FLORIDA INFLUENZA SURVEILLANCE

Week 46: November 12th — November 18th 2006



Aimee Pragle, MS, Respiratory Disease Epidemiologist Matt Laidler, MA, MPH, Surveillance Epidemiologist LaKisha Thomas, Influenza Surveillance Coordinator D'Juan Harris, MSP, GIS Coordinator Aaron Kite-Powell, MS, Florida EIS Officer



IN THIS ISSUE:

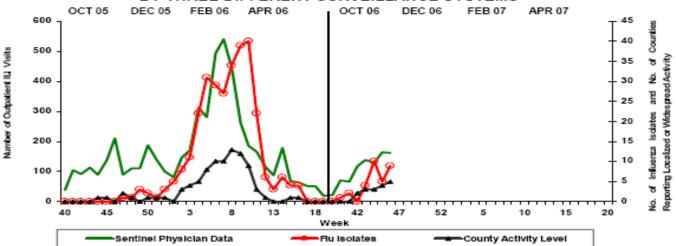
- I. Summary
- II. FSPISN Influenza-like Illness Statewide Graph
- III. NEW! Florida Pneumonia & Influenza Mortality Surveillance System
- IV. FDOH Laboratory Surveillance
- V. Laboratory and Influenza-like Illness Surveillance by Region
- VI. County Influenza Activity Map
- VII. Reports of Influenza 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 2006-07 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.

During week 46 statewide influenza activity was regional. The proportion of patient visits for influenza-like illness (ILI) as reported by the Florida Sentinel Physician Influenza Surveillance Network was 2.57 percent and this is above the state threshold for moderate activity of 2.08 percent. Nine of the 24 specimens (38%) tested by Bureau of Laboratories were positive for influenza. Five counties reported localized activity, 20 counties reported sporadic activity and 23 counties reported no activity. Nineteen counties did not report. The graph below shows the progression of the 2005-06 & 2006-07 Florida influenza seasons as monitored by three** of five surveillance systems.

FLORIDA INFLUENZA SURVEILLANCE DATA FOR 2005-06 & 2006-07 AS REPORTED BY THREE DIFFERENT SURVEILLANCE SYSTEMS**



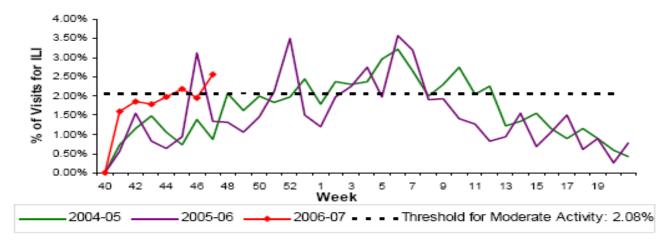
*The purposes of these surveillance systems are to determine when and where influenza activity is occurring, to identify circulating viruses, to detect changes in the circulating influenza viruses, to track patterns of influenza associated morbidity and mortality and estimate the overall impact of influenza in the state of Florida.

**1) FSPISN, 2) State Laboratory Viral Surveillance, and 3) County Activity Levels.

II. FSPISN INFLUENZA-LIKE ILLNESS STATEWIDE GRAPH

During week 46, 2.57%* of patient visits to Florida sentinel providers were due to ILI. This percentage is above the 2006—07 statewide threshold for moderate activity of 2.08%**. The percentage of visits ranged from 0.33% in the Northcentral region to 6.40% in the Northeast region. For the 2005-06 influenza season the statewide ILI activity percentage was 1.33.% for week 46.

Percentage of Visits for Influenza-like Illness Reported by Sentinel Providers Statewide Summary 2006-07, 2005-06, and 2004-05

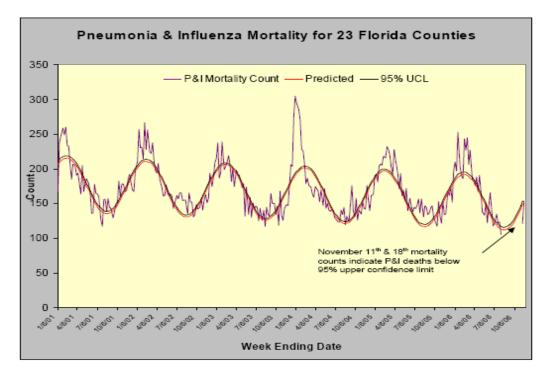


*FSPISN reporting is incomplete for this week (50%). Numbers may change as more reports are received.

**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 2006—07 data.

III. THE FLORIDA PNEUMONIA & INFLUENZA MORTALITY SURVEILLANCE SYSTEM

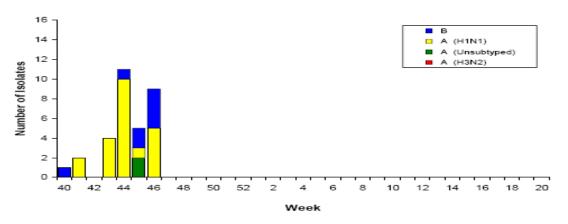
During week 46, the total count of pneumonia and influenza (P&I) deaths reported from 23 counties was below the epidemic threshold count of 154 (95% UCL). There were 151 actual pneumonia and influenza deaths reported. This indicates there were no deaths in excess of the expected count for week 46 and observed mortality does not indicate that Florida has surpassed the epidemic threshold for this week.



