

# FLORIDA INFLUENZA SURVEILLANCE

Week 15: April 6th 2008—April 12th 2008



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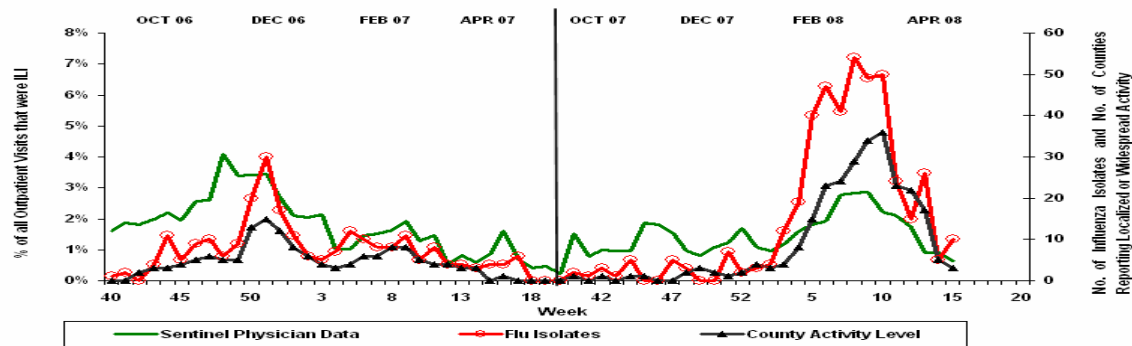
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## I. SUMMARY

This is twenty-eighth 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. Localized activity has been reported in Florida for this reporting week (Week 15). There has been an increase in influenza activity in the Northwest region. Because of this increase, Florida meets the CDC local activity definition. The CDC definition for local activity is: Outbreaks of influenza or increases in ILI cases 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 15 the proportion of patient visits for influenza-like illness (ILI) as reported by the Florida Sentinel Physician Influenza Surveillance Network was 0.63 percent. This is below the state threshold for moderate activity of 1.75 percent. Ten of the 25 specimens tested by Bureau of Laboratories were positive for influenza. No counties reported widespread activity and 3 counties reported localized activity. Twenty-seven counties reported sporadic activity and 20 counties reported no activity. Eighteen 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.

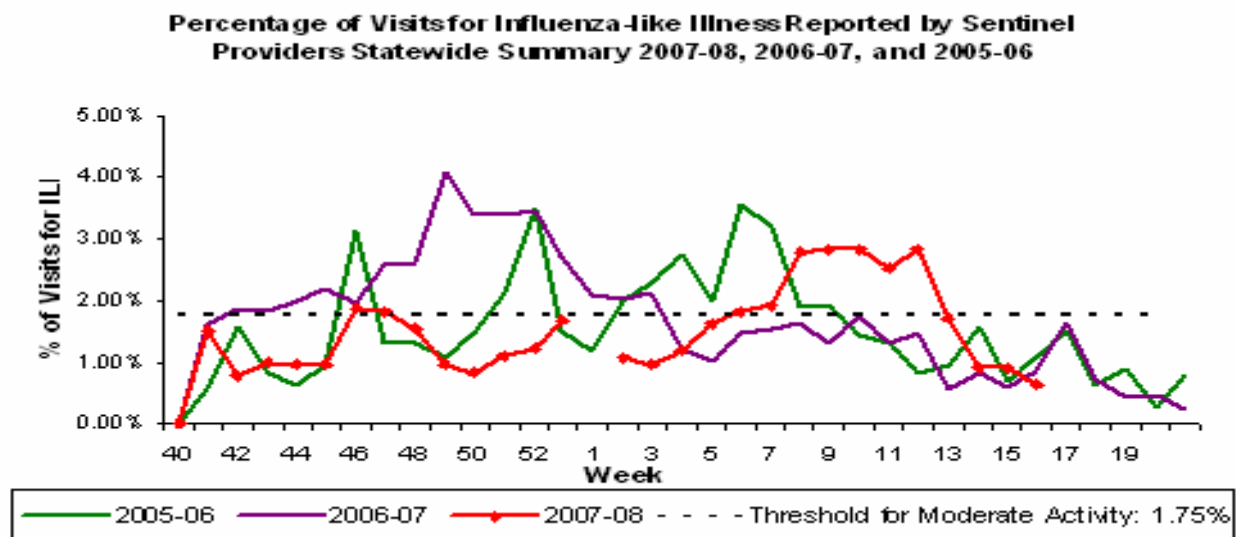


\*The purposes of these surveillance systems are to determine when and where influenza activity is occurring, to identify circulating viruses, to detect changes in the circulating influenza viruses, to track patterns of influenza-associated morbidity and mortality and estimate the overall impact of influenza 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 15, 0.63%\* 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 1.60% in the Northwest region. For the 2006-07 influenza season the statewide ILI activity percent 0.86% for week 15.



