

# FLORIDA INFLUENZA SURVEILLANCE

Week 51: December 17th — December 23rd 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:

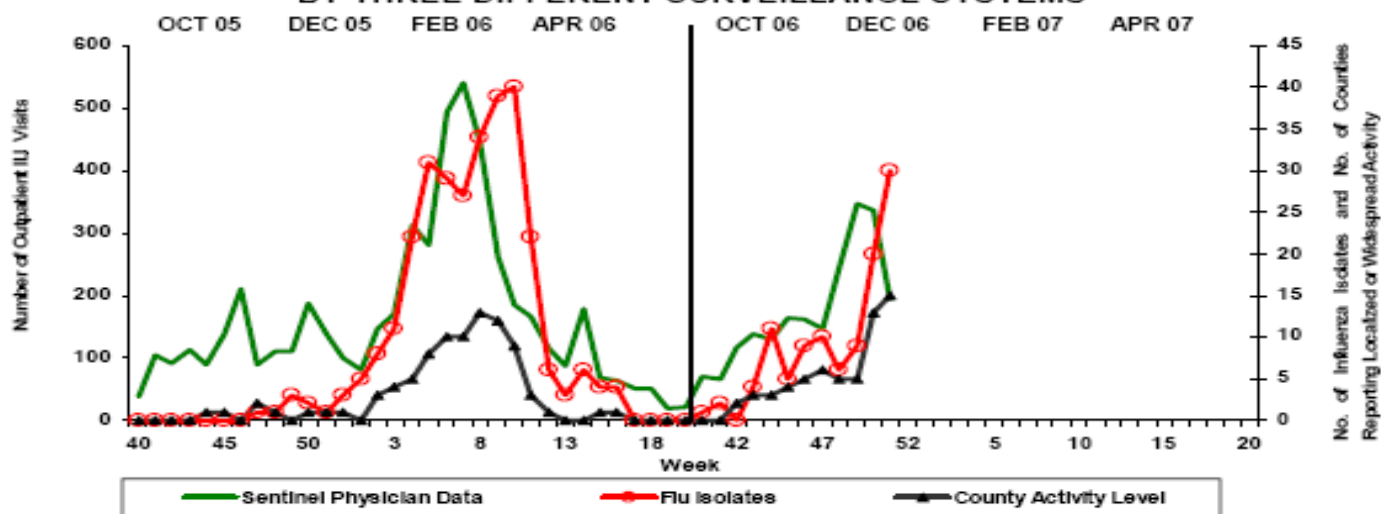
- I. Summary
- II. FSPISN Influenza-like Illness Statewide Graph
- III. Florida Pneumonia & Influenza Mortality Surveillance System
- IV. FDOH Laboratory Surveillance
- V. Laboratory and Influenza-like Illness Surveillance by Region
- VI. County Influenza Activity Map
- VII. Reports of Influenza or Influenza-like 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 twelfth 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 51 statewide influenza activity was widespread. The proportion of patient visits for influenza-like illness (ILI) as reported by the Florida Sentinel Physician Influenza Surveillance Network was 3.45 percent and this is above the state threshold for moderate activity of 2.08 percent. Thirty of the 46 specimens (65%) tested by Bureau of Laboratories were positive for influenza. Two counties reported widespread activity, 13 counties reported localized activity, 19 counties reported sporadic activity and 13 counties reported no activity. Twenty 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\*\*



