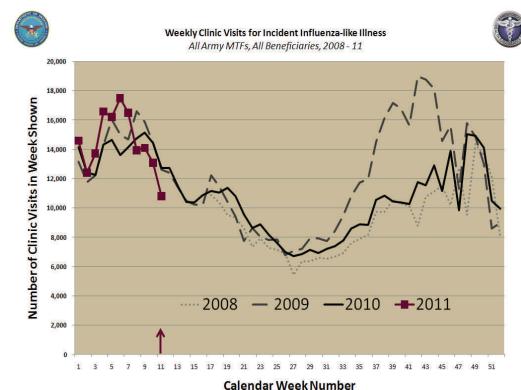
Overview of Army Influenza Surveillance Activities

An integrated summary of findings from epidemiological reporting systems, Army Medical Center laboratory results, and sentinel, population and hospital-based surveillance systems.

Influenza-like Illness (ILI) activity

Clinical visits for ILI are gathered by the Armed Forces Health Surveillance Center from ESSENCE. As of 25 March.

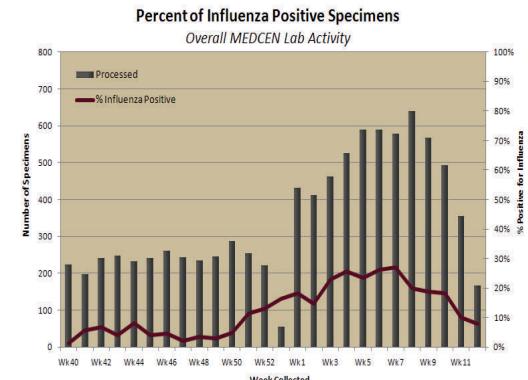
For the week ending 19 March, visits for ILI across Army MTFs decreased (17.3%) from the previous week, and remained at or below the range of visits for the major geographic regions. Click graph below and see pages 2-3 for an overview by region.



Army Regional Lab activity

Data reflect major regional Medical Center lab activity (TAMC, LRMC, EAMC, WRAMC, MAMC, and BAMC).

The frequency of specimen collections decreased (28.1%) from Weeks 10 to 11. The percentage of positive influenza results decreased from 18.2% in Week 10 to 10.1% in Week 11. Click graph below and see pages 2-3 for an overview by region.



Surveillance Activity Reports

For detailed information on the surveillance programs, see "Resources" section.

MHS Lab-based surveillance (DoD beneficiaries)

Week ending 26 March: The influenza rate decreased from the previous week to 1.5 per 100,000 for Army active duty. The highest frequency of cases occurred at West Point (n=6) and Ft Lewis (n=6). There were 6 (3 Army) bacterial coinfections associated with influenza this week, totaling 142 for the DoD this season.

Sentinel-based surveillance (DoD beneficiaries)

Week ending 19 March: 18.9% of 53 specimens were influenza-positive (8 A/H3, 2 B). Influenza accounts for 36% of season results (70% A, 30% B).

Influenza A (n=505)		Influenza B (n=196)	
Subtype	No. (%)	Lineage	No. (%)
A/H1	264 (52.3)	B/Victoria	9 (4.6)
A/pH1	228 (45.1)	B/Yamagata	3 (1.5)
A/pending	13 (2.6)	B/pending	186 (94.9)

Of influenza patients with vaccine history, 50% (148/299) of influenza A cases and 38% (48/126) of influenza B cases were immunized.

Acute Respiratory Disease surveillance (Recruits)

Week ending 26 March: Febrile respiratory illness rate is moderately elevated at Fort Benning. This season, 138 Army recruits enrolled in surveillance were positive with influenza (122 A/pH1, 7 A/H3, 9 B). Of these, 16 (15 A/pH1, 1 B) were collected from 22 Feb-4 Mar.

Pneumonia and Influenza-associated Mortality

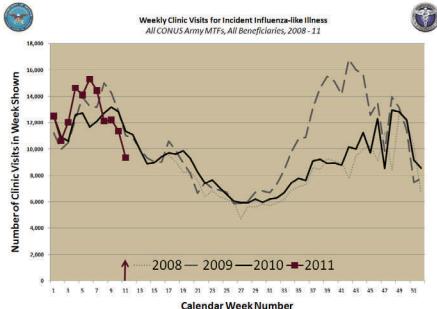
2010-11 season: 1 death on 20 Feb was attributed to influenza A (Ft Jackson). Patient was vaccinated >14 days. A DoD effort is in place to review circulating strains and vaccine efficacy.

