FLORIDA INFLUENZA SURVEILLANCE

Week 48: November 25th—December 1st 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

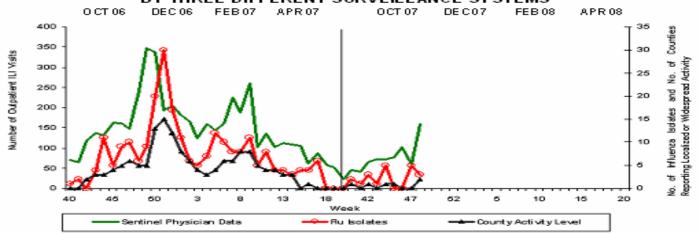
I. SUMMARY

This is the ninth 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 & postinfluenza 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 48). 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.

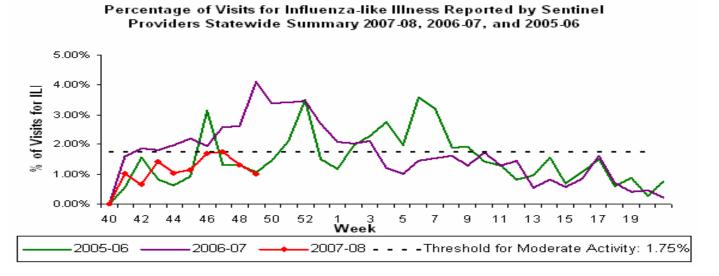
During week 48 the proportion of patient visits for influenza-like illness (ILI) as reported by the Florida Sentinel Physician Influenza Surveillance Network was 1.01 percent and this is below the state threshold for moderate activity of 1.75 percent. Three of the 20 specimens tested by Bureau of Laboratories were positive for influenza. Two counties reported localized activity. Thirteen counties reported sporadic activity and 37 counties reported no activity. Sixteen 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.

FLORID A INFLUENZA SURVEILLANCE DATA FOR 2006-07 & 2007-08 AS REPORTED BY THREE DIFFERENT SURVEILLANCE SYSTEMS**



II. FSPISN INFLUENZA-LIKE ILLNESS STATEWIDE GRAPH

During week 48, 1.01%* of patient visits to Florida sentinel providers were due to ILI. This percentage is below the statewide baseline of 1.75%**. The percentage of visits ranged from 0.00% in the Southwest region to 2.57% in the Centraleast region. For the 2006-07 influenza season the statewide ILI activity percent was 4.08% for week 48.

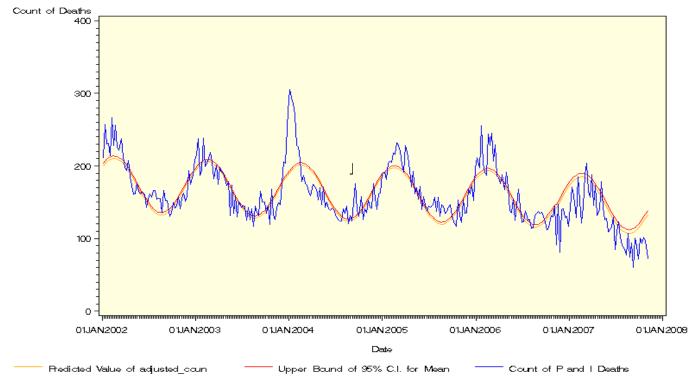


*FSPISN reporting is incomplete for this week (42%). Numbers may change as more reports are received.

**The 2007—08 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 48, 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 48 and observed mortality does not indicate that Florida has surpassed the epidemic threshold for this week**.

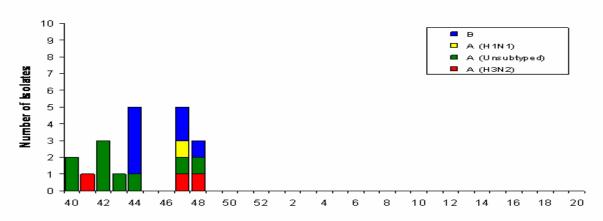


Pneumonia and Influenza Mortality for 23 Florida Counties, Counts Model

*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.

