



Week 24: June 10 – June 16, 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 counties compared to previous years at this time. Most counties report low to no activity. Two counties report moderate activity.

- In week 24, 6 specimens tested PCR-positive for influenza at the state lab. Five specimens tested positive for influenza B. One specimen tested positive for influenza A unspecified. 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).

June 20, 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 24

| Measure | Difference from previous week | Current week 24 | Previous week 23 | Page of Report |
|--|-------------------------------|-----------------|------------------|----------------|
| Percent of visits to ILINet providers for ILI | ▲ 0.1 | 1.8% | 1.7% | 2 |
| Percent of emergency department visits (from ESSENCE) due to ILI | ▼ 0.1 | 2.0% | 2.1% | 3 |
| Number of laboratory specimens that were positive for influenza out of total submissions | ▼ 7 | 6/16 | 13/21 | 5 |
| Number of counties reporting moderate influenza activity | No Change | 2 | 2 | 6 |
| Number of counties reporting widespread influenza activity | No Change | 0 | 0 | 6 |
| Number of counties reporting increasing influenza activity | ▼ 2 | 3 | 5 | 7 |
| Number of counties reporting decreasing influenza activity | ▼ 2 | 9 | 7 | 7 |
| Number of ILI outbreaks reported in EpiCom | ▼ 3 | 0 | 3 | 10 |

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NREVSS Respiratory Virus Surveillance

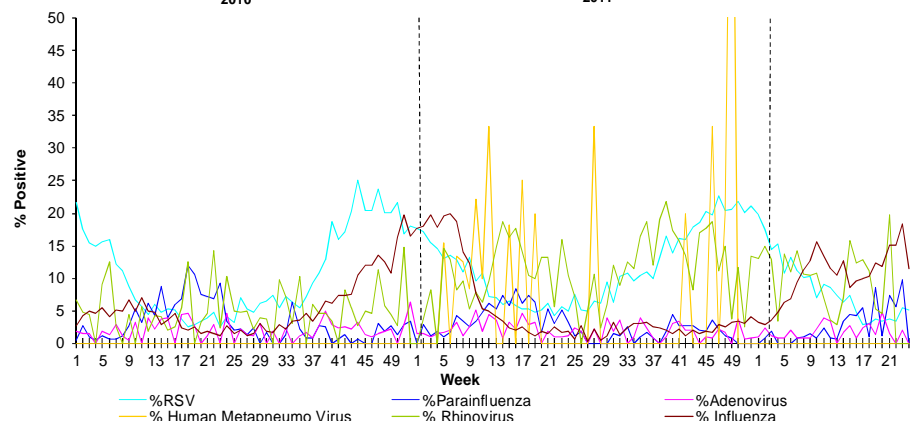
The National Respiratory and Enteric Virus Surveillance System (NREVSS) collects data from laboratory facilities around the country on a weekly basis. NREVSS monitors temporal and geographic patterns of RSV, human parainfluenza viruses, human metapneumo virus (HMPV), respiratory and enteric adenoviruses, and rotavirus. Florida has over 30 participating laboratory facilities. Twenty-eight facilities reported in week 24.

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 June 19, 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.

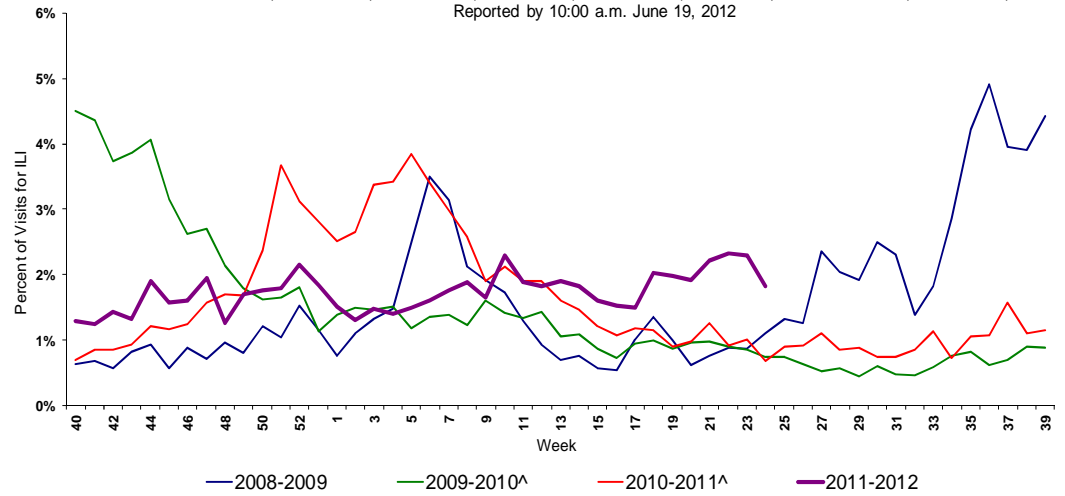
FIGURE 2 shows the percentage of visits for ILI* reported by ILINet Sentinel Providers statewide.

