

# Flu Watch

Week Ending March 30, 2013 (MMWR Week 13)

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

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**MMWR Week 13 at a Glance:**

**Influenza Activity Level: LOCAL**  
 Note: Activity level definitions are found on page 11

**ILI Activity Status (South Carolina baseline is 2.05%\*):** Below baseline in the Upstate Region (.48%) and the Midlands Region (.78%). Above baseline in the Pee Dee Region (4.49%). No reports were received from the Low Country Region. The state ILI percentage was 1.58%. These data reflect reports from 13 (40.6%) providers.

**SC Viral Isolate and RT-PCR Activity:** 33 positive specimens were reported. Since 9/30/12, 1090 positive specimens have been reported.

**Positive Rapid Flu Test Activity:** 2088 positive rapid tests were reported. Since 9/30/12, 54,447 positive rapid tests have been reported.

**Hospitalizations:** 41 lab confirmed hospitalizations were reported. Since 9/30/12, 1611 hospitalizations have been reported.

**Deaths:** No lab confirmed deaths were reported. Since 9/30/12, 42 deaths have been reported.

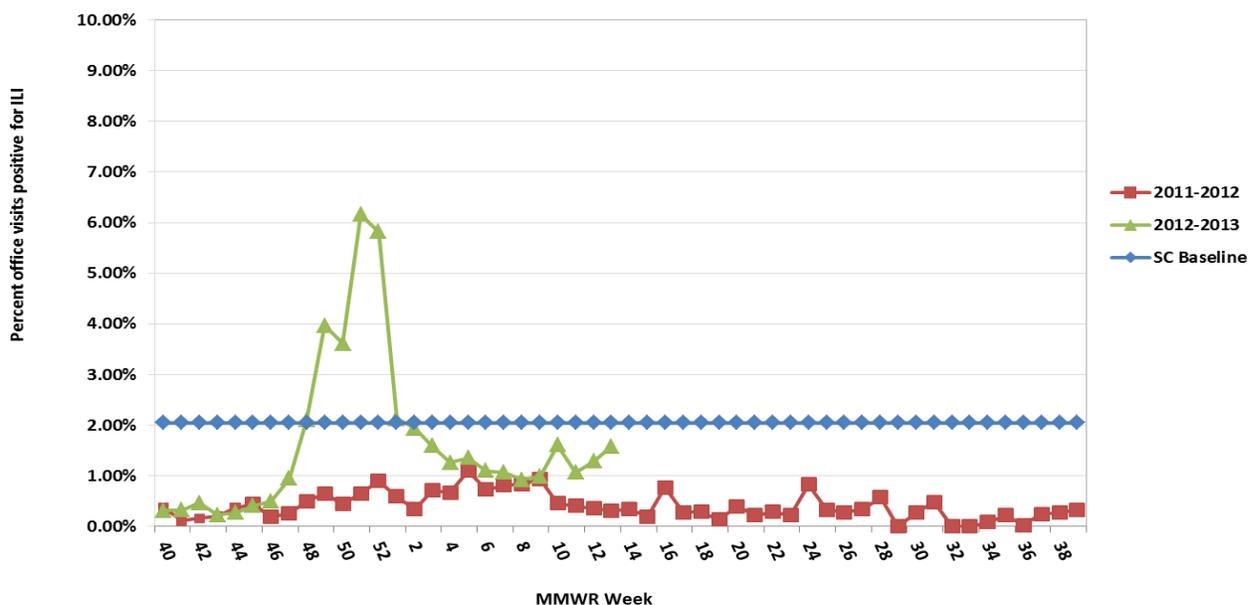
Summary of ILI Activity, Positive Confirmatory Tests, and Influenza Associated Hospitalizations and Deaths

	<i>Current week</i>	<i>Previous week</i>	<i>Change from previous week</i>
Percent of ILI visits reported by ILINet providers	1.58%	1.29%	▲ .29
Number of positive confirmatory tests	33	22	▲ 11
Number of lab confirmed flu hospitalizations	41	44	▼ 3
Number of lab confirmed flu deaths	0	1	▼ 1

## I. ILINet Influenza-Like Illness Surveillance

During the most recent MMWR week, 1.58% of patient visits to SC ILINet providers were due to ILI. This is below the state baseline (2.05%). This ILI percentage compares to .31 % this time last year. Reports were received from providers in 13 counties, representing 3 of the 4 regions.