Regional Army Respiratory Activity: Syndromic (ILI) and Lab-Confirmed

Major Geographic Region: CONUS

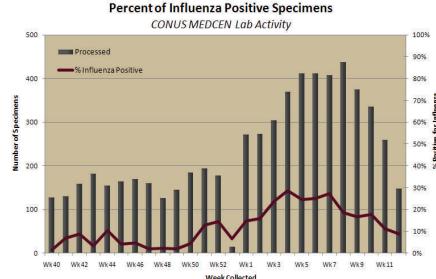
Influenza-like illness

For the week ending 19 March, patient visits for ILI decreased (17.8%) from the previous week among CONUS-based Army MTFs. Click graph below for an overview.



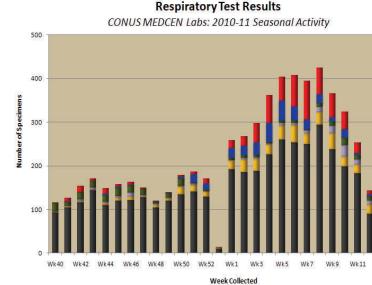
Respiratory Testing Activity (CONUS)

For week ending 19 March, the frequency of specimen collections decreased (22.9%) from the previous week. The percentage of positive influenza results decreased to 11.2% in Week 11. Click graph below for an overview.



Laboratory Results

For week ending 19 March, 28.9% (n=75) of specimens collected were positive for a respiratory virus. Influenza subtypes identified this season include: A/pH1 (n=60), A/H3 (n=138). Click graph below for an overview.



• Northern Regional Medical Command (NRMC)

Respiratory Testing Activity

The frequency of specimen collections remained stable from Week 10 to Week 11 (ending 19 March). The percent positive influenza results decreased to 15.4% in Week 11. Click graph to right for an overview.

Laboratory Results

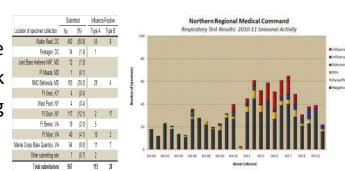
The percentage of positive respiratory results decreased from 39.52% in Week 10 to 15.4% in Week 11. Influenza isolates characterized this season include: A/pH1 (n=3), A/H3 (n=2).

Patients with Influenza

The majority of influenza-positive patients whose specimen was collected during Week 11 were children (66.7%), followed by 16.7% (n=1) active duty and spouse 16.7% (n=1) spouse.

Sites submitting specimens

In Week 11, the majority (33.4%) of specimens were collected at WRAMC and Ft. Drum, NY (30.8%). Click table to the right for a seasonal overview of submitting sites and influenza results.



• Southern Regional Medical Command (SRMC)

Respiratory Testing Activity

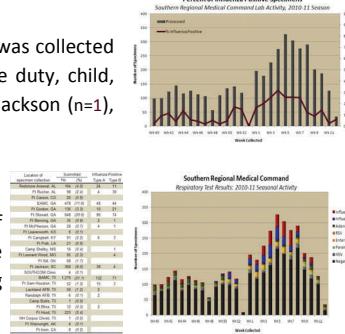
The frequency of specimen collections decreased (32.9%) from Week 10 to 11. The percentage of positive influenza results decreased from 14.4% in Week 10 to 2.4% in Week 11.

Patients with Influenza

Of the 3 influenza-positive patients whose specimen was collected in Week 11, there was 33.3% (n=1) each of an active duty, child, and spouse. Patients sought care at EAMC (n=1), Ft Jackson (n=1), and Redstone Arsenal (n=1).

Sites submitting specimens

For the week ending 19 March, the majority (27.8%) of specimens were collected at Ft Jackson, SC. Click the table to the right for a season overview of submitting sites and influenza results.



• Western Regional Medical Command (WRMC)

Respiratory Testing Activity

The frequency of specimen collections decreased (14.5%) from Week 10 to Week 11. The percentage of positive influenza results remained stable from Week 10 to Week 11. Click graph to right for an overview.