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.**

38 of 110 ILINet Sentinels have reported visit counts as of 11:00 a.m., June 20, 2012.

13 of 16 ILINet Super-Sentinels have reported visit counts as of 11:00 a.m., June 20, 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 40-24) Reported by 10:00 a.m. June 19, 2012

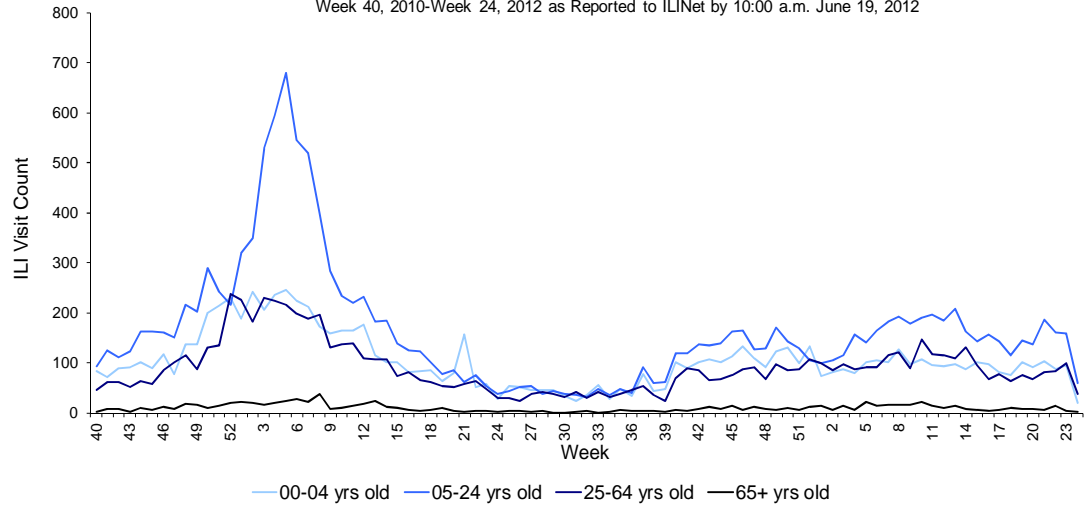


*ILI = Influenza-like illness, fever >100°F AND sore throat and/or cough *in the absence of another known cause.*
 ^There is no week 53 during the 2009-2010, 2010-2011, and 2011-12 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.

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

ILI visit counts are decreasing in all age groups in week 24.

FIGURE 3: Influenza-like Illness (ILI) Visit Counts Reported by ILINet Sentinel Providers Statewide by Age Group Week 40, 2010-Week 24, 2012 as Reported to ILINet by 10:00 a.m. June 19, 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

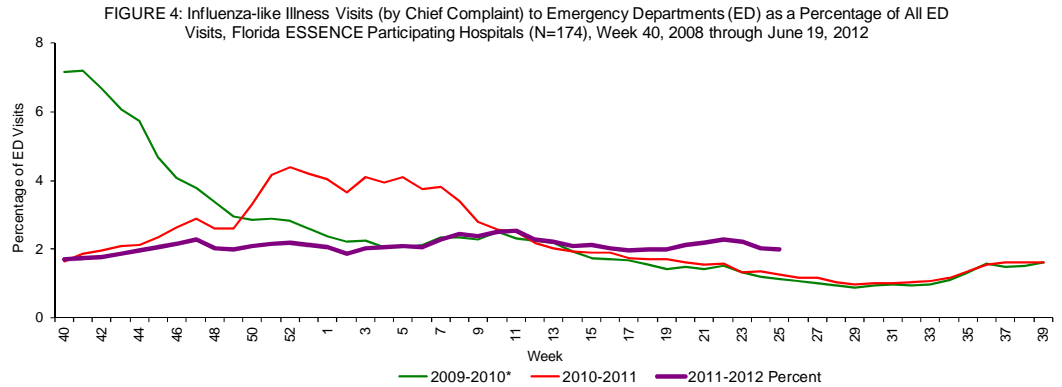
In week 24 there were **no** influenza or ILI outbreaks reported via EpiCom.

Three 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.

