FLORIDA INFLUENZA SURVEILLANCE

Week 49: November 30th 2008—December 6th 2008

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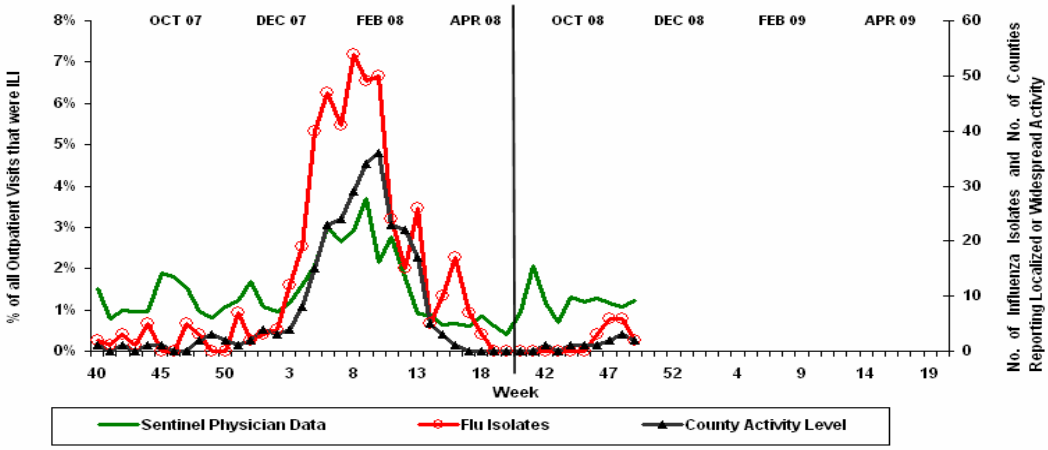
I. SUMMARY

This is the tenth 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) State laboratory viral surveillance; 4) County influenza activity levels; 5) Notifiable Disease Reports: Influenza-associated deaths in children & post-influenza infection encephalitis; 6) Influenza or ILI outbreaks; 7) Syndromic surveillance.

During week 49 (11/29/08-12/6/08), the proportion of patient visits for influenza-like illness (ILI) as reported by the Florida Sentinel Physician Influenza Surveillance Network was 1.22 percent. This is below the state threshold for moderate activity of 2.98 percent. Two of the five ILI specimens tested by Bureau of Laboratories were positive for influenza. No counties reported widespread activity and two counties reported localized activity. Twenty-five counties reported sporadic activity and 20 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.**

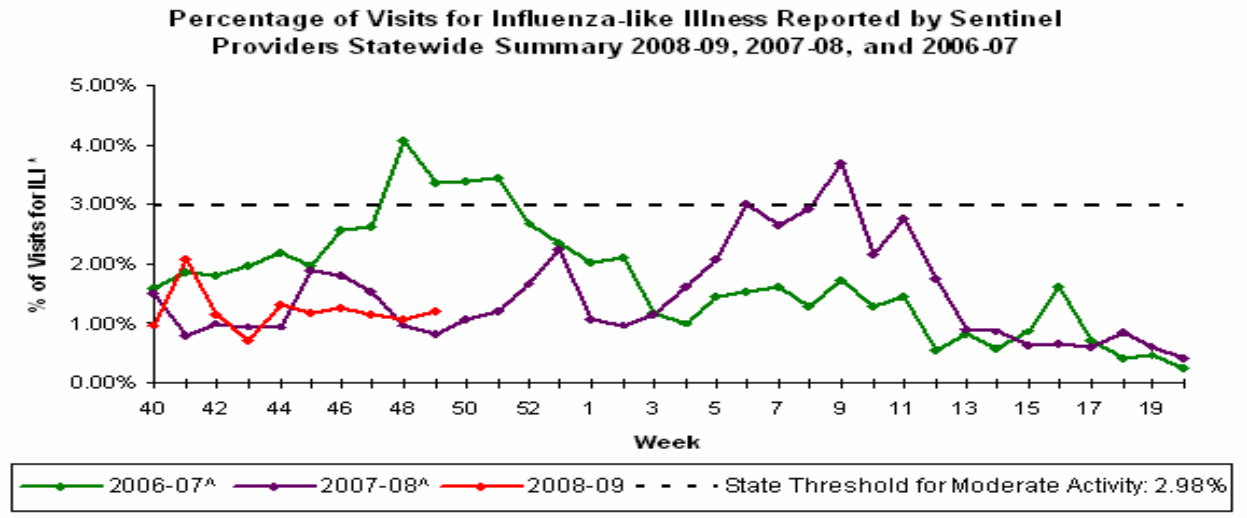
Each week an activity code for the state as a whole is reported to the Centers for Disease Control and Prevention (CDC). There are five possible categories: No Activity, Sporadic, Local, Regional, or Widespread. Sporadic activity has been reported in Florida for this reporting week (week 49). Florida 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 influenza 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.

