FLORIDA INFLUENZA SURVEILLANCE

Week 42: October 18th-October 24th, 2009

Produced on: October 28, 2009
Posted on the Bureau of Epidemiology website: http://www.doh.state.fl.us/disease_ctrl/epi/swineflu/Reports/reports.htm
Produced by: Bureau of Epidemiology, Florida Department of Health (FDOH)
Contributors: Kateesha McConnell, MPH; Kate Goodin, MPH; Leah Eisenstein, MPH; Aaron Kite-Powell, MS; Brian Fox, MA; Lillian Stark, PhD, MPH, MS; Valerie Mock; Julian Everett B.S.; Subir Goyal, MBBS; Janet Hamilton, MPH; Richard Hopkins, MD, MS

IN THIS ISSUE:

Weekly state influenza activity: Widespread

I. SUMMARY

The Florida Department of Health (FDOH) monitors influenza activity through multiple surveillance systems. This report is produced weekly in order to assist FDOH monitor the current influenza and novel H1N1 influenza situation. Data summarized in this report includes multiple sources:

1) **Emergency department syndromic surveillance as monitored through Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)**
2) **Laboratory data from the Bureau of Laboratories**
3) **County influenza activity levels as reported by county health department epidemiologists**
4) **Florida Pneumonia and Influenza Mortality Surveillance System (FPIMSS)**
5) **Florida Outpatient Influenza-like Illness Surveillance Network (ILINet) providers**
6) **Novel H1N1 influenza notifiable disease data for special surveillance populations (deaths, hospitalized pregnant women, and those with life threatening illness) and pediatric influenza-associated mortality as reported in the Merlin system for notifiable disease surveillance**
7) **Outbreaks or clusters of influenza-like illness (ILI) as reported through EpiCom. The criteria for influenza-like illness differ somewhat across the data systems**

These data sources indicate influenza-like illness activity has been well above the expected levels for this time of year and is comparable to the peaks seen during "normal" influenza seasons.

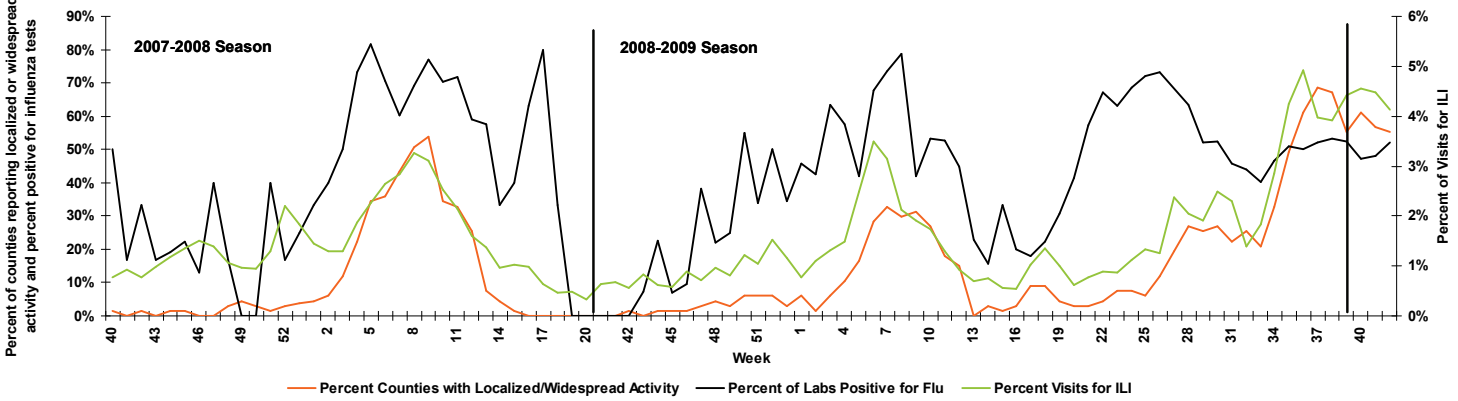
TABLE 1: Summary of Florida Influenza-Like Illness (ILI) Activity for Week 42

Measure	Current week 42	Previous week 41	Difference from previous week	Page of Report
Overall statewide activity code reported to CDC	Widespread	Widespread	No change	1
Percent of visits to ILINet providers for ILI	4.1%	4.5%	-0.4	2
Percent of emergency department visits (from ESSENCE) due to ILI	6.7%	7.2%	-0.5	4
Percent of hospital admissions (from ESSENCE) due to ILI	1.0%	1.2%	-0.2	4
Percent of laboratory specimens that were positive for influenza	52.1%	47.9%	4.2	6
Percent of positive influenza specimens that were identified as 2009 H1N1	100.0%	97.6%	2.4	6
Number of counties reporting localized influenza activity	30 counties	28 counties	2	7
Number of counties reporting widespread influenza activity	7 counties	9 counties	-2	7
Number of recent hospitalizations in confirmed 2009 H1N1 influenza cases	51 hospitalizations	39 hospitalizations	12	11
Number of recent deaths in confirmed 2009 H1N1 influenza cases	8 deaths	11 deaths	-3	12
Number of ILI outbreaks reported in Epi Com	38 outbreaks	42 outbreaks	-4	13

Each week an activity code for the state as a whole is reported to the Centers for Disease Control and Prevention (CDC). There are five possible categories: No Activity, Sporadic, Local, Regional, or Widespread. For week 42, Florida meets the CDC widespread activity definition: outbreaks of influenza or increases in ILI cases in more than half the regions of the state with recent laboratory evidence of influenza in those regions. The CDC report can be viewed at: http://www.cdc.gov/flu/weekly/usmap.htm.

Figure 1 shows the progression of the 2007-2008 and 2008-2009 Florida influenza seasons as monitored by three of the seven surveillance systems: ILINet, Bureau of Laboratories viral surveillance, and county activity levels.

FIGURE 1: Percent Visits for ILI to ILINet Sites, Percent of Counties with Localized or Widespread Activity, and Percent of Labs Tested by Florida Bureau of Laboratories Positive for Influenza
2007-2008 (Weeks 40-20), 2008-2009 (Weeks 40-39), and 2009-2010 (Week 42)

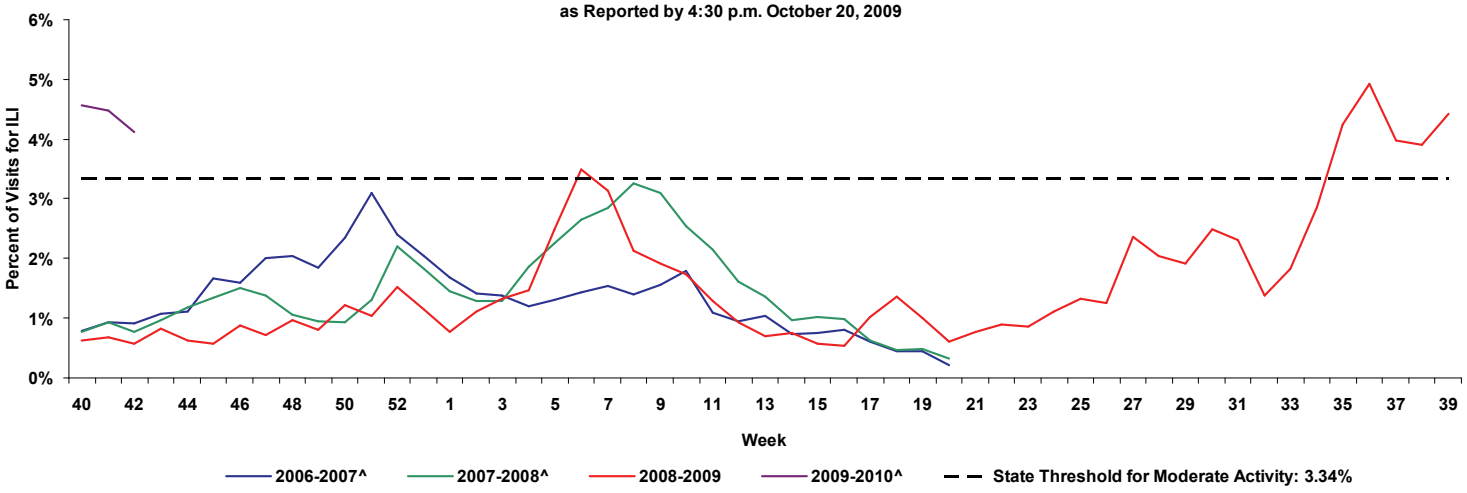


Return to Top

II. ILINET INFLUENZA-LIKE ILLNESS-STATEWIDE

During week 42, 4.12% of patient visits to Florida ILINet sentinel providers were due to ILI*. This percentage is above the statewide threshold for moderate activity of 3.32%. The percentage of visits ranged from 1.92% in the Northcentral to 5.29% in the Centralwest region. As of 4:00 p.m. October 27, 2009, only 48% of ILINet sentinel providers across the state had reported. Numbers will change as more reports are received. Data from previous weeks are updated as additional reports are received.**

FIGURE 2: Percentage of Visits for Influenza-Like Illness Reported by ILINet Sentinel Providers by Region, 2006-2007, 2007-2008 (Weeks 40-20), 2008-2009 (Weeks 40-39), and 2009-2010 (Weeks 40-41) as Reported by 4:30 p.m. October 20, 2009



*ILI = Influenza-like illness, fever >100°F AND sore throat and/or cough *in the absence* of another known cause.
**The 2009—2010 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 2006-2007, 2007-2008, and 2009-2010 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.