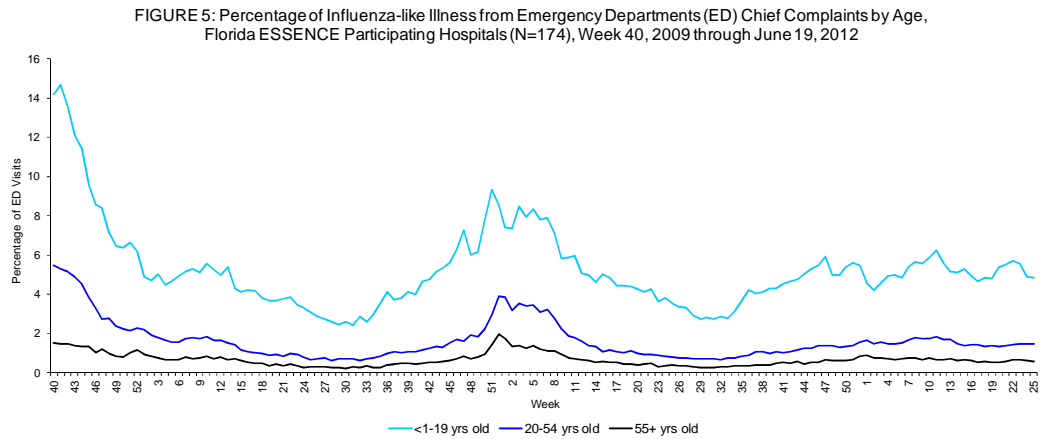
Overall activity for influenza-like illness reported in ESSENCE is elevated compared to levels seen in previous non-pandemic seasons at this time.



*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 0-54 age group is flat and percent ILI is decreasing in the 55+ age group in week 24.



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.

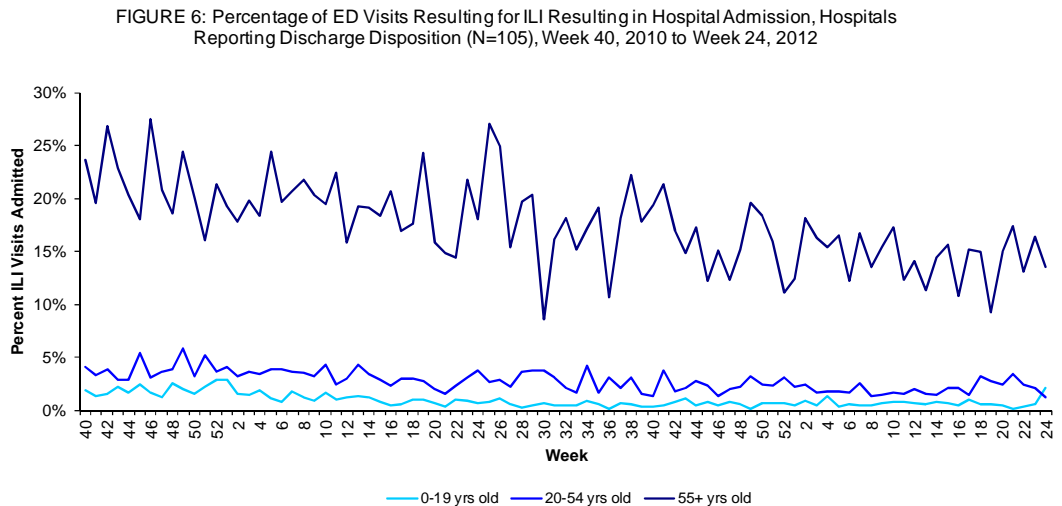


FIGURE 7 - FIGURE 13 describe ED chief complaint data from ESSENCE by Regional Domestic Security Task Force (RDSTF).

ILI activity in ESSENCE is elevated over previous years at this time in Regions 3, 5 and 7.

Map 1: Hospitals Reporting Emergency Department (ED) Data to Florida ESSENCE, June 20, 2012 (N=174)

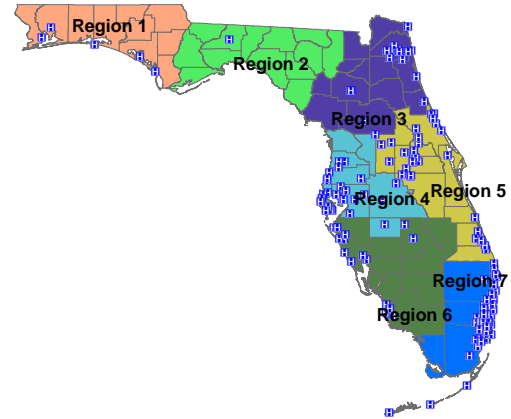


FIGURE 7: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 1 ESSENCE Participating Hospitals (N=5), Week 40, 2008 through June 19, 2012

