



Weeks 37-38: September 11-24, 2011



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), National Respiratory and Enteric Virus Surveillance System (NREVSS), EpiCom, and Florida ILINet in order to track influenza activity in the state.

- State:**
- FDOH surveillance systems show low levels of influenza and ILI. Mandatory submissions of county influenza activity levels has ended for the summer months, so no county level influenza activity data is presented here.
 - ESSENCE and ILINet ILI activity levels are near previous years at this time in most regions of Florida. Due to decreased reporting in the summer months, regional data from ILINet sentinels will not be reported until the beginning of the 2011-12 season.
 - In week 38 one specimen tested by the Bureau of Laboratories was positive for influenza B. There have been no influenza positive specimens from week 37. Other viruses known to be currently circulating, potentially causing ILI, include adenovirus, rhinovirus, parainfluenza, and respiratory syncytial virus (RSV).
 - No outbreaks of ILI or influenza were reported in weeks 37-38.
 - The next Florida Flu Review will be published on October 12, and will appear weekly thereafter. It will be the first report of the 2011-12 flu season, which begins October 2.**

September 28, 2011

Posted on the Bureau of Epidemiology website: http://www.doh.state.fl.us/Disease_ctrl/epi/htopics/flu/reports.htm

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TABLE 1: Summary of Florida Influenza-Like Illness (ILI) Activity for Week 38

| Measure | Difference from previous week | Current week 38 | Previous week 37 |
|--|-------------------------------|-----------------|------------------|
| Percent of visits to ILINet providers for ILI | ▼ 0.7 | 0.9% | 1.6% |
| Percent of emergency department visits (from ESSENCE) due to ILI | ▲ 0.1 | 1.7% | 1.6% |
| Percent of hospital admissions (from ESSENCE) due to ILI | No Change | 0.4% | 0.4% |
| Number of laboratory specimens that were positive for influenza (out of total number tested) | ▲ 1 | 1 (of 7) | 0 (of 16) |

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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 respiratory syncytial virus (RSV), human parainfluenza viruses (HPIV), respiratory and enteric adenoviruses and rotavirus. Florida has over 30 participating laboratory facilities.

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

The six respiratory viruses summarized in Figure 1 are:

- RSV
- Parainfluenza 1-3 (HPIV)
- Adenovirus
- Human Metapneumo Virus (HMPV)
- Rhinovirus
- Influenza

Recent spikes in Rhinovirus percent positive are due to low numbers of test results.

Figure 1: Percentage of Positive Respiratory Virus Tests as Collected by NREVSS, Florida, 2009-2011, as of September 27, 2011

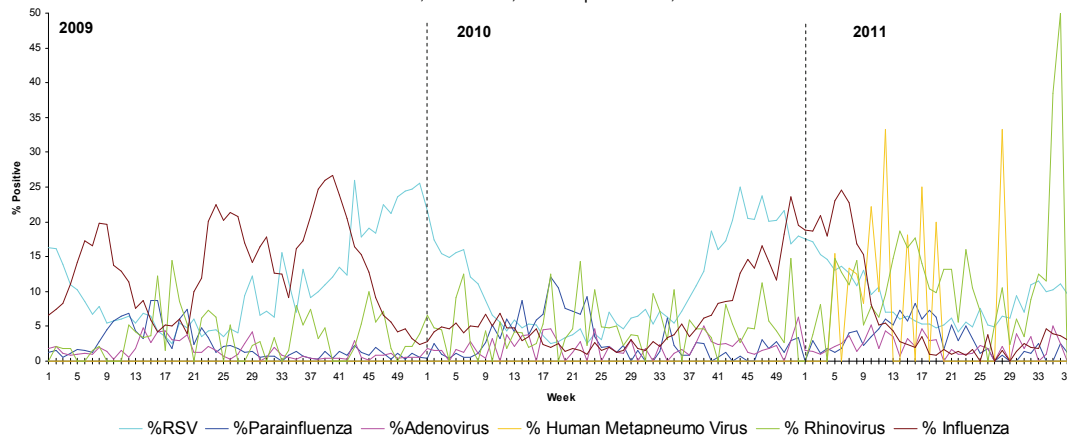
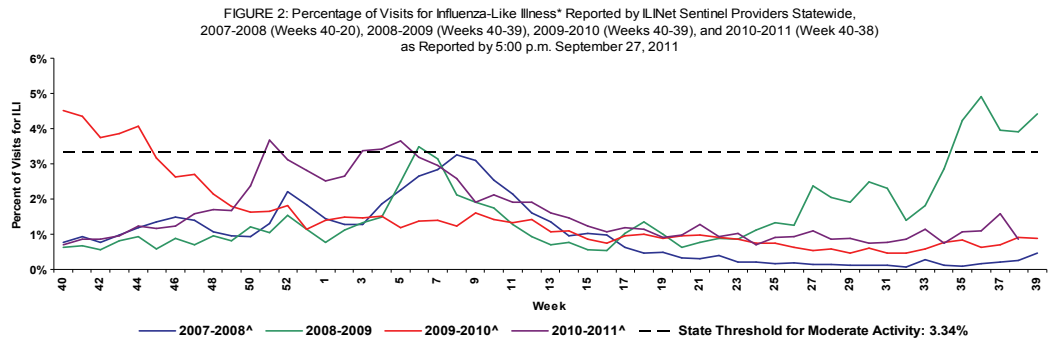


