# Florida FLU REVIEW Summer 2012

# Week 27: July 1 – July 7, 2012

#### Summary

The Florida Department of Health (FDOH) monitors multiple surveillance systems such as the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE), the Florida Pneumonia and Influenza Mortality Surveillance System (FPIMSS), notifiable disease reports (Merlin), EpiCom, and Florida ILINet in order to track influenza activity in the state. **State:** 

Influenza and Influenza-like illness (ILI) activity in Florida is low in most FDOH surveillance systems. ESSENCE emergency department data show elevated percent ILI in some regions compared to previous years at this time. One county reports moderate activity.

- Two ILI outbreaks were reported to EpiCom in week 27. A correctional facility in DeSoto county reported 3 residents that tested PCR positive at the state lab for Influenza B. Thirty-seven residents reported ILI. An assisted living facility in Miami-Dade county reported residents with ILI. Five residents tested PCR positive for influenza B at the state lab. Two residents were hospitalized.
- In week 27, nine specimens tested PCR-positive for influenza at the state lab. All nine specimens tested
  positive for influenza B. In recent weeks, influenza B has been the most common strain identified by the
  state lab. Other viruses known to be currently circulating, potentially causing ILI, include adenovirus,
  rhinovirus, parainfluenza, and respiratory syncytial virus (RSV).

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#### July 11, 2012

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Surveillance Network (ILINET)-

Posted on the Bureau of Epidemiology website: <u>http://</u> www.doh.state.fl.us/floridaflu/

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TABLE 1:	Summarv	of Florida	Influenza-Like	Illness	(ILI)	Activity	for Week 27	7
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Measure	Difference from previous week	Current week 27	Previous week 26	Page of Report
Percent of visits to ILINet providers for ILI	▲ 0.1	1.3%	1.2%	2
Number of ILI outbreaks reported in EpiCom	▲ 2	2	0	2
Percent of emergency department visits (from ESSENCE) due to ILI	▼ 0.5	1.6%	2.1%	3
Number of laboratory specimens that were positive for influenza out of total submissions	▲ 5	9/20	4/18	5
Number of counties reporting moderate influenza activity	No Change	1	1	6
Number of counties reporting widespread influenza activity	No Change	0	0	6

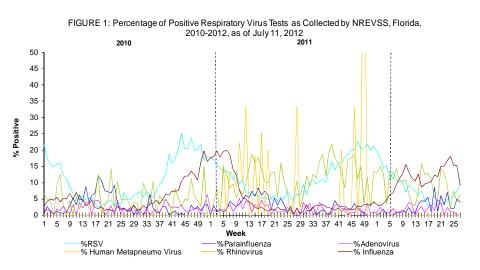
#### **NREVSS Respiratory Virus Surveillance**

The National Respiratory and Enteric Virus Surveillance System (NREVSS) collects data from laboratory facilities around the country on a weekly basis. NREVSS monitors temporal and geographic patterns of RSV, human parainfluenza viruses, human metapneumo virus (HMPV), respiratory and enteric adenoviruses, and rotavirus. Twenty-eight facilities reported in week 27.

**FIGURE 1** shows the percentage of positive tests for multiple respiratory viruses reported by NREVSS-participating laboratories in Florida

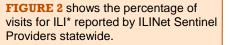
The 6 respiratory viruses summarized in Figure 1 are:

- RSV
- Parainfluenza 1-3
- Adenovirus
- HMPV
- Rhinovirus
- Influenza



## 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 submitting ILI specimens to the BOL for confirmatory testing.



ILI percent positive remains low and similar to other non-pandemic seasons at this time. ILINet Provider reporting declines in the summer months. Figures will be updated as new data are received.

59 of 110 ILINet Sentinels have reported visit counts as of 11:00 a.m., July 11, 2012.

13 of 16 ILINet Super-Sentinels have reported visit counts as of 11:00 a.m., July 11, 2012.