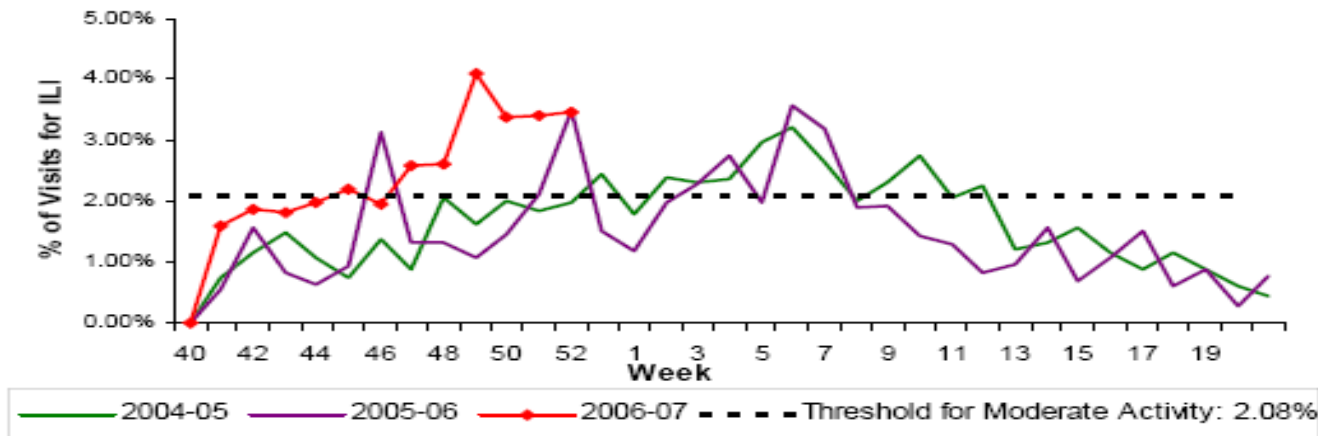
\*The purposes of these surveillance systems are to determine when and where influenza activity is occurring, to identify circulating viruses, to detect changes in the circulating influenza viruses, to track patterns of influenza-associated morbidity and mortality and estimate the overall impact of influenza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

Find more information at: [http://www.doh.state.fl.us/disease\\_ctrl/epi/htopics/flu/index.htm](http://www.doh.state.fl.us/disease_ctrl/epi/htopics/flu/index.htm)

## II. FSPISN INFLUENZA-LIKE ILLNESS STATEWIDE GRAPH

During week 51, 3.45%\* 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 2.90% in the Centraleast region to 8.00% in the Northwest region. For the 2005-06 influenza season the statewide ILI activity percentage was 3.50% for week 51.

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

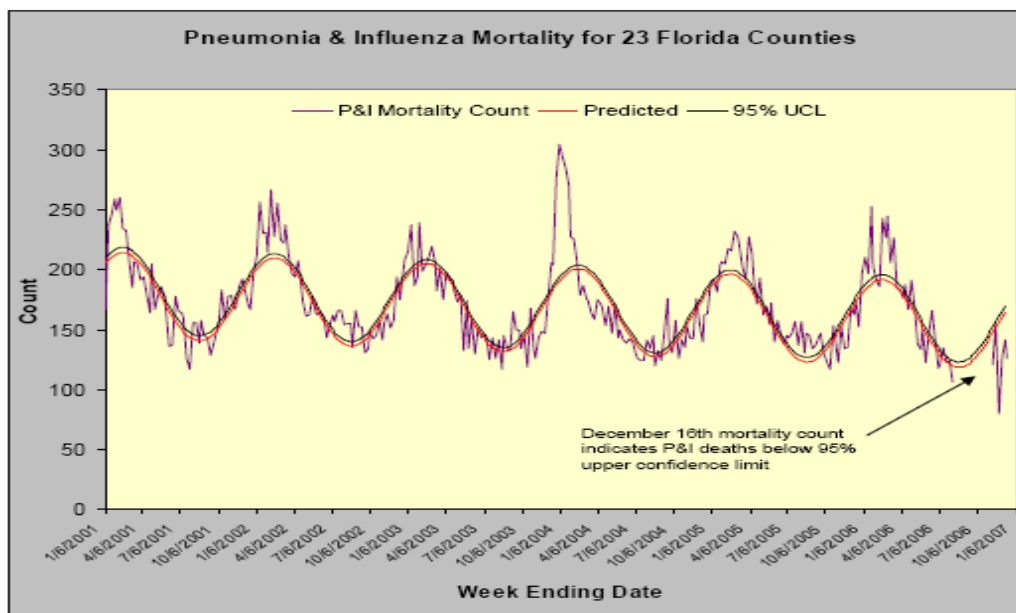


\*FSPISN reporting is incomplete for this week (30%). Numbers may change as more reports are received.

\*\*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

Note: This graph does not display data for week 51. Due to insufficient data provided for week 51 the graph cannot be updated. Additional data will be provided when sufficient data is received. During week 50, the total count of pneumonia and influenza (P&I) deaths reported from 23 counties was below the epidemic threshold of 173 (95% UCL). There were 126 actual pneumonia and influenza deaths reported. This indicates there were no deaths in excess of the expected count for week 50 and observed mortality does not indicate that Florida has surpassed the epidemic threshold for week 50.

