

FLORIDA INFLUENZA SURVEILLANCE

Week 23: June 7th 2009- June 13th 2009



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IN THIS ISSUE:

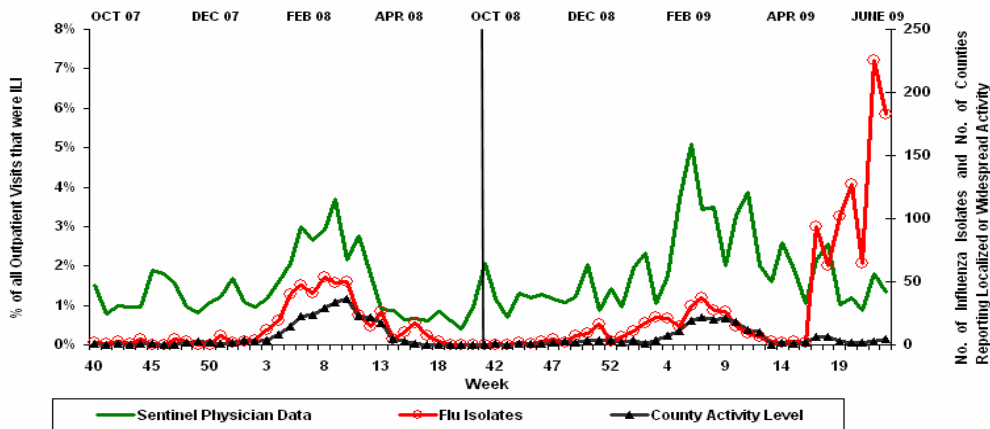
- I. Summary
- II. FSPISN Influenza-like Illness Statewide Graph
- III. Florida Pneumonia and Influenza Mortality Surveillance
- IV. FDOH Laboratory Surveillance
- V. Laboratory and Influenza-like Illness Surveillance by Region
- VI. County Influenza Activity Map
- VII. Reports of Influenza or Influenza-like Illness (ILI) Outbreaks
- VIII. Notifiable Disease Reports: Influenza-associated deaths in children & post-influenza infection encephalitis
- IX. ESSENCE ILI syndromic surveillance summary

I. SUMMARY

This is the thirty-seventh 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 23 (06/07/09-06/13/09), the proportion of patient visits for influenza-like illness (ILI) as reported by the Florida Sentinel Physician Influenza Surveillance Network was 1.33 percent. This is below the state threshold for moderate activity of 2.98 percent. One hundred eighty-three (58%) of 313 ILI specimens tested by Bureau of Laboratories were positive for influenza. One county reported widespread activity and four counties reported localized activity. Twenty counties reported sporadic activity and 17 counties reported no activity. Twenty-six 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. Local activity has been reported in Florida for this reporting week (week 23). Florida meets the CDC local activity definition which is: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state. The CDC report can be viewed at <http://www.cdc.gov/flu/weekly/usmap.htm>.

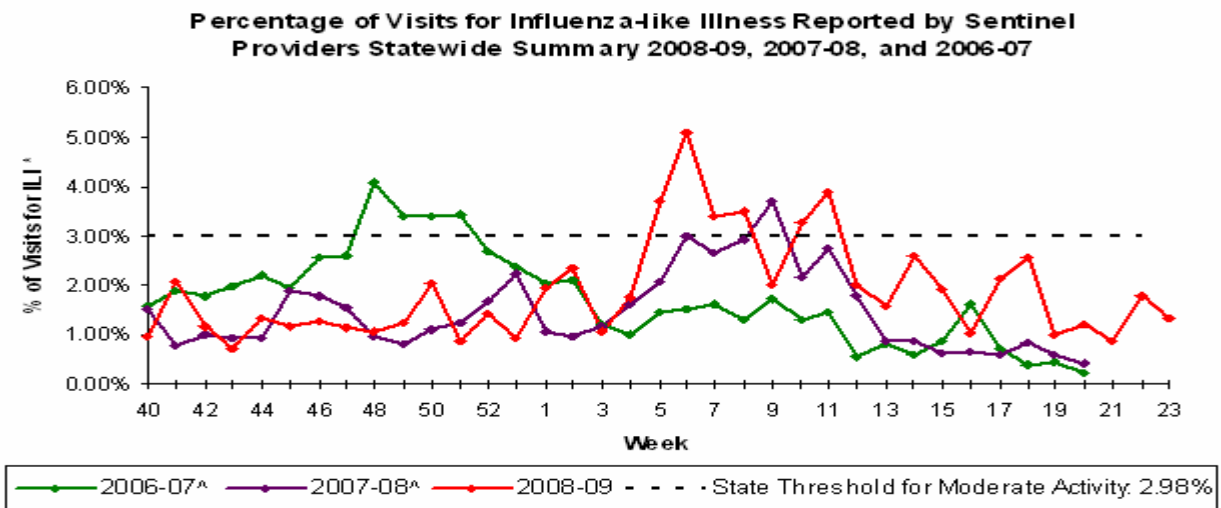


*The purposes of these surveillance systems are to determine when and where influenza activity is occurring, to identify circulating viruses, to detect changes in the circulating influenza viruses, to track patterns of influenza-associated morbidity and mortality and estimate the overall impact of influenza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

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

II. FSPISN INFLUENZA-LIKE ILLNESS STATEWIDE GRAPH

During week 23, 1.33%* 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 and Northwest to 3.30% in the Southeast region.



