Florida Influenza Surveillance

Week Ending February 11, 2006 (Week 6)

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I. Summary

This is the nineteenth 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 6, Influenza-like illness (ILI) activity as reported by FSPISN increased in 5 of the seven regions (Centraleast, Northcentral, Northeast, Southeast, and Southwest). County level influenza reporting recorded as of February 17, 2006: Activity levels for Hillsborough and Pasco Counties were reported as widespread. Localized activity was reported by Alachua, Brevard, Duval, Lee, Polk, St. Lucie, Seminole, and Volusia Counties. Nineteen county health departments (Baker, Bay, Citrus, Clay, Collier, Dade, Escambia, Hendry, Hernando, Highlands, Lake, Marion, Nassau, Orange, Palm Beach, Pinellas, St. Johns, Santa Rosa, and Sarasota) reported sporadic ILI activity and 15 reported no activity. Twenty-three 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 11, 2006 was 3.58%, compared to 1.97% for the previous week. This is based on 39% of sentinel sites reporting. The highest weighted % ILI activity reported was in the Centraleast region at 6.47%, while the Southwest region reported the lowest at 2.24% ILI cases.

<table>
<thead>
<tr>
<th>REGION</th>
<th>REPORTED ILI%</th>
</tr>
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<tbody>
<tr>
<td>Centraleast</td>
<td>6.47%</td>
</tr>
<tr>
<td>Centralwest</td>
<td>2.58%</td>
</tr>
<tr>
<td>Northcentral</td>
<td>3.17%</td>
</tr>
<tr>
<td>Northeast</td>
<td>2.50%</td>
</tr>
<tr>
<td>Northwest</td>
<td>**</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.27%</td>
</tr>
<tr>
<td>Southwest</td>
<td>2.24%</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 Northwest region is 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

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.*
IV. Laboratory Surveillance:

During week 6, Florida Department of Health State Laboratories (Tampa and Jacksonville) reported 57 specimens tested for influenza viruses and 34 (60%) were positive. Of these 13 were influenza A (H3N2), 19 were influenza A viruses not subtyped, and 2 were Influenza B.

Since October 4, 2005, Florida Department of Health State Laboratories have tested a total of 323 specimens for influenza viruses and 122 (38%) were positive. Among the 122 influenza viruses, 116 (95%) were influenza A viruses and 6 (5%) were influenza B viruses. Seventy of the 116 influenza A viruses have been subtyped: 66 were influenza A (H3N2) virus and 4 were influenza A (H1N1) virus. Laboratory information is preliminary and may change as additional results are received.
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:
And/or
   a. Isolated cases of laboratory confirmed influenza† in the county.
   b. An ILI§ outbreak in a single setting‡ in the county.
   (No detection of increased ILI§ activity by surveillance systems*)

2 = Localized:
And/or
   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.
   AND
   c. Recent (within past three weeks) laboratory evidence† of flu activity in the county.

3 = Widespread:
And/or
   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.

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 February 11, 2006, no influenza–associated deaths among those <18 years of age and/or post influenza infection encephalitis were reported in the state of Florida.

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

Cases of influenza-associated deaths among those <18 years of age and/or post influenza encephalitis infection are reportable; case report forms can be accessed at: 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

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 an 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

Since the recent outbreak activity began at the end of December 2003 there have been a total of 169 confirmed human cases and 91 deaths*. Cases and deaths occurred in the following nations: Cambodia 4 cases and 4 deaths; China 12 cases and 8 deaths; Indonesia 25 cases and 18 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 (2 new cases and deaths) and China (2 new cases and 1 death) over the last week. Health officials in Nigeria have begun to conduct active surveillance for H5N1 infection in people working in the poultry industry.

There has been a substantial expansion of H5N1 infection found in wild birds species during the last week in multiple European countries. Countries reporting confirmed outbreaks of H5N1 in bird species since late December 2003, with the most recent outbreaks listed first, include Bulgaria, Italy, Greece, Iran, Croatia, Nigeria, Cyprus, Ukraine, Turkey, Romania, Indonesia, China, Russia, Thailand, Vietnam, Kuwait (only one flamingo), Kazakhstan, Mongolia, Cambodia, Malaysia, Korea (Rep. of), and Japan. German, Austrian, and Slovenian officials are also reporting confirmation of H5N1 infection in wild birds, although this is not yet confirmed by the OIE. Other countries investigating reports of bird deaths include Azerbaijan and Armenia. A genetic analysis of the samples taken from birds in Italy suggest that the H5N1 strain is the same as what was found in wild birds at Qinghai Lake in Northwest China in the spring of 2004.

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.