



Week 28: July 8 – July 14, 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. No counties report moderate activity.

- Two ILI outbreaks were reported to EpiCom in week 28. Alachua County Health Department (ACHD) investigated ILI in a summer camp in a neighboring county, which reported 24/160 campers with ILI. Four campers tested rapid antigen positive for influenza. Influenza B was found in three specimens, subtype information for the fourth specimen is unavailable. A tour group visiting Orange County reported 28/650 group members with ILI. Five group members tested PCR positive for influenza A H3 at the state lab. Two more group members tested rapid-antigen positive for influenza A at a local healthcare facility.
- In week 28, twelve specimens tested PCR-positive for influenza at the state lab. Seven specimens tested positive for influenza A H3. Five more 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).

July 18, 2012

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

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TABLE 1: Summary of Florida Influenza-Like Illness (ILI) Activity for Week 28

Measure	Difference from previous week	Current week 28	Previous week 27	Page of Report
Percent of visits to ILINet providers for ILI	▼ 0.3	1.0%	1.3%	2
Number of ILI outbreaks reported in EpiCom	No Change	2	2	2
Percent of emergency department visits (from ESSENCE) due to ILI	▼ 0.1	1.5%	1.6%	3
Number of laboratory specimens that were positive for influenza out of total submissions	▲ 3	12/26	9/20	5
Number of counties reporting moderate influenza activity	▼ 1	0	1	6
Number of counties reporting widespread influenza activity	No Change	0	0	6

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NREVSS Respiratory Virus Surveillance

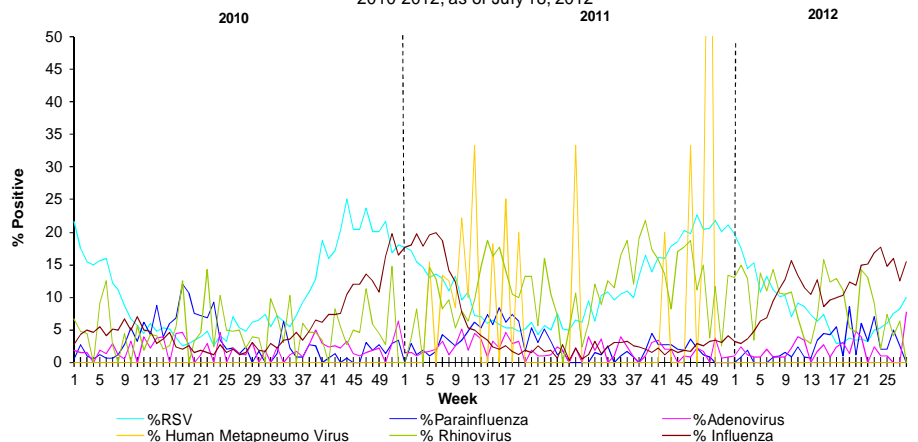
The National Respiratory and Enteric Virus Surveillance System (NREVSS) collects data from laboratory facilities around the country on a weekly basis. NREVSS monitors temporal and geographic patterns of RSV, human parainfluenza viruses, human metapneumo virus (HMPV), respiratory and enteric adenoviruses, and rotavirus. Twenty-eight facilities reported in week 28.

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

FIGURE 1: Percentage of Positive Respiratory Virus Tests as Collected by NREVSS, Florida, 2010-2012, as of July 18, 2012



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.

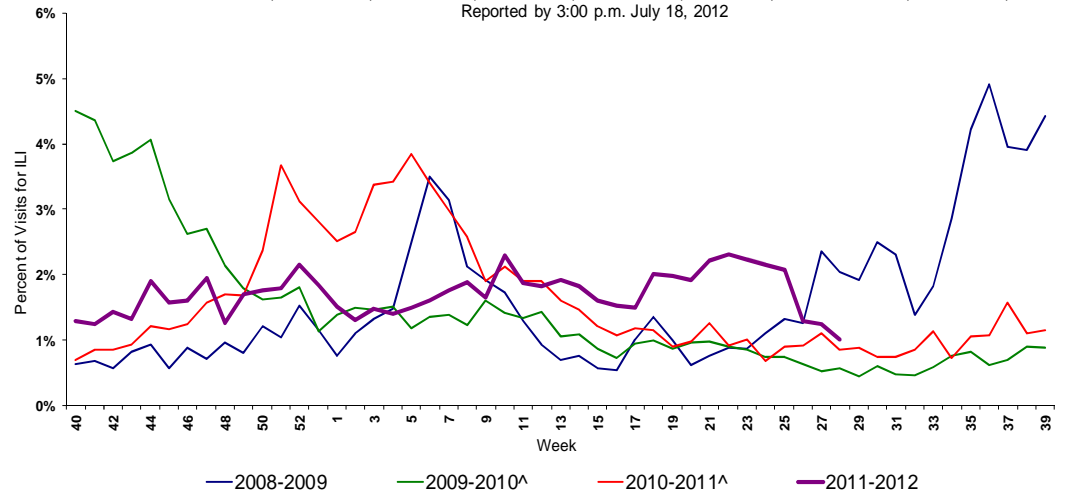
FIGURE 2 shows the percentage of visits for ILI* reported by ILINet Sentinel Providers statewide.

