

# FLORIDA INFLUENZA SURVEILLANCE

Week 24: June 14th 2009- June 20th 2009



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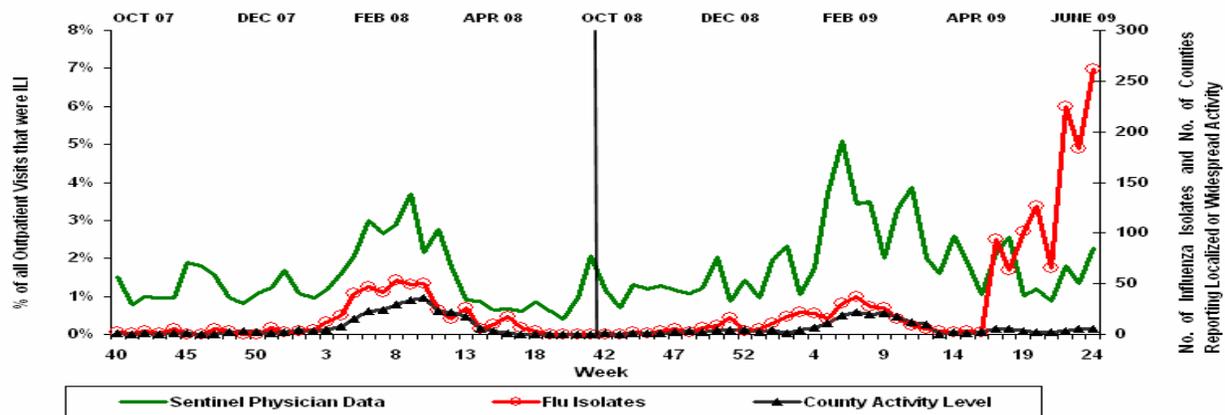
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## I. SUMMARY

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 24 (06/14/09-06/20/09), the proportion of patient visits for influenza-like illness (ILI) as reported by the Florida Sentinel Physician Influenza Surveillance Network was 2.28 percent. This is below the state threshold for moderate activity of 2.98 percent. Two hundred sixty-two (69%) of 382 ILI specimens tested by Bureau of Laboratories were positive for influenza. One county reported widespread activity and four counties reported localized activity. Twenty-seven counties reported sporadic activity and 15 counties reported no activity. Twenty 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 24). 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>.

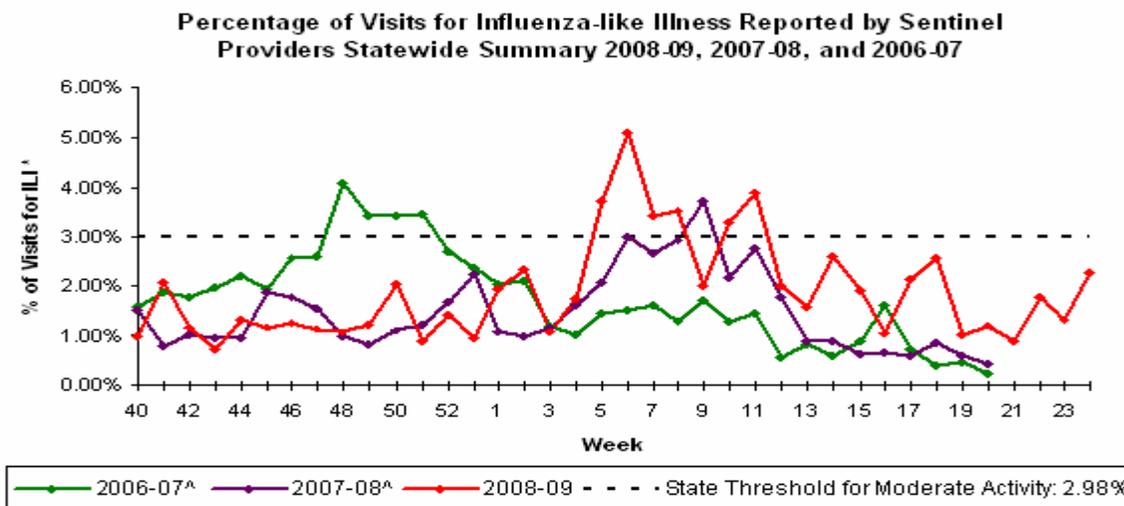


\*The purposes of these surveillance systems are to determine when and where influenza activity is occurring, to identify circulating viruses, to detect changes in the circulating influenza viruses, to track patterns of influenza-associated morbidity and mortality and estimate the overall impact of influenza 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 24, 2.28%\* 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 4.77% in the Southeast region.



\*FSPISN reporting is incomplete for this week (44% of providers reported). Numbers may change as more reports are received. Data displayed is weighted to the state population.