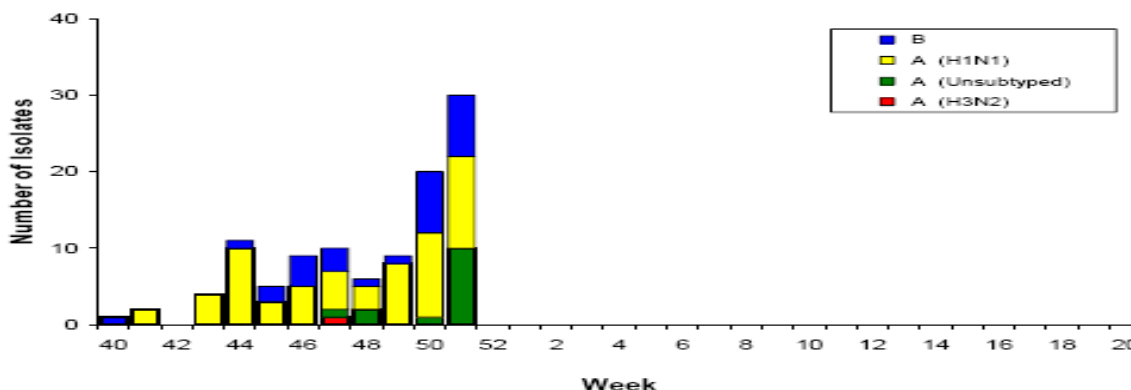


Note The graph above shows a gap in the data for weeks in September and October which will be filled in for subsequent reporting weeks once retrospective data become available.

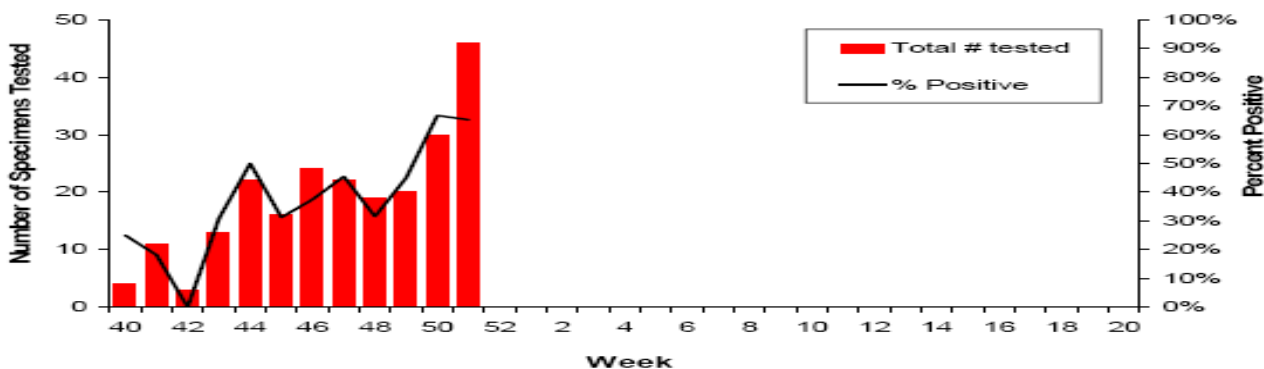
## IV. FDOH LABORATORY SURVEILLANCE

Since October 1, 2006, Florida Department of Health Laboratories have tested a total of 230 specimens for influenza viruses and 107 (47%) were positive. Among the 107 influenza viruses, 78 (73%) were influenza A viruses and 29 (27%) were influenza B viruses. Ninety of the 107 influenza viruses have been subtyped. Of the Influenza A viruses, 63 were A H1N1, 1 was A H3N2 and 14 were A untyped. Of the 29 influenza B viruses, 19 have been subtyped as influenza B Malaysia, 4 as influenza B Shanghai, and 6 were B untyped. *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