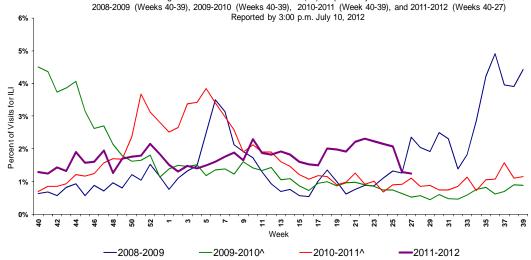
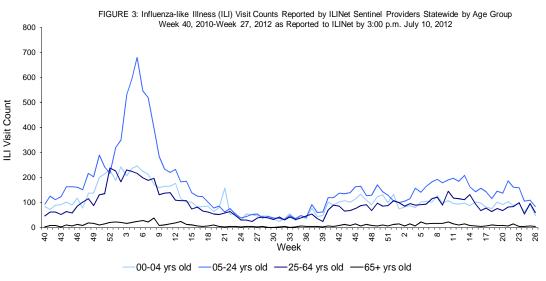


FIGURE 2: Percentage of Visits for Influenza-Like Illness (ILI)\* Reported by ILINet Sentinel Providers Statewide,

\*ILI = Influenza-like illness, fever >100°F AND sore throat and/or cough *in the absence* of another known cause. ^There is no week 53 during the 2009-2010, 2010-2011, and 2011-12 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.

**FIGURE 3** shows ILI visit counts reported by ILINet sentinel providers statewide by age group.

ILI visit counts are decreasing in the 0-64 age group in week 27. ILI visit counts are flat in the 65+ age group in week 27.



†Data presented here are counts, not proportions as included in Figure 2. This is because age group denominator data is not available through ILINet.

## Influenza and ILI Outbreaks

In week 27 there were two influenza or ILI outbreaks reported via EpiCom.

- **DeSoto:** A correctional institution reported 6/286 residents with ILI. Three specimens were collected and all three tested positive by PCR at BOL for influenza B. Cases continue to appear in this facility. A total of 37 people were reported with ILI. All ill residents were placed in a dorm until symptom-free for 72 hours.
- Miami-Dade: An assisted living facility reported that 10/50 residents and 1/20 staff had ILI. Two residents were hospitalized and both tested positive for influenza B by rapid test. Miami-Dade CHD collected four specimens, all of which tested PCR positive for influenza B at BOL. A fifth specimen was collected on one of the hospitalized patients and it also tested PCR positive for influenza B at BOL.

Five influenza or ILI outbreaks were reported via EpiCom in summer 2011-12.

## ESSENCE Syndromic Surveillance Summary-Statewide

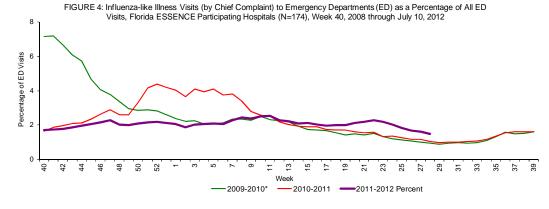
Florida uses ESSENCE for syndromic surveillance, which currently collects data daily from 174 hospital emergency departments (ED). These data are processed into 11 different syndrome categories based on the patient's chief complaint. One of the categories is ILI, which is composed of chief complaints that include the words "influenza" or "flu," or complaints that contain fever plus cough and/or sore throat.

FIGURE 4 shows ESSENCE data on ILI visits to EDs as a percentage of all ED Visits.

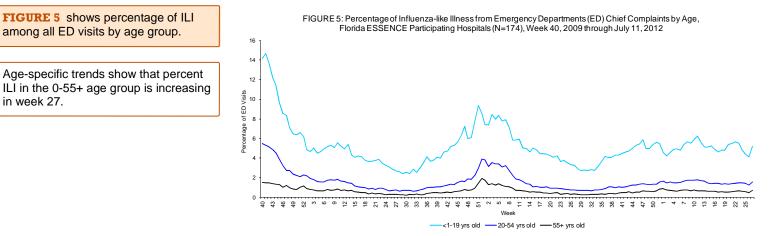
Overall activity for influenza-like illness reported in ESSENCE is elevated compared to levels seen in previous non-pandemic seasons at this time.

among all ED visits by age group.

in week 27.