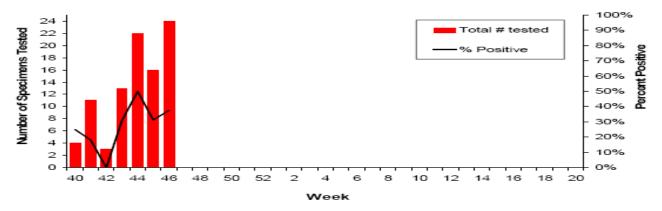
Note that this is the 2nd week in which the Florida Pneumonia and Influenza Mortality Surveillance System has operated. As a result, the graph above shows a gap in the data for weeks in September and October which will be filled in for subsequent reporting weeks once retrospective data become available.

Since October 1, 2006, Florida Department of Health Laboratories have tested a total of 93 specimens for influenza viruses and 32 (34%) were positive. Among the 32 influenza viruses, 24 (75%) were influenza A viruses and 8 (25%) were influenza B viruses. Thirty of the 32 influenza viruses have been subtyped. Of the Influenza A viruses, 22 were A H1N1, 2 were A unsubtyped. Of the eight influenza B viruses, 6 have been subtyped as influenza B Malaysia and 2 as influenza B Shanghai. Laboratory information is preliminary and may change as additional results are received.

FDOH State Laboratory Influenza Virus Isolates 2006-07

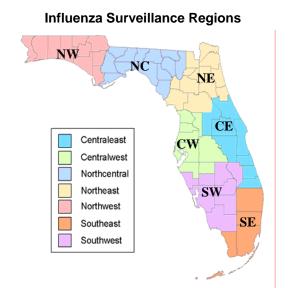


Number of Influenza Specimens Tested by FDOH State Laboratories, 2006-07



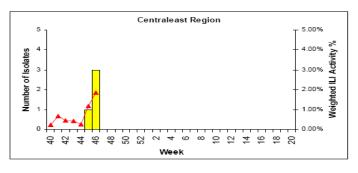
2006 – 07 Influenza Laboratory Isolates by Week and County									
Week		Alachua	Broward	Duval	Miami- Dade	Leon	Polk	Sarasota	Volusia
40	A								
	В			1					
41	Α				2				
	В								
42	Α								
	В								
43	Α		2		2				
	В								
44	Α				10				
	В				1				
45	Α	1					2	1	1
	В								
46	Α				1	1			3
	В				3	1			

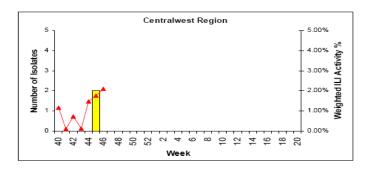
V. LABORATORY AND INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE BY REGION

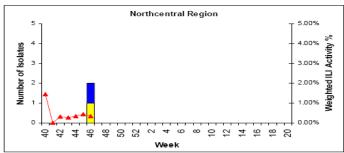


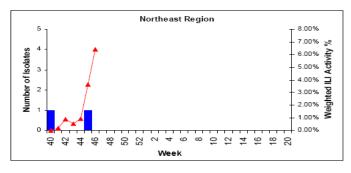
The table below shows the weighted ILI activity by region as reported by Florida sentinel physicians for the 2005-06 & 2006-07 seasons. The graphs below include ILI activity as reported by sentinel physicians and FDOH laboratory data.

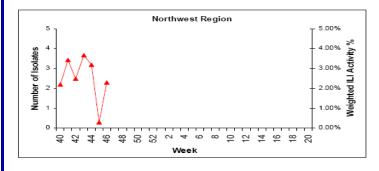
Week 46: FSPISN Weighted ILI Activity, by Region 2005-06 & 2006-07 Seasons							
REGION	2006-07 ILI %	2005-06 ILI %					
Centraleast	1.87%	1.18%					
Centralwest	2.11%	1.70%					
Northcentral	0.33%	0.46%					
Northeast	6.40%	1.04%					
Northwest	2.29%	0.00%					
Southeast	2.52%	1.02%					
Southwest	2.23%	3.17%					

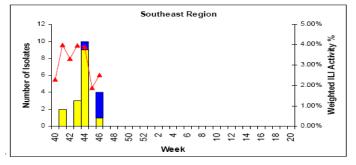


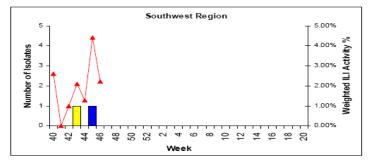












- ☐ Influenza A specimens FDOH Laboratories
- Influenza B specimens FDOH Laboratories
- % of visits for ILI, reported by sentinel providers

During week 46, Broward, Miami-Dade, Pinellas, Seminole, and St. Johns reported localized activity. Twenty counties (Alachua, Bay, Brevard, Clay, Collier, Duval, Escambia, Flagler, Hillsborough, Lake, Lee, Okaloosa, Okeechobee, Orange, Osceola, Palm Beach, Polk, Sarasota, Sumter, and Volusia) reported sporadic activity. Twenty-three counties reported no activity. Nineteen counties did not report.