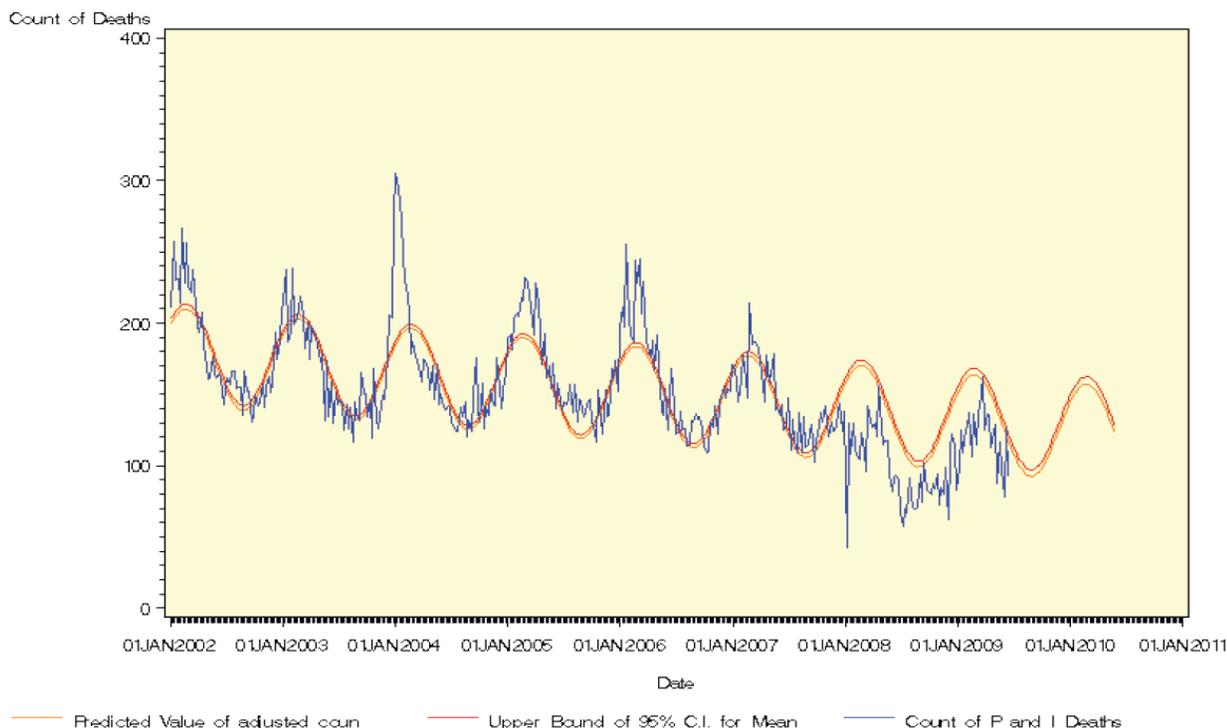
\*\*The 2008—09 threshold for moderate activity is calculated from FSPISN data. The threshold for moderate activity is the mean percentage of patient visits for ILI during influenza weeks for the previous three seasons plus two standard deviations. Only weeks with 10% or greater of laboratory specimens 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.

<sup>^</sup> 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 24, 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 24 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

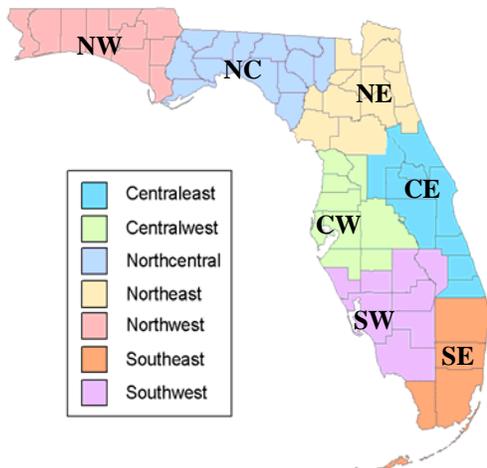


\*\*Twenty-one of 24 counties reported P&I deaths to create this trend graph. Please note: Data from Duval, Hillsborough, and Volusia was not available. 100% participation is required for this graph to provide an accurate representation. We look forward to 100% participation for the duration of the influenza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