*FSPISN reporting is incomplete for this week (34% of providers reported). Numbers may change as more reports are received. Data displayed is weighted to the state population.

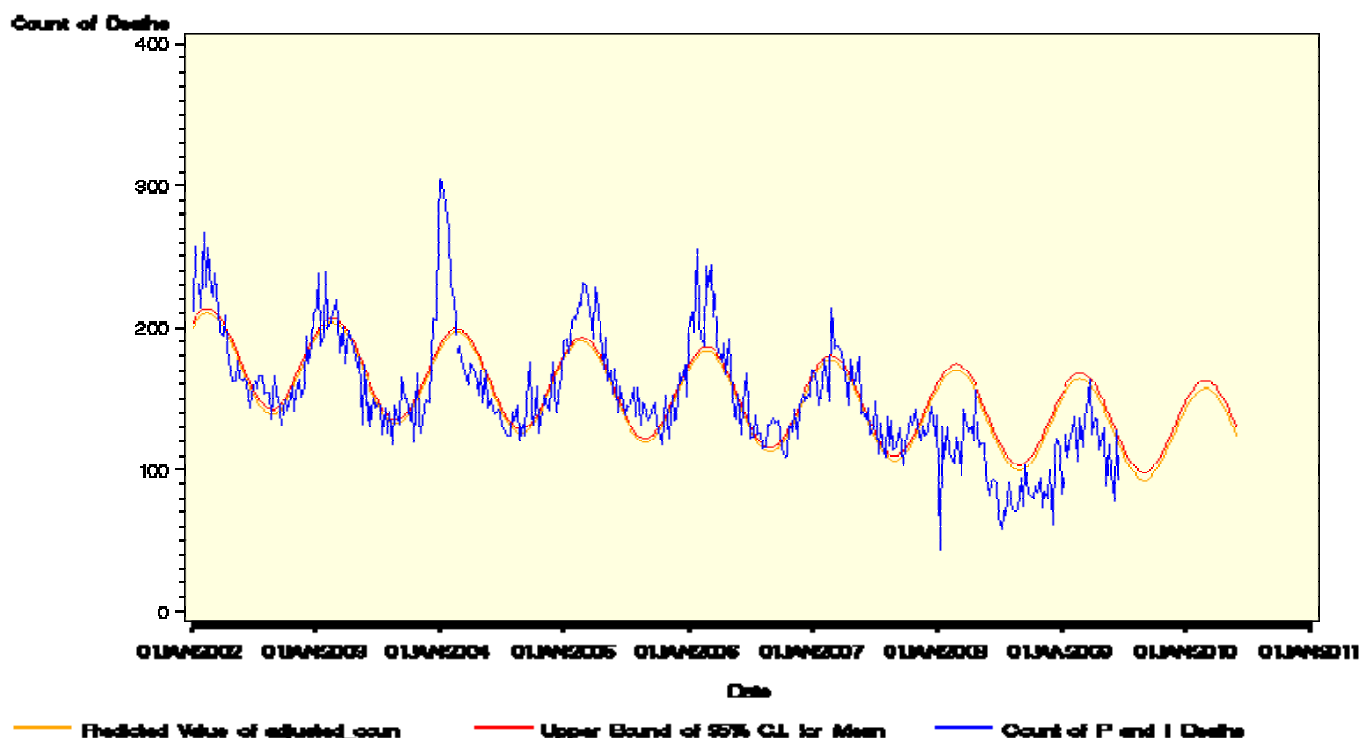
**The 2008—09 threshold for moderate activity is calculated from FSPISN data. The threshold for moderate activity is the mean percentage of patient visits for ILI during influenza weeks for the previous three seasons plus two standard deviations. Only weeks with 10% or greater of laboratory specimens 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 23, 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 23 and observed mortality does not indicate that Florida has surpassed the epidemic threshold for this week**.

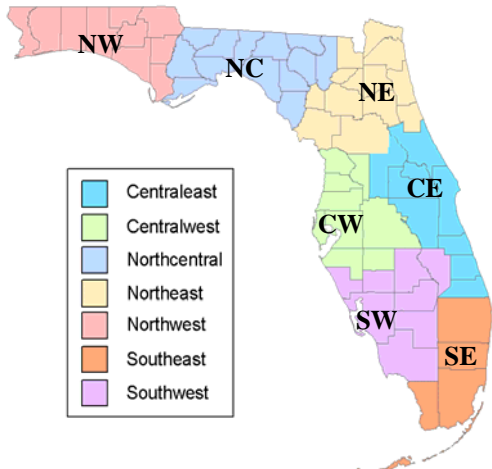
Pneumonia and Influenza Mortality for 24 Florida Counties, Counts Model



**Twenty of 24 counties reported P&I deaths to create this trend graph. Please note: Data from Miami-Dade, Palm Beach, Sumter, 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.

