

2010-11 Influenza Season, as of
 12 January 2011

U.S. Army Influenza Activity Report

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

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 trails have shown effectiveness of the vaccine to be between 70-90% among health adults.

(Reference: CDC)

Antiviral Resistance

CDC antiviral testing indicates that all subtypes of influenza continue to be sensitive to neuraminidase inhibitors oseltamivir and zanamivir. DoD antiviral testing, using a genetic marker detection technique, also found that no 2009 H1N1 specimens indicated resistance to oseltamivir.

(Reference CDC, USAFSAM)

Resources

To access, double-click titles

Surveillance Programs

- DoD Influenza-like Illness (AFHSC)
- Sentinel-based (USAFSAM)
- Population-based (NHRC)
- Region-based (PHC-EUR/LRMC)
- Acute Respiratory Disease (PHC)
- Hospital Surveillance (NMCPHC)

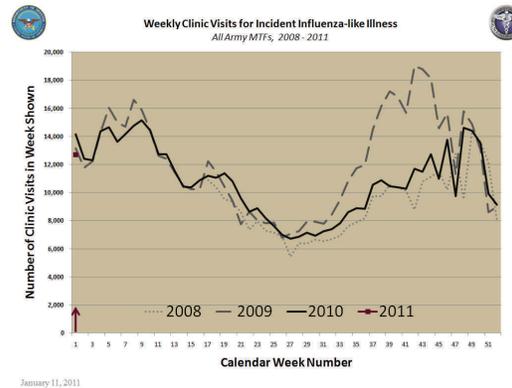
Related Links

- Pandemic Influenza Watchboard
- AFHSC
- CDC Influenza Update
- Google FluTrends
- Historical PHC Influenza reports

Influenza-like Illness (ILI) activity

Clinical visits for ILI are gathered by the Armed Forces Health Surveillance Center from ESSENCE. As of 11 Jan.

For the week ending 8 January, visits for ILI across Army MTFs returned to levels prior to the steep drop in counts associated with the holiday period, as counts increased (38.7%) from the previous week. Click graph below for an overview and see page 2 for an overview by region.

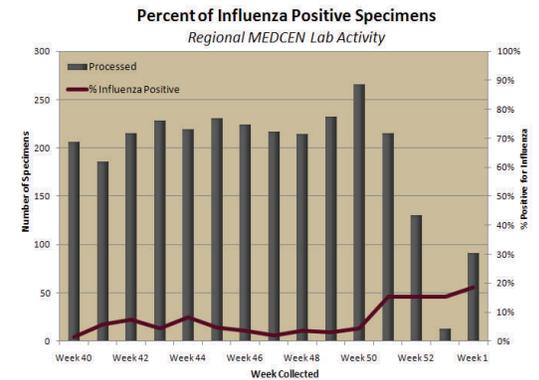


January 11, 2011

Army Regional Lab activity

Data reflect TAMC, LRMC, EAMC, WRAMC, MAMC. BAMC data are pending inclusion at this time.

An average of 43 patients per week had a specimen tested for a respiratory virus at one of the major regional Army MEDCEN labs. Of the total 2,891 specimens tested, 6.2% (n=180) were positive for influenza. Click graph below for an overview and see pages 2-3 for an overview by major regional Army lab.



Surveillance Activity Reports

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

Sentinel-based surveillance (DoD beneficiaries)

Overall, 8.7% (42 of 479) of specimens collected are positive for influenza (55% A, 45% B). Of the isolates characterized, A/pH1N1 (n=5), A/H3 (n=18), and B/Victoria (n=4) have been identified. No influenza-positive specimens have been collected from an Army installation. 11 Jan 2011.

Population-based surveillance (Recruits)

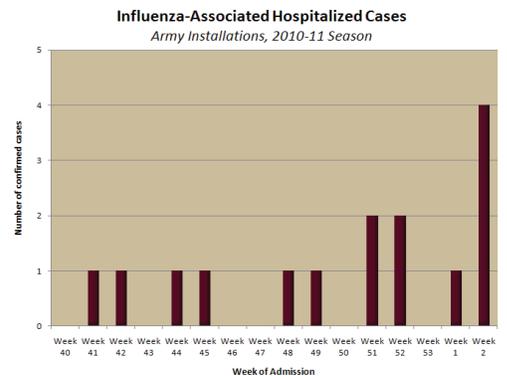
The febrile respiratory illness rate status remains at or below expected value for all participating recruit sites. Adenovirus type 4 remains the predominant cause of FRI among recruits at most training centers. Last report 6 Jan.

Acute Respiratory Disease (ARD) surveillance

Step/ARD surveillance index (SASI) increased from the previous week at 1 site (Ft Leonard Wood: 10 ARD cases, 1 Strep positive). Last report dated 12 Jan.

