Epi Notes
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South Carolina Department of Health and Environmental Control

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Changes in the 2009 S.C. List of Reportable Conditions

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As authorized by South Carolina Statute #44-20-10 and Regulation #61-20, DHEC updates the list of Reportable Conditions in January of each year.

Revisions to the list of reportable conditions are based on many factors, including: 1) the need for DHEC to conduct surveillance on new conditions or to increase surveillance on certain existing conditions in order to protect the health of the public and 2) changes in reporting requirements from the U.S. Centers for Disease Control and Prevention (CDC).

The following revisions have been made to the 2008 List of Reportable Conditions:

New for 2009:

- Influenza deaths (pediatric and adults.)

Revisions to the List of Reportable Conditions:

- *Haemophilus influenzae*, non-type b, has been changed to "*Haemophilus influenzae*, all types," and has been moved to Urgently Reportable within 24 hours by phone.
- Influenza, pediatric deaths-age $\leq$ 17 years has been changed to "influenza, deaths (pediatric and adults; lab confirmed only:

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Ask Epi:
Prevention and Treatment of Influenza during Pregnancy

Eric Brenner, MD, Medical Epidemiologist
Division of Acute Disease Epidemiology

1. What are guidelines for use of influenza vaccine in pregnancy in the upcoming flu season?

Vaccination with trivalent inactivated influenza vaccine (TIV , or "the flu shot") is now recommended by the US Public Health Service Advisory Committee on Immunization Practices (ACIP) for all women who will be pregnant during the influenza season (October through mid-May). [1]

This recommendation is supported by other national organizations including the American College of Obstetricians and Gynecologists (ACOG). [2] Table 1 (see page 8) provides historical perspective on the evolution of national recommendations over the past two decades which has led to current broad guideline for use of TIV in pregnancy.

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Changes in Varicella Reporting for 2009

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The 2009 S.C. reporting requirements for varicella will change slightly.

Rather than requiring that all cases of varicella be reportable by name, **DHEC will require reporting of cases by name only in the event of outbreaks, hospitalizations and deaths. Sporadic cases of varicella will not be reportable to DHEC.**

For the purposes of disease reporting, <u>an outbreak of varicella is defined as five or more cases occurring within six weeks in a common setting such as school, childcare or other institutional setting</u>.

As of November 14, 2008, 763 cases of varicella had been reported, year to date, to DHEC. Previous years' case counts have been similar. The majority of these cases were expected and sporadic cases in previously immunized children and no public health intervention was necessary. Narrowing the criteria for varicella cases to be reported will allow public health officials to reserve efforts for unusual events that deserve further scrutiny and save time for busy providers.

Changes in Reporting for *Haemophilus influenzae* for 2009

Marya Barker, MPH, Epidemiologist
Division of Acute Disease Epidemiology

For 2009, DHEC has combined the reporting for all types of *Haemophilus influenzae* (*H. flu)*, invasive disease into the "Urgently Reportable within 24 Hours" category.

In previous years, DHEC had required immediate reporting of *H. flu*, type b, while non-type b disease was reportable within seven days. The primary reason for this change is to reduce confusion about reporting requirements for private providers and laboratorians.

In addition, because most private labs in South Carolina do not perform serotyping of *H. flu* isolates, providers often waited seven days to report positive *H. flu* tests because the laboratory testing indicated only a positive *H. flu* result. This additional time interval between onset of disease and initiation of public health response made the timely prophylaxis of contacts difficult and delayed or prevented the isolate from being sent to the DHEC Bureau of Labs for serotyping.

We hope that moving all types of *H. flu* into one reporting category will make reporting of *H. flu* easier and faster. As in the past, all *Haemophilus influenzae* isolates are required to be sent to the DHEC Bureau of Labs for serotyping. These data are critical not only for the treatment of the patient but also for controlling the potential for spread of Hib and for chronicling the changing epidemiology of *Haemophilus influenzae.*

Changes in the 2009 SC List of Reportable Conditions

(Continued from page 1)

e.g. culture, rapid test, PCR or autopsy results consistent with influenza.)"

- Lead poisoning has been clarified as "lead poisoning (elevated blood lead levels, all ages.)"
- Lead tests, all, has been changed to "lead tests, all (age < 6)."
- Legionellosis isolates are now requested; footnote (7) has been added to Legionellosis.
- Varicella death has been combined with varicella and is listed as "varicella (outbreaks and individual cases resulting in death or hospitalization.)"
- Footnote (5) has been updated to clarify elevated lead levels.
- One new footnote has been added: (6) defines an outbreak of varicella.

(Continued on page 3)

Changes in the 2009 SC List of Reportable Conditions

(Continued from page 2)

- Under "how to report", 1. **immediately reportable conditions**, hours have been changed to 8:30 AM-5 PM.

Under "how to report", 4. **HIV and AIDS**, "or submit electronically via DHEC's electronic reporting system (call 1-800-917-2093 to learn more)" has been added.

Revisions to the Laboratory Reporting List:

- *Haemophilus influenzae*, non-type b, has been changed to "*Haemophilus influenzae*, all types, and has been moved to Urgently Reportable within 24 hours by phone."
- *Francisella tularensis* has been moved to Urgently Reportable within 24 hours by phone.
- Lead tests, all other, has been changed to "lead tests, all results (ages <6)."
- Serum lead levels has been changed to lead poisoning.
- Footnote (5) has been updated to clarify elevated lead levels.

Revisions to the Disease Reporting Card:

- Several sections have been revised to include an option for "Unk." These include ethnicity, pregnant, patient status, symptoms for Lyme or RMSF rash and STD reporting for treated patients.
- Specimen type has been changed to "specimen source (blood, stool, etc.)."

The above changes may be found:

- On the DHEC Web site at:

  http://www.scdhec.gov/

  http://www.scdhec.gov/health/

  http://www.scdhec.gov/health/disease/index.htm
- On the 2009 DHEC Disease Reporting Card (color is green for 2009.)
- On the 2009 List of Reportable Conditions poster.

Both the Disease Reporting Cards and the laminated Reportable Disease posters (sizes 8½ x 11 inches and 12 x 24 inches) are available from the DHEC regional public health departments or from the DHEC Division of Acute Disease Epidemiology in Columbia.