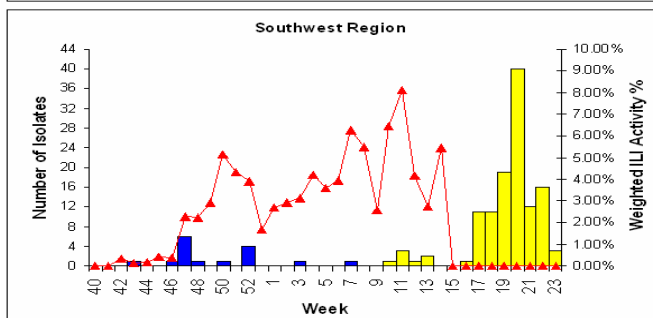
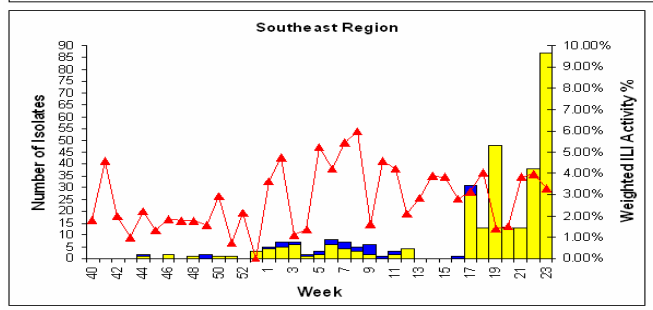
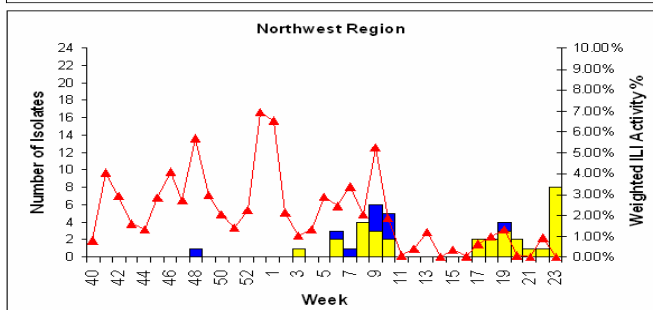
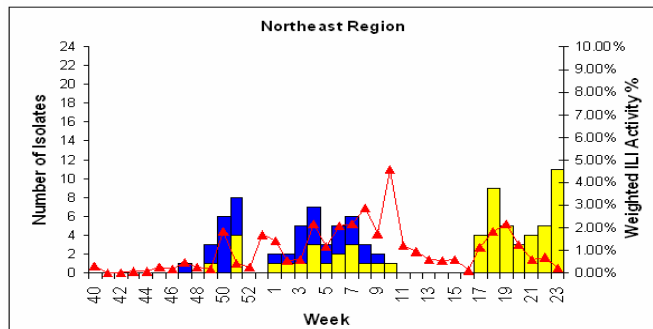
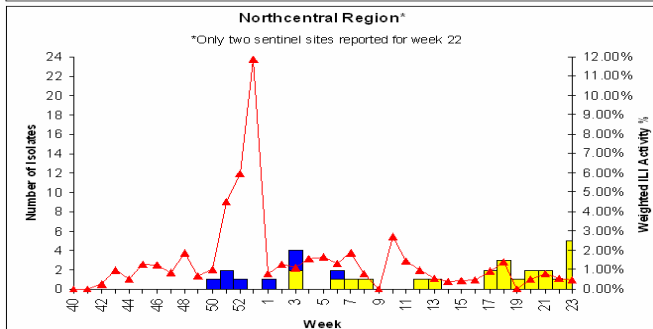
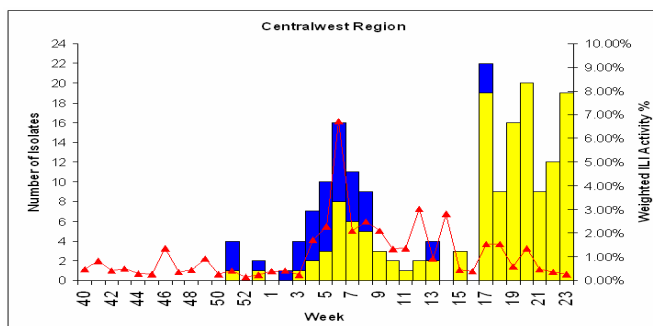
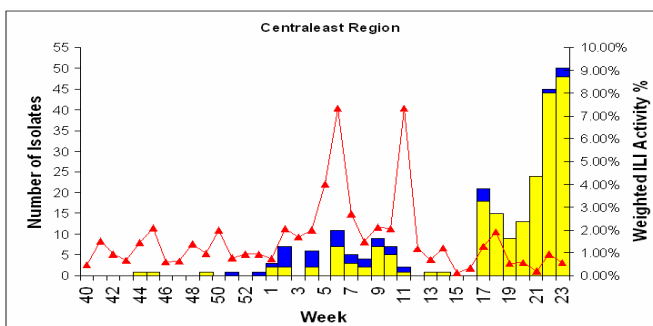
V. LABORATORY AND INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE BY REGION