Influenza-associated Hospitalized Cases

A total of 18 patients have been admitted this season, including 5 in January. Active duty members (n=7) and spouses (n=7) accounted for 38.8% each, while children accounted for 22.2% (n=4) of the hospitalized patients. Click graph below for an overview.



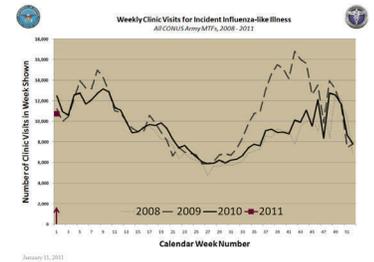
Regional Army Respiratory Activity: Syndromic (ILI) and Lab-Confirmed

Double-click images to the right of the paragraphs to expand.

CONUS Activity

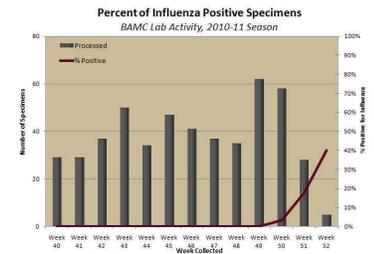
- Influenza-like illness**

- For the week ending 8 January, patient visits for ILI returned to levels prior to the holiday period, increasing (37.7%) from the previous week.



- Brooke Army Medical Center (BAMC), TX**

- 2010-11 season: An average of 38 patients a week had a specimen tested for a respiratory virus. Of the 492 patients tested, 13.6% (n=67) were positive, more specifically, 1.8% (n=9) were positive for influenza. Of the patients with influenza, the majority (88.8%, n=8) were dependents (4 Army, 3 Air Force, and 1 Marine Core), followed one Army active duty member. The majority (77.7%, n=7) of the influenza-positive patients sought care at BAMC and/or Fort Sam Houston, while 2 patients sought care at Randolph Air Force Base.

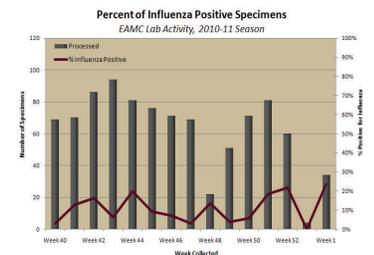


- One of the nine positive influenza patients is affiliated with the recent lab-based influenza surveillance in advanced trainees at Fort Sam Houston. A total of 7 specimens have been collected since the 2010-11 season, and 14.2% (n=1) have been positive for influenza. Current efforts are taking place to better identify demographics for the advanced trainee population.

- Sites sending specimens to BAMC for respiratory testing include Ft Sam, Camp Bullis, Ft Bliss, Randolph AFB, Lackland AFB, NH Corpus Christi, Ft Sill, Ft Irwin, Ft Leonard Wood, Ft Leavenworth, Ft Hood, Ft Polk, and Ft Wainwright.

- Eisenhower Army Medical Center (EAMC), GA**

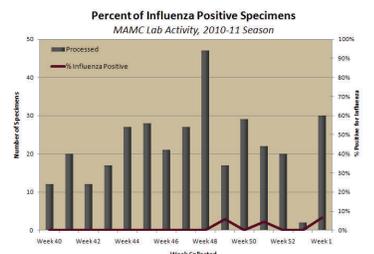
- 2010-11 season: An average of 63 patients a week had a specimen tested for a respiratory virus. Of the 939 tested, 31.2% (n=293) were positive, more specifically, 11.2% (n=106) were positive for influenza. Of the patients with influenza, the majority (92.5%, n=98) were dependents, followed Army active duty (3.7%, n=4), Army retirees (2.8%, n=3), and Army National Guard (0.9%, n=1). The majority (61.3%, n=65) of the influenza-positive patients sought care at Ft. Stewart, GA, from Weeks 40-52.



- Sites sending specimens to EAMC for respiratory testing include Ft McPherson, Ft Campbell, Redstone Arsenal, Ft Rucker, Ft Benning, Ft Jackson, and Ft Stewart. Overall, Ft. Stewart accounted for 42.8% (n=402) of all respiratory specimens processed at EAMC.

- Madigan Army Medical Center (MAMC), WA**

- 2010-11 season: An average of 21 patients a week had a specimen tested for a respiratory virus. Of the 335 specimens tested, 22.9% (n=77) were positive, more specifically, 1.2% (n=4) were positive for influenza (3 influenza A, 1 influenza B). The subtypes identified include influenza A/H3 (n=1) and A/pH1 (n=1). All patients with positive influenza results sought care at Madigan. Of the 4 influenza-positive patients, 2 were Air Force retirees and 2 were Navy spouses.