**Percentage of Visits for Influenza-like Illness (ILI) Reported by Sentinel Providers in South Carolina  
2011-2012 and 2012-2013 Influenza Seasons**



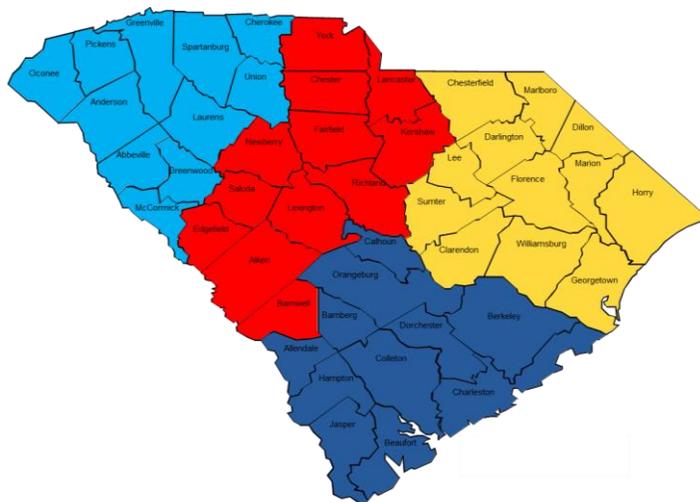
\*The SC baseline is the mean percentage of patient visits for ILI during non-influenza weeks (weeks when percent of positive lab tests was below 20%) for the previous three seasons plus two standard deviations.

## Influenza-Like Illness Reported by Sentinel Providers March 24, 2013 – March 30, 2013

County	ILI %	County	ILI %
Abbeville	---	Greenwood	NR
Aiken	0%	Hampton	NR
Allendale	---	Horry	NR
Anderson	2.70%	Jasper	NR
Bamberg	---	Kershaw	.30%
Barnwell	---	Lancaster	---
Beaufort	NR	Laurens	NR
Berkeley	NR	Lee	---
Calhoun	---	Lexington	3.68%
Charleston	NR	Marion	---
Cherokee	---	Marlboro	---
Chester	---	McCormick	0%
Chesterfield	---	Newberry	---
Clarendon	---	Oconee	---
Colleton	---	Orangeburg	---
Darlington	---	Pickens	0%
Dillon	NR	Richland	NR
Dorchester	NR	Saluda	0%
Edgefield	---	Spartanburg	.51%
Fairfield	---	Sumter	NR
Florence	1.18%	Union	---
Georgetown	8.71%	Williamsburg	---
Greenville	.47%	York	1.22%

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

Region	ILI %	# of Reporters
Upstate (Light blue)	.48	6
Midlands (Red)	.78	5
Pee Dee (Yellow)	4.49	2
Coastal (Dark blue)	-	0



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

## II. Virologic Surveillance

<i>Positive confirmatory influenza test results*</i> <i>Current MMWR Week (3/24/13 – 3/30/13)</i>		
	<b>BOL</b>	<b>Other clinical labs</b>
<b>Number of specimens tested</b>	15	-
<b>Number of positive specimens</b>	6	27
<b>Influenza A unsubtype</b>		1
<b>Influenza A H1N1</b>		
<b>Influenza A H3N2</b>	1	
<b>Influenza B</b>	5	26
<b>Other</b>		

Includes culture, RT-PCR, DFA, and IFA

During the previous MMWR week, 33 positive specimens were reported.