II. FSPISN INFLUENZA-LIKE ILLNESS STATEWIDE GRAPH

During week 49, 1.22%* 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 0.19% in the Northeast to 3.00% in the Northwest region.**



*FSPISN reporting is incomplete for this week (45% of providers reported). Numbers may change as more reports are received. Data displayed is weighted to the state population.

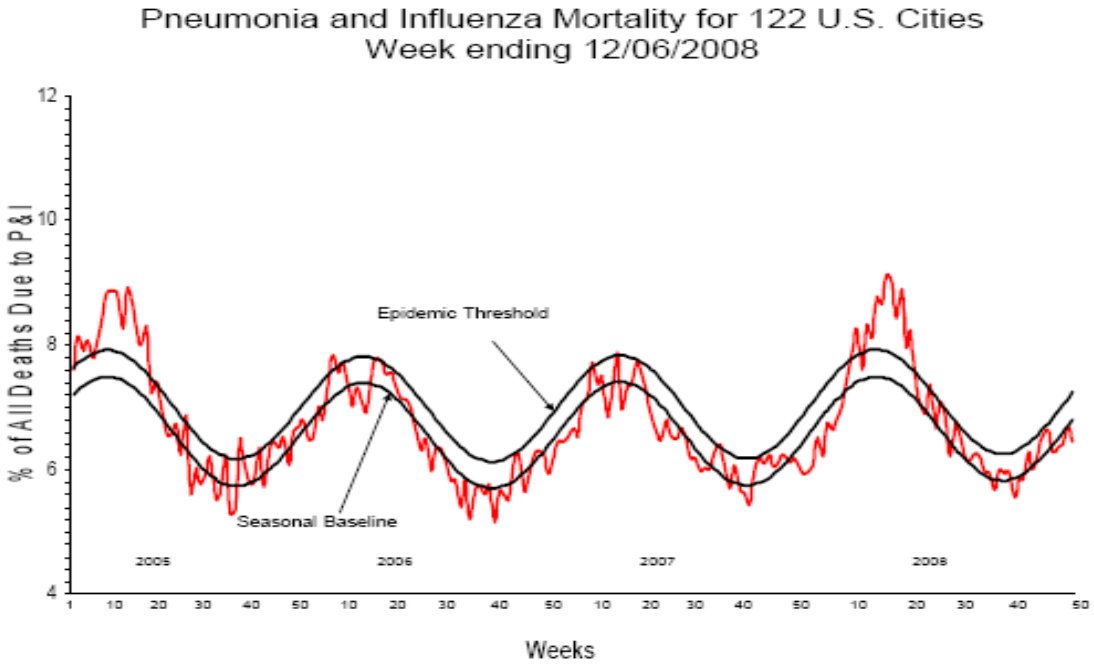
**The 2008—09 threshold for moderate activity is calculated from FSPISN data. The threshold for moderate activity is the mean percentage of patient visits for ILI during influenza weeks for the previous three seasons plus two standard deviations. Only weeks with 10% or greater of laboratory specimens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