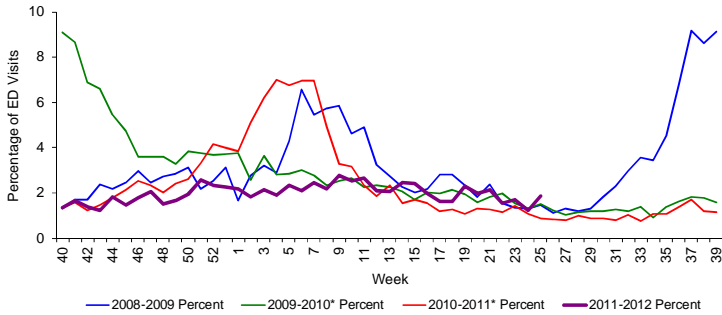


FIGURE 8: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 2 ESSENCE Participating Hospitals (N=2), Week 1, 2009 through June 19, 2012

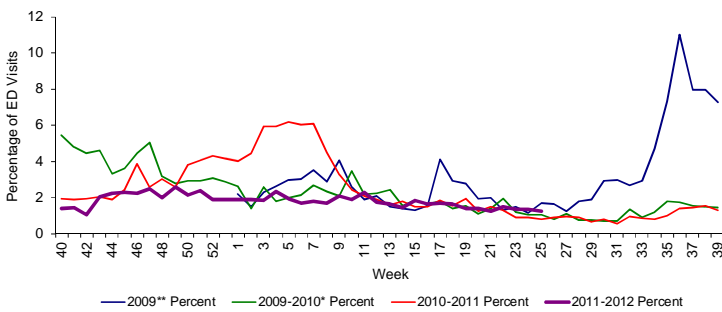


FIGURE 9: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 3 ESSENCE Participating Hospitals (N=14), Week 40, 2008 through June 19, 2012

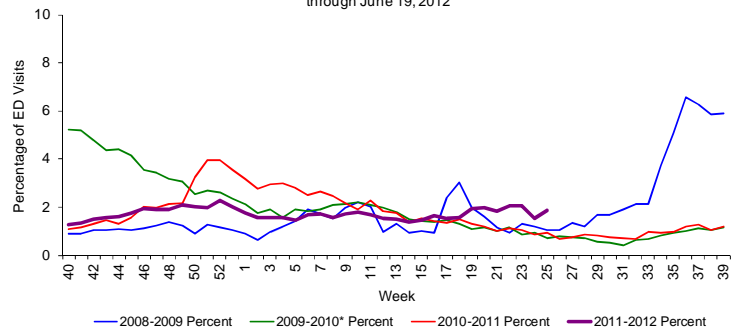


FIGURE 10: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 4 ESSENCE Participating Hospitals (N=31), Week 40, 2008 through June 19, 2012

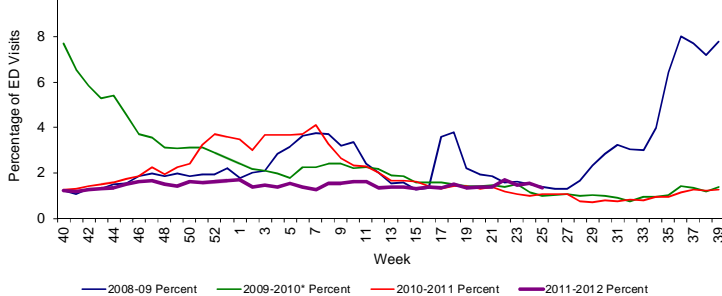


FIGURE 11: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 5 ESSENCE Participating Hospitals (N=49), Week 40, 2008 through June 19, 2012

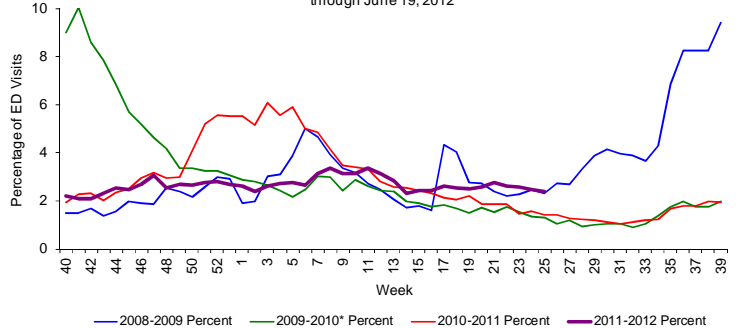


FIGURE 12: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 6 ESSENCE Participating Hospitals (N=15), Week 40, 2008 through June 19, 2012

