Florida Influenza Surveillance for the Week Ending December 6, 2003 (Week 49)

Angela Fix, MPH, Respiratory Disease Surveillance Epidemiologist
Melissa Covey, Influenza Surveillance Coordinator

Summary

Florida influenza-like illness (ILI) activity continues to increase statewide. Fourteen counties are reported as having high ILI% activity for the week ending December 6 (Week 49). Significance testing is not done for these percentages. Of the 18,596 patients seen by the sentinel providers during the week ending December 6, 517 were seen for influenza-like illnesses (overall state ILI activity of 2.78%). The number of specimen submissions and positive laboratory results increased during the week ending December 6. The Influenza A strain H3N2 continues to be the predominant strain circulating throughout Florida. Of the thirty-five specimens received by the state laboratories for influenza isolate testing during Week 49, fourteen were positive for Influenza A (H3N2). The Bureau of Epidemiology continues to encourage the county influenza coordinators to contact their sentinel providers to promote submission of laboratory specimens for subtyping. The best way to prevent the flu is to get vaccinated. However, in the absence of vaccine there are other ways to protect yourself and your family from the flu. Good heath habits such as avoiding close contact with those who are ill, staying home whenever possible if you are sick, covering your mouth and nose with a tissue when you sneeze or cough, washing your hands regularly, and avoiding touching your mouth, eyes and nose after touching items that may be contaminated with germs can help prevent the spread of influenza to you and those around you.

Florida Influenza-Like Illness (ILI) Summary

Seventy sentinels from 64 public clinics and private offices submitted reports for 27 counties during the week ending December 6, 2003 (Week 49). Counties with the highest percentage of patients with ILI were Leon (2.50%, 2 of 2 sentinel locations reporting); Okaloosa (2.51%, 2 of 5); Duval (2.56%, 5 of 9); Alachua (2.89%, 1 of 2); Seminole (2.91%, 2 of 5); Orange (4.19%, 6 of 9); Indian River (4.46%, 2 of 3); Lake (4.71%, 1 of 2); Pinellas (5.65%, 5 of 8); Broward (6.68%, 6 of 7); Polk (7.62%, 4 of 4); Osceola (7.99%, 2 of 2); Palm Beach (9.02%, 5 of 5); and Pasco (9.09%, 1 of 1). Nine counties reported a low percentage of patients with ILI, and 4 counties reported no cases of ILI. A breakdown of ILI% reported for weeks ending December 6, 2003 by county is listed in Table 1.

Table 1: Influenza-Like Illness Reporting by County for Week Ending 12/06/03 (Week 49)

County	Change in ILI Activity	Enrolled as of 12/12/03		Reporting for Week 49		Participation for Week 49	ILI% Reported for Week 49 (Current)	ILI% Reported for Week 48 (Updated)	ILI% Reported for Week 47 (Updated)
		Sentinels recruited	From Offices	Sentinels reporting	From Offices				
Alachua	Level	1	1	2	2	50%	2.89%	2.71%	2.66%
Brevard	Decreasing	2	2	3	3	67%	1.95%	2.43%	2.53%
Broward	Increasing	6	6	7	7	86%	6.68%	4.41%	2.82%
Charlotte	--	1	1	1	1	**100%**	0.00%	0.00%	0.00%
Citrus	--	1	1	1	1	**100%**	0.17%	0.00%	0.09%
Collier	--	1	1	2	2	50%	0.00%	0.00%	0.47%
Duval	Level	5	5	9	9	56%	2.56%	2.50%	2.10%
Hillsborough	Level	3	3	6	6	50%	0.82%	0.90%	0.34%
Indian River	Decreasing	6	2	8	3	75%	4.46%	6.08%	4.84%
Lake	Increasing	1	1	2	2	50%	4.71%	1.72%	0.99%
Lee	Increasing	1	1	2	2	50%	0.39%	0.00%	0.78%
Leon	Increasing	2	2	2	2	**100%**	2.50%	2.12%	1.16%
Marion	--	1	1	1	1	**100%**	0.52%	0.00%	0.24%
Martin	Increasing	1	1	1	1	**100%**	1.57%	0.57%	0.33%
Miami-Dade	Level	5	5	6	6	83%	1.01%	1.18%	0.59%
Monroe	Decreasing	1	1	1	1	**100%**	0.73%	1.79%	1.55%
Okaloosa	Increasing	2	2	5	5	40%	2.51%	2.02%	1.32%
Orange	Decreasing	6	6	12	9	50%	4.19%	5.69%	3.46%
Osceola	Increasing	2	2	2	2	**100%**	7.99%	0.00%	0.00%
Palm Beach	Increasing	5	5	5	5	**100%**	9.02%	5.70%	3.36%