FIGURE 2 shows the percentage of visits for influenza-like illness* reported by ILINet Sentinel Providers statewide.

The percentage of visits for ILINet sentinel providers continues to be low.

Note: Small numbers of sentinels reporting year-round may make summer ILI estimates less reliable.



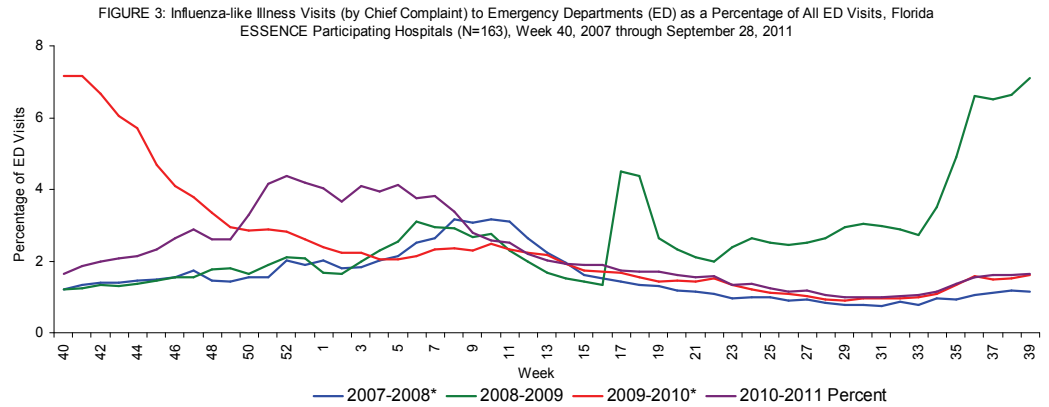
*ILI = Influenza-like illness, fever >100°F AND sore throat and/or cough *in the absence* of another known cause.
 **The 2010–2011 threshold for moderate activity is calculated from ILINet data. The threshold for moderate activity is the mean percentage of patient visits for ILI during influenza weeks for the previous three seasons plus two standard deviations. Only weeks with 10% or greater of laboratory specimens testing positive are included in the calculation. Due to wide variability in regional level data, it is not appropriate to apply the state baseline to regional data.
 ^There is no week 53 during 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.

ESSENCE Syndromic Surveillance Summary-Statewide

The Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) currently collects data daily from 163 hospital emergency departments (ED). Data are processed into 11 different syndrome categories based on the patient's chief complaint. One category is influenza-like illness (ILI), which comprises chief complaints that include "influenza" or "flu," or either fever and cough or sore throat.

FIGURE 3 shows ESSENCE data on ILI visits to Emergency Departments as a percentage of all ED Visits.

Overall activity for influenza-like illness reported in ESSENCE is near expected levels for this time of year.



Florida Pneumonia and Influenza Mortality Surveillance

The Florida Department of Health started the Florida Pneumonia and Influenza Mortality Surveillance System (FPIMSS) in 2006 in order to more timely assess the number of pneumonia and influenza deaths occurring in the state. This system was modeled on the CDC's 122 cities surveillance system. Each week, the vital statistics office in the 24 most populous counties in Florida manually reviews the death certificates received for the previous week. Any mention of pneumonia or influenza on the death certificate, with certain prescribed exceptions, is counted as a pneumonia or influenza death. These counts, by age group, are then reported to the state via the EpiGateway web-interface. We are now using a Serfling model to more accurately calculate our predicted values for weekly pneumonia and influenza mortality.

FIGURE 4 shows Pneumonia and Influenza Deaths for 24 Florida Counties, 2007-2008, 2008-2009, 2009-2010, and 2010-11

For week 38 (ending September 24, 2011) there were:

- 103 deaths reported
- Upper bound of 95% confidence interval for prediction: 157 deaths
- NO excess deaths

23 of 24 participating counties reported their data for week 38.

