

FLORIDA INFLUENZA SURVEILLANCE

Week 22: May 31st 2009- June 6th 2009



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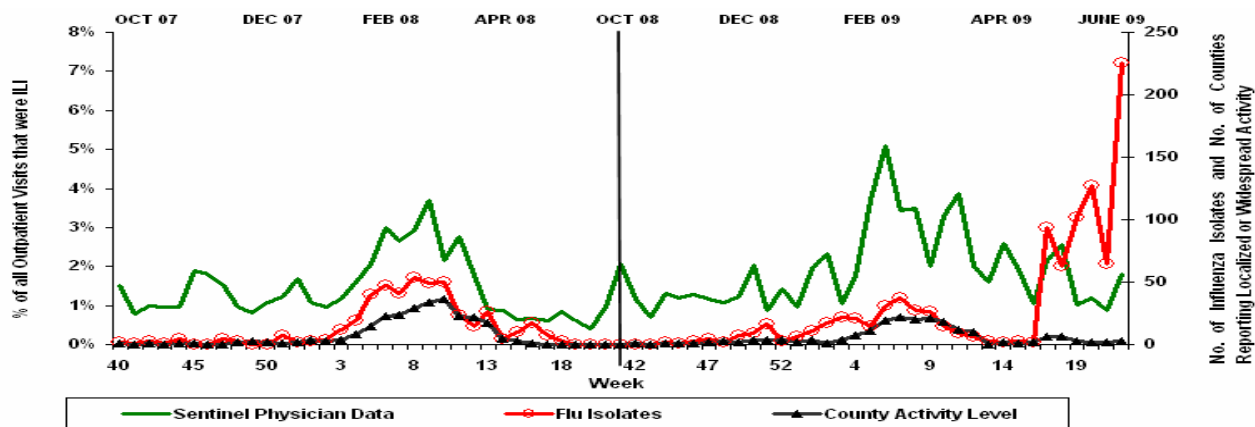
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I. SUMMARY

This is the thirty-sixth weekly Florida influenza surveillance report for the 2008-09 season. Influenza surveillance in Florida consists of seven surveillance components*: 1) Florida Sentinel Physician Influenza Surveillance Network (FSPISN); 2) Florida Pneumonia & Influenza Mortality Surveillance System; 3) Bureau of Laboratories viral surveillance; 4) County influenza activity levels; 5) Notifiable Disease Reports: Influenza-associated deaths in children, post-influenza infection encephalitis and novel influenza cases; 6) Influenza or ILI outbreaks; 7) Syndromic surveillance.

During week 22 (05/31/09-06/06/09), the proportion of patient visits for influenza-like illness (ILI) as reported by the Florida Sentinel Physician Influenza Surveillance Network was 1.79 percent. This is below the state threshold for moderate activity of 2.98 percent. One hundred eighteen of the two hundred and twenty-five ILI specimens tested by Bureau of Laboratories were positive for influenza. No counties reported widespread activity and three counties reported localized activity. Twenty-one counties reported sporadic activity and 26 counties reported no activity. Seventeen counties did not report. The graph below shows the progression of the 2007-08 & 2008-09 Florida influenza seasons as monitored by three** of seven surveillance systems.

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. Sporadic activity has been reported in Florida for this reporting week (week 22). Florida meets the CDC sporadic activity definition. The CDC definition for sporadic activity is: Small numbers of laboratory-confirmed influenza cases or a single laboratory confirmed outbreak has been reported, but there is no increase in cases of ILI. The CDC report can be viewed at <http://www.cdc.gov/flu/weekly/usmap.htm>.



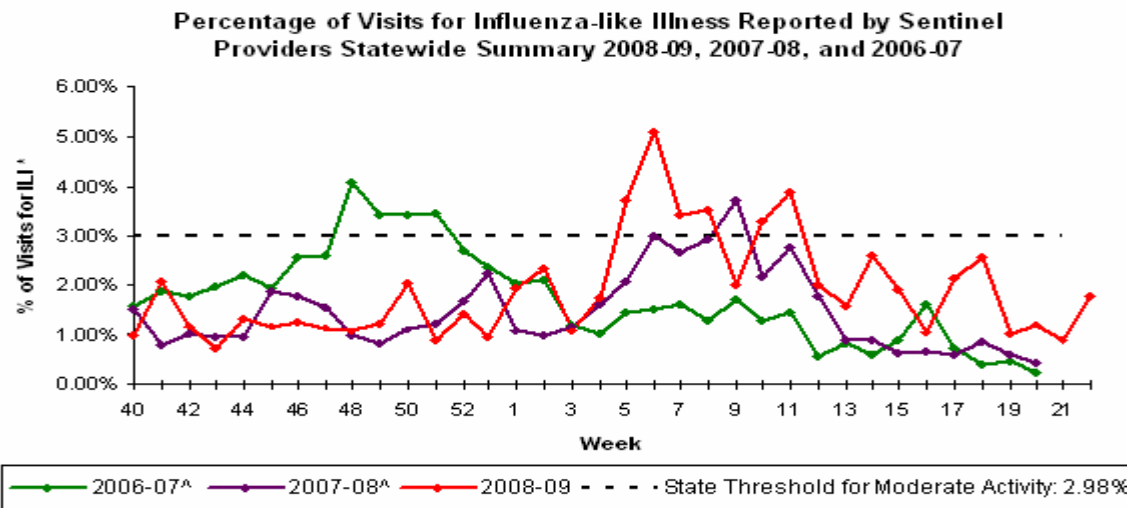
*The purposes of these surveillance systems are to determine when and where influenza activity is occurring, to identify circulating viruses, to detect changes in the circulating influenza viruses, to track patterns of influenza-associated morbidity and mortality and estimate the overall impact of influenza in the state of Florida.