Return to Top

The table below shows the weighted ILI activity by Domestic Security Task Force Region (RSTDF) as reported by Florida ILINet physicians for week 42 (ending October 24, 2009). The graphs below include ILI activity as reported by sentinel physicians for the 2006-2007, 2007-2008, and 2008-2009, and 2009-10 seasons.

MAP 1: RSTDF Regions for ILINet Data

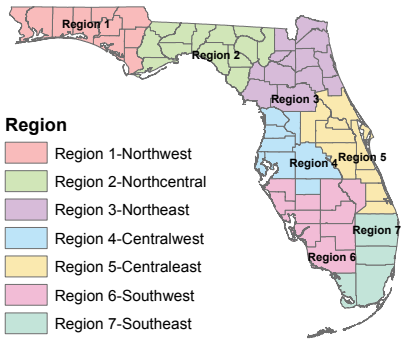
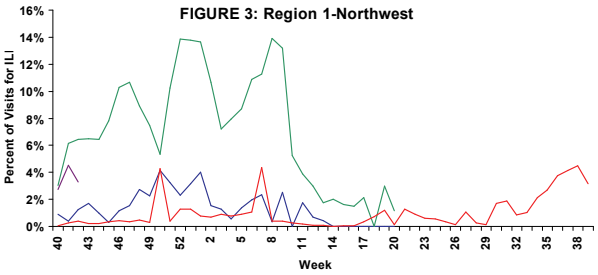


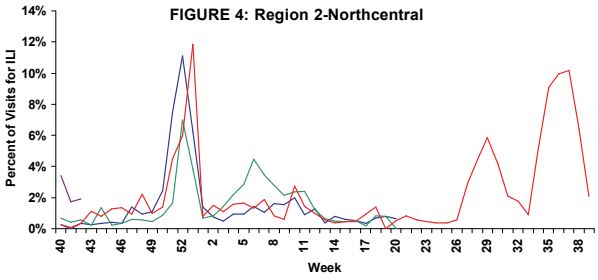
TABLE 2: ILINet Providers and Percent of Visits for ILI by Region, Week 42, as Reported by 4:00 p.m. October 27, 2009

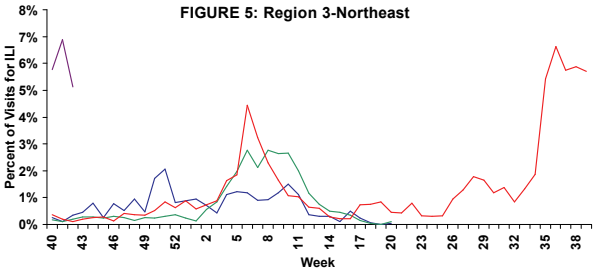
Region	Number of Participating Providers	Providers that Reported	Percent Visits for ILI
Region 1-Northwest	17	6 (35.3%)	3.27%
Region 2-Northcentral	5	2 (40.0%)	1.92%
Region 3-Northeast	23	8 (34.8%)	5.13%
Region 4-Centralwest	37	18 (48.6%)	5.29%
Region 5-Centraleast	45	30 (66.7%)	3.96%
Region 6-Southwest	20	7 (35.0%)	3.36%
Region 7-Southeast	23	11 (47.8%)	3.10%
Total	**170**	**82 (48.2%)**	**4.12%**

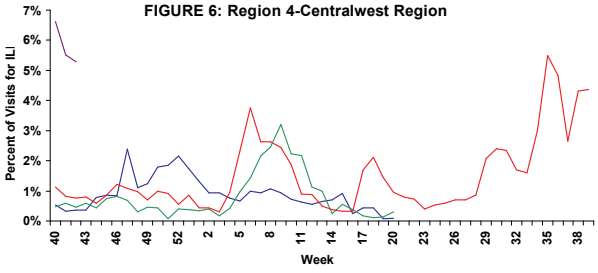
Percentage of Visits for Influenza-Like Illness Reported by ILINet Sentinel Providers by RSTDF Region, 2006-07 (Weeks 40-20), 2007-2008 (Weeks 40-20), 2008-2009 (Weeks 40-39), and 2009-10 (Weeks 40-42) as Reported by 4:00 p.m. October 27, 2009

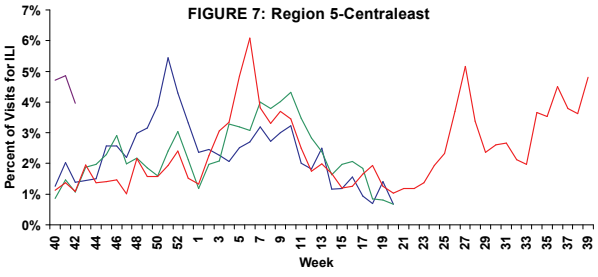
Please refer to table above for the number of providers reporting for each region. Data should be interpreted with caution, due to the low number of providers reporting in some regions. Numbers will change as more data are received.

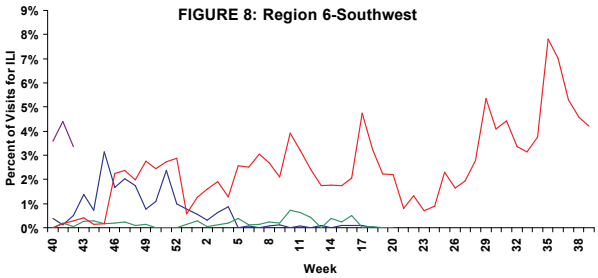


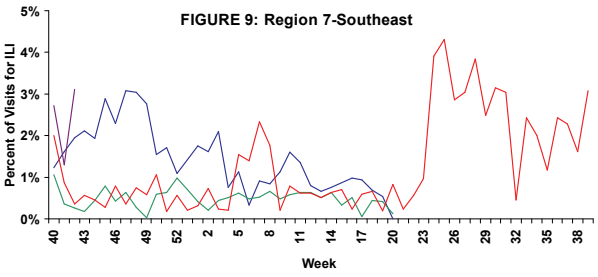












Graph Legend

- **2006-2007***
- **2007-2008***
- **2008-2009**
- **2009-2010***

***There is no week 53 during the 2006-07, 2007-08, and 2009-10 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.

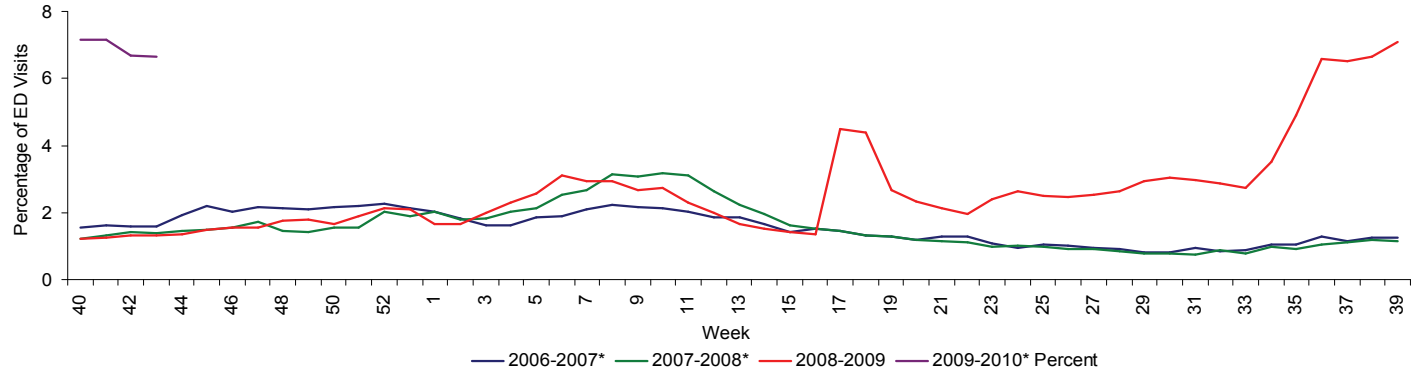
Return to Top

Florida uses the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) for syndromic surveillance, which currently collects data daily from 133 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 influenza-like illness (ILI), which is composed of chief complaints that include the words "influenza" or "flu," or either fever and cough or sore throat.

