

## Florida Influenza Surveillance

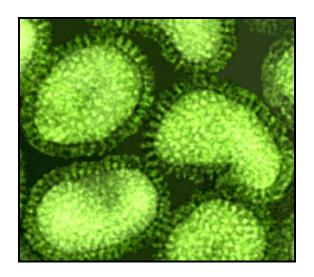
## Week Ending March 11, 2006 (Week 10)

André Ourso, MPH; Florida Epidemic Intelligence Service Fellow

Brittni Jones, Influenza Surveillance Coordinator

D'Juan Harris, GIS Specialist

Aaron Kite-Powell, MS; Florida Epidemic Intelligence Service Fellow



## In This Issue:

- I. Summary
- II. FSPISN Influenza and Influenza-like Illness Surveillance Summary
- III. FSPISN Influenza-like Illness Graphs by Region
- IV. FL DOH Laboratory Surveillance
- V. County Health Department Influenza Activity
- VI. Influenza-associated deaths among those <18 years of age
  - & post-influenza infection encephalitis
- VII. Reports of influenza or ILI outbreaks in the community or institutional setting
- VIII. Summary of Worldwide A/H5N1 Influenza Activity

## I. Summary

This is the twenty-third weekly Florida influenza surveillance report for the 2005-06 season. Influenza surveillance in Florida consists of six surveillance components: Florida Sentinel Physician Influenza Surveillance Network (FSPISN), state laboratory-based viral surveillance, county influenza activity levels as determined and reported by county health department epidemiologists based on county level influenza and influenza-like illness (ILI) surveillance, reporting of influenza-associated deaths among those <18 years of age, post-influenza infection encephalitis reporting, and reports of influenza or ILI outbreaks in the community or institutional settings. Influenza is not a reportable disease in Florida and therefore information regarding the exact number of influenza cases within the state is not available.

These surveillance systems allow the Florida Department of Health, in collaboration with the Centers for Disease Control and Prevention (CDC), to determine when and where influenza activity is occurring, identify circulating viruses, detect changes in the circulating influenza viruses, track patterns of influenza-associated morbidity and mortality and estimate the overall impact of influenza in the state of Florida. Almost all of the reporting by the counties, laboratories and healthcare providers for the various surveillance programs that track influenza-associated morbidity and mortality is voluntary.

During week 10, Influenza-like illness (ILI) activity, as reported by FSPISN increased in five of the seven regions (Centralwest, Northcentral, Northwest, Northeast and Southwest), yet decreased in the state overall. County-level influenza reporting recorded as of March 14, 2006: No counties reported Widespread activity. Nine counties reported Localized activity: (Bay, Broward, Duval, Hernando, Hillsborough, Holmes, Jackson, Sarasota, and Volusia). Twenty-six county health departments reported Sporadic ILI activity: (Alachua, Baker, Brevard, Charlotte, Citrus, Dade, Escambia, Gulf, Hamilton, Highlands, Indian River, Lake, Lee, Leon, Martin, Monroe, Nassau, Orange, Palm Beach, Pinellas, Polk, St. Johns, Seminole, Sumter, Union and Wakulla). Seven counties reported no activity. Twenty-five counties did not report this week.

## II. FSPISN Influenza and Influenza-like Illness (ILI) Surveillance Summary:

Table 1 shows the weighted ILI activity by region as reported by Florida Sentinel Physician Influenza Surveillance Network (FSPISN) providers. The overall weighted percent ILI activity for the state for the week ending March 11, 2006 was 1.42%, compared to 1.93% for the previous week. ILI activity is below the Florida baseline. This is based on 36% of sentinel sites reporting. The highest weighted % ILI activity reported was in the Northcentral\*\* region at 3.38%, while the Northwest† region reported the lowest at 0.69% ILI cases.