**1) FSPISN, 2) State Laboratory Viral Surveillance, and 3) County Activity Levels.

Find more information at: http://www.doh.state.fl.us/disease_ctrl/epi/htopics/flu/index.htm

II. FSPISN INFLUENZA-LIKE ILLNESS STATEWIDE GRAPH

During week 22, 1.79%* of patient visits to Florida sentinel providers were due to ILI. This percentage is below the statewide threshold for moderate activity of 2.98%** . The percentage of visits ranged from 0.00% in the Southwest to 3.96% in the Southeast region.



*FSPISN reporting is incomplete for this week (42% of providers reported). Numbers may change as more reports are received. Data displayed is weighted to the state population.

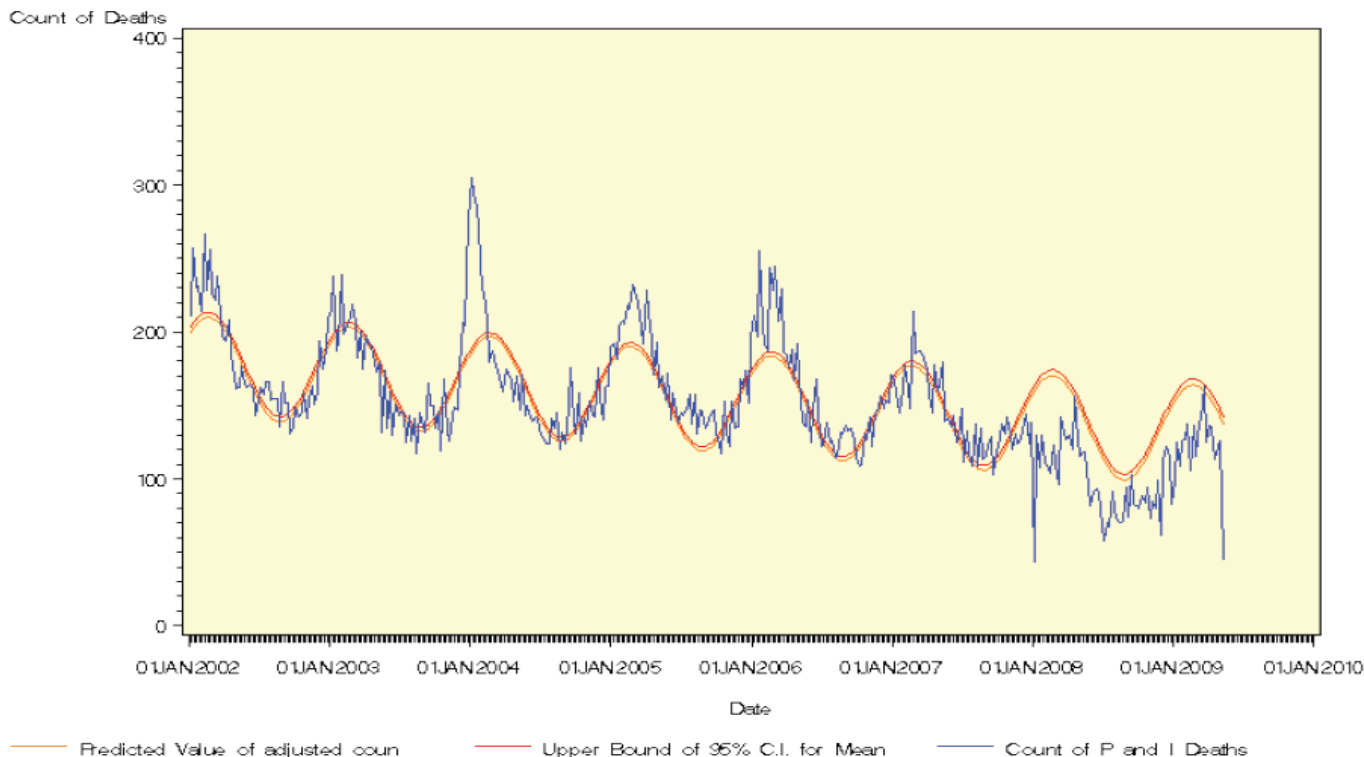
**The 2008—09 threshold for moderate activity is calculated from FSPISN data. The threshold for moderate activity is the mean percentage of patient visits for ILI during influenza weeks for the previous three seasons plus two standard deviations. Only weeks with 10% or greater of laboratory specimens 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 was no week 53 during the 2006-07 and 2007-08 seasons; the week 53 data point for those seasons is an average of weeks 52 and 1.

III. FLORIDA PNEUMONIA AND INFLUENZA MORTALITY SURVEILLANCE

During week 22, the total count of pneumonia and influenza (P&I) deaths reported was below the epidemic threshold. This indicates there were no deaths in excess of the expected count for week 22 and observed mortality does not indicate that Florida has surpassed the epidemic threshold for this week**.

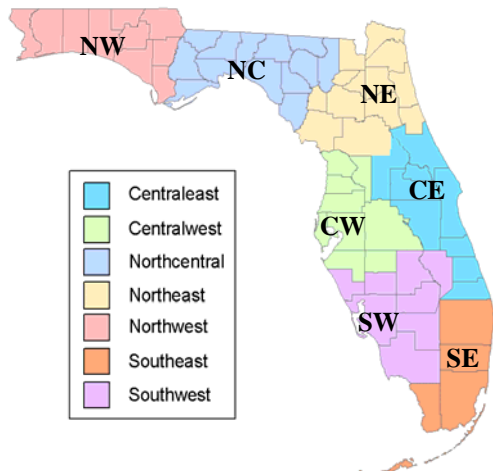
Pneumonia and Influenza Mortality for 24 Florida Counties, Counts Model



**Twenty-two of 24 counties reported P&I deaths to create this trend graph. Please note: Data from Broward and Volusia was not available. 100% participation is required for this graph to provide an accurate representation. We look forward to 100% participation for the duration of the influenza season.