2009 DHEC Disease Reporting Card (DHEC 1129 card)

2009 SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL DISEASE REPORTING CARD

Disease reporting is required by SC Code of Laws Section 44-29-10, 44-53-1380, 44-1-110, and 44-1-140 and Regulation 61-20. **See other side for list of reportable diseases.**

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

Patient Name Last First Middle	Date of Birth Month / Day /Year	Patient Phone Numbers	Race ☐ Asian ☐ Black ☐ White ☐ Am Ind ☐ Pac Isl ☐ Unk	Ethnicity ☐ Unk ☐ Hispanic or Latino ☐ Not Hispanic or Latino	Sex ☐ Male ☐ Female ☐ Not Stated
Patient Address / City / ZIP Code		County	Patient ID or SSN	If Female, Pregnant? ☐ Yes ☐ No ☐ Unk	
Disease (include stage, if appropriate) Date of Diagnosis	Symptoms If Lyme or RMSF, Rash? ☐ Yes ☐ No ☐ Unk	Date of Symptom Onset _____	For STD Reporting Treated: ☐ Yes ☐ No ☐ Unk Treatment Date: _____ Rx: _____	Patient Status ☐ In Childcare ☐ Food Handler ☐ Unk	
Laboratory Results Date Specimen Source (blood, stool, etc.)	Hepatitis Jaundice ☐ Yes ☐ No AST: _____ ALT: _____ Date: _____	Hepatitis A Results Hepatitis A antibody (Acute IgM anti-HAV) ☐ Pos ☐ Neg ☐ Unk Hepatitis C Results Hepatitis C – EIA..... ☐ Pos ☐ Neg ☐ Unk s/co ratio:_____ Hepatitis C – RIBA..... ☐ Pos ☐ Neg ☐ Unk Hepatitis C – PCR..... ☐ Pos ☐ Neg ☐ Unk Hepatitis C – Viral Load _____	Hepatitis B Results Pos Neg Unk Hepatitis B surface Antigen (HBsAg)..... ☐ ☐ ☐ Hepatitis B core Antibody IgM (HBcAb-IgM)..... ☐ ☐ ☐ Hepatitis B core Antibody Total (HBcAb)..... ☐ ☐ ☐ Hepatitis B surface Antibody (HBsAb)..... ☐ ☐ ☐ Hepatitis B e Antigen (HBeAg)..... ☐ ☐ ☐		
Responsible Physician & Phone #	Reporting Lab/Facility, Person, & Phone #		Date Reported to Health Dept.	Mail or Call Reports To:	
For daytime & after-hours phone numbers: www.scdhec.gov/health/disease/docs/reportable_conditions.pdf For after-hours reporting of immediately reportable conditions, call state answering service: 1-888-847-0902 For more information, call the DHEC Bureau of Disease Control in Columbia: 803-898-0861 (M-F 8:30-5)			☐ Send More Cards To: (Address)		
DHEC 1129 (01/2009) DHEC Use Only: County Review Date State Review Date C P S N					

S.C. 2009 List of Reportable Conditions

Attention: Health Care Facilities, Physicians, and Laboratories

South Carolina Law §44-29-10 and Regulation §61-20 require reporting of conditions on this list to the local public health department.
South Carolina Law §44-53-1380 requires reporting by laboratories of all blood lead values in children under 6 years of age.

HIPAA: 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)

IMMEDIATELY REPORTABLE BY PHONE

All suspected and confirmed cases, including preliminary clinical and laboratory results

- ☣ **Any outbreak, unusual disease, or cluster of cases (1)**
- ☣ **Any potential biological, chemical or terrorist event (including exposures to toxins such as ricin)**
- Animal (mammal) bites
- ☣ Anthrax (7)
- ☣ Botulism
- ☣ Foodborne outbreak – unusual cluster
- Influenza A, Avian or Novel (Not H1 or H3)
- Measles (rubeola)
- Meningococcal disease (7) (9)
- ☣ Plague (7)
- Poliomyelitis, Paralytic and Nonparalytic
- SARS – Severe Acute Respiratory Syndrome (7)
- ☣ Smallpox
- ☣ Viral Hemorrhagic Fever

Urgently Reportable within 24 Hours by Phone

All suspected and confirmed cases, including preliminary clinical and laboratory results

- Arboviral Neuroinvasive & Non-Neuroinvasive Disease (acute infection, acute flaccid paralysis, or atypical Guillain-Barré Syndrome); Eastern Equine Encephalitis, LaCrosse, St. Louis Encephalitis, West Nile Virus (7)
- ☣ Brucellosis (7)
- Diphtheria (7)
- Dengue
- *E. coli*, shiga toxin – producing (STEC) (7)
- *E. coli* O157:H7 (7)
- ☣ Glanders (*Burkholderia mallei*) (7)
- *Haemophilus influenzae*, all types, invasive disease (4) (7)
- Hantavirus
- Hemolytic uremic syndrome (HUS) (10)
- Hepatitis A, acute (IgM Ab + only)
- Hepatitis B, acute (IgM core Ab + only)
- ☣ Melioidosis (*Burkholderia pseudomallei*) (7)
- Mumps
- Pertussis
- ☣ Q fever (*Coxiella burnetii*)
- Rabies (human)
- Rubella (includes congenital)
- *Staphylococcus aureus*, vancomycin-resistant or intermediate (VRSA/VISA) (7)
- Syphilis, primary or secondary (lesion or rash)
- Syphilis, congenital
- Trichinosis
- Tuberculosis (7)
- ☣ Tularemia
- Typhoid fever (*Salmonella typhi*) (7)
- ☣ Typhus, epidemic (*Rickettsia prowazekii*)
- Vibrio, all types, including *Vibrio cholerae* O1 and O139 (7)
- Yellow Fever

Report within 7 Days

- AIDS (2)
- Campylobacteriosis
- Chancroid
- Chlamydia trachomatis, genital site (L)
- Creutzfeldt-Jakob Disease (Age < 55 years)
- Cryptosporidiosis
- Cyclosporiasis
- Ehrlichiosis / Anaplasmosis
- Giardiasis
- Gonorrhea
- Hepatitis B, chronic
- Hepatitis B Surface Antigen + (HBsAg +) with each pregnancy
- Hepatitis C, D, E
- HIV-1 or HIV-2 infection (2)
- HIV CD4 co receptor (L)
- HIV CD4 T-lymphocyte count/percentage – all results (L) (2)
- HIV viral load – all results (L) (2)
- HIV HLA-B5701 (L)
- HIV subtype, genotype, and phenotype (L)
- Influenza, positive rapid flu test (#)
- Influenza, positive virus culture isolates (L)
- Influenza, deaths (pediatric & adult; lab confirmed only: e.g. culture, rapid test, PCR or autopsy results consistent with influenza)
- Lead poisoning (elevated blood lead levels, all ages) (5)
- Lead tests, all (age <6) (L)
- Legionellosis (7)
- Leprosy (Hansen's Disease)
- Leptospirosis
- Listeriosis (7)
- Lyme disease
- Lymphogranuloma venereum
- Malaria
- Meningitis, aseptic (8)
- Pesticide poisoning
- ☣ Psittacosis
- Rocky Mountain Spotted Fever
- Salmonellosis (7)
- Shigellosis (7)
- *Staphylococcus aureus*, Methicillin resistant (MRSA) – (Bloodstream infections) (L)
- Streptococcus group A, invasive disease (4)
- Streptococcus group B, age < 90 days
- *Streptococcus pneumoniae*, invasive, (4), (include antibiotic resistance patterns) (3)
- Syphilis, latent or tertiary
- Syphilis, positive serologic test
- Tetanus
- Toxic Shock (specify staphylococcal or streptococcal)
- Varicella (outbreaks and individual cases resulting in death or hospitalization) (6)
- Yersiniosis

☣ *Potential agent of bioterrorism*

(L) Only Labs required to report.
(#) Report weekly only total number of positive results; individual case reporting is not necessary.

