

Flu Watch

Week Ending January 12, 2013 (MMWR Week 2)

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

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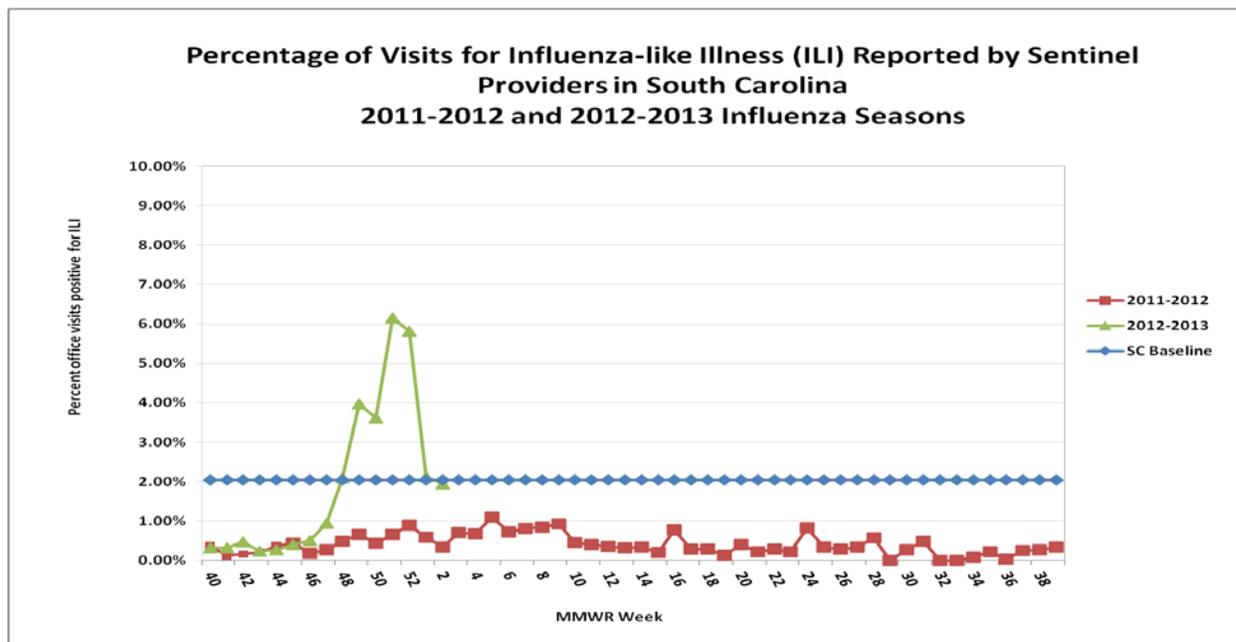
| MMWR Week 2 at a Glance: | |
|---|--|
| Influenza Activity Level: WIDESPREAD Note: Activity level definitions are found on page 11 | |
| ILI Activity Status (South Carolina baseline is 2.05%*): Below baseline in the Upstate (1.04%). At baseline in the Midlands (2.05%). Above baseline along the Coast (5.20%). The state ILI percentage was 1.94%. These data reflect reports from 17 (53.1%) providers. | |
| SC Viral Isolate and RT-PCR Activity: 67 positive specimens were reported. Since 9/30/12, 687 positive specimens have been reported. | |
| Positive Rapid Flu Test Activity: 3009 positive rapid tests were reported. Since 9/30/12, 35,830 positive rapid tests have been reported. | |
| Hospitalizations: 112 lab confirmed hospitalizations were reported. Since 9/30/12, 1209 hospitalizations have been reported. | |
| Deaths: Four lab confirmed deaths were reported. Since 9/30/12, 23 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 | 1.94% | 2.12% | ▼ .18 |
| Number of positive confirmatory tests | 67 | 77 | ▼ 10 |
| Number of lab confirmed flu hospitalizations | 112 | 198 | ▼ 86 |
| Number of lab confirmed flu deaths | 1 | 3 | ▼ 2 |

I. ILINet Influenza-Like Illness Surveillance

During the most recent MMWR week, 1.94% of patient visits to SC ILINet providers were due to ILI. This is below the state baseline (2.05%). This ILI percentage compares to .34 % this time last year. Reports were received from providers in 13 counties, representing 7 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.