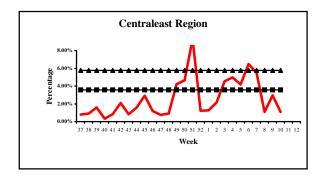
FSPISN*§ Weighted ILI Activity, by Region, Week ending March 11, 2006		
REGION	REPORTED ILI%	
Centraleast	1.09%	
Centralwest	0.82%	
Northcentral**	3.38%	
Northeast	2.23%	
Northwest†	0.69%	
Southeast	1.48%	
Southwest	2.57%	

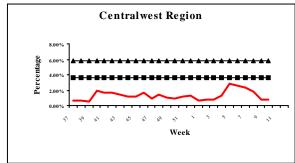
<sup>\*</sup> The ILI activity levels are based on information reported by the Florida Sentinel Physician Influenza Network.

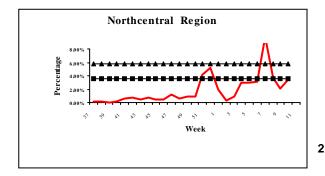
## III. FSPISN Influenza-like Illness Graphs by Region

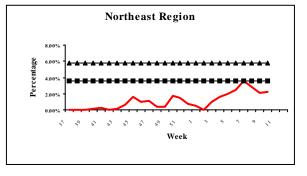
ชชชชช Florida Baseline: 3.58%, calculated using the previous 3 years of data as reported by FSPISN. (A line exceeding the baseline indicates moderate ILI activity.)

→ ▲ ▲ ▲ ★ Florida Threshold: 5.76%, calculated using the previous 3 years of data as reported by FSPISN. (A line exceeding the threshold indicates high ILI activity.)





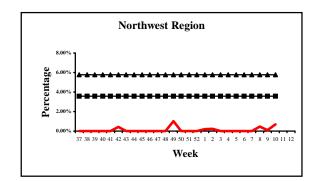


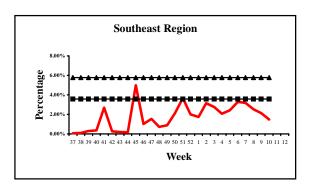


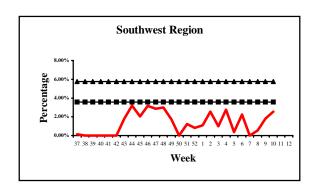
<sup>§</sup> FSPISN Reporting is incomplete for this week (36%). Numbers may change dramatically as more reports are received.

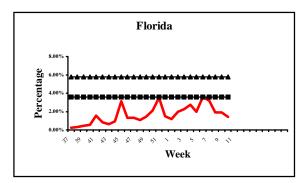
<sup>\*\*</sup> The ILI activity percentage reported for the Northcentral is based on only 2 FSPISN facilities

<sup>†</sup> The ILI activity percentage reported for the Northwest is based on only 2 FSPISN facilities

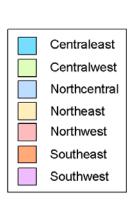


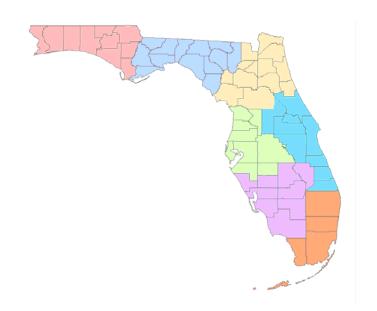






## Influenza Surveillance Regions





#### Influenza Surveillance – Reminders

## Important Reminders

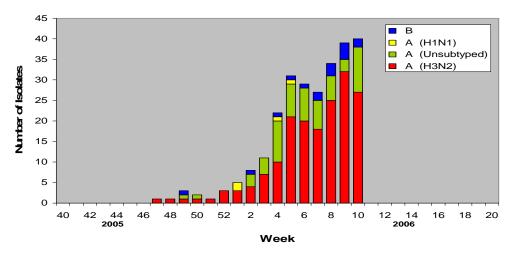
- \*Influenza activity reporting by sentinel providers is voluntary
- \*The influenza surveillance data is used to answer the questions of where, when, and what viruses are circulating. It can be used to determine if influenza activity is increasing or decreasing, but it cannot be used to ascertain how many people have become ill with influenza so far this season.
- \*Reporting is incomplete for this week. Numbers may change dramatically as more reports are received.