1. Outbreak: An excess number of cases or syndromes over the expected occurrence of disease within a geographic area or population group.
2. Report HIV or AIDS when serum, urine, or oral fluid specimen is positive by: (a) confirmatory test (e.g. Western Blot), or (b) an HIV detection test (e.g., PCR nucleic acid test, including viral load) or (c) clinical diagnosis of a case of HIV or AIDS. All reactive rapid HIV test results must be reported to DHEC. All HIV viral load and CD4 test results must be reported by labs regardless of results.
3. Antibiotic resistant organisms: resistant pneumococcus - MIC > 2µg/ml of penicillin G (or Oxacillin disc zone < 19mm) or resistance to any single drug accepted as effective treatment. The definition of resistance may differ between laboratories by test methods used to determine susceptibility. Reports should specify the site from which the isolate was obtained and the drug susceptibility profile.
4. Invasive disease: isolated from normally sterile site: blood, bone, CSF, joint, pericardial, peritoneal or pleural fluid, protected bronchial sampling or from lung aspirate/biopsy, necrotizing fasciitis, and cellulitis only if isolate is from a tissue biopsy. Always specify site of isolate.
5. Report serum lead levels >10 µg/dL for children under 18 years of age and > 25 µg/dL for persons 18 years or older.
6. An outbreak of Varicella is defined as 5 or more cases within 6 weeks in a common setting, such as school, childcare or other institutional setting.
7. Labs must submit these isolates, broths, and serum to the DHEC Bureau of Laboratories for confirmatory testing, serotyping, serogrouping, or genotyping.
8. Acute meningeal symptoms, fever, CSF pleocytosis, sterile culture. Consult DHEC in outbreaks to submit specimens to lab for virus identification.
9. Report Gram-negative diplococci in blood or CSF.
10. HUS, with or without gastroenteritis: Triad of acute renal failure, thrombocytopenia, and microangiopathic hemolytic anemia.

S.C. 2009 Laboratory Reporting List

Adapted from the SC 2009 List of Reportable Conditions

South Carolina Law §44-29-10 and Regulation §61-20 require reporting of conditions on this list to the local public health department.
South Carolina Law §44-53-1380 requires reporting of all blood lead values in children under 6 years of age by laboratories.

HIPAA: 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)

IMMEDIATELY REPORTABLE BY PHONE

All suspected and confirmed cases, including preliminary* laboratory results

- ☣ **Any outbreak, unusual disease, or cluster of cases (1)**
- ☣ **Any potential biological, chemical, or terrorist event (including exposures to toxins such as ricin)**

VIRAL

- Influenza A, Avian or Novel (Not H1 or H3)
- Measles (Rubeola)
- Poliovirus
- SARS associated Coronavirus (7)
- ☣ Variola major (Smallpox)
- ☣ Viral Hemorrhagic Fever agents (e.g. Ebola, Lassa, Marburg viruses)

BACTERIAL

- ☣ *Bacillus anthracis* (7)
- ☣ *Clostridium botulinum or Botulinum toxin*
- *Neisseria meningitidis*, invasive (4) (7) (9)
- ☣ *Yersinia pestis* (7)

URGENTLY REPORTABLE WITHIN 24 HOURS BY PHONE

All suspected and confirmed cases

PARASITIC

- *Trichinella*
- *Plasmodium*

VIRAL

- Arboviral Agents (e.g., Eastern Equine Encephalitis (EEE), LaCrosse (LAC), St. Louis Encephalitis (SLE), West Nile Virus (WNV) (7)
- Dengue (*Flavivirus*)
- Hantavirus
- Hepatitis A, acute (IgM Ab + only)
- Hepatitis B, acute (IgM core Ab + only)
- Mumps virus
- Rabies virus (human)
- Rubella
- Yellow Fever (*Flavivirus*)

BACTERIAL

- *Bordetella pertussis*
- ☣ *Brucella* (7)
- ☣ *Burkholderia mallei* (7)
- ☣ *Burkholderia pseudomallei* (7)
- *Corynebacterium diphtheriae* (7)
- ☣ *Coxiella burnetii*
- *Escherichia coli*, shiga toxin – producing (STEC) including O157:H7 (7)
- ☣ *Francisella tularensis (7)*
- *Haemophilus influenzae*, all types, invasive (4) (7)
- *Mycobacterium tuberculosis* (7)
- ☣ *Rickettsia prowazekii*
- *Salmonella typhi* (7)
- *Staphylococcus aureus*, vancomycin intermediate/resistant (VISA/VRSA) (7)
- *Treponema pallidum* (Darkfield exam positive)
- *Vibrio* -all, including V. *cholerae* O1 and O139 (7)

REPORT WITHIN 7 DAYS

PARASITIC

- *Cryptosporidium*
- *Cyclospora*
- *Giardia*

VIRAL

- Hepatitis B, all positive tests
- Hepatitis C, D, E, all positive tests
- HIV-1 or HIV-2 infection (2)
- HIV CD4 co receptor
- HIV CD4 T-lymphocyte count/percentage – all results (2)
- HIV viral loads – all results (2)
- HIV HLA-B5701
- HIV subtype, genotype, and phenotype
- Influenza, positive rapid flu test (#)
- Influenza, positive virus culture isolates
- Varicella (6)

BACTERIAL

- *Anaplasma phagocytophilium*
- *Borrelia burgdorferi*
- *Campylobacter*
- Chancroid (Haemophilus ducreyi)
- ☣ *Chlamydia psittaci*
- *Chlamydia trachomatis*, genital site
- *Clostridium tetani*
- *Ehrlichia*
- *Legionella* (7)
- *Leptospira*
- *Listeria* (7)
- *Mycobacterium leprae*
- *Neisseria gonorrhoeae*
- *Rickettsia rickettsii* (Rocky Mountain Spotted Fever)
- *Salmonella* (7)
- *Shigella* (7)
- *Staphylococcus aureus*, Methicillin resistant (MRSA) – (Bloodstream infections)
- *Streptococcus* group A, invasive disease (4)
- *Streptococcus* group B, age < 90 days
- *Streptococcus* pneumoniae, invasive, (4), include antibiotic resistance patterns (3)
- Syphilis, positive serologic test
- *Yersinia*, not *pestis*

OTHER

- Lead tests, all results (ages <6)
- Lead poisoning (5)
- Pesticide poisoning

(#) Report weekly only total number of positive results; individual case reporting is not necessary.

