Florida Influenza Surveillance

Week Ending February 14, 2004 (Week 06)

Angela Fix, MPH, Respiratory Disease Epidemiologist

Melissa Covey, Influenza Surveillance Coordinator



Summary

Florida influenza-like illness (ILI) activity continues to decrease across the state for the week ending February 14, 2004. Eight counties reported as having a high ILI% activity for the week. However, not all sentinels have reported at the time that this summary was written (76% reporting as of February 16, 2004). Compared to the previous week, nine counties reported an increase in ILI activity, eight counties reported a decrease and twelve counties remained at a level activity. Four counties did not have at least 50% of the active sentinels reporting or did not report the previous week and therefore the change in ILI activity could not be determined. Ten counties across the state have reported no influenza-like illness activity for the week ending February 14, 2004. The Florida Sentinel Physician Influenza Surveillance Network (FSPISN) providers reported seeing 17,349 total patients during week 06, of which, 189 were seen with influenza-like illness symptoms.

Across the nation, two states reported regional ILI activity, eleven states, including Florida, reported local activity, thirty-three states reported sporadic activity, and four states reported no ILI activity for the week ending February 14, 2004. The percentage of deaths due to influenza and pneumonia remained level compared to the previous week (8.6% and 8.7%, respectively). This percentage is above the epidemic threshold of 8.3% for week 06.

As of February 23, thirty-two laboratory confirmed cases of avian influenza A (H5N1) infections in humans were reported in Vietnam and Thailand. Twenty-three cases are from Vietnam, of which, fifteen have been fatal. Nine cases have been reported from Thailand, of which, five have been fatal. The Bureau of Epidemiology continues to work with local health departments, physicians and health care professionals in an effort to monitor for potential avian influenza infections in Florida as well as update the public with the most recent conditions in Asia. A fact sheet about the significance of avian influenza for human health can be found at the World Health Organization's website: http://www.who.int

Enhanced Surveillance for Influenza 2003-2004 Season - Week 06

At the end of December 2003, the Bureau of Epidemiology sent out information regarding the reporting of outbreaks of influenza and influenza-like illness, as well as influenza associated deaths and encephalopathies among children (<18 yrs old). In that request, counties were instructed to report this information using the Influenza forum in EpiCom. The following is a

statewide summary of the reports submitted by the counties for the week ending February 14, 2004.

I Influenza or ILI Outbreaks

No outbreaks of influenza or influenza-like illness were reported to the Bureau of Epidemiology during this surveillance week.

Pediatric Deaths and Encephalopathies

No influenza deaths or encephalopathies among children were reported to the Bureau of Epidemiology during this surveillance week.

Notes

Many counties have reported a little to no influenza-like illness (ILI) activity across the state. There have been no reports of increased absenteeism.

A statewide summary of the enhanced surveillance report is also available on EpiCom.

FSPISN Influenza-Like Illness (ILI) Summary

Seventy-five sentinels from 67 public clinics and private offices submitted reports for 30 counties during the week ending February 14, 2004 (Week 06). Counties with the highest percentage of patients with ILI were Monroe (2.17%, with 1 sentinel locations reporting); Lake (2.41%, 2 reporting); Indian River (2.56%, 3 reporting); Brevard (2.70%, 3 reporting); Wakulla (3.42%, 1 reporting); Polk (5.45%, 4 reporting); Palm Beach (7.29%, 5 reporting); and Escambia (10.47%, 1 reporting). Twelve counties reported a low percentage of patients with ILI, and 10 counties reported no cases of ILI. A breakdown of ILI% reported for week ending February 7, 2004 by county is listed in Table 1.