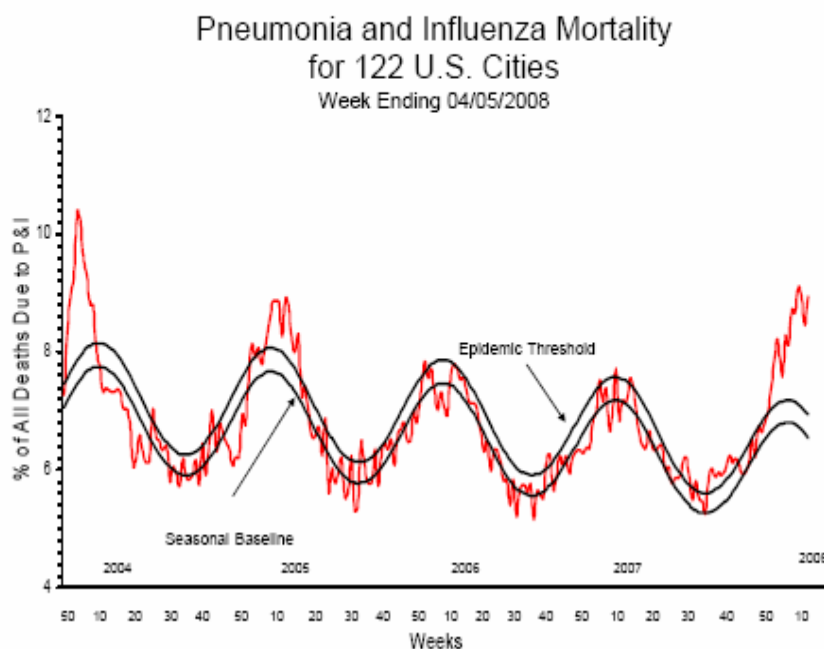
\*FSPISN reporting is incomplete for this week (45%). Numbers may change as more reports are received.

\*\*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

*Florida is currently in the process of updating P&I mortality surveillance. Please refer to the most recent national data compiled by the CDC below.*

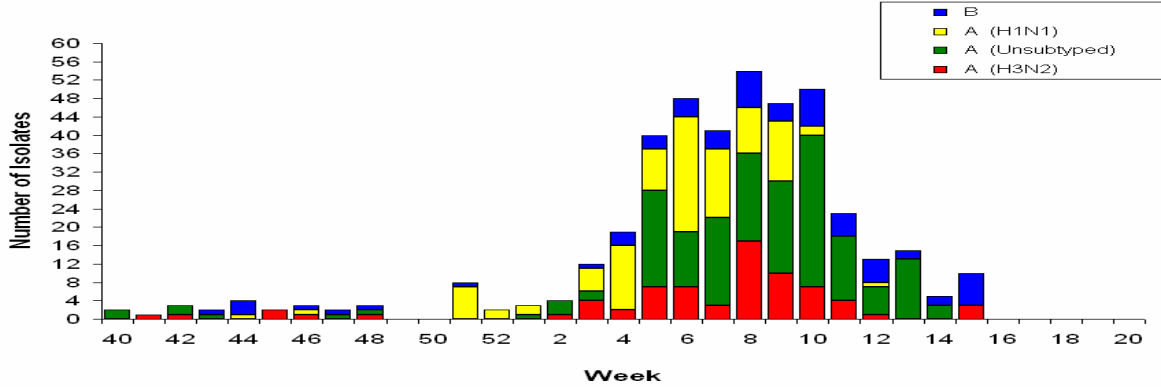
**Pneumonia and Influenza (P&I) Mortality Surveillance:** During week 14, 8.9% of all deaths reported through the 122 Cities Mortality Reporting System were reported as due to P&I. This percentage is above the epidemic threshold of 6.9% for week 14. Including week 14, P&I mortality has been above epidemic threshold for 13 consecutive weeks.