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.**

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, 2008-2009 (Weeks 40-39), 2009-2010 (Weeks 40-39), 2010-2011 (Week 40-39), and 2011-2012 (Weeks 40-28) Reported by 3:00 p.m. July 18, 2012

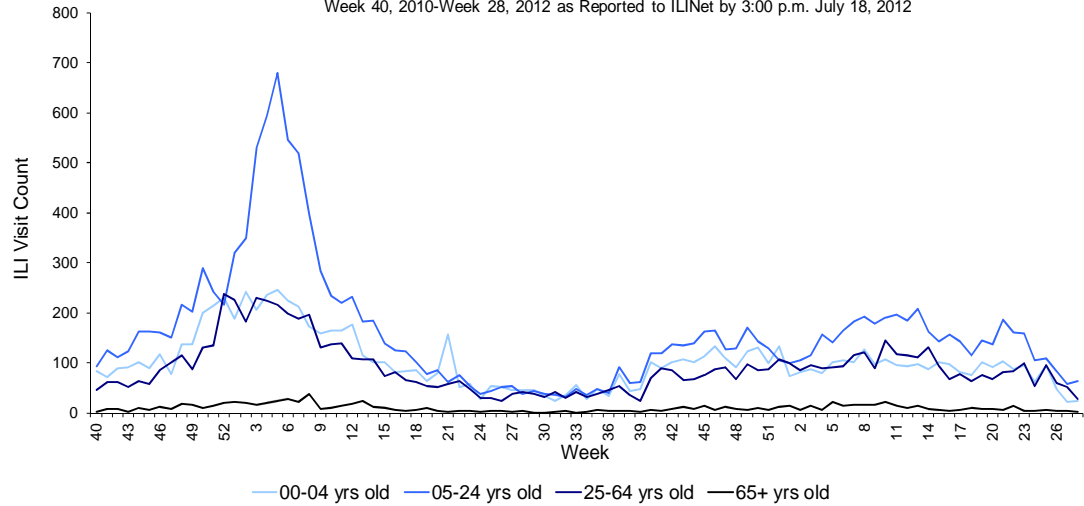


*ILI = Influenza-like illness, fever >100°F AND sore throat and/or cough *in the absence of another known cause.*
 ^There is no week 53 during the 2009-2010, 2010-2011, and 2011-12 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.

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

ILI visit counts are decreasing in the 5-64 age group in week 28. ILI visit counts are flat in the 65+ age group and in the 0-4 age group in week 28.

FIGURE 3: Influenza-like Illness (ILI) Visit Counts Reported by ILINet Sentinel Providers Statewide by Age Group Week 40, 2010-Week 28, 2012 as Reported to ILINet by 3:00 p.m. July 18, 2012



†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 28 there were **two** influenza or ILI outbreaks reported via EpiCom.

- **Alachua:** A summer camp in a neighboring county reported 24/160 campers with ILI. Rapid influenza testing was performed on four campers, three campers tested rapid antigen positive for influenza B. The fourth camper tested positive for influenza by rapid test at a local pediatrician; subtype information is unavailable. ACHD advised the camp of prevention and control measures.
- **Orange:** A tour group from South America reported 28/650 group members with ILI. Orange County Health Department (OCHD) collected five specimens, all of which tested positive for influenza A H3 at BOL. Two other group members tested rapid-antigen test positive for influenza A at a local healthcare facility. Most group members had not received seasonal influenza vaccination. OCHD recommended control and prevention measures. Investigation is ongoing.

