Week 32: August 5 – 11, 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.

National:

Since July, 2012, over 150 people in four states have been infected with a variant strain of influenza A H3N2, also known as H3N2v. The H3N2v strain originates from influenza that circulates in pigs. All persons infected with H3N2v have reported direct or indirect contact with swine. Most cases have occurred in children; no deaths have been reported. **No cases of H3N2v infection have been reported in Florida.** More information can be found at: http://www.cdc.gov/flu/swineflu/influenza-variant-viruses-h3n2v.htm

State:

FDOH influenza and influenza-like illness (ILI) surveillance systems are showing an unusual amount of activity for this time of year. Although flu activity remains sporadic, it has not yet declined to summer baseline levels. ESSENCE emergency department data show elevated percent ILI in some regions compared to previous years at this time. No counties report moderate influenza activity.

- A Brevard County long-term care facility influenza B outbreak was posted to EpiCom in week 32.
- In week 32, one specimen tested PCR-positive for influenza B at the state lab. In recent weeks, influenza B has been the most common influenza subtype identified by the state lab.

TABLE 1: Summary of Florida Influenza-Like Illness (ILI) Activity for Week 32

Measure	Difference from previous week	Current week 32	Previous week 31	Page of Report
Percent of visits to ILINet providers for ILI	▼ 0.1	0.6%	0.7%	2
Number of ILI outbreaks reported in EpiCom	A 1	1	0	2
Percent of emergency department visits (from ESSENCE) due to ILI	▼ 0.1	1.2%	1.3%	3
Number of laboratory specimens that were positive for influenza out of total submissions	▼ 5	1/10	6/8	5
Number of counties reporting moderate or widespread influenza activity	No Change	0	0	6

August 15, 2012

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

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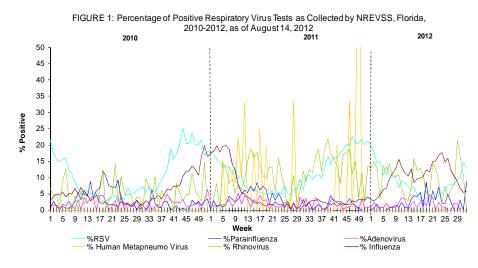
NREVSS Respiratory Virus Surveillance

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. Twenty-eight facilities reported in week 32.

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 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 Bureau of Public Health laboratories (BPHL) for confirmatory testing.

FIGURE 2 shows the percentage of visits for ILI* reported by ILINet Sentinel Providers statewide.

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.

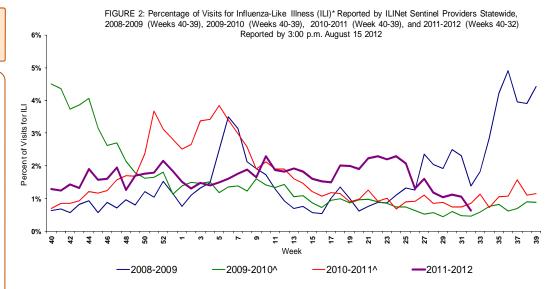
60 of 110 ILINet Sentinels have reported visit counts as of 11:00 a.m., August 15, 2012.

13 of 16 ILINet Super-Sentinels have reported visit counts as of 11:00 a.m., August 15, 2012.

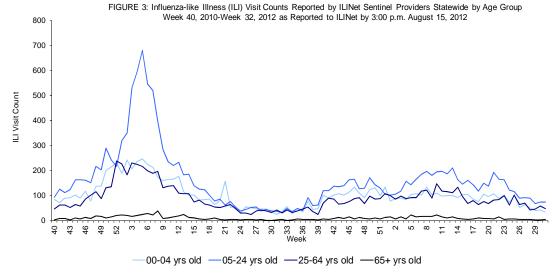
Note: In response to several states' identifying recent infections due to H3N2v, FDOH is enhancing its virologic surveillance. ILI sentinel physicians have been advised to submit more specimens to the BPHL from children under age 18. BPHL is able to detect presumptive positives for both seasonal and novel influenza viruses through routine testing. No cases of variant H3N2 influenza A have been reported in Florida. Detailed guidance documents have been sent to sentinel sites and county health departments.