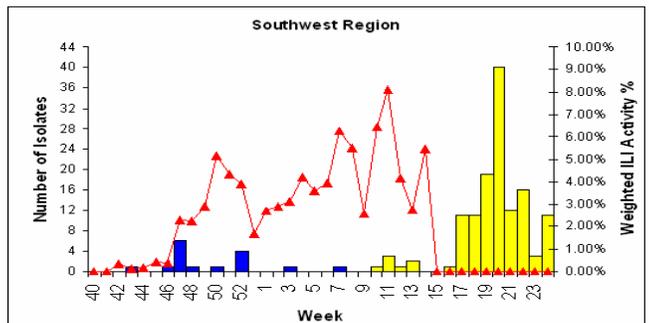
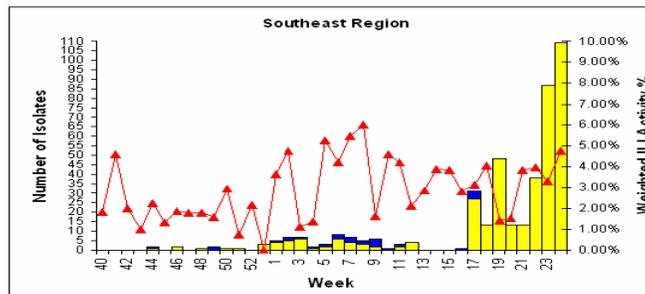
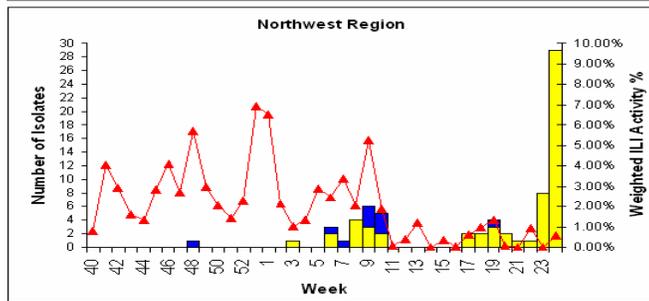
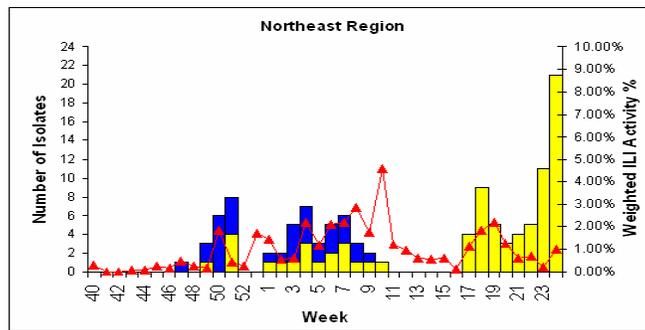
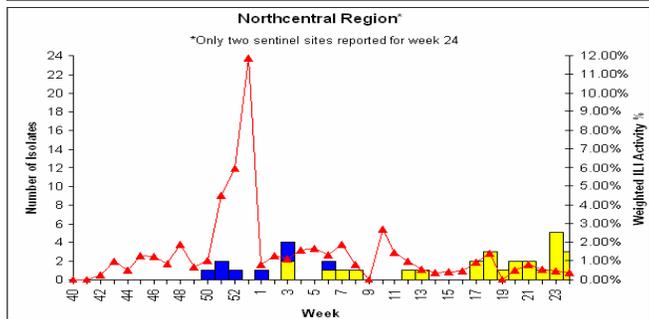
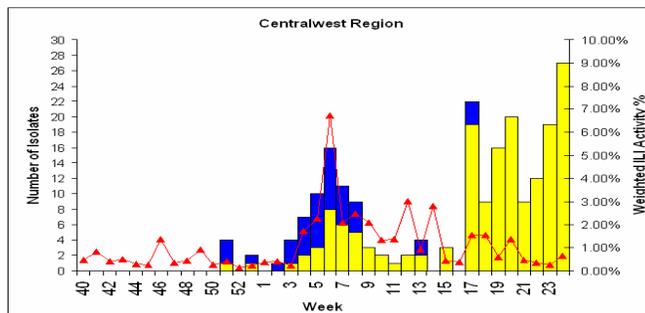
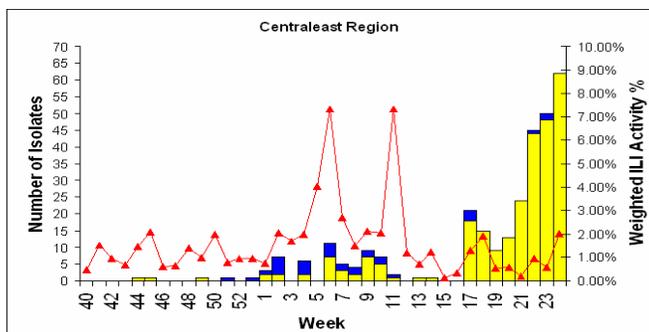
# V. LABORATORY AND INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE BY REGION

## 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 24: FSPISN Weighted ILI Activity, by Region 2007-08 & 2008-09 Seasons	
REGION	2008-09 ILI %
Centraleast	2.04%
Centralwest	0.66%
Northcentral	0.37%
Northeast	0.99%
Northwest	0.57%
Southeast	4.77%
Southwest	0.00%



