Florida Influenza Surveillance

Week Ending March 25, 2006
(Week 12)

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I. Summary

This is the twenty-fifth 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 12, Influenza-like illness (ILI) activity, as reported by FSPISN decreased in six of the seven regions (Centraleast, Centralwest, Northcentral, Northeast, Northwest and Southwest), and continues to decrease in the state overall. County-level influenza reporting recorded as of March 29, 2006: No counties reported Widespread activity. One county reported Localized activity: (Hillsborough). Twenty-seven county health departments reported Sporadic ILI activity: (Alachua, Bay, Brevard, Charlotte, Dade, Escambia, Hendry, Hernando, Highlands, Holmes, Jackson, Lake, Leon, Martin, Monroe, Nassau, Okaloosa, Orange, Palm Beach, Pinellas, Polk, St. Lucie, Santa Rosa, Sarasota, Seminole, Union, and Volusia). Thirteen counties 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 March 25, 2006 was 0.83%, compared to 1.28% for the previous week. ILI activity is below the Florida baseline. This is based on 41% of sentinel sites reporting. The highest weighted % ILI activity reported was in the Northwest region at 1.47%, while the Northeast region reported the lowest at 0.24% ILI cases.

<table>
<thead>
<tr>
<th>REGION</th>
<th>REPORTED ILI%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centraleast</td>
<td>0.91%</td>
</tr>
<tr>
<td>Centralwest</td>
<td>0.28%</td>
</tr>
<tr>
<td>Northcentral</td>
<td>0.92%</td>
</tr>
<tr>
<td>Northeast</td>
<td>0.24%</td>
</tr>
<tr>
<td>Northwest</td>
<td>1.47%</td>
</tr>
<tr>
<td>Southeast</td>
<td>1.22%</td>
</tr>
<tr>
<td>Southwest</td>
<td>0.46%</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.
** The ILI activity percentage reported for the Northcentral is based on only 2 FSPISN facilities

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

- Northwest Region
- Southeast Region
- Southwest Region
- Florida

Legend:
- Centraleast
- Centralwest
- Northcentral
- Northeast
- Northwest
- Southeast
- Southwest
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 11 and 12, Florida Department of Health State Laboratories (Tampa and Jacksonville) reported 57 specimens tested for influenza viruses and 27 (47%) were positive. Of these 22 were influenza A (H3N2), 1 was influenza A viruses not subtyped, and 4 were influenza B.

Since October 4, 2005, Florida Department of Health State Laboratories have tested a total of 644 specimens for influenza viruses and 283 (44%) were positive. Among the 283 influenza viruses, 264 (93%) were influenza A viruses and 20 (7%) were influenza B viruses. Two hundred and nine (209) of the 264 influenza A viruses have been subtyped: 205 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](image)

![Number of Influenza Specimens Tested by FL DOH State Laboratories 2005-06](image)
V. County Health Department Influenza Activity

Weekly County Influenza Activity
(Week ending March 25, 2006 - Week 12)

County influenza activity levels are reported by county health department epidemiologists.

Level of Influenza Activity by County

- No Report
- No Activity
- Sporadic
- Localized
- Widespread

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Map printed March 29, 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:
- Isolated cases of laboratory confirmed influenza† in the county.
- An ILI§ outbreak in a single setting‡ in the county.
  (No detection of increased ILI§ activity by surveillance systems*)

2 = Localized:
- 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).
  - Two or more outbreaks (ILI§ or lab confirmed†) detected in a single setting‡ in the county.
  
  **AND**
  - Recent (within past three weeks) laboratory evidence† of flu activity in the county.

3 = Widespread:
- An increase in ILI§ activity detected in ≥2 surveillance systems in the county.
  - 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 ≥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.
‡ Settings include institutional settings (LTCFs, hospitals, prisons, schools, companies) & the community.

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

As of the week ending March 25, 2006, one influenza-associated death and/or post influenza infection encephalitis among those <18 years of age were reported in the state of Florida.

<table>
<thead>
<tr>
<th>Reportable Disease</th>
<th>Number of Cases 05-06 Influenza Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza-associated deaths among those &lt;18 years of age</td>
<td>1</td>
</tr>
<tr>
<td>Post-influenza infection encephalitis</td>
<td>0</td>
</tr>
</tbody>
</table>

*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](http://www.doh.state.fl.us/disease_ctrl/epi/topics/crforms.htm).
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: https://www.epicom.fl.net. Influenza and ILI outbreaks should be reported to EpiCom on the Influenza forum.

VIII. Summary of Worldwide A/H5N1 Influenza Activity

03/30/06 Summary of Worldwide A/H5N1 Avian Influenza Activity Update 17

Since the recent outbreak activity began at the end of December 2003 there have been a total of 186 confirmed human cases and 105 deaths*. Cases and deaths occurred in the following nations: Azerbaijan 7 cases and 5 deaths; Cambodia 5 cases and 5 deaths; China 16 cases and 11 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 China (one case and death) and Cambodia (one case and death). The case in Cambodia occurred in a 3 yr old girl in the southern part of the country, and in an area where chickens began dieing in February. The child is known to have played with the chickens. This is the first confirmed case and death in Cambodia in a year. Egyptian officials are reporting their second human death of avian influenza, based on analysis by NAMRU-3. The case was a 30-yr old female who had contact with diseased chickens. NAMRU-3 has also confirmed an additional three cases of human H5N1 infection, all of whom had known contact with poultry in the recent past. Additional analyses must be performed for confirmation before Egypt is added to the list of countries with confirmed human cases.

The H5N1 virus continues to spread into new areas of the Middle East and Asia. Countries reporting confirmed outbreaks of H5N1 in bird species since late December 2003, with the most recent outbreaks listed first, include Jordan, Sweden, Israel, Afghanistan, 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 Philippines, Pakistan, Iraq, and Laos. Nepal recently reported mass bird deaths and is currently investigating their cause. The current USGS list of species affected by H5N1 include the Owston Palm Civet, domestic/feral cat, Cynomolgus macaques, Stone martens, ferrets, New Zealand white rabbits, leopards, tigers, rats, and pigs. A recent report from Swedish veterinary officials says a mink has recently been found H5 positive.

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.