*Only includes hospitals participating in SC syndromic surveillance

Influenza-Like Illness Reported by Sentinel Providers January 6, 2013 – January 12, 2013

| County | ILI % | County | ILI % |
|--------------|-------|--------------|-------|
| Abbeville | --- | Greenwood | NR |
| Aiken | 2.75% | Hampton | 2.18% |
| Allendale | --- | Horry | NR |
| Anderson | 6.25% | Jasper | NR |
| Bamberg | --- | Kershaw | .48% |
| Barnwell | --- | Lancaster | --- |
| Beaufort | NR | Laurens | NR |
| Berkeley | NR | Lee | --- |
| Calhoun | --- | Lexington | 7.05% |
| Charleston | NR | Marion | --- |
| Cherokee | --- | Marlboro | --- |
| Chester | --- | McCormick | 1.33% |
| Chesterfield | --- | Newberry | --- |
| Clarendon | --- | Oconee | --- |
| Colleton | --- | Orangeburg | --- |
| Darlington | --- | Pickens | NR |
| Dillon | NR | Richland | 1.37% |
| Dorchester | NR | Saluda | 1.33% |
| Edgefield | --- | Spartanburg | .62% |
| Fairfield | --- | Sumter | NR |
| Florence | 1.47% | Union | --- |
| Georgetown | 6.53% | Williamsburg | --- |
| Greenville | 1.07% | York | 7.14% |

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

| Geographic Region | ILI % | # of Reporters |
|----------------------|-------|----------------|
| Upstate-Regions 1 -2 | 1.04 | 8 |
| Midlands-Regions 3-5 | 2.05 | 7 |
| Coastal-Regions 6-8 | 5.20 | 2 |



*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 (1/6/13 – 1/12/13)</i> | | |
|---|------------|----------------------------|
| | BOL | Other clinical labs |
| Number of specimens tested | 39 | NA |
| Number of positive specimens | 26 | 41 |
| Influenza A unsubtype | | 12 |
| Influenza A H1N1 | | 1 |
| Influenza A H3N2 | 25 | 25 |
| Influenza B | 1 | 3 |
| Other | | |

Includes culture, RT-PCR, DFA, and IFA

During the previous MMWR week, 67 positive specimens were reported.

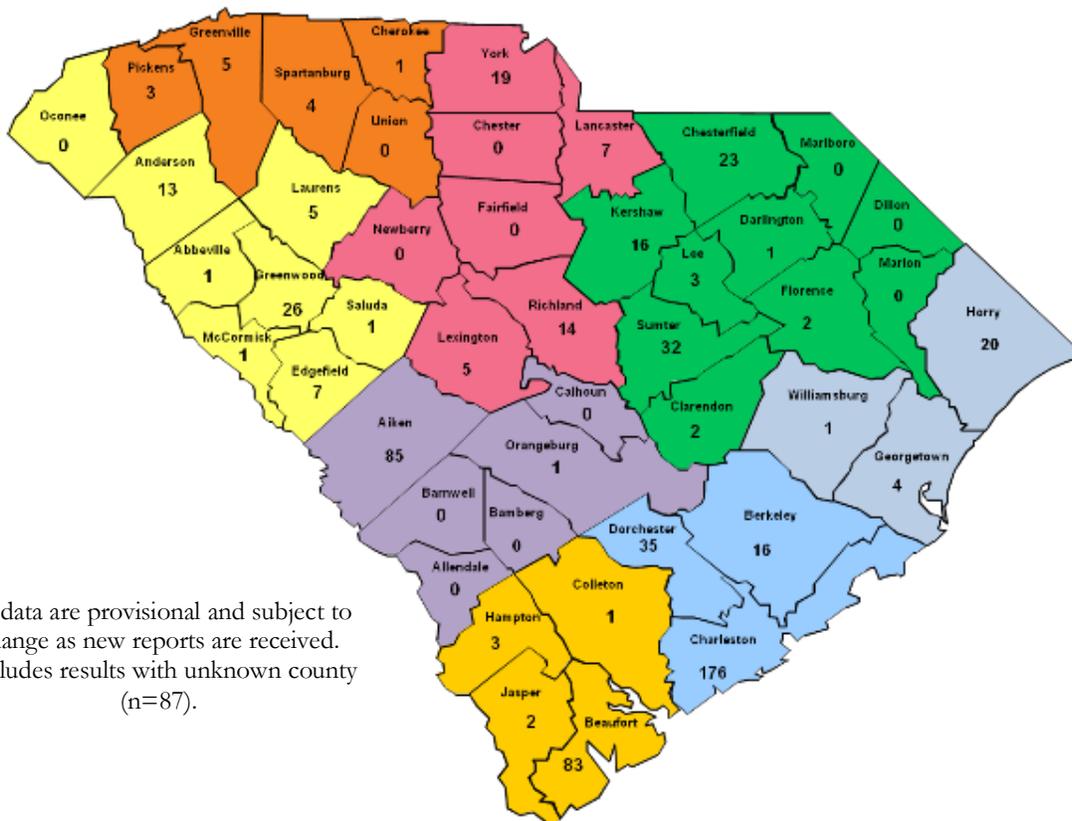
| <i>Positive confirmatory influenza test results*</i> <i>Cumulative (09/30/12 – 1/12/13)</i> | | |
|--|------------|----------------------------|
| | BOL | Other clinical labs |
| Number of specimens tested | 324 | NA |
| Number of positive specimens | 216 | 471 |
| Influenza A unsubtype | | 215 |
| Influenza A H1N1 | 13 | 6 |
| Influenza A H3N2 | 191 | 236 |
| Influenza B | 12 | 14 |
| Other | | |