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

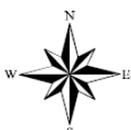
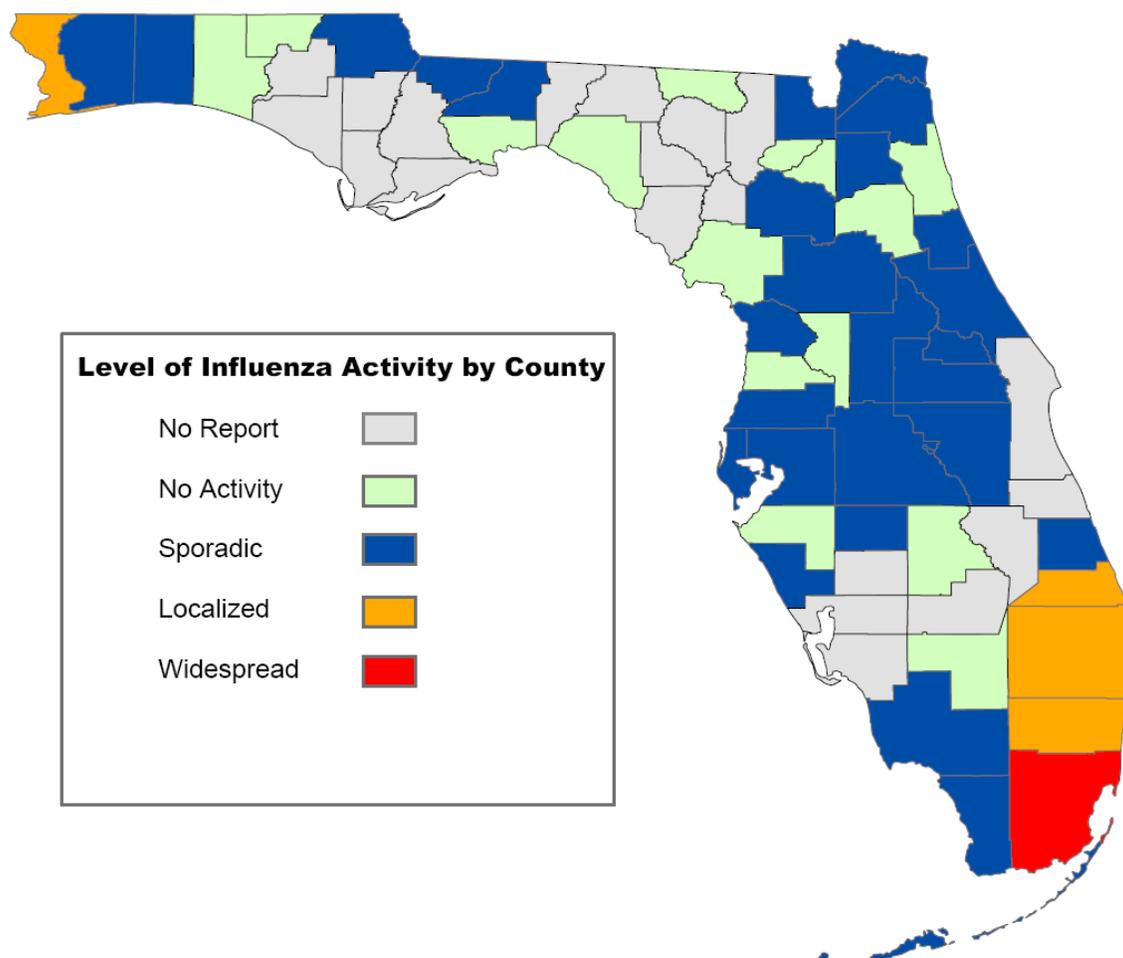
## VI. COUNTY INFLUENZA ACTIVITY MAP

During week 24, one county (Miami-Dade) reported widespread activity. Four counties reported localized activity (Broward, Escambia, Martin, and Palm Beach). Twenty-seven counties reported sporadic activity and fifteen counties reported no activity. Twenty 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 20, 2009 - Week 24)

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 25, 2009 at 9:28 am ET.

## COUNTY INFLUENZA ACTIVITY LEVEL DEFINITIONS

### 0 = No Activity:

Overall clinical activity remains low with no laboratory confirmed cases<sup>†</sup> in the county.

### 1 = Sporadic:

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

### 2 = Localized:

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

### AND

- Recent (within past three weeks) laboratory evidence<sup>†</sup> of influenza activity in the county.

### 3 = Widespread:

- And/or {
- An increase in ILI<sup>§</sup> activity detected in  $\geq 2$  surveillance systems in the county.
  - Two or more outbreaks ((ILI<sup>§</sup> or laboratory confirmed<sup>†</sup>) detected in *multiple* settings<sup>‡</sup> in the county.