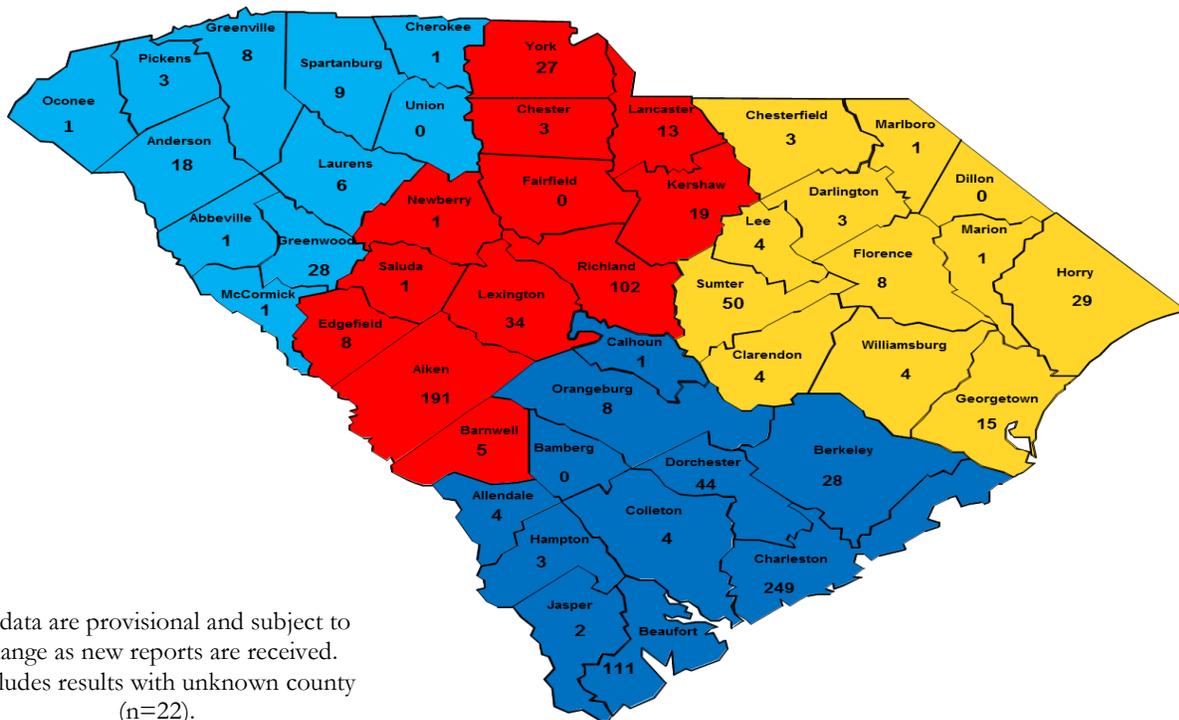
<i>Positive confirmatory influenza test results*</i> <i>Cumulative (09/30/12 – 3/30/13)</i>		
	<b>BOL</b>	<b>Other clinical labs</b>
<b>Number of specimens tested</b>	476	NA
<b>Number of positive specimens</b>	308 (64.7%)	782
<b>Influenza A unsubtype</b>		320 (40.9%)
<b>Influenza A H1N1</b>	24 (7.8%)	13 (1.7)
<b>Influenza A H3N2</b>	244 (79.2%)	309 (39.5%)
<b>Influenza B</b>	40 (13.0%)	137 (17.5%)
<b>Other</b>		3 (.40%)

Includes culture, RT-PCR, DFA, and IFA

**Positive Confirmatory Tests by County  
Current Week 3/24/13 – 3/30/13**

County	Positive Tests	County	Positive Tests	County	Positive Tests
Abbeville		Dillon		Marion	
Aiken	9	Dorchester	1	Marlboro	
Allendale		Edgefield		McCormick	
Anderson	2	Fairfield		Newberry	
Bamberg		Florence	1	Oconee	
Barnwell		Georgetown	1	Orangeburg	
Beaufort	1	Greenville	1	Pickens	
Berkeley	2	Greenwood	2	Richland	1
Calhoun		Hampton		Saluda	
Charleston	5	Horry		Spartanburg	
Cherokee		Jasper		Sumter	3
Chester	1	Kershaw	1	Union	
Chesterfield		Lancaster		Williamsburg	
Clarendon		Laurens		York	1
Colleton		Lee		Unknown	
Darlington		Lexington	1		