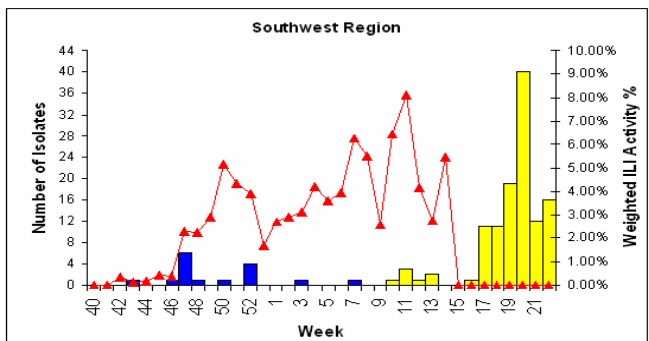
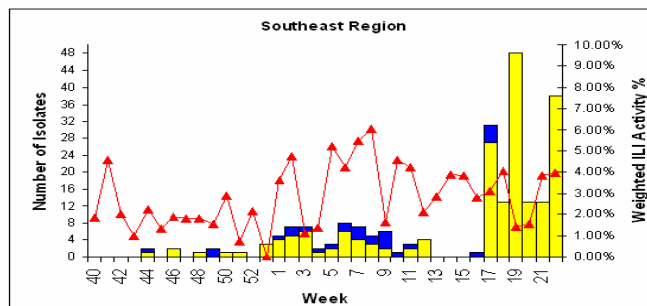
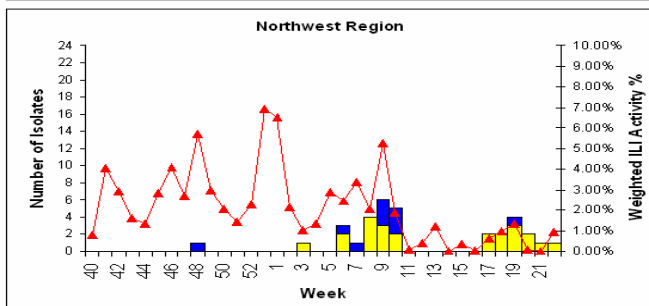
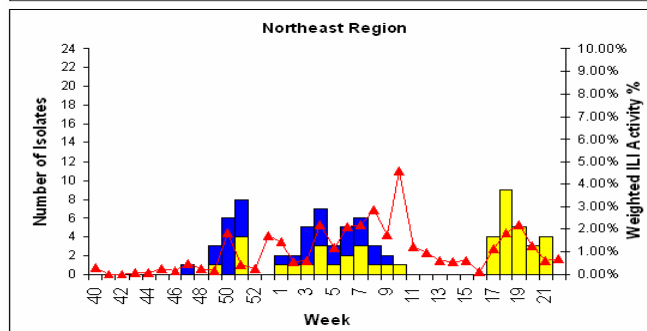
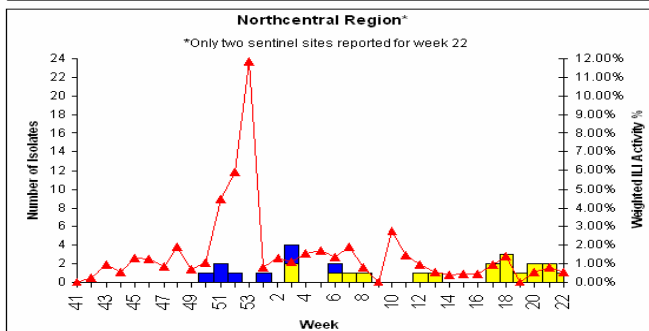
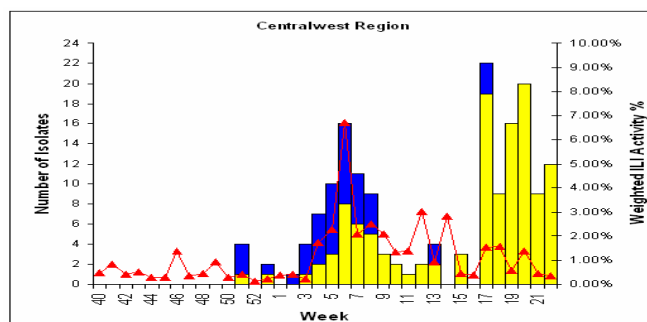
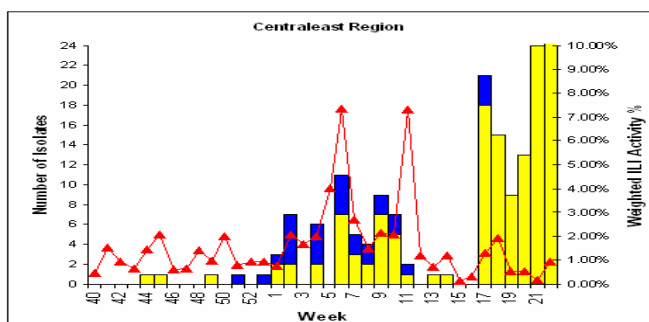
V. LABORATORY AND INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE BY REGION

Influenza Surveillance Regions



The table below shows the weighted ILI activity by region as reported by Florida sentinel physicians for the 2007-08 & 2008-09 seasons. The graphs below include ILI activity as reported by sentinel physicians and FDOH laboratory data.

