

FLORIDA INFLUENZA SURVEILLANCE

Week 16: April 12th 2008—April 19th 2008



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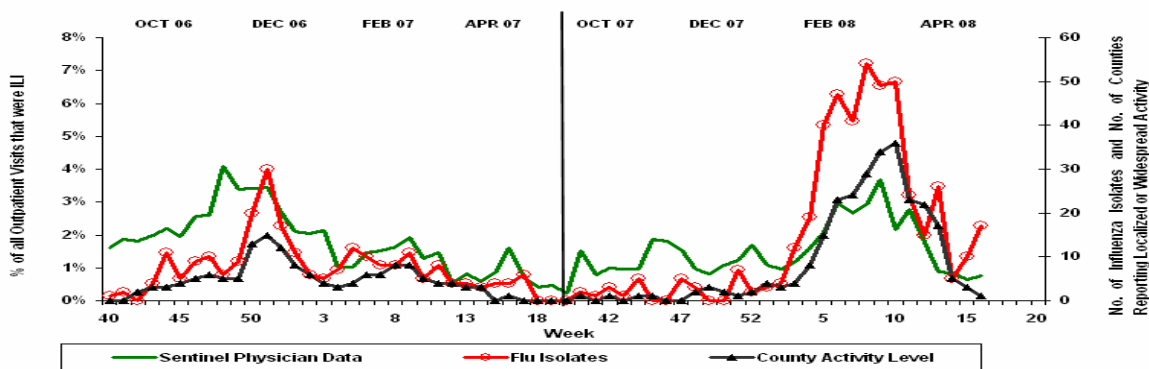
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I. SUMMARY

This is twenty-ninth weekly Florida influenza surveillance report for the 2007-08 season. Influenza surveillance in Florida consists of six 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.

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. Localized activity has been reported in Florida for this reporting week (Week 16). There has been an increase in influenza activity in the Southeast region. Because of this increase, Florida meets the CDC local activity definition. The CDC definition for local activity 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>.

During week 16 the proportion of patient visits for influenza-like illness (ILI) as reported by the Florida Sentinel Physician Influenza Surveillance Network was 0.76 percent. This is below the state threshold for moderate activity of 1.75 percent. Seventeen of the 27 specimens tested by Bureau of Laboratories were positive for influenza. No counties reported widespread activity and 1 county reported localized activity. Twenty-six counties reported sporadic activity and 25 counties reported no activity. Sixteen counties did not report. The graph below shows the progression of the 2006-07 & 2007-08 Florida influenza seasons as monitored by three** of six surveillance systems.



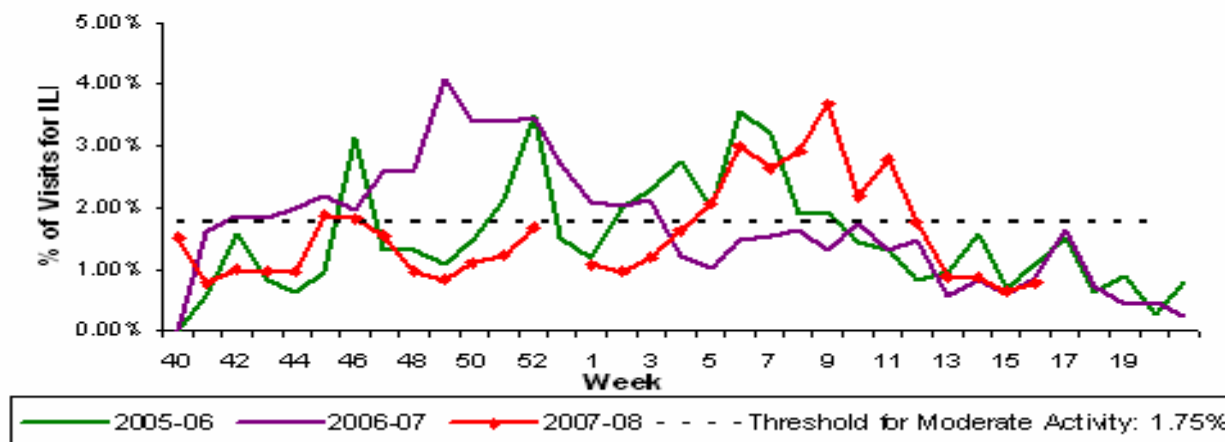
*The purposes of these surveillance systems are to determine when and where influenza activity is occurring, to identify circulating viruses, to detect changes in the circulating influenza viruses, to track patterns of influenza-associated morbidity and mortality and estimate the overall impact of influenza 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 16, 0.76%* of patient visits to Florida sentinel providers were due to ILI. This percentage is below the statewide baseline of 1.75%** . The percentage of visits ranged from 0.00% in the Centralwest and Southwest region to 1.46% in the Northwest region. For the 2006-07 influenza season the statewide ILI activity percent 1.62% for week 16.