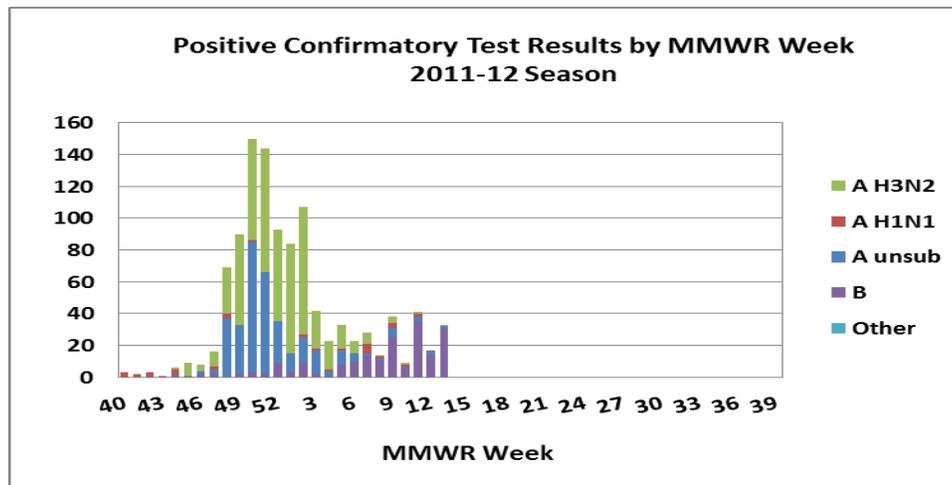
**Map of Positive Confirmatory Tests by County  
Cumulative 09/30/12 – 3/30/13**



All data are provisional and subject to change as new reports are received. Excludes results with unknown county (n=22).

**Positive Confirmatory Tests by County and Type  
Cumulative 9/30/12 – 3/30/13**

	A H1N1	A H3N2	B	A Unsub	Unk		A H1N1	A H3N2	B	A Unsub	Unk
<b>Upstate</b>											
Abbeville		1				McCormick		1			
Anderson		8	4	5	1	Oconee		1			
Cherokee				1		Pickens		3			
Greenwood		22	4	3		Spartanburg	2		3	4	
Greenville		2	1	5		Union					
Laurens		2		4							
<b>Midlands</b>											
Aiken	3	3	42	143	1	Lancaster		3	3	7	
Barnwell			2	3		Lexington		5	5	24	
Chester			1	2		Newberry				1	
Edgefield		1	1	6		Richland	3	16	23	60	
Fairfield						Saluda					
Kershaw	2	8	4	4		York	1	13	3	13	
<b>Pee Dee</b>											
Chesterfield		1	1	1		Horry		19	4	6	
Clarendon	1	2	1			Lee		2		2	
Darlington		1	1	1		Marion			1		
Dillon						Marlboro		1			
Florence		1	2	5		Sumter		32	15	3	
Georgetown		5	10			Williamsburg			1	3	
<b>Low Country</b>											
Allendale	4					Colleton			4		
Bamberg						Dorchester		38	6		
Beaufort	17	80	8	8	1	Hampton		1		2	
Berkeley		17	11			Jasper		2			
Calhoun				1		Orangeburg		4		3	
Charleston	3	213	24	8							
Unknown		16	4	2							