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

ILI visit counts are flat or declining in all age groups.



*ILI = Influenza-like illness, fever >100°F AND sor e 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.



†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 32 there was one influenza or ILI outbreak reported via EpiCom.

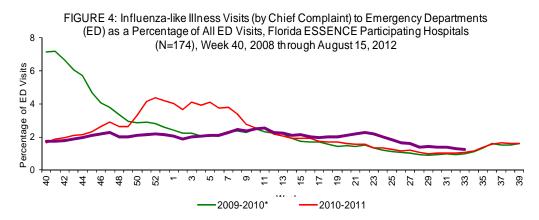
Brevard: A long term care facility reported that 15 out 60 residents (20%) had ILI. Four residents tested positive for influenza B by rapid antigen test. Rates of vaccination at the facility were 95% for residents and 40% for staff. All residents and non-immunized employees were prophylaxed with oseltamivir. Four specimens tested positive at BPHL for influenza B; three of these were in residents who previously tested positive by rapid test. All positive specimens by rapid test and PCR were from residents that had received the seasonal influenza vaccine in the fall of 2011.

Eight influenza or ILI outbreaks have been reported via EpiCom in summer 2011-12.

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.

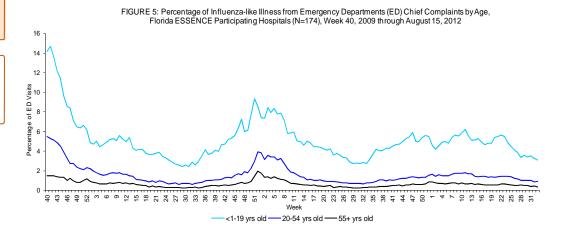
Overall activity for ILI reported in ESSENCE is elevated compared to levels seen in previous non-pandemic seasons at this time.



*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.

FIGURE 5 shows percentage of ILI among all ED visits by age group.

Age-specific trends show that percent ILI in the 0-19 age group is decreasing and that the percent ILI in the 20-55+ age group is flat in week 32.



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

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 Regions 2 and 5.

Map 1: Hospitals Reporting Emergency Department (ED) Data to Florida ESSENCE, August 15, 2012 (N=174)



FIGURE 7: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief

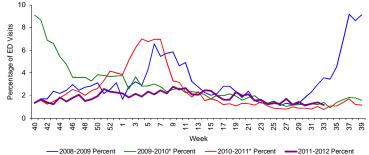
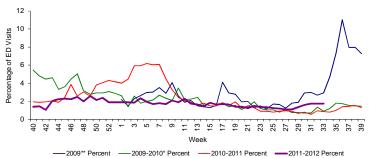
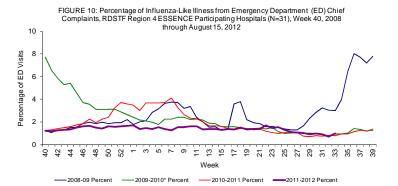
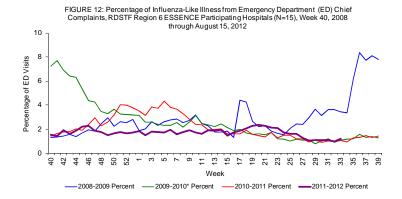


FIGURE 8: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 2 ESSENCE Participating Hospitals (N=2), Week 1, 2009 through August 15, 2012







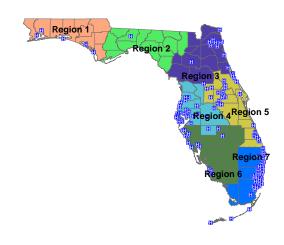


FIGURE 9: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 3 ESSENCE Participating Hospitals (N=14), Week 40, 2008 through August 15, 2012

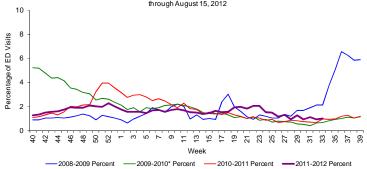


FIGURE 11: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 5 ESSENCE Participating Hospitals (N=49), Week 40, 2008

