

FLORIDA INFLUENZA SURVEILLANCE

Week 46: November 11th—November 17th 2007



Kateesha McConnell, MPH, FL EIS Fellow
 Kate Goodin, MPH, Surveillance Epidemiologist
 Lillian Stark, PhD, MPH, MS, Bureau of Laboratories-Tampa
 Valerie Mock, Bureau of Laboratories—Jacksonville
 Julian Everett, Influenza Coordinator



IN THIS ISSUE:

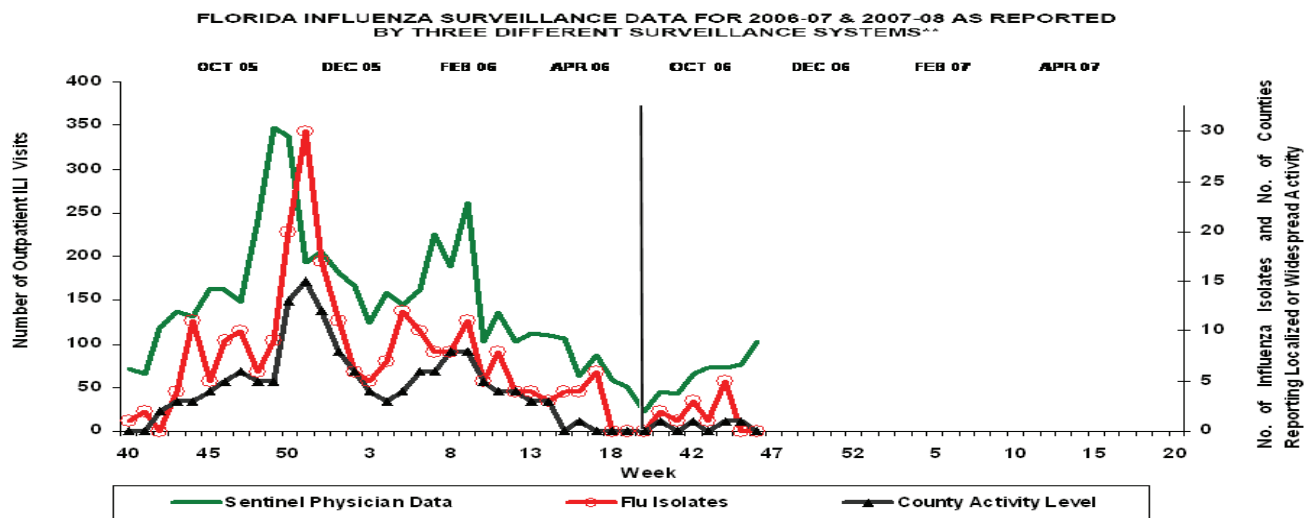
- I. Summary
- II. FSPISN Influenza-like Illness Statewide Graph
- III. Florida Pneumonia and Influenza Mortality Surveillance
- IV. FDOH Laboratory Surveillance
- V. Laboratory and Influenza-like Illness Surveillance by Region
- VI. County Influenza Activity Map
- VII. Reports of Influenza or Influenza-like Illness (ILI) Outbreaks
- VIII. Notifiable Disease Reports: Influenza-assoc. deaths in children & post-influenza infection encephalitis
- IX. Summary of Worldwide A/H5N1 Influenza Activity

I. SUMMARY

This is the seventh weekly Florida influenza surveillance report for the 2007-08 season. Influenza surveillance* in Florida consists of six surveillance components: 1) Florida Sentinel Physician Influenza Surveillance Network (FSPISN); 2) Florida Pneumonia & Influenza Mortality Surveillance System; 3) State laboratory viral surveillance; 4) County influenza activity levels; 5) Notifiable Disease Reports: Influenza-associated deaths in children & post-influenza infection encephalitis; 6) Influenza or ILI outbreaks.