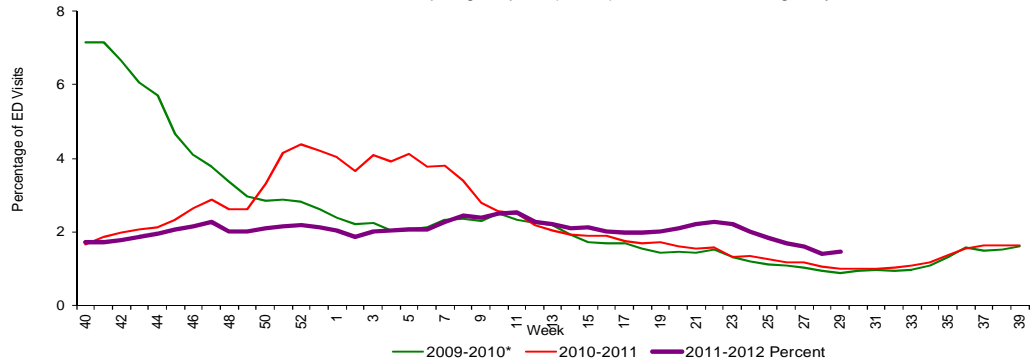
Seven influenza or ILI outbreaks were reported via EpiCom in summer 2011-12.

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

FIGURE 4: Influenza-like Illness Visits (by Chief Complaint) to Emergency Departments (ED) as a Percentage of All ED Visits, Florida ESSENCE Participating Hospitals (N=174), Week 40, 2008 through July 17, 2012

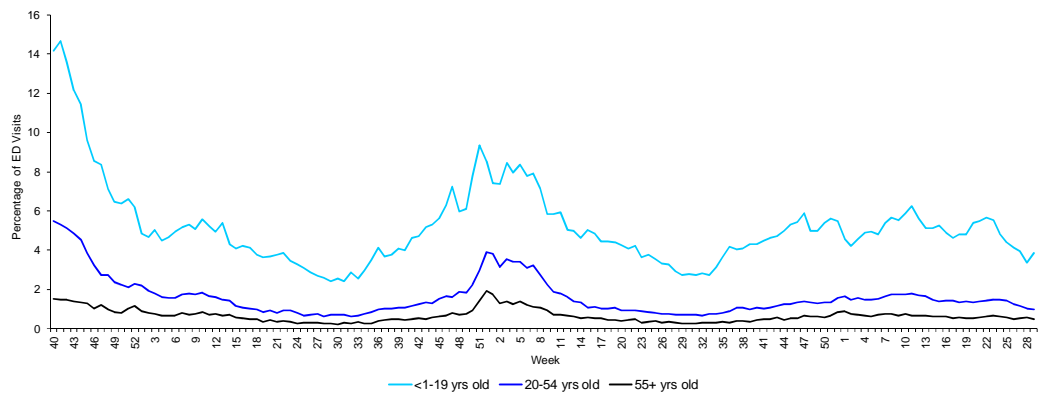


*There is no week 53 for the 2007-2008, 2009-2010, and 2010-2011 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.

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 increasing in week 28. Percent ILI is flat in the 20-55+ age group.

FIGURE 5: Percentage of Influenza-like Illness from Emergency Departments (ED) Chief Complaints by Age, Florida ESSENCE Participating Hospitals (N=174), Week 40, 2009 through July 17, 2012



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 28, 2012

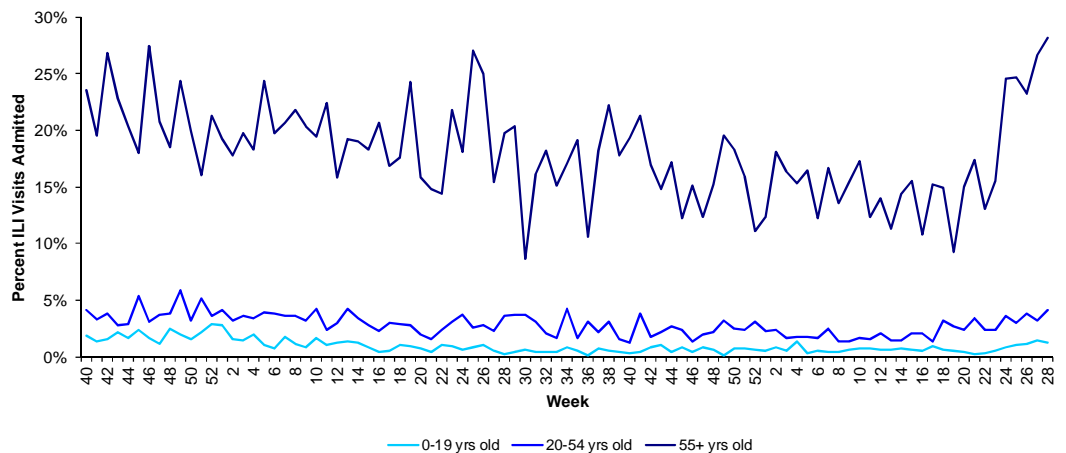


FIGURE 7 - FIGURE 13 describe ED chief complaint data from ESSENCE by Regional Domestic Security Task Force (RDSTF).