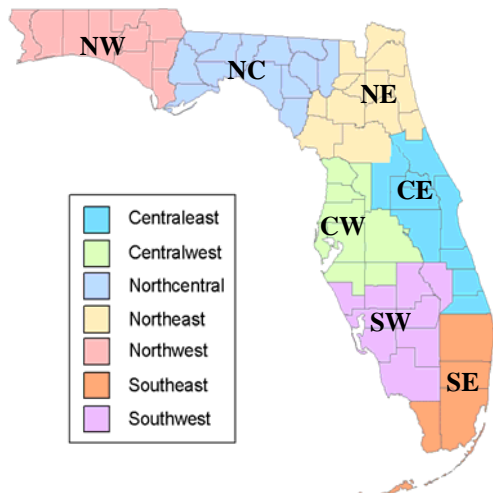


2006 - 07 Influenza Laboratory Isolates by Week and County

Week	Alachua	Bay	Broward	Clay	Duval	Escambia	Flagler	Franklin	Miami-Dade	Hardee	Hillsborough	Indian River	Leon	Lee	Orange	Palm Beach	Polk	St. Lucie	St. Johns	Santa Rosa	Sarasota	Volusia	
43			2						2														
44									10														
45									1								2						1
46		1							1				1									1	3
47			1						3		4	1		1									
48		1							1										1				
49		1							1								1	1					
50			2														6						
51							1		1		5						3		1	1			
51		4				1	1		1	1	2				1	1	2						
51				1	3	1	1	1	1	1	2		2		1	1	6	1		1			
51					1	2				2			1			1	1			1			

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

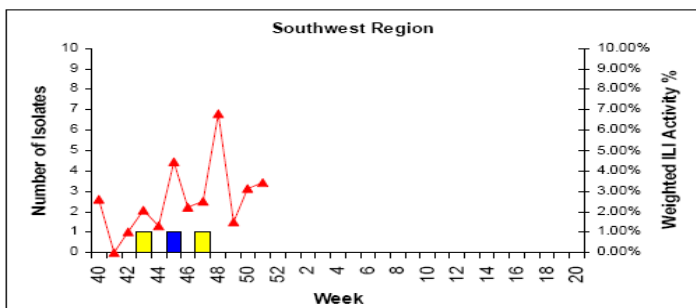
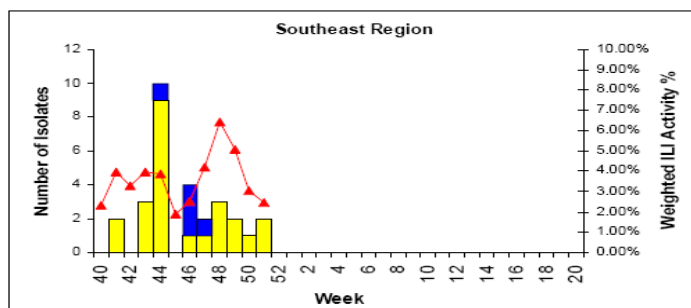
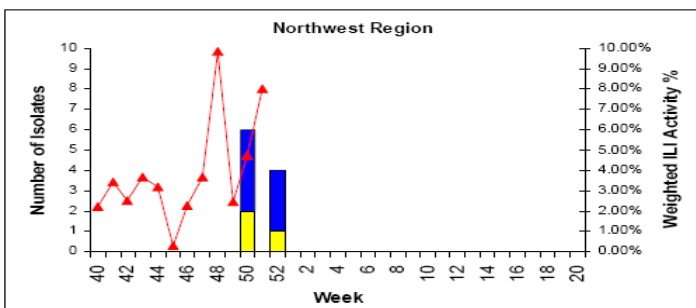
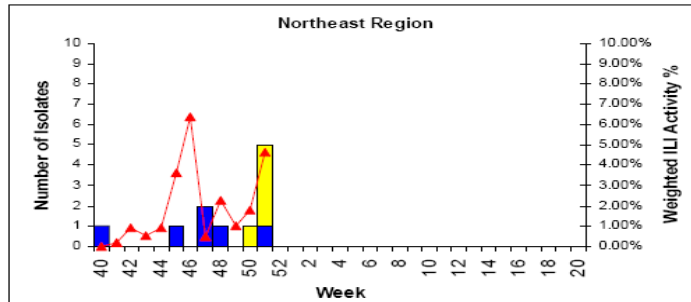
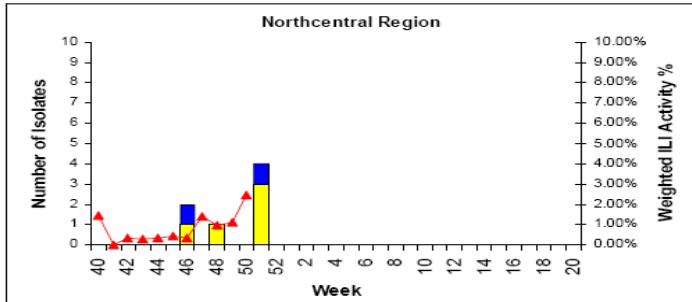
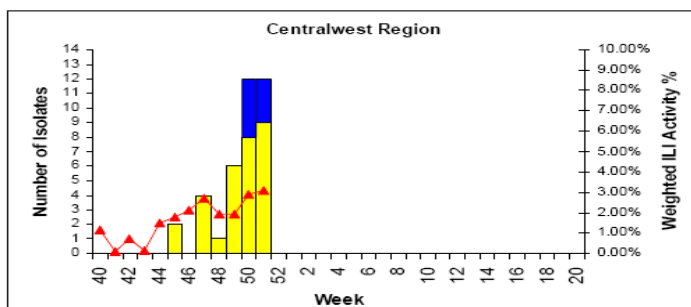
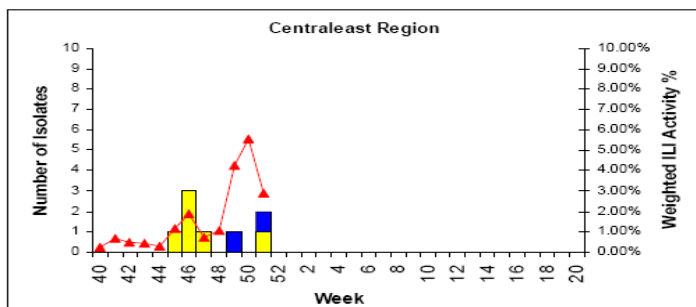
Influenza Surveillance Regions