Each week an activity code for the state as a whole is reported to the Centers for Disease Control and Prevention (CDC). There are five possible categories: No Activity, Sporadic, Local, Regional, or Widespread. Local activity has been reported for Florida for this reporting week (Week 46). There has been an increase in influenza activity in the southeast region of Florida (Palm Beach, Broward, Miami-Dade, and Monroe). Because of this increase, Florida meets the CDC local activity definition. The CDC definition for local activity is: Outbreaks of influenza or increases in influenza-like illness (ILI) and recent laboratory confirmed influenza in a single region of the state. The CDC report can be viewed at <http://www.cdc.gov/flu/weekly/usmap.htm>.

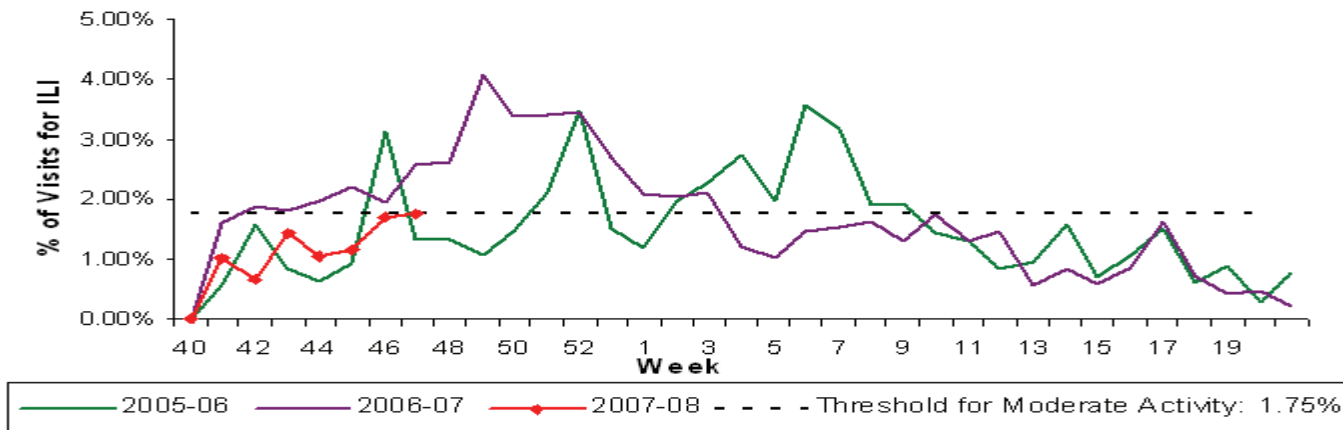
During week 46 the proportion of patient visits for influenza-like illness (ILI) as reported by the Florida Sentinel Physician Influenza Surveillance Network was 1.77 percent and this is slightly above the state threshold for moderate activity of 1.75 percent. None of the 12 specimens tested by Bureau of Laboratories were positive for influenza. No county reported localized activity. Nineteen counties reported sporadic activity and 28 counties reported no activity. Twenty counties did not report. The graph below shows the progression of the 2006-07 & 2007-08 Florida influenza seasons as monitored by three** of six surveillance systems.



II. FSPISN INFLUENZA-LIKE ILLNESS STATEWIDE GRAPH

During week 46, 1.77%* of patient visits to Florida sentinel providers were due to ILI. This percentage is slightly above the statewide baseline of 1.75%** . The percentage of visits ranged from 0.30% in the North-east region to 3.27% in the Southwest region. For the 2006-07 influenza season the statewide ILI activity percent was 2.57% percent for week 46.

Percentage of Visits for Influenza-like Illness Reported by Sentinel Providers Statewide Summary 2007-08, 2006-07, and 2005-06