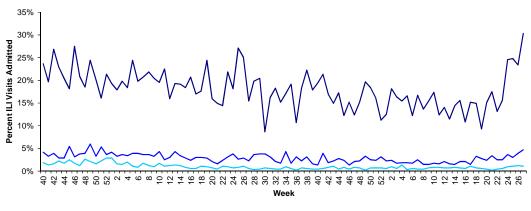
\*There is no week 53 for the 2007-2008, 2009-2010, and 2010-2011 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.



One hundred five ESSENCE participating facilities are able to provide discharge disposition data for their ED visits going back to week 40, 2010. Using this information, the percent of ED visits for ILI that result in hospitalization can be calculated. The highest percentage of admissions is in the 55+ years old age group. The low number of visits in the 55+ age group causes variability in the ILI admission percentage from week to week.

FIGURE 6 shows the percentage of ED visits for ILI that resulted in hospitalization, by age group.

FIGURE 6: Percentage of ED Visits Resulting for ILI Resulting in Hospital Admission, Hospitals Reporting Discharge Disposition (N=105), Week 40, 2010 to Week 27, 2012



0-19 yrs old \_\_\_\_\_ 20-54 yrs old \_\_\_\_\_ 55+ yrs old

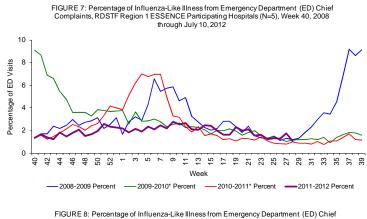
## **ESSENCE Syndromic Surveillance Summary-Regional**

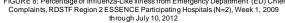
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#### FIGURE 7 - FIGURE 13 describe ED chief complaint data from ESSENCE by Regional Domestic Security Task Force (RDSTF).

ILI activity in ESSENCE is elevated over previous years at this time in Region 5 and 7.







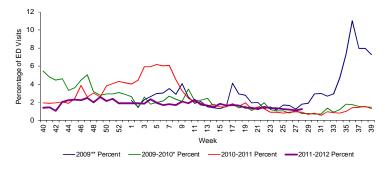
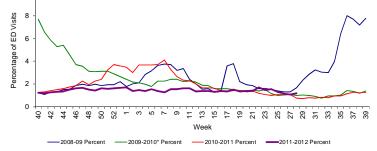
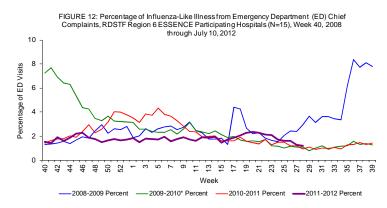
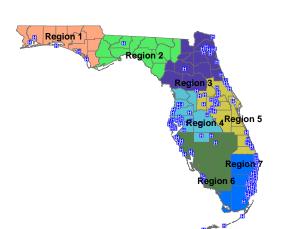
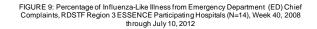


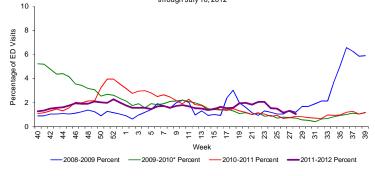
FIGURE 10: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 4 ESSENCE Participating Hospitals (N=31), Week 40, 2008 through July 10, 2012











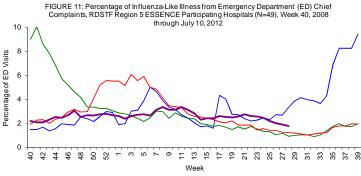


FIGURE 13: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 7 ESSENCE Participating Hospitals (N=48), Week 40, 2008 through July 10, 2012 8 Percentage of ED Visits 6 4 2 0 σ 4 42 4 46 48 50 52 Ξ Week



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\*There is no week 53 for the 2009-2010, 2010-2011 and 2011-2012 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1. \*\*Historical data for region 2 is only available beginning week 1, 2009.