Overall activity for influenza-like illness remains well above expected levels for this time of year (Figure 10). In many areas it exceeds levels seen at the peak of normal influenza season, and exceeds the initial surge of worried well at week 17, 2009. The majority of the increase in ED visits is occurring in younger age groups (Figure 11). In the last 3-4 weeks the percent of ED visits has either stabilized or has declined, depending on the region and age group. These data are based on the patient's chief complaint and may not reflect the actual diagnosis.

Hospital admissions due to ILI as a percentage of all hospital admissions are shown in the bottom graph (Figure 12). Twenty-seven facilities participating in ESSENCE have been able to provide historical admissions data and are included here. The percentage of admissions for ILI is highest in those less than 20 years old, but the small numerators and denominators in this age group result in high variability. The percentages in the older age groups is less variable and shows a distinct increase starting around week 32. Overall, the percentage of admissions due to ILI is very low. These data are based on the patient's chief complaint when presenting to the emergency department and may not reflect the actual diagnosis.

FIGURE 10: Influenza-like Illness Visits (by Chief Complaint) to Emergency Departments (ED) as a Percentage of All ED Visits, Florida ESSENCE Participating Hospitals (N=133), Week 40, 2006 through Octorber 27, 2009



*There is no week 53 for the 2006-2007, 2007-2008, or 2009-2010 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.

FIGURE 11: Percentage of Influenza-like Illness from Emergency Department (ED) Chief Complaints by Age, Florida ESSENCE Participating Hospitals (N=133), Week 40, 2008 through October 27, 2009

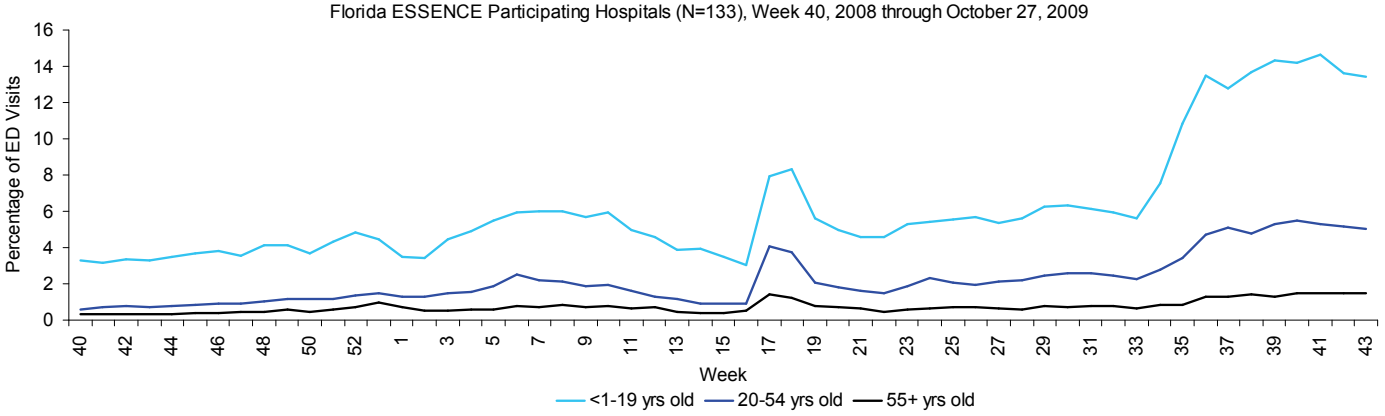
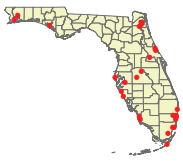


FIGURE 12: Percentage Admitted to Hospital for Influenza-Like Illness (ILI) Among All Persons Admitted in the Hospital through the ED Based on ED Chief Complaint, Hospitals Reporting Admissions Data (N=27) for Week 40, 2008 to Week 42, 2009

MAP 1: Hospitals Reporting



Return to Top

The figures below describe emergency department chief complaint data from ESSENCE by Domestic Security Task Force Region (Region 2 does not have any participating facilities in ESSENCE and therefore is not displayed). All regions with reporting hospitals show very large increases in flu activity in the weeks coinciding with school opening (week 34). At this time it appears that most regions are at a plateau or are showing decreases in ED visits categorized as ILI. At the time novel H1N1 influenza was first identified (week 17, 2009), data from 5 of the 7 regions indicated large increases in patients presenting for care of influenza-like illness. Our interpretation of this peak is that it includes many individuals who we may classify as "worried well," others may be truly ill with a respiratory illness but in the absence of swine flu news may have stayed home to get better, and then of course some of these probably had some strain of influenza. The increase in ILI activity after week 21 are more likely to be associated with actual 2009 H1N1 influenza infection.

MAP 2: Hospitals Reporting Emergency Department (ED) Data to Florida ESSENCE, October 27, 2009 (N=133)

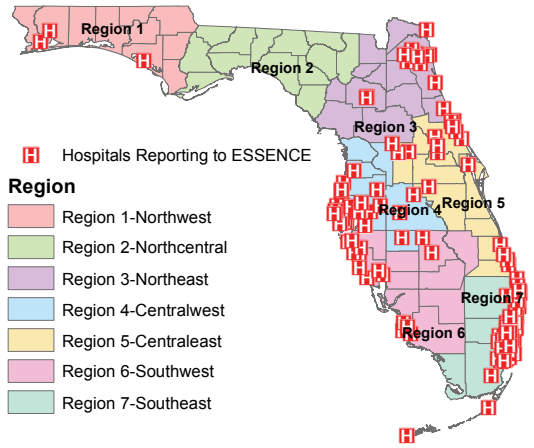


FIGURE 13: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 1 ESSENCE Participating Hospitals (N=3), Week 40, 2007 through October 27, 2009

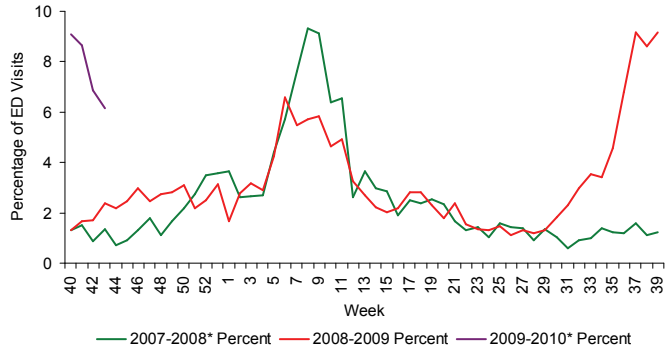


FIGURE 14: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 3 ESSENCE Participating Hospitals (N=15), Week 40, 2007 through October 27, 2009

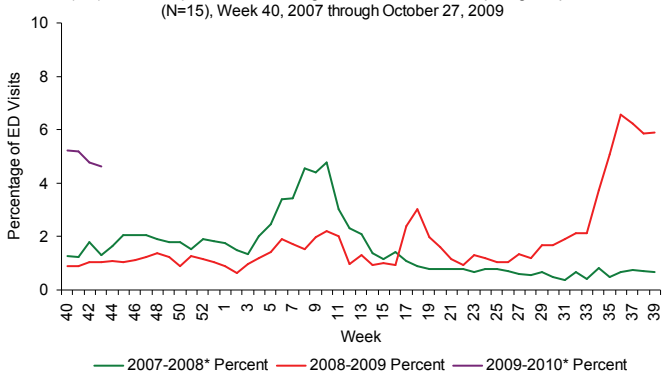


FIGURE 15: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 4 ESSENCE Participating Hospitals (N=29), Week 40, 2006 through Octorber 27, 2009

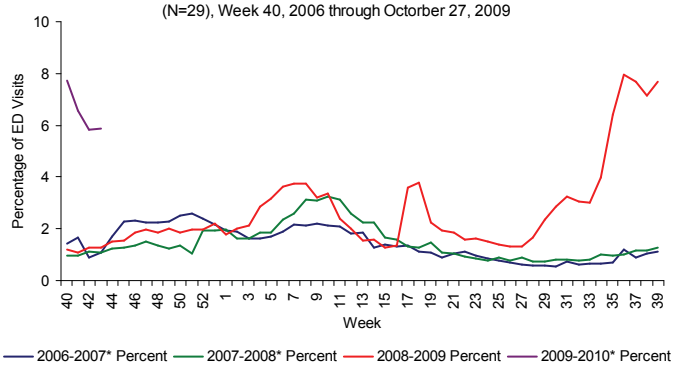


FIGURE 16: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 5 ESSENCE Participating Hospitals (N=24), Week 40, 2007 through October 27, 2009