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

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

<sup>§</sup>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.

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

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

During week 24, there were no additional 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 starting in week 23. Updates to this situation can be found on EpiCom. The most recent reports related to the camp outbreak were entitled "More Boy Scouts—Hillsborough County" and "Boy Scout Influenza Outbreak...More Info From Collier County".

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 24 (06/20/09): 14**

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

As of the week ending June 20, 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.

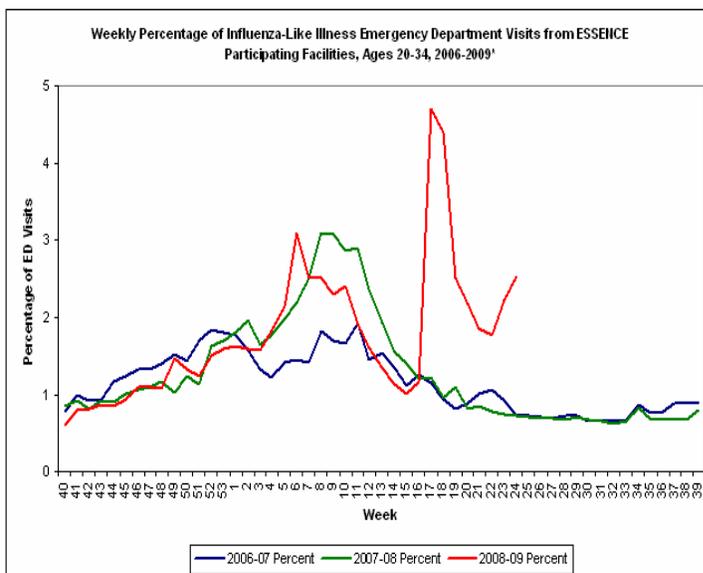
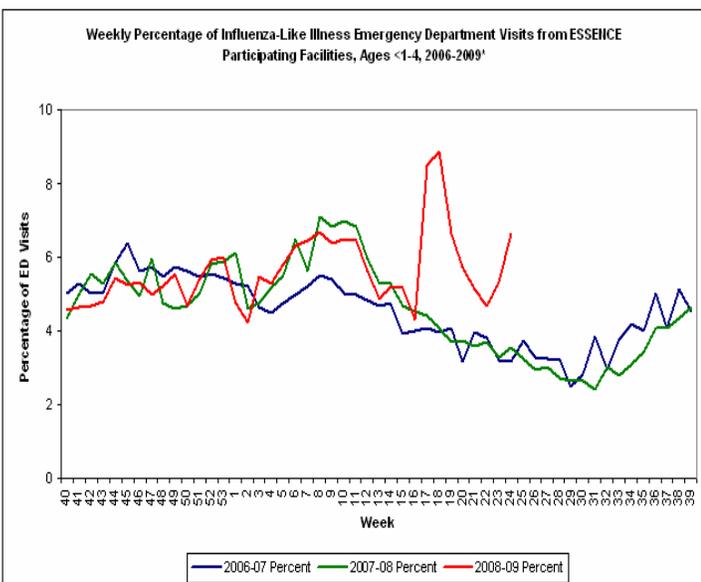
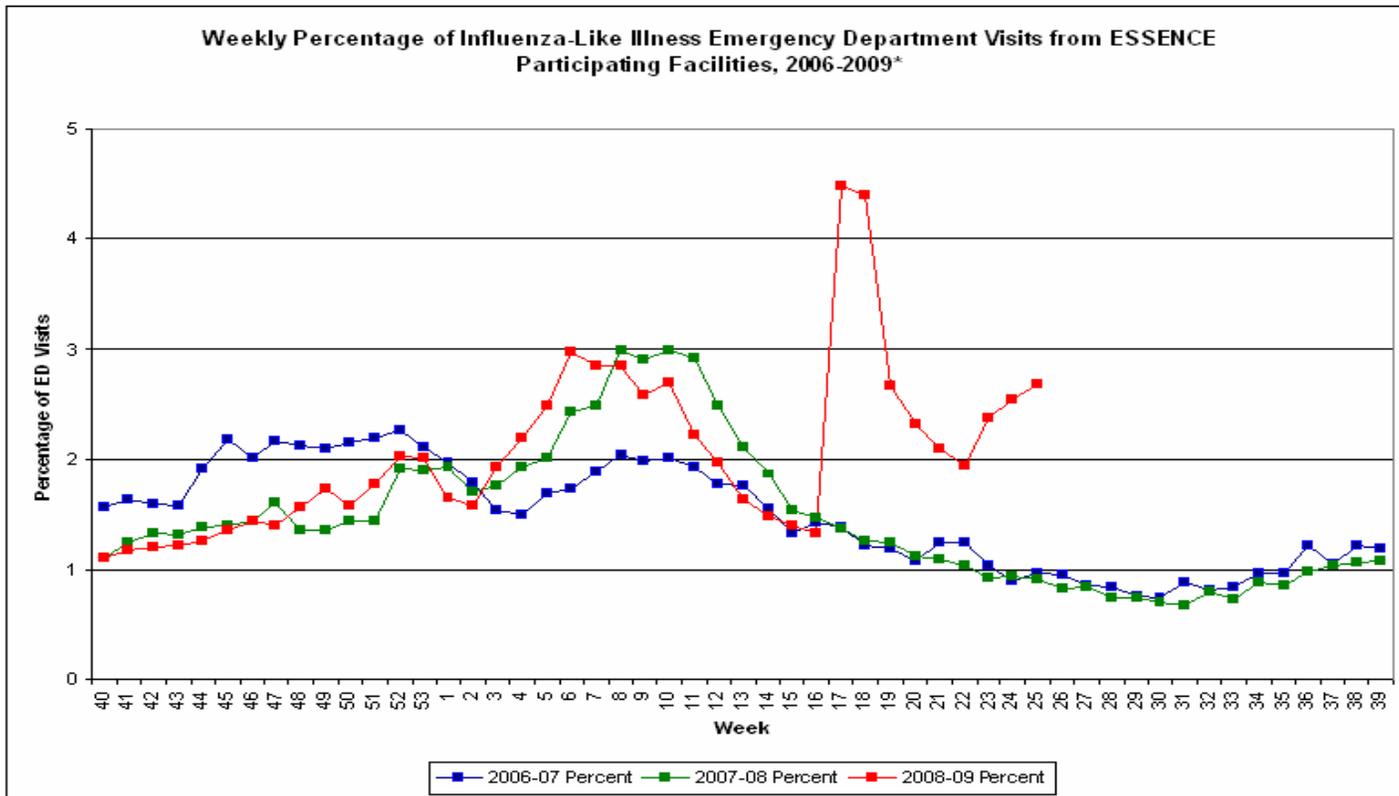
Reportable Disease	# of Cases 08-09 Influenza Season
Influenza-associated deaths among those <18 years of age	4*
Post-influenza infection encephalitis	0