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

Map 1: Hospitals Reporting Emergency Department (ED) Data to Florida ESSENCE, July 18, 2012 (N=174)

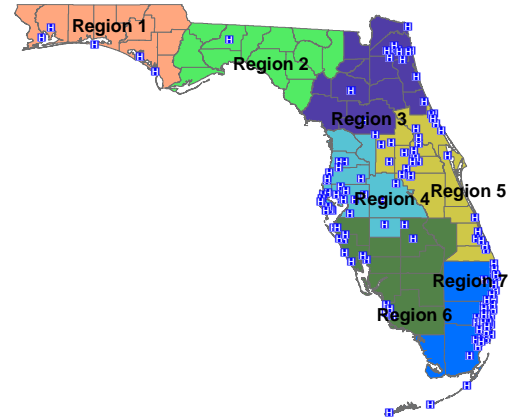


FIGURE 7: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 1 ESSENCE Participating Hospitals (N=5), Week 40, 2008 through July 17, 2012

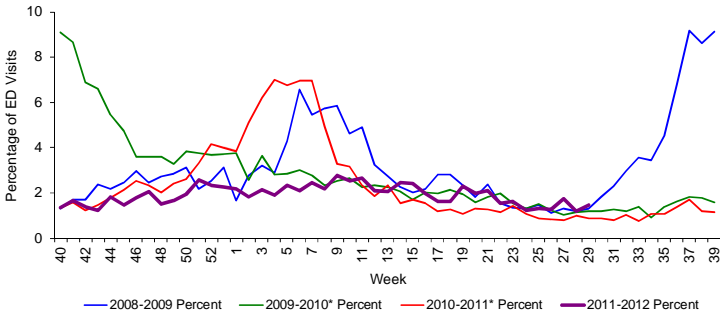


FIGURE 8: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 2 ESSENCE Participating Hospitals (N=2), Week 1, 2009 through July 18, 2012

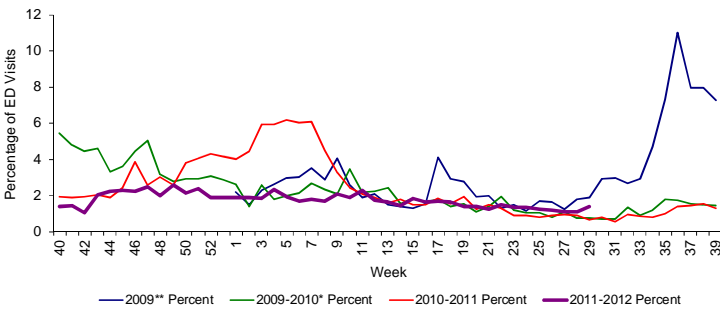


FIGURE 9: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 3 ESSENCE Participating Hospitals (N=14), Week 40, 2008 through July 18, 2012

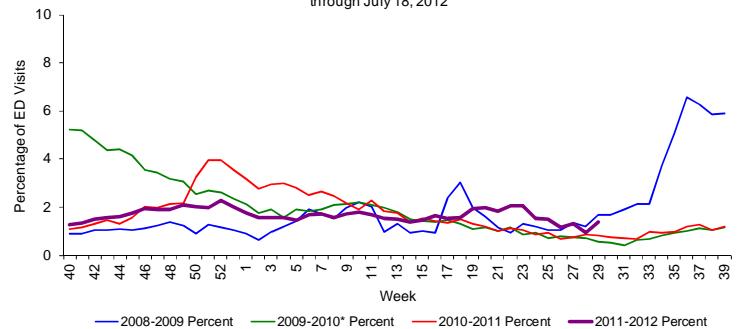


FIGURE 10: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 4 ESSENCE Participating Hospitals (N=31), Week 40, 2008 through July 18, 2012