Pasco	Increasing	1	1	1	1	**100%**	9.09%	0.00%	1.67%
Pinellas	Increasing	5	5	8	8	63%	5.65%	1.16%	1.72%
Polk	Increasing	6	4	7	4	86%	7.62%	4.96%	3.50%
Santa Rosa	--	1	1	1	1	**100%**	0.00%	1.20%	0.00%
Sarasota	--			1	1	0%			
Seminole	Increasing	2	2	5	5	40%	2.91%	1.54%	2.20%
St. Johns	Increasing	1	1	3	2	33%	1.80%	0.00%	0.00%
St. Lucie	--			1	1	0%		0.00%	0.00%
Volusia	--	1	1	1	1	**100%**	0.00%	0.00%	0.00%
Walton	--			1	1	0%		4.82%	3.28%
Florida		**70**	**64**	**108**	**96**	**65%**	**2.78%**	**2.62%**	**1.75%**

Laboratory Specimen Testing in Florida
Fourteen of the 35 specimens received by the Jacksonville Central and Tampa Branch laboratories for influenza isolate testing during the week ending December 6, 2003 (Week 49) were found positive for influenza A (H3N2). These viruses came from Broward (1), Duval (4), Hillsborough (3), Indian River (2), Leon (1), Miami-Dade (1), Okaloosa (1), and St. Johns (1) counties.

From September 28, 2003 to December 6, 2003, the Florida laboratories tested a total of 137 specimens and found 35 positive for influenza A (H3N2). 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: December 16, 2003
Number of previously reported cases (Number of new cases)

County	Type A - H3N2	Type A - H1N1	Type A - Unknown	Type B
Alachua	7	0	0	0
Broward	(1)	0	0	0
Dade	(1)	0	0	0
Duval	(4)	0	0	0
Hillsborough	3(1)	0	0	0
Indian River	2(2)	0	0	0
Leon	3(1)	0	0	0
Okaloosa	2(1)	0	0	0
Orange	2	0	0	0
Palm Beach	1	0	0	0
Pinellas	1(1)	0	0	0
Polk	(1)	0	0	0
St Johns	(1)	0	0	0

Rapid Testing Performed by Private Laboratories in Florida
Reports received from one clinic, three hospitals and one private laboratory since September 28, 2003 are summarized in Table 3.

Table 3. Rapid Influenza Tests by County During 2003-2004
Report Date: December 1, 2003
Number of previously reported cases (Number of new cases) Rapid tests reported

County	Rapid Tests performed	Negative Tests	Positive for A or B	Positive for A	Positive for B

Alachua	0	0	5	0	0
Brevard	108	107	(1)	0	0
Broward	7	6	0	1	0
Marion	2	1	(1)	0	0
Miami-Dade	7	6	(1)	0	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 6, 2003.

The proportion of patient visits to sentinel physicians for influenza-like illness (ILI) was 5.1% nationwide. This is above the national baseline of 2.5%. The percentage of patient visits for ILI increased in all regions except the West South Central region, where it has decreased (7.0% for week 49 compared with 11.5% for week 48). On a regional level, the percentage of visits for ILI was highest in the Pacific and Mountain regions (7.76%), followed by the West South Central (7.0%), East South Central (5.3%), West North Central (4.9%), and South Atlantic (4.4%) regions. All other regions were below 4%. 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 212 influenza A (H3N2) viruses submitted by U.S. laboratories since October 1. Of the 212 A (H3N2) viruses tested, 54 (25%) were similar antigenically to the vaccine strain A/Panama/2007/99 (H3N2), and 158 (75%) were similar to the drift variant, A/Fujian/411/2002 (H3N2). Of the seven influenza A (H3N2) viruses submitted to the CDC from Florida since mid-October, 3 were A/Fujian/411/2002 (H3N2)-like and the remaining were A/Panama/2007/99-like (H3N2)-like. The CDC has also antigenically characterized one influenza A(H1N1) virus that was similar to the vaccine strain A/New Caledonia/20/99.

