

Florida Influenza Surveillance for the Week Ending December 27, 2003 (Week 52)

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Summary

Florida influenza-like illness (ILI) activity continues to increase statewide. Eighteen counties are reported as having high ILI% activity for the week ending December 27 (Week 52). Twelve counties reported an increase in ILI activity during the week ending December 27, eleven counties reported a decrease and three counties remained level. Four counties did not have at least 50% of the sentinels reporting or did not report last week and therefore the change in activity could not be determined. Of the 8,149 patients seen by the sentinel providers during the week ending December 27, 654 were seen for influenza-like illnesses (an overall state ILI activity of 8.03%). The number of patients seen by the sentinel providers during the week ending December 27 was down substantially from the previous week (8,149 vs. 14,465). This decline in patient visits may have contributed to a larger ILI% activity. Due to the holiday week, some sentinel providers reporting seeing no patients. The Florida ILI activity code reported to the Centers for Disease Control and Prevention (CDC) for the week ending December 27 was widespread. Widespread is defined as an increase in ILI activity in greater than or equal to half of all regions (sentinel counties), along with recent laboratory evidence of influenza or recent institutional outbreaks within those regions. Three counties have reported outbreaks of influenza or influenza-like illness for the week ending December 27. The previous week only one county reported any outbreaks. As of January 5, 2004, there have been four cases of influenza-associated pediatric deaths in Florida reported to the Bureau of Epidemiology. Two of these were encephalopathy cases in which the patient later died. A statewide summary of the county enhanced surveillance reports has been made available on EpiCom.

Influenza-Like Illness (ILI) Florida Summary

Sixty-eight sentinels from 58 public clinics and private offices submitted reports for 28 counties during the week ending December 27, 2003 (Week 52). Counties with the highest percentage of patients with ILI were: Okaloosa (2.31%, with 2 of 5 locations reporting); Pinellas (2.39%, with 4 of 8 reporting); Martin (2.48%, with 1 of 1 reporting); Marion (2.73%, with 1 of 1 reporting); Lake (3.05%, with 2 of 2 reporting); Broward (4.02%, with 4 of 7 reporting); Alachua (5.45%, with 1 of 2 reporting); Miami-Dade (5.63%, with 3 of 6 reporting); Orange (6.69%, with 5 of 9 reporting); Monroe (7.96%, with 1 of 1 reporting); Palm Beach (9.66%, with 4 of 5 reporting); Duval (10.06%, with 4 of 7 reporting); Sarasota (15.07%, with 1 of 1 reporting); Polk (18.06%, with 4 of 4 reporting); Brevard (18.75%, with 3 of 3 reporting); Pasco (22.22%, with 1 of 1 reporting); Indian River (22.47%, with 3 of 3 reporting); and Leon (31.30%, with 1 of 2 reporting). Five counties reported a low percentage of patients with ILI, and four counties reported no cases of ILI. A breakdown of ILI% reported for week ending December 27, 2003 by county is listed in Table 1.

Table 1. Influenza-Like Illness Reporting by County for Week Ending 12/27/03 (Week 52)

County	Change in ILI Activity	Enrolled as of 1/2/04		Reporting for Week 52		Participation for Week 52	ILI% Reported for Week 52 (Current)	ILI% Reported for Week 51 (Updated)	ILI% Reported for Week 50 (Updated)
		Sentinels recruited	From Offices	Sentinels reporting	From Offices				
Alachua	Increasing	2	2	1	1	50%	5.45%	1.89%	3.42%
Brevard	Increasing	3	3	3	3	100%	18.75%	8.90%	3.80%
Broward	Decreasing	7	7	4	4	57%	4.02%	6.29%	5.19%
Charlotte	Level	1	1	1	1	100%	0.00%	0.00%	0.00%
Citrus	Decreasing	1	1	1	1	100%	0.00%	0.62%	0.53%
Collier	Decreasing	2	2	1	1	50%	1.72%	3.36%	1.62%
Duval	Increasing	7	7	4	4	57%	10.06%	8.44%	5.54%
Hillsborough	Decreasing	6	6	3	3	50%	0.57%	3.98%	1.25%
Indian River	Increasing	8	3	8	3	100%	22.47%	14.50%	5.60%
Lake	Decreasing	2	2	2	2	100%	3.05%	5.83%	6.16%
Lee	Decreasing	2	2	1	1	50%	0.00%	1.12%	1.22%
Leon	Increasing	2	2	1	1	50%	31.30%	10.74%	5.40%
Marion	Increasing	1	1	1	1	100%	2.73%	1.17%	1.00%
Martin	Increasing	1	1	1	1	100%	2.48%	1.22%	1.16%
Miami-Dade	Increasing	6	6	3	3	50%	5.63%	1.82%	1.34%