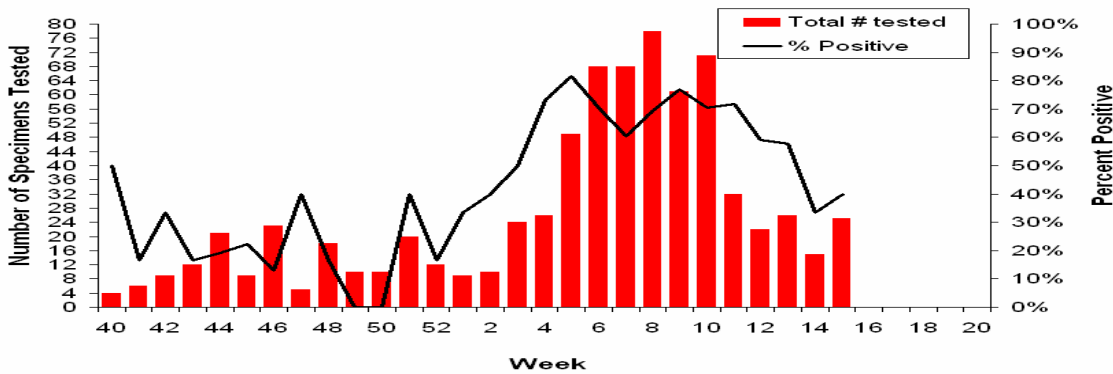
## IV. FDOH LABORATORY SURVEILLANCE

Since September 30th, 2007, Florida Department of Health Laboratories have tested a total of 743 specimens for influenza viruses and 416 (56%) were positive. Among the 416 influenza viruses, 352 (85%) were influenza A viruses and 64 (15%) were influenza B viruses. Of the 352 influenza A viruses, 72 were A H3N2, 107 were H1N1, and 173 were A unsubtype. Of the 64 influenza B viruses 52 were Shanghai, 2 were Malaysia and 10 were unknown. *Laboratory information is preliminary and may change as additional results are received. Totals from previous weeks have been adjusted to reflect correct specimen numbers.*