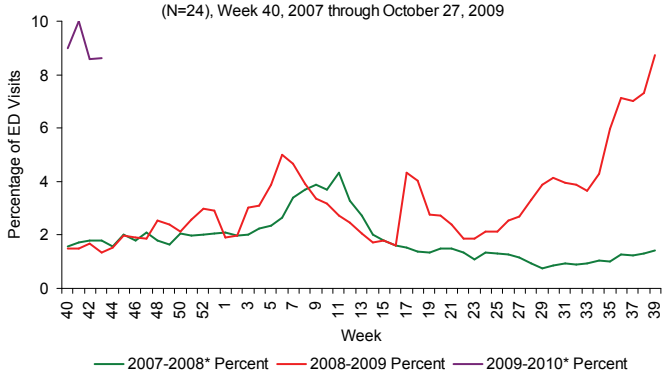


FIGURE 17: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 6 ESSENCE Participating Hospitals (N=15), Week 40, 2007 through October 27, 2009

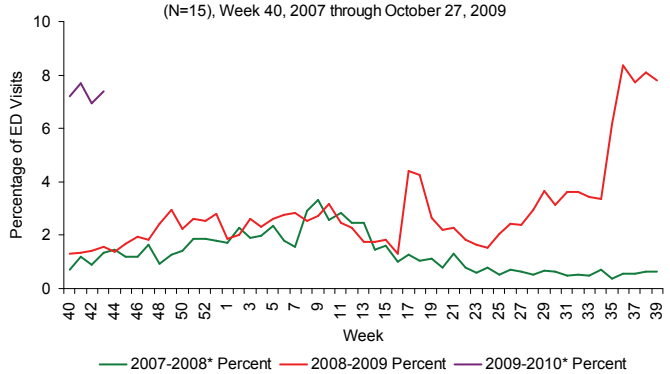
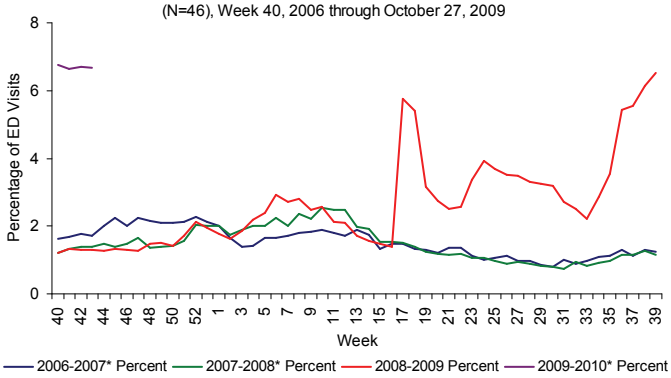


FIGURE 18: Percentage of Influenza-Like Illness from Emergency Department (ED) Chief Complaints, RDSTF Region 7 ESSENCE Participating Hospitals (N=46), Week 40, 2006 through October 27, 2009



*There is no week 53 for the 2006-2007, 2007-2008, or 2009-2010 seasons; the week 53 data point for those seasons is an average of weeks 52 and

Return to Top

As of 9:00 a.m. October 27, 140 specimens with a Lab Event Date* during week 42 were tested by the Bureau of Laboratories (BOL). Of those, 73 (52%) were positive for influenza. Of the 73 positive for influenza, 73 (100%) were novel H1N1 influenza (Figure 19-21). Since week 39, two specimens tested by BOL have tested positive for influenza B; one of the had a lab event date of week 39 and the other from week 40. Influenza B, unlike influenza A does not cause epidemics. All of the viruses detected during week 42 were novel H1N1 influenza viruses. Virtually all infections due to the new virus are caused by strains that are sensitive to Tamiflu and Relenza.
A total of 340 specimens with a Lab Event Date* of week 41 have now been tested by BOL with 163 (50%) positive for influenza (Figure 19-21). Laboratory information is preliminary and will change as additional results are received. Totals from previous weeks will be adjusted to reflect correct specimen numbers.

Enhanced laboratory testing activities in response to novel H1N1 influenza activity was initiated in week 17.

FIGURE 19: Number of Influenza-Positive Specimens Tested by the Florida Bureau of Laboratories by Subtype by Lab Event Date*
Week 40, 2008 to Week 42, 2009 as Reported in Merlin by 9:00 a.m. October 27, 2009

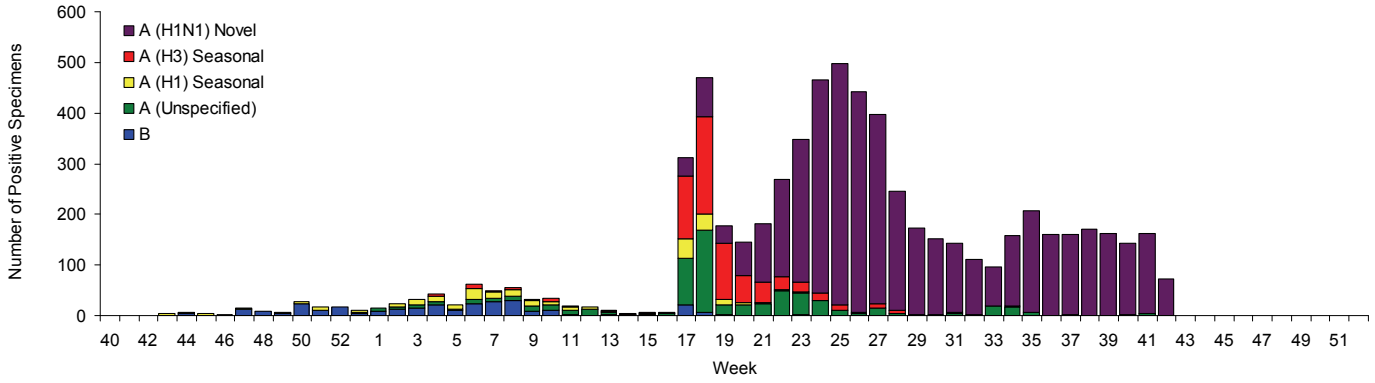


FIGURE 20: Number of Specimens Tested by Florida Bureau of Laboratories and Percent Positive for Influenza by Lab Event Date*
Week 40, 2008 to Week 42, 2009 as Reported in Merlin by 9:00 a.m. October 27, 2009

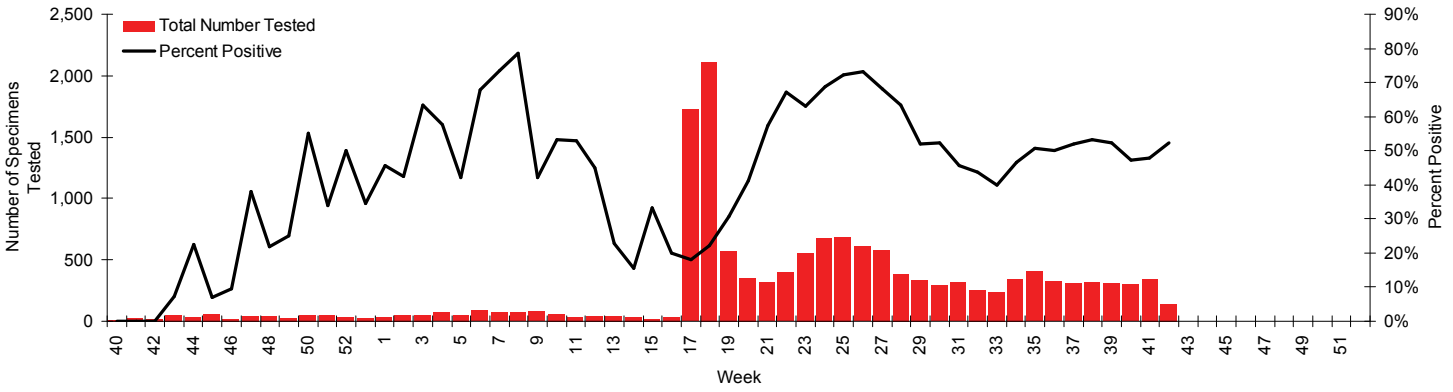
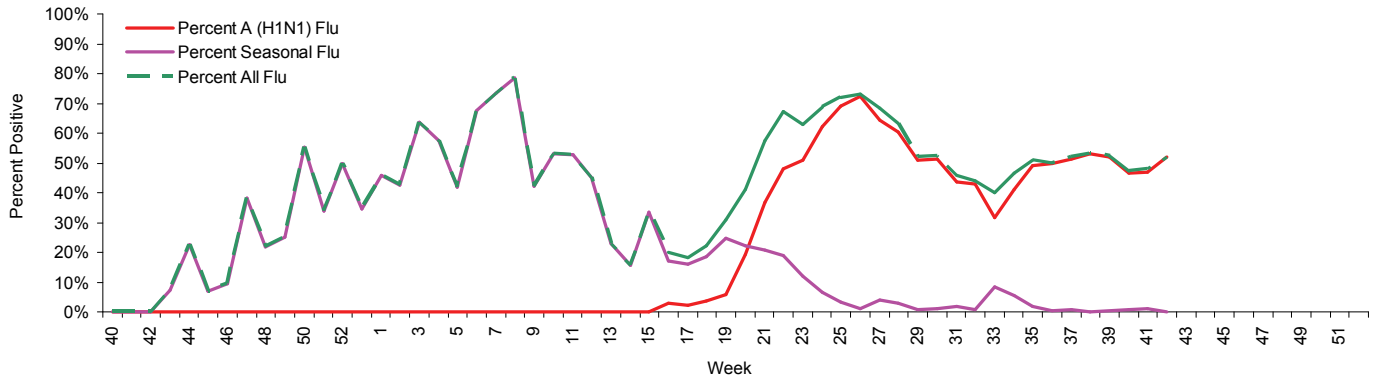