Weekly County Influenza Activity (Week ending November 18, 2006 - Week 46) County influenza activity levels are reported by county health department epidemiologists Level of Influenza Activity by County No Report No Activity Sporadic Localized Widespread





1:3724185

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 22, 2006

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

2=Localized:

And/or

- a. 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.)
- b. Two or more outbreaks (ILI§ or lab confirmed†) detected in a single setting‡ in the

AND

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

3=Widespread:

- a. An increase in ILI[§] activity detected in ≥2 surveillance systems in the county.
- b. 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 3100°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.

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

Posted on EpiCom November 7, 2006: Miami-Dade and Broward CHD Epidemiology units reported an increase of influenza activity in children in Southeast Florida as detected from mid October to current by the following surveillance systems: laboratory viral surveillance, sentinel physician ILI surveillance, and ES-SENCE syndromic surveillance.

A description of reported influenza or ILI outbreaks in community or institutional settings can be viewed via EpiCom at: https://www.epicom.fl.net Influenza and ILI outbreaks should be reported via EpiCom.

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

As of the week ending November 4, 2006, 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 06-07 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.

Update 36

11/22/2006

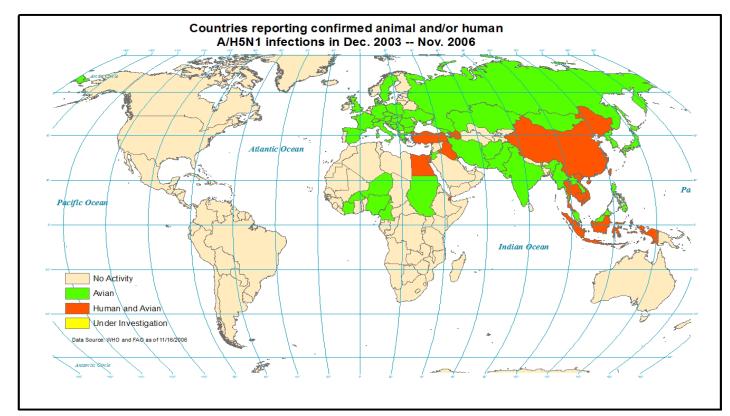
Since the recent outbreak activity began at the end of December 2003, there have been a total of 258 confirmed human cases and 153 deaths*. Cases and deaths occurred in the following nations: Azerbaijan 8 cases and 5 deaths; Cambodia 6 cases and 6 deaths; China 21 cases and 14 deaths; Djibouti 1 case 0 deaths; Egypt 15 cases and 7 deaths; Indonesia 74 cases and 56 deaths; Iraq 3 case and 2 deaths; Thailand 25 cases and 17 deaths; Turkey 12 cases and 4 deaths; and, Vietnam 93 cases and 42 deaths. Since the last update on 10/12/06 there have been three new cases and three new deaths, all occurring in Indonesia. All cases had known close contact with various types of poultry, with the exception of 1 case where the investigation is ongoing.

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 4/30/2005, please visit: http://www.who.int/csr/disease/avian influenza/guidelines/wer8126/en/index.html

There have not been reports of avian influenza spreading to new countries in the last few months. The complete list of countries reporting confirmed outbreaks of H5N1 in bird species since late December 2003, with the most recent outbreaks listed first, include Sudan, Spain, Djibouti, Ivory Coast, Czech Republic, Palestinian Autonomous Territories, United Kingdom (Scotland), Burkina Faso, Jordan, Sweden, Israel, Afghanistan, Cameroon, Myanmar, Albania, Serbia and Montenegro, Hungary, Poland, Switzerland, Niger, Slovakia, France, Austria, Malaysia, Azerbaijan, India, Slovenia, Bosnia Herzegovina, Germany, Nigeria, Egypt, Bulgaria, Italy, Greece, Iran, Croatia, Cyprus, Ukraine, Turkey, Romania, Indonesia, China, Russia, Thailand, Vietnam, Kuwait (only one flamingo), Kazakhstan, Mongolia, Cambodia, Korea (Rep. of), and Japan. Countries with confirmed H5 (neuraminidase not determined yet) infection in birds include the Philippines, Iraq, and Laos.

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.



*All confirmed results are from official sources – WHO, CDC, FAO. Information on suspect cases comes from a variety of sources including Epi-X, Promed, and the official sources mentioned above.