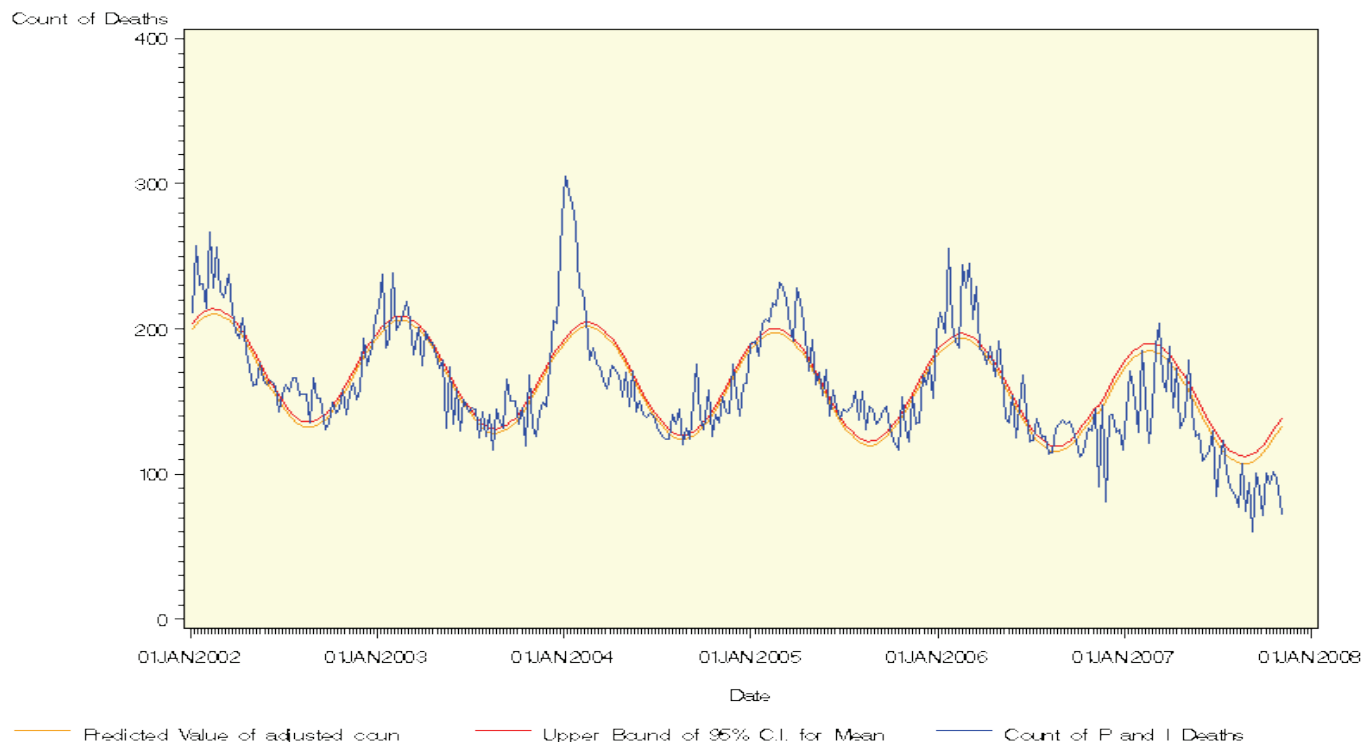
*FSPISN reporting is incomplete for this week (60%). Numbers may change as more reports are received.

**The 2006—07 threshold for moderate activity is calculated from the previous 3 years of FSPISN data. Only weeks with 10% or greater of laboratory specimens testing positive are included in the calculation. The threshold is only specific to 2007—08 data.

III. Florida Pneumonia and Influenza Mortality Surveillance

During week 46, the total count of pneumonia and influenza (P&I) deaths reported was below the epidemic threshold. This indicates there were no deaths in excess of the expected count for week 46 and observed mortality does not indicate that Florida has surpassed the epidemic threshold for this week**.

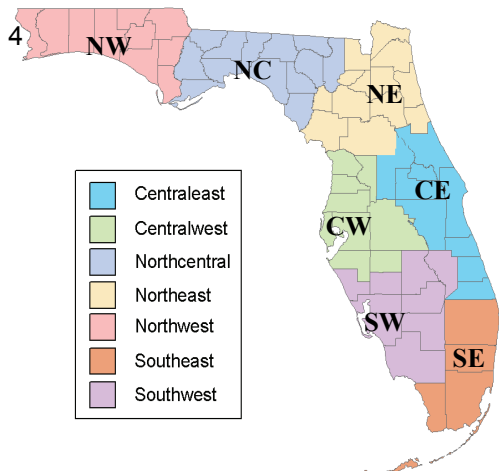
Pneumonia and Influenza Mortality for 23 Florida Counties, Counts Model



**Twenty-one of 23 counties are currently reporting P&I deaths. 100% participation is required for this graph to provide an accurate representation. We look forward to 100% participation in the near future.