FIGURE 21: Percentage of Specimens Tested by Florida Bureau of Laboratories Positive for Influenza by Subtype by Lab Event Date*
Week 40, 2008 to Week 42, 2009 as Reported in Merlin by 9:00 a.m. October 27, 2009



***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

Return to Top

As of 8:06 a.m. October 28, 2009, a total of 51 (76.1%) counties had reported their weekly level of influenza activity. ***Please note that data reported by counties after the deadline are recorded but may not be included in the activity map below.***

TABLE 3: Weekly County Influenza Activity for Week 42 (ending October 28, 2009) as Reported by 8:06 a.m. October 28, 2009

Activity Level	Week 41 Number of Counties	Week 42 Number of Counties	Week 42 Counties
No Report	9	15	Calhoun, Charlotte, Dixie, Gadsden, Gilchrist, Hamilton, Holmes, Jefferson, Lafayette, Levy, Liberty, Madison, Santa Rosa, Wakulla, Washington
No Activity	0	0	
Sporadic	20	15	Alachua, Bay, Columbia, Franklin, Glades, Gulf, Hardee, Indian River, Monroe, Nassau, Pinellas, Putnam, St. Johns, Taylor, Union
Localized	29	30	Baker, Bradford, Brevard, Broward, Citrus, Clay, Collier, Dade, Desoto, Duval, Escambia, Flagler, Hendry, Hernando, Highlands, Jackson, Lake, Leon, Manatee, Martin, Okaloosa, Okeechobee, Orange, Osceola, Palm Beach, Pasco, St. Lucie, Sumter, Volusia, Walton
Widespread	9	7	Hillsborough, Lee, Marion, Polk, Sarasota, Seminole, Suwannee

MAP 3: Weekly County Influenza Activity for Week 42 (ending October 28, 2009) as Reported by 8:06 a.m. October 28, 2009

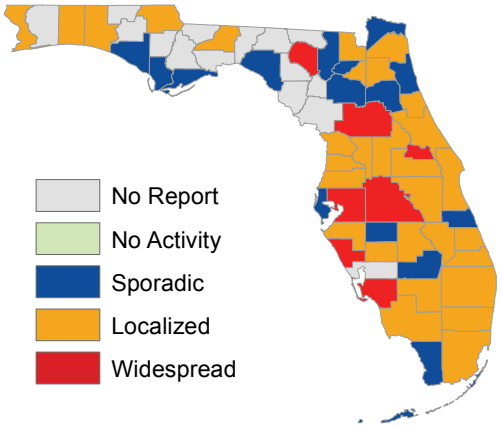
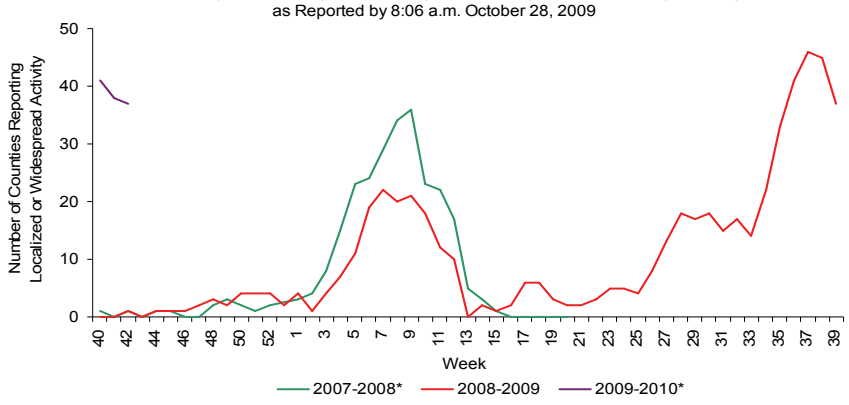


FIGURE 22: Number of Counties Reporting Localized or Widespread Actitvity, 2007-2008 (Weeks 40-20), 2008-2009 (Weeks 40-39), and 2009-2010 (Week 42) as Reported by 8:06 a.m. October 28, 2009



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

The number of counties reporting localized or widespread influenza activity has decreased over the past week and is now at 37 (55%).

COUNTY INFLUENZA ACTIVITY LEVEL DEFINITIONS

0 = No Activity:
Overall clinical activity remains low with no laboratory confirmed cases† in the county.

1 = Sporadic:
a. Isolated cases of laboratory confirmed influenza† in the county.
And/or { b. An ILI§ outbreak in a single setting‡ in the county. (No detection of decreased ILI§ activity by surveillance systems*)

2 = Localized:
a. ILI§ activity detected by a *single* surveillance system* within the county.
And/or { ILI§ activity has not been detected by *multiple* ILI surveillance systems.)
b. Two or more outbreaks (ILI§ or lab confirmed†) detected in a *single* setting‡ in the county.

AND

c. Recent (within past three weeks) laboratory evidence† of influenza activity in the county.

3 = Widespread:
a. An increase in ILI§ activity detected in ≥2 surveillance systems in the county.
And/or { b. Two or more outbreaks ((ILI§ or laboratory confirmed†) detected in *multiple* settings‡ in the county.

AND

c. Recent (within the past three weeks) laboratory evidence† of influenza activity in the county.

No Report: *(No report was received from the county at the time of publication)*

† Laboratory confirmed case = case confirmed by rapid diagnostic test, antigen detection, culture, or PCR.

§ILI = Influenza-like illness, fever ³ 100°F AND sore throat and/or cough *in the absence* of another known cause.

*ILI surveillance system activity can be assessed using a variety of surveillance systems including sentinel providers, school/workplace absenteeism, long-term care facility (LTCF) surveillance, correctional institution surveillance, hospital emergency department surveillance and laboratory surveillance.

‡Settings include institutional settings (LTCFs, hospitals, prisons, schools, companies) & the community.

Return to Top

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 23-31 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 the week ending October 24th, 20 counties indicated that activity was decreasing, 25 indicated it was about the same, and 6 indicated that activity was increasing.

Assessment of Overall Influenza Activity Trend in County and Activity Levels in Various Facilities by County as Reported by County Health Department Flu Coordinators for Week 42 as of 8:30 a.m. October 28, 2009

