Florida Influenza Surveillance

Week Ending February 4, 2006
(Week 5)

Aimee Pragle, MS; 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. NEW! FL DOH Laboratory Surveillance
V. County Health Department Influenza Activity
VI. Summary of Worldwide A/H5N1 Influenza Activity

I. Summary

This is the eighteenth 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 5, Influenza-like illness (ILI) activity as reported by FSPISN increased in 3 of the seven regions (Centralwest, Northeast, and Southeast). County level influenza reporting recorded as of February 8, 2006: Localized activity was reported by Alachua, Brevard, Broward, Miami-Dade, Nassau, Orange, Seminole, and Volusia Counties. Twenty county health departments (Bay, Citrus, Clay, Collier, Duval, Escambia, Flagler, Glades, Gulf, Hernando, Highlands, Hillsborough, Lee, Leon, Palm Beach, Pinellas, Polk, St. Johns, Santa Rosa, and Sarasota) reported sporadic ILI activity and 13 reported no activity. Twenty-six 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 February 4, 2006 was 1.97%, compared to 2.76% for the previous week. This is based on 36% of sentinel sites reporting. The highest weighted % ILI activity reported was in the Centraleast region at 4.17%, while the Southwest region reported the lowest at 0.39% ILI cases.

<table>
<thead>
<tr>
<th>REGION</th>
<th>REPORTED ILI%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centraleast</td>
<td>4.17%</td>
</tr>
<tr>
<td>Centralwest</td>
<td>2.83%</td>
</tr>
<tr>
<td>Northcentral</td>
<td>**</td>
</tr>
<tr>
<td>Northeast</td>
<td>1.99%</td>
</tr>
<tr>
<td>Northwest</td>
<td>**</td>
</tr>
<tr>
<td>Southeast</td>
<td>2.44%</td>
</tr>
<tr>
<td>Southwest</td>
<td>0.39%</td>
</tr>
</tbody>
</table>

*The ILI activity levels are based on information reported by the Florida Sentinel Physician Influenza Network.

§ FSPISN Reporting is incomplete for this week (39%). Numbers may change dramatically as more reports are received.

** Reporting for the Northcentral and Northwest regions are undetermined for this week; due to only one sentinel provider in each region contributing data for week 5.

III. FSPISN Influenza-like Illness Graphs By Region

- **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.)
Influenza Surveillance Regions
IV. Laboratory Surveillance:

During week 5, Florida Department of Health State Laboratories (Tampa and Jacksonville) reported 49 specimens tested for influenza viruses and 31 (63%) were positive. Of these 21 were influenza A (H3N2), 1 was influenza A (H1N1), 8 were influenza A viruses not subtyped, and 1 was Influenza B.

Since October 4, 2005, Florida Department of Health State Laboratories have tested a total of 266 specimens for influenza viruses and 88 (33%) were positive. Among the 88 influenza viruses, 84 (95%) were influenza A viruses and 4 (5%) were influenza B viruses. Fifty-seven of the 84 influenza A viruses have been subtyped: 53 were influenza A (H3N2) virus and 4 were influenza A (H1N1) virus. Laboratory information is preliminary and may change as additional results are received.
IV. County Health Department Influenza Activity

Weekly County Influenza Activity
(Week ending February 04, 2006 - Week 5)
County influenza activity levels are reported by county health department epidemiologists

Level of Influenza Activity by County
- No Report
- No Activity
- Sporadic
- Localized
- Widespread

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 February 08, 2006
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† in the county.

1 = Sporadic:
\[\text{And/or} \begin{cases} 
\text{a. Isolated cases of laboratory confirmed influenza† in the county.} \\
\text{b. An ILI§ outbreak in a single setting‡ in the county.} \\
\text{(No detection of increased ILI§ activity by surveillance systems*)} 
\end{cases}\]

2 = Localized:
\[\text{And/or} \begin{cases} 
\text{a. An increase of ILI§ activity detected by a single surveillance system* within the county. (An increase in ILI§ activity has not been detected by multiple ILI surveillance systems).} \\
b. Two or more outbreaks (ILI§ or lab confirmed†) detected in a single setting‡ in the county. \\
\text{AND} \\
c. Recent (within the past three weeks) laboratory evidence† of influenza activity in the county. 
\end{cases}\]

3 = Widespread:
\[\text{And/or} \begin{cases} 
\text{a. An increase in ILI§ activity detected in ≥2 surveillance systems in the county.} \\
b. Two or more outbreaks (ILI§ or laboratory confirmed†) detected in multiple settings‡ in the county. 
\end{cases}\]

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 ≥100°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.
‡ Setting includes institutional settings (LTCFs, hospitals, prisons, schools, companies, etc.) as well as the community.

Influenza Surveillance – Reminders

Important Reminders
* * Influenza activity reporting by sentinel providers is voluntary.

* * The influenza surveillance data is used to answer the question 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.

V. Summary of Worldwide A/H5N1 Influenza Activity

Since the recent outbreak activity began at the end of December 2003 there have been a total of 165 confirmed human cases and 88 deaths*. Cases and deaths occurred in the following nations: Cambodia 4 cases and 4 deaths; China 10 cases and 7 deaths; Indonesia 23 cases and 16 deaths; Thailand 22 cases and 14 deaths; Vietnam 93 cases and 42 deaths; Turkey 12 cases and 4 deaths; and, Iraq 1 case and 1 death. The most recent confirmed cases and deaths have occurred in Indonesia and Iraq over the last week. Two additional cases in northern Iraq have died of suspected avian influenza, including the uncle of the initial case, although these are not yet confirmed. Iraqi authorities are also reporting that a
13 year old boy has died of suspected avian influenza in southern Iraq. Birds kept by the family are said to have died recently, although there are no confirmed cases in birds in southern Iraq at this time.

Countries reporting confirmed outbreaks of H5N1 in bird species since late December 2003, with the most recent outbreaks listed first, include Nigeria, Cyprus, Ukraine, Turkey, Romania, Indonesia, China, Russia, Thailand, Vietnam, Croatia, Kuwait (only one flamingo), Kazakhstan, Mongolia, Cambodia, Malaysia, Korea (Rep. of), and Japan. Iraq is waiting for confirmation of samples from dead poultry thought to have died from avian influenza. The outbreak in Nigeria is significant in that it represents the first confirmed avian influenza cases in Africa. At present the outbreak is thought to be confined to a large commercial farm where thousands of chickens are kept, but investigations are underway to determine the full extent of the spread. The countries of Bulgaria, Georgia, Iran, and Yemen, are also currently investigating recent deaths in wild waterfowl. Teams of WHO veterinary experts are working with a number of Middle Eastern countries to assess their situation and assist with improving surveillance efforts.

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.