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, 6,751 (27.1%) of the 24,906 specimens tested for influenza viruses were positive. One thousand two hundred fifty-four influenza A (H3N2) viruses, one influenza (H1) virus and 135 influenza B viruses have been identified. Of the specimens submitted to date, 2,419 (35.8%) were reported from the West South Central region and 2,278 (33.7%) were from the Mountain region.

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	2003-2004 Summary By Region WHO and NREVSS Laboratories						ILI Reporting: Weighted ILI% For Week 49
	Total Specimens	AH1N1	AH3N2	A-Unk	B	Ratio Pos.	
New England Region	200	0	9	20	1	0.150	1.000
Mid-Atlantic Region	1774	0	13	89	0	0.057	1.564
East North Central Region	1152	0	140	30	1	0.148	1.904
West North Central Region	3075	0	42	271	1	0.102	1.841
South Atlantic Region	4008	1	225	945	16	0.296	1.834
East South Central Region	579	0	37	18	0	0.095	2.425
West South Central Region	6038	0	444	1971	4	0.401	9.629
Mountain Region	5877	0	304	1964	10	0.388	2.629
Pacific Region	2203	0	40	153	2	0.089	3.149

122 US Cities Vital Statistics Mortality Report.
The percentage of all deaths due to pneumonia and influenza was 7.0%. This percentage is below the epidemic threshold of 7.6% for the week ending December 6, 2003.

International Influenza Activity

World Health Organization Communicable Disease Surveillance and Response
WHO issued Update 3 on December 10, 2003 in which significant increased in influenza activity associated with influenza A (H3N2) in some countries in the northern hemisphere is reported. 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 the week ending November 15, 2003, widespread influenza activity was reported in all regions in Saskatchewan and 1 region in Ontario, localized influenza activity was reported in all regions of the North West Territories, 2 regions of Nunavut, 1 region of Alberta, Manitoba and Nova Scotia, and sporadic influenza activity was reported Alberta, Manitoba, Nova Scotia, Nunavut, Quebec and the Yukon.

Four Influenza outbreaks were reporting in schools in Nova Scotia (3) and Alberta (1); long-term care facilities in Alberta (2), British Columbia (1), Manitoba (1), Ontario (2), and Saskatchewan (2); and a hospital in British Columbia. Influenza related deaths were reported in Ontario (2 seniors, and a 10-year-old child with co-morbidities).

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)
Of the 22 European countries that are members of the EISS, widespread influenza activity was reported in Belgium, England, France, Norway, Portugal, Scotland and Spain; Switzerland reported regional activity; and Denmark, Ireland, Luxembourg, the Netherlands, Northern Ireland, Romania and Sweden reported local outbreaks for the week ending December 6, 2003 (Week 49). All other countries in Europe reported sporadic or no activity.

Strain characterization: Based on data available for the 145 viruses isolated up to week 49, 88.3% (128) were A/Fujian/411/2002 (H3N2)-like, 6.2% were A/Moscow/10/99 (H3N2)-like, 3.5% (5) were A/New

Caledonia/20/99 (H1N1)-like, 1.4% were B/Hong Kong/330/2001-like. A B/Sichuan/379/99-like virus was isolated in Germany is reported to be a sporadic case that represents less than 0.7% of all strain characterizations, and the EISS will carefully monitor B/Sichuan-like isolates in Europe.

Season Summary: Early influenza activity in Spain, Portugal, the United Kingdom and Ireland has slowed down or declined, and has increased in most other countries in Europe. Seasonal influenza activity has begun to gradually move across Europe but has not reached a number of countries, most of which are in the eastern part of Europe. 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.*