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

Week 51: FSPISN Weighted ILI Activity, by Region 2005-06 & 2006-07 Seasons		
REGION	2006-07 ILI %	2005-06 ILI %
Centraleast	2.90%	9.31%
Centralwest	3.09%	1.14%
Northcentral	***	4.08%
Northeast	4.65%	1.43%
Northwest	8.00%	0.00%
Southeast	2.48%	3.67%
Southwest	3.75%	1.00%

\*\*\*insufficient data to provide activity percentage for Northwest region



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

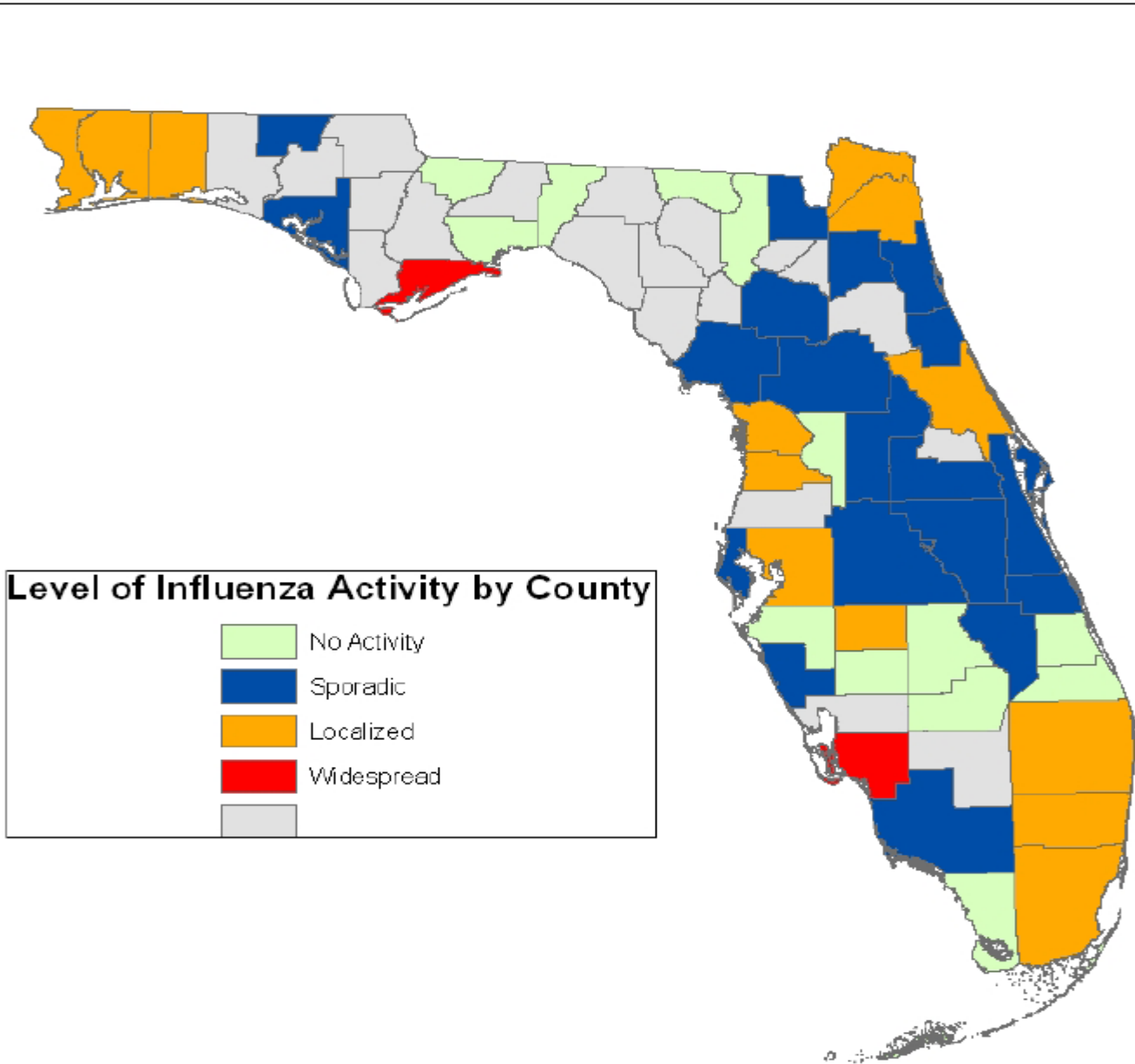
## VI. COUNTY INFLUENZA ACTIVITY MAP

During week 51, Franklin county and Lee county reported widespread activity. Localized activity was reported by thirteen counties (Broward, Citrus, Dade, Duval, Escambia, Hardee, Hernando, Hillsborough, Nassau, Okaloosa, Palm Beach, Santa Roas, and Volusia). Nineteen counties (Alachua, Baker, Bay, Brevard, Clay, Collier, Flagler, Holmes, Indian River, Lake, Levy, Marion, Okeechobee, Orange, Osceola, Pinellas, Polk, St. Johns, and Sarasota) reported sporadic activity. Thirteen counties reported no activity. Twenty-one counties did not report.

### Weekly County Influenza Activity

(Week ending December 23, 2006 - Week 51)

County influenza activity levels are reported by county health department epidemiologists



Florida Department of Health

Bureau of Epidemiology



## COUNTY INFLUENZA ACTIVITY LEVEL DEFINITIONS

### 0 = No Activity:

Overall clinical activity remains low with no laboratory confirmed cases<sup>†</sup> in the county.

### 1 = Sporadic:

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