TABLE 1. INFLUENZA-LIKE ILLNESS REPORTING BY COUNTY FOR WEEK ENDING 02/14/04 (WEEK 06) Report Date: February 16, 2004									
		Active wi last 4 v		Reporting for Week 06		Participation	ILI % Reported	ILI% Reported	ILI% Reported
County	Change	Active Sentinels	From Offices	Sentinels Reporting	From Offices	for Week 06	Week 06 (Current)	Week 05 (Updated)	Week 04 (Updated)
Alachua	Increasing	1	1	1	1	100%	0.20%	0.00%	0.21%
Brevard	Decreasing	3	3	3	3	100%	2.70%	5.41%	3.16%
Broward	Increasing	7	7	6	6	86%	1.35%	0.69%	0.57%
Charlotte	Level	1	1	1	1	100%	0.00%	0.00%	0.00%
Citrus	Level	1	1	1	1	100%	0.00%	0.00%	0.00%
Collier	Decreasing	2	2	1	1	50%	0.00%	7.80%	10.82%
Duval	Decreasing	7	7	6	6	86%	1.78%	2.48%	1.07%
Escambia	Decreasing	1	1	1	1	100%	10.47%	13.71%	15.92%
Hardee		1	1	0	0			0.00%	0.00%
Hillsborough	Level	5	5	3	3	60%	0.42%	0.42%	1.19%
Indian River	Decreasing	8	3	8	3	100%	2.56%	3.93%	4.33%
Lake	Increasing	2	2	2	2	100%	2.41%	1.55%	2.15%
Lee	Increasing	2	2	2	2	100%	0.71%	0.00%	3.80%
Leon	Level	2	2	2	2	100%	0.43%	0.37%	0.73%
Marion	Increasing	1	1	1	1	100%	0.14%	0.00%	0.00%
Martin		1	1	0	0			0.00%	0.00%
Miami-Dade	Decreasing	5	5	4	4	80%	0.27%	0.40%	0.54%
Monroe	Increasing	1	1	1	1	100%	2.17%	0.00%	1.78%
Okaloosa	Increasing	4	4	3	3	75%	1.05%	0.23%	0.38%
Orange	Decreasing	10	7	6	5	60%	1.03%	1.75%	1.71%
Osceola	Level	2	2	1	1	50%	0.00%	0.00%	0.00%
Palm Beach		5	5	1	1	20%	7.29%	5.25%	5.75%

Pasco	Level	1	1	1	1	100%	0.00%	0.00%	0.00%
Pinellas	Level	7	7	5	5	71%	1.80%	1.52%	2.34%
Polk	Level	7	4	5	3	71%	5.45%	5.47%	4.48%
Putnam	Level	1	1	1	1	100%	0.00%	0.00%	29.03%
Santa Rosa	Increasing	1	1	1	1	100%	1.57%	0.63%	0.00%
Sarasota		1	1	0	0			5.98%	0.70%
Seminole		1	1	0	0			0.28%	0.00%
St. Johns	Level	1	1	1	1	100%	0.00%	0.00%	0.00%
St. Lucie	Level	1	1	1	1	100%	0.00%	0.00%	0.00%
Volusia	Decreasing	4	4	4	4	100%	0.00%	0.20%	0.57%
Wakulla	Increasing	1	1	1	1	100%	3.42%	0.00%	0.00%

State Laboratory Specimen Testing in Florida

Three of the 12 specimens received by the Jacksonville Central and Tampa Branch laboratories for influenza isolate testing during the week ending February 14, 2004 (Week 06) were found positive for influenza A. All of these 3 viruses were found positive for A (H3N2). These specimens came from Miami-Dade and Volusia counties. The CDC has returned results from 14 specimens collected from Florida during October and November. All were positive for influenza A (H3N2): 5 were similar antigenically to the vaccine strain A/Panama/2007/99 (H3N2), and 9 were similar to the drift variant, A/Fujian/411/2002 (H3N2)

From September 28, 2003 to February 14, 2004, the Florida laboratories tested a total of 702 specimens and found 235 positive for influenza A (H3N2) and 99 that were unknown A or had culture results pending. The remaining specimens were negative for influenza. Table 2 details isolates found since September 28, 2003 by county.