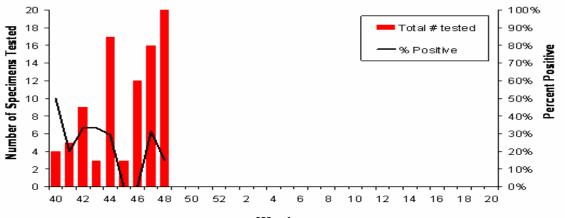
IV. FDOH LABORATORY SURVEILLANCE

Since September 30th, 2007, Florida Department of Health Laboratories have tested a total of 87 specimens for influenza viruses and 20 (23%) were positive. Among the 20 influenza viruses, 13 (65%) were influenza A viruses and 7 (35%) were influenza B viruses. Four of the 20 influenza virus samples has been subtyped. Of the 13 influenza A viruses, 3 were A H3N2, 1 was H1N1, and 9 were A unsubtyped. All of the influenza B viruses have not been subtyped. *Laboratory information is preliminary and may change as additional results are received.*



FDOH State Laboratory Influenza Virus Isolates 2007-08







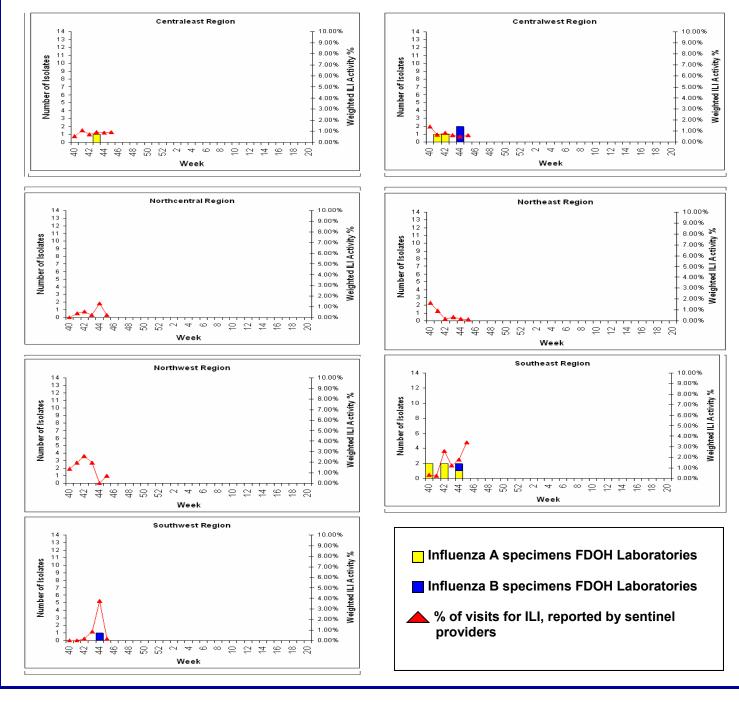
Week		Alachua	Charlotte	Citrus	Duval	Escantia	Mani-Dade	Hilsborough	Indian River	Lean	Orange	Osceda	PalmBeach	Pinellas	Palk	Volusia
40	А						2									
	A B															
41	Α							1								
	В															
42	Α						2	1								
	В															
43	А										1					
	В															
44	А						1									
	В		1				1	2								
45	A B															
46	А															
	В															
47	А						3									
	В		1					1								
48	А						2									
	В		1													
49	А															
	В															
50	А															
	В															
51	Α															
	В															

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



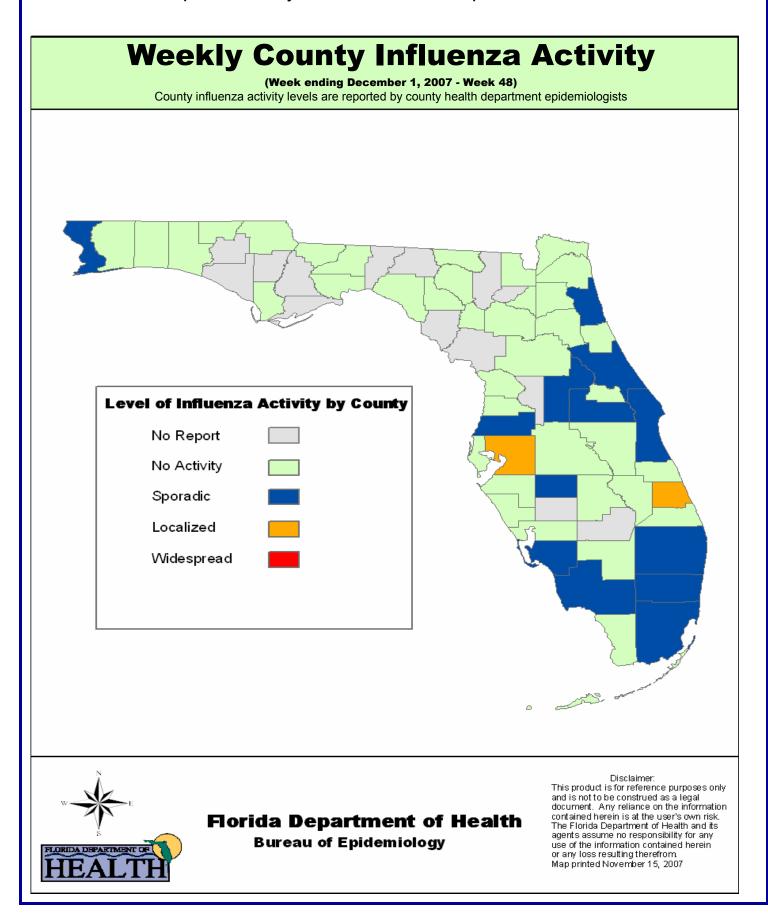
The table below shows the weighted ILI activity by region as reported by Florida sentinel physicians for the 2006-07 & 2007-08 seasons. The graphs below include ILI activity as reported by sentinel physicians and FDOH laboratory data.