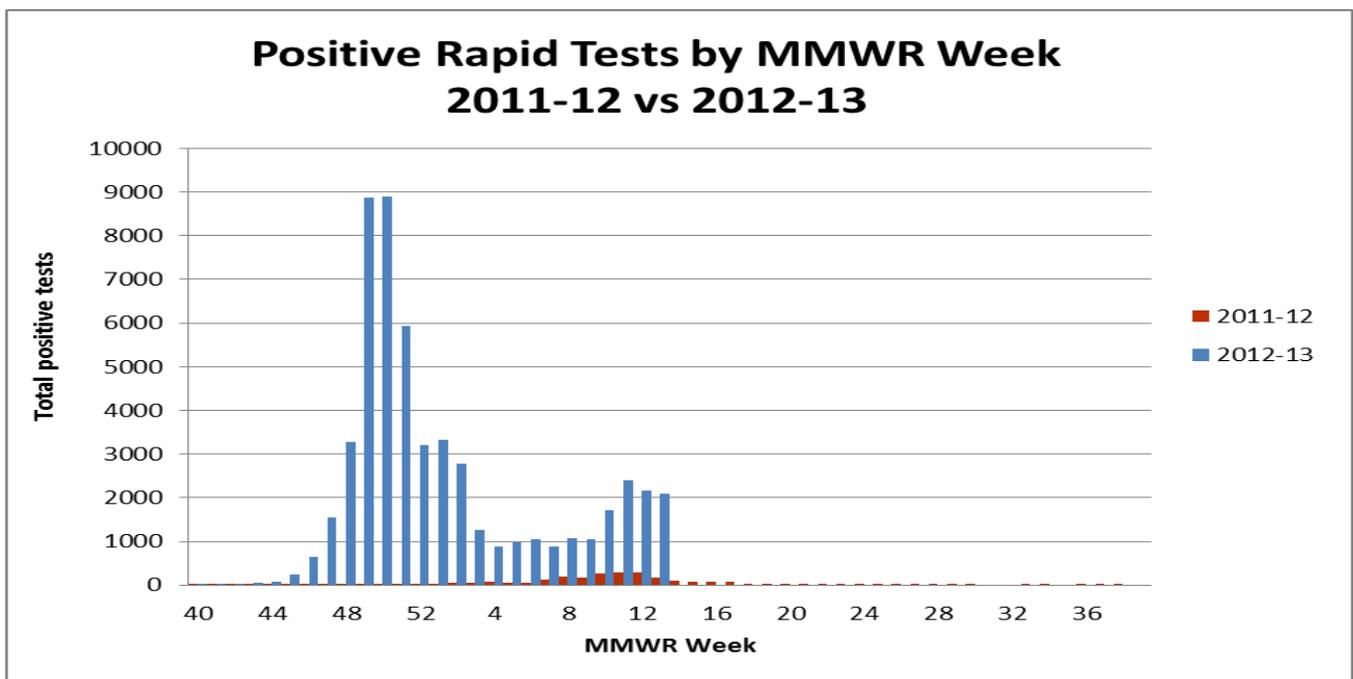


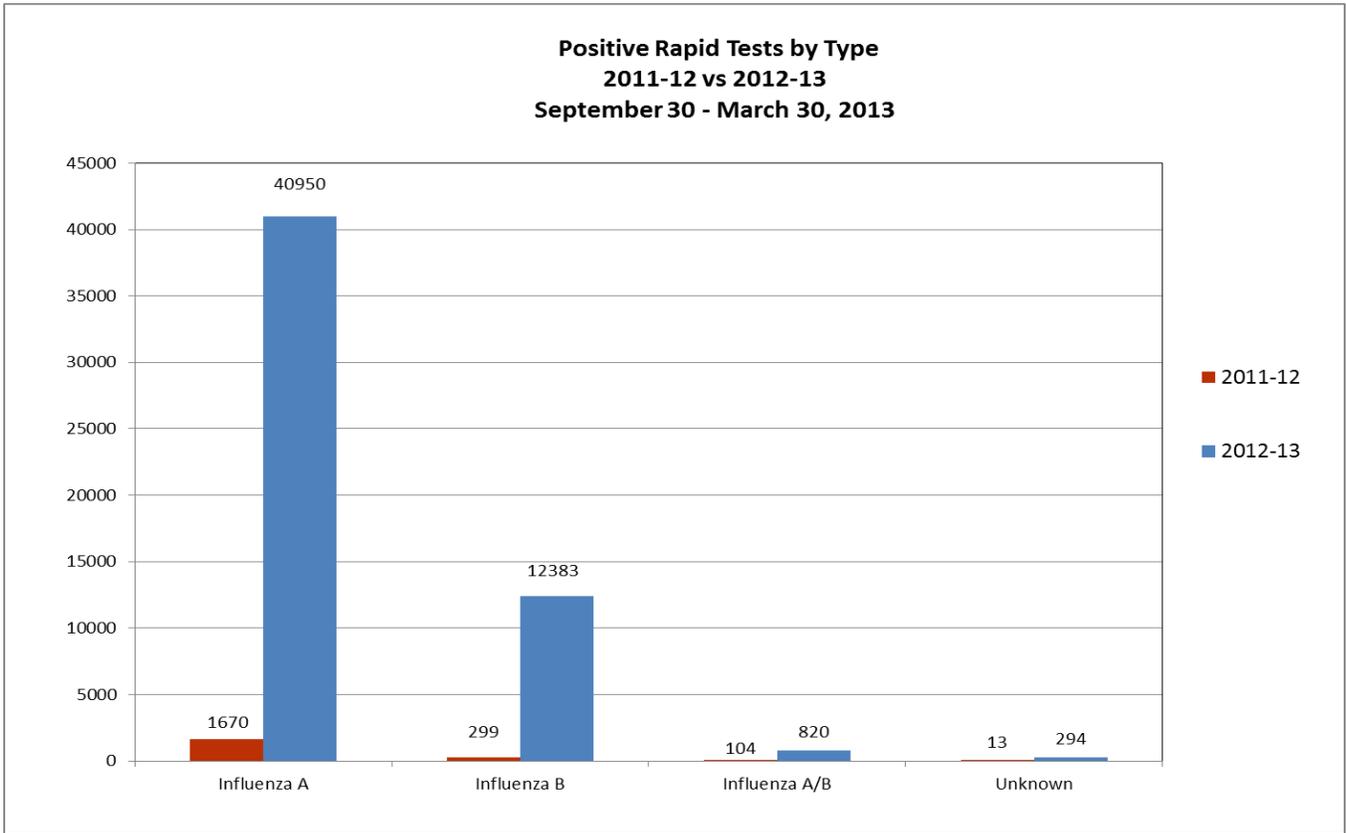
### III. Positive Rapid Antigen Tests

During the past MMWR week, 2088 positive rapid antigen tests were reported. Of these, 328 were influenza A, 1682 were influenza B, 67 were influenza A/B, and 11 were unknown. This compares to 182 this time last year. 54,447 positive rapid tests have been reported this year.

#### Positive Rapid Flu Tests by County March 24, 2013 – March 30, 2013

County	Positive Tests	County	Positive Tests	County	Positive Tests
Abbeville	11	Dillon	16	Lexington	79
Aiken	17	Dorchester	89	Marion	
Allendale	1	Edgefield	8	Marlboro	21