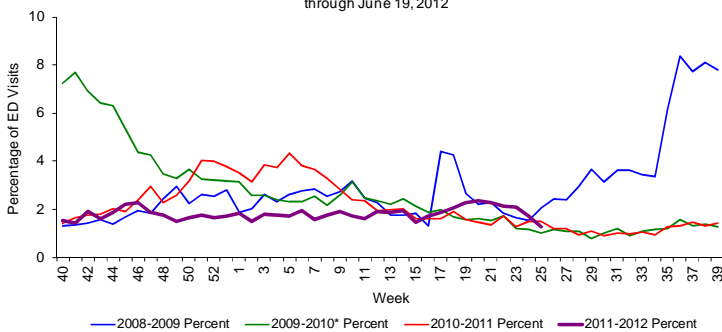


FIGURE 13: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 7 ESSENCE Participating Hospitals (N=48), Week 40, 2008 through June 19, 2012

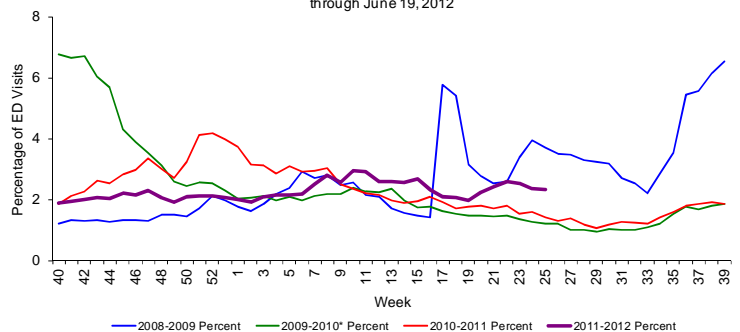


Table 2 shows the number of specimens tested by the Bureau of Laboratories (BOL), how many are influenza positive, and how many are H1N1 or other influenza subtypes.

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 24 by Lab Event Date* as reported by 10:00 a.m. June 20, 2012

| | Current Week 24 | Previous Week 23 |
|--|-----------------|------------------|
| Total Specimens Tested | 16 | 21 |
| Influenza Positive Specimens (% of total) | 6 (37.5) | 13 (61.9%) |
| H1N1 Positive Specimens (% of influenza positives) | - | - |
| H3 Influenza A | - | 1 (7.7%) |
| Influenza A Unspecified | 1 (16.7%) | - |
| Influenza B Unspecified | 5 (83.3%) | 12 (92.3%) |

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 24, 2012 as Reported in Merlin by 11:30 a.m. June 20, 2012

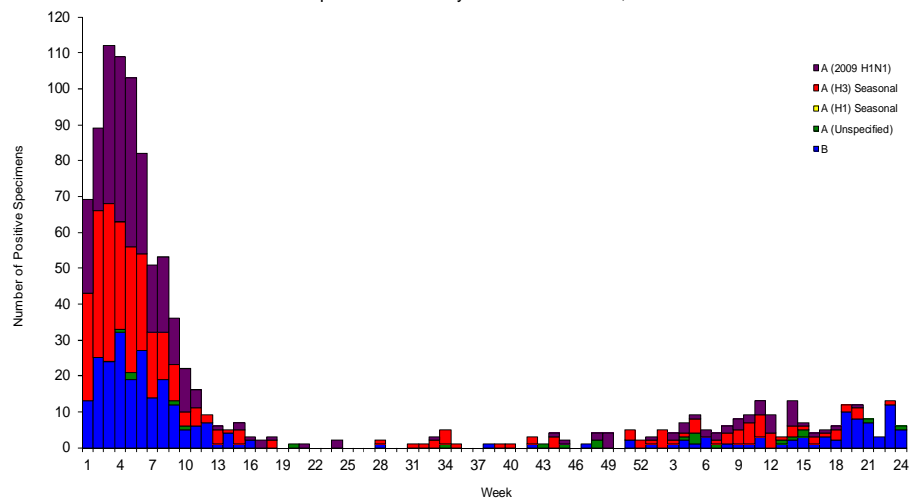
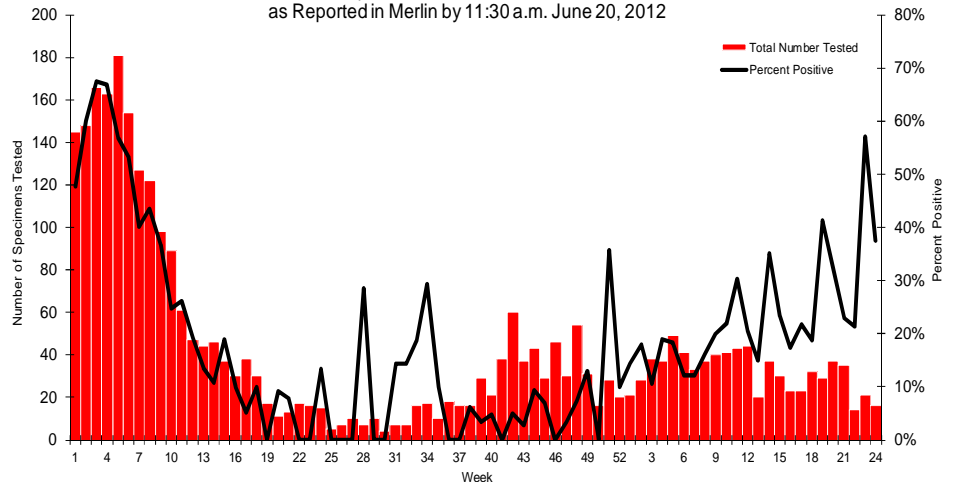