Week 22: FSPISN Weighted ILI Activity, by Region 2007-08 & 2008-09 Seasons	
REGION	2008-09 ILI %
Centraleast	0.95%
Centralwest	0.35%
Northcentral	0.57%
Northeast	0.71%
Northwest	0.92%
Southeast	3.96%
Southwest	0.00%



- Influenza A specimens FDOH Laboratories
- Influenza B specimens FDOH Laboratories
- ▲ % of visits for ILI, reported by sentinel providers

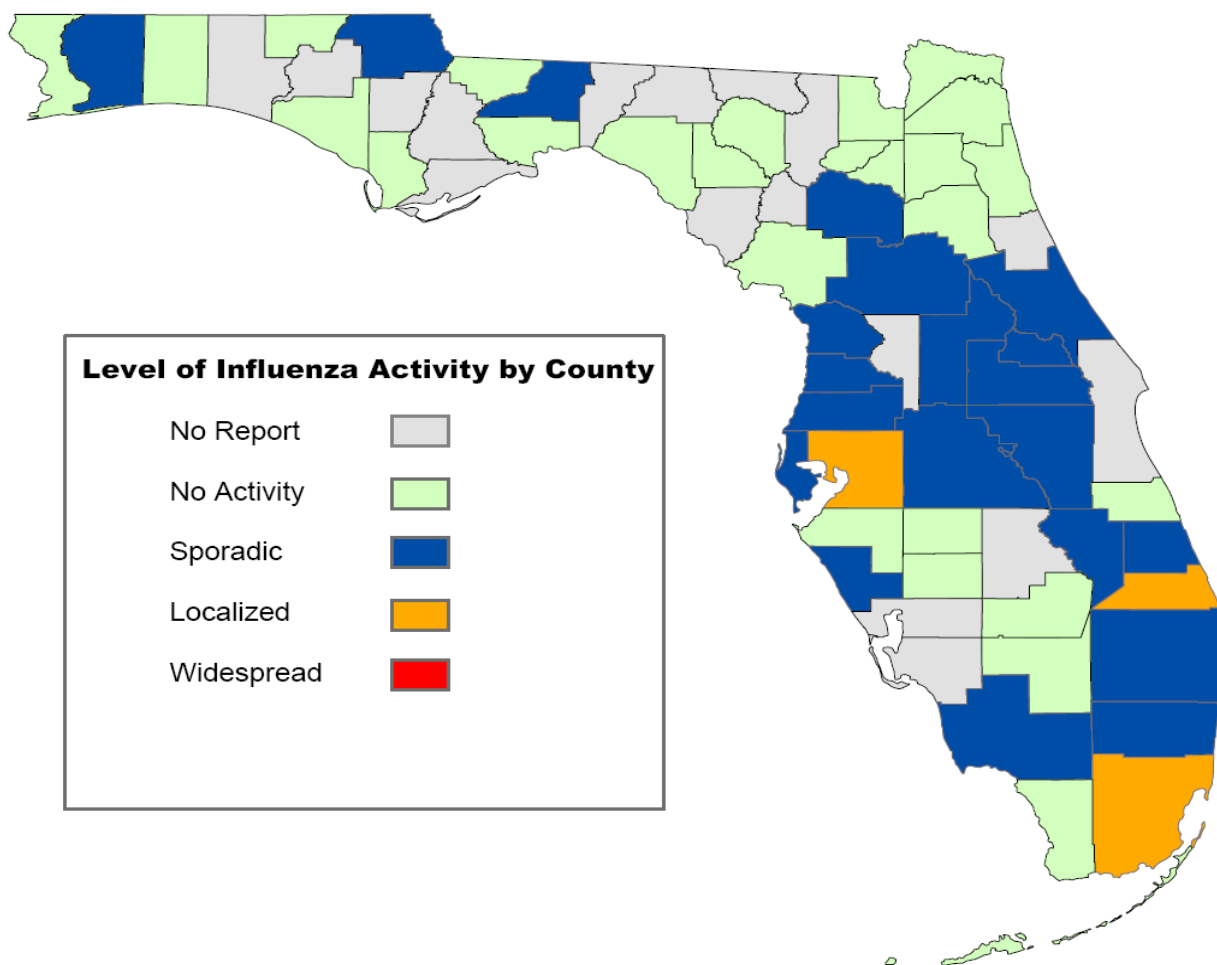
VI. COUNTY INFLUENZA ACTIVITY MAP

During week 22, no counties reported widespread activity. Three counties reported localized activity (Miami-Dade, Hillsborough, Martin). Twenty-one counties (Alachua, Broward, Citrus, Collier, Hernando, Jackson, Lake, Lee, Leon, Marion, Okeechobee, Orange, Osceola, Palm Beach, Pasco, Pinellas, Polk, St. Lucie, Santa Rosa, Sarasota, Seminole, Volusia) reported sporadic activity. Twenty-six counties reported no activity. Seventeen counties did not report. *Please note: data reported from counties reporting after the deadline are recorded but may not be included in the activity map below.*

Weekly County Influenza Activity

(Week ending June 6, 2009 - Week 22)

County influenza activity levels are reported by county health department epidemiologists



Florida Department of Health
Bureau of Epidemiology

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 Map printed June 11, 2009 at 9:45 am ET.

COUNTY INFLUENZA ACTIVITY LEVEL DEFINITIONS

0 = No Activity:

Overall clinical activity remains low with no laboratory confirmed cases[†] in the county.

