

Flu Watch

South Carolina Department of Health and Environmental Control Division of Acute Disease Epidemiology

Week Ending October 8, 2011 (MMWR Week 40)

All data are provisional and may change as more reports are received.

In this issue:

2
4
6
7
7
8

MMWR Week 40 at a Glance:

Influenza Activity Level: No activity

Note: Activity level definitions are found on page 7

ILI Activity Status (South Carolina baseline is 2.05%*): Below baseline in the Upstate (.15%), Midlands (.32%), and along the Coast (1.06%). The state ILI percentage was .37%. These data reflect reports from 16 (47.1%) providers.

Note: See map of counties on page 3 for regional descriptions

SC Viral Isolate and RT-PCR Activity: No positive specimens were reported by any lab.

Positive Rapid Flu Test Activity: Eighteen positive rapid tests were reported.

Hospitalizations: No lab confirmed hospitalizations were reported.

Deaths: No lab confirmed deaths were reported.

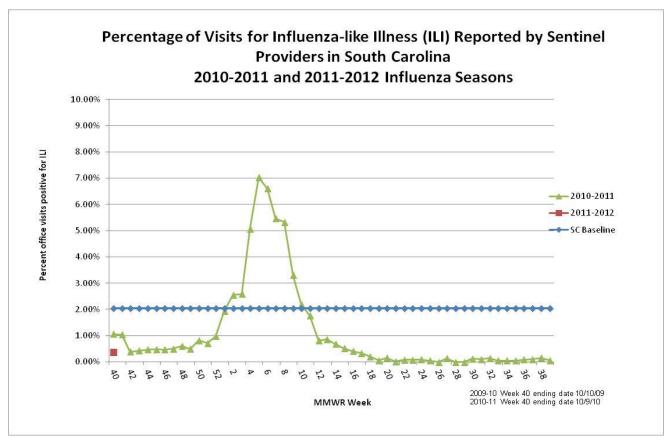
**Note: Additional charts and/or graphs will be presented as the season progresses and more data are available.

Summary of ILI Activity, Positive Confirmatory Tests, and Influenza Associated Hospitalizations and Deaths

	Current week	Previous week	Change From previous week
Percent of visits to ILINet providers for ILI	.37%	.06%	▲ .31
Number of positive confirmatory tests	0	NA	NA
Number of lab confirmed flu hospitalizations	0	NA	NA
Number of lab confirmed flu deaths	0	NA	NA

I. ILINet Influenza-Like Illness Surveillance

During MMWR week 40, .37% of patient visits to SC ILINet providers were due to ILI. This is below the state baseline (2.05%). This ILI percentage compares to 1.06 % this time last year. Reports were received from providers in 14 counties, representing 6 of the 8 regions.



^{*}The SC baseline is the mean percentage of patient visits for ILI during non-influenza weeks (weeks when percent of positive lab tests was below 20%) for the previous three seasons plus two standard deviations.

Reported Influenza-Like Illness by Sentinel Providers October 2, 2011-October 8, 2011

County	ILI %	County	ILI %
Abbeville		Greenwood	NR
Aiken	.51%	Hampton	NR
Allendale		Horry	NR
Anderson	0%	Jasper	NR
Bamberg		Kershaw	0%
Barnwell		Lancaster	
Beaufort	NR	Laurens	NR
Berkeley	NR	Lee	
Calhoun		Lexington	0%
Charleston	NR	Marion	
Cherokee		Marlboro	
Chester		McCormick	.64%
Chesterfield		Newberry	
Clarendon		Oconee	
Colleton		Orangeburg	
Darlington		Pickens	0%
Dillon	NR	Richland	.22%
Dorchester	NR	Saluda	0%
Edgefield		Spartanburg	0%
Fairfield	1.31%	Sumter	NR
Florence	.20%	Union	
Georgetown	1.06%	Williamsburg	
Greenville	.40%	York	.55%

NR: No reports received ---: No enrolled providers



Geographic Region	ILI %	# of Reporters
Upstate-Regions 1 -2	.15	8
Midlands-Regions 3-5	.32	7
Coastal-Regions 6-8	1.06	1

^{*}County ILI percentages are affected by the number of reporting providers within that county.

Positive confirmatory influenza test results* Current MMWR Week (10/2/11-10/8/11)			
	BOL	Other clinical labs	
Number of specimens tested	0	NA	
Number of positive specimens		0	
Influenza A unsubtyped			
Influenza A H1N1			
Influenza A H3N2			
Influenza B			
Other			

Includes culture, RT-PCR, DFA, and IFA

During MMWR week 40, no positive specimens were reported.