FIGURE 23: Assessment of Overall Influenza Activity Trend

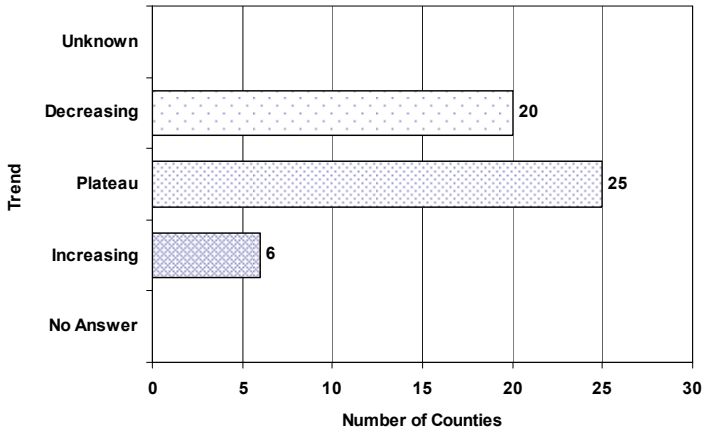


FIGURE 24: Assessment of Influenza Activity in Schools

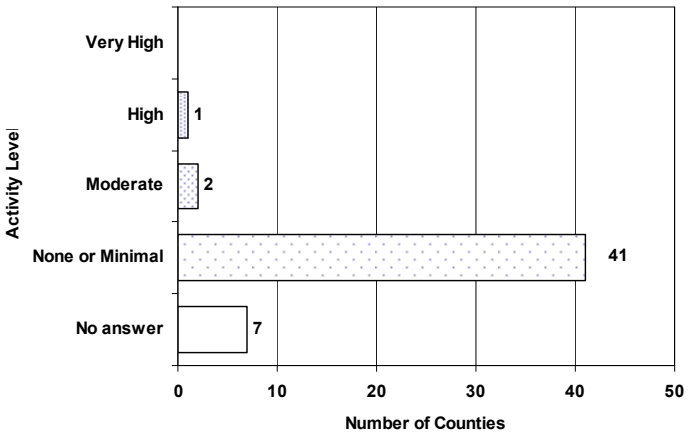


FIGURE 25: Assessment of Influenza Activity in Jails/Prisons

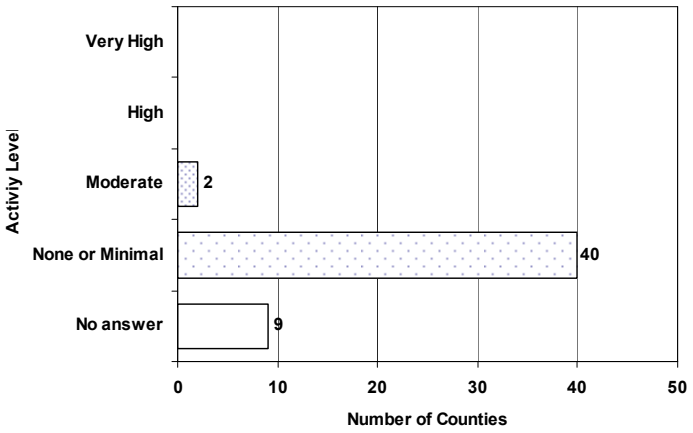


FIGURE 26: Assessment of Influenza Activity in Retirement Facilities

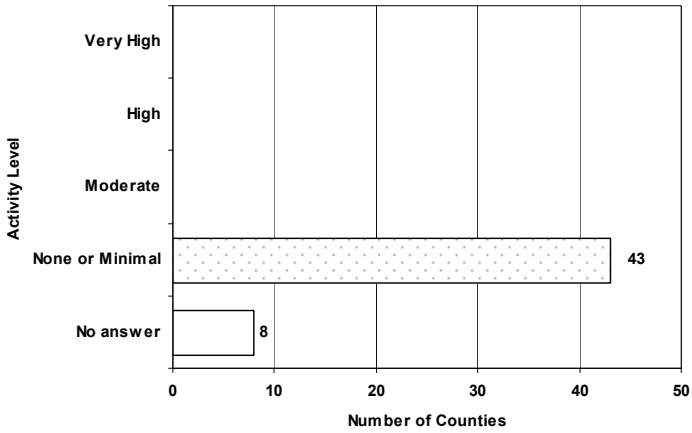


FIGURE 27: Assessment of Influenza Activity in Nursing Homes

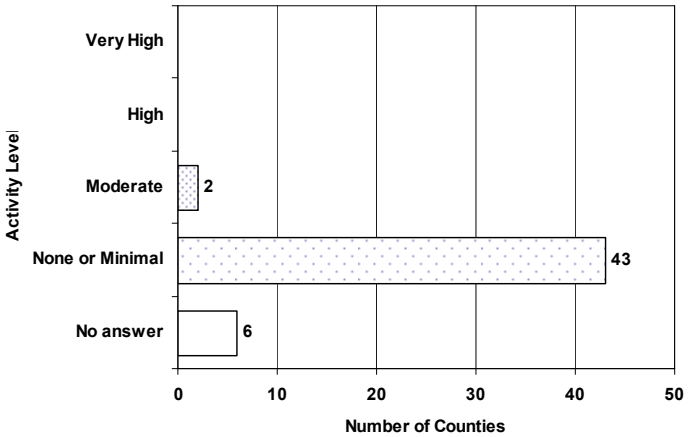
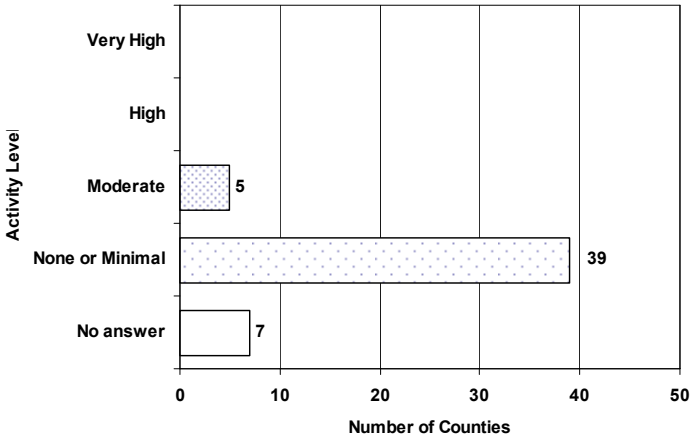


FIGURE 28: Assessment of Influenza Activity in Health Care Facilities



Return to Top

Assessment of Overall Influenza Activity Trend in County and Activity Levels in Various Facilities by County as Reported by County Health Department Flu Coordinators for Week 42 as of 8:30 a.m. October 28, 2009

FIGURE 29: Assessment of Influenza Activity in Daycare Centers

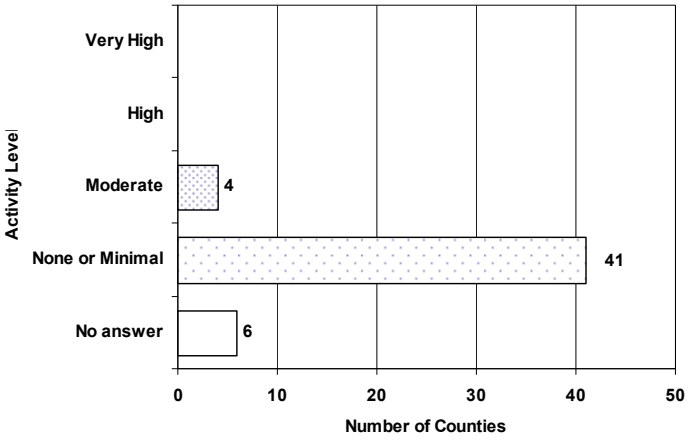


FIGURE 30: Assessment of Influenza Activity in Businesses

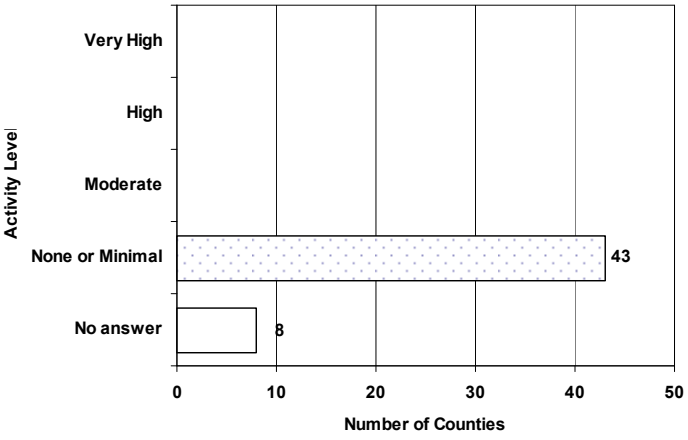
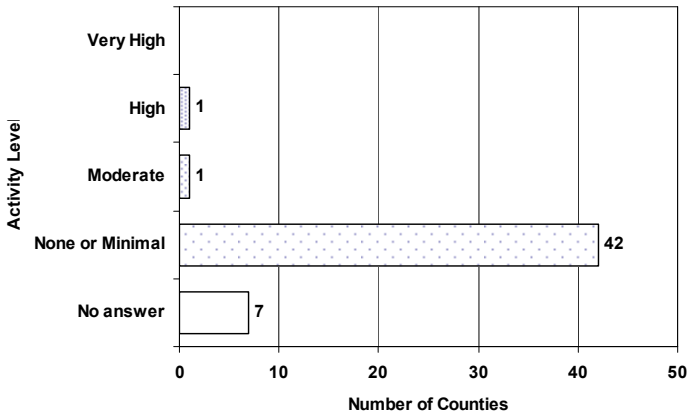


FIGURE 31: Assessment of Influenza Activity in State or Local Government Offices

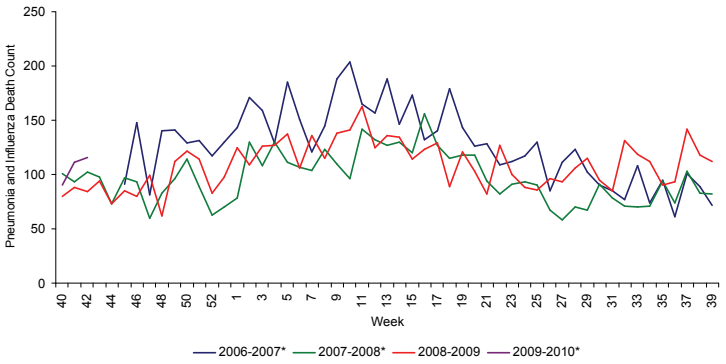


Return to Top

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.