\*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](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: 06/26/09

**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](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](http://www.who.int/csr/disease/avian_influenza/guidelines/case_definition2006_08_29/en/index.html)

During week 24, 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](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 59,814 confirmed human cases and 263 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 (see next page):

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

Accessed on: 06/26/09

Country, territory and area	Cumulative total		Newly confirmed since the last reporting period	
	Cases	Deaths	Cases	Deaths
Algeria	2	0	0	0
Antigua and Barbuda	2	0	0	0
Argentina	1391	21	178	14
Australia	3280	3	423	1
Austria	12	0	0	0
Bahamas	4	0	0	0
Bahrain	15	0	0	0
Bangladesh	1	0	0	0
Barbados	10	0	5	0
Belgium	36	0	6	0
Bermuda, UKOT	1	0	0	0
Bolivia	47	0	3	0
Brazil	399	0	65	0
British Virgin Islands, UKOT	1	0	0	0
Brunei Darussalam	11	0	7	0
Bulgaria	7	0	2	0
Cambodia	5	0	4	0
Canada	6732	19	275	4
Cap Verde	3	0	0	0
Cayman Islands, UKOT	9	0	2	0
Chile	5186	7	871	3
China	1089	0	183	0
Colombia	72	2	1	0
Costa Rica	222	1	33	0
Cote d'Ivoire	2	0	0	0
Cuba	34	0	19	0
Cyprus	9	0	4	0
Czech Republic	9	0	2	0
Denmark	41	0	7	0
Dominica	1	0	0	0
Dominican Republic	108	2	0	0
Ecuador	125	0	10	0
Egypt	43	0	3	0
El Salvador	160	0	0	0
Estonia	8	0	3	0
Ethiopia	2	0	0	0
Fiji	2	0	0	0
Finland	26	0	0	0
France	191	0	20	0
French Polynesia, FOC	1	0	0	0
Martinique, FOC	2	0	0	0
Germany	333	0	32	0
Greece	73	0	15	0
Guatemala	254	2	19	1
Honduras	118	1	0	1
Hungary	8	0	1	0
Iceland	4	0	0	0
India	64	0	0	0
Indonesia	2	0	2	0
Iran	1	0	1	0
Ireland	29	0	6	0
Israel	405	0	30	0
Italy	102	0	6	0
Jamaica	19	0	0	0
Japan	1049	0	156	0
Jordan	15	0	0	0
Korea, Republic of	142	0	27	0