1 = Sporadic:

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

2 = Localized:

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

AND

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

3 = Widespread:

- And/or {
- An increase in ILI[§] activity detected in ≥ 2 surveillance systems in the county.
 - Two or more outbreaks ((ILI[§] or laboratory confirmed[†]) detected in *multiple* settings[‡] 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 $\geq 100^{\circ}\text{F}$ 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.

VII. REPORTS OF INFLUENZA OR INFLUENZA-LIKE ILLNESS (ILI) OUTBREAKS

During week 22, there was one influenza outbreak reported. The report was entitled "Novel Influenza A H1N1 Cluster Involving Seminole and Duval Counties." Please see Epi Com for the details of this investigation.

County Health Department epidemiologists should report Influenza and ILI outbreaks via EpiCom at: <https://fdens.com/vabtrs/GateStart.aspx> within the Influenza Forum.

Total influenza or ILI outbreaks reported as of week 21 (05/30/09): 11

VIII. NOTIFIABLE DISEASE REPORTS: INFLUENZA-ASSOCIATED DEATHS AMONG CHILDREN (<18 YEARS) & POST-INFLUENZA INFECTION ENCEPHALITIS

As of the week ending June 6, 2009, there were no influenza-associated deaths among those <18 years of age and/ or post influenza infection encephalitis reported in the state of Florida.

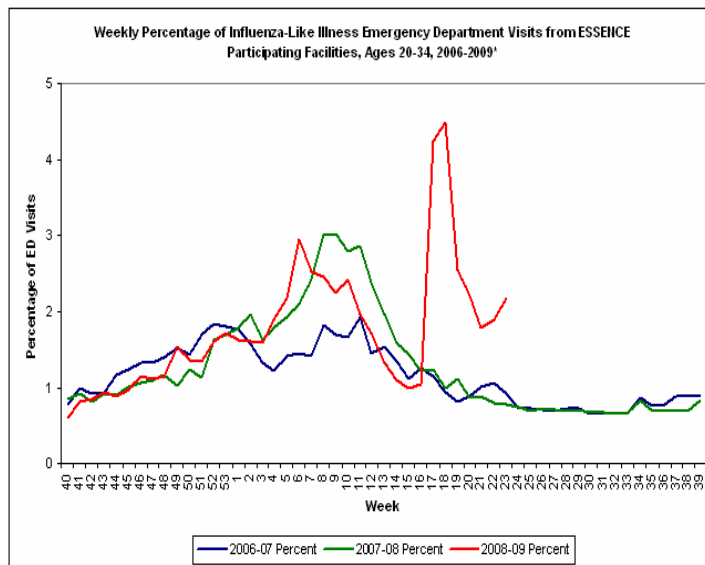
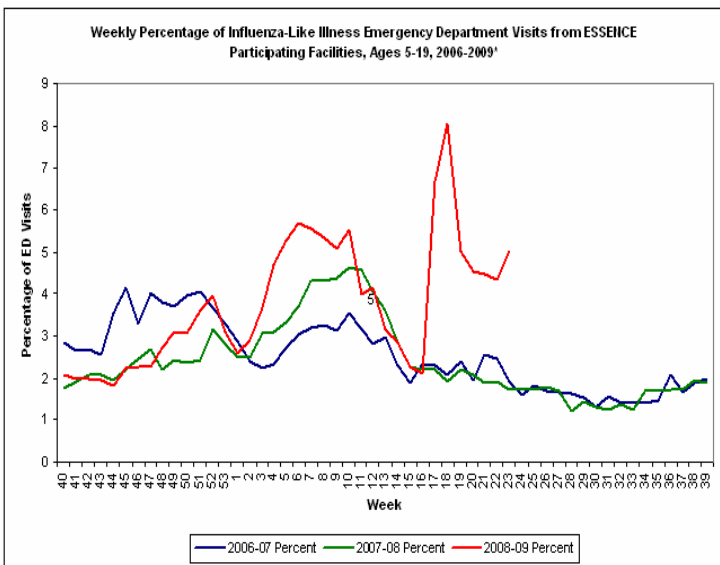
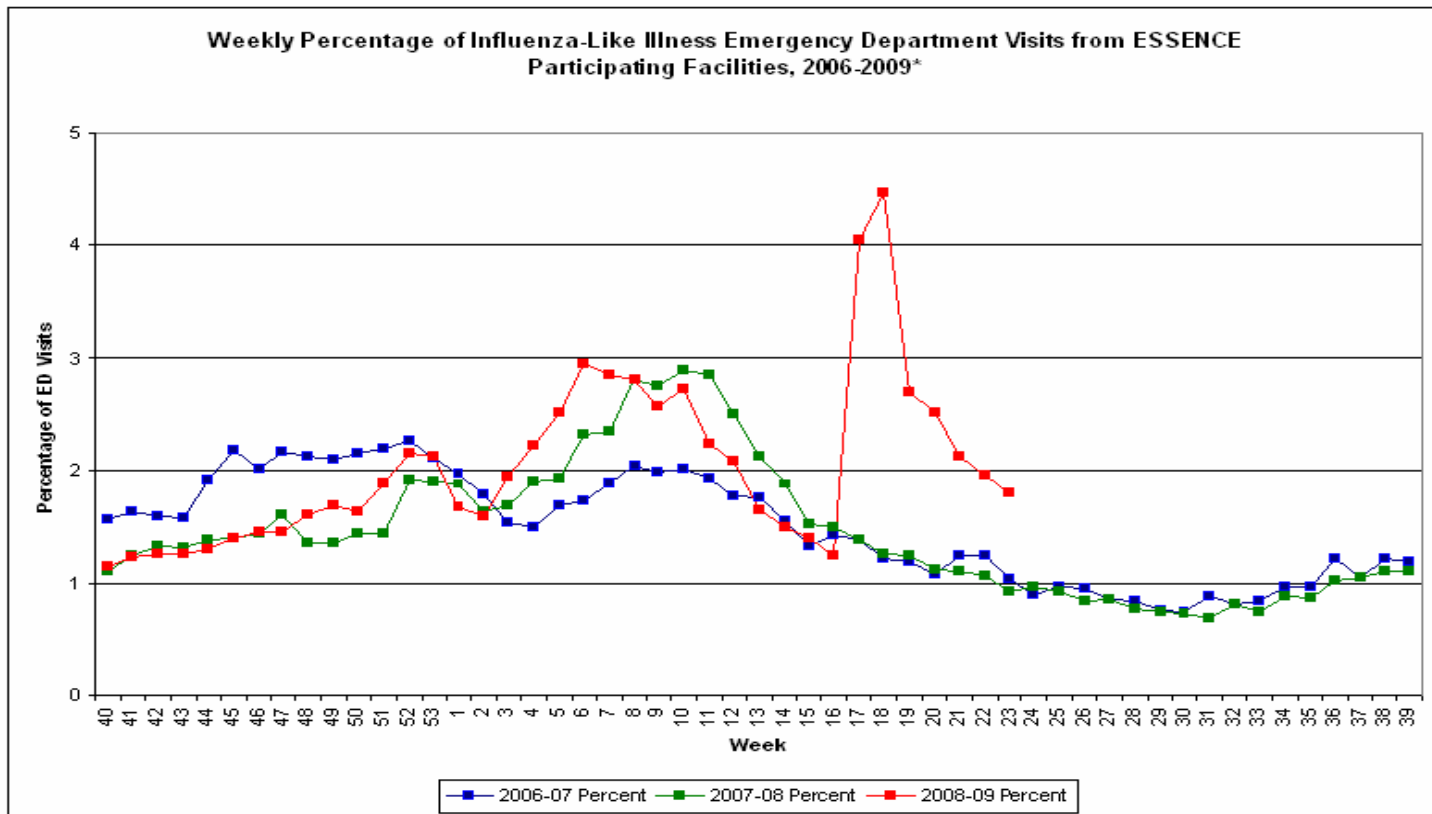
Reportable Disease	# of Cases 08-09 Influenza Season
Influenza-associated deaths among those <18 years of age	3*
Post-influenza infection encephalitis	0