1. Outbreak: An excess number of cases or syndromes over the expected occurrence of disease within a geographic area or population group.
2. Report HIV or AIDS when serum, urine, or oral fluid specimen is positive by: (a) confirmatory test (e.g. Western Blot), or (b) an HIV detection test (e.g., PCR nucleic acid test, including viral load), or (c) clinical diagnosis of a case of HIV or AIDS. All reactive rapid HIV test results must be reported to DHEC. All HIV viral load and CD4 test results must be reported by labs regardless of results.
3. Antibiotic resistant organisms: resistant pneumococcus - MIC > 2µg/ml of penicillin G (or Oxacillin disc zone < 19mm) or resistance to any single drug accepted as effective treatment. The definition of resistance may differ between laboratories by test methods used to determine susceptibility. Reports should specify the site from which the isolate was obtained and the drug susceptibility profile.
4. Invasive disease: isolated from normally sterile site: blood, bone, CSF, joint, pericardial, peritoneal or pleural fluid, protected bronchial sampling, or from lung aspirate/biopsy, necrotizing fasciitis, and cellulitis only if isolate is from a tissue biopsy. Always specify site of isolate.
5. Report serum lead level >10 µg/dL for children under 18 years of age and > 25 µg/dL for persons 18 years of age or older.
6. An outbreak of Varicella is defined as 5 or more cases within 6 weeks in a common setting, such as school, childcare or institutional setting.
7. Labs should submit these isolates and positive serologies to the DHEC Bureau of Laboratories for confirmatory testing, serotyping, serogrouping, or genotyping.
8. Acute meningeal symptoms, fever, CSF pleocytosis, sterile culture. Consult DHEC in outbreaks to submit specimens to lab for virus identification.
9. Report Gram-negative diplococci in blood or CSF.

* Preliminary results are defined as gram stain results that may be indicative of an immediately reportable condition.

☣ **Potential agent of bioterrorism**

S.C. 2009 List of Reportable Conditions

South Carolina Department of Health and Environmental Control

How to Report

Submit reports by **one** of the following methods:

1. **Immediately Reportable Conditions**
   - M-F, 8:30-5 PM: Call the regional public health office. See list below.
   - Nights, weekends, and holidays: Call the regional public health office night / weekend phone / pager number (see list below), or the statewide DHEC emergency contact number (1-888-847-0902).
2. **Urgently Reportable Conditions:**
   - Call the regional public health office within 24 hours. See list below.
3. **Routine Reportable Conditions:**
   - Call the regional public health office, or
   - Complete the DHEC 1129 Disease Reporting Card and mail in an envelope marked confidential to the regional public health office (see list below), or
   - Submit an electronic morbidity report via DHEC's web-based reporting system. To learn more, call 1-800-917-2093.
4. **HIV and AIDS:** To report these conditions: call 1-800-277-0873 or (803) 898-0758; or submit electronically via DHEC's electronic reporting system (call 1-800-917-2093 to learn more); or submit a DHEC 1129 Disease Reporting Card or appropriate CDC Case Report Form in a confidential envelope to:
   STD/HIV Surveillance Division, Mills/Jarrett Complex
   Box 101106, Columbia, SC 29211

What to Report

- Patient's name
- Patient's complete address, phone, date of birth, race, sex, county, social security number
- Physician's name and phone number
- Name, institution, and phone number of person reporting
- Disease or condition
- Date of diagnosis
- Symptoms
- Date of onset of symptom
- Date of report
- Lab results, specimen site, collection date
- If female, pregnancy status
- Status: In daycare or a food-handler

Regional Public Health Offices

Mail or call reports to the Epidemiology Office in each Public Health Region.

Region 1

(Anderson, Oconee)
220 McGee Road
Anderson, SC 29625
Phone: (864) 260-4358
Fax: (864) 260-5623
Nights / Weekends: 1-866-298-4442

(Abbeville, Edgefield, Greenwood, Laurens, McCormick, Saluda)
1736 S. Main Street
Greenwood, SC 29646
Phone: 1-888-218-5475
Fax: (864) 942-3690
Nights / Weekends: 1-800-420-1915

Region 2

(Greenville, Pickens)
PO Box 2507
200 University Ridge
Greenville, SC 29602-2507
Phone: (864) 282-4139
Fax: (864) 282-4373
Nights / Weekends: 1-800-993-1186

(Cherokee, Spartanburg, Union)
PO Box 4217
151 E. Wood Street
Spartanburg, SC 29305-4217
Phone: (864) 596-2227, x-210
Fax: (864) 596-3443
Nights / Weekends: 1-800-993-1186

Region 3

(Fairfield, Lexington, Newberry, Richland)
2000 Hampton Street
Columbia, SC 29204
Phone: (803) 576-2749
Fax: (803) 576-2993
Nights / Weekends: 1-888-554-9915

Region 3 cont.

(Chester, Lancaster, York)
PO Box 817
1833 Pageland Highway
Lancaster, SC 29720
Phone: (803) 286-9948
Fax: (803) 286-5418
Nights / Weekends: 1-866-867-3886

Region 4

(Chesterfield, Darlington, Dillon, Florence, Marlboro, Marion)
145 E. Cheves Street
Florence, SC 29506
Phone: (843) 661-4830
Fax: (843) 661-4859
Nights / Weekends: (843) 660-8145

(Clarendon, Kershaw, Lee, Sumter)
PO Box 1628
105 North Magnolia Street
Sumter, SC 29150
Phone: (803) 773-5511
Fax: (803) 775-9941
Nights/Weekends: 1-877-831-4647

Region 5

(Bamberg, Calhoun, Orangeburg)
PO Box 1126
1550 Carolina Avenue
Orangeburg, SC 29116
Phone: (803) 533-7199
Fax: (803) 533-7134
Nights / Weekends: (803) 954-8513

(Aiken, Allendale, Barnwell)
1680 Richland Avenue, W. Suite 40
Aiken, SC 29801
Phone: (803) 642-1618
Fax: (803) 643-8386
Nights / Weekends: (803) 827-8668 or 1-800-614-1519