## IV. Laboratory Surveillance:

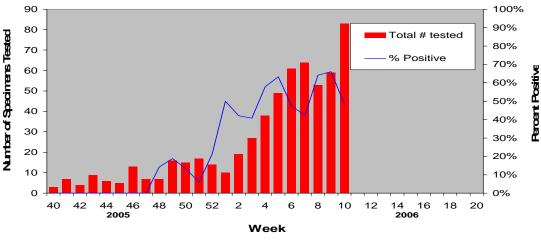
During weeks 9 and 10, Florida Department of Health State Laboratories (Tampa and Jacksonville) reported 142 specimens tested for influenza viruses and 79 (56%) were positive. Of these 59 were influenza A (H3N2), 14 were influenza A viruses not subtyped, and 6 were influenza B.

Since October 4, 2005, Florida Department of Health State Laboratories have tested a total of 586 specimens for influenza viruses and 257 (44%) were positive. Among the 257 influenza viruses, 241 (94%) were influenza A viruses and 16 (6%) were influenza B viruses. One hundred and seventy-nine (179) of the 241 influenza A viruses have been subtyped: 175 were influenza A (H3N2) virus and 4 were influenza A (H1N1) virus. Laboratory information is preliminary and may change as additional results are received.

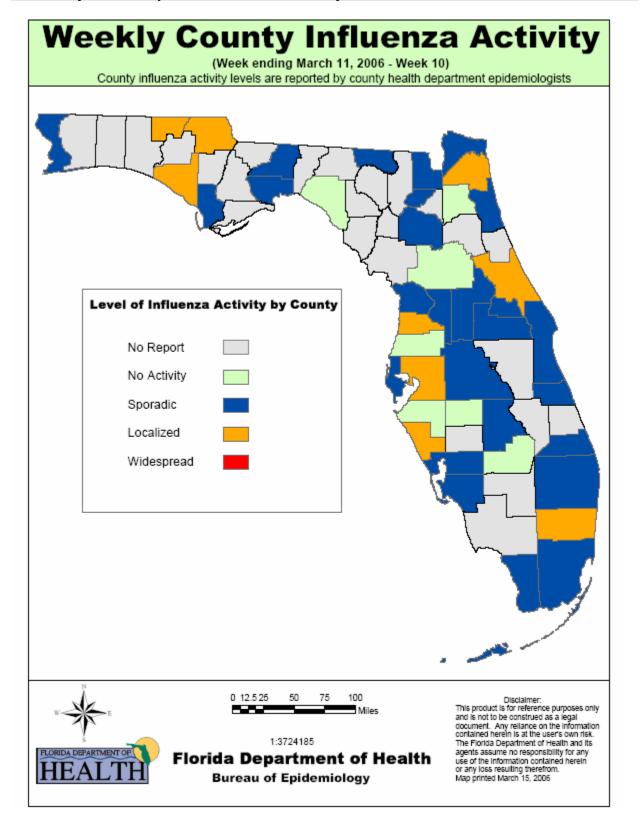
### FL DOH State Laboratory Influenza Virus Isolates 2005-06



#### Number of Influenza Specimens Tested by FL DOH State Laboratories 2005-06



## V. County Health Department Influenza Activity



County influenza activity level definitions. (County activity levels should be reported via EpiCom.)

#### 0 = No Activity:

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

### 1 = Sporadic:

And/or a. Is

a. Isolated cases of laboratory confirmed influenza<sup>†</sup> in the county.

b. An ILI<sup>§</sup> outbreak in a single setting<sup>‡</sup> in the county.

(No detection of increased ILI§ activity by surveillance systems\*)

#### 2 = Localized:



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

#### AND

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

## 3 = Widespread:



a. An increase in ILI<sup>§</sup> activity detected in ≥2 surveillance systems in the county.

b. 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)

# VI. Influenza-associated deaths among those <18 years of age & post influenza infection encephalitis

As of the week ending March 11, 2006, one influenza-associated death and/or post influenza infection encephalitis among those <18 years of age were reported in the state of Florida.

Reportable Disease	Number of Cases 05-06 Influenza Season
Influenza-associated deaths among those <18 years of age	1
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/topics/crforms.htm.