Only 23 of the 24 participating counties reported data to FPIMSS for week 41 (ending October 17, 2009) as of 12:50 p.m. October 21, 2009. Hillsborough county was later able to enter their data for week 41 which brought the total number of deaths reported last week up to 111 from 99. This indicates that there was one excess death. For week 42 (ending October 24, 2009) as of 11:29 a.m., 116 deaths had been reported; 113 deaths were expected for week 42 indicating that there were three excess deaths. Two weeks in a row with excess deaths reported indicates that the state is above the epidemic threshold for deaths. The majority of the deaths are in those aged 45 years and older.

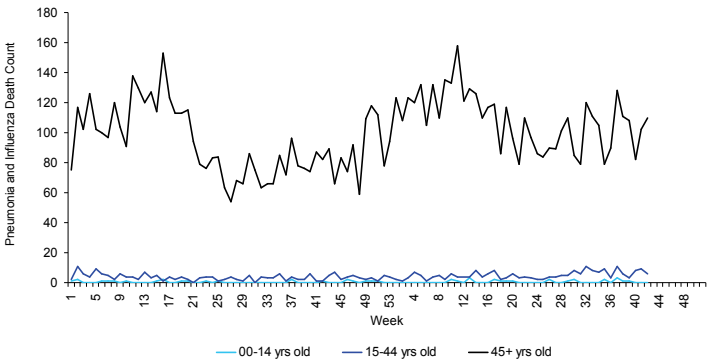
FIGURE 32: Pneumonia and Influenza Deaths for 24 Florida Counties, 2006-2007 (Weeks 40-39), 2007-2008 (Weeks 40-39), 2008-2009 (Weeks 40-39), and 2009-2010 (Weeks 40-42) as Reported to FPIMSS by 11:29 a.m. October 28, 2009



*There is no week 53 for the 2006-2007, 2007-2008, or 2009-2010 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.

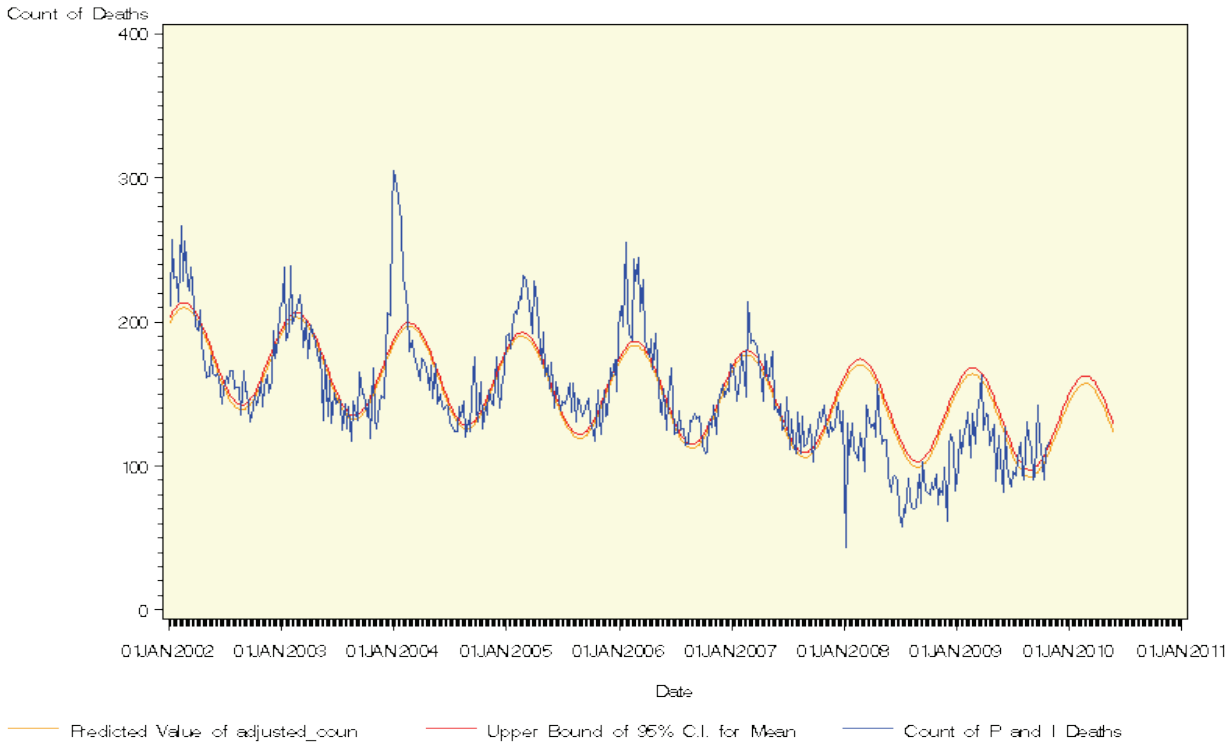
All of the 24 participating counties reported their data for week 42. There were three excess deaths.

FIGURE 33: Pneumonia and Influenza Deaths in 3 Age Groups for 24 Florida Counties, Week 1, 2008-Week 42, 2009 as Reported to FPIMSS by by 11:29 a.m. October 28, 2009



All of the 24 participating counties reported their data for week 42 as of 11:29 a.m. October 28, 2009. The highest number of pneumonia and influenza deaths has occurred in those over 45.

FIGURE 34: Pneumonia and Influenza Deaths for 24 Florida Counties, Counts Model January 1, 2002-October 24, 2009 as Reported to FPIMSS as of 11:29 a.m. October 28, 2009



Return to Top

Although the number of cases, hospitalizations*, and deaths continues to rise, there is no evidence that the virus has changed to a more virulent form, either in Florida, the rest of the U.S., or elsewhere in the world.

Please note that under the current surveillance strategy, case reporting is only required for confirmed or probable cases of novel H1N1 influenza in a) patients with life-threatening illness, b) pregnant women who are hospitalized, and c) deaths. *Use caution when interpreting hospitalization data, as only hospitalized patients with life-threatening illness are reportable and there is some variability in communities as to how "life-threatening-illness" is interpreted.

TABLE 4: Cumulative hospitalizations* in all Reported Novel H1N1 Influenza Cases by County as of 12:00 Noon October 27, 2009

County	Number	Percent	ICU (percent of hospitalized)
Alachua	15	1.6	12 (80.0)
Baker	2	0.2	2 (100.0)
Bay	2	0.2	0 (0.0)
Bradford	1	0.1	0 (0.0)
Brevard	11	1.1	8 (72.7)
Broward	79	8.2	26 (32.9)
Calhoun	1	0.1	0 (0.0)
Charlotte	5	0.5	1 (20.0)
Citrus	11	1.1	1 (9.1)
Clay	3	0.3	1 (33.3)
Collier	3	0.3	2 (66.7)
Columbia	2	0.2	0 (0.0)
Dade	370	38.3	113 (30.5)
Duval	51	5.3	29 (56.9)
Escambia	4	0.4	0 (0.0)
Flagler	1	0.1	0 (0.0)
Gadsden	4	0.4	1 (25.0)
Hardee	1	0.1	0 (0.0)
Hendry	1	0.1	0 (0.0)
Hernando	7	0.7	3 (42.9)
Highlands	4	0.4	0 (0.0)
Hillsborough	25	2.6	11 (44.0)
Indian River	4	0.4	0 (0.0)
Lake	6	0.6	0 (0.0)
Lee	29	3.0	19 (65.5)
Levy	2	0.2	0 (0.0)
Manatee	10	1.0	5 (50.0)
Marion	4	0.4	0 (0.0)
Martin	5	0.5	2 (40.0)
Monroe	5	0.5	0 (0.0)
Nassau	3	0.3	3 (100.0)
Okaloosa	7	0.7	5 (71.4)
Okeechobee	1	0.1	0 (0.0)
Orange	80	8.3	28 (35.0)
Osceola	5	0.5	2 (40.0)
Palm Beach	78	8.1	32 (41.0)
Pasco	3	0.3	0 (0.0)
Pinellas	26	2.7	19 (73.1)
Polk	20	2.1	10 (50.0)
Putnam	3	0.3	2 (66.7)
Santa Rosa	6	0.6	1 (16.7)
Sarasota	12	1.2	6 (50.0)
Seminole	19	2.0	6 (31.6)
St. Johns	6	0.6	2 (33.3)
St. Lucie	6	0.6	3 (50.0)
Taylor	1	0.1	1 (100.0)
Volusia	20	2.1	15 (75.0)
Walton	1	0.1	1 (100.0)
Total	**965**	**100.0**	**372 (38.5)**

TABLE 5: Recent Hospitalizations* in Novel H1N1 Influenza Cases by County, 12:00 Noon October 20, 2009 to 12:00 Noon October 27, 2009

County	Number	Percent	ICU (percent of hospitalized)
Alachua	1	1.96	1 (100.0)
Bradford	1	1.96	0 (0.0)
Broward	6	11.76	5 (83.3)
Charlotte	1	1.96	0 (0.0)
Clay	1	1.96	0 (0.0)
Dade	19	37.25	9 (47.4)
Duval	3	5.88	3 (100.0)
Escambia	1	1.96	0 (0.0)
Hillsborough	2	3.92	1 (50.0)
Indian River	2	3.92	0 (0.0)
Okaloosa	1	1.96	1 (100.0)
Orange	1	1.96	1 (100.0)
Palm Beach	4	7.84	1 (25.0)
Polk	2	3.92	1 (50.0)
Sarasota	3	5.88	1 (33.3)
Seminole	1	1.96	1 (100.0)
Volusia	2	3.92	2 (100.0)
Total	**51**	**100.00**	**27 (52.9)**

The number of hospitalizations in cases reported each week since July 26, 2009 has ranged from 13 hospitalizations (week 33) to 54 hospitalizations (week 40) with an average of 29.3 hospitalizations in cases reported per week.