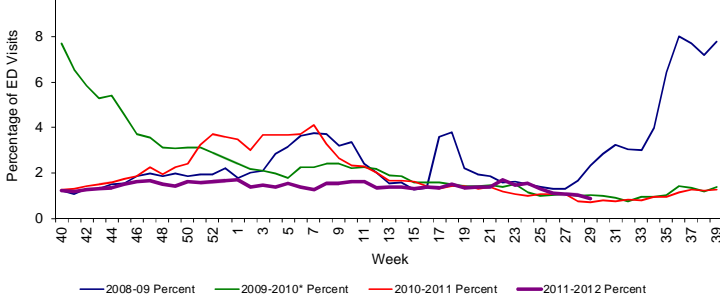


FIGURE 11: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 5 ESSENCE Participating Hospitals (N=49), Week 40, 2008 through July 18, 2012

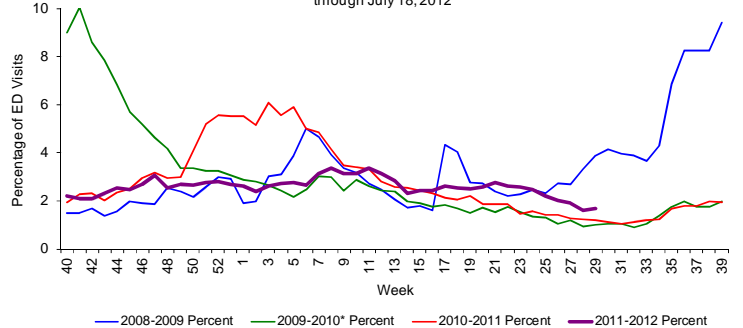


FIGURE 12: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 6 ESSENCE Participating Hospitals (N=15), Week 40, 2008 through July 18, 2012

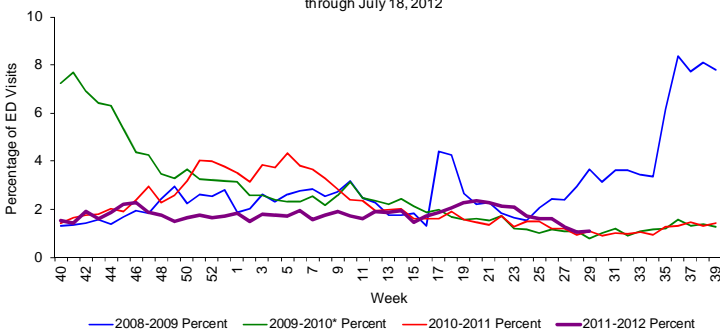


FIGURE 13: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 7 ESSENCE Participating Hospitals (N=48), Week 40, 2008 through July 18, 2012

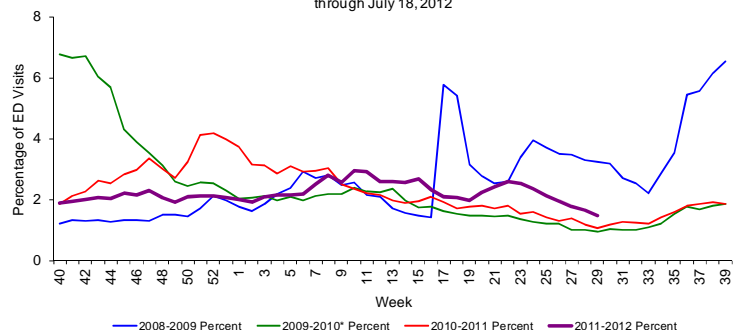


Table 2 shows the number of specimens tested by the Bureau of Laboratories (BOL), how many are influenza positive, and how many are H1N1 or other influenza subtypes.

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.

Table 2: Bureau of Laboratories Viral Surveillance for Week 28 by Lab Event Date* as reported by 10:00 a.m. July 18, 2012

	Current Week 28	Previous Week 27
Total Specimens Tested	26	20
Influenza Positive Specimens (% of total)	12 (46.2%)	9 (45.0%)
H1N1 Positive Specimens (% of influenza positives)	-	-
H3 Influenza A	7 (58.3%)	-
Influenza A Unspecified	-	-
Influenza B Unspecified	5 (41.7%)	9 (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 28, 2012 as Reported in Merlin by 10:00 a.m. July 18, 2012

