FLORIDA INFLUENZA SURVEILLANCE

Week 40: September 28th 2008—October 4, 2008

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This is the first weekly Florida influenza surveillance report for the 2008-09 season. Influenza surveillance in Florida consists of six surveillance components*: 1) Florida Sentinel Physician Influenza Surveillance Network (FSPISN); 2) Florida Pneumonia & Influenza Mortality Surveillance System; 3) State laboratory viral surveillance; 4) County influenza activity levels; 5) Notifiable Disease Reports: Influenza-associated deaths in children & post-influenza infection encephalitis; 6) Influenza or ILI outbreaks.

During week 40 (9/28/08-10/4/08), the proportion of patient visits for influenza-like illness (ILI) as reported by the Florida Sentinel Physician Influenza Surveillance Network was 0.97 percent. This is below the state threshold for moderate activity of 2.98 percent. There were no ILI specimens tested by Bureau of Laboratories this week. No counties reported widespread or localized activity. Twelve counties reported sporadic activity and 39 counties reported no activity. Sixteen counties did not report. The graph below shows the progression of the 2007-08 & 2008-09 Florida influenza seasons as monitored by three** of six surveillance systems.

Each week an activity code for the state as a whole is reported to the Centers for Disease Control and Prevention (CDC). There are five possible categories: No Activity, Sporadic, Local, Regional, or Widespread. Sporadic activity has been reported in Florida for this reporting week (week 40). There has been early influenza activity in the state prior to week 40. Because of this activity, Florida meets the CDC sporadic activity definition. The CDC definition for sporadic activity is: Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI and no reported increase in the number of cases of ILI. The CDC report can be viewed at http://www.cdc.gov/flu/weekly/usmap.htm.

*The purposes of these surveillance systems are to determine when and where influenza activity is occurring, to identify circulating viruses, to detect changes in the circulating influenza viruses, to track patterns of influenza-associated morbidity and mortality and estimate the overall impact of influenza in the state of Florida.

**1) FSPISN, 2) State Laboratory Viral Surveillance, and 3) County Activity Levels.

Find more information at: http://www.doh.state.fl.us/disease_ctrl/epi/htopics/flu/index.htm
During week 40, 0.97%* of patient visits to Florida sentinel providers were due to ILI. This percentage is below the statewide baseline of 2.98%**. The percentage of visits ranged from 0.00% in the Northcentral, and Southwest regions to 1.83% in the Southeast region.

*FSPISN reporting is incomplete for this week (44% of providers reported). Numbers may change as more reports are received.

**The 2008—09 threshold for moderate activity is calculated from FSPISN data. The threshold for moderate activity is the mean percentage of patient visits for ILI during influenza weeks for the previous three seasons plus two standard deviations. Only weeks with 10% or greater of laboratory specimens testing positive are included in the calculation. Due to wide variability in regional level data, it is not appropriate to apply the state baseline to regional data.

Pneumonia and Influenza Mortality Surveillance: During week 40, 6.3% of all deaths reported through the 122-Cities Mortality Reporting System were reported as due to pneumonia or influenza. This percentage is below the epidemic threshold of 6.4% for week 40.
The table below shows the weighted ILI activity by region as reported by Florida sentinel physicians for the 2007-08 & 2008-09 seasons. The graphs below include ILI activity as reported by sentinel physicians and FDOH laboratory data.

### Week 40: FSPISN Weighted ILI Activity, by Region
#### 2007-08 & 2008-09 Seasons

<table>
<thead>
<tr>
<th>REGION</th>
<th>2008-09 ILI %</th>
<th>2007-08 ILI %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centraleast</td>
<td>0.48%</td>
<td>0.58%</td>
</tr>
<tr>
<td>Centralwest</td>
<td>0.48%</td>
<td>1.43%</td>
</tr>
<tr>
<td>Northcentral</td>
<td>0.00%</td>
<td>7.26%</td>
</tr>
<tr>
<td>Northeast</td>
<td>0.31%</td>
<td>1.67%</td>
</tr>
<tr>
<td>Northwest</td>
<td>0.80%</td>
<td>1.40%</td>
</tr>
<tr>
<td>Southeast</td>
<td>1.83%</td>
<td>0.35%</td>
</tr>
<tr>
<td>Southwest</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
During week 40, Florida Department of Health Bureau of Laboratories have tested a total of 0 specimens for influenza viruses. Laboratory information is preliminary and may change as additional results are received. Totals from previous weeks will be adjusted to reflect correct specimen numbers. During August and September prior to the “official” start of the influenza surveillance season, the Bureau of Laboratories tested three specimens that were positive for influenza. Two were influenza A H1N1 one each from Nassau and Orange counties. The other was PCR positive for Influenza A H3 in Hillsborough county.