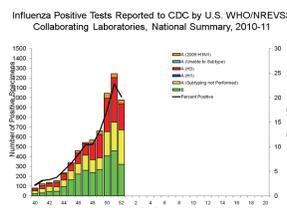
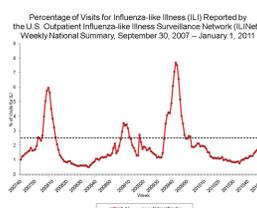


- Walter Reed Army Medical Center (WRAMC), MD**

- 2010-11 season: Data pending update at the time of this report.

- Centers for Disease Control and Prevention**

- Nationwide, during week 52, 2.6% of reported patient visits were due to ILI. An average of 4,840 specimens are tested each week, with an average of 9.7% positive for influenza. See CDC's FluView weekly influenza report for more information.



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

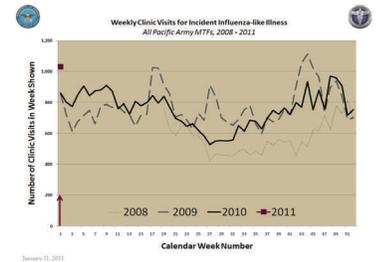
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OCONUS Activity

Pacific

- Influenza-like illness**

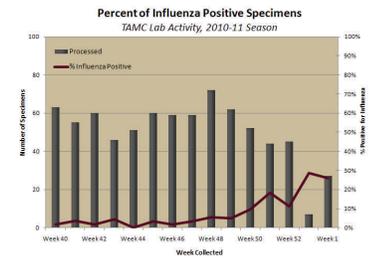
- For the week ending 8 January, patient visits for ILI returned to levels prior to the holiday period, increasing (36.7%) from the previous week.



- Tripler Army Medical Center (TAMC), HI**

- 2010-11 season: An average of 51 patients a week had a specimen tested for a respiratory virus. Of the 762 patients tested, 32.6% (n=249) were positive, more specifically, 5.9% (n=45) were positive for influenza. Of the patients with influenza, the majority (86.6%, n=39) were dependents (21 Army, 16 Navy, 1 Air Force, and 1 Marine Core), followed 6.6% (n=3) Army active duty members, 4.4% (n=2) Navy retirees, and 2.2% (n=1) VA beneficiary. The majority (95.5%, n=43) of the influenza-positive patients sought care in HI, while 2 patients sought care in South Korea (BAACH).

- TAMC sends all positive influenza specimens to UAFSAM for further molecular analysis.



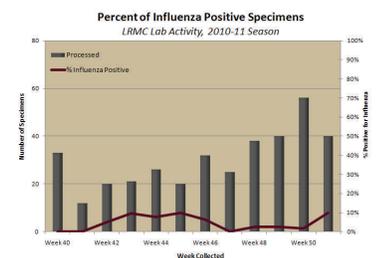
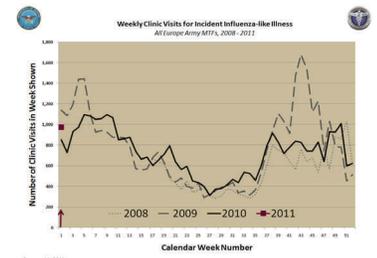
Europe

- Influenza-like illness**

- For the week ending 8 January, patient visits for ILI returned to levels prior to the holiday period, increasing (56.3%) from the previous week.

- Landstuhl Army Medical Center (LRMC), Germany**

- 2010-11 season: An average of 30 patients a week had a specimen tested for a respiratory virus. Of the 363 tested, 50.6% (n=194) were positive, more specifically, 4.4% (n=16) were positive for influenza (10 A, 5 B, 1 co-infection with influenza A/B). The majority (31.2%, n=5) of patients with influenza sought care in England, followed by 25% (n=4) in Germany, 18.7% (n=3) in Belgium, 18.7% (n=3) in Spain, and 6% (n=1) unknown. Five of the influenza isolates were further subtyped as A/H1 (n=1), A/H3 (n=4). Dependents accounted for 62.5% (n=10) of the patients with influenza, and the remainder (37.5%) were active duty members (5 Air Force, 1 Navy).



- Centers for Disease Control and Prevention**

- Global Influenza Activity. As of 30 December, consultation rates for ILI were above baseline levels in the all four United Kingdom countries. For Europe, consultation rates for ILI and acute respiratory infection increased in eight out of 32 reporting countries, and 34% percent of specimens tested were positive for influenza (mainly influenza B circulating during Week 51). In China, 15.8% of respiratory specimens were positive for influenza, with the influenza A/H3N2 being the predominant subtype in both North and South China.

- See CDC's [International Situation Update](#) for more information.