TABLE 2. ISOLATES BY COUNTY FOUND DURING 2003-2004 SURVEILLANCE Report Date: February 16, 2004 Number of previously reported positive specimens (positive specimens, Week 06)							
Number of prev					Week Ub)		
County	Type A - H3N2	Type A - H1N1	Type A - Unknown	Type A –Unknown Culture Pending	Туре В		
Alachua	10		6				
Brevard	1						
Broward	6			5			
Charlotte				1			
Citrus	5			3			
Collier	3						
Duval	30		10				
Hardee	1			1			
Hernando	1						
Hillsborough	14			6			
Indian River	31		17				
Lake	1						
Lee	2						
Leon	22		4				
Marion	1						
Martin	1						
Miami-Dade	15(1)		13				
Monroe	2		1				
Okaloosa	6						
Orange	5		4	1			
Osceola	2		1				
Palm Beach	7			3			
Pasco	3						
Pinellas	10			3			

Polk	21		5	
Putnam	6	1	3	
Sarasota	9			
St Johns	10	4		
Taylor		1		
Volusia	6(2)	4		
Wakulla	1		1	

Rapid Testing Performed by Private Laboratories in Florida

Reports received from non-sentinel, private hospitals and private laboratories since September 28, 2003 are summarized in Table 3.

TABLE 3. RAPID INFLUENZA TESTS BY COUNTY DURING 2003-2004 Report Date: February 16, 2004									
County	Rapid Tests Performed	Negative Tests	Positive for A/B	Positive for A	Positive for B				
Alachua	Unknown	Unknown	5	0	0				
Bay	714	468	103	144	1				
Brevard	1212	922	0	299	0				
Broward	7	6	0	1	0				
Clay	Unknown	Unknown	1	0	0				
Collier	Unknown	Unknown	362	0	0				
Hillsborough	Unknown	Unknown	3	40	0				
Marion	2	1	1	0	0				
Miami-Dade	294	180	91	0	0				
Orange	24	16	14	0	0				
Pinellas	3	1	2	67	0				
Sarasota	Unknown	Unknown	79	77	1				

National Influenza Surveillance

This section summarizes the weekly influenza report from the Centers for Disease Control and Prevention. More detailed information can be found at: http://www.cdc.gov/flu

Influenza-Like Illness Report for the Week Ending January 24, 2004

The proportion of patient visits to sentinel physicians for influenza-like illness (ILI) continued to decrease (1.3% nationwide). This is below the national baseline of 2.5%. On a regional level, the percentage of patient visits for ILI ranged from 2.3% in the West South Central region to 0.7% in the New England and West North Central regions. Due to wide variability in regional level data, it is not appropriate to apply the national baseline to regional level data. National and regional percentages of patient visits for ILI are weighted on the basis of state population.

Antigenic Characterization

The CDC has antigenically characterized two influenza A (H1) viruses, 614 influenza A (H3N2) viruses, and 8 influenza B viruses that were submitted by U.S. laboratories since October 1, 2003. The influenza A (H1) viruses were similar antigentically to the vaccine strain A/New Caledonia/20/99. Of the 614 influenza A (H3N2) isolates characterized, 106 (18.2%) were similar antigenically to the vaccine strain A/Panama/2007/99 (H3N2), and 508 (81.8%) were similar to the drift variant, A/Fujian/411/2002 (H3N2). Seven of the influenza B viruses were similar to B/Hong Kong/330/2001.

U.S. World Health Organization (WHO) and Nation Respiratory and Enteric Virus Surveillance System (NREVSS) Laboratories Report

During week ending February 14, 2004, 27 (2.0%) of the 1,328 specimens tested at WHO and NREVSS laboratories were positive. Of these 27 positive specimens, 21 were influenza A (H3N2) viruses, 5 were influenza A viruses that were not subtyped, and 1 was an influenza B virus. Since September 28, 2003 WHO and NREVSS laboratories tested 95,778 specimens for influenza viruses and found 22,702 positive specimens. Of the positive specimens, 140 were influenza B viruses, 5,993 were influenza A (H3N2), and two was A (H1). The remaining 16,567 influenza A viruses have not been subtyped. Weekly ratios reported by the nine regions are presented in Table 4.

