Summary

The Florida Department of Health (FDOH) uses many different surveillance systems to measure influenza activity. A summary of all these systems can be found on page 11.

Novel influenza:
- Nineteen confirmed cases of influenza A H3N2v infection have been reported since June, 2013. Ohio reported the most recent cases. Since being first identified in the United States, the Centers for Disease Control and Prevention (CDC) has reported 340 cases and one fatality. No cases of H3N2v infection have been reported in Florida. The H3N2v strain originates from influenza that circulates in pigs. Nearly all people infected with H3N2v have reported direct or indirect contact with swine. No sustained human to human transmission has been identified. More information can be found at: http://www.cdc.gov/flu/swineflu/h3n2v-cases.htm.
- For current information on novel or pandemic strains of influenza (including avian or swine origin influenza A) visit http://www.floridahealth.gov/diseases-and-conditions/diseases-from-animals/novel-influenza-viruses.html.

State:
- Most Florida counties reported mild or no influenza activity. Twenty-three counties reported increasing influenza activity.
- Emergency department (ED) and urgent care center (UCC) influenza-like illness (ILI) visits have increased overall in recent weeks. Although in EDs and UCCs reporting to ESSENCE-FL, the statewide percent of ED visits for ILI is at or near typical levels for this time of year in all regions of Florida.
- In Florida, the most common influenza subtype detected at the Bureau of Public Health Laboratories (BPHL) in recent weeks has been influenza A (2009 H1N1).
  - In week 42, 12 of 39 specimens submitted for influenza testing at BPHL tested PCR positive for influenza. Ten tested PCR positive for influenza A (2009 H1N1) and two tested PCR positive for influenza A unspecified. In the 2012-2013 influenza season, Influenza B, influenza A (H3) and influenza A (2009 H1N1) were all detected. All of these are seasonal strains of influenza.
  - Nationally (including Florida), almost all circulating influenza is a good match for the vaccine.
- One influenza outbreak (epidemiologically linked cases of influenza in a single setting) was reported in week 42.
- No pediatric influenza-associated deaths were reported in week 42. No pediatric influenza-associated deaths have been reported in the 2013-2014 season.
- The preliminary estimated number of Florida deaths due to pneumonia or influenza in week 41 is lower than the seasonal baseline, based on previous years’ data. Estimated deaths due to pneumonia and influenza are identified using preliminary death certificate data.
- Because of low influenza activity in most regions of the state, Florida reported sporadic influenza activity to CDC in week 42. This activity level represents the geographic spread of influenza in Florida.
ILINet is a nationwide surveillance system composed of sentinel providers. Florida has 110 providers enrolled in ILINet who submit weekly ILI and total visit counts, as well as submit ILI specimens to the BPHL for confirmatory testing. For this season, the Bureau of Epidemiology (DCBE) has designated 12 of these ILINet physicians’ offices as Super-Sentinels. These Super-Sentinels receive more active follow-up from DCBE and participating county health departments (CHDs), with the goal of increasing data quality and surveillance specimen submission.

**FIGURE 1** shows the percentage of visits for ILI* reported by ILINet sentinel providers statewide.

*ILI = Influenza-like illness, fever >100°F AND sore throat and/or cough in the absence of another known cause.

FIGURE 2 shows ILI visit counts reported by ILINet sentinel providers statewide by age group.

In week 42, the number of visits to ILINet sentinel providers for ILI decreased in the 0-4, 5-24 and 65+ age groups.

### TABLE 1: Summary of Florida Influenza-Like Illness (ILI) Activity for Week 42

<table>
<thead>
<tr>
<th>Measure</th>
<th>Difference from Previous Week</th>
<th>Current Week 42</th>
<th>Previous Week 41</th>
<th>Page of Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall statewide activity code reported to CDC</td>
<td>No Change</td>
<td>Sporadic</td>
<td>Sporadic</td>
<td>1</td>
</tr>
<tr>
<td>Percent of visits to ILINet providers for ILI</td>
<td>▲ 0.1</td>
<td>1.4%</td>
<td>1.3%</td>
<td>2</td>
</tr>
<tr>
<td>Percent of ED and UCC visits (from ESSENCE-FL) due to ILI</td>
<td>▲ 0.1</td>
<td>2.4%</td>
<td>2.3%</td>
<td>3</td>
</tr>
<tr>
<td>Percent of laboratory specimens that were positive for influenza</td>
<td>▼ 38.9</td>
<td>30.8%</td>
<td>69.7%</td>
<td>5</td>
</tr>
<tr>
<td>Number of counties reporting moderate influenza activity</td>
<td>No Change</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Number of counties reporting widespread influenza activity</td>
<td>No Change</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Number of counties reporting increasing influenza activity</td>
<td>▼ 1</td>
<td>23</td>
<td>24</td>
<td>7</td>
</tr>
<tr>
<td>Number of counties reporting decreasing influenza activity</td>
<td>No Change</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Number of ILI outbreaks reported in EpiCom</td>
<td>▲ 1</td>
<td>1</td>
<td>0</td>
<td>11</td>
</tr>
</tbody>
</table>