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 23: FSPISN Weighted ILI Activity, by Region 2007-08 & 2008-09 Seasons	
REGION	2008-09 ILI %
Centraleast	0.58%
Centralwest	0.26%
Northcentral	0.45%
Northeast	0.21%
Northwest	0.00%
Southeast	3.30%
Southwest	0.00%



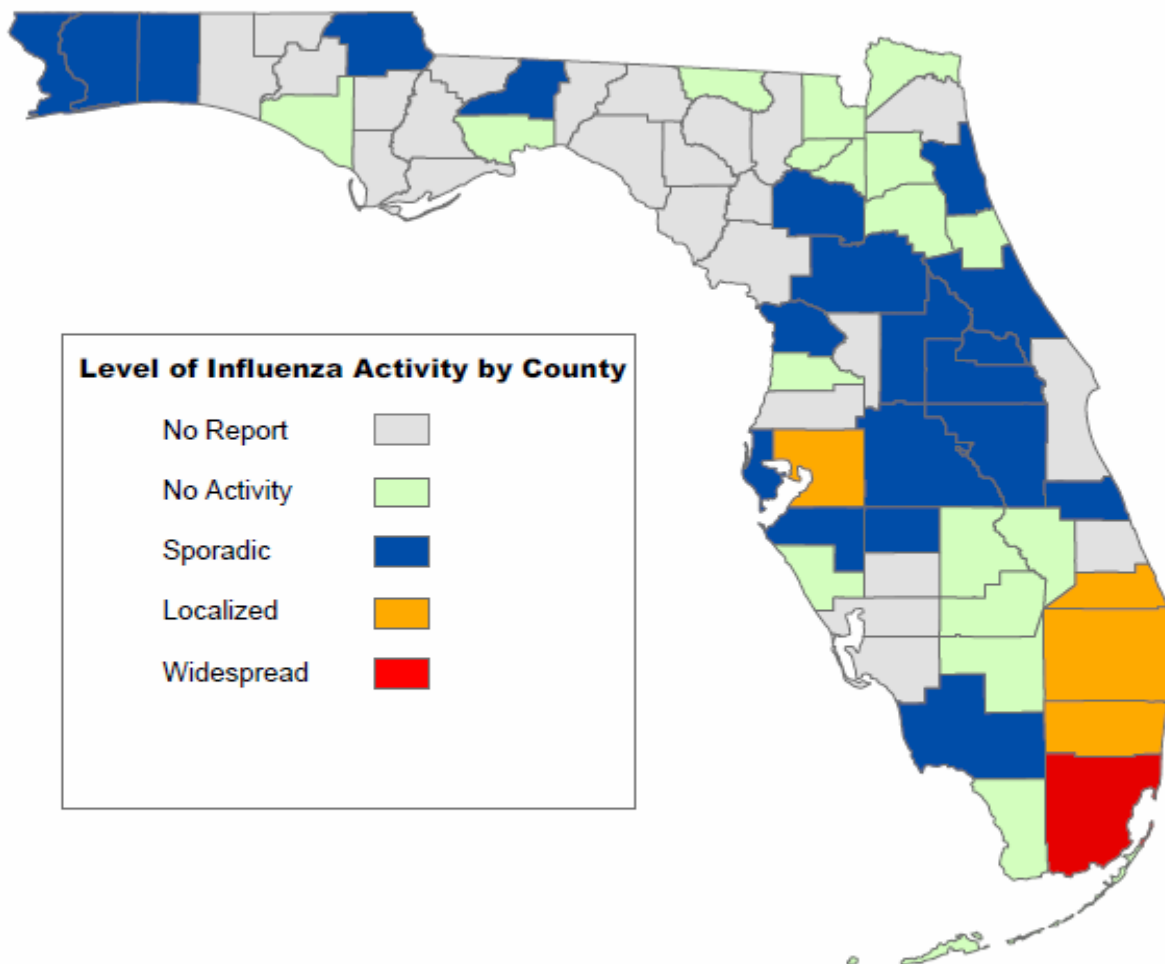
- Influenza A specimens FDOH Laboratories
- Influenza B specimens FDOH Laboratories
- % of visits for ILI, reported by sentinel providers