Includes culture, RT-PCR, DFA, and IFA

**Positive Confirmatory Tests by County
Current Week 1/6/13 – 1/12/13**

| County | Positive Tests | County | Positive Tests | County | Positive Tests |
|--------------|----------------|------------|----------------|--------------|----------------|
| Abbeville | | Dillon | | Marion | |
| Aiken | 1 | Dorchester | 3 | Marlboro | |
| Allendale | | Edgefield | | McCormick | |
| Anderson | | Fairfield | | Newberry | |
| Bamberg | | Florence | | Oconee | |
| Barnwell | | Georgetown | | Orangeburg | |
| Beaufort | 17 | Greenville | 1 | Pickens | |
| Berkeley | 2 | Greenwood | 5 | Richland | |
| Calhoun | | Hampton | | Saluda | |
| Charleston | 24 | Horry | | Spartanburg | |
| Cherokee | | Jasper | | Sumter | 6 |
| Chester | | Kershaw | 7 | Union | |
| Chesterfield | | Lancaster | 1 | Williamsburg | |
| Clarendon | | Laurens | | York | |
| Colleton | | Lee | | Unknown | |
| Darlington | | Lexington | | | |

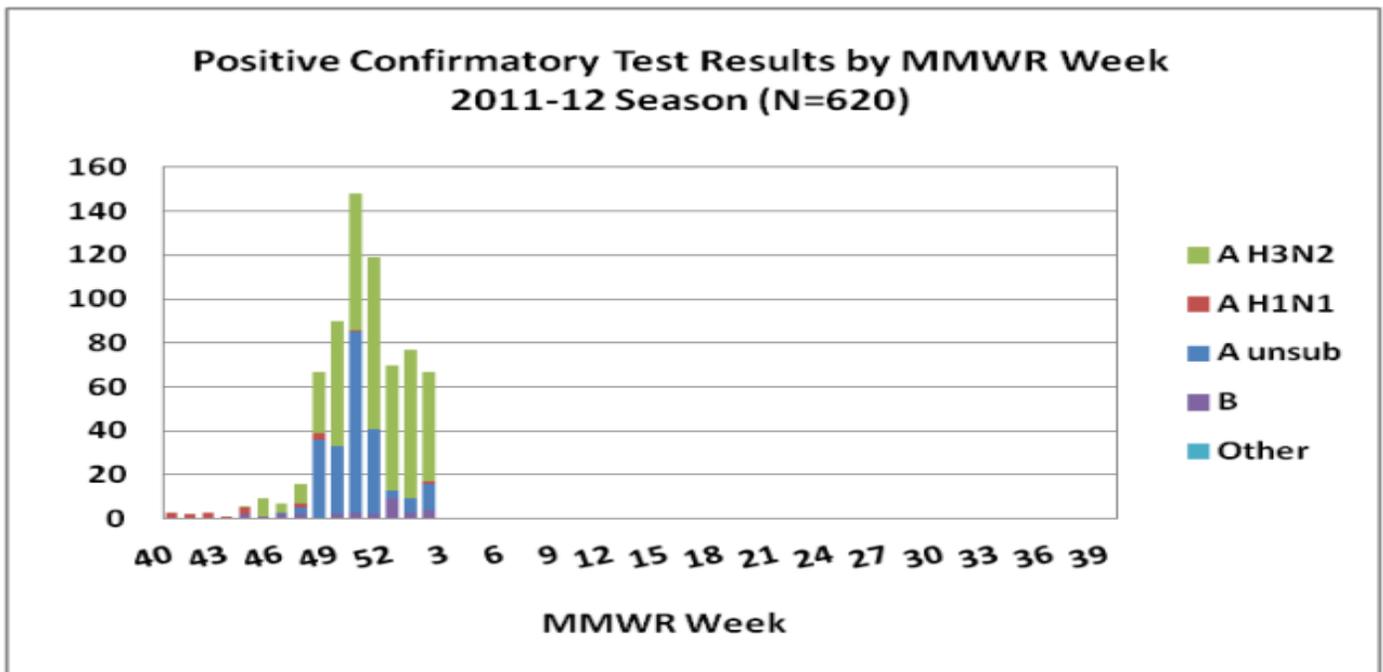
**Map of Positive Confirmatory Tests by County
Cumulative 09/30/12 – 1/12/13**