<sup>&</sup>lt;sup>†</sup> Laboratory confirmed case = case confirmed by rapid diagnostic test, antigen detection, culture, or PCR. § ILI = Influenza-like illness, fever ≥100°F AND sore throat and/or cough *in the absence* of another known cause.

<sup>\*</sup> 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 ILI outbreaks in the community or institutional settings

- The Department of Corrections reported an influenza A outbreak in a Bay County corrections facility on 3/8/06.
- Duval County Health Department reported an influenza A outbreak in a nursing home on 2/23/06.
- Duval County Health Department reported an influenza A outbreak in an assisted living facility on 2/21/06.
- The Department of Corrections reported an influenza-like illness outbreak in a Jackson County corrections facility on 2/22/06.
- Alachua County Health Department Epidemiology reported an influenza A outbreak in a special needs facility which occurred from 1/20/06 to 2/6/06.
- Brevard County Health Department began investigation of a reported influenza outbreak in a long-term care facility on 2/03/06.

A description of reported influenza or ILI outbreaks in community or institutional settings can be viewed via EpiCom at: <a href="https://www.epicom.fl.net">https://www.epicom.fl.net</a>. Influenza and ILI outbreaks should be reported to EpiCom on the Influenza forum.

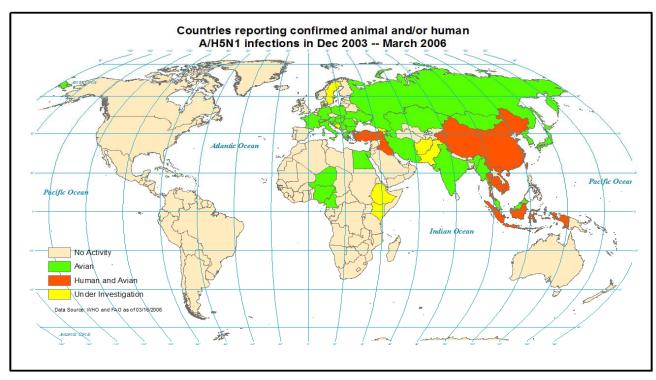
## VIII. Summary of Worldwide A/H5N1 Influenza Activity

## 03/16/06 Summary of Worldwide A/H5N1 Avian Influenza Activity Update 15

Since the recent outbreak activity began at the end of December 2003 there have been a total of 177 confirmed human cases and 98 deaths\*. Cases and deaths occurred in the following nations: Cambodia 4 cases and 4 deaths; China 15 cases and 10 deaths; Indonesia 29 cases and 22 deaths; Thailand 22 cases and 14 deaths; Vietnam 93 cases and 42 deaths; Turkey 12 cases and 4 deaths; and, Iraq 2 case and 2 deaths. The most recent confirmed cases and deaths occurred in Indonesia (two new cases and deaths) in the last few weeks. The Indonesian cases were siblings, and H5 infected poultry were found in their household. Health officials in Azerbaijan have reported their first 3 cases of human H5 infection, all of which were fatal. The testing of these specimens was conducted by NAMRU-3, a WHO collaborating center for emerging infections, although further testing will be required to confirm these results. The cases lived in the same region of Azerbaijan, but different settlements. Heightened surveillance has found additional suspect cases. Infected poultry was first discovered in the area on February 9.

The H5N1 virus continues to spread into new areas of Europe, Africa, and Asia. Countries reporting confirmed outbreaks of H5N1 in bird species since late December 2003, with the most recent outbreaks listed first, include Cameroon, Myanmar, Albania, Serbia and Montenegro, Hungary, Poland, Switzerland, Niger, Slovakia, France, Austria, Malaysia, Azerbaijan, India, Slovenia, 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 Georgia, Pakistan, Bosnia and Herzegovina, Iraq, and Laos. Other countries investigating new reports of bird deaths or have preliminary positive test results include Afghanistan, Sweden, Denmark, Ethiopia, Kenya, and Armenia. Reports suggest additional mammalian species that have tested positive for H5N1 infection include domestic cats, stone martens, and stray dogs. Recently published research is now suggesting that the H5N1 virus may be endemic in parts of Asia.

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.