Percentage of Visits for Influenza-like Illness Reported by Sentinel Providers Statewide Summary 2007-08, 2006-07, and 2005-06



*FSPISN reporting is incomplete for this week (47%). Numbers may change as more reports are received.

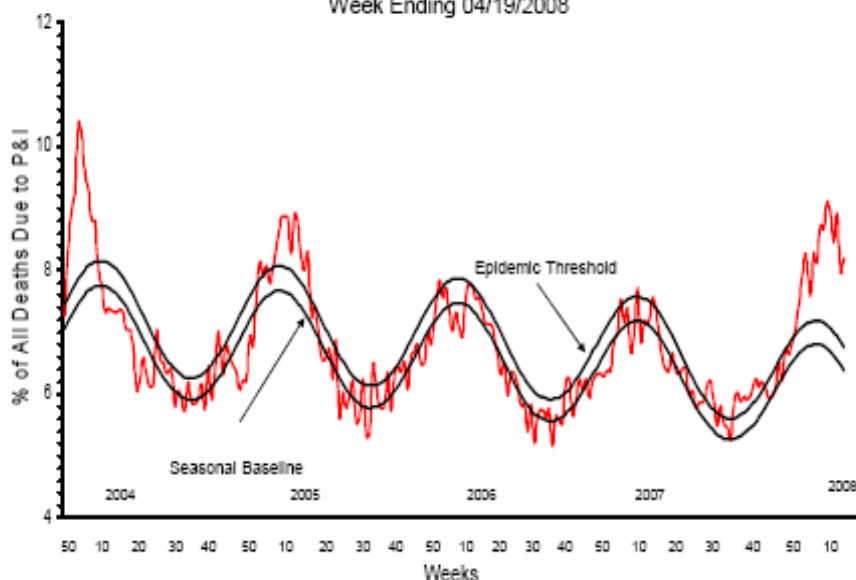
**The 2006—07 threshold for moderate activity is calculated from the previous 3 years of FSPISN data. Only weeks with 10% or greater of laboratory specimens testing positive are included in the calculation. The threshold is only specific to 2007—08 data.

III. Florida Pneumonia and Influenza Mortality Surveillance

Florida is currently in the process of updating P&I mortality surveillance. Please refer to the most recent national data compiled by the CDC below.

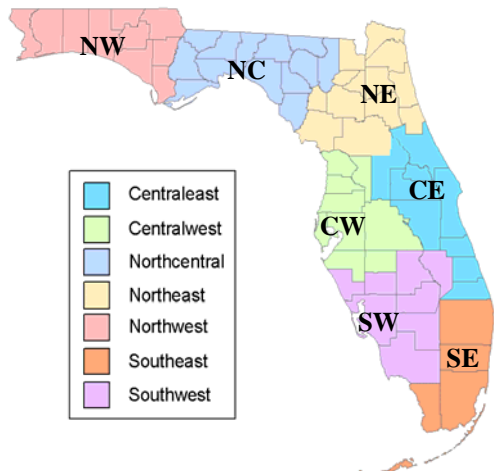
Pneumonia and Influenza (P&I) Mortality Surveillance: During week 16, 8.2% of all deaths reported through the 122 Cities Mortality Reporting System were reported as due to P&I. This percentage is above the epidemic threshold of 6.8% for week 16. Including week 16, P&I mortality has been above epidemic threshold for 15 consecutive weeks.