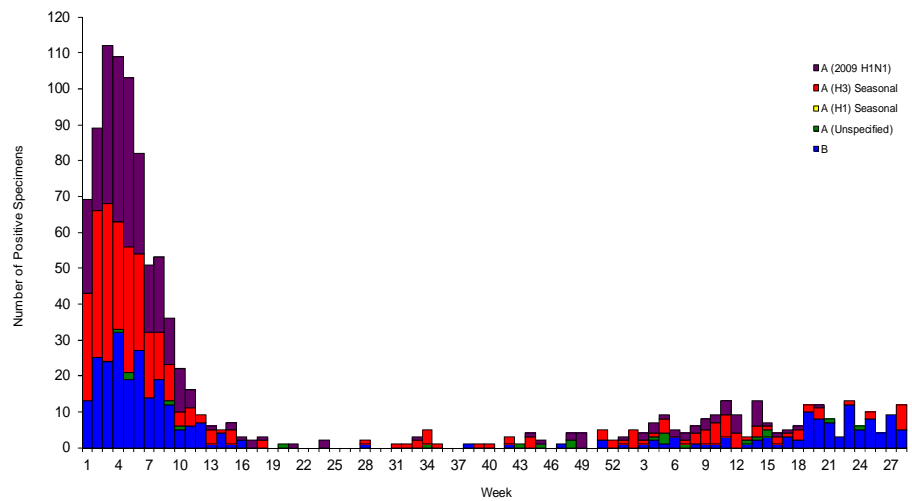
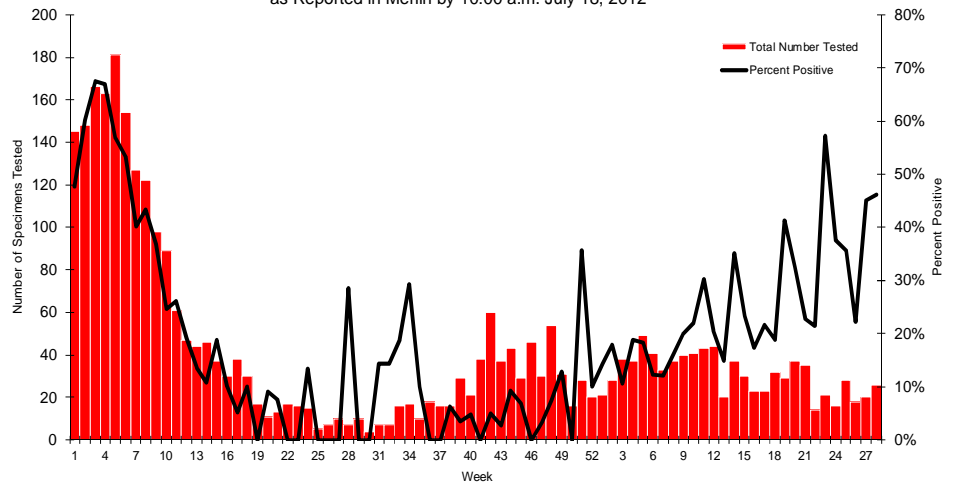


FIGURE 15: Number of Specimens Tested by Florida Bureau of Laboratories (BOL) and Percent Positive for Influenza by Lab Event Date* Week 1, 2011 to Week 28, 2012 as Reported in Merlin by 10:00 a.m. July 18, 2012



*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

As of 11:00 a.m. July 18, 2012 a total of 30 (45%) 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 28 (ending July 14, 2012)
as Reported by 11:00 a.m. July 18, 2012**

Activity Level	Week 27 Number of Counties	Week 28 Number of Counties	Week 28 Counties
No Report	38	37	Baker, Brevard, Citrus, Columbia, Desoto, Dixie, Escambia, Franklin, Gadsden, Gilchrist, Glades, Hardee, Hendry, Hillsborough, Indian River, Jefferson, Lafayette, Lee, Leon, Madison, Martin, Monroe, Nassau, Okaloosa, Pasco, Pinellas, Putnam, Santa Rosa, Sarasota, Sumter, Suwannee, Taylor, Volusia, Wakulla, Walton, Washington
No Activity	13	14	Bay, Bradford, Calhoun, Charlotte, Flagler, Gulf, Hamilton, Hernando, Holmes, Jackson, Liberty, Okeechobee, Seminole, Union
Mild	16	17	Alachua, Broward, Clay, Collier, Dade, Duval, Highlands, Lake, Levy, Manatee, Marion, Orange, Osceola, Palm Beach, Polk, St. Johns, St. Lucie
Moderate	1	0	-
Widespread	-	-	-

**Map 2: Weekly County Influenza Activity for Week 28
as Reported by 11:00 a.m. July 18, 2012**

A total of 30 counties report influenza activity in week 28. Most reporting counties reported no or mild activity. No counties reported moderate activity.