FIGURE 15: Number of Specimens Tested by Florida Bureau of Laboratories (BOL) and Percent Positive for Influenza by Lab Event Date* Week 1, 2011 to Week 24, 2012 as Reported in Merlin by 11:30 a.m. June 20, 2012



*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_ctr/epi/htopics/flu/FluLabReportGuide.pdf

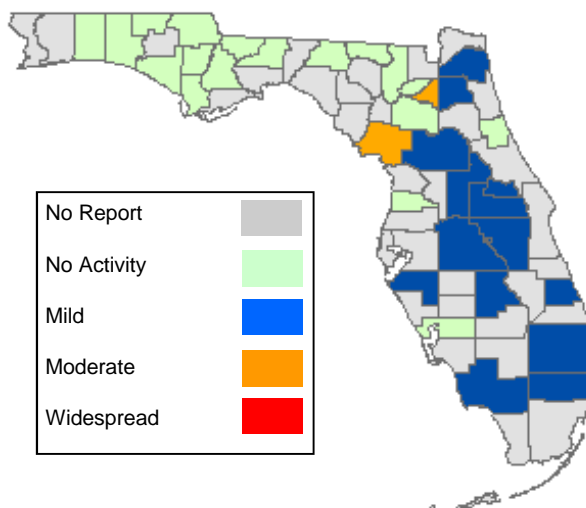
As of 11:00 a.m. June 20, 2012 a total of 34 (51%) counties had reported their weekly level of influenza activity. During the summer months, counties have the option of continuing to report influenza activity. *Please note that data reported by counties after the deadline Tuesday at 5 p.m. are recorded but may not be included in the activity map for previous weeks.*

**TABLE 3: Weekly County Influenza Activity for Week 24 (ending June 16, 2012)
as Reported by 11:00 a.m. June 20, 2012**

| Activity Level | Week 23 Number of Counties | Week 24 Number of Counties | Week 24 Counties |
|----------------|-------------------------------------|-------------------------------------|--|
| No Report | 36 | 33 | Baker, Brevard, Citrus, Dade, Desoto, Dixie, Escambia, Franklin, Gilchrist, Glades, Hardee, Hendry, Hillsborough, Indian River, Jefferson, Lafayette, Lee, Martin, Monroe, Nassau, Okeechobee, Pasco, Pinellas, Putnam, Santa Rosa, Sarasota, St. Johns, Sumter, Suwannee, Taylor, Volusia, Walton |
| No Activity | 15 | 19 | Alachua, Bay, Calhoun, Charlotte, Columbia, Flagler, Gadsden, Gulf, Hamilton, Hernando, Holmes, Jackson, Leon, Liberty, Madison, Okaloosa, Union, Wakulla, Washington |
| Mild | 15 | 14 | Broward, Clay, Collier, Duval, Highlands, Lake, Manatee, Marion, Orange, Osceola, Palm Beach, Polk, Seminole, St. Lucie |
| Moderate | 2 | 2 | Bradford, Levy |
| Widespread | - | - | - |

