Florida Influenza Surveillance

Week Ending April 22, 2006
(Week 16)

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I. Summary

This is the twenty-ninth 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 16, Influenza-like illness (ILI) activity, as reported by FSPISN increased in five of the seven regions (Centraleast, Centralwest, Northcentral, Northwest, Southeast), while it decreased in two regions (Northeast and Southwest). Overall, state ILI activity as reported by FSPISN increased this week. Influenza activity levels reported by counties as of April 26, 2006 stabilized compared to the previous week: No counties reported Widespread activity. One county reported Localized activity (Manatee). Fifteen county health departments reported Sporadic ILI activity: (Brevard, Broward, Dade, Duval, Hamilton, Hillsborough, Lake, Monroe, Okaloosa, Orange, Palm Beach, Pinellas, Sarasota, Seminole, and Volusia). Twenty-six 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 April 22, 2006 was 1.07%, compared to 0.69% for the previous week. ILI activity is below the Florida baseline. This is based on 37% of sentinel sites reporting. The highest weighted % ILI activity reported was in the Centraleast region at 2.07%, while the Northeast region reported the lowest at 0% ILI cases.

<table>
<thead>
<tr>
<th>REGION</th>
<th>REPORTED ILI%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centraleast</td>
<td>2.07%</td>
</tr>
<tr>
<td>Centralwest</td>
<td>0.52%</td>
</tr>
<tr>
<td>Northcentral**</td>
<td>0.31%</td>
</tr>
<tr>
<td>Northeast</td>
<td>0.00%</td>
</tr>
<tr>
<td>Northwest†</td>
<td>0.29%</td>
</tr>
<tr>
<td>Southeast</td>
<td>1.26%</td>
</tr>
<tr>
<td>Southwest</td>
<td>0.58%</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 (37%). Numbers may change dramatically as more reports are received. ** The ILI activity percentage reported for the Northcentral region is based on 2 FSPISN facilities. † The ILI activity percentage reported for the Northwest region is based on 2 FSPISN facilities.

III. FSPISN Influenza-like Illness Graphs by Region

irára 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.)

irára 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

Florida

Northwest Region

Southeast Region

Southwest Region
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 15 and 16, Florida Department of Health State Laboratories reported 19 specimens tested for influenza viruses and 8 (42%) were positive. Of these, 1 was influenza A H3N2 and 7 were influenza B.

Since October 4, 2005, Florida Department of Health State Laboratories have tested a total of 688 specimens for influenza viruses and 302 (44%) were positive. Among the 302 influenza viruses, 269 (89%) were influenza A viruses and 33 (11%) were influenza B viruses. Two hundred twelve (214) of the 269 influenza A viruses have been subtyped: 210 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
Weekly County Influenza Activity
(Week ending April 22, 2006 - Week 16)
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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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 April 8, 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.
VII. Reports of influenza or ILI outbreaks in the community or institutional settings

- Manatee County Health Department reported an Influenza B outbreak in an elementary school on 4/13/06.
- 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

04/27/06 Summary of Worldwide A/H5N1 Avian Influenza Activity Update 21

Since the recent outbreak activity began at the end of December 2003, there have been a total of 205 confirmed human cases and 113 deaths*. Cases and deaths occurred in the following nations: Egypt 12 cases and 4 deaths; Azerbaijan 8 cases and 5 deaths; Cambodia 6 cases and 6 deaths; China 18 cases and 12 deaths; Indonesia 32 cases and 24 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 death occurred in China (one death). The death in China occurred in a case reported on 4/19/06. He initially developed symptoms April 1st and died after being reported as a case on 4/19/06. No poultry outbreaks have been reported in Hubei province since November 2005 and the source of the man’s exposure is under investigation. China has also reported its 18th case of infection with the virus. The patient is an eight year old girl from the province of Sichuan. She developed symptoms on April 16th and remains hospitalized. An initial investigation determined recent poultry deaths near the girl’s home. The increase in the numbers of cases and deaths in Egypt reflects WHO’s confirmation of cases previously reported by Egyptian health officials.

Over the last week the H5N1 virus has been found in one new country, and is suspected in one other, however, the virus continues to cause outbreaks in some previously impacted countries. Countries reporting confirmed outbreaks of H5N1 in bird species since late December 2003, with the most recent outbreaks listed first, include the Ivory Coast, Czech Republic, Palestinian Autonomous Territories, United Kingdom (Scotland), Burkina Faso, Jordan, Sweden, Israel, Afghanistan, Cameroon, Myanmar, Albania, Serbia and Montenegro, Hungary, Poland, Switzerland, Niger, Slovakia, France, Austria, Malaysia, Azerbaijan, India, Slovenia, Bosnia Herzegovina, Germany, Nigeria, Egypt, Bulgaria, Italy, Greece, Iran, Croatia, Cyprus, Ukraine, Turkey, Romania, Indonesia, China, Russia, Thailand, Vietnam, Kuwait (only one flamingo), Kazakhstan, Mongolia, Cambodia, 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 the Sudan, Philippines, Iraq, and Laos.

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.