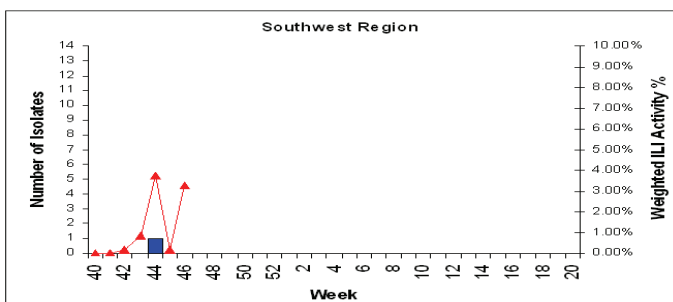
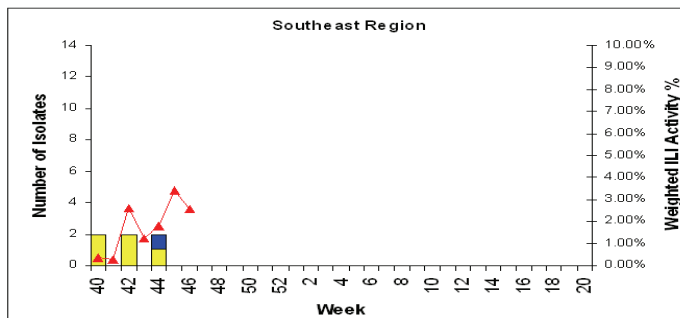
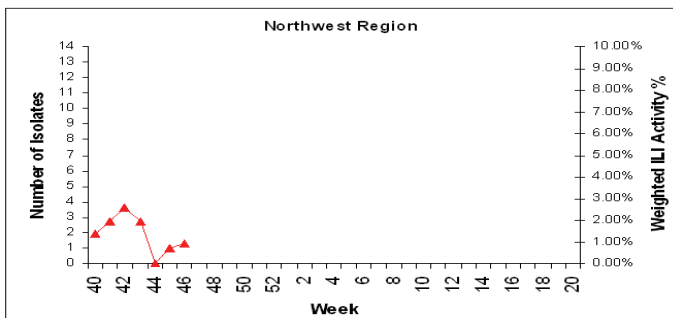
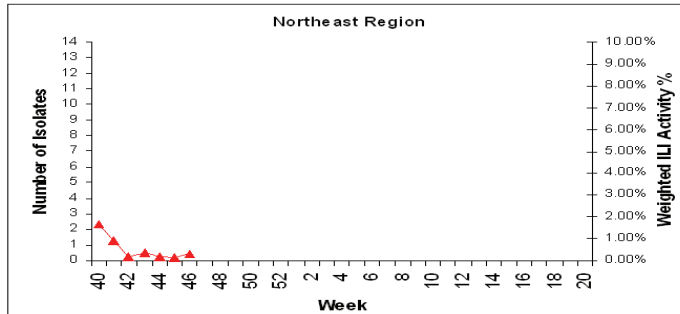
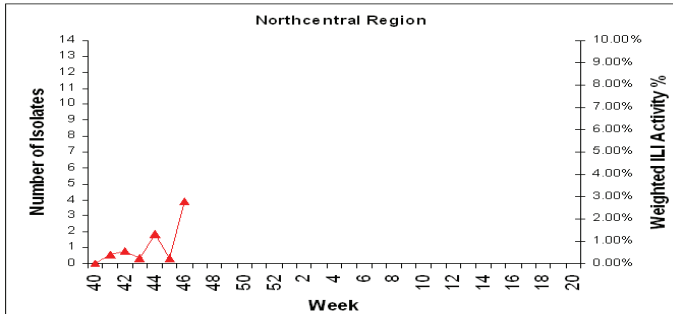
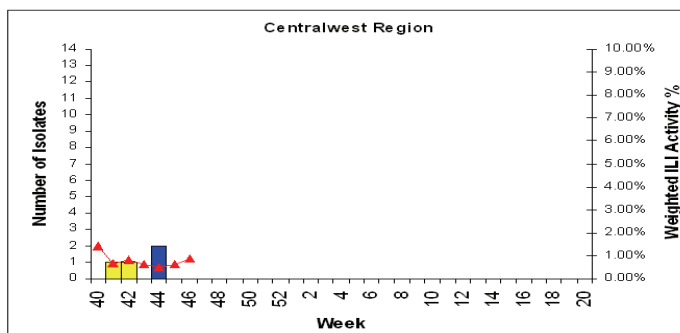
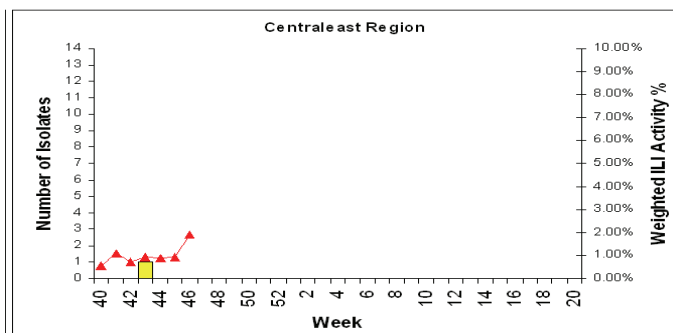
IV. LABORATORY AND INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE BY REGION