VI. COUNTY INFLUENZA ACTIVITY MAP

During week 23, one county (Miami-Dade) reported widespread activity. Four counties reported localized activity (Broward, Hillsborough, Martin, and Palm Beach). Twenty counties reported sporadic activity and seventeen counties reported no activity. Twenty-six 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 13, 2009 - Week 23)
 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 16, 2009 at 4:00 pm 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 23, there were two influenza outbreaks reported. Several counties within the state have been affected by a cluster of novel influenza H1N1 cases associated with a Boy Scout camp in North Carolina. A summary of the activity seen in Palm Beach County as a consequence of those imported cases can be seen on EpiCom. The report was titled "Cluster of ILI in a North Carolina Camp Involving Florida Residents." An additional outbreak report titled "Novel H1N1 Influenza Outbreak at a Federal Detention Center in Miami, FL" can also be viewed via EpiCom.

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 23 (06/13/09): 14

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

As of the week ending June 13, 2009, there were four influenza-associated deaths among those <18 years of age and/ or post influenza infection encephalitis reported in the state of Florida.

One death that occurred during week 23 was due to novel influenza A H1N1.

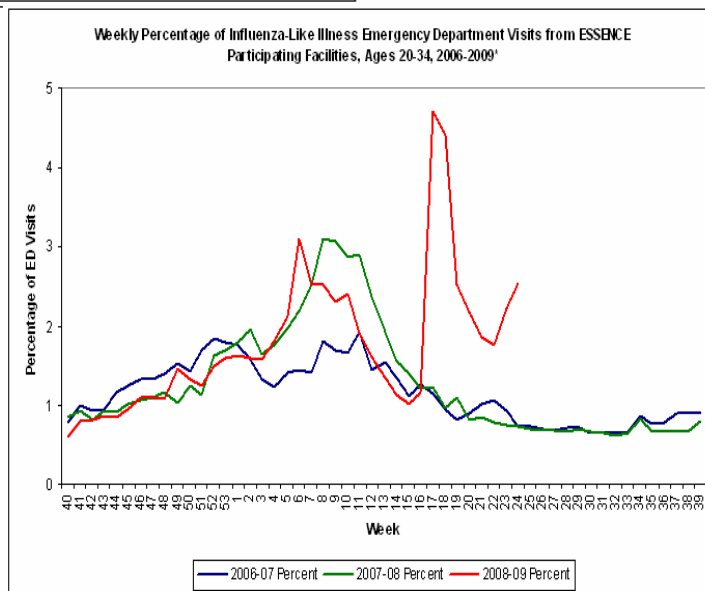
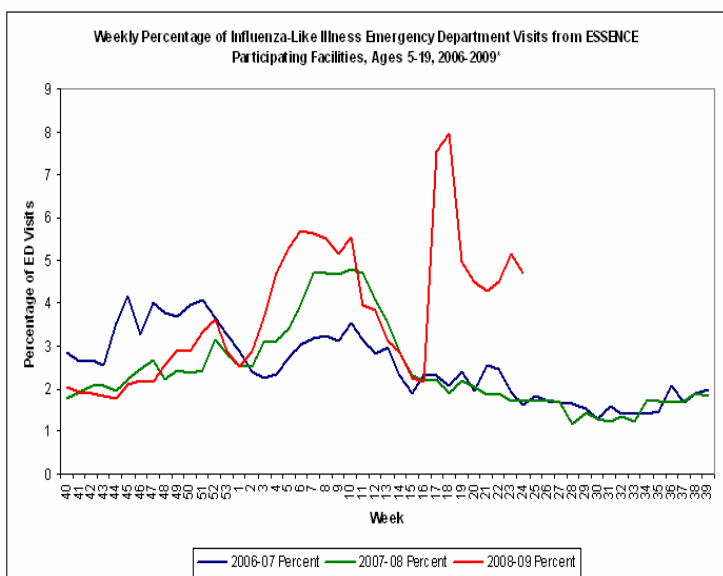
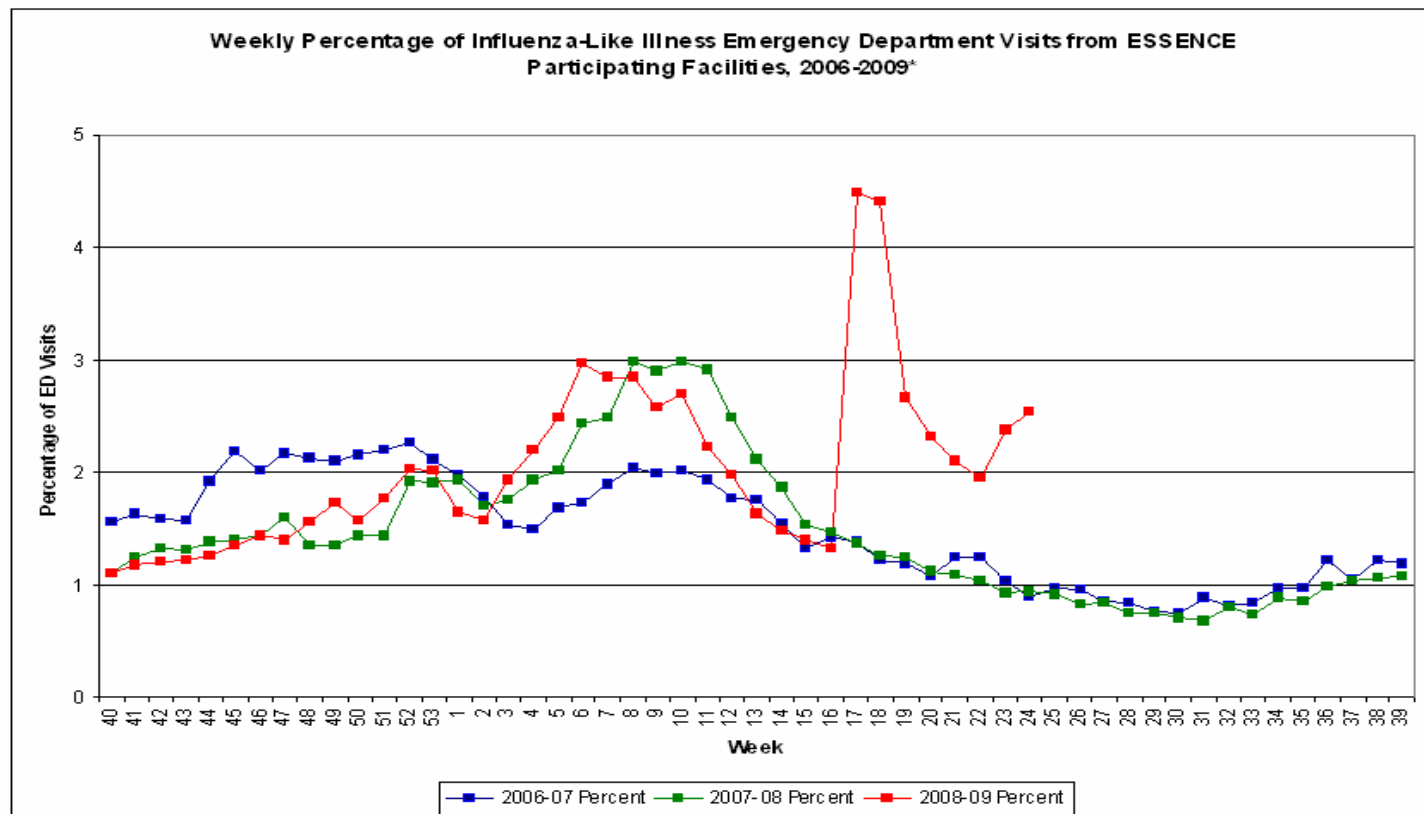
Reportable Disease	# of Cases 08-09 Influenza Season
Influenza-associated deaths among those <18 years of age	4*
Post-influenza infection encephalitis	0