TABLE 6: Cumulative hospitalizations* in all Reported Novel H1N1 Influenza Cases by Age as of 12:00 Noon October 27, 2009

Age group	Number	Percent	Hospitalizations per million population	NO underlying condition^	ICU
0-4	144	14.9	127.3	31 (21.5)	43 (29.9)
5-24	275	28.5	57.3	33 (12.0)	80 (29.1)
25-49	321	33.3	51.8	59 (18.4)	144 (44.9)
50-64	176	18.2	48.0	22 (12.5)	92 (52.3)
65+	49	5.1	14.8	5 (10.2)	13 (26.5)
Total	**965**	**100.0**	**50.5**	**150 (15.5)**	**372 (38.5)**

^As of week 41, underlying medical conditions include pregnancy unless otherwise noted.

TABLE 7: Cumulative hospitalizations* in all Pregnant Women with Novel H1N1 Influenza Cases by Status of Underlying Medical Conditions Other than Pregnancy as of 12:00 Noon October 27, 2009

Underlying medical condition status	Number	Percent	ICU	Death
No underlying medical condition	64	59.3	21 (32.8)	3 (4.7)
Underlying medical condition	28	25.9	8 (28.6)	3 (10.7)
Unknown	16	14.8	4 (25.0)	0 (0.0)
Total	**108**	**100.0**	**33 (30.6)**	**6 (5.6)**

Return to Top

All deaths in reported laboratory-confirmed novel H1N1 influenza cases are presented in the following tables. Note that novel H1N1 influenza may not necessarily be the attributable cause of death in all cases.

Approximately 20% of deaths are in people with no clear underlying medical condition.

140 deaths in those with laboratory-confirmed novel H1N1 influenza reported as of 12:00 noon October 27, 2009
8 deaths were newly reported (12:00 noon October 20, 2009 to 12:00 noon October 27, 2009)

TABLE 8: Cumulative deaths in Novel H1N1 Influenza Cases by County as of 12:00 Noon October 27, 2009

County	Number	Percent
Alachua	6	4.3
Baker	1	0.7
Brevard	3	2.1
Broward	10	7.1
Charlotte	2	1.4
Citrus	1	0.7
Clay	1	0.7
Dade	28	20.0
Desoto	1	0.7
Duval	13	9.3
Hernando	2	1.4
Highlands	1	0.7
Hillsborough	9	6.4
Indian River	1	0.7
Lake	1	0.7
Lee	4	2.9
Levy	1	0.7
Manatee	2	1.4
Monroe	2	1.4
Okaloosa	1	0.7
Orange	7	5.0
Osceola	1	0.7
Palm Beach	6	4.3
Pasco	2	1.4
Pinellas	9	6.4
Polk	4	2.9
Santa Rosa	1	0.7
Sarasota	4	2.9
Seminole	3	2.1
St. Johns	2	1.4
St. Lucie	4	2.9
Taylor	1	0.7
Volusia	5	3.6
Walton	1	0.7
Total	**140**	**100.0**

TABLE 9: Recent Deaths in Novel H1N1 Influenza Cases by County, 12:00 Noon October 20, 2009 to 12:00 Noon October 27, 2009

County	Number	Percent
Alachua	1	12.5
Dade	2	25.0
Duval	1	12.5
Indian River	1	12.5
Orange	1	12.5
Pinellas	1	12.5
Seminole	1	12.5
Total	**8**	**100.0**

TABLE 10: Cumulative deaths in Novel H1N1 Influenza Cases by Age as of 12:00 Noon October 27, 2009

Age	Number	Percent	Deaths per million population	NO underlying condition^	
0-4	4	2.9	3.5	0	(0.0)
5-24	17	12.1	3.5	7	(41.2)
25-49	59	42.1	9.5	16	(27.1)
50-64	52	37.1	14.2	6	(11.5)
65+	8	5.7	2.4	0	(0.0)
Total	**140**	**100.0**	**7.3**	**29**	**(20.7)**

^As of week 41, underlying medical conditions include pregnancy unless otherwise noted.

The number of deaths reported each week since July 26, 2009 has ranged from 2 deaths (week 37) to 13 deaths (week 38) with an average of 8.5 deaths reported per week.

Return to Top

XII. NOTIFIABLE DISEASE REPORTS: INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY

Influenza-associated deaths among those <18 years of age and/or post-influenza infection encephalitis are reportable; case report forms can be accessed at: http://www.doh.state.fl.us/disease_ctrl/epi/topicscrforms.htm.

Influenza-Associated Pediatric Mortality

- **1 influenza-associated deaths among those <18 years of age was reported in week 42 for a total of 1 case for the 2009-2010 season**
- **11 influenza-associated deaths among those <18 years of age were reported for the 2008-2009 influenza season (week 40, 2008 to week 39, 2009)**

Return to Top

372 confirmed or suspect outbreaks of novel influenza A (H1N1) have been reported as of October 24, 2009
Schools have been the most heavily impacted setting with 217 (58.3%) of the 372 outbreaks. Summer camps accounted for 50 (13.4%) of the outbreaks, daycares accounted for 22 (5.9%), and correctional facilities accounted for 18 (4.8%).

38 confirmed or suspect outbreaks of novel influenza A (H1N1) reported during week 42 (ending October 24, 2009)
During week 42, 38 new confirmed or suspect outbreaks of ILI and novel influenza A H1N1 were reported via EpiCom (please note that outbreaks may not have occurred during the week in which they were posted). These outbreaks occurred in 36 schools, one special needs facility, and one day care.

County health department epidemiologists should report influenza and ILI outbreaks via the Influenza Forum in EpiCom: https://fdens.com/vabtrs/GateStart.aspx

TABLE 11: Cumulative outbreaks Reported via EpiCom by County as of Week 42 (Ending October 24, 2009)

County	Number	Percent
Alachua	1	0.3%
Baker	2	0.5%
Bradford	1	0.3%
Brevard	1	0.3%
Clay	4	1.1%
Collier	27	7.3%
Columbia	2	0.5%
Duval	8	2.2%
Escambia	42	11.3%
Glades	1	0.3%
Hamilton	1	0.3%
Hendry	3	0.8%
Hernando	1	0.3%
Hillsborough	54	14.5%
Holmes	1	0.3%
Indian River	3	0.8%
Jackson	2	0.5%
Lake	36	9.7%
Madison	1	0.3%
Marion	3	0.8%
Martin	1	0.3%
Miami-Dade	20	5.4%
Nassau	20	5.4%
Okaloosa	4	1.1%
Orange	42	11.3%
Osceola	20	5.4%
Palm Beach	44	11.8%
Pasco	3	0.8%
Pinellas	3	0.8%
Polk	2	0.5%
Putnam	1	0.3%
Sarasota	7	1.9%
Seminole	5	1.3%
St. Johns	5	1.3%
Volusia	1	0.3%
Total	**372**	**100.0%**

TABLE 12: Cumulative outbreaks Reported via EpiCom by Setting as of Week 42 (Ending October 24, 2009)

Setting	Number	Percent
Athletics	3	0.8%
Church	1	0.3%
College/University	3	0.8%
Community Center	5	1.3%
Correctional Facility	18	4.8%
Day Care	22	5.9%
Group/Foster Home	2	0.5%
Healthcare Facility	7	1.9%
Home	4	1.1%
Home/School	1	0.3%
Long-Term Care Facility	4	1.1%
Military Facility	3	0.8%
Out of State Trip	5	1.3%
School	217	58.3%
Special Needs Facility	11	3.0%
Summer Camps	50	13.4%
Work	13	3.5%
Work/Home	3	0.8%
Total	**372**	**100.0%**

TABLE 13: Recent Outbreaks Reported via EpiCom by Setting during Week 42 (Ending October 24, 2009)

Setting	Number	Percent
School	36	94.8%
Special Needs Facility	1	2.6%
Day Care	1	2.6%
Total	**38**	**100.0%**

Return to Top