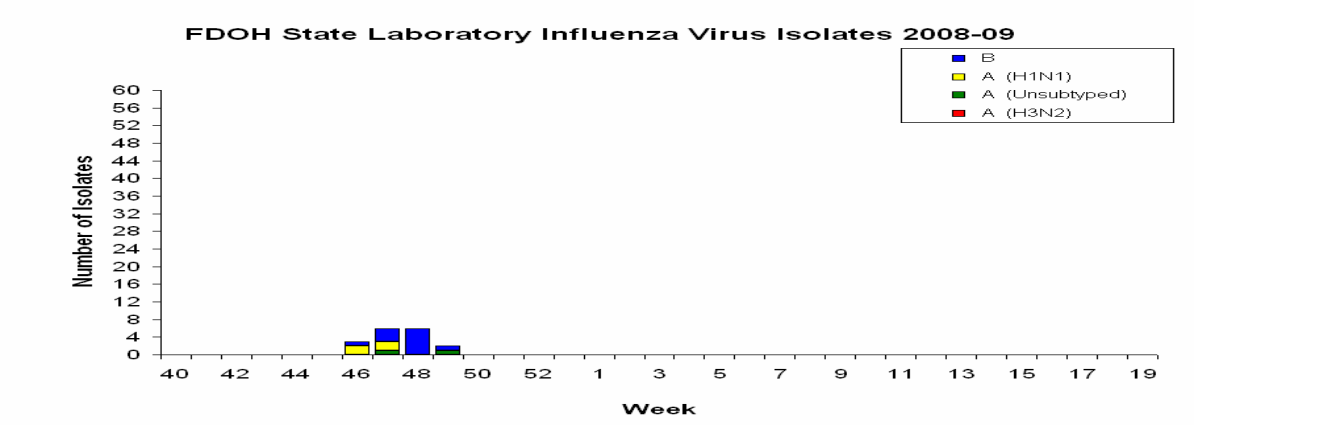
Please refer to the most recent national data compiled by the CDC below. Three major metropolitan locations participate in the national 122 Cities Mortality Reporting System. Florida is currently in the process of updating the Florida Pneumonia and Influenza Mortality Surveillance System (FPIMSS). Twenty-three counties participate in the FPIMSS. During week 49, six counties did not report. Data from all participating counties are required to accurately display the data in this report.

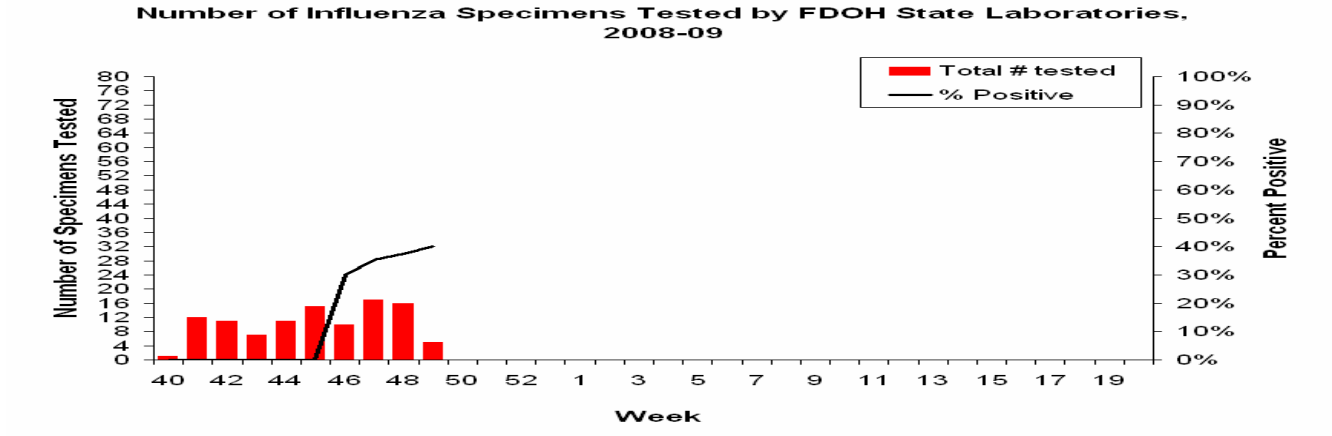
Pneumonia and Influenza (P&I) Mortality Surveillance: During week 49, 6.5% of all deaths reported through the 122-Cities Mortality Reporting System were due to P&I. This percentage is below the epidemic threshold of 7.2% for week 49.



IV. FDOH LABORATORY SURVEILLANCE

During week 49, Florida Department of Health Bureau of Laboratories tested a total of 5 specimens for influenza viruses. Two (40%) of 5 were positive for influenza. One was influenza A and one was influenza B. The positive results were typed as influenza A H1 and influenza B Malaysia. The Bureau of Laboratories have tested a total of 105 specimens so far this season. ***Laboratory information is preliminary and may change as additional results are received. Totals from previous weeks will be adjusted to reflect correct specimen numbers.***