*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: 06/18/09

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 23, no new cases of Influenza A H5N1 were reported. Information about previously reported cases can be found at http://www.who.int/csr/disease/avian_influenza/updates/en/index.html

Influenza A (H1N1) - (Swine Origin) -Accessed 06/18/09

Worldwide, a total of 39,620 confirmed human cases and 167 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:

Country, territory and area	Cumulative total		Newly confirmed since the last reporting period	
	Cases	Deaths	Cases	Deaths
Argentina	733	1	390	1
Australia	2,112	-	289	-
Austria	7	-	-	-
Bahamas	2	-	1	-
Bahrain	12	-	11	-
Barbados	3	-	-	-
Belgium	19	-	2	-
Bermuda	1	-	1	-
Bolivia	11	-	4	-
Brazil	79	-	25	-
British Virgin Islands	1	-	1	-
Bulgaria	2	-	-	-
Canada	4,049	7	1,071	3
Cayman Islands	4	-	2	-
Chile	2,335	2	641	-
China	382	-	64	-
Colombia	53	1	11	-
Costa Rica	149	1	45	-
Cuba	7	-	1	-
Cyprus	1	-	-	-
Czech Republic	4	-	-	-
Denmark	15	-	3	-
Dominica	1	-	-	-
Dominican Republic	93	1	-	-
Ecuador	86	-	6	-
Egypt	26	-	8	-
El Salvador	125	-	30	-
Estonia	4	-	-	-
Finland	12	-	8	-
France	118	-	38	-
French Polynesia	1	-	1	-
Germany	195	-	25	-
Greece	23	-	4	-
Guatemala	128	1	9	-
Honduras	100	-	11	-
Hungary	4	-	-	-
Iceland	4	-	-	-
India	30	-	14	-
Ireland	12	-	-	-
Israel	152	-	35	-
Italy	72	-	5	-
Jamaica	12	-	1	-
Japan	666	-	61	-
Jordan	2	-	2	-
Korea	65	-	-	-
Kuwait	18	-	-	-
Lebanon	11	-	3	-
Luxembourg	2	-	1	-
Malaysia	17	-	12	-
Martinique	1	-	1	-
Mexico	6,241	108	-	-
Morocco	3	-	2	-
Netherlands	68	-	7	-
Netherlands, Curacao, OT	1	-	1	-
New Zealand	127	-	41	-
Nicaragua	118	-	62	-
Norway	13	-	-	-
Panama	272	-	-	-
Paraguay	25	-	-	-
Peru	112	-	21	-
Philippines	193	-	116	-
Poland	7	-	-	-
Portugal	3	-	-	-
Qatar	3	-	3	-
Romania	16	-	3	-
Russia	3	-	-	-
Samoa	1	-	1	-
Saudi Arabia	17	-	6	-
Singapore	49	-	2	-
Slovakia	3	-	-	-
Spain	499	-	11	-
Sri Lanka	1	-	1	-
Sweden	37	-	5	-
Switzerland	27	-	5	-
Thailand	310	-	281	-
Trinidad and Tobago	5	-	-	-
Turkey	16	-	6	-
Ukraine	1	-	-	-
United Arab Emirates	1	-	-	-
United Kingdom	1,463	1	237	1
United States of America*	17,855	44	-	-1
Uruguay	36	-	-	-
Venezuela	45	-	20	-
Viet Nam	27	-	2	-
West Bank and Gaza Strip	2	-	-	-
Yemen	1	-	1	-
Grand Total	39,620	167	3,692	4

