



Antimicrobial Stewardship Collaborative of South Carolina

LeeAnne Lynch, MPH

The Antimicrobial Stewardship Collaborative of South Carolina (ASC-SC, pronounced "Ask-SC") is getting started to address the increasing threat of antibiotic resistance. An estimated 20-50% of antibiotics prescribed in US hospitals are unnecessary or administered inappropriately for the type of infection or in duration of treatment.

The CDC estimates more than 2 million people are infected with antibiotic-resistant organisms, resulting in approximately 23,000 deaths annually. Evidence increasingly shows that hospital-based programs aimed at improving the appropriate use of antibiotics can optimize the treatment of infections and reduce antibiotic-associated adverse events.

DHEC encourages pharmacists, health care providers and health care facilities to join the work to coordinate prevention of antimicrobial resistance regionally and throughout South Carolina. The initial focus of ASC-SC will be to provide outreach to target MRSA and Clostridium difficile infections in acute care settings, including nursing homes.

For details about trainings, meetings and assistance ASC-SC can provide to facilities, connect with us on Twitter @ASC_SCarolina or via email asc-sc@dhec.sc.gov.

Visit www.cdc.gov/getsmart/healthcare/ implementation/core-elements.html for more information about the core elements of Antibiotic Stewardship programs.

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South Carolina Infectious Disease and Outbreak Reporting Network (SCION)

Claire Youngblood

At the beginning of June, Carolina's Health Electronic Surveillance System (CHESS) was replaced by South Carolina's Infectious Disease and Outbreak Reporting Network (SCION). This new system will improve our surveillance ability and will expand to fit changing needs.

As part of this change, we have developed a provider portal (SCIONx) to allow health care providers and labs to submit disease reports electronically. To sign up for SCIONx, please visit https://www.scdhec.gov/Apps/Health/SCIAPPS/Account/Login or email the help desk at SCIONHELP@dhec.sc.gov.



School and Childcare Exclusion List of 2017

Students in school or child care, and employees in these settings may be required to be excluded from school activities to prevent the spread of contagious or infectious diseases. The Official School and Child Care Exclusion List of Contagious or Communicable Diseases lists the conditions for exclusion and the criteria for return to a school or child care setting. The current 2017 School and Childcare Exclusion list can be found at www.scdhec.gov/library/CR-011634-A.pdf.

The brochure for parents is available in English and Spanish. The webpage is located at www.scdhec.gov/Health/ChildTeenHealth/SchoolExclusion/.

Please contact the DHEC Division of Acute Disease Epidemiology (803-898-0861) with any questions about the School and Childcare Exclusion Lists.

DHEC Bureau of Laboratories Provides Zika Testing

Christy Greenwood

The DHEC Bureau of Laboratories (BOL) offers Zika virus testing free of charge to individuals meeting the CDC-recommended guidelines for testing. Health care providers that desire testing for patients suspected to have Zika virus infection can contact DHEC for assistance. Refer to the List of Reportable Conditions found on pages 10-11 and also posted on the DHEC website to find contact information for the Regional Epidemiologist in your area who can facilitate testing. All potential Zika virus cases will be evaluated by a Regional Epidemiologist, and if testing is recommended, specimens should be sent to the Virology laboratory at the BOL. The BOL offers the following tests based upon the date of the patient's onset of symptoms or possible exposure:

Zika Testing Information for Symptomatic Persons with an Epidemiologic Risk Factor

Days from Illness Onset	Specimen Type	Testing Available
<14 days	Serum and Urine	Urine - PCR; Serum - PCR and IgM
> 14 days to ≈ 12 weeks	Serum	IgM

Zika Testing Information for Pregnant Women with an Epidemiologic Risk Factor

Weeks from Exposure (Asymptomatic) or Onset (Symptomatic)	Specimen Type	Testing Available
Within 2 weeks	Serum and Urine	PCR*,~
2 to 12 weeks	Serum and Urine ⁺	Serum - IgM; Serum and Urine - reflex PCR if IgM is positive

- * Asymptomatic pregnant women who are tested by PCR within 2 weeks of last exposure and are negative for ZIKV, should have IgM antibody testing done 2 to 12 weeks after exposure.
- ~ Symptomatic pregnant women who are tested by PCR within 2 weeks of illness onset and are negative for ZIKV, should have IgM antibody testing done for ZIKV and Dengue.
- + In pregnant women who present 2 to 12 weeks after exposure or illness onset, collect a urine sample at the same time as the serum sample. If the serum sample is positive by IgM, both the serum and urine samples will reflex to testing by PCR.

ZIKA PREVENTION

Protect yourself and others from Zika

Zika is a disease primarily spread by mosquitoes, but it may also be spread by sexual contact with someone who is infected or from a pregnant woman to her fetus.

Learn more about Zika at cdc.gov/zika.

Zika symptoms

- Most people infected with Zika virus don't know they have it because they have no symptoms. In those with symptoms the illness is usually mild and lasts about a week.
- The most common symptoms are:
 - Red eyes
 - Joint pain
 - Fever
 - Rash

Prevent mosquito bites

Protect yourself from mosquito bites, especially if you live in or are traveling to an area where Zika virus transmission is ongoing.

- Use insect repellent containing DEET, picaridin, IR3535, OLE or PMD. Reapply as directed. Remember, if needed, to apply sunscreen first and then insect repellent.
- Cover exposed skin when possible with light-weight clothing.
- Stay and sleep in screened-in or air-conditioned rooms whenever possible. Use