2008-2009 Influenza Laboratory Isolates by Week and County

Week		Alachua	Bay	Bradford	Brevard	Broward	Clay	Charlotte	Citrus	Miami-Dade	DeSoto	Dixie	Duval	Escambia	Hamilton	Hardee	Hillsborough	Holmes	Indian River	Jackson	Lee	Leon	Levy	Marion	Nassau	Okaloosa	Okeechobee	Orange	Palm Beach	Pasco	Pinellas	Polk	Santa Rosa	Sarasota	Seminole	St. Johns	Washington	Volusia
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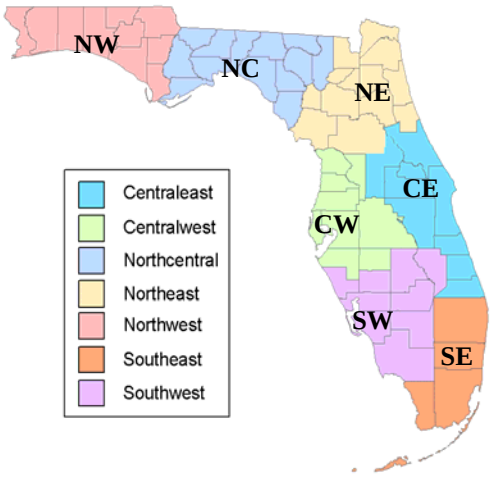
*Please note that the graph displays positive influenza isolates in each county reported during week 49. Totals will be adjusted to reflect actual week of positive specimen.

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

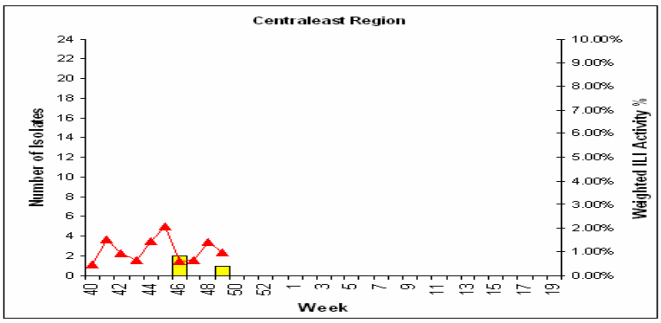
Influenza Surveillance Regions

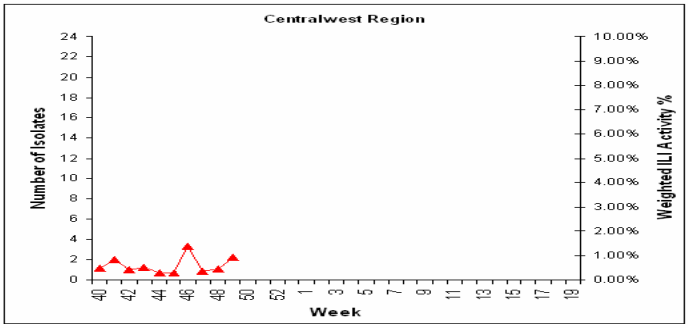


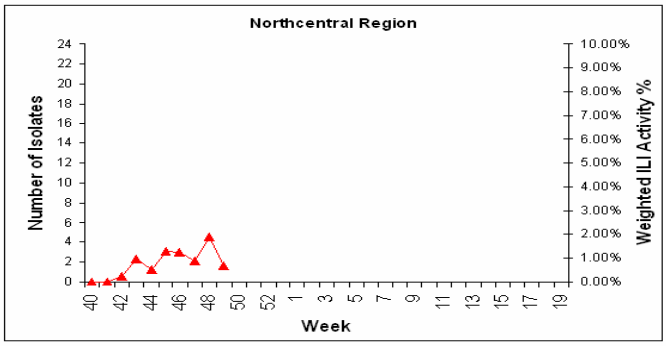
The table below shows the weighted ILI activity by region as reported by Florida sentinel physicians for the 2007-08 & 2008-09 seasons. The graphs below include ILI activity as reported by sentinel physicians and FDOH laboratory data.

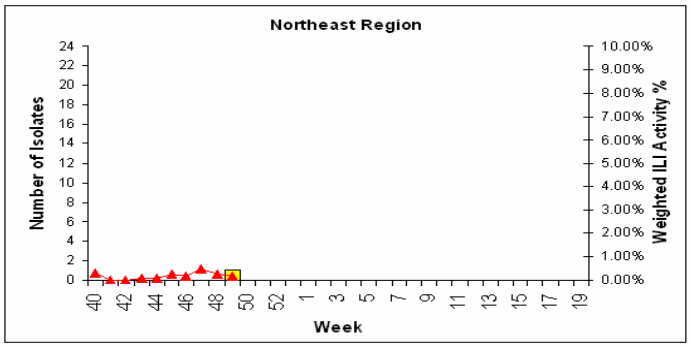
Week 49: FSPISN Weighted ILI Activity, by Region
2007-08 & 2008-09 Seasons