### 2=Localized:

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

### AND

Recent (within past three weeks) laboratory evidence<sup>†</sup> of influenza activity in the county.

### 3=Widespread:

- And/or {
- An increase in ILI<sup>§</sup> activity detected in  $\geq 2$  surveillance systems in the county.
  - Two or more outbreaks ((ILI<sup>§</sup> or laboratory confirmed<sup>†</sup>) detected in *multiple* settings<sup>‡</sup> in the county.

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

<sup>†</sup> Laboratory confirmed case = case confirmed by rapid diagnostic test, antigen detection, culture, or PCR.

<sup>§</sup> 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.

<sup>‡</sup>Settings include institutional settings (LTCFs, hospitals, prisons, schools, companies) & the community.

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

**Posted on EpiCom December 22, 2006:** The Seminole CHD Epidemiology unit reported an increase in positive laboratory results from local hospitals. Public Health prevention measures resulted in a flu clinic being held in residence area with greatest number of cases.

**Posted on EpiCom December 18, 2006:** The Escambia CHD Epidemiology unit reported influenza-like illness in students in 28 Escambia County schools with onset of symptoms from 11/27 to 12/15.

**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 ESSENCE 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 December 23, 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](http://www.doh.state.fl.us/disease_ctrl/epi/topicscrforms.htm).