Anderson	52	Fairfield	3	McCormick	
Bamberg		Florence	127	Newberry	10
Barnwell		Georgetown	153	Oconee	
Beaufort	27	Greenville	240	Orangeburg	9
Berkeley	46	Greenwood	50	Pickens	4
Calhoun		Hampton		Richland	155
Charleston	177	Horry	127	Saluda	
Cherokee	5	Jasper		Spartanburg	114
Chester	1	Kershaw	76	Sumter	58
Chesterfield	5	Lancaster	48	Union	23
Clarendon	25	Laurens	8	Williamsburg	8
Colleton	28	Lee	3	York	215
Darlington	49				





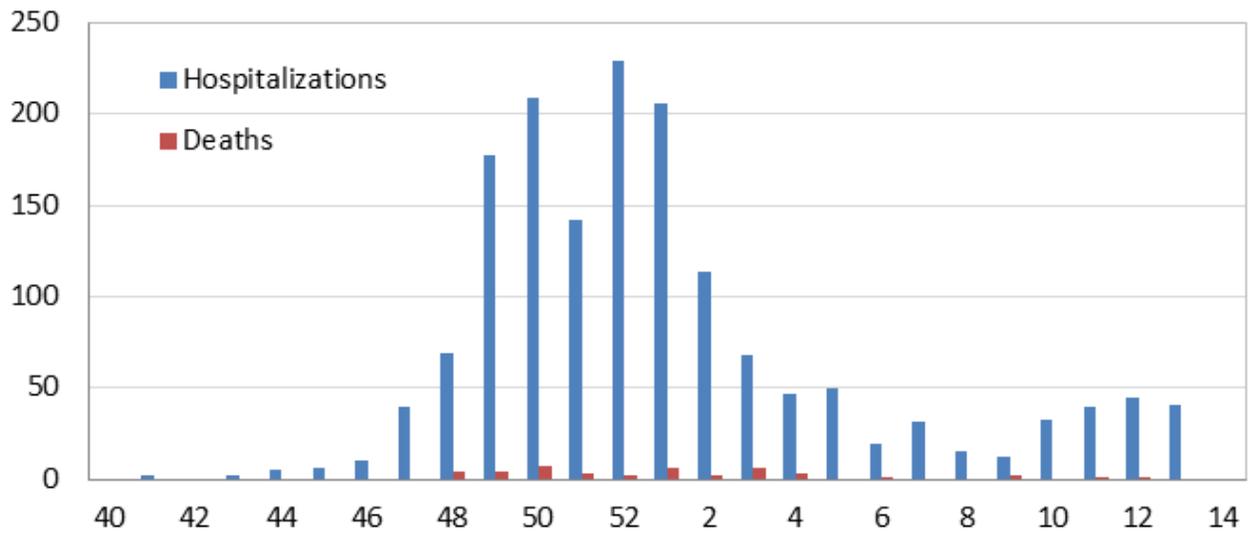
#### IV. Influenza hospitalizations and deaths

During the past MMWR week, 41 lab confirmed\* influenza hospitalizations were reported. No lab confirmed deaths were reported.