Pneumonia and Influenza Mortality
for 122 U.S. Cities
Week Ending 04/19/2008



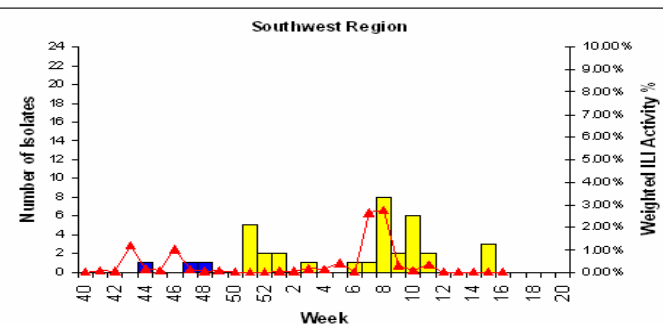
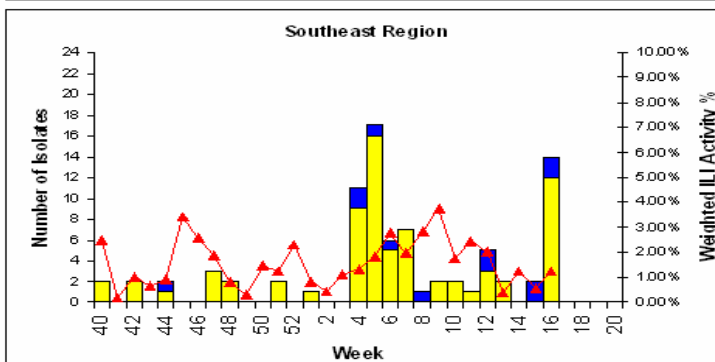
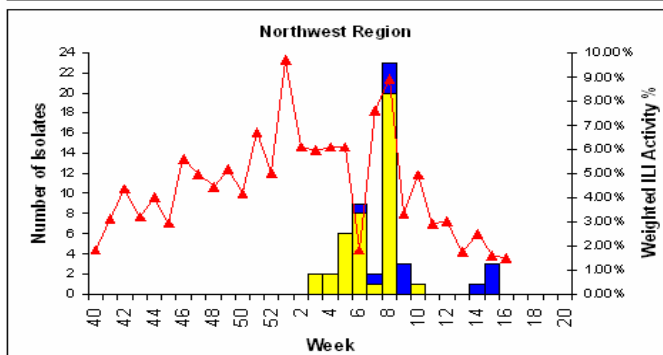
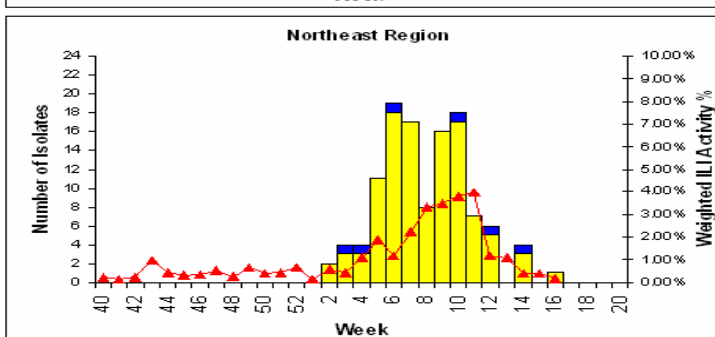
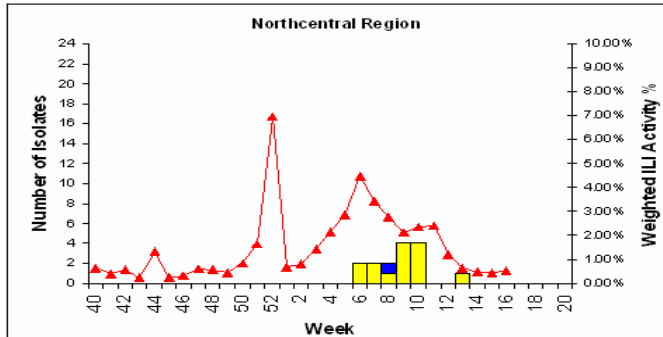
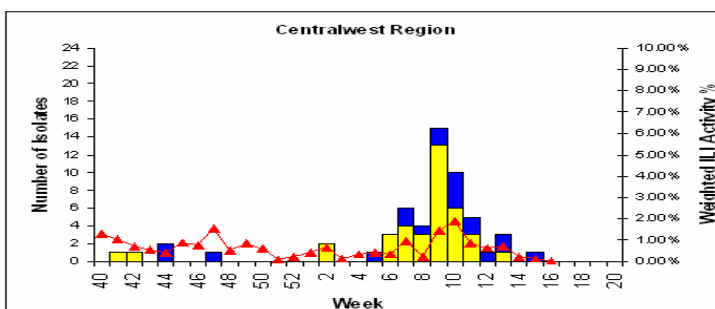
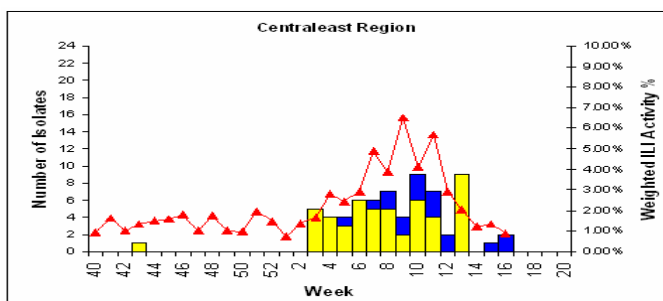
IV. LABORATORY AND INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE BY REGION