## XI. SUMMARY OF WORLDWIDE A/H5N1 INFLUENZA ACTIVITY

Update 41

12/28/2006

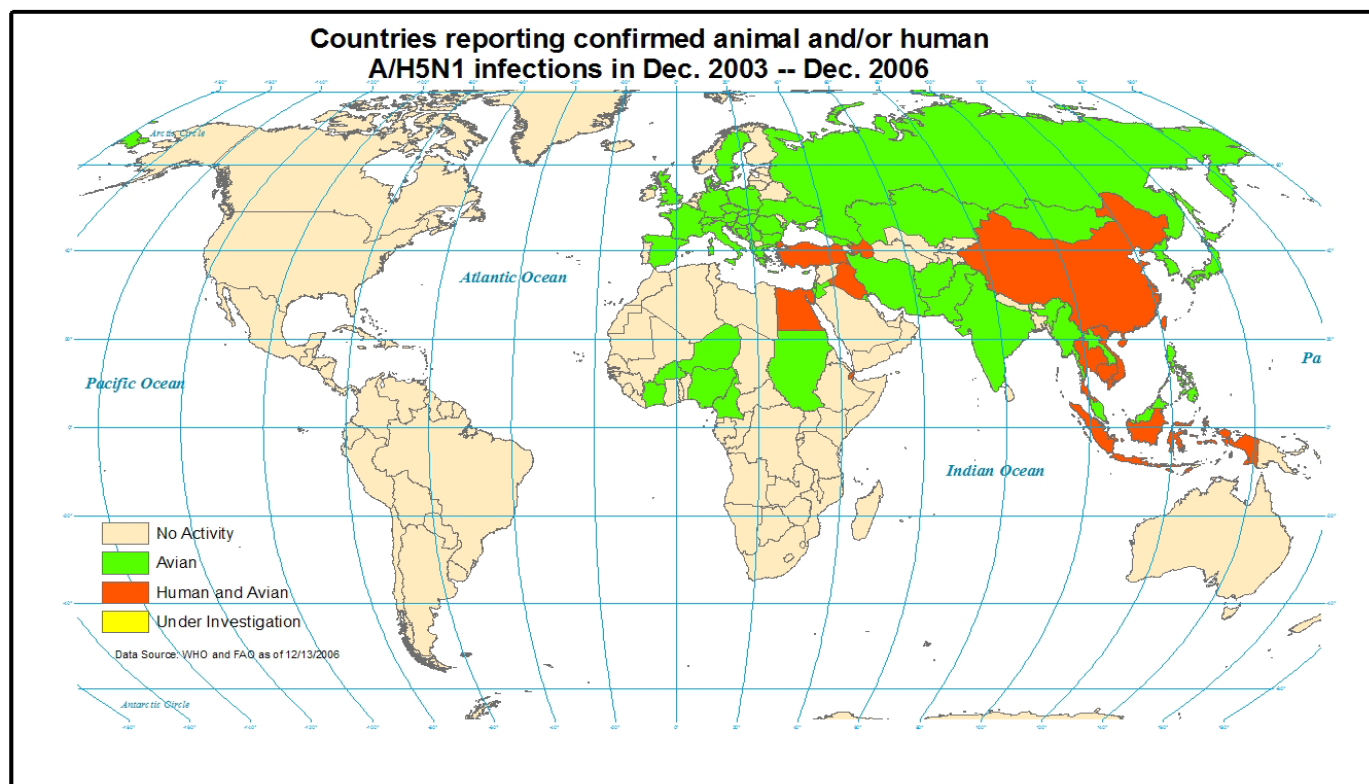
Since the recent outbreak activity began at the end of December 2003, there have been a total of 261 confirmed human cases and 157 deaths\*. Cases and deaths occurred in the following nations: Azerbaijan 8 cases and 5 deaths; Cambodia 6 cases and 6 deaths; China 21 cases and 14 deaths; Djibouti 1 case 0 deaths; Egypt 18 cases and 10 deaths; Indonesia 74 cases and 57 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 12/21/06 there has been three new human cases of A (H5N1) virus infection. All three cases belong to one extended family near Cairo, Egypt. While being transferred and cared for at the country's designated avian influenza hospital, a 30 year-old female, a 15 year-old girl and a 26 year-old male died. The cases reportedly had contact with sick poultry (ducks).

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](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](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.**

**Find more information at: [http://www.doh.state.fl.us/disease\\_ctrl/epi/htopics/BirdFlu.htm](http://www.doh.state.fl.us/disease_ctrl/epi/htopics/BirdFlu.htm)**