Region 6

(Georgetown, Horry, Williamsburg)
1931 Industrial Park Road
Conway, SC 29526-5482
Phone: (843) 915-8804
Fax: (843) 365-0085
Nights / Weekends: (843) 381-6710

Region 7

(Berkeley, Charleston, Dorchester)
4050 Bridge View Drive, Suite 600
N. Charleston, SC 29405
Phone: (843) 953-0060
Fax: (843) 953-0051
Nights / Weekends: (843) 219-8470

Region 8

(Beaufort, Colleton, Hampton, Jasper)
219 S. Lemacks Street
Walterboro, SC 29488
Phone: (843) 525-7603 x-108
Fax: (843) 549-6845
Nights / Weekends: 1-800-614-4698

DHEC Bureau of Disease Control

Division of Acute Disease Epidemiology
1751 Calhoun Street
Box 101106
Columbia, SC 29211
Phone: (803) 898-0861
Fax: (803) 898-0897
Nights / Weekends: 1-888-847-0902

South Carolina Department of Health and Environmental Control
We promote and protect the health of the public and the environment.
www.scdhec.gov

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Vibrio Spotlight

Julie Schlegel, MSP, Foodborne Epidemiologist
Division of Acute Disease Epidemiology

Vibrio vulnificus is a naturally occurring estuarine organism. Shellfish, such as oysters, may become contaminated with *Vibrio vulnificus* as they feed by filtering contaminated seawater. This is especially true of shellfish harvested from the Gulf Coast states, which is where the majority of cases in the United States occur. Shellfish sold in South Carolina may have been harvested here, but a significant percentage will have been imported from Gulf Coast states, making *Vibrio vulnificus* a significant concern to our S.C. residents and tourists.

Vibrio vulnificus may cause vomiting, diarrhea, and abdominal pain among healthy people who eat contaminated seafood. In the immunocompromised, and in those with existing chronic illness, *Vibrio vulnificus* can lead to septicemia, causing a severe and life-threatening illness. *Vibrio* vulnificus bloodstream infections are fatal about 50 percent of the time.

Persons at higher risk for *Vibrio* vulnificus infection include those with liver disorders (e.g., cirrhosis, hemochromatosis, chronic hepatitis), diabetes, stomach disorders, cancer, HIV/AIDS, alcohol abuse and those with weakened immune systems due to a variety of medical treatments, such as chemotherapy. **Physicians are encouraged to warn patients with these risk factors to avoid eating raw or undercooked shellfish.**

DHEC staff monitor reports of *Vibrio vulnificus*. When providers report a case of *Vibrio vulnificus* to DHEC a number of processes are set into action:

- An epidemiological interview will be conducted to help identify potential sources of illness. If the case reports eating shellfish, DHEC staff will conduct a traceback of that shellfish to determine the harvest site.
- If any suspect shellfish is available, it will be tested.
- In the case of shellfish contamination, DHEC will coordinate with the CDC, the FDA and other states to assure that the suspect shellfish is no longer available for sale and that the harvest site is evaluated.

Local healthcare providers and laboratories are the link between individual presenting patients and public health responses. Without reports of illness from local partners, DHEC cannot identify and investigate outbreaks of public health significance. South Carolina local disease reporters have provided key information in numerous outbreak investigations and in turn, critical product recalls.

REPORTING: Vibrio is reportable within 24 hours in South Carolina. Please see the 2009 S.C. List of Reportable Conditions for more information: http://www.scdhec.gov/health/disease/docs/reportable_conditions.pdf.

Ask an Epi: Prevention and Treatment of Influenza during Pregnancy

(Continued from page 1)

Table 1: Evolution of ACIP guidelines regarding influenza immunization in pregnancy: 2008 and selected illustrative past years

Year	Recommendation for use of TIV in pregnancy
1993 [3]	• Vaccinate only pregnant women with medical conditions known to increase risk for complications from influenza.
1998 [4]	• Vaccinate women who will be in the second or third trimester of pregnancy during the influenza season. • Vaccinate pregnant women who have medical conditions that increase their risk of complications from influenza regardless of the stage of pregnancy
2008 [1]	• Vaccinate all women who will be pregnant during the influenza season.

It should be noted, however, that unlike TIV, **live attenuated (intranasal) influenza vaccine (LAIV) is NOT recommended in pregnancy.**

2. Why has national vaccine policy gradually moved to universal influenza vaccination in pregnancy?

The ACIP [1] has cited a number of studies conducted in different settings which have accumulated evidence that pregnancy increases influenza complications. [5-9] Some examples are informally presented in Table 2.

Table 2: Representative studies documenting increased complications of influenza during pregnancy

Reference	Study population	Conclusion
5	3975 women consecutively delivered at two Nottingham hospitals. (British study)	There was no evidence for transplacental transmission of influenza virus. There was an increase in complications of pregnancy in the influenza cohort
6	~25,000 women enrolled in Tennessee Medicaid program. (Vanderbilt School of Medicine study)	Out of every 10,000 women in their 3rd trimester without other identified risk factors who experience an average influenza season of 2.5 months, 25 will be hospitalized with influenza related morbidity.
7	Population-based cohort study of pregnant women in Nova Scotia (Canadian study)	Hospitalization rates for respiratory illness among pregnant women were ~doubled during influenza season even for women without comorbidities. "All pregnant women are likely to benefit from influenza vaccination."
8	Review of influenza and pregnant women: hospitalization burden, USA 1998-2002 (US CDC review)	Universal vaccination of pregnant women to decrease influenza-related morbidity should be encouraged.
9	National data from the Healthcare Cost and Utilization Project National Inpatient Sample (NIS). (US CDC study)	During influenza season, hospitalized pregnant women with respiratory illnesses had longer lengths of stay and higher likelihood of delivery complications. Interventions to decrease influenza-related respiratory morbidity among pregnant women ought to be encouraged.

Ask an Epi: Prevention and Treatment of Influenza during Pregnancy

(Continued from page 8)

3. Are antiviral agents for influenza recommended in pregnancy?

For the general population, annual vaccination remains the primary strategy for preventing morbidity and mortality due to influenza. Antiviral medications may be considered useful adjuncts for prevention of influenza and may be effective as treatment when used early in the course of illness. [1] However, neither of the licensed amantadanes (amantadine and rimantadine) is recommended for use in the United States because of documented high levels of resistance. Thus, the neuraminadase inhibitors (oseltamivir and zanamivir) are preferred. Some low-level resistance (~10 percent) of Influenza A H1N1 to oseltamivir was documented in the 2007-2008 influenza season, but no cross-resistance to zanamivir was observed.