![FDOH State Laboratory Influenza Virus Isolates 2008-09](chart1)

![Number of Influenza Specimens Tested by FDOH State Laboratories, 2008-09](chart2)

| Week | Alachua | Benham | Broward | Charlotte | Citrus | Collier | Desoto | Duval | Escambia | Hernando | Hillsborough | Holmes | Indian River | Jackson | Lee | Leon | Levy | Lincoln | Madison | Martin | Martin | Manatee | Nassau | Palm Beach | Pasco | Pinellas | Polk | Putnam | Saint Johns | Saint Lucie | Sarasota | Seminole | St Johns | Sumter | Taylor | Wakulla | Wakulla | West Palm | Wright | Yukon |
|------|---------|--------|---------|-----------|--------|---------|--------|-------|----------|----------|-------------|--------|-------------|---------|-----|------|------|-------|--------|--------|--------|--------|--------|--------|-----------|-------|--------|------|------|-----------|--------|-------|-------|--------|--------|--------|-------|--------|--------|--------|--------|--------|
During week 40, no counties reported widespread activity or localized activity. Twelve counties (Brevard, Broward, Collier, Escambia, Hillsborough, Lake, Manatee, Orange, Palm Beach, Polk, St. Johns, Seminole) reported sporadic activity. Thirty-nine counties reported no activity. Sixteen counties did not report.
COUNTY INFLUENZA ACTIVITY LEVEL DEFINITIONS

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 decreased ILI§ activity by surveillance systems*)

2 = Localized:
And/or
a. ILI§ activity detected by a single surveillance system* within the county.
   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 influenza 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. REPORTS OF INFLUENZA OR INFLUENZA-LIKE ILLNESS (ILI) OUTBREAKS

During week 40, there were no reports of influenza or influenza-like illness outbreaks in the state.

County Health Department epidemiologists should report Influenza and ILI outbreaks via EpiCom at: https://fdens.com/vabtrs/GateStart.aspx within the Influenza Forum.

VII. NOTIFIABLE DISEASE REPORTS: INFLUENZA-ASSOCIATED DEATHS AMONG CHILDREN (<18 YEARS) & POST-INFLUENZA INFECTION ENCEPHALITIS

As of the week ending October 4, 2008, there were no influenza-associated deaths among those <18 years of age and/or post-influenza infection encephalitis reported in the state of Florida.

<table>
<thead>
<tr>
<th>Reportable Disease</th>
<th># of Cases 08-09 Influenza Season</th>
</tr>
</thead>
<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>

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/topicscrforms.htm.
Since the outbreak activity began at the end of December 2003, there have been a total of 387 confirmed human cases and 245 deaths. Cases and deaths have occurred in the following nations: Azerbaijan 8 cases and 5 deaths; Bangladesh 1 case 0 deaths; Cambodia 7 cases and 7 deaths; China 30 cases and 20 deaths; Djibouti 1 case 0 deaths; Egypt 50 cases and 22 deaths; Indonesia 137 cases and 112 deaths; Iraq 3 cases and 2 deaths; Lao People’s Democratic Republic 2 cases and 2 deaths; Myanmar 1 case and 0 deaths; Nigeria 1 case and 1 death; Pakistan 3 cases and 1 death. Thailand 25 cases and 17 deaths; Turkey 12 cases and 4 deaths; and, Vietnam 106 cases and 52 deaths. For a complete analysis and summary of WHO confirmed human cases of H5N1 from 12/1/2003 to current, please visit: http://www.who.int/csr/disease/avian_influenza/ai_timeline/en/index.html

Changes in the WHO case definition for human infection with avian influenza H5N1 can be found here:

During week 40, the Ministry of Health of Indonesia retrospectively announced two confirmed cases of human infection with avian influenza in a 20-year old male and a 38-year old male in the Baten province during late July 2008. The cases were not related but both individuals had contact with live and/or sick poultry. Both cases died within six days of symptom onset.

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.

Human cases of influenza due to infection from novel or pandemic strains are reportable in Florida. Reports should be made to the Department 24/7 upon initial suspicion.

Find more information at: http://www.doh.state.fl.us/disease_ctrl/epi/htopics/BirdFlu.htm