*Case reported during week 6 was reclassified as a suspect case. Please note that status of reported cases are subject to change upon receipt of additional information.

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.

IX. SYNDROMIC SURVEILLANCE SUMMARY

Florida uses the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) for syndromic surveillance, which currently collects data from 107* hospitals. 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. The data are collected on a daily basis from participating hospital emergency departments (ED) across the state. Displayed below are the percentage of ILI visits to local EDs from 2006 to 2009 by week.



*The total number of facilities participating in ESSENCE has increased steadily from 2006 to 2009. In 2007 ESSENCE was implemented as the state syndromic surveillance system. Please note that numbers may change as facility data is updated.

X. SUMMARY OF WORLDWIDE, UNITED STATES, AND FLORIDA NOVEL INFLUENZA ACTIVITY

Accessed on: 06/10/09

Avian Influenza A (H5N1)

Since the outbreak activity of avian influenza A (H5N1) began at the end of December 2003, there have been a total of 433 confirmed human cases and 262 deaths. Cases and deaths have occurred in the following nations: Azerbaijan 8 cases and 5 deaths; Bangladesh 1 case 0 and deaths; Cambodia 8 cases and 7 deaths; China 38 cases and 25 deaths; Djibouti 1 case and 0 deaths; Egypt 78 cases and 27 deaths; Indonesia 141 cases and 115 deaths; Iraq 3 cases and 2 deaths; Lao People's Democratic Republic 2 cases and 2 deaths; Myanmar 1 case and 0 deaths; Nigeria 1 case and 1 death; Pakistan 3 cases and 1 death; Thailand 25 cases and 17 deaths; Turkey 12 cases and 4 deaths; and, Vietnam 111 cases and 56 deaths. For a complete analysis and summary of WHO confirmed human cases of H5N1 from 12/1/2003 to current, please visit: http://www.who.int/csr/disease/avian_influenza/ai_timeline/en/index.html

Changes in the WHO case definition for human infection with avian influenza H5N1 can be found here: http://www.who.int/csr/disease/avian_influenza/guidelines/case_definition2006_08_29/en/index.html

During week 22, no new cases of Influenza A H5N1 were reported.

During week 21, The Ministry of Health of Egypt has reported two confirmed human cases of avian influenza. The first case is a 14-month old girl from Dekernes District, Dkhalia Governorate. Her symptoms began on May 25, 2009. She was admitted to Mansoura Chest Hospital on May 29th. The second case is a 4-year old female child from the Keفر El Sheikh District of Keفر El Sheikh Governorate. Her symptoms started on May 30, 2009 with fever, cough and sore throat. She was admitted to Keفر El Sheikh Fever Hospital on May 31st. Both patients received oseltamivir and are in a stable condition. Contact with sick and/or dead poultry was noted in both cases prior to illness.