FDOH State Laboratory Influenza Virus Isolates 2007-08



Number of Influenza Specimens Tested by FDOH State Laboratories, 2007-08

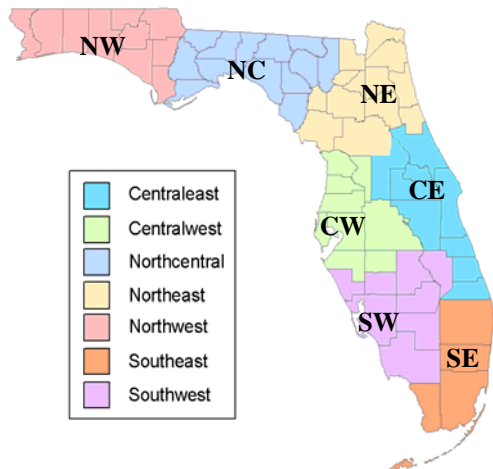


2007-2008 Influenza Laboratory Isolates by Week and County

Week	Alachua	Bay	Bradford	Brevard	Broward	Clay	Charlotte	Citrus	Miami-Dade	DeSoto	Dixie	Duval	Escambia	Hamilton	Hardee	Hillsborough	Holmes	Indian River	Jackson	Leon	Ley	Marion	Nassau	Okechobee	Orange	Palm Beach	Pasco	Pinellas	Polk	Santa Rosa	Sarasota	Seminole	St. Johns	Washington	Volusia	
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9												1	1	1	12	3		1	3			1	1	1	1	1	1			1	3	1			2	1
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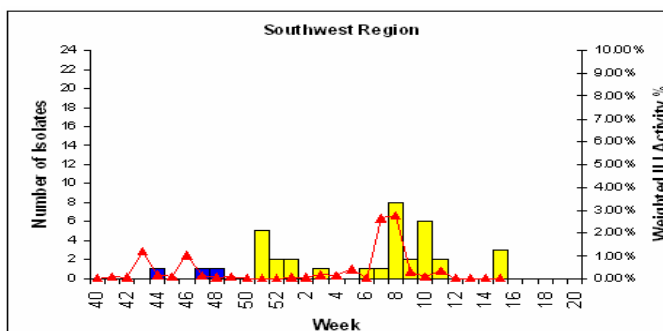
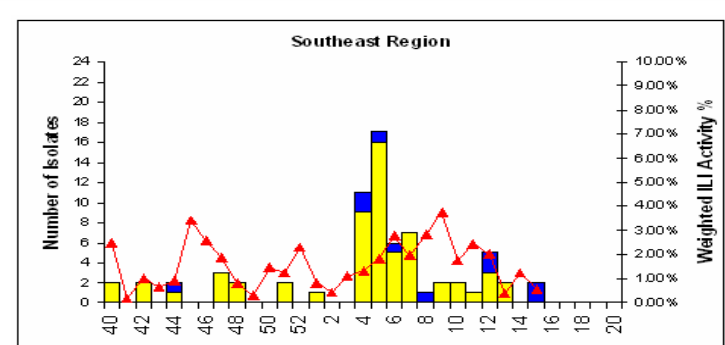
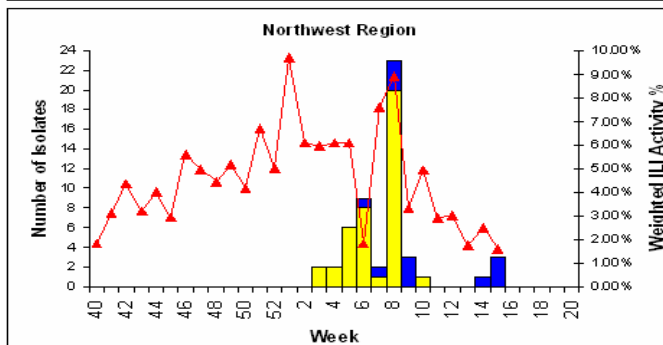
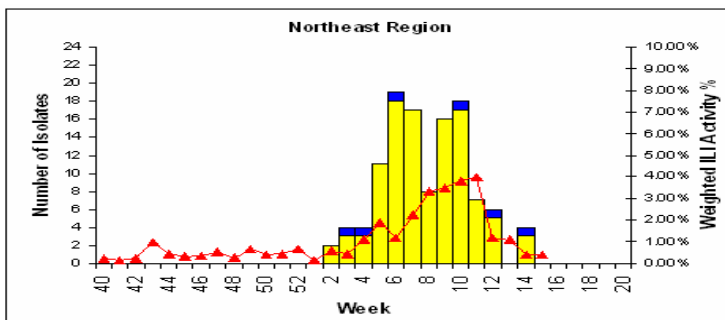
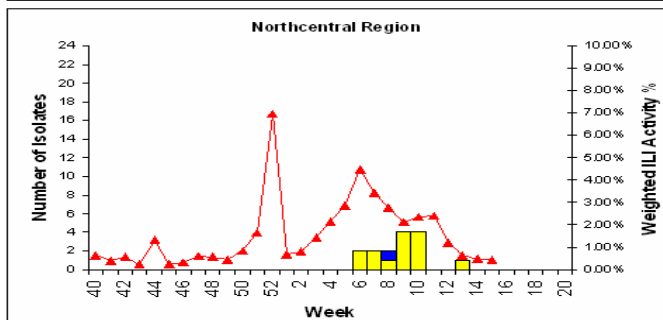
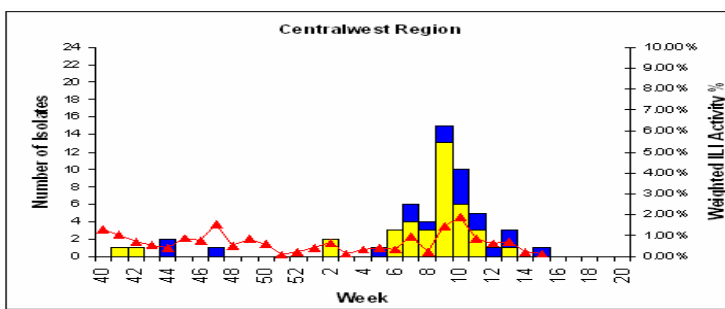
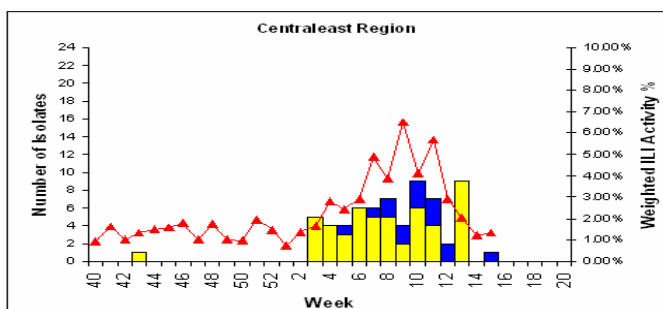
# IV. LABORATORY AND INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE BY REGION