ILINet Influenza-Like Illness-Statewide

ILINet is a nationwide surveillance system composed of sentinel providers. Florida has 110 providers enrolled in ILINet who submit weekly ILI and total visit counts, as well as submit ILI specimens to the BPHL for confirmatory testing. For this season, the Bureau of Epidemiology (DCBE) has designated 12 of these ILINet physicians’ offices as Super-Sentinels. These Super-Sentinels receive more active follow-up from DCBE and participating county health departments (CHDs), with the goal of increasing data quality and surveillance specimen submission.
ESSENCE-FL Syndromic Surveillance Summary-Statewide

ESSENCE-FL collects data daily from 187 EDs and UCCs. These data are processed into 11 different syndrome categories based on the patient's chief complaint. One of the categories is ILI, which is composed of chief complaints that include the words "influenza" or "flu," or complaints that contain fever plus cough or sore throat.

**FIGURE 3** shows ESSENCE-FL data on ILI visits to EDs and UCCs as a percentage of all visits.

The percent of visits to EDs and UCCs for ILI continues to rise, and is near expected levels for this time of year.

**FIGURE 4** shows percentage of ILI among all ED and UCC visits by age.

In the current week, the percent of visits to emergency departments and urgent care centers for ILI is similar to previous years at this time for the 20-54 and 55+age groups. ILI visits for the 0-19 age group are higher than previous years at this time.

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**ESSENCE-FL Syndromic Surveillance Summary-Regional**

Map 3: Emergency Departments and Urgent Care Centers Reporting Data to ESSENCE-FL by Regional Domestic Security Task Force (RDSTF), October 23, 2013 (N=187)

Map 4: Emergency Departments and Urgent Care Centers Reporting Data to ESSENCE-FL by Regional Domestic Security Task Force (RDSTF) ILI Activity Trends, Week 42, 2013

Increasing  
Decreasing  
Plateau
FIGURE 5 - FIGURE 11 describe Emergency department (ED) and Urgent Care Center (UCC) chief complaint data from ESSENCE-FL by Regional Domestic Security Task Force (RDSTF) regions.

- The percent of ED and UCC visits for ILI is near expected levels in all regions of Florida.
- RDSTF Regions 2, 3, 4 and 6 report increasing visits for ILI to EDs and UCCs in week 42, 2013.
- RDSTF Regions 1, 5 and 7 report decreasing visits for ILI to EDs and UCCs in week 42, 2013.
- Regions 4, 6 and 7 are seeing higher numbers of visits for ILI to EDs and UCCs than in previous seasons at this time.

*There is no week 53 for the 2010-2011, 2011-2012, and 2013-2014 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.
TABLE 2 shows the number of specimens tested by BPHL, how many are influenza positive, and their subtypes.

Recent influenza specimens submitted to BPHL tested positive for influenza A 2009 H1N1.

In recent weeks, influenza A (2009 H1N1) has been the most common strain detected by BPHL.

Table 2: Bureau of Public Health Laboratories (BPHL) Viral Surveillance for Week 42 by Lab Event Date* as reported by 9:30 a.m. October 23, 2013

<table>
<thead>
<tr>
<th></th>
<th>Current Week 42</th>
<th>Previous Week 41</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Specimens Tested</td>
<td>39</td>
<td>33</td>
</tr>
<tr>
<td>Influenza positive specimens (% of total)</td>
<td>12 (30.8%)</td>
<td>23 (69.7%)</td>
</tr>
<tr>
<td>Influenza A (2009 H1N1) (% of influenza positives)</td>
<td>10 (83.3%)</td>
<td>20 (86.9%)</td>
</tr>
<tr>
<td>Influenza A (H3) (% of influenza positives)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Influenza A not yet subtyped (% of influenza positives)</td>
<td>-</td>
<td>2 (8.7%)</td>
</tr>
<tr>
<td>Influenza B unspecified (% of influenza positives)</td>
<td>-</td>
<td>1 (4.4%)</td>
</tr>
</tbody>
</table>

*Please note that lab event date is defined as the earliest of the following dates associated with the lab: date specimen collected, date received by the laboratory, date reported, or date inserted.

For county-specific laboratory data, please refer to the Flu Lab Report in Merlin.

As of 12:00 p.m. October 16, 2013 a total of 67 (100%) counties had reported their weekly level of influenza activity. Please note that data reported by counties after the deadline Tuesday at 5 p.m. are recorded but may not be included in the activity map for previous weeks.