**Map 2: Weekly County Influenza Activity for Week 24
as Reported by 1100 a.m. June 20, 2012**

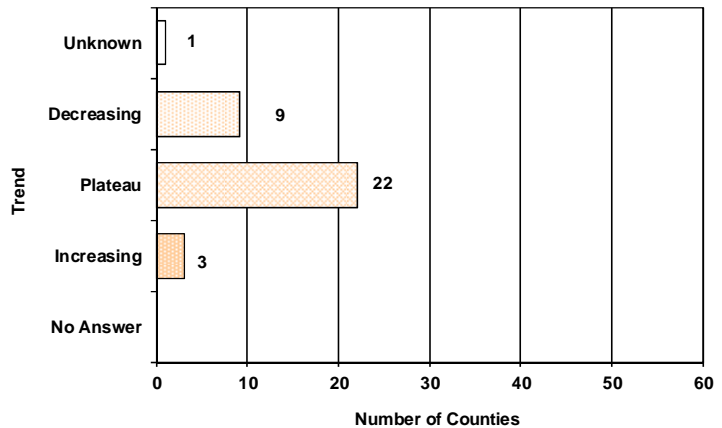
A total of 34 counties report influenza activity in week 24. Most reporting counties reported no or mild activity. Two counties report moderate activity.



County influenza activity data is reported to the Bureau of Epidemiology 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 16-25 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 24, nine counties indicated that activity was decreasing, twenty-two indicated it was about the same as previous weeks, and three indicated that activity was increasing.

FIGURE 16 shows the assessment of the overall influenza activity trend in each county as reported by county health department flu coordinators for week 24 as of 11:00 a.m. June 20, 2012.

FIGURE 16: Assessment of Overall Influenza Activity Trend



Definitions for the County Influenza Activity Trends are available at: 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 17 - FIGURE 18 show the activity levels in various facilities by county as reported by county health department influenza coordinators for week 24 as of 11:00 a.m. June 20, 2012.

FIGURE 17: Assessment of Influenza Activity in Elementary, Middle, and High Schools

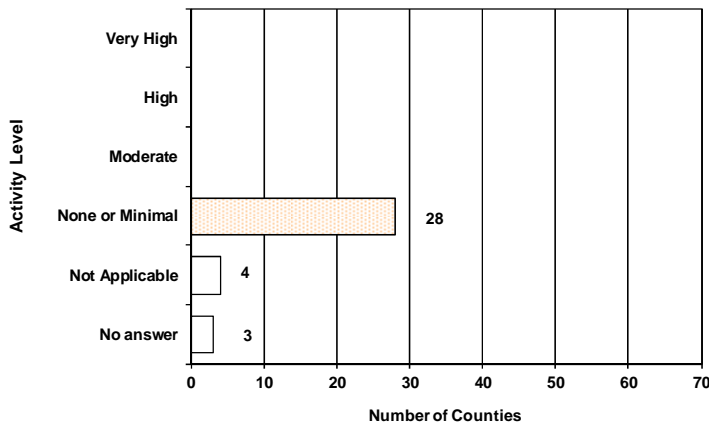


FIGURE 18: Assessment of Influenza Activity in Colleges and Universities

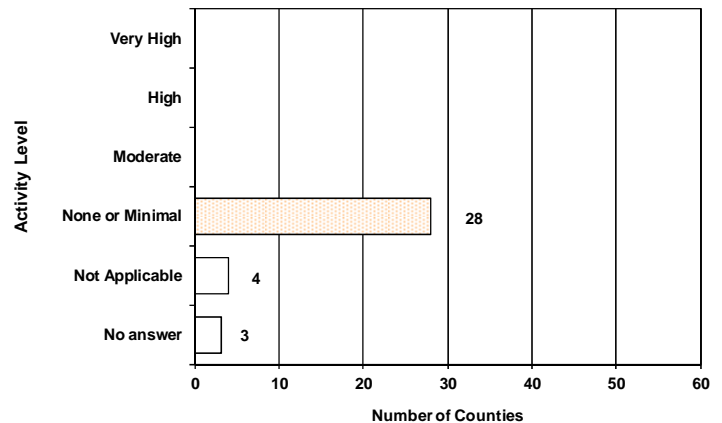


FIGURE 19 - FIGURE 25 show the activity levels in various facilities by county as reported by county health department influenza coordinators for week 24 as of 11:00 a.m. June 20, 2012.