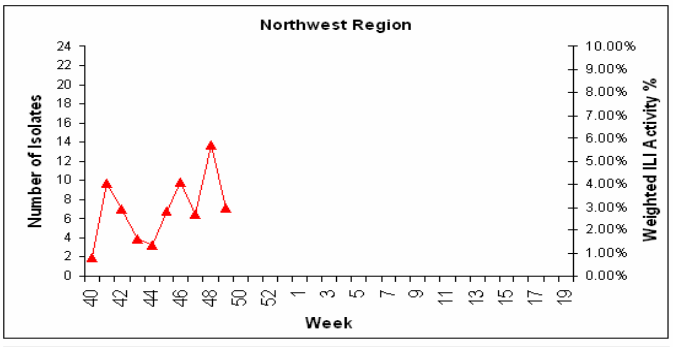
REGION	2008-09 ILI %	2007-08 ILI %
Centraleast	0.99%	0.67%
Centralwest	0.93%	0.68%
Northcentral	0.69%	0.43%
Northeast	0.19%	1.25%
Northwest	3.00%	1.27%
Southeast	1.55%	0.32%
Southwest	2.90%	0.00%

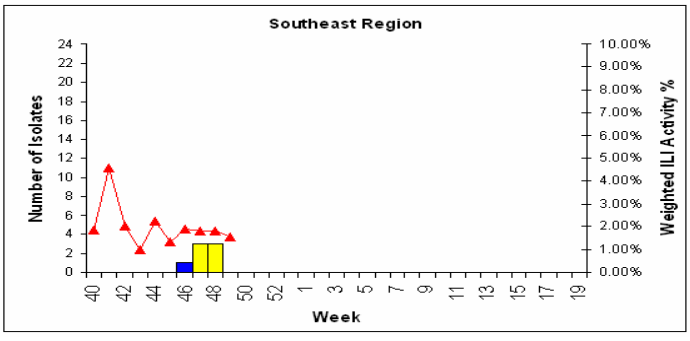


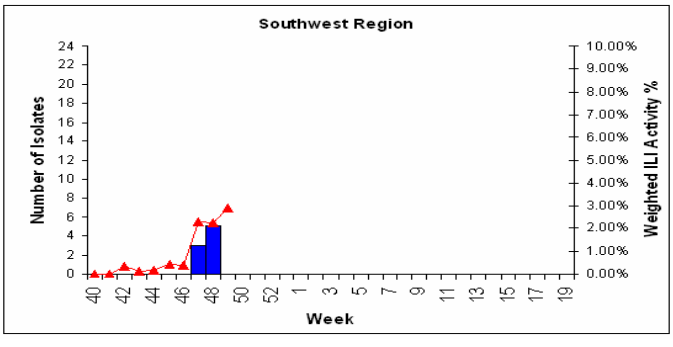












Influenza A specimens FDOH Laboratories

Influenza B specimens FDOH Laboratories

% of visits for ILI, reported by sentinel providers

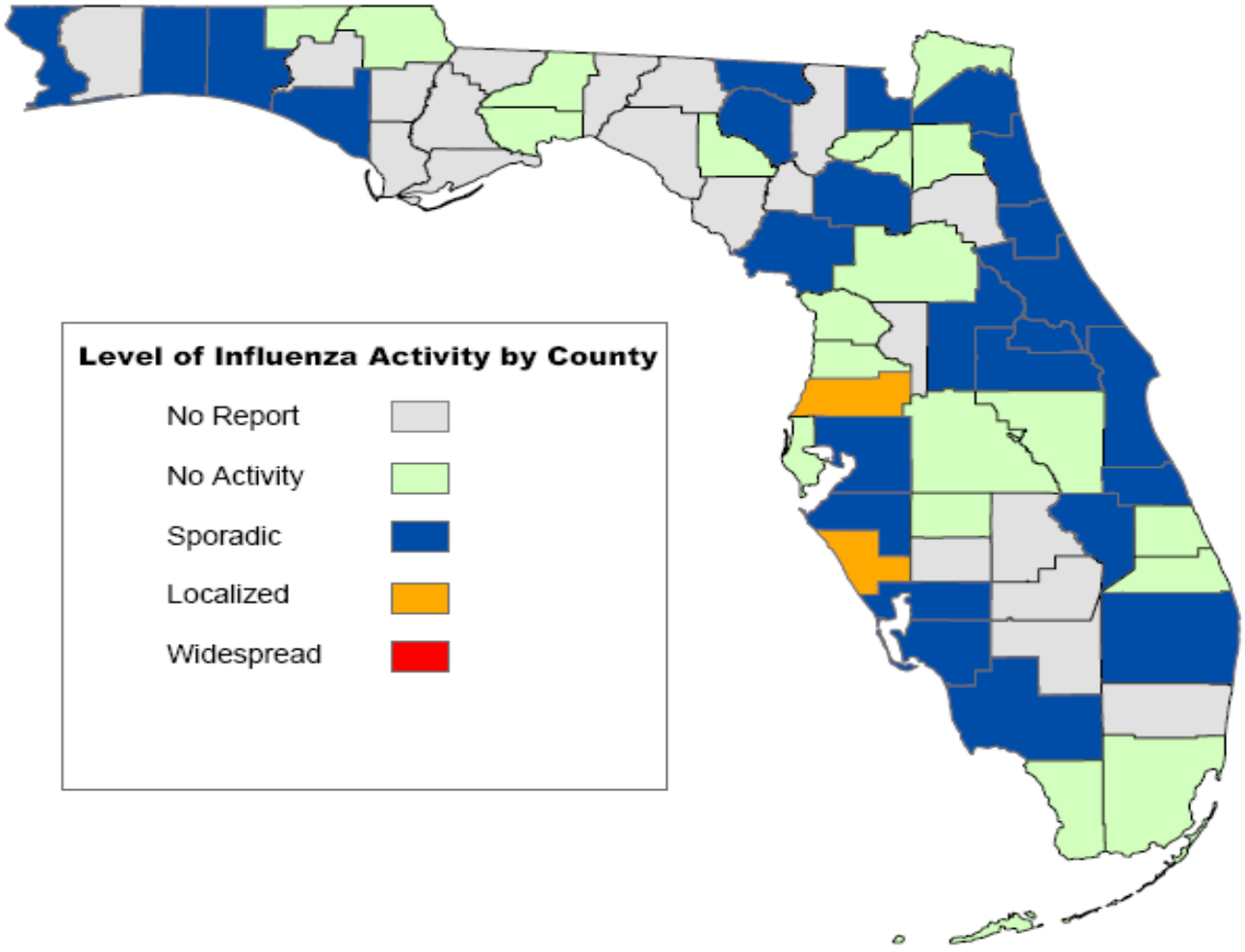
VI. COUNTY INFLUENZA ACTIVITY MAP

During week 49, no counties reported widespread activity and two counties (Pasco, Sarasota) reported localized activity. Twenty-five counties (Alachua, Baker, Bay, Brevard, Charlotte, Collier, Duval, Escambia, Flagler, Hamilton, Hillsborough, Indian River, Lake, Lee, Levy, Manatee, Okaloosa, Okeechobee, Orange, Palm Beach, Seminole, St. Johns, Suwannee, Volusia, Walton) reported sporadic activity. Twenty counties reported no activity. Twenty counties did not report.

Weekly County Influenza Activity

(Week ending December 6, 2008 - Week 49)

County influenza activity levels are reported by county health department epidemiologists



Florida Department of Health

Bureau of Epidemiology

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Map printed December 13, 2008

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
a. Isolated cases of laboratory confirmed influenza† in the county.
b. An ILI§ outbreak in a single setting‡ in the county. (No detection of decreased ILI§ activity by surveillance systems*)

2 = Localized:
And/or
a. ILI§ activity detected by a *single* surveillance system* within the county. 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:
And/or
a. An increase in ILI§ activity detected in ≥2 surveillance systems in the county.
b. 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 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.

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

During week 49, there were no reports of influenza or influenza-like illness outbreaks in the state.