### TABLE 3: Weekly County Influenza Activity for Week 42 (ending October 19, 2013) as Reported by 11:30 a.m. October 23, 2013

<table>
<thead>
<tr>
<th>Activity Level</th>
<th>Week 42 Number of Counties</th>
<th>Week 41 Number of Counties</th>
<th>Week 42 Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Report</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mild</td>
<td>41</td>
<td>40</td>
<td>Alachua, Bay, Brevard, Calhoun, Charlotte, Citrus, Collier, Dade, Desoto, Duval, Escambia, Flagler, Franklin, Gadsden, Hardee, Hernando, Highlands, Indian River, Lafayette, Lake, Leon, Levy, Liberty, Manatee, Marion, Martin, Monroe, Okaloosa, Okeechobee, Orange, Osceola, Palm Beach, Pasco, Pinellas, Polk, Sarasota, Seminole, Suwannee, Taylor, Volusia, Wakulla</td>
</tr>
<tr>
<td>Moderate</td>
<td>6</td>
<td>6</td>
<td>Hillsborough, Holmes, Lee, Santa Rosa, St. Lucie, Washington</td>
</tr>
<tr>
<td>Widespread</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Map 5: Weekly County Influenza Activity Level for Week 42 as Reported by 11:30 p.m. October 23, 2013

Six counties report moderate activity.

Map 6: Weekly County Influenza Activity Trend for Week 42 as Reported by 11:30 a.m. October 23, 2013

Twenty-three counties report increasing influenza and ILI activity in Week 42, 2013

County influenza activity data is reported to the Division of Disease Control Bureau of Epidemiology (DCBE) through EpiGateway on a weekly basis by the county influenza coordinator. Specific information is requested about laboratory results, outbreak reports, and surveillance system activity. Figures 14-23 displayed below reflect a county’s assessment of influenza activity within their county as a whole as well as influenza activity within specific settings. For week 42, two counties indicated that activity was decreasing, 35 indicated activity was about the same as previous weeks and 23 indicated that activity was increasing.

**FIGURE 14** shows the assessment of the overall influenza activity trend in each county as reported by CHD influenza coordinators for week 42 as of 11:30 a.m. October 23, 2013.

![Influenza Activity Trend Graph](image-url)

Definitions for the County Influenza Activity Trends are available at: [http://www.doh.state.fl.us/disease_ctrl/epi/CountyInfluenzaTrendGuide.html](http://www.doh.state.fl.us/disease_ctrl/epi/CountyInfluenzaTrendGuide.html)
Counties are asked to evaluate influenza activity in certain settings within their county. Each setting has a scale for activity that ranges from none or minimal activity to very high activity. What defines each of the values varies by facility type, but the example of the assessment in elementary, middle and high schools is included below. More detailed information on the meanings of the levels for each setting can be found on the webpage also included below.

No or very minimal activity -- Scattered cases of ILI with no increase in absenteeism or disruption of school activities.

Moderate activity -- Absenteeism elevated above baseline (in range of 10 to 25%) in some but fewer than half of schools where it is known; occasional children sent home because of ILI.

High activity -- Absenteeism elevated above baseline (in range of 10 to 25%) in more than half of schools; most schools sending several or many children home each day because of ILI.

Very high activity -- Absenteeism high enough to force curtailment of some or all school activities.

County influenza settings assessment guides are available at:
http://www.doh.state.fl.us/disease_ctrl/epi/FluAssessment.htm

**FIGURE 15 - FIGURE 18** show the activity levels in various facilities by county as reported by county health department flu coordinators for week 42 as of 11:30 a.m., October 23, 2013.
FIGURE 19-FIGURE 23 show the activity levels in various facilities by county as reported by county health department influenza coordinators for week 42 as of 11:30 a.m., October 23, 2013.

Pediatric Influenza-Associated Mortality

In week 42, 2013, no influenza-associated pediatric deaths were reported in Florida.
Over the past year, the FDOH Bureau of Vital Statistics and CHDs have been rolling out an electronic death record system for Florida. ESSENCE-FL now displays electronic vital statistics death record data from all 67 Florida counties. For pneumonia and influenza surveillance, death record literals are queried in ESSENCE-FL using a free-text query that searches for references to pneumonia and influenza on death certificates. Any mention of pneumonia or influenza in the death certificate literals, with certain exceptions, is counted as a pneumonia and influenza death. Current season pneumonia and influenza death numbers are preliminary estimates, and may change as more data are received. The most recent data available are displayed here. ESSENCE-FL vital statistics death records data are currently considered to be complete through week 41, 2013.