FIGURE 19: Assessment of Influenza Activity in Jails/Prisons

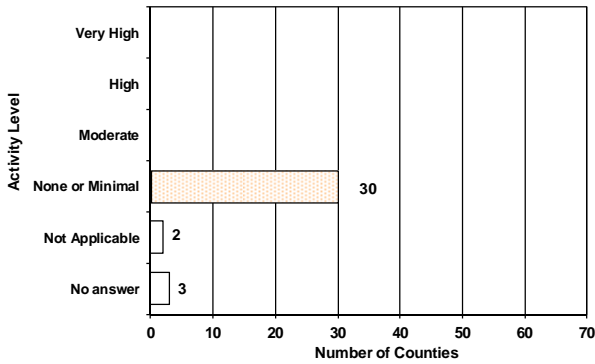


FIGURE 20: Assessment of Influenza Activity in Retirement Facilities

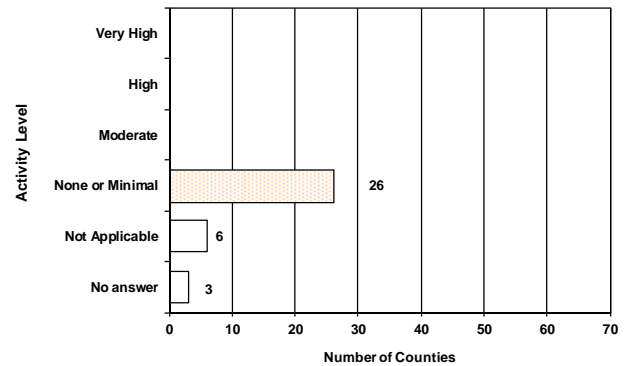


FIGURE 21: Assessment of Influenza Activity in Nursing Homes

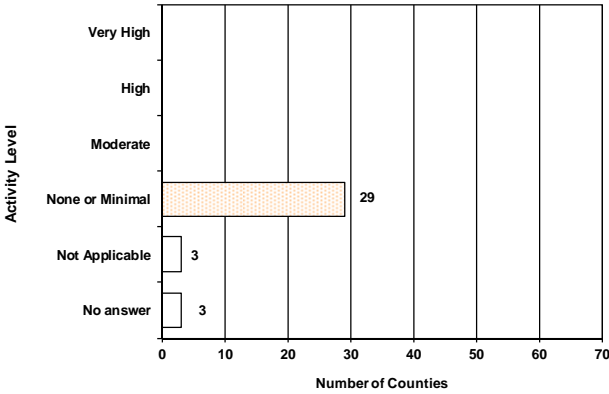


FIGURE 22: Assessment of Influenza Activity in Health Care Facilities

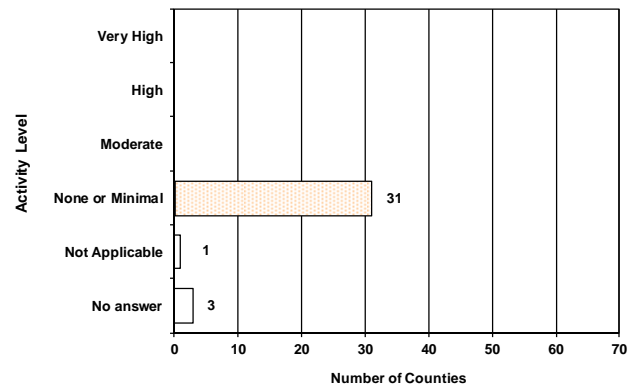


FIGURE 23: Assessment of Influenza Activity in Daycare Centers

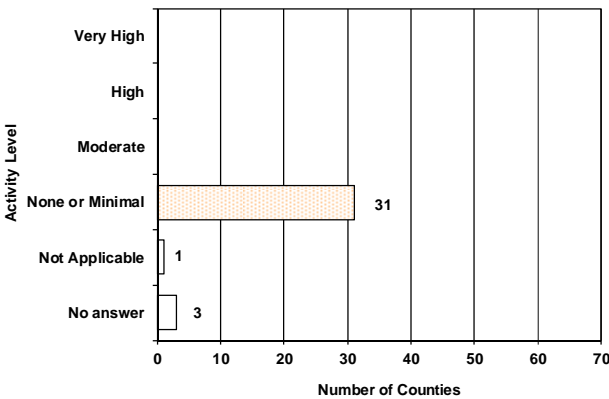


FIGURE 24: Assessment of Influenza Activity in Businesses

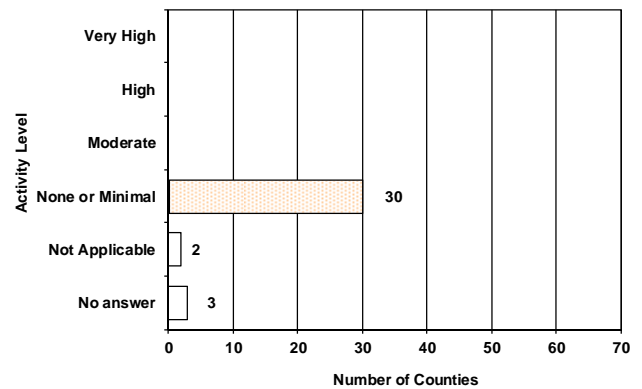


FIGURE 25: Assessment of Influenza Activity in State or Local Government Offices