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

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

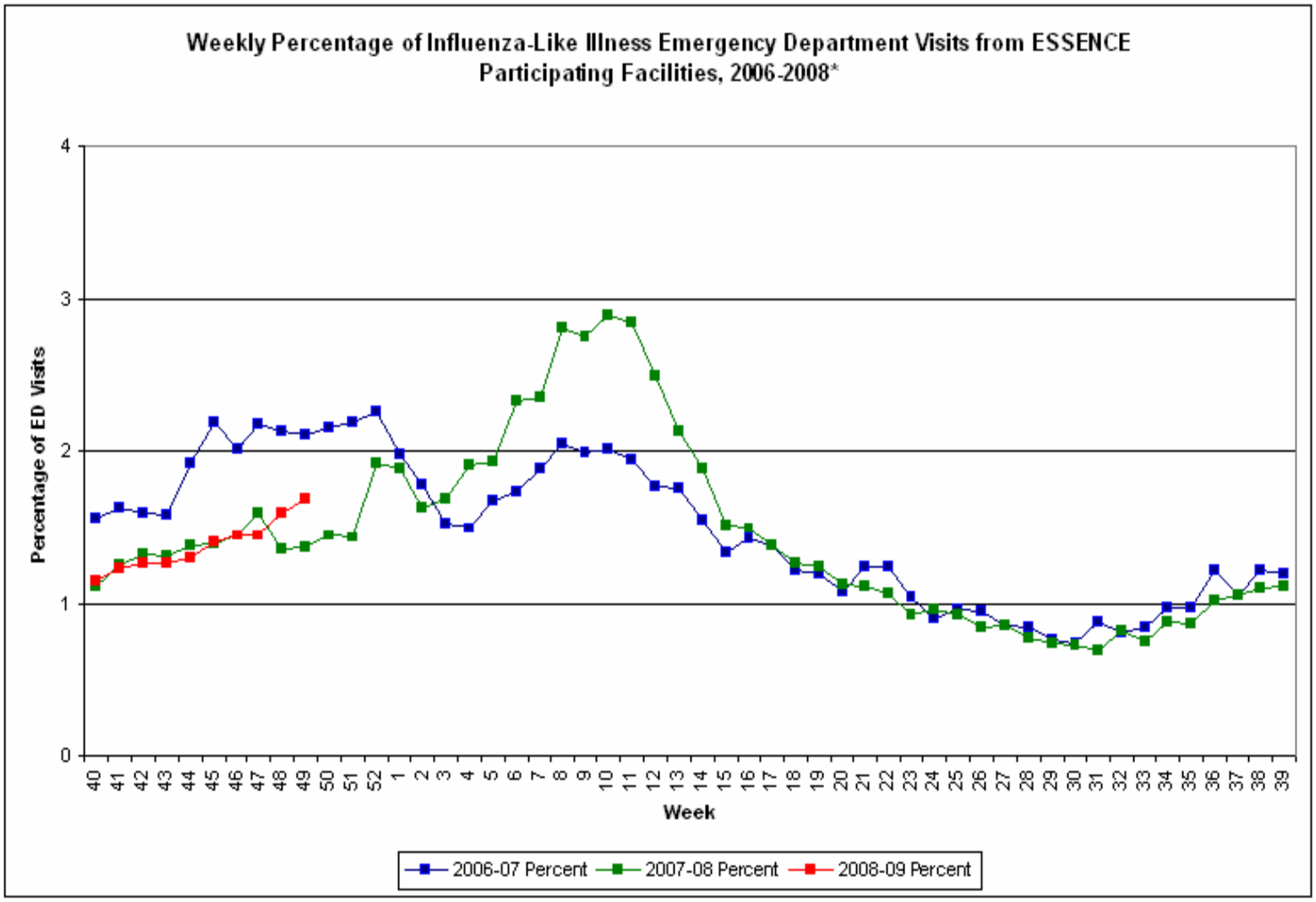
As of the week ending December 6, 2008, there were no influenza-associated deaths among those <18 years of age and/ or post influenza infection encephalitis reported in the state of Florida.

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

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

Syndromic surveillance ILI data as monitored through the ESSENCE system is a newly added component of the overall state influenza surveillance program. Florida uses the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) for syndromic surveillance, which currently collects data from 86* 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 2008 by week.



***The total number of facilities participating in ESSENCE has increased steadily from 2006 to 2008. 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 A/H5N1 INFLUENZA ACTIVITY