Both oseltamivir and zanamivir are "Pregnancy Category C" medications, reflecting the fact that formal clinical studies have not been conducted to evaluate their safety in pregnancy. The ACIP therefore recommends that " …. these two drugs should be used during pregnancy only if the potential benefit justifies the potential risk to the embryo or fetus…" Fortunately, no adverse reactions to these drugs have been reported among women who have received them during pregnancy, or among infants born to these women. [1] It appears therefore that these drugs might be used in special situations during pregnancy when indicated by informed clinical judgment.

Published References:

1. Prevention and Control of Influenza. Recommendations of the ACIP. MMWR August 8, 2008 / Vol. 57 / No. RR-7 (available at www.cdc.gov/mmwr). [The best single document concerning current recommendations.]
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7. Dodds L, McNeil SA, Fell DB, et al. Impact of influenza exposure on rates of hospital admissions and physician visits because of respiratory illness among pregnant women. CMAJ 2007;176:463–8.
8. Cox S, Posner SF, McPheeters M et al. Influenza and pregnant women: hospitalization burden, United States, 1998-2002. J. Womens Health (Larchmt). 2006 Oct;15(8):891-3
9. Cox S, Posner SF, McPheeters M et al. Hospitalizations with respiratory illness among pregnant women during influenza season. Obstet Gynecol. 2006 Jun;107(6):1315-22.

Selected Web resources concerning influenza:

- www.cdc.gov/flu/ — CDC's primary "flu portal" with links to numerous general and specialized resources
- www.cdc.gov/flu/about/season/index.htm — Useful site to keep up with flu surveillance trends from around the country
- www.nlm.nih.gov/medlineplus/flu.html — NIH's public portal with numerous flu links
- www.who.int/topics/influenza/en/ — Provides an entrée to the World Health Organization's influenza links
- www.dhec.sc.gov/flu — General information from DHEC about influenza as well as links to more specialized information

South Carolina 2008-2009 Influenza Season Surveillance Update

Chasisity Springs, MSPH, Influenza Epidemiologist
Division of Acute Disease Epidemiology

1. Changes in the 2009 SC List of Reportable Conditions

The SC 2009 List of Reportable Conditions has been updated to make all influenza-related deaths reportable. Previously, influenza-related deaths in children ≤ 17 years of age were reportable to the local public health department within seven days. Beginning in 2009, all (pediatric and adult) lab confirmed (culture, rapid test, PCR or autopsy results consistent with influenza) influenza deaths will be reportable to the local public health department within seven days.

2. SC 2008-2009 Influenza Surveillance Update *(as of 11/26/2008)*

Influenza surveillance in South Carolina currently consists of the following five methodologies:

a. **Rapid Flu Tests** Positive rapid antigen influenza tests (total numbers, are reportable to regional public health departments within seven days)

b. **Viral isolates**

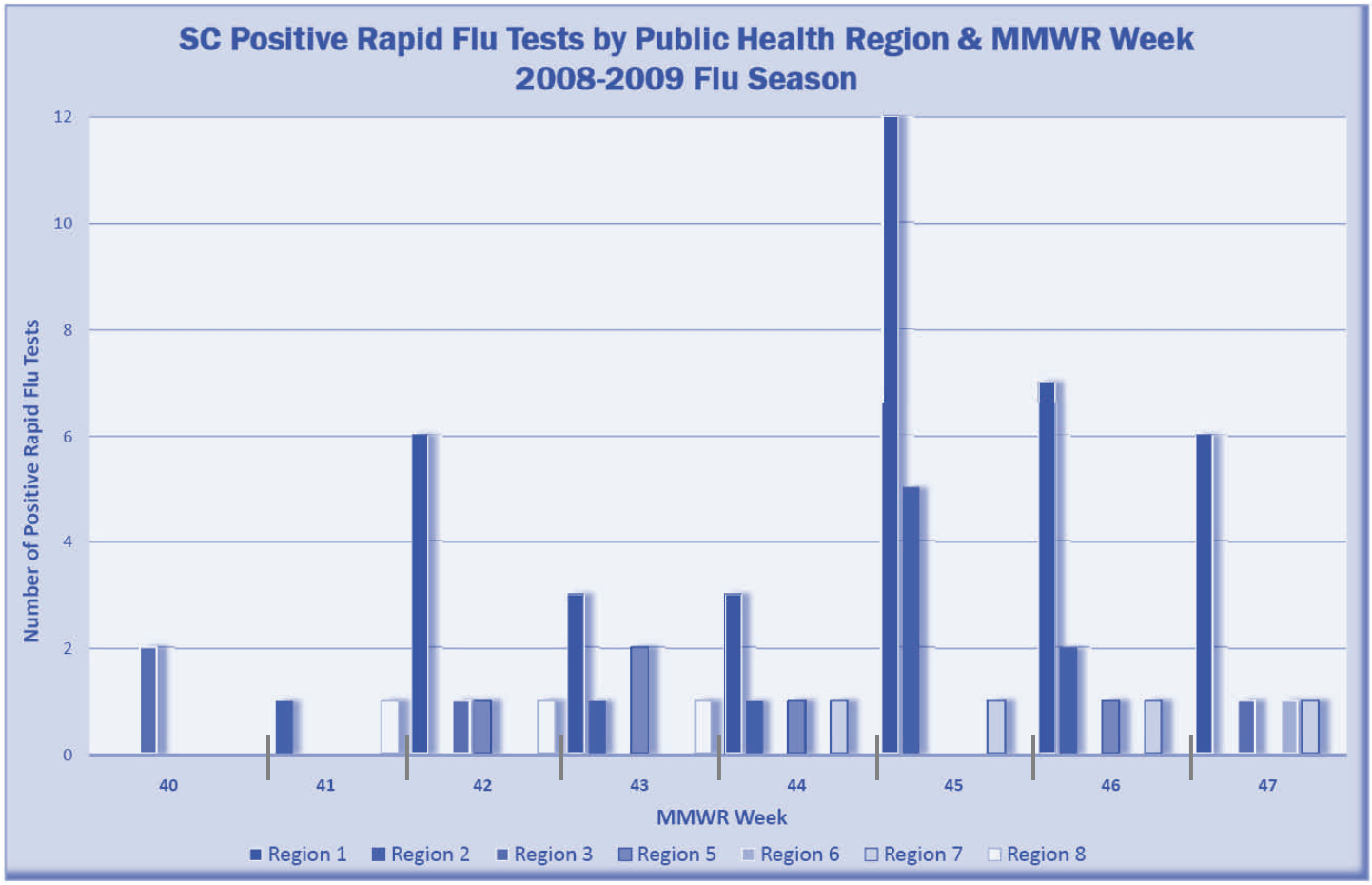
Participation in the viral isolate network is FREE. Providers receive collection kits, lab forms, instructions and postage-paid mailers.