Kuwait	30	0	4	0
Laos	3	0	0	0
Latvia	1	0	0	0
Lebanon	25	0	0	0
Luxembourg	3	0	0	0
Malaysia	68	0	0	0
Mexico	8279	116	432	1
Montenegro	1	0	0	0
Morocco	11	0	2	0
Netherlands	116	0	6	0
Netherlands Antilles, Curaçao *	3	0	0	0
Netherlands Antilles, Sint Maarten	1	0	0	0
New Zealand	453	0	67	0
Nicaragua	265	0	45	0
Norway	22	0	0	0
Oman	3	0	0	0
Panama	358	0	28	0
Papua New Guinea	1	0	0	0
Paraguay	79	0	21	0
Peru	252	0	35	0
Philippines	445	1	0	0
Poland	13	0	0	0
Portugal	7	0	1	0
Qatar	10	0	0	0
Romania	19	0	0	0
Russia	3	0	0	0
Samoa	1	0	0	0
Saudi Arabia	48	0	3	0
Serbia	2	0	2	0
Singapore	315	0	121	0
Slovakia	7	0	3	0
Slovenia	3	0	2	0
South Africa	1	0	0	0
Spain	541	0	2	0
Sri Lanka	7	0	2	0
Suriname	11	0	0	0
Sweden	61	0	6	0
Switzerland	47	0	14	0
Thailand	774	0	0	0
Trinidad and Tobago	25	0	0	0
Tunisia	2	0	0	0
Turkey	26	0	0	0
Ukraine	1	0	0	0
United Arab Emirates	7	0	5	0
United Kingdom	3597	1	692	0
Guernsey, Crown Dependency	1	0	1	0
Isle of Man, Crown Dependency	1	0	0	0
Jersey, Crown Dependency	8	0	5	0
United States of America	21449	87	0	0
Uruguay	195	0	0	0
Vanuatu	2	0	1	0
Venezuela	153	0	18	0
Viet Nam	63	0	7	0
West Bank and Gaza Strip	9	0	1	0
Yemen	6	0	0	0
Grand Total	59814	263	3947	25

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 21,449 cases and 87 deaths reported as of June 26, 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=941), Florida, as of June 24, 2009

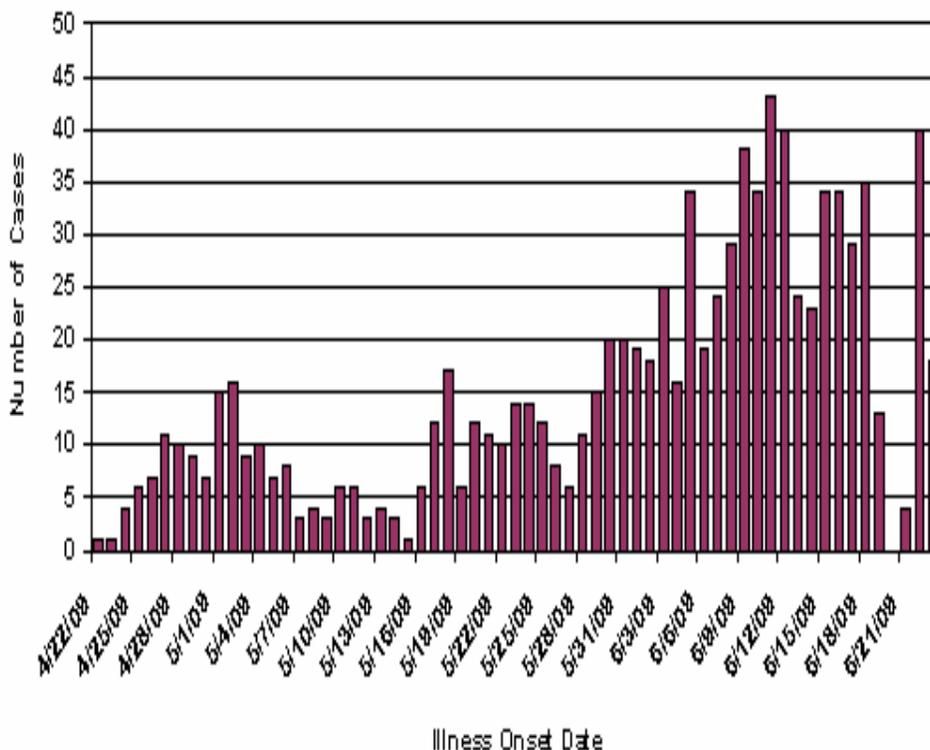
County	Frequency	Percent
ALACHUA	13	1.38
BAY	4	0.43
BRADFORD	1	0.11
BREVARD	10	1.06
BROWARD	103	10.95
CHARLOTTE	1	0.11
CLAY	2	0.21
COLLIER	15	1.59
DADE	305	32.41
DESOTO	1	0.11
DUVAL	12	1.28
ESCAMBIA	35	3.72
FLAGLER	1	0.11
HAMILTON	1	0.11
HERNANDO	1	0.11
HIGHLANDS	1	0.11
HILLSBOROUGH	62	6.59
INDIAN RIVER	1	0.11
LAKE	16	1.70
LEE	26	2.76
LEON	1	0.11