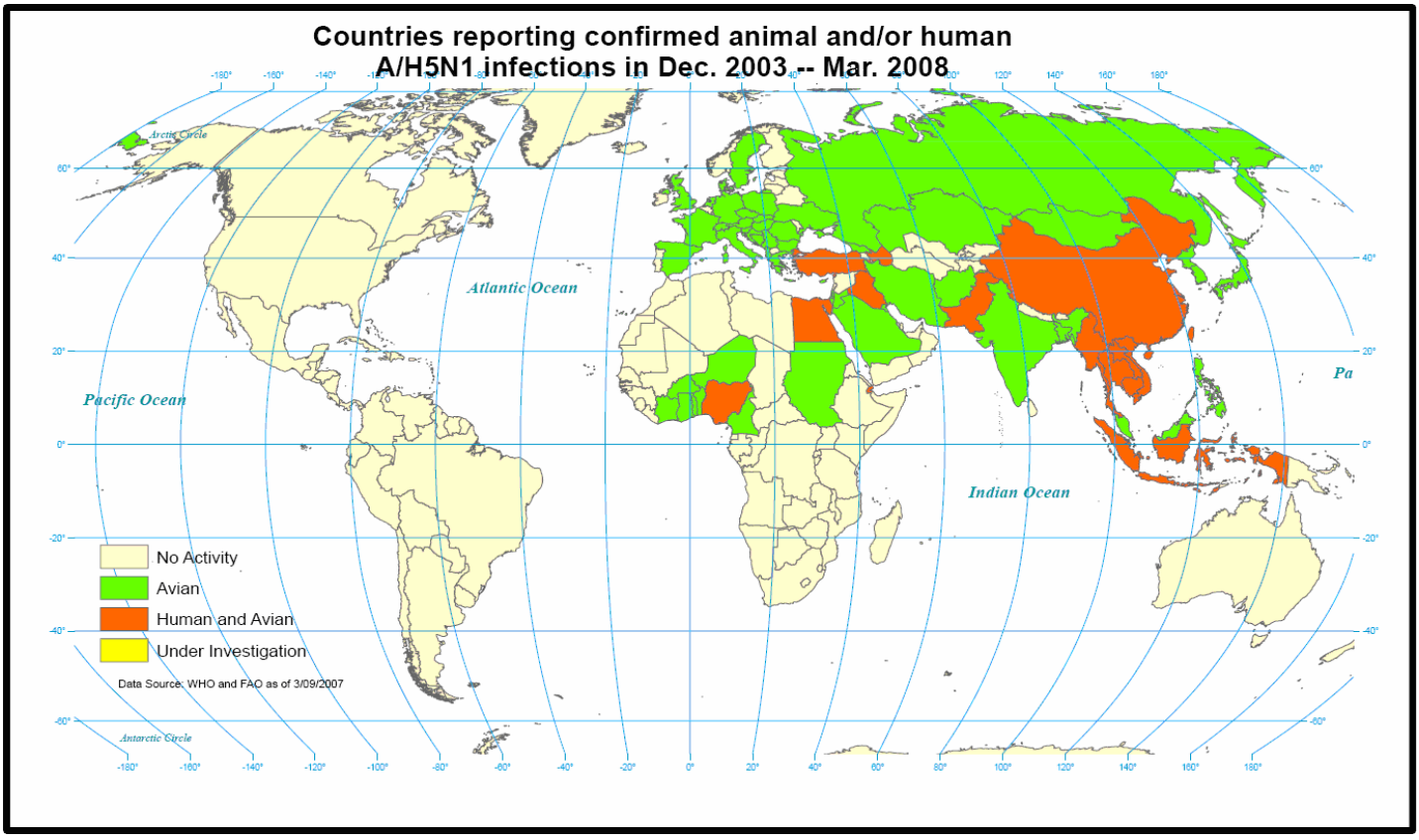
Update 10/10/2008

Since the outbreak activity began at the end of December 2003, there have been a total of 387 confirmed human cases and 245 deaths. Cases and deaths have occurred in the following nations: Azerbaijan 8 cases and 5 deaths; Bangladesh 1 case 0 deaths; Cambodia 7 cases and 7 deaths; China 30 cases and 20 deaths; Djibouti 1 case 0 deaths; Egypt 50 cases and 22 deaths; Indonesia 137 cases and 112 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 106 cases and 52 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 49 there were no new updates of influenza A H5N1 infections.

The current phase of alert as defined by the WHO global influenza preparedness plan is phase 3, which states that human infections with a new subtype are occurring, but no human-to-human spread, or at most rare instances of spread to a close contact. At the present time the WHO is not recommending restrictions on travel to areas affected by H5N1 avian influenza, but is suggesting that travelers to these areas avoid contact with live animal markets and poultry farms, and any free-ranging or caged poultry. Evidence suggests that the primary route of infection at this time is associated with direct contact with infected poultry, or surfaces and objects contaminated by their droppings.



Human cases of influenza due to infection from novel or pandemic strains are reportable in Florida. Reports should be made to the Department 24/7 upon initial suspicion.