Patients with Influenza

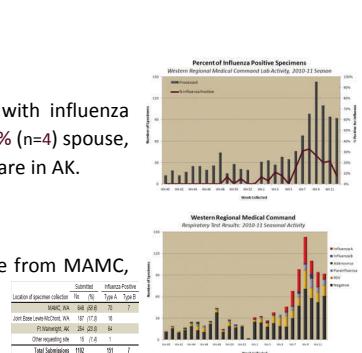
For Week 11, the majority (45%, n=9) of patients with influenza were active duty, followed by 30% (n=6) children, 20% (n=4) spouse, and 5% (n=1) retiree. Twenty percent (n=4) sought care in AK.

Laboratory Results

The frequency of positive respiratory results slightly decreased to 44.7% of all specimens processed from Week 10 to Week 11. Influenza isolates characterized this season include: A/H3 (n=88), A/pH1 (n=57).

Sites submitting specimens

The majority (73.4%) of collections in Week 11 were from MAMC, while 26.6% (n=25) were collected at Ft Wainwright, AK. Click the table to right for a seasonal overview.



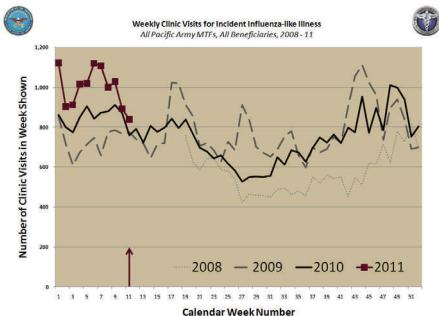
Regional Army Respiratory Activity: Syndromic (ILI) and Lab-Confirmed

Major Geographic Region: Pacific

• Pacific Regional Medical Command (PRMC)

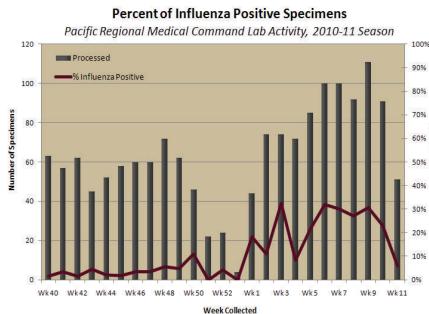
Influenza-like illness

For the week ending 19 March, patient visits for ILI decreased (5.9%) from the previous week among Army MTFs located in the Pacific region. Click graph below for an overview.



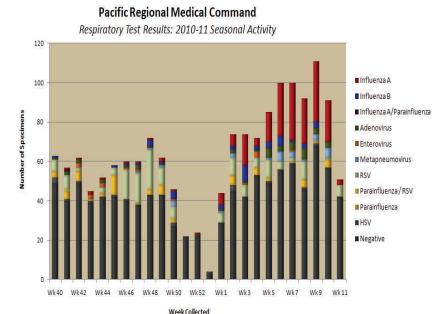
Respiratory Testing Activity

For week ending 19 March, the frequency of specimen collections decreased (43.9%) from the previous week. The percent positive influenza results decreased to 5.9% in Week 11.



Laboratory Results

For week ending 19 March, 17.6% of specimens collected were positive for a respiratory virus. Influenza subtypes identified this season include: A/pH1 (n=3), B/Victoria (n=1).



Patients with Influenza

Of the influenza-positive patients whose specimen was collected during Week 11, 1 was an active duty member, 1 was a child, and 1 was a spouse. Of these patients, all sought care in HI (33.3% at TAMC and 66.6% at Joint Base Pearl Harbor Hickam).

Sites submitting specimens

For week ending 19 March, the majority (78.4%, n=40) of specimens were collected at TAMC, HI, followed by 17.6% (n=9) at Joint Base Pearl Harbor Hickam, and 3.9% (n=2) at Schofield Barracks. Click table for a season review of submitting sites and positive influenza results.