Influenza Surveillance Regions



The table below shows the weighted ILI activity by region as reported by Florida sentinel physicians for the 2006-07 & 2007-08 seasons. The graphs below include ILI activity as reported by sentinel physicians and FDOH laboratory data.

Week 46: FSPISN Weighted ILI Activity, by Region 2006-07 & 2007-08 Seasons		
REGION	2007-08 ILI %	2006-07 ILI %
Centraleast	1.92%	1.87%
Centralwest	0.86%	2.11%
Northcentral	2.80%	0.33%
Northeast	0.30%	6.40%
Northwest	0.95%	2.29%
Southeast	2.57%	2.52%
Southwest	3.27%	2.23%



- Influenza A specimens FDOH Laboratories
- Influenza B specimens FDOH Laboratories
- % of visits for ILI, reported by sentinel providers

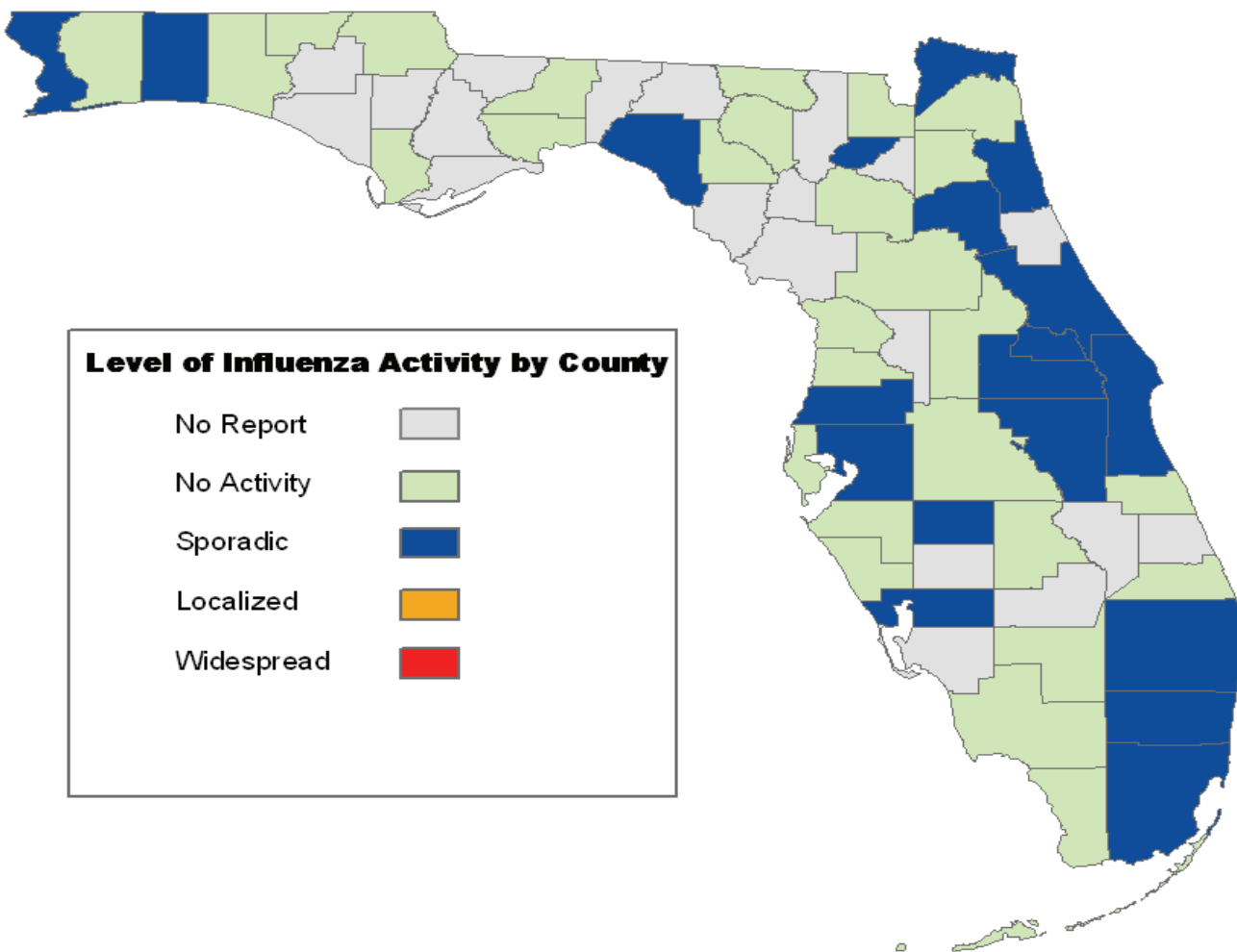
V. COUNTY INFLUENZA ACTIVITY MAP

During week 46, no counties reported localized activity. No counties reported widespread activity. Nineteen counties (Brevard, Broward, Charlotte, Miami-Dade, Escambia, Hardee, Hillsborough, Nassau, Okaloosa, Orange, Osceola, Palm Beach, Pasco, Putnam, St. Johns, Seminole, Taylor, Union, Volusia) reported sporadic activity. Twenty-eight counties reported no activity. Twenty counties did not report.

Weekly County Influenza Activity

(Week ending November 17, 2007 - Week 46)

County influenza activity levels are reported by county health department epidemiologists



Florida Department of Health
Bureau of Epidemiology