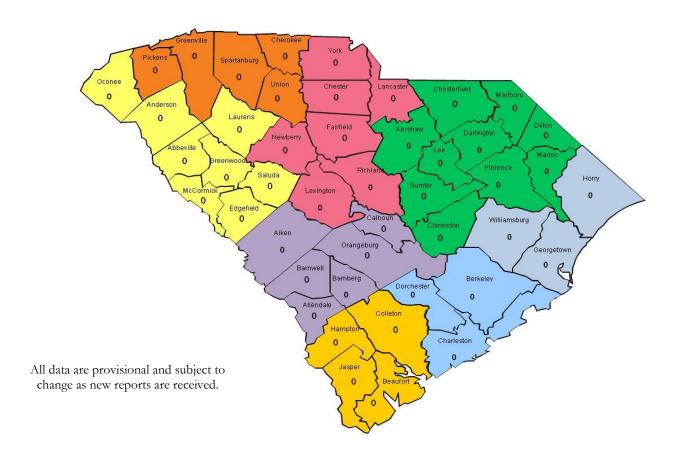
Positive confirmatory influenza test results* Cumulative (10/2/11-10/8/11) BOL Other clinical labs Number of specimens tested 0 NA Number of positive specimens Influenza A unsubtyped Influenza A H1N1 Influenza A H3N2 Influenza B Other

Includes culture, RT-PCR, DFA, and IFA

Positive Confirmatory Tests by County Current Week 10/2/11-10/8/11

County	Positive Tests	County	Positive Tests	County	Positive Tests
Abbeville		Dillon		Lexington	
Aiken		Dorchester		Marion	
Allendale		Edgefield		Marlboro	
Anderson		Fairfield		McCormick	
Bamberg		Florence		Newberry	
Barnwell		Georgetown		Oconee	
Beaufort		Greenville		Orangeburg	
Berkeley		Greenwood		Pickens	
Calhoun		Hampton		Richland	
Charleston		Horry		Saluda	
Cherokee		Jasper		Spartanburg	
Chester		Kershaw		Sumter	
Chesterfield		Lancaster		Union	
Clarendon		Laurens		Williamsburg	
Colleton		Lee		York	
Darlington					

Map of Positive Confirmatory Tests by County Cumulative 10/2/11-10/8/11

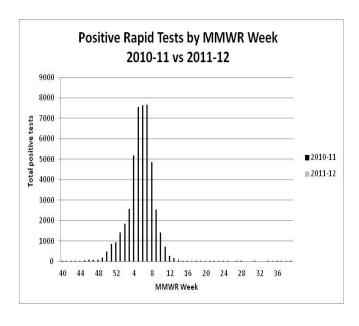


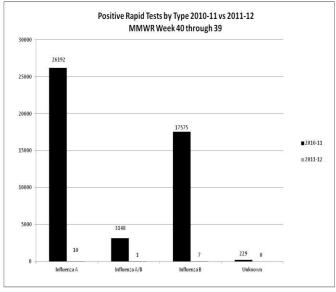
III. Positive Rapid Antigen Tests

During MMWR week 40 (the first of the current season), 18 positive rapid antigen test were reported. Of these, there were 10 influenza A, 7 influenza B, and 1 was influenza A/B. This compares to 40 this time last year.

Positive Rapid Flu Tests by County October 2, 2011 – October 8, 2011

County	Positive Tests	County	Positive Tests	County	Positive Tests
Abbeville		Dillon		Lexington	
Aiken		Dorchester	1	Marion	
Allendale		Edgefield		Marlboro	
Anderson		Fairfield		McCormick	
Bamberg		Florence		Newberry	1
Barnwell		Georgetown		Oconee	
Beaufort		Greenville	3	Orangeburg	
Berkeley		Greenwood		Pickens	
Calhoun		Hampton		Richland	
Charleston	1	Horry	5	Saluda	
Cherokee	1	Jasper		Spartanburg	1
Chester		Kershaw		Sumter	1
Chesterfield		Lancaster	1	Union	
Clarendon	1	Laurens		Williamsburg	
Colleton		Lee		York	2
Darlington					





IV. Influenza hospitalizations and deaths

During MMWR week 40, no lab confirmed* influenza hospitalizations were reported. No lab confirmed deaths were reported.