TABLE 4. 2003-2004 SPECIMEN TESTING SUMMARY BY REGION Report Date: February 16, 2004									
Region	Total Specimens	A H1N1	A H3N2	A-Unk	В	Ratio Pos.	ILI Reporting Weighted ILI %		
New England	3,407	1	288	821	2	0.326	2.201		
Mid-Atlantic	10,215	-	282	1,353	8	0.161	2.477		
East North Central	5,695	-	1,045	449	5	0.263	3.728		
West North Central	10,783	-	406	1,738	4	0.199	2.917		
South Atlantic	17,819	1	1,302	3,761	67	0.288	3.268		
East South Central	4,232	-	421	268	1	0.163	3.055		
West South Central	19,110	-	959	4,041	9	0.262	6.302		
Mountain	12,229	-	628	2,802	36	0.283	2.653		
Pacific	12,288	-	662	1,334	8	0.163	3.901		

122 U.S. Cities Vital Statistics Mortality Report

The percentage of all deaths due to pneumonia and influenza was 8.6%. This percentage is above the epidemic threshold of 8.3% for the week ending February 14, 2004.

International Influenza Surveillance

This section summarizes the weekly influenza report from around the globe. More detailed information can be found at the corresponding websites for each organization.

Report from the European Influenza Surveillance Scheme (EISS)

The EISS reports the influenza season seems to be ending in Europe, after moving across Europe from the west to east. Influenza activity was reported as peaking in Italy and Poland. Of the 22 European countries that are members of the EISS, widespread influenza activity was reported in Italy; regional activity was reported in Germany, Latvia and Switzerland; and 19 networks reported either local outbreaks or no influenza activity for the week. Younger age groups (0-14) experienced the highest clinical incidence of influenza. A/Fujian/411/2002 (H3N2)-like viruses continue to be most common. For more information about the EISS report, please visit their website at http://dev.eiss.org

World Health Organization (WHO) Communicable Disease Surveillance and Response

During the past two weeks, Croatia, Czech Republic, Latvia, Poland and Slovakia continued to experience Influenza activity associated with A/Fujian/411/2002-like viruses. Japan and Viet Nam report influenza A (H3N2) virus circulating in their countries. The Republic of Korea reports a low level of influenza B virus circulating. Sporadic cases of A (H3N2) were reported from China, Hong Kong Special Administrative Region (SAR) of China, Malaysia, Singapore and Thailand. Austria reported sporadic cases of A (H1N1) and B viruses. In Canada, Quebec reported widespread influenza activity. *The Weekly Epidemiological Record (WER)*, vol. 79, 8 (pp. 83-84): http://www.who.int/wer/en/

World Health Organization Communicable Disease Surveillance and Response

WHO influenza updates and reports to date have also included the following items:

- (Update 28) On February 20, 2004 WHO reported the investigation of possible influenza A (H5N1) infection in cats in Thailand. Fourteen of 15 cats from the same household died after one of the cats had contact with dead chickens. Faculty at the Veterinary Sciences at Thailand's Kasetsart University announced two of three cats tested had an infection due to A (H5N1) viruses. WHO reports no firm conclusions can be made at present. The health of the owner of the cats is being monitored. For the full article, please visit http://www.who.int/csr/don/2004_02_20/en/
- Current Confirmed Human Cases of Avian Influenza A (H5N1) reports can be found at http://www.who.int/csr/disease/avian influenza/country/en/

WHO Recommended Composition of Influenza Vaccine

WHO recommended composition of influenza virus vaccines for use in the 2004 influenza season http://www.who.int/csr/disease/influenza/recommendations2004/en/

Influenza Surveillance – Definitions and Reminders

Definitions of the influenza activity codes

No Activity: No laboratory-confirmed cases of influenza and no reported increase in the number of cases of ILI.

Sporadic: Small numbers of laboratory-confirmed influenza cases or a single influenza outbreak has been reported, but there is no increase in cases of ILI.

Local: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state.

Regional: Outbreaks of influenza or increases in ILI cases and recent laboratoryconfirmed influenza in at least two but less than half the regions of the state.

Widespread: Outbreaks of influenza or increases in ILI cases and recent laboratoryconfirmed influenza in at least half the regions of the state.

Important Reminders

- * Influenza activity reporting by sentinel providers is voluntary.
- * The influenza surveillance data is used to answer the question of where, when, and what viruses are circulating. It can be used to determine if influenza activity is increasing or decreasing, but it cannot be used to ascertain how many people have become ill with influenza so far this season.
- * Reporting is incomplete for this week. Numbers may change as more reports are received.