Disclaimer:
 This product is for reference purposes only and is not to be construed as a legal document. Any reliance on the information contained herein is at the user's own risk. The Florida Department of Health and its agents assume no responsibility for any use of the information contained herein or any loss resulting therefrom.
 Map printed November 15, 2007

COUNTY INFLUENZA ACTIVITY LEVEL DEFINITIONS

0 = No Activity:

Overall clinical activity remains low with no laboratory confirmed cases[†] in the county.

1 = Sporadic:

- And/or {
- Isolated cases of laboratory confirmed influenza[†] in the county.
 - An ILI[§] outbreak in a single setting[‡] in the county. (No detection of decreased ILI[§] activity by surveillance systems*)

2=Localized:

- And/or {
- An increase of ILI[§] activity detected by a *single* surveillance system* within the county. (An increase in ILI[§] activity has not been detected by *multiple* ILI surveillance systems.)
 - Two or more outbreaks (ILI[§] or lab confirmed[†]) detected in a *single* setting[‡] in the county.

AND

- Recent (within past three weeks) laboratory evidence[†] of influenza activity in the county.

3=Widespread:

- And/or {
- An increase in ILI[§] activity detected in ≥ 2 surveillance systems in the county.
 - Two or more outbreaks ((ILI[§] or laboratory confirmed[†]) detected in *multiple* settings[‡] in the county.