All data are provisional and subject to change as new reports are received. Excludes results with unknown county (n=87).

Positive Confirmatory Tests by County and Type
Cumulative 9/30/12 – 1/12/13

| | A H1N1 | A H3N2 | B | A Unsub | Unk | | A H1N1 | A H3N2 | B | A Unsub | Unk |
|-----------------|-----------|-----------|---|------------|-----|-----------------|-----------|-----------|---|------------|-----|
| Region 1 | | | | | | Region 2 | | | | | 1 |
| Abbeville | | 1 | | | | Cherokee | | | | | |
| Anderson | | 8 | | 5 | | Greenville | | 3 | | 3 | |
| Edgefield | | 1 | | 6 | | Pickens | | 3 | | | |
| Greenwood | | 23 | 1 | 2 | | Spartanburg | | 1 | | 3 | |
| Laurens | | 2 | | 3 | | Union | | | | | |
| McCormick | | 1 | | | | Region 4 | | | | | |
| Oconee | | | | | | Chesterfield | | 1 | 1 | 1 | |
| Saluda | | 1 | | | | Clarendon | | 1 | | 1 | |
| Region 3 | | | | | | Darlington | | 1 | | | |
| Chester | | | | | | Dillon | | | | | |
| Fairfield | | | | | | Florence | | 1 | | 1 | |
| Lancaster | | 3 | | 3 | | Kershaw | | 12 | | 4 | |
| Lexington | | 4 | | | | Lee | | 2 | | 1 | |
| Newberry | | | | | | Marion | | | | | |
| Richland | | 9 | 2 | 3 | | Marlboro | | | | | |
| York | | 9 | 2 | 8 | | Sumter | | 28 | 2 | | |
| Region 5 | | | | | | Region 6 | | | | | |
| Aiken | 1 | 3 | 1 | 75 | | Georgetown | | 4 | | | |
| Allendale | | | | | | Horry | | 16 | | 4 | |
| Bamberg | | | | | | Williamsburg | | | | 1 | |
| Barnwell | | | | | | Region 8 | | | | | |
| Calhoun | | | | | | Beaufort | 15 | 59 | 3 | 6 | |
| Orangeburg | | 1 | | | | Colleton | | | | | |
| Region 7 | | | | | | Hampton | | 1 | | 3 | |
| Berkeley | | 15 | 1 | | | Jasper | | 2 | | | |
| Charleston | 1 | 162 | 7 | 6 | | Unknown | 2 | 15 | 2 | 68 | |
| Dorchester | | 33 | 2 | | | | | | | | |