**FIGURE 24** shows the count of preliminary estimated pneumonia and influenza deaths for all Florida counties, the number of deaths predicted using a multi-year regression model, and the upper bound of the 95% confidence interval for this prediction.

For week 41 (ending October 12, 2013):
- 150 preliminary estimated pneumonia and influenza deaths reported
- Upper bound of 95% confidence interval for prediction: 184 deaths
- No excess deaths.

**FIGURE 25** shows pneumonia and influenza deaths for all Florida counties, Week 40, 2010 - Week 43, 2013, as reported into ESSENCE-FL.

**FIGURE 26** shows pneumonia and influenza deaths for all Florida counties by age group, Week 40, 2010 - Week 43, 2013, as reported into ESSENCE-FL.

* Death records data reported into ESSENCE-FL are currently considered to be complete through week 41, 2013.
The National Respiratory and Enteric Virus Surveillance System (NREVSS) collects data from laboratories around the country on a weekly basis. NREVSS monitors temporal and geographic patterns of six common respiratory viruses. Nine Florida facilities reported in week 42.

**FIGURE 27** shows the percentage of positive tests for multiple respiratory viruses reported by NREVSS-participating laboratories in Florida.

The 6 respiratory viruses summarized in Figure 27 are:

- Respiratory Syncytial Virus (RSV)
- Parainfluenza 1-3
- Adenovirus
- Human Metapneumovirus (HMPV)
- Rhinovirus
- Influenza

**Influenza and ILI Outbreaks**

In week 42, 2013 one ILI outbreak was reported in EpiCom.

Hillsborough County: An elementary school reported ten children with ILI. Two of the ill tested positive for influenza A by rapid antigen test at their doctor’s office. Influenza prevention and control measures were discussed with the school nurse. The investigation is ongoing.

Two outbreaks of influenza or ILI has been reported so far in the 2013-2014 influenza season.

Map 6: Influenza and ILI outbreaks by county, Week 40, 2012 - Week 42, 2013 as Reported by 1:00 p.m. October 23, 2013

Two influenza or ILI outbreaks have been reported into EpiCom in the 2013-2014 season so far.
Florida ILINet

Measures trends in ILI visits to outpatient doctor’s offices

Doctors submit specimens from ill patients for influenza testing

Network of volunteer healthcare providers who:
- Report ILI and total visit counts every week
- Submit specimens for confirmatory testing

ESSENCE-FL Syndromic Surveillance

Measures trends in ILI visits and hospital admissions from emergency departments and urgent care clinics

Emergency departments and urgent care clinics electronically transmit visit data into ESSENCE-FL daily

Visit data summarized in the Florida Flu Review include:
- Percent of ED/urgent care visits due to ILI
- Percent of ED/urgent care visitors with ILI who are admitted to the hospital

ESSENCE-FL Vital Statistics Portal

Death certificates with pneumonia or influenza listed as a cause of death are used as a proxy to measure influenza mortality

Death certificate data from the Bureau of Vital Statistics can be accessed through ESSENCE-FL

Vital statistics data in ESSENCE are used for pneumonia and influenza mortality surveillance

County Influenza Activity in EpiGateway

Uses data provided by CHDs to create a county-by-county breakdown of influenza and ILI activity around the state

CHD epidemiologists report their county’s influenza and ILI surveillance data weekly into the EpiGateway website

Influenza activity is classified as: No Activity, Mild, Moderate, or Widespread

Setting-specific influenza activity and influenza trend is also reported

Outbreak Reporting in EpiCom

Tracks influenza and ILI outbreak investigations by CHDs

 Shows what types of influenza are responsible for outbreaks and where outbreaks are occurring

CHD epidemiologists report outbreaks of influenza or ILI into EpiCom, Florida’s online disease communication system

Outbreaks are defined as two or more cases of influenza or ILI in a specific setting

Bureau of Public Health Laboratories Viral Surveillance (BPHL)

BPHL performs confirmatory testing and subtyping on surveillance specimens

Surveillance specimens come from ILINet sentinel providers, outbreak investigations, patients with severe or unusual influenza presentations, and medical examiners

Case-Based Influenza Surveillance

Pediatric Influenza-Associated Mortality

Deaths in children with laboratory-confirmed influenza infection are reportable in Florida

Influenza due to Novel or Pandemic Strains

Patients with influenza infection due to novel or pandemic strains are reportable in Florida

National Respiratory and Enteric Virus Surveillance System (NREVSS)

Measures trends in different viruses that cause respiratory disease

Network of laboratories who report counts of test results for common respiratory viruses, including influenza, RSV, rhinovirus, and others

Information on locating influenza vaccination can be found using the flu vaccine locator at: [http://flushot.healthmap.org/](http://flushot.healthmap.org/)