County	Frequency	Percent
LEVY	2	0.21
MANATEE	5	0.53
MARION	3	0.32
MARTIN	35	3.72
MONROE	3	0.32
NASSAU	3	0.32
OKEECHOBEE	1	0.11
ORANGE	86	9.14
OSCEOLA	12	1.28
PALM BEACH	63	6.70
PASCO	13	1.38
PINELLAS	18	1.91
POLK	31	3.29
SANTA ROSA	2	0.21
SARASOTA	6	0.64
SEMINOLE	28	2.98
ST. JOHNS	7	0.74
ST. LUCIE	7	0.74
SUMTER	1	0.11
VOLUSIA	3	0.32

There are no probable swine influenza H1N1 in Florida as of June 24, 2009

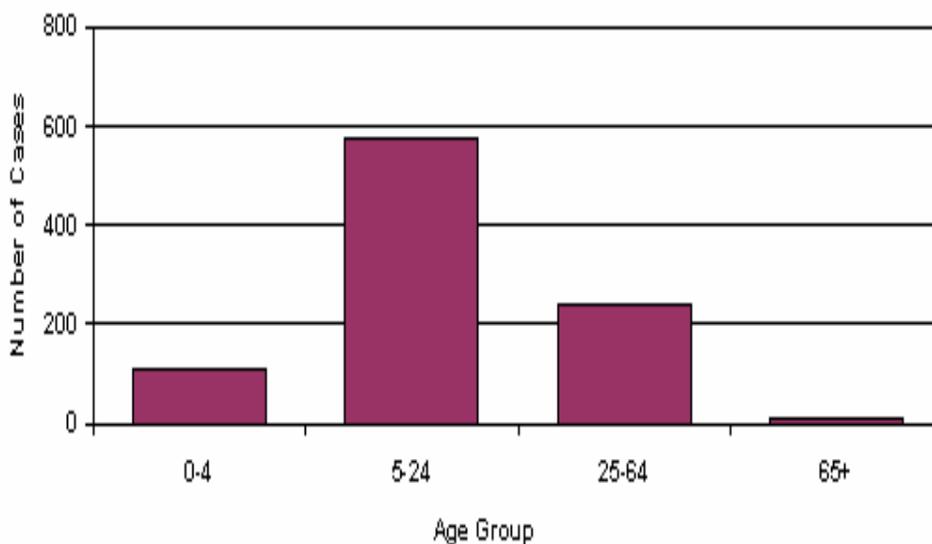
**X. SUMMARY OF WORLDWIDE, UNITED STATES, AND FLORIDA NOVEL INFLUENZA ACTIVITY**

**Confirmed and probable cases by event date\*, Florida, as of June 24, 2009**



\*Event date is the earliest date associated with the case (onset date, date of diagnosis, lab report date, or date reported to the county)

**Confirmed and probable cases by age, Florida, as of June 24, 2009**



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

### Confirmed and probable cases by age, gender<sup>\*</sup>, and outcome<sup>†</sup>, Florida, as of June 24, 2009

	Age			Female		Male		Hospitalized		Deaths	
	N	% of total cases	Rate <sup>‡</sup>	N	% of age group	N	% of age group	N	% of age group	N	% of age group
<b>0-4</b>	112	11.90	9.90	43	40.19	64	59.81	24	21.43	0	0.00
<b>5-24</b>	576	61.21	12.01	242	42.68	325	57.32	39	6.77	1	0.17
<b>25-64</b>	241	25.61	2.44	125	52.74	112	47.26	35	14.52	1	0.41
<b>65+</b>	12	1.28	0.36	6	50.00	6	50.00	3	25.00	0	0.00
<b>Total</b>	<b>941</b>	<b>100.00</b>	<b>4.92</b>	<b>416</b>	<b>46.07</b>	<b>507</b>	<b>54.93</b>	<b>101</b>	<b>10.73</b>	<b>2</b>	<b>0.21</b>

**Age: range=0-85; average=19.2; median=14.0**

\*18 cases are missing gender and are excluded from gender percentage calculations

<sup>†</sup>Note that a 55 year old laboratory-confirmed case from Volusia County died, but the death was not attributed to influenza and this death is not included in "Deaths" column.

<sup>‡</sup>Rate is per 100,000 population; population data are from CHARTS.

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](http://www.doh.state.fl.us/disease_ctrl/epi/swineflu/index.html)