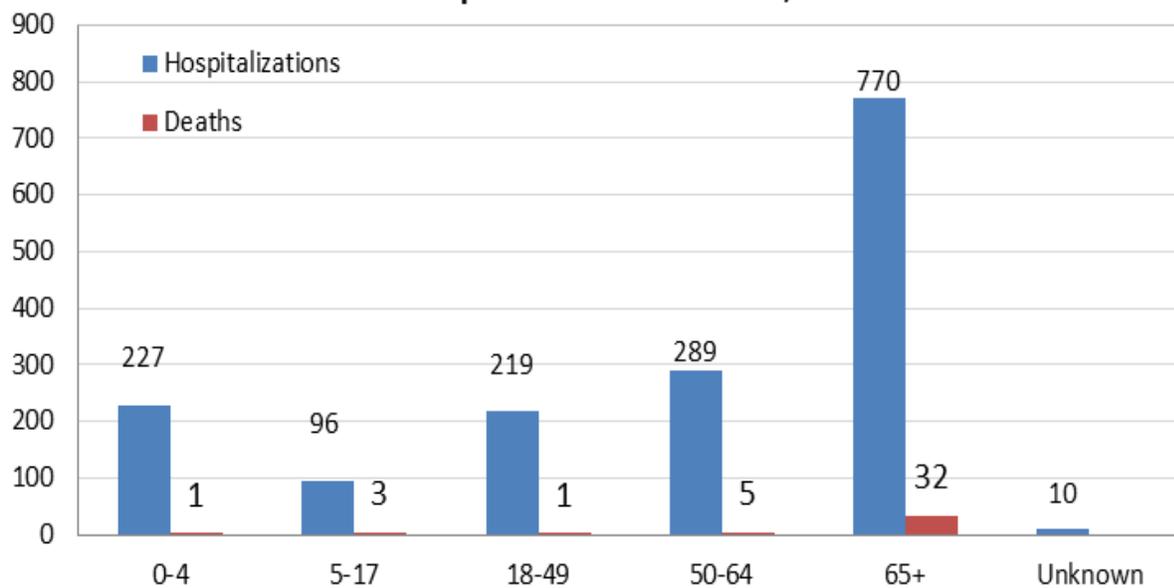
	Total number*	
<b>Number of Reporting Hospitals (Current week)</b>	49	
	<i>Current MMWR Week (3/24/13-3/230/13)</i>	<i>Cumulative (since 09/30/12)</i>
<b>Hospitalizations</b>	41	1611
<b>Deaths</b>	0	42

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

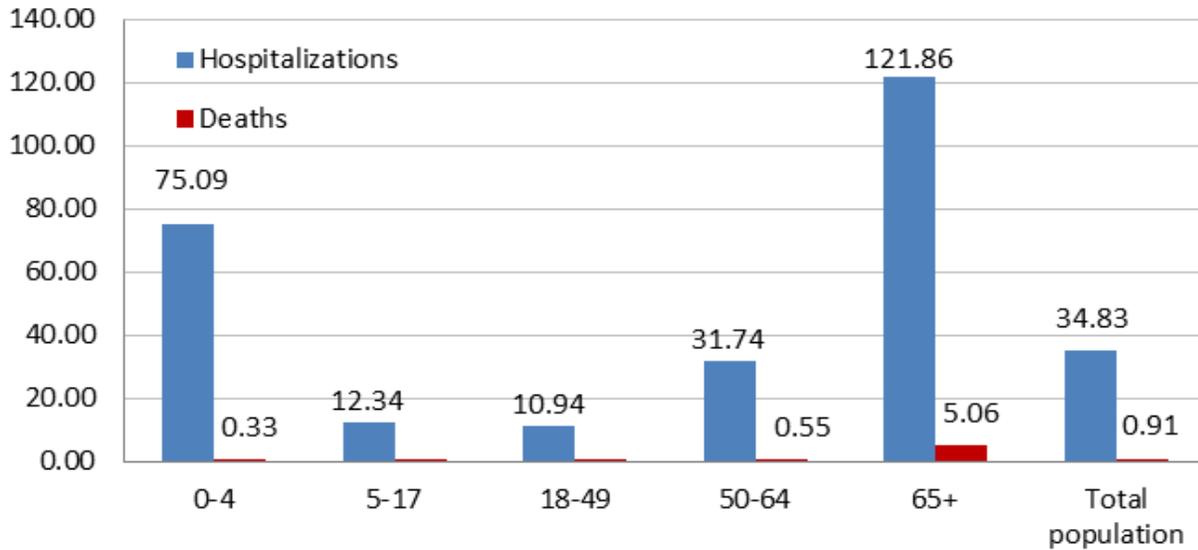
**Reported Cases of Laboratory Confirmed Influenza  
Hospitalizations and Deaths  
by MMWR week  
September 30, 2012 March 30, 2013**