Influenza Surveillance Regions



The table below shows the weighted ILI activity by region as reported by Florida sentinel physicians for the 2006-07 & 2007-08 seasons. The graphs below include ILI activity as reported by sentinel physicians and FDOH laboratory data.

Week 16: FSPISN Weighted ILI Activity, by Region 2006-07 & 2007-08 Seasons		
REGION	2007-08 ILI %	2006-07 ILI %
Centraleast	0.90%	1.14%
Centralwest	0.00%	0.57%
Northcentral	0.54%	0.52%
Northeast	0.17%	0.49%
Northwest	1.46%	0.00%
Southeast	1.24%	3.55%
Southwest	0.00%	0.03%



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

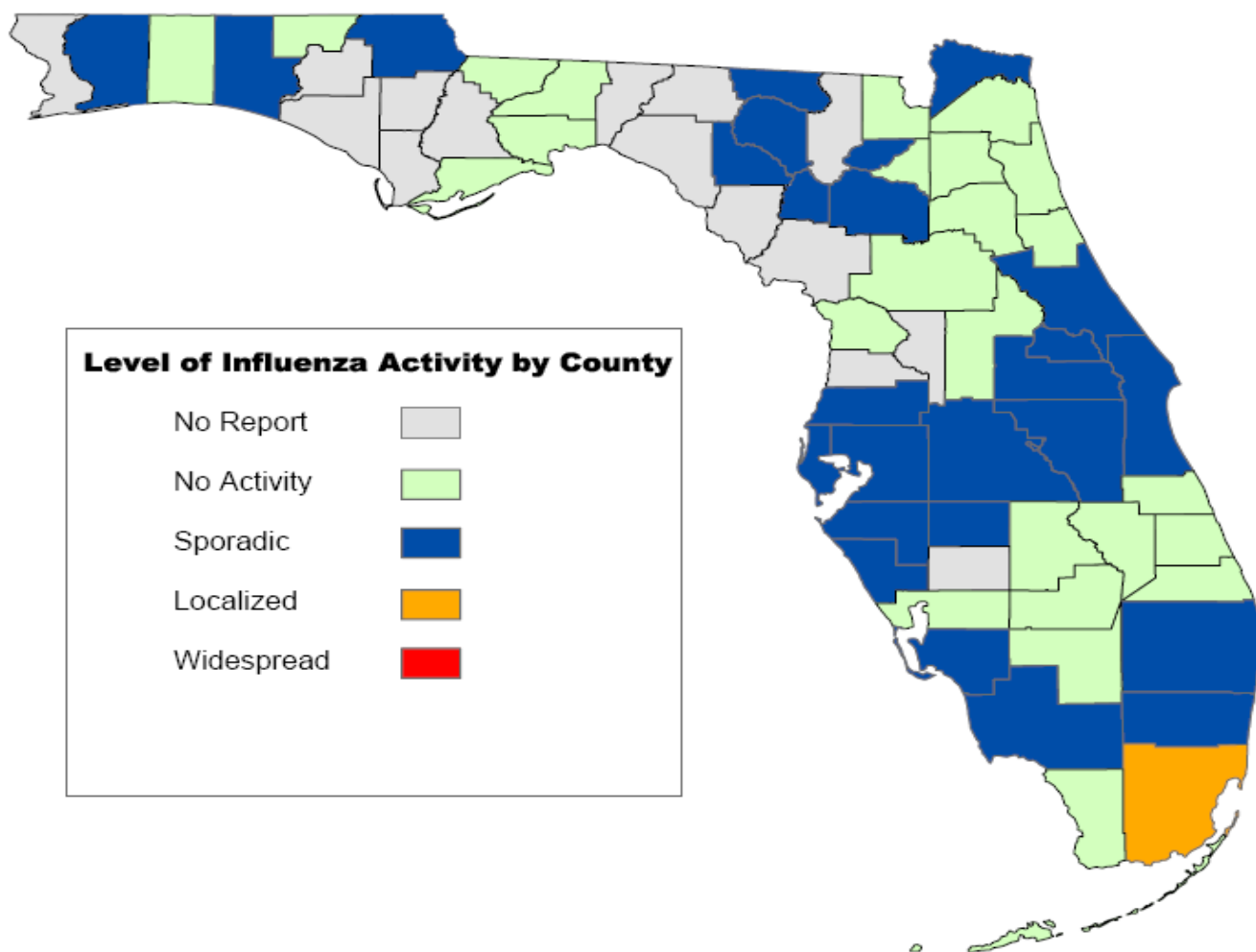
V. COUNTY INFLUENZA ACTIVITY MAP

During week 16, no counties reported widespread activity. One county reported localized activity (Dade). Twenty-six counties (Alachua, Brevard, Broward, Collier, Gilchrist, Hamilton, Hardee, Hillsborough, Jackson, Lafayette, Lee, Manatee, Nassau, Orange, Osceola, Palm Beach, Pasco, Pinellas, Polk, Santa Rosa, Sarasota, Seminole, Suwannee, Union, Volusia, Walton) reported sporadic activity. Twenty-five counties reported no activity. Sixteen counties did not report.

Weekly County Influenza Activity

(Week ending April 19, 2008 - Week 16)

County influenza activity levels are reported by county health department epidemiologists



Florida Department of Health
Bureau of Epidemiology

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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 {
- An increase of ILI[§] activity detected by a *single* surveillance system* within the county. (An increase in 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.

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

During week 16, testing was conducted at the State Lab in Jacksonville on samples submitted from a recent influenza outbreak at a Miami-Dade County correctional institution. All five specimens tested positive for Influenza A however, as of 04/18/08 no specific virus had been isolated.

During week 15, the Escambia CHD was notified by the state health office of an influenza outbreak at a local nursing home. Forty-six out of 100 residents had symptoms consistent with influenza. Three out of the 5 specimens sent to the state lab in Tampa were positive for influenza B. Of the residents with ILI, 50% had received their flu vaccines (most were given in June 2007). All ill residents were treated with Tamiflu and one fatality was associated with this outbreak.