Monroe	Decreasing	1	1	1	1	100%	7.96%	13.99%	7.59%
Okaloosa	--	5	5	2	2	40%	2.31%	2.79%	3.38%
Orange	Decreasing	12	9	7	5	58%	6.69%	7.37%	4.60%
Osceola	Decreasing	2	2	2	2	100%	0.00%	1.75%	1.75%
Palm Beach	Decreasing	5	5	4	4	80%	9.66%	19.01%	13.53%
Pasco	Increasing	1	1	1	1	100%	22.22%	11.11%	2.99%
Pinellas	Level	8	8	4	4	50%	2.39%	2.82%	4.27%
Polk	Increasing	7	4	5	4	71%	18.06%	13.33%	8.80%
Santa Rosa	--	1	1	--	--	--	--	3.45%	--
Sarasota	Increasing	1	1	1	1	100%	15.07%	1.59%	--
Seminole	Decreasing	2	2	1	1	50%	0.36%	1.72%	--
St. Johns	Level	2	2	1	1	50%	1.74%	1.28%	0.00%
St. Lucie	--	1	1	1	1	100%	0.00%	--	0.00%
Volusia	Increasing	2	2	1	1	50%	1.24%	0.39%	0.77%
Walton	--	1	1	--	--	--	--	0.00%	3.45%

Laboratory Specimen Testing in Florida

Forty-four of the 105 specimens received by the Jacksonville Central and Tampa Branch laboratories for influenza isolate testing during the week ending December 27, 2003 (Week 52) were found positive for influenza A. Of these 44 viruses, 30 were A (H3N2), 29 were influenza A, unknown. These viruses came from Alachua, Broward, Citrus, Duval, Hernando, Hillsborough, Indian River, Lee, Leon, Marion, Orange, Palm Beach, Pasco, Pinellas, Polk, St. Johns, Volusia, and Wakulla counties. Culture testing continues on 15 of the unknown 29 influenza A specimens received during week 52 that were found positive for influenza A through PCR testing. The CDC has returned results from 9 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 4 were similar to the drift variant, A/Fujian/411/2002 (H3N2).

From September 28, 2003 to December 27, 2003, the Florida laboratories tested a total of 409 specimens and found 147 positive for influenza A (H3N2) and 49 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.

County	Type A - H3N2	Type A - H1N1	Type A - Unknown	Type A - Unknown; Culture Pending	Type B
Alachua	7(2)		1(3)		
Broward	3		3	(2)	
Citrus	1		1	(5)	
Collier	3				
Duval	17(3)		3(5)		
Hernando	(1)				
Hillsborough	7(3)		1	(2)	
Indian River	17		3(4)		
Lake	1				
Lee	(2)				
Leon	15(3)		3		
Marion	(1)				
Miami-Dade	1				
Okaloosa	5				
Orange	2(3)		2(1)		
Osceola	1				
Palm Beach	5(2)		1	(1)	
Pasco	(3)				
Pinellas	4(1)		0		
Polk	15(2)		1	(3)	
Sarasota	8		0		
St Johns	5(2)		1		
Volusia	(1)		(1)		
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.

County	Rapid Tests performed	Negative Tests	Positive for A or B	Positive for A	Positive for B
Alachua	Unknown	Unknown	5	0	0
Bay	180	114	32	34	1
Brevard	497	364	0	142	0
Broward	7	6	0	1	0
Clay	Unknown	Unknown	1	0	0
Collier	Unknown	Unknown	306	0	0
Marion	2	1	1	0	0
Miami-Dade	Unknown	Unknown	107	0	0
Orange	Unknown	Unknown	8	0	0
Orange*	10	7	3	0	0
Pinellas	3	1	2	0	0
Sarasota	Unknown	Unknown	11	21	0

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 their website:

<http://www.cdc.gov/ncidod/diseases/flu/weekly.htm> and at <http://www.cdc.gov/ncidod/diseases/flu/vacfacts.htm#01>

Influenza-Like Illness Report for the Week ending December 27, 2003

The proportion of patient visits to sentinel physicians for influenza-like illness (ILI) was 9.4% nationwide. This is above the national baseline of 2.5%. The percentage of patient visits for ILI increased in 7 surveillance regions. On a regional level, the percentage of visits for ILI ranged from 11.4% in the East North Central region to 5.8% in the east South Central region. The South Atlantic region, in which Florida is located, reported 10.4% of patient visits were due to ILI. Due to wide variability in regional level data, it is not appropriate to apply the national baseline to regional level data. National percentage and regional percentages of patient visits for ILI are weighted on the basis of state population.

Antigenic Characterization: CDC has antigenically characterized two influenza A (H1) viruses, 357 influenza A (H3N2) viruses, and two influenza B viruses that were submitted by U.S. laboratories since October 1, 2003. The influenza A (H1) viruses were similar antigenically to the vaccine strain A/New Caledonia/20/99. Of the 357 A (H3N2) viruses characterized, 91 (25.5%) were similar antigenically to the vaccine strain A/Panama/2007/99 (H3N2), and 266 (74.5%) were similar to the drift variant, A/Fujian/411/2002 (H3N2). The influenza B viruses were similar to B/Sichuan/379/99, which is in the 2003-04 vaccine.