**Reported Cases of Laboratory Confirmed Influenza  
Hospitalizations (n=1611) and Deaths (n=42)  
September 30 - March 30, 2013**



**Laboratory Confirmed Influenza Case rate/100,000  
Hospitalizations (n=1611) and Deaths (n=42) by age group  
September 30, 2012 - March 30, 2013**



**Lab Confirmed Influenza Deaths by County  
September 30, 2012 – March 30, 2013**

County	Deaths	County	Deaths
Aiken	3	Lexington	4
Barnwell	1	McCormick	1
Beaufort	2	Newberry	1
Charleston	1	Oconee	4
Cherokee	1	Pickens	3
Clarendon	1	Richland	4
Georgetown	1	Spartanburg	2
Greenville	6	Sumter	2
Horry	1	Williamsburg	1
Jasper	1	York	2
<b>Total Deaths</b>		<b>42</b>	

## V. Influenza activity levels

Activity Level	ILI activity/Outbreaks		Laboratory data
<b>No activity</b>	Low	<b>And</b>	No lab confirmed cases
<b>Sporadic</b>	Not increased	<b>And</b>	Isolated lab-confirmed cases
	<b>OR</b>		
<b>Local</b>	Not increased	<b>And</b>	Lab confirmed outbreak in one institution
	Increased ILI in 1 region; ILI activity in other regions is not increased	<b>And</b>	Recent (within the past 3 weeks) lab evidence of influenza in region with increased ILI
<b>Local</b>	<b>OR</b>		
	2 or more institutional outbreaks (ILI or lab confirmed) in 1 region; ILI activity in other regions is not increased	<b>And</b>	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
<b>Regional</b>	Increased ILI in 2-3 regions	<b>And</b>	Recent (within the past 3 weeks) lab confirmed influenza in the affected regions
	<b>OR</b>		
<b>Regional</b>	Institutional outbreaks (ILI or lab confirmed) in 2-3 regions	<b>And</b>	Recent (within the past 3 weeks) lab confirmed influenza in the affected regions
	Increased ILI and/or institutional outbreaks (ILI or lab confirmed) in at least 4 of the regions	<b>And</b>	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 regional 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 regional 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](mailto:springcb@dhec.sc.gov).

### Voluntary Networks

#### Influenza-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  $U \geq U100^{\circ}F$ ) 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.

To join the SC-DARTS system or for more information, please contact: **Alecia Alianell at 803-898-0269 or [alianeat@dhec.sc.gov](mailto:alianeat@dhec.sc.gov)**.

## VII. National Surveillance MMWR Week 12 (3/17-3/23)

During week 12 (March 17 – 23, 2013), influenza activity decreased in the United States.

- **Viral Surveillance:** Of 5,332 specimens tested and reported by collaborating laboratories, 702 (13.2%) were positive for influenza.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was at the epidemic threshold.
- **Influenza-Associated Pediatric Deaths:** Five pediatric deaths were reported.
- **Influenza-Associated Hospitalizations:** A cumulative rate for the season of 41.8 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. Of reported hospitalizations, 50% were among adults 65 years and older.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.8%. This is below the national baseline of 2.2%. Three of 10 regions reported ILI at or above region-specific baseline levels. One state experienced moderate activity; 3 states and New York City experienced low activity; 46 states experienced minimal activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** Six states reported widespread influenza activity; Puerto Rico and 8 states reported regional influenza activity; the District of Columbia and 23 states reported local influenza activity; 11 states reported sporadic influenza activity; Guam and one state reported no influenza activity, and the U.S. Virgin Islands and one state did not report.

A description of surveillance methods is available at: <http://www.cdc.gov/flu/weekly/overview.htm>