The Miami-Dade CHD Office of Epidemiology and Disease Control received a report on 04/07/08 of a local correctional institution (CI) reporting 12 female inmates with ILI symptoms. The earliest onset of symptoms was on 04/03/08. Control measures were implemented at the CI and viral testing will be conducted. The investigation is still ongoing at this time.

During week 14, there was a report of an influenza death in Indian River county of a child with cystic fibrosis. The child was originally seen in Alachua county on 02/19/08 but was reported to the Department of Health on 04/01/08.

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

As of the week ending April 19, 2008, there were no influenza-associated deaths among those <18 years of age and/ or post influenza infection encephalitis were reported in the state of Florida.

Reportable Disease	# of Cases 07-08 Influenza Season
Influenza-associated deaths among those <18 years of age	3
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.

VIII. SUMMARY OF WORLDWIDE A/H5N1 INFLUENZA ACTIVITY

Update 04/17/2008

Since the recent outbreak activity began at the end of December 2003, there have been a total of 381 confirmed human cases and 240 deaths. Cases and deaths occurred in the following nations: Azerbaijan 8 cases and 5 deaths; Cambodia 7 cases and 7 deaths; China 30 cases and 20 deaths; Djibouti 1 case 0 deaths; Egypt 50 cases and 21 deaths; Indonesia 132 cases and 107 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 0 deaths. Thailand 25 cases and 17 deaths; Turkey 12 cases and 4 deaths; and, Vietnam 106 cases and 52 deaths.

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

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/guidelines/wer8126/en/index.html

During week 16, the Ministry of Health and Population of Egypt announced a new human case of avian influenza A (H5N1). The case was a 2-year-old female from Al-Honsanya, Sharkea governorate with symptom onset April 13th followed by hospitalization on April 14th. Confirmation of infection with influenza A H5N1 was made by the Central Public Health Laboratories and by Cairo-based US Naval Medical Research Unit 3 (NAMRU-3). A history of contact with sick and/or dead poultry was noted.

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.