Influenza drift variant, A/Fujian/411/2002 (H3N2), found in the United States and Europe

The Influenza A drift variant, A/Fujian/411/2002 (H3N2) predominated the Australian and New Zealand outbreaks that peaked in mid-to-late August 2003, and has been detected in many countries in the Northern Hemisphere, including the United States. The CDC expects the current U.S. vaccine will offer some protective immunity against the A/Fujian/411/2002-like viruses because these viruses are related to

the vaccine strain, A/Panama/2007/99. Antibodies produced against the vaccine virus cross-react with A/Fujian/411/2002-like viruses, but at a lower level.

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

Since September 28, 2003, 14,942 (29.4%) of the 50,743 specimens tested for influenza viruses were positive. Three thousand five hundred seventy-six influenza A (H3N2) viruses, one influenza (H1) virus and 95 influenza B viruses have been identified. Weekly ratios rather than proportions are presented in the 2003-2004 Summary By Region because specimens reported positive for influenza virus each week may include specimens submitted for testing during an earlier week.

Region	Total Specimens	AH1N1	AH3N2	A-Unk	B	Ratio Pos.	ILI Reporting: Weighted ILI% For Week 52
New England Region	1,231	0	90	338	1	0.348	1.851
Mid-Atlantic Region	3,641	0	45	425	2	0.130	2.232
East North Central Region	2,863	0	652	204	2	0.300	4.087
West North Central Region	5,928	0	116	1,100	1	0.205	3.293
South Atlantic Region	10,619	1	791	2,915	43	0.353	3.203
East South Central Region	2,230	0	163	168	1	0.149	3.478
West South Central Region	10,582	0	928	2,927	7	0.365	7.325
Mountain Region	9,168	0	525	2,691	35	0.355	3.309
Pacific Region	4,481	0	266	502	3	0.172	4.617

122 US Cities Vital Statistics Mortality Report

The percentage of all deaths due to pneumonia and influenza was 9.0. This percentage exceeds the epidemic threshold of 7.9 for the week ending December 27, 2003.

International Influenza Activity

World Health Organization Communicable Disease Surveillance and Response

WHO reported on January 5, 2004 the first laboratory confirmed case of SARS in a 32-year-old man in the southern Chinese province of Guangdong. The patient was hospitalized on December 20, 2003, four days after the onset of symptoms. WHO reports follow-up on all persons in contact with the patient indicates contacts are free of symptoms and most have been released from quarantine. Surveillance has been intensified in Guangdong and other provinces. For more information about this report please visit the WHO website at http://www.who.int/csr/don/2004_01_05/en/.

No new influenza updates were found as of January 5, 2004. WHO influenza updates to date included the following items:

WHO issued Update 5 on December 23, 2003 in which an outbreak of avian influenza A (H5N1) in poultry at a farm in the Republic of Korea has resulted in the detection of infected chickens at nine poultry farms in 4 provinces. An estimated one million chickens and ducks are to be culled. No human A(H5N1) cases have been reported.

On December 10, 2003 WHO reported a case of avian influenza A(H9N2) in Hong Kong Special Administrative Region of China. The patient, a five-year old boy, was hospitalized and has recovered. The only other reported case of influenza A(H9N2) virus in Hong Kong occurred in 1999.

Significant increases in influenza activity associated with influenza A(H3N2) in some countries in the northern hemisphere and in Africa is reported. Countries with declining influenza activity include Portugal, Spain and the United Kingdom, and most parts of Canada. Countries in Asia most frequently report influenza B viruses; sporadic cases of influenza B have been found in Europe and North America. An influenza A(H1) outbreak that had begun in Iceland during early October had ended by mid-November. For more information about the WHO Communicable Disease Surveillance and Response Updates, please visit their website at <http://www.who.int/csr/en/>.

FluWatch Report from the Canadian Centre for Infectious Disease Prevention and Control

For more information about the FluWatch report, please visit their website at <http://www.hc-sc.gc.ca/pphb-dgspsp/fluwatch/index.html>

Report from the European Influenza Surveillance Scheme (EISS)

For more information about the EISS report, please visit their website at http://dev.eiss.org/cgi-files/bulletin_v2.cgi.

WHO Collaborating Centre for Reference and Research on Influenza, Melbourne Australia

Australia's winter months are from May to October. One of Australia's biggest influenza seasons since 1998 peaked from mid to late August 2003, and by October cases of influenza had generally subsided. Influenza A (H3) viruses were cited as the primary cause of outbreaks, with little A (H1) or B viruses isolated during the season. For more information about Australian influenza, please visit the Melbourne, Australia Branch website at <http://www.influenzacentre.org/> (specific article can be found at <http://www.influenzacentre.org/flunews.htm#subsiding>).

2002-2003 Influenza Surveillance Summaries

An international summary of the 2002-2003 influenza surveillance season (October-September) can be found on page 303 in the November 7, 2003 edition of the WHO's Weekly Epidemiological Record (Vol. 78) at <http://www.who.int/wer/2003/wer7845/en/>.

WHO Recommended composition of influenza virus vaccines for use in the 2004 influenza season

<http://www.who.int/csr/disease/influenza/recommendations2004/en/>

*** Reporting is incomplete for this week. Numbers may change as more reports are received**