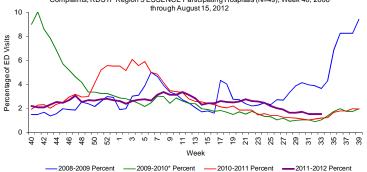
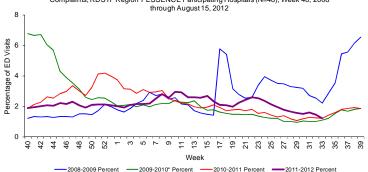


FIGURE 13: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 7 ESSENCE Participating Hospitals (N=48), Week 40, 2008



^{*}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.

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

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

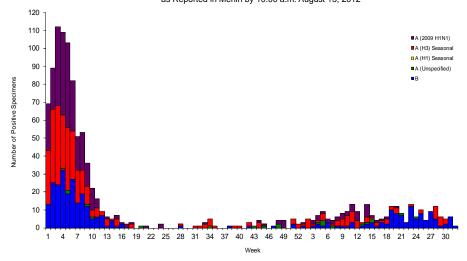
Small numbers of influenza specimens submitted to BPHL tested positive for influenza A H3, 2009 H1N1, and influenza B.

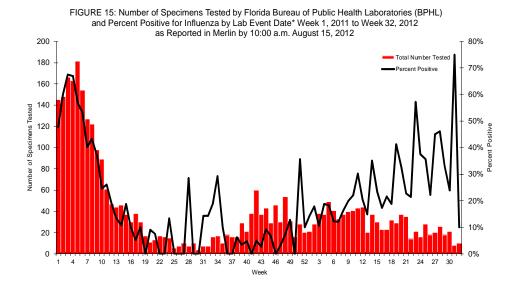
Influenza B has been the most common strain detected by BPHL in recent weeks.

Table 2: Bureau of Public Health Laboratories Viral Surveillance for Week 32 by Lab Event Date* as reported by 10:00 a.m. August 15, 2012

	Current Week 32	Previous Week 31
Total Specimens Tested	10	8
Influenza Positive Specimens (% of total)	1 (10.0%)	6 (75.0%)
H1N1 Positive Specimens (% of influenza positives)	-	-
H3 Influenza A	-	-
Influenza A Unspecified	-	-
Influenza B Unspecified	1 (100.0%)	6 (100.0%)

FIGURE 14: Number of Influenza-Positive Specimens Tested by the Florida Bureau of Public Health Laboratories (BPHL) by Subtype by Lab Event Date* Week 1, 2011 to Week 32, 2012 as Reported in Merlin by 10:00 a.m. August 15, 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.

As of 11:00 a.m. August 15, 2012 a total of 26 (39%) 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 32 (ending August 11, 2012) as Reported by 11:00 a.m. August 15, 2012

Activity Level	Week 31 Number of Counties	Week 32 Number of Counties	Week 32 Counties
No Report	38	42	Baker, Brevard, Citrus, Columbia, Desoto, Dixie, Escambia, Franklin, Gadsden, Gilchrist, Glades, Hardee, Hendry, Hernando, Hillsborough, Indian River, Jackson, Jefferson, Lafayette, Lee, Leon, Madison, Manatee, Martin, Monroe, Nassau, Okaloosa, Osceola, Pasco, Pinellas, Putnam, Santa Rosa, Sarasota, St. Johns, Sumter, Suwannee, Taylor, Volusia, Wakulla, Walton, Washington
No Activity	14	15	Bay, Bradford, Broward, Calhoun, Charlotte, Flagler, Gulf, Hamilton, Highlands, Holmes, Levy, Liberty, Okeechobee, Polk, Union
Mild	16	11	Alachua, Clay, Collier, Dade, Duval, Lake, Marion, Orange, Palm Beach, Seminole, St. Lucie
Moderate	0	0	-
Widespread	-	-	-

Map 2: Weekly County Influenza Activity for Week 32 as Reported by 11:00 a.m. August 15, 2012

A total of 26 counties report influenza activity in week 32. Most reporting counties reported no or mild activity. No counties report moderate activity.