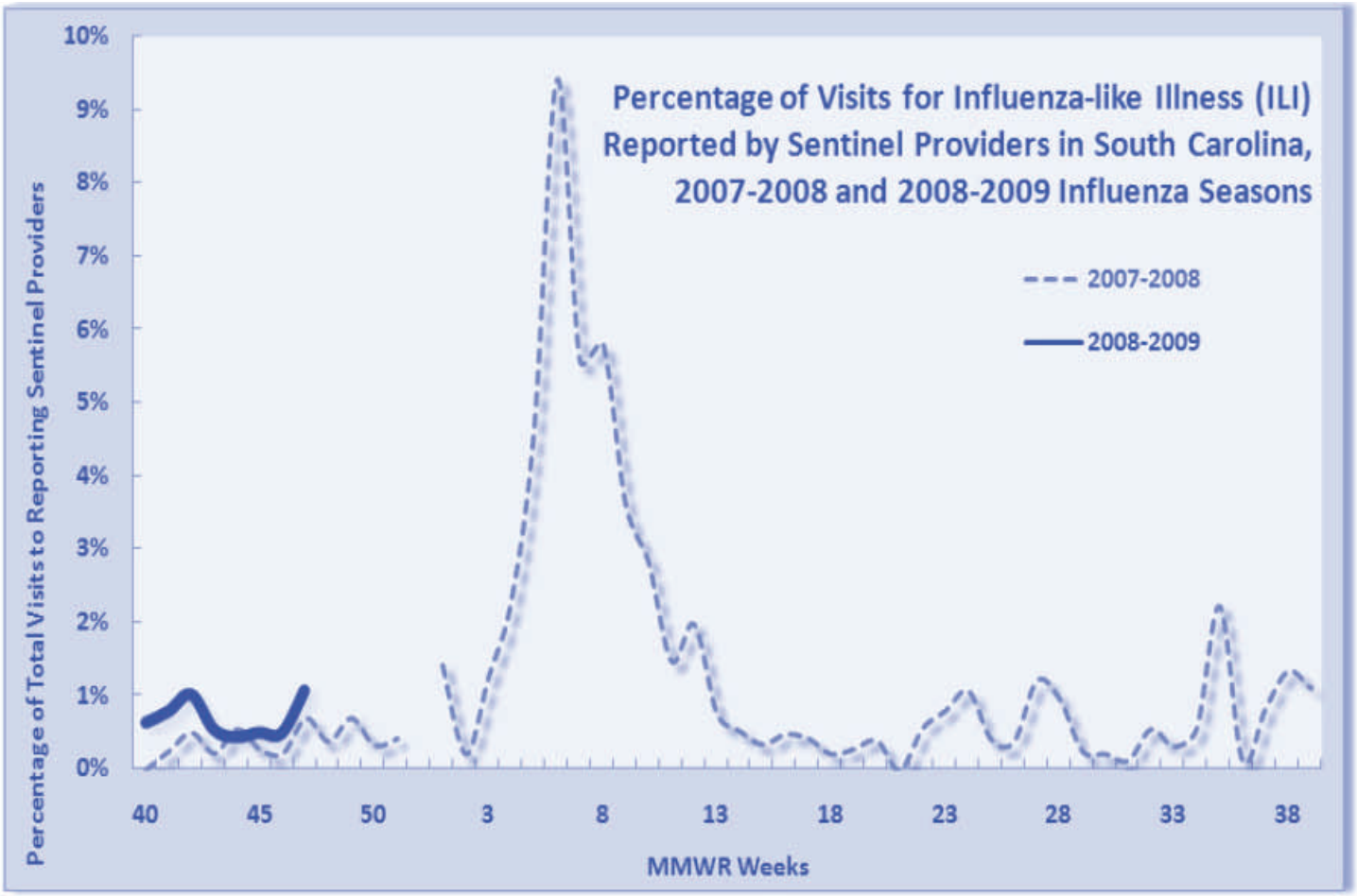
c. **Influenza like illness (ILI)**

ILI, or influenza-like illness, is defined as fever ≥100° F AND cough or sore throat where no other explanation exists for these symptoms.

Providers voluntarily submit the number of ILIs and the total number of patients seen weekly to the CDC via fax or the internet.

(Continued on page 11)





SC 2008-2009 Influenza Season Surveillance Update

(Continued from page 10)

d. **Enhanced human avian influenza surveillance**, and

e. **Influenza-associated pediatric deaths**, which will change in January 2009 to **all influenza-associated deaths.**

The 2008-2009 influenza season began September 28, 2008 (MMWR week 40). MMWR weeks begin on Sunday and end on Saturday.

Thus far, South Carolina has had 64 positive rapid flu tests. There were 0 positive cultures as of MMWR week 47. Since the beginning of the 2008-2009 season, the percentage of visits to enrolled healthcare providers for influenza-like illness has been higher than during the same period in the 2007-2008 season, with the exception of week 44 (October 26-November 1, 2008).

Please visit the DHEC Flu Monitoring Web site for weekly updated information:

www.scdhec.gov/health/disease/acute/flu.htm

3. Participation in Flu Surveillance

We reply on our sentinel providers for our flu isolate and influenza-like illness data.

If you wish to participate in the ILI sentinel provider network or in the Viral Isolate network, contact Chasisity Springs at (803) 898-0870.

Better, Faster, Smarter: Using CHESS for Reportable Conditions

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We are writing to let providers know about using the CHESS (Carolina's Health Electronic Surveillance System) for disease reporting. The CHESS system gives you and your practice the opportunity to submit required state disease reporting electronically. This option makes reporting much faster and easier for your staff.

As you are aware, healthcare providers are required by S.C. law to report specific communicable diseases. Routine disease reporting serves several purposes, including but not limited to:

- Identification of clusters, outbreaks and/or pandemics,
- Enabling preventive or mitigative treatments, and
- Assisting in national and international surveillance efforts to control the spread of diseases.

Web-based electronic surveillance is a key component of S.C. DHEC's efforts to assure timeliness and accuracy in disease reporting. We are excited about finally having in place an easy-to-use system that has the capacity to receive information electronically from private providers about a patient's health status.

As we know, and as we have heard from you, the manual card-based process of disease reporting has become outdated. In the past two years, DHEC has developed systems to accept electronic laboratory reports (ELRs) from several commercial and reference laboratories. ELRs have greatly enhanced DHEC's ability to identify disease burden, to address healthcare- and community-associated infections and to provide timely response to single cases of illness that may have consequences for a community (e.g., acute Hepatitis A or Acute Hepatitis B cases.)