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 17,855 cases and 44 deaths reported as of June 17, 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: 06/18/09

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

Confirmed swine influenza H1N1 cases by county (n=556), Florida, as of June 17, 2009

County	Frequency	Percent
ALACHUA	5	0.90
BRADFORD	1	0.18
BREVARD	7	1.26
BROWARD	84	15.11
CLAY	2	0.36
COLLIER	8	1.44
DADE	151	27.16
DESOTO	1	0.18
DUVAL	6	1.08
ESCAMBIA	13	2.34
FLAGLER	1	0.18
HAMILTON	1	0.18
HERNANDO	1	0.18
HIGHLANDS	1	0.18
HILLSBOROUGH	37	6.65
INDIAN RIVER	1	0.18
LAKE	13	2.34
LEE	22	3.96
LEON	1	0.18
LEVY	2	0.36

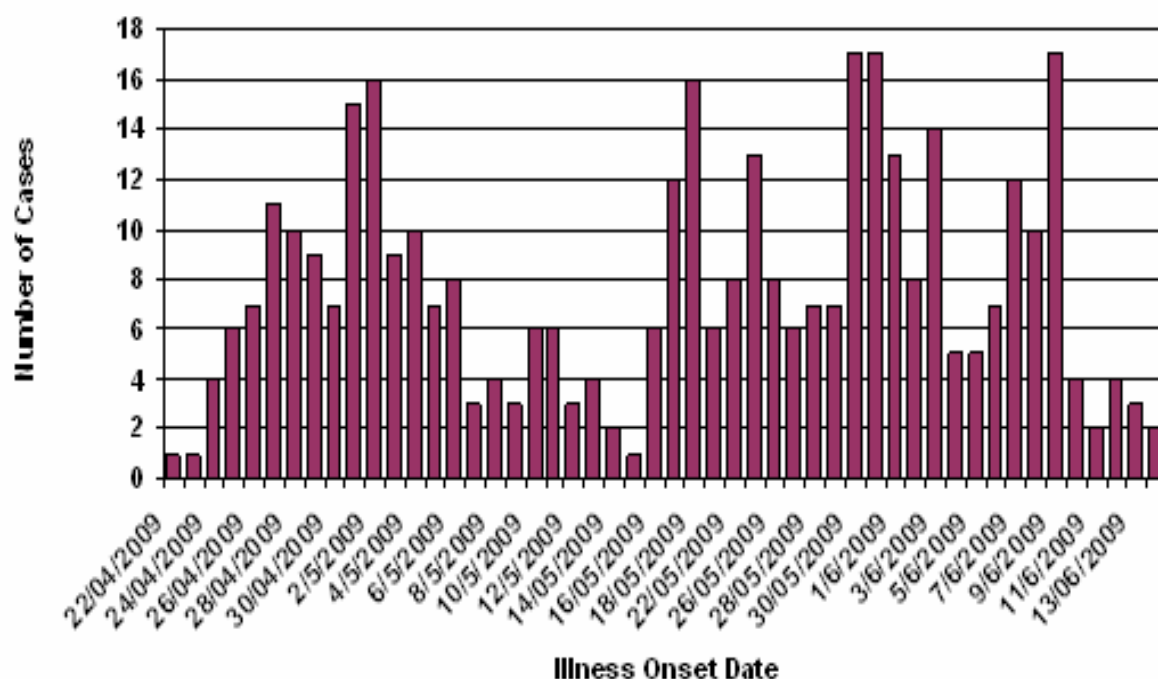
County	Frequency	Percent
MANATEE	4	0.72
MARION	3	0.54
MARTIN	25	4.50
NAUSSAU	2	0.36
OKEECHOBEE	1	0.18
ORANGE	43	7.73
OSCEOLA	8	1.44
PALM BEACH	34	6.12
PASCO	9	1.62
PIKEELLAS	12	2.16
POLK	24	4.32
SANTA ROSA	2	0.36
SARASOTA	5	0.90
SEMINOLE	18	3.24
ST. JOHNS	3	0.54
ST. LUCIE	2	0.36
SUMTER	1	0.18
VOLUSIA	2	0.36