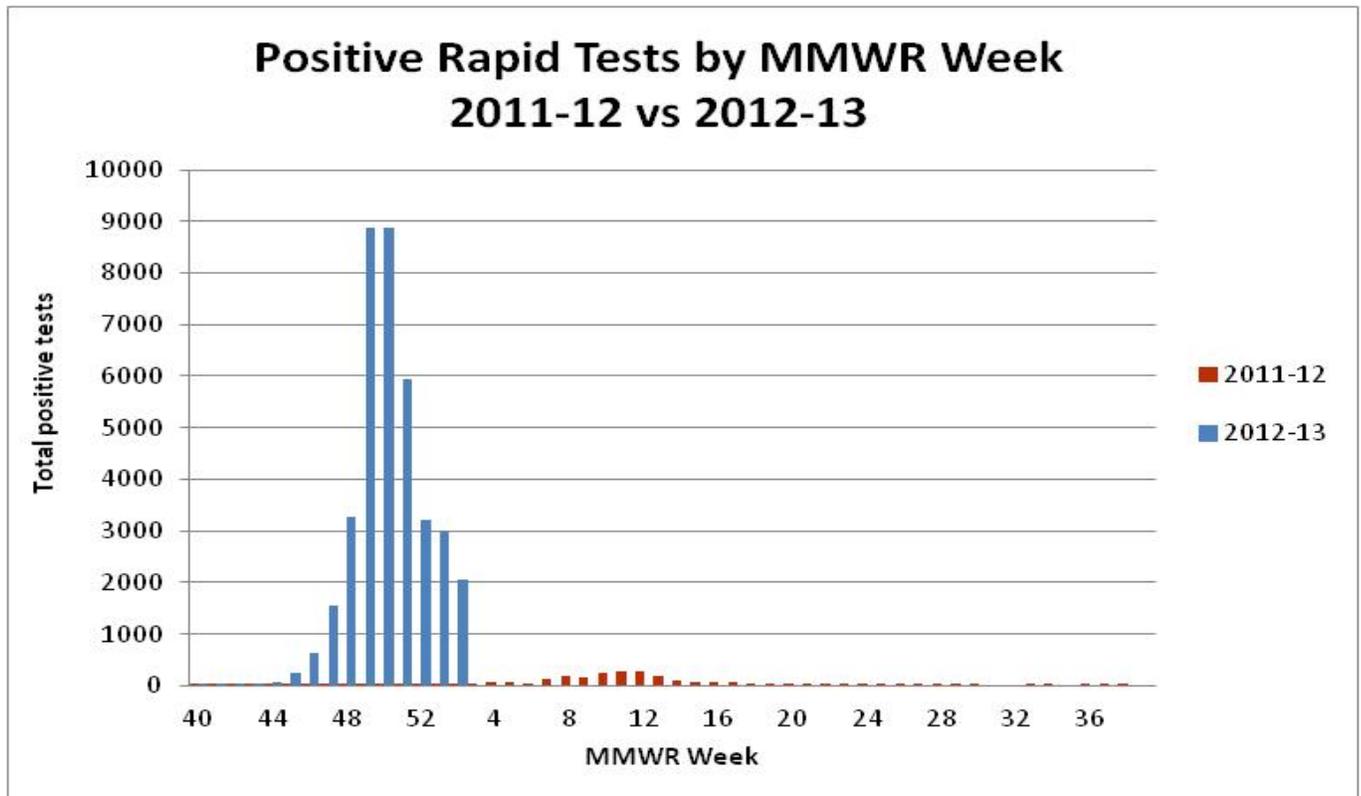


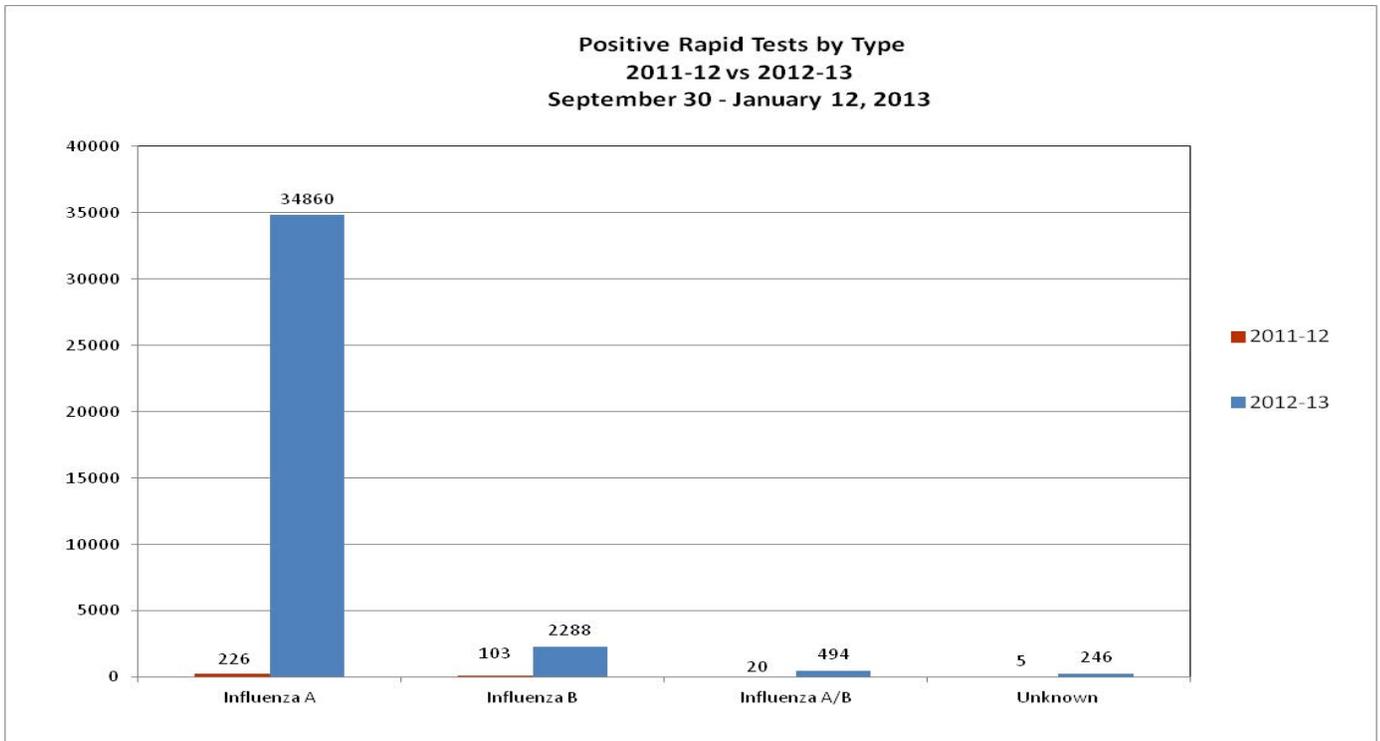
III. Positive Rapid Antigen Tests

During the past MMWR week, 2058 positive rapid antigen tests were reported. Of these, 1805 were influenza A, 232 were influenza B, 20 were influenza A/B, and 1 was unknown. This compares to 48 this time last year. 37,888 positive rapid tests have been reported this year.

Positive Rapid Flu Tests by County January 6, 2013 – January 12, 2013

| County | Positive Tests | County | Positive Tests | County | Positive Tests |
|--------------|----------------|------------|----------------|--------------|----------------|
| Abbeville | | Dillon | 10 | Lexington | 95 |
| Aiken | 11 | Dorchester | 138 | Marion | 5 |
| Allendale | | Edgefield | | Marlboro | 5 |
| Anderson | | Fairfield | 8 | McCormick | |
| Bamberg | | Florence | 127 | Newberry | 14 |
| Barnwell | 5 | Georgetown | 87 | Oconee | |
| Beaufort | | Greenville | 384 | Orangeburg | 14 |
| Berkeley | 45 | Greenwood | | Pickens | 28 |
| Calhoun | | Hampton | | Richland | 165 |
| Charleston | 423 | Horry | 205 | Saluda | |
| Cherokee | 11 | Jasper | | Spartanburg | 110 |
| Chester | | Kershaw | 50 | Sumter | 33 |
| Chesterfield | | Lancaster | 19 | Union | 56 |
| Clarendon | 12 | Laurens | | Williamsburg | 8 |
| Colleton | | Lee | | York | |
| Darlington | 26 | | | | |