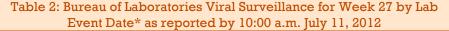
#### **Bureau of Laboratories Viral Surveillance**

**Table 2** shows the number of specimens tested by the Bureau of Laboratories (BOL), how many are influenza positive, and how many are H1N1 or other influenza subtypes.

FIGURE 14 - FIGURE 15 use BOL viral surveillance data to track the progress of influenza infection over time. They include weekly information on how many specimens are tested by the BOL, what proportion of those test positive for influenza, and what subtypes are found for the positive influenza specimens.

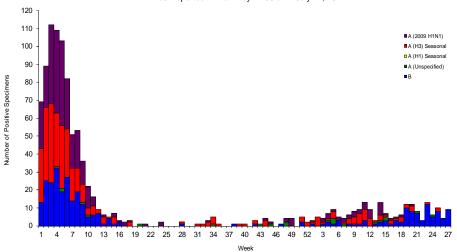
Small numbers of influenza specimens submitted to BOL tested positive for influenza A H3, 2009 H1N1, and influenza B.

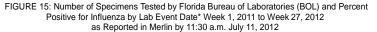
Influenza B has been the most common strain detected by BOL in recent weeks.

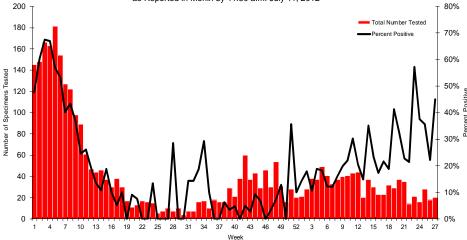


	Current Week 27	Previous Week 26
Total Specimens Tested	20	18
Influenza Positive Specimens (% of total)	9 (45.0%)	4 (22.2%)
H1N1 Positive Specimens (% of influenza positives)	-	-
H3 Influenza A	-	-
Influenza A Unspecified	-	-
Influenza B Unspecified	9 (100%)	4 (100%)

FIGURE 14: Number of Influenza-Positive Specimens Tested by the Florida Bureau of Laboratories (BOL) by Subtype by Lab Event Date\* Week 1, 2011 to Week 27, 2012 as Reported in Merlin by 11:30 a.m. July 11, 2012







\*Please note that lab event date is defined as the earliest of the following dates associated with the lab: date 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.

For instructions on how to use the Flu Lab Report, please see the Guide to Flu Lab Report on the Bureau of Epidemiology website: http://www.doh.state.fl.us/disease\_ctrl/epi/htopics/flu/FluLabReportGuide.pdf

# **County Influenza Activity**

As of 11:00 a.m. July 5, 2012 a total of 33 (49%) counties had reported their weekly level of influenza activity. During the summer months, counties have the option of continuing to report 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 27 (ending July 7, 2012) as Reported by 11:00 a.m. July 11, 2012			
Activity Level	Week 26 Number of Counties	Week 27 Number of Counties	Week 27 Counties
No Report	38	35	Baker, Brevard, Calhoun, Citrus, Columbia, Dade, Desoto, Dixie, Escambia, Franklin, Gilchrist, Glades, Hardee, Hendry, Hillsborough, Indian River, Jackson, Jefferson, Lafayette, Lee, Liberty, Martin, Monroe, Nassau, Pasco, Pinellas, Putnam, Santa Rosa, Sarasota, Sumter, Taylor, Volusia, Walton, Washington
No Activity	13	16	Bay, Charlotte, Flagler, Gadsden, Gulf, Hamilton, Hernando, Highlands, Holmes, Leon, Madison, Okeechobee, Seminole, Suwannee, Union, Wakulla
Mild	16	16	Alachua, Broward, Clay, Collier, Duval, Lake, Levy, Manatee, Marion, Okaloosa, Orange, Osceola, Palm Beach, Polk, St. Johns, St. Lucie
Moderate	1	1	Bradford
Widespread	-	-	-

#### Map 2: Weekly County Influenza Activity for Week 27 as Reported by 11:00 a.m. July 11, 2012

A total of 33 counties report influenza activity in week 27. Most reporting counties reported no or mild activity. One county reports moderate activity.

