2016-2017 South Carolina Influenza Surveillance

This update is to provide healthcare professionals with the latest information regarding:

- SC influenza surveillance and reporting systems
- State-mandated influenza surveillance
- Voluntary influenza surveillance
- State laboratory influenza testing and specimen submission
- Resource Links
- Attachments: Regional health department contact information, positive rapid influenza test reporting worksheet, and influenza hospitalization reporting worksheet

SC Influenza Surveillance and Reporting Systems

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

Combined, these systems assist in:

- Determining when and where influenza activity is occurring in the state
- Determining what influenza viruses are circulating
- Detecting changes in influenza viruses
- Tracking influenza-related illness
- Understanding influenza morbidity and mortality in SC
- Identification of novel strains of influenza
- Identifying anti-viral resistance in circulating influenza strains

Data from these systems are reported on DHEC’s influenza surveillance website: http://www.scdhec.gov/Health/DiseasesandConditions/InfectiousDiseases/Flu/FluData/

State-mandated Influenza Surveillance Components

SC State Law # 44-29-10 and Regulation # 61-20 requires reporting of diseases and conditions to local and state health departments. The following influenza-related conditions are reportable:

- Influenza A, novel or avian (not seasonal H1 or H3)
Human infections with novel or avian influenza virus A (other than seasonal H1, H3, or 2009 H1N1) must be reported immediately to the local health department. This includes variant strains such as influenza A H1N1v, A H1N2v, and A H3N2v.

- **Laboratory confirmed reports (culture, RT-PCR, DFA, IFA)**
  Laboratory reports of influenza culture, RT-PCR, DFA, and IFA results must be reported to DHEC within 3 days either electronically via the South Carolina Infectious Disease and Outbreak Network for Externals (SCIONx) or using the DHEC 1129 card.

- **Laboratory confirmed influenza-associated hospitalizations**
  The total number of laboratory confirmed influenza hospitalizations must be reported to the regional health department by age group (0-4, 5-18, 19-24, 25-49, 50-64, 65+) by **noon** each **Monday** for the preceding week. Laboratory confirmation includes culture, RT-PCR, DFA, IFA, or rapid test. For weekly reporting see the attached laboratory confirmed influenza hospitalizations reporting worksheet.

- **Laboratory confirmed influenza-associated deaths**
  All influenza deaths (pediatric and adult) are reportable within 24 hours by phone to the regional health department. Laboratory confirmation includes culture, RT-PCR, DFA, IFA, rapid test or autopsy results consistent with influenza. Upon notification of a death, the Regional Epidemiology Program Manager will follow up to obtain additional information needed for the case report form.

- **Positive Rapid Antigen Tests**
  The total number of positive rapid antigen tests by type (A, B, A and B, or unknown) must be reported to the regional health department by **noon** each **Monday** for the preceding week. For weekly reporting please see the attached positive rapid influenza test results summary worksheet.

**Voluntary Influenza Surveillance**

Providers have the option of participating in one or both of South Carolina’s two voluntary influenza monitoring networks. These networks include submission of specimens for viral isolation (DHEC Viral Isolate Network) and monitoring and reporting of Influenza-like Illnesses (ILINet).

- **DHEC Viral Isolate Network**
  The DHEC Bureau of Laboratories provides culture media, packaging, processing and shipping labels free of charge to participating providers. Enrolled providers are requested to submit specimens for testing throughout the influenza season. These samples will be tested at the Bureau of Laboratories and results will be reported to CDC.

  If a provider would like to participate in the Viral Isolate Network at the Bureau of Laboratories, please contact Christy Jeffcoat-Greenwood, Virology & Rabies laboratory at (803) 896-0819 or jeffcoca@dhec.sc.gov to learn more and receive testing supplies.

- **U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)**
  ILINet is a national surveillance system in which a network of providers submits the number of patients seen with influenza-like symptoms and the total number of patients seen each week. ILI is defined as fever (temperature of $\geq100^\circ F$) plus a cough and/or a sore throat in the absence of another known cause.