For healthcare providers, CHESS integrates disease reporting to DHEC with data collection by DHEC. ***CHESS allows participating healthcare providers to input a patient's demographics, lab results, and disease history in a timely and efficient manner using a web browser. Reporting can be done by trained, authorized office personnel.*** Data provided to CHESS can be used to develop customized reports addressing trends gathered from disease reporting — one of the biggest benefits for providers reporting via CHESS.

CHESS offers providers:

- ☑ Faster and more complete disease reporting
- ☑ Use of industry standards for data management
- ☑ A common location in which data are stored
- ☑ Secure handling of confidential data
- ☑ A web-based interface with no need to purchase or install specialized software

Currently, CHESS is used for routine disease reporting by a diverse group of providers, including hospitals, independent labs, educational institutions, private practices and military bases. We hope you will consider joining this group.

Want to know more? If you are a healthcare provider or someone who would like to know more about the Carolina's Health Electronic Surveillance System, contact your Regional Disease Response and Surveillance Coordinator at the local public health department (see list of numbers on Page 6.) You may also call 1-800-917-2093 to schedule a demonstration.

KNOW WHAT TO DO BEFORE PAN FLU!

Is your practice prepared for an influenza pandemic or for a bad flu season?

DHEC's Public Health Clinical Liaisons can help!

Did You Know…

- **PAN FLU HITS COMMUNITIES IN WAVES . .**
- ***Each wave lasts at least 6 weeks...***
- **MEDICAL OFFICES MAY SEE AN *EXTRA 25* PATIENTS A DAY . . .**
- **15% to 30% of the healthcare workforce may be sick during pandemic waves?**

Public Health Clinical Liaisons can provide *FREE* Pan Flu Informational & Planning Sessions for Medical Practices concerning:

- **CONTINUITY OF OPERATIONS**
  - How will YOU keep your office practice going?
- **INFECTION CONTROL STRATEGIES**
  - In Medical Offices and for Patients
  - In the Community
- **INFLUENZA MONITORING SYSTEM ENROLLMENT**
  - Flu-like Syndromes
  - Flu Cultures

Would you like to have a DHEC Public Health Clinical Liaison visit your practice or facility?
Please provide facility name, county and phone number to:
Roscia Hardee RN, MPH at 803-898-1490.

Summary of Conditions reported to SC DHEC January 1 through November 1, 2008.

Compiled by Claire Youngblood, MA, Data Manager
Division of Acute Disease Epidemiology

Condition	Confirmed	Probable	Total
Animal Bite, PEP Recommended	309	0	309
Aseptic meningitis	103	1	104
Botulism, infant	1	0	1
Brucellosis	1	1	2
Campylobacteriosis	216	0	216
Ciguatera fish poisoning	0	0	0
Cholera	1	0	1
Cryptosporidiosis	47	3	50
Cyclosporiasis	1	0	1
Dengue Fever	0	1	1
Ehrlichiosis, chaffeensis	0	1	1
Encephalitis, West Nile	0	0	0
Enterohem. E. coli O157:H7	1	0	1
Enterohem. E. coli shigatox+- ?serogrp	1	0	1
Enterohem. E. coli- shigatox+- non-O157	0	0	0
Giardiasis	110	1	111
Group A Streptococcus, invasive	60	0	60
Group B Streptococcus, invasive	40	0	40
Haemophilus influenzae, invasive	44	1	45
Hansen disease (Leprosy)	1	0	1
Hemolytic uremic syndrome, postdiarrheal	1	0	1
Hepatitis A, acute	15	0	15
Hepatitis B, acute	52	1	53
Hepatitis B virus infection, Chronic	98	415	513
Hepatitis B virus infection, Perinatal	0	0	0
Hepatitis C, acute	3	0	3
Hepatitis C Virus Infection, past or present	3,555	105	3.660
Hepatitis Delta co- or super-infection, acute	0	0	0
Hepatitis E, acute	0	0	0
Influenza, human isolates	254	0	254
Legionellosis	13	0	13
Listeriosis	4	0	4
Lyme disease	10	12	22

Summary of Conditions reported to SC DHEC January 1 through November 1, 2008

Condition	Confirmed	Probable	Total
Malaria	8	0	8
Mumps	0	0	0
Neisseria meningitidis, invasive (Mening. disease)	18	1	19
Pertussis	90	14	104
Rocky Mountain spotted fever	6	48	54
S. aureus, vancomycin intermediate susc (VISA)	0	0	0
Salmonellosis	1,019	3	1,022
Shiga toxin-producing Escherichia coli (STEC)	35	3	38
Shigellosis	495	11	506
Strep pneumoniae, invasive	451	0	451
Streptococcal disease, invasive, other	1	0	1
Tetanus	0	0	0
Toxic-shock syndrome, staphylococcal	0	0	0
Typhoid fever (Salmonella typhi)	2	0	2
Varicella (Chickenpox)	413	335	748
Vibrio parahaemolyticus	3	0	3
Vibrio spp., non-toxigenic, other or unspecified	5	0	5
Vibrio vulnificus infection	3	0	3
West Nile Fever	0	2	2
Yersiniosis	5	0	5

List of Reportable Conditions for Laboratories

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The information below appeared in the Winter 2008 edition of the Epi Notes. It is re-printed here for the benefit of our new reporting partners.

In 2008, S.C. DHEC introduced a separate *List of Reportable Conditions for Laboratories*. The purpose of this list is to reduce confusion regarding disease reporting responsibilities.

The *List of Reportable Conditions for Laboratories* includes the reportable conditions for which there is a laboratory test. The list is conveniently divided into categories of Bacterial, Viral, Parasitic, and Other. The few reportable conditions omitted from the laboratory list are those in which diagnosis is made based on clinical data, e.g., hemolytic uremic syndrome (HUS) or conditions that result in death, e.g. varicella or influenza deaths.

Outbreaks, unusual disease and clusters of cases remain as reportable situations on the laboratory list; however, the terminology "foodborne outbreaks" was omitted since the laboratorian is not likely to know the source of infection.

Many other states have already developed separate lists for clinicians and labs. The hope is that by targeting different audiences with information based on their focus area, reporting will be easier and faster than ever.

Epi Notes
Division of Acute Disease Epidemiology
SC DHEC
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FOR DISEASE REPORTING

For immediately reportable conditions, call your local county health department or, for after hours, call 1-888-847-0902. Routine reports may be phoned in to your local health department or mailed on a completed DHEC DISEASE REPORTING CARD (DHEC 1129.) Local county health department numbers are listed on the Official List of Reportable Conditions.
For a copy of the current Official List of Reportable Conditions, call 803-898-0861 or visit www.scdhec.gov/health/disease.index.htm.

THE EPI NOTES NEWSLETTER IS AVAILABLE ONLINE AT
www.scdhec.gov/health/disease/index.htm.

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