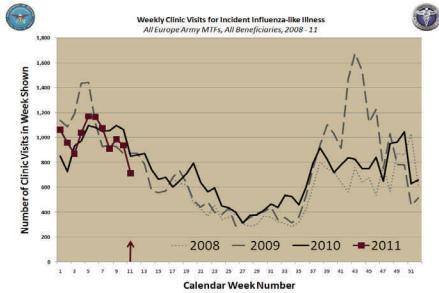
Location of specimen collection	No. (n)	Influenza Positive (%)
Tamc AMC, HI	1,310 (72.6)	156 (37)
Joint Base Pearl Harbor Hickam, HI	198 (7.8)	16 (5)
Schofield Barracks, HI	201 (74.7)	24 (7)
Ri Sehee, HI	0 (0)	0 (0)
Marine Corps Base, HI	31 (1.7)	4 (2)
USO Sand Island, HI	7 (0.4)	0 (0)
VA Hospital, HI	2 (0.1)	0 (0)
Brian Abbott Adm S, HI	29 (1.5)	2 (2)
Nh Guam, Guan	8 (0.4)	0 (0)
Total Submissions	1,779	201 (11)

Major Geographic Region: Europe

• Europe Regional Medical Command (ERMC)

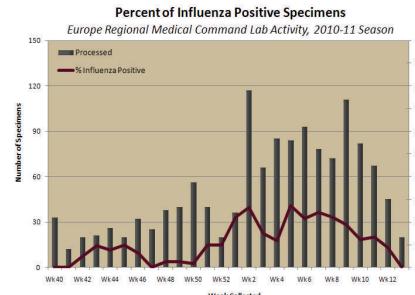
Influenza-like illness

For the week ending 19 March, patient visits for ILI decreased (24.1%) from the previous week among Army MTFs in the European region. Click graph below for an overview.



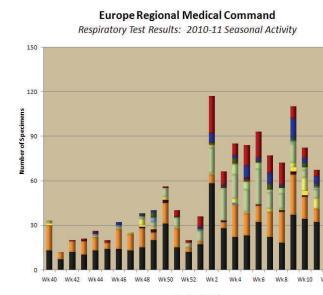
Respiratory Testing Activity

The frequency of specimen collections decreased (18.3%) from Week 10 to Week 11 (week ending 19 March). The percent influenza positive results slightly increased to 13.4% in Week 11.



Laboratory Results

The percentage of positive respiratory results continued to decrease from 58.5% to 52.2% in Week 11. Click graph below for an overview of lab results by week collected.



Patients with Influenza

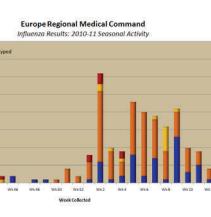
The majority (66.7%, n=6) of patients with influenza whose specimen was collected during Week 11 were children, followed by 22.2% (n=2) active duty, and 11.1% (n=1) spouse. The majority (66.6%) of these patients sought care in Germany.

Characterized Influenza

Of the 199 positive influenza specimens identified this season, LRMC further characterized 67.8% (n=135) as A/pH1 (n=118) and A/H3 (n=17). Click graph to the right for an overview of characterized isolates by week collected.

Submitting Sites

For week ending 19 March, the majority (29.9%, n=20) of specimens were collected at Landstuhl, Germany. MTFs in Germany collected 82.0% (n=55) of specimens during Week 11 that were submitted to LRMC for a respiratory test. Click table below for a season overview of submitting sites and influenza results.



Location of specimen collection	Specimens submitted	Specimens tested	Type A	Type B	Type A/B
Bamberg, Germany	2	0	0	1	1
Berlin, Germany	1	0	0	1	1
Cologne, Germany	22	20	1	1	1
Darmstadt, Germany	1	0	0	1	1
Heidelberg, Germany	309	270	14	14	14
Hannover, Germany	1	0	0	1	1
Hamburg, Germany	1	0	0	1	1
Koblenz, Germany	3	0	0	3	3
Ludwigshafen, Germany	1	0	0	1	1
Mannheim, Germany	10	9	3	3	3
Munich, Germany	1	0	0	1	1
Schwerin, Germany	13	12	1	1	1
Stuttgart, Germany	11	10	2	1	1
Airbase Italy	10	10	2	2	2
Albania	1	0	0	1	1
Bosnia, BiH	1	0	0	1	1
Bulgaria	3	2	1	1	1
Croatia	1	0	0	1	1
Hungary	1	0	0	1	1
Iraq	1	0	0	1	1
Italy	1	0	0	1	1
Montenegro	1	0	0	1	1
North Macedonia	1	0	0	1	1
Poland	1	0	0	1	1
Romania	1	0	0	1	1
Russia	1	0	0	1	1
Ukraine	1	0	0	1	1
Uzbekistan	1	0	0	1	1
Yemen	1	0	0	1	1
Total Submissions	1,326	145	55	3	3