No Report: (No report was received from the county at the time of publication)

[†] Laboratory confirmed case = case confirmed by rapid diagnostic test, antigen detection, culture, or PCR.

[§] ILI = Influenza-like illness, fever $\geq 100^{\circ}\text{F}$ AND sore throat and/or cough *in the absence* of another known cause.

*ILI surveillance system activity can be assessed using a variety of surveillance systems including sentinel providers, school/workplace absenteeism, long-term care facility (LTCF) surveillance, correctional institution surveillance, hospital emergency department surveillance and laboratory surveillance.

[‡]Settings include institutional settings (LTCFs, hospitals, prisons, schools, companies) & the community.

VI. REPORTS OF INFLUENZA OR INFLUENZA-LIKE ILLNESS (ILI) OUTBREAKS

On October 16, 2007 Duval CHD Epidemiology reported a pediatric patient hospitalized by Acute Disseminated Encephalomyelitis (ADEM) caused by recent Influenza A infection. Nasopharyngeal specimen was positive for Influenza A by EIA.

On October 10, 2007 Palm Beach CHD Epidemiology reported ILI activity in two long-term care facilities. In addition, a local laboratory hospital reported four positive cases of influenza A by rapid antigen testing.

On September 27, 2007 Miami-Dade CHD Epidemiology reported two university students with ILI symptoms and confirmed influenza A by PCR testing at the State Laboratory—Jacksonville.

Influenza and ILI outbreaks should be reported via EpiCom at: <https://www.epicom.fl.net> on the Influenza Forum.

VII. NOTIFIABLE DISEASE REPORTS: INFLUENZA-ASSOCIATED DEATHS AMONG CHILDREN (<18 YEARS) & POST-INFLUENZA INFECTION ENCEPHALITIS

As of the week ending November 10, 2007, no influenza-associated deaths among those <18 years of age and/or post influenza infection encephalitis were reported in the state of Florida.

Reportable Disease	# of Cases 07-08 Influenza Season
Influenza-associated deaths among those <18 years of age	0
Post-influenza infection encephalitis	0

Influenza-associated deaths among those < 18 years of age and/or post-influenza infection encephalitis are reportable; case report forms can be accessed at: http://www.doh.state.fl.us/disease_ctrl/epi/topicscrforms.htm.

VIII. SUMMARY OF WORLDWIDE A/H5N1 INFLUENZA ACTIVITY

Update 62

11/8/2007

Since the recent outbreak activity began at the end of December 2003, there have been a total of 335 confirmed human cases and 206 deaths. Cases and deaths occurred in the following nations: Azerbaijan 8 cases and 5 deaths; Cambodia 7 cases and 7 deaths; China 25 cases and 16 deaths; Djibouti 1 case 0 deaths; Egypt 38 cases and 15 deaths; Indonesia 113 cases and 91 deaths; Lao People's Democratic Republic 2 cases and 2 deaths; Nigeria 1 case and 1 death; Iraq 3 cases and 2 deaths; Thailand 25 cases and 17 deaths; Turkey 12 cases and 4 deaths; and, Vietnam 100 cases and 46 deaths.

Changes in the WHO case definition for human infection with avian influenza H5N1 can be found here:

http://www.who.int/csr/disease/avian_influenza/guidelines/case_definition2006_08_29/en/index.html

For a complete analysis and summary of WHO confirmed human cases of H5N1 from 12/1/2003 to current, please visit: http://www.who.int/csr/disease/avian_influenza/guidelines/wer8126/en/index.html

The current phase of alert as defined by the WHO global influenza preparedness plan is phase 3, which states that human infections with a new subtype are occurring, but no human-to-human spread, or at most rare instances of spread to a close contact. At the present time the WHO is not recommending restrictions on travel to areas affected by H5N1 avian influenza, but is suggesting that travelers to these areas avoid contact with live animal markets and poultry farms, and any free-ranging or caged poultry. Evidence suggests that the primary route of infection at this time is associated with direct contact with infected poultry, or surfaces and objects contaminated by their droppings.