  Providers who are interested in participating in ILINet should contact the DHEC influenza surveillance coordinator at ratlifmr@dhec.sc.gov.
State Laboratory Testing and Specimen Submission

In 2016-17, the SC DHEC Bureau of Laboratories (BOL) will offer influenza RT-PCR on samples submitted for influenza surveillance. All positive specimens will be subtyped for either influenza A or influenza B subtypes. Negative specimens will also be tested for other respiratory pathogens by viral culture testing. Specimen submission should focus on the following groups:

- Patients with ILI seen at facilities participating in the Viral Culture Surveillance Network,
- Medically attended ILI and acute respiratory illness (ARI) in children under 18 years of age,
- Unusual or severe presentations of ILI,
- Vaccine failure,
- Patients admitted to hospital intensive care units with severe influenza-like illness (ILI) and no other confirmed diagnosis (e.g. RSV, Adenovirus),
- ILI outbreaks, particularly among children in child-care and school settings,
- Fatalities associated with ILI.

Testing may also be performed at the BOL when public health staff in the Division of Acute Disease Epidemiology (DADE) or the Regional Public Health Epidemiologic Response staff determine that such testing is necessary (e.g., under the auspices of an outbreak investigation).

The current specimen types acceptable for testing by our SC DHEC Bureau of Laboratories are:

- Upper respiratory: nasopharyngeal swab (NPS) or throat swab
- Lower respiratory: bronchoalveolar lavage tracheal aspirates, bronchial washes

A nasopharyngeal swab remains the specimen of choice for influenza testing. Lower respiratory specimens may be appropriate for critically ill patients who are highly suspected of having influenza. These patients may clear virus from their upper respiratory tract, while lower respiratory specimens remain positive.

Specimen Submission

If testing is indicated, collect a specimen as soon as possible after symptom onset and record the date of onset on the test request form. Ideally, specimens should be submitted within 3 days of collection. All specimens must be submitted in viral transport media. Please use polyester swabs when collecting nasopharyngeal or throat specimens.

- Specimens submitted for testing must be shipped cold.
- Submit specimens along with the SC DHEC BOL Laboratory Request Form (D-1335, multi-part form, available from the BOL).

Resources for Additional Information

- DHEC Influenza Monitoring Website: [http://www.scdhec.gov/Health/DiseasesandConditions/InfectiousDiseases/Flu/FluData/](http://www.scdhec.gov/Health/DiseasesandConditions/InfectiousDiseases/Flu/FluData/)
- CDC Influenza surveillance website: [http://www.cdc.gov/flu/weekly/fluactivitysurv.htm](http://www.cdc.gov/flu/weekly/fluactivitysurv.htm)
- Advisory Committee on Immunization Practices 2016-17 Influenza Season Recommendations [http://www.cdc.gov/mmwr/volumes/65/rr/rr6505a1.htm](http://www.cdc.gov/mmwr/volumes/65/rr/rr6505a1.htm)
DHEC contact information for reportable diseases and reporting requirements

Reporting of influenza is consistent with South Carolina Law requiring the reporting of diseases and conditions to your state or local public health department. (State Law # 44-29-10 and Regulation # 61-20) as per the DHEC 2016 List of Reportable Conditions available at: http://www.scdhec.gov/Library/CR009025.pdf

Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities to collect and receive such information for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512).

Regional Public Health Offices – 2016
Mail or call reports to the Epidemiology Office in each Public Health Region

MAIL TO:

<table>
<thead>
<tr>
<th>Region</th>
<th>Address 1</th>
<th>Address 2</th>
<th>Address 3</th>
<th>Address 4</th>
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<tbody>
<tr>
<td>Lowcountry</td>
<td>4050 Bridge View Drive, Suite 600</td>
<td>N. Charleston, SC 29405</td>
<td>Fax: (843) 953-0051</td>
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<tr>
<td>Midlands</td>
<td>2000 Hampton Street</td>
<td>Columbia, SC 29204</td>
<td>Fax: (803) 576-2993</td>
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<tr>
<td>Pee Dee</td>
<td>145 E. Cheves Street</td>
<td>Florence, SC 29506</td>
<td>Fax: (843) 661-4859</td>
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<tr>
<td>Upstate</td>
<td>200 University Ridge</td>
<td>Greenville, SC 29602</td>
<td>Fax: (864) 282-4373</td>
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CALL TO:

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<tr>
<td>Lowcountry</td>
<td>Berkeley, Charleston, Dorchester</td>
<td>Phone: (843) 953-0043</td>
<td>Nights/Weekends: (843) 441-1091</td>
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<tr>
<td>Beaufort, Colleton, Hampton, Jasper</td>
<td>Phone: (843) 322-2453</td>
<td>Nights/Weekends: (843) 441-1091</td>
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<tr>
<td>Allendale, Bamberg, Calhoun, Orangeburg</td>
<td>Phone: (803) 268-5833</td>
<td>Nights/Weekends: (843) 441-1091</td>
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<tr>
<td>Midlands</td>
<td>Kershaw, Lexington, Newberry, Richland</td>
<td>Phone: (803) 576-2749</td>
<td>Nights/Weekends: (888) 801-1046</td>
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<tr>
<td>Chester, Fairfield, Lancaster, York</td>
<td>Phone: (803) 286-9948</td>
<td>Nights/Weekends: (888) 801-1046</td>
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<tr>
<td>Aiken, Barnwell, Edgefield, Saluda</td>
<td>Phone: (803) 642-1618</td>
<td>Nights/Weekends: (888) 801-1046</td>
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<td>Phone: (843) 661-4830</td>
<td>Nights/Weekends: (843) 915-8845</td>
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<tr>
<td>Clarendon, Lee, Sumter</td>
<td>Phone: (803) 773-5511</td>
<td>Nights/Weekends: (843) 915-8845</td>
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<tr>
<td>Georgetown, Horry, Williamsburg</td>
<td>Phone: (843) 915-8804</td>
<td>Nights/Weekends: (843) 915-8845</td>
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<tr>
<td>Upstate</td>
<td>Anderson, Oconee</td>
<td>Phone: (864) 260-5801</td>
<td>Nights/Weekends: (866) 298-4442</td>
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<tr>
<td>Abbeville, Greenwood, Laurens, McCormick</td>
<td>Phone: (864) 227-5947</td>
<td>Nights/Weekends: (866) 298-4442</td>
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<tr>
<td>Cherokee, Greenville, Pickens, Spartanburg, Union</td>
<td>Phone: (864) 372-3133</td>
<td>Nights/Weekends: (866) 298-4442</td>
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For information on reportable conditions, see http://www.scdhec.gov/Health/FHPF/ReportDiseasesAdverseEvents/ReportableConditionsInSC/

DHEC Bureau of Disease Control
Division of Acute Disease Epidemiology
2100 Bull St • Columbia, SC 29201
Phone: (803) 898-0861• Fax: (803) 898-0897
Nights / Weekends: 1-888-847-0902

Categories of Health Alert messages:

- **Health Alert**: Conveys the highest level of importance; warrants immediate action or attention.
- **Health Advisory**: Provides important information for a specific incident or situation; may not require immediate action.
- **Health Update**: Provides updated information regarding an incident or situation; unlikely to require immediate action.
- **Info Service**: Provides general information that is not necessarily considered to be of an emergent nature.
**Positive Rapid Influenza Test Results Reporting Worksheet**

Reporting week: _____/____/____ - ____/____/____ (Sunday – Saturday)

Reporting Facility/Practice:

County: ________________________________

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- Only positive rapid antigen detection tests should be reported using this worksheet. Positive viral cultures, “rapid” viral cultures, PCRs, DFAs, and IFAs should be reported electronically.

- Positive rapid antigen detection tests should be reported each week for the preceding week. Fax this worksheet by NOON on MONDAY to the regional health department. Contact numbers for regional health departments are available at: [http://www.scdhec.gov/Health/FHPF/ReportDiseasesAdverseEvents/ReportableConditionsInSC/](http://www.scdhec.gov/Health/FHPF/ReportDiseasesAdverseEvents/ReportableConditionsInSC/)

- Contact the regional health department if you wish to submit this worksheet via email.

- Influenza is reportable year-round.
Laboratory Confirmed Influenza
Hospitalizations Reporting Worksheet
(For Hospital Use)

Reporting hospital: ________________________________
County: _________________________________________
Date of report: _____/____/____
Reporting week: _____/____/____ - _____/____/____ (Sunday-Saturday)
Contact name: ____________________________________
Contact telephone: _________________________________

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<th>Age group</th>
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<td>Total</td>
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- Laboratory confirmation includes RT-PCR, viral culture, DFA, IFA, and rapid tests.
- Fax this worksheet to the regional health department by NOON on MONDAY for the preceding week. Regional health department contact numbers are available at: http://www.scdhec.gov/Health/FHPF/ReportDiseasesAdverseEvents/ReportableConditionInSC/
- Report zeros if there were no influenza hospitalizations.
- Contact the regional health department to report an influenza associated death.