	Total number*		
Number of Hospitals Reporting (current week)	31		
	Previous MMWR (10/2-10/8/11)	Cumulative (since 10/3/10)	
Hospitalizations	0	0	
Deaths	0	0	

^{*}These data are provisional. Lab confirmation for hospitalizations and deaths includes culture, PCR, DFA, IFA, and rapid test.

V. Influenza activity levels

Activity Level	ILI activity/Outbreaks		Laboratory data	
No activity	Low	And	No lab confirmed cases	
	Not increased	And	Isolated lab-confirmed cases	
Sporadic	OR			
	Not increased	And	Lab confirmed outbreak in one institution	
	Increased ILI in 1 region; ILI activity in other regions is not increased	And	Recent (within the past 3 weeks) lab evidence of influenza in region with increased ILI	
			OR	
Local	2 or more institutional outbreaks (ILI or lab confirmed) in 1 region; ILI activity in other regions is not increased	And	Recent (within the past 3 weeks) lab evidence of influenza in region with the outbreaks; virus activity is no greater than sporadic in other regions	
	Increased ILI in 2-3 regions	And	Recent (within the past 3 weeks) lab confirmed influenza in the affected regions	
Regional	OR			
	Institutional outbreaks (ILI or lab confirmed) in 2-3 regions	And	Recent (within the past 3 weeks) lab confirmed influenza in the affected regions	
Widespread	Increased ILI and/or institutional outbreaks (ILI or lab confirmed) in at least 4 of the regions	And	Recent (within the past 3 weeks) lab confirmed influenza in the state.	

VI. South Carolina Influenza Surveillance Components

South Carolina influenza surveillance consists of mandatory and voluntary reporting systems for year-round influenza surveillance. These networks provide information on influenza virus strain and subtype and influenza disease burden.

Mandatory Reporting

Positive confirmatory test reporting

Positive influenza culture, PCR, DFA, and IFA results from commercial laboratories should be reported to DHEC within 7 days electronically via CHESS or using a DHEC 1129 card.

Positive rapid antigen test reporting

Summary numbers of positive rapid influenza tests and influenza type identified should be sent to the Uregional U health department by fax or email before noon on Monday for the preceding week.

Influenza death reporting

Lab confirmed influenza deaths in adults should be reported to DHEC within 7 days. Lab confirmed influenza deaths in children under age 18 should be reported within 24 hours. These include results from viral culture, PCR, rapid flu tests, DFA, IFA or autopsy results consistent with influenza. Hospitals should report deaths to their regional health department by noon on Monday for the preceding week.

Influenza hospitalizations

DHEC requires weekly submission of laboratory confirmed influenza hospitalizations. Hospitals should report these to their <u>regional</u> health department by noon on Monday for the preceding week.

For additional information about ILINet or to become an ILINet provider, contact the Acute Disease Epidemiology influenza surveillance coordinator at springcb@dhec.sc.gov.

Voluntary Networks

Laboratory Viral Isolate Network

Viral isolate surveillance is essential for identifying circulating influenza strain subtype information, and the identification of new strains that may need to be included in the next year's influenza vaccine. Participating providers receive culture media, packaging, processing and shipping labels in order to submit a subset of specimens to the Bureau of Labs (BOL).

UInfluenza-Like Illness (ILINet) Sentinel Providers Network ILINet focuses on the number of patients presenting with influenza-like symptoms in the absence of another known cause. ILI is defined as fever (temperature of U≥U100°F) plus a cough and/or a sore throat in the absence of another known cause. Providers submit weekly reports to the CDC of the total number of patients seen in a week and the subset number of those patients with ILI symptoms by age group.

South Carolina Disease Alerting, Reporting & Tracking System (SC-DARTS)

SC-DARTS is a collaborative network of syndromic surveillance systems within South Carolina. Currently our network contains the following data sources: SC Hospital Emergency Department (ED) chief-complaint data, Poison Control Center call data, Over-the-Counter (OTC) pharmaceutical sales surveillance, and CDC's BioSense Biosurveillance system. The hospital ED syndromic surveillance system classifies ED chief complaint data into appropriate syndrome categories (ex: Respiratory, GI, Fever, etc.). These syndrome categories are then analyzed using the cumulative sum (CUSUM) methodology to detect any significant increases. Syndromic reports are distributed back to the hospital on a daily basis.