Week 48: FSPISN Weighted ILI Activity, by Region 2006-07 & 2007-08 Seasons							
REGION	2007-08 ILI %	2006-07 ILI %					
Centraleast	2.75%	1.05%					
Centralwest	0.39%	1.95%					
Northcentral	0.55%	0.95%					
Northeast	0.25%	2.28%					
Northwest	1.18%	9.84%					
Southeast	0.81%	6.42%					
Southwest	0.00%	6.80%					

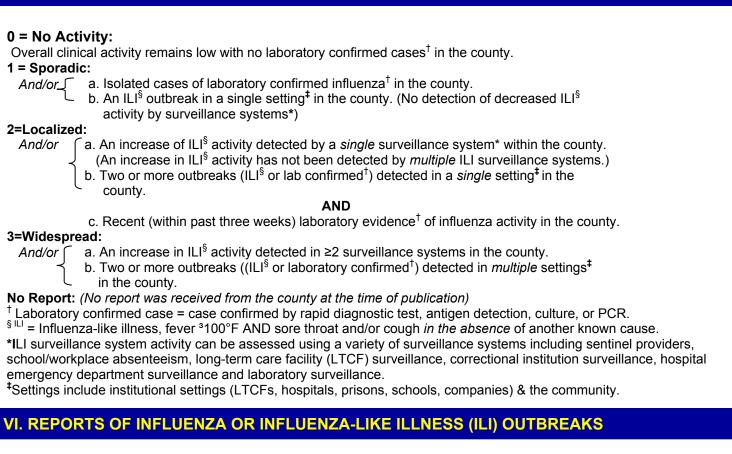


V. COUNTY INFLUENZA ACTIVITY MAP

During week 48, two counties reported localized activity (Hillsborough, St. Lucie). No counties reported widespread activity. Thirteen counties (Brevard, Broward, Collier, Miami-Dade, Escambia, Hardee, Lake, Lee, Orange, Palm Beach, Pasco, St. Johns, Volusia) reported sporadic activity. Thirtyseven counties reported no activity. Sixteen counties did not report.



COUNTY INFLUENZA ACTIVITY LEVEL DEFINITIONS



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: <u>https://www.epicom.fl.net</u>on the Influenza Forum.

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

As of the week ending December 1, 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: <u>http://www.doh.state.fl.us/disease_ctrl/epi/topicscrforms.htm</u>.

VIII. SUMMARY OF WORLDWIDE A/H5N1 INFLUENZA ACTIVITY

Update 63 12/4/2007

Since the recent outbreak activity began at the end of December 2003, there have been a total of 336 confirmed human cases and 207 deaths. Cases and deaths occurred in the following nations: Azerbaijan 8 cases and 5 deaths; Cambodia 7 cases and 7 deaths; China 26 cases and 17 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: <u>http://www.who.int/csr/disease/avian_influenza/guidelines/case_definition2006_08_29/en/index.html</u> For a complete analysis and summary of WHO confirmed human cases of H5N1 from 12/1/2003 to current, please visit: <u>http://www.who.int/csr/disease/avian_influenza/guidelines/wer8126/en/index.html</u>

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.