More information about these cases can be found at http://www.who.int/csr/disease/avian_influenza/updates/en/index.html

Influenza A (H1N1) - (Swine Origin) -Accessed 06/10/09

Worldwide, a total of 20,274 confirmed human cases and 117 confirmed deaths due to influenza A (H1N1) have been reported, since the virus was first recognized in April 2009. Laboratory confirmed cases and deaths have occurred in the following nations: Argentina 131 cases, 0 deaths; Australia 501 cases, 0 deaths; Austria 1 case, 0 deaths; Bahamas 1 case, 0 deaths; Bahrain 1 case, 0 deaths; Belgium 13 cases, 0 deaths; Bolivia 3 cases, 0 deaths; Brazil 20 cases, 0 deaths; Bulgaria 1 case, 0 deaths; Canada 1530 cases, 2 deaths; Chile 313 cases, 0 deaths; China 69 cases, 0 deaths; Columbia 20 cases, 0 deaths; Costa Rica 50 cases, 1 death; Cuba 4 cases, 0 deaths; Cyprus 1 case, 0 deaths; Czech Republic 1 case, 0 deaths; Denmark 1 case, 0 deaths; Dominican Republic 11 cases, 0 deaths; Ecuador 39 cases, 0 deaths; Egypt 1 case, 0 deaths; El Salvador 41 cases, 0 deaths; Estonia 1 case, 0 deaths; Finland 4 cases, 0 deaths; France 26 cases, 0 deaths; Germany 28 cases, 0 deaths; Greece 5 case, 0 deaths; Guatemala 14 cases, 0 deaths; Honduras 2 cases, 0 deaths; Hungary 1 case, 0 deaths; Iceland 1 case, 0 deaths; India 1 case, 0 deaths; Ireland 4 cases, 0 deaths; Israel 33 cases, 0 deaths; Italy 30 cases, 0 deaths; Jamaica 2 cases, 0 deaths; Japan 385 cases, 0 deaths; Kuwait 18 cases, 0 deaths; Lebanon 3 cases, 0 deaths; Malaysia 2 cases, 0 deaths; Mexico 5,029 cases, 97 deaths; Netherlands 4 cases, 0 deaths; New Zealand 10 cases, 0 deaths; Nicaragua 1 case, 0 deaths; Norway 4 cases, 0 deaths; Panama 155 cases, 0 deaths; Paraguay 5 cases, 0 deaths; Peru 40 cases, 0 deaths; Philippines 16 cases, 0 deaths; Poland 4 cases, 0 deaths; Portugal 2 cases, 0 deaths; Republic of Korea 41 cases, 0 deaths; Romania 5 cases, 0 deaths; Russia 3 cases, 0 deaths; Singapore 9 cases, 0 deaths; Slovakia 2 cases, 0 deaths; Spain 180 cases, 0 deaths; Sweden 7 cases, 0 deaths; Switzerland 10 cases, 0 deaths; Thailand 2 cases, 0 deaths; Turkey 4 cases, 0 deaths; and, United Kingdom 339 cases, 0 deaths; Uruguay 15 cases, 0 deaths; Venezuela 3 cases, 0 deaths; Viet Nam 3 cases, 0 deaths.

For a summary of the most up to date H1N1 information please visit: <http://www.who.int/csr/disease/swineflu/en/index.html>

In the United States, a total of 52 states (including the District of Columbia and Puerto Rico) have reported confirmed cases of Influenza A (H1N1) swine origin. There have been a total of 13,217 cases and 27 deaths reported as of June 4, 2009.

For the latest information about this rapidly evolving situation please visit: <http://www.cdc.gov/h1n1flu/>

X. SUMMARY OF WORLDWIDE, UNITED STATES, AND FLORIDA NOVEL INFLUENZA ACTIVITY

Accessed on: 06/05/09

In Florida, laboratory confirmed cases of Influenza A (H1N1) - Swine Origin are as follows:

Confirmed swine influenza H1N1 cases by county (n=417), Florida, as of June 11, 2009

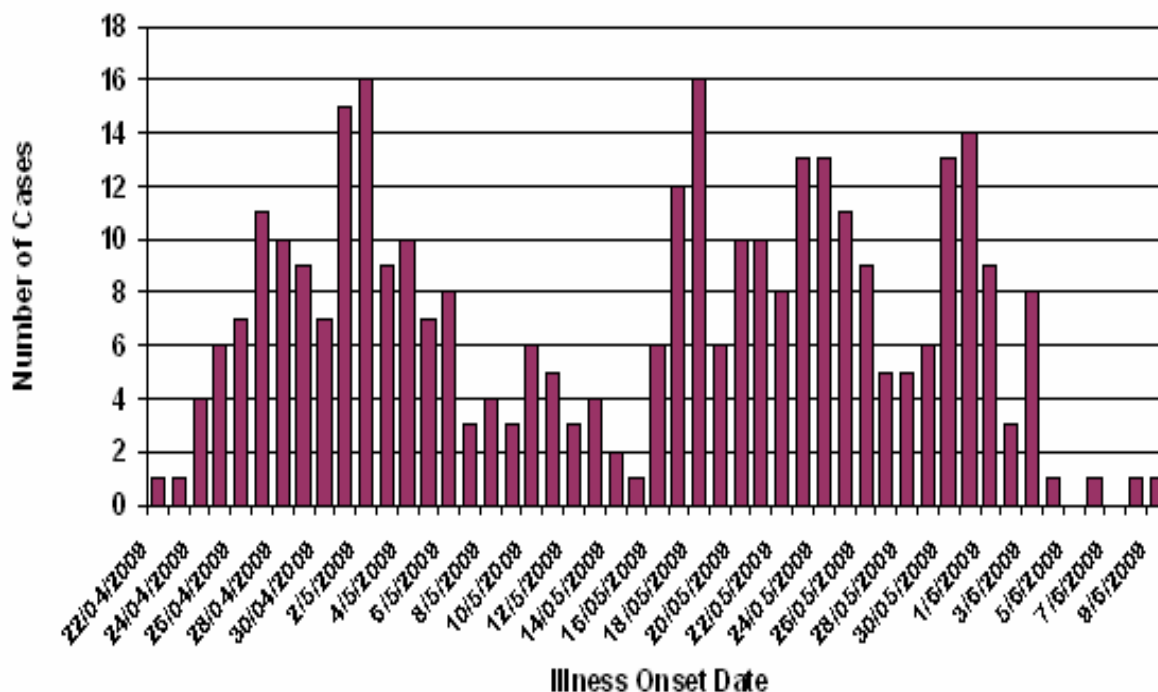
County	Frequency	Percent
ALACHUA	3	0.72
BRADFORD	1	0.24
BREVARD	5	1.20
BROWARD	68	16.31
CLAY	1	0.24
COLLIER	7	1.68
DADE	114	27.34
DESOTO	1	0.24
DUVAL	6	1.44
ESCAMBIA	1	0.24
FLAGLER	1	0.24
HERNANDO	1	0.24
HIGHLANDS	1	0.24
HILLSBOROUGH	25	6.00
INDIAN RIVER	1	0.24
LAKE	9	2.16
LEE	21	5.04
LEON	1	0.24
LEVY	2	0.48