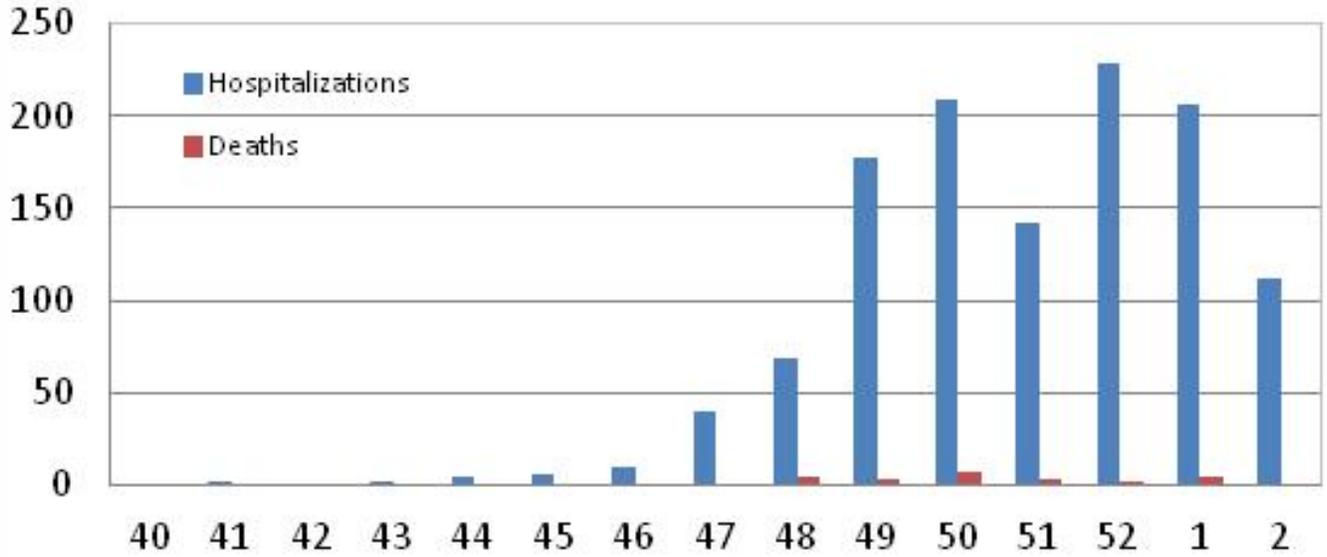
IV. Influenza hospitalizations and deaths

During the past MMWR week, 198 lab confirmed* influenza hospitalizations were reported. Three lab confirmed deaths were reported.

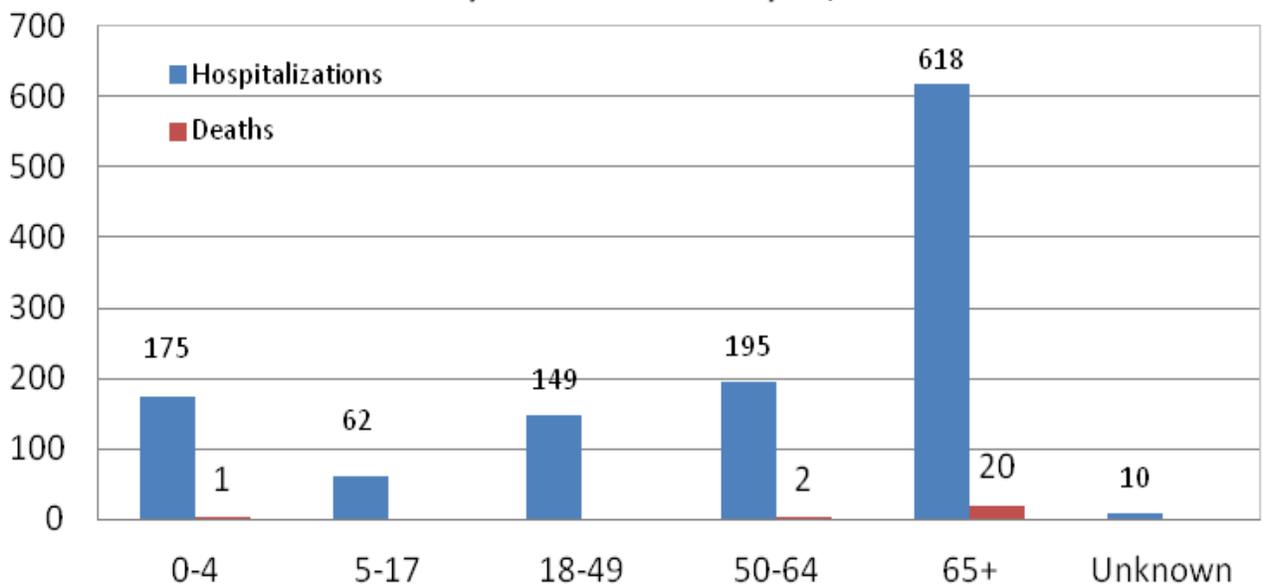
| | Total number* | |
|---|---|------------------------------------|
| Number of Reporting Hospitals (Current week) | 50 | |
| | <i>Current MMWR Week (1/6/13-1/12/13)</i> | <i>Cumulative (since 09/30/12)</i> |
| Hospitalizations | 198 | 1087 |
| Deaths | 3 | 22 |