## 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 14: FSPISN Weighted ILI Activity, by Region 2006-07 & 2007-08 Seasons		
REGION	2007-08 ILI %	2006-07 ILI %
Centraleast	1.33%	2.35%
Centralwest	0.13%	0.85%
Northcentral	0.46%	0.58%
Northeast	0.38%	0.12%
Northwest	1.60%	0.00%
Southeast	0.55%	0.57%
Southwest	0.00%	0.06%



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

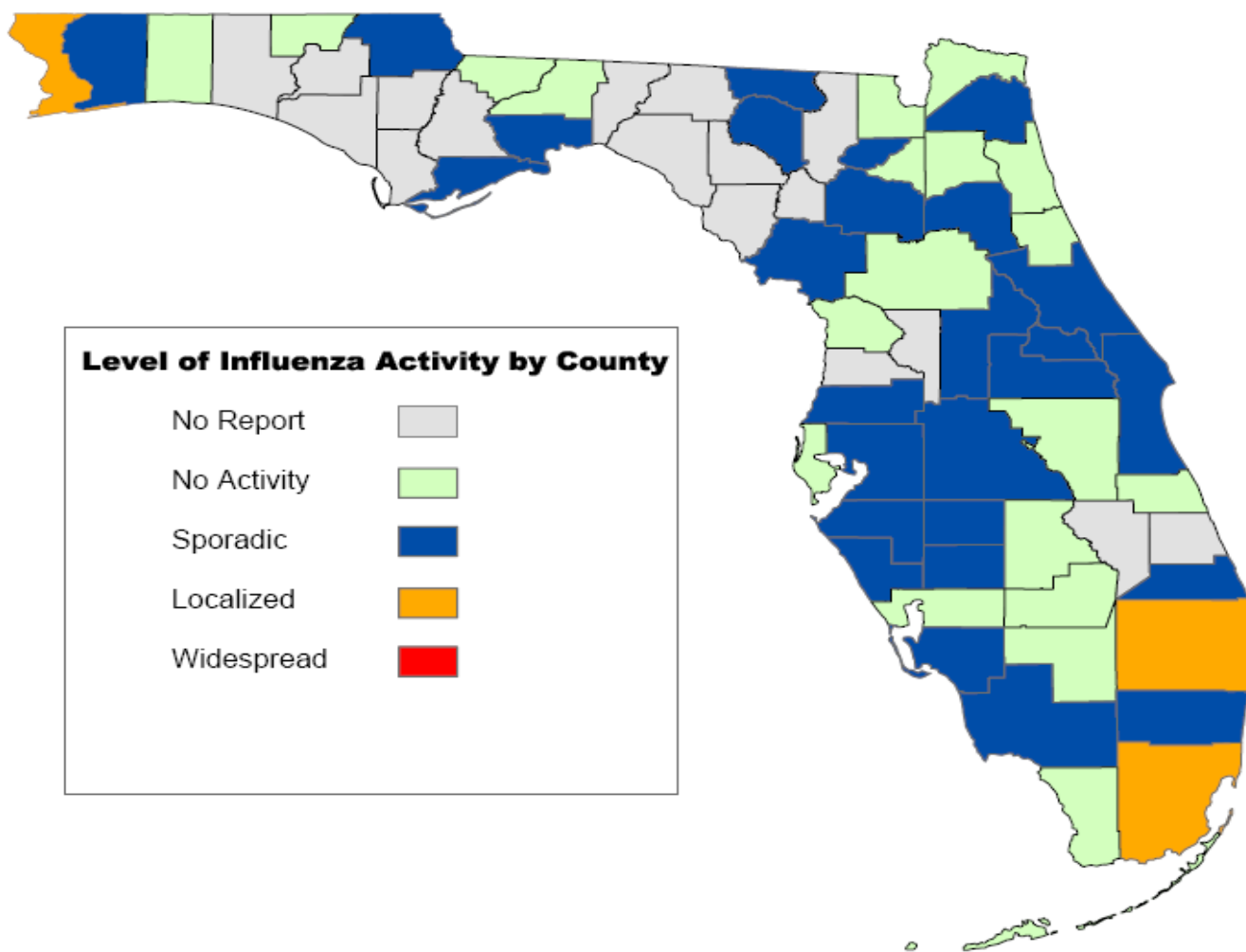
## V. COUNTY INFLUENZA ACTIVITY MAP

During week 15, no counties reported widespread activity. Three counties reported localized activity (Dade, Escambia, Palm Beach). Twenty-seven counties (Alachua, Brevard, Broward, Collier, DeSoto, Duval, Franklin, Hamilton, Hardee, Hillsborough, Jackson, Lafayette, Lake, Levy, Manatee, Martin, Orange, Pasco, Polk, Putnam, Santa Rosa, Sarasota, Seminole, Suwannee, Union, Volusia, Wakulla) reported sporadic activity. Twenty counties reported no activity. Eighteen counties did not report.

# Weekly County Influenza Activity

(Week ending April 12, 2008 - Week 15)

County influenza activity levels are reported by county health department epidemiologists



**Florida Department of Health**  
**Bureau of Epidemiology**

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## 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.

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

During week 15, the Escambia CHD was notified by the state health office of an influenza outbreak at a local nursing home. Forty-six out of 100 residents had symptoms consistent with influenza. Three out of the 5 specimens sent to the state lab in Tampa were positive for influenza B. Of the residents with ILI, 50% had received their flu vaccines (most were given in June 2007). All ill residents were treated with Tamiflu and one fatality was associated with this outbreak.

The Miami-Dade CHD Office of Epidemiology and Disease Control received a report on 04/07/08 of a local correctional institution (CI) reporting 12 female inmates with ILI symptoms. The earliest onset of symptoms was on 04/03/08. Control measures were implemented at the CI and viral testing will be conducted. The investigation is still ongoing at this time.

During week 14, there was a report of an influenza death in Indian River county of a child with cystic fibrosis. The child was originally seen in Alachua county on 02/19/08 but was reported to the Department of Health on 04/01/08.

During week 13, there was a pediatric influenza death in Hillsborough County. The child tested positive for adenovirus and parainfluenza at a the hospital but was tested for influenza by the medical examiner who submitted the specimen to the state lab. The test was positive for influenza A H3.

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

As of the week ending April 12, 2008, there were no influenza-associated deaths among those <18 years or 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	3
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).

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

Update 04/08/2008

Since the recent outbreak activity began at the end of December 2003, there have been a total of 379 confirmed human cases and 239 deaths. Cases and deaths occurred in the following nations: Azerbaijan 8 cases and 5 deaths; Cambodia 7 cases and 7 deaths; China 30 cases and 20 deaths; Djibouti 1 case 0 deaths; Egypt 48 cases and 21 deaths; Indonesia 132 cases and 107 deaths; Iraq 3 cases and 2 deaths; Lao People's Democratic Republic 2 cases and 2 deaths; Myanmar 1 case and 0 deaths; Nigeria 1 case and 1 death; Thailand 25 cases and 17 deaths; Turkey 12 cases and 4 deaths; and, Vietnam 106 cases and 52 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](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](http://www.who.int/csr/disease/avian_influenza/guidelines/wer8126/en/index.html)

During week 15, the Ministry of Health and Population of Egypt announced a new fatal human case of avian influenza A (H5N1). The case was a 30-year-old female from Al-Matarya, Cairo governorate with symptom onset April 2nd followed by hospitalization and death on April 11th. Confirmation of infection with influenza A H5N1 was made by the Central Public Health Laboratories and by Cairo-based US Naval Medical Research Unit 3 (NAMRU-3). A history of contact with sick and/or dead poultry was noted.

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.