County	Frequency	Percent
MANATEE	3	0.72
MARION	3	0.72
MARTIN	18	4.32
NASSAU	2	0.48
OKEECHOBEE	1	0.24
ORANGE	31	7.43
OSCEOLA	7	1.68
PALM BEACH	20	4.80
PASCO	8	1.92
PINELLAS	9	2.16
POLK	18	4.32
SANTA ROSA	2	0.48
SARASOTA	4	0.96
SEMINOLE	14	3.36
ST. JOHNS	3	0.72
ST. LUCIE	2	0.48
SUMTER	1	0.24
VOLUSIA	2	0.48

There are no probable swine influenza H1N1 cases in Florida, as of June 11, 2009.

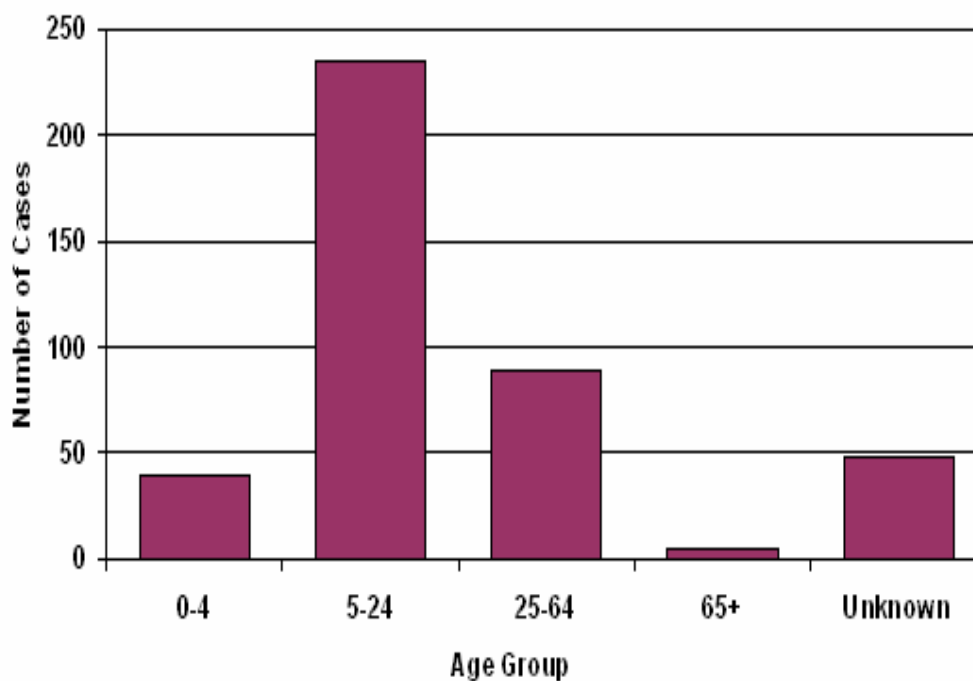
X. SUMMARY OF WORLDWIDE, UNITED STATES, AND FLORIDA NOVEL INFLUENZA ACTIVITY

Confirmed and probable cases by date of onset*, Florida, as of June 11, 2009



*Note that 84 confirmed cases are missing dates of onset.

Confirmed and probable cases by age, Florida, as of June 11, 2009



X. SUMMARY OF WORLDWIDE, UNITED STATES, AND FLORIDA NOVEL INFLUENZA ACTIVITY**Confirmed and probable cases by date of age and gender, Florida, as of June 11, 2009**

Age			
	#	%	Rate (per 100,000)
0-4	40	9.59	3.54
5-24	235	56.35	4.90
25-64	89	21.34	0.90
65+	5	1.20	0.15
Unknown	48	11.51	--
Total	417	100.00	2.18

Range: 1-75
Average: 19.2
Median: 14.0

Gender			
	#	%	Rate (per 100,000)
Female	183	43.88	1.88
Male	228	54.68	2.43
Unknown	6	1.44	--
Total	417	100.00	2.18

Human cases of influenza due to infection from novel or pandemic strains are reportable in Florida. Reports should be made to the Department of Health 24/7 upon initial suspicion. Reporting guidelines for hospitals and clinicians can be found at http://www.doh.state.fl.us/disease_ctrl/epi/swineflu/index.html