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

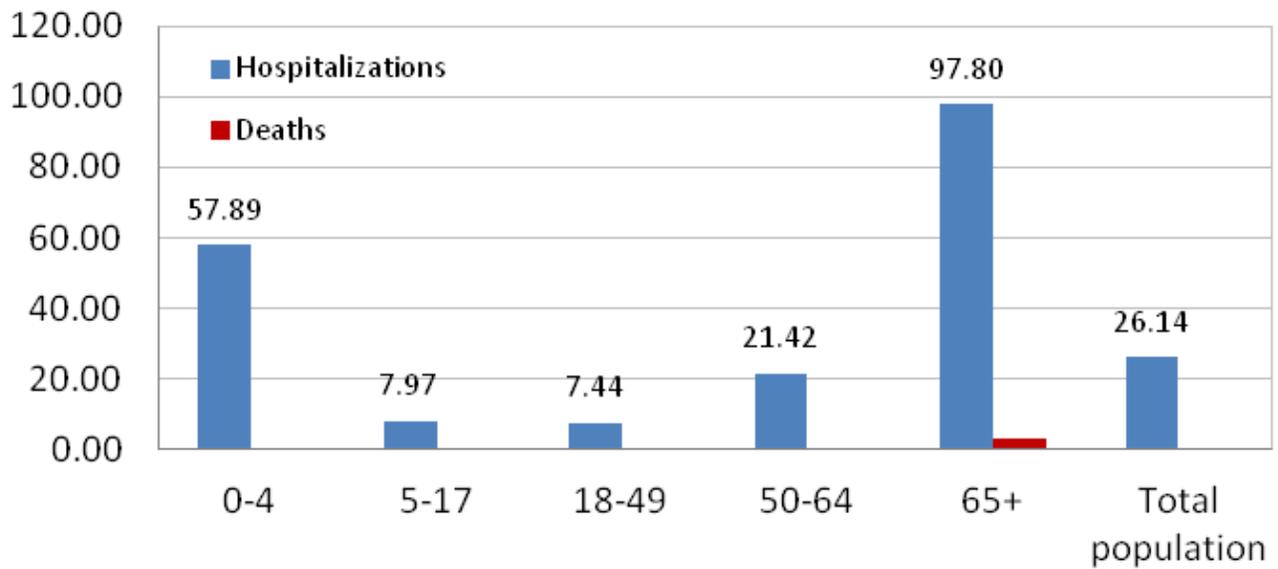
**Reported Cases of Laboratory Confirmed Influenza
Hospitalizations and Deaths
by MMWR week
September 30, 2012 - January 12, 2013**



**Reported Cases of Laboratory Confirmed Influenza
Hospitalizations (n=1209) and Deaths (n=23)
September 30 - January 12, 2012**



**Laboratory Confirmed Influenza Case rate/100,000
Hospitalizations (n=1209) and Deaths (n=23) by age group
September 30, 2012 - January 12, 2012**



Lab Confirmed Influenza Deaths by County
September 30, 2012 – January 12, 2013

| County | Number of Deaths |
|------------|------------------|
| Aiken | 2 |
| Barnwell | 1 |
| Beaufort | 1 |
| Charleston | 1 |
| Clarendon | 1 |
| Greenville | 3 |
| Jasper | 1 |
| Lexington | 3 |
| McCormick | 1 |
| Oconee | 2 |
| Pickens | 2 |
| Richland | 2 |
| Sumter | 1 |
| York | 2 |
| Total | 23 |

V. Influenza activity levels

| Activity Level | ILI activity/Outbreaks | | Laboratory data |
|--------------------|--|------------|--|
| No activity | Low | And | No lab confirmed cases |
| Sporadic | Not increased | And | Isolated lab-confirmed cases |
| | OR | | |
| Local | 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 | | |
| Regional | 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 |
| Widespread | 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. |
| | OR | | |

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 CHESSE 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.

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**.