Probable swine influenza H1N1 cases by county (n=6), Florida, as of June 17, 2009

County	Frequency	Percent
ESCAMBIA	1	16.67
PALM BEACH	1	16.67
SANTA ROSA	4	66.67

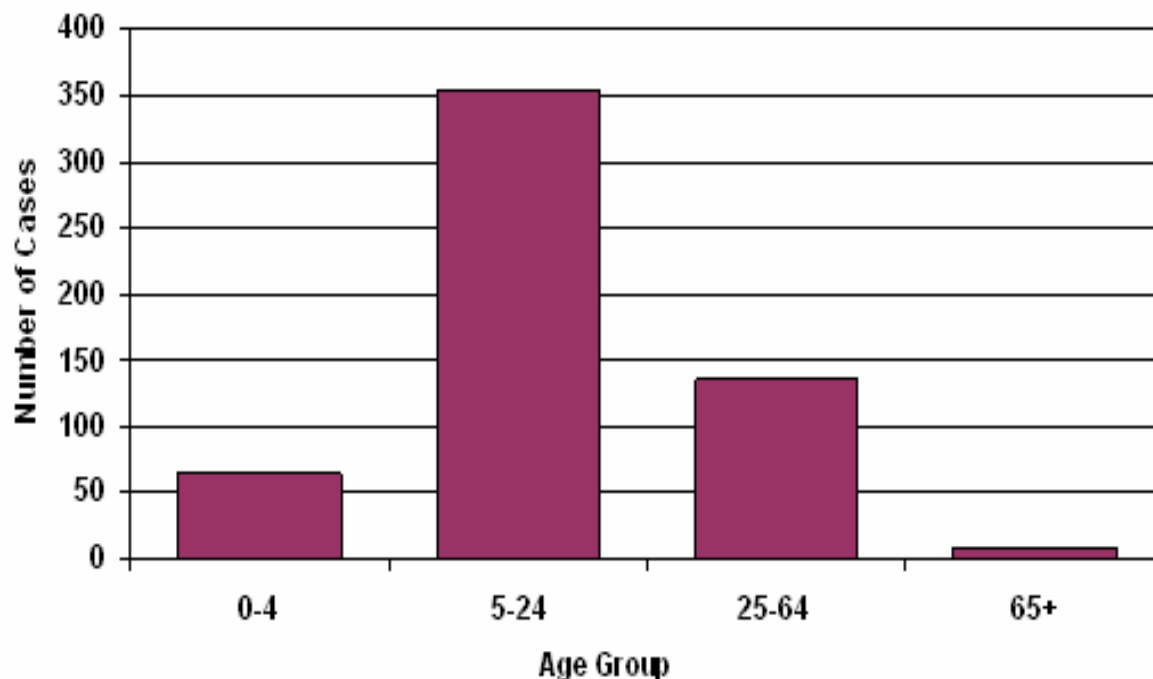
X. SUMMARY OF WORLDWIDE, UNITED STATES, AND FLORIDA NOVEL INFLUENZA ACTIVITY

Confirmed and probable cases by date of onset*, Florida, as of June 17, 2009



*Note that 135 confirmed cases are missing dates of onset.

Confirmed and probable cases by age, Florida, as of June 17, 2009



X. SUMMARY OF WORLDWIDE, UNITED STATES, AND FLORIDA NOVEL INFLUENZA ACTIVITY**Confirmed and probable cases by age, gender*, and outcome, Florida, as of June 17, 2009**

	Age			Female		Male		Hospitalized		Deaths	
	N	% of total cases	Rate	N	% of age group	N	% of age group	N	% of age group	N	% of age group
0-4	65	11.57	5.75	25	39.68	38	60.32	20	30.77	0	0.00
5-24	353	62.81	7.36	153	44.22	193	55.78	24	6.80	1	0.28
25-64	135	24.02	1.37	63	47.01	71	52.99	18	13.33	0	0.00
65+	9	1.60	0.27	4	44.44	5	55.56	3	33.33	0	0.00
Total	562	100.00	2.94	245	44.38	307	55.62	65	11.57	1	0.18

Age: range=0-85; average=18.9; median=14.0

*10 cases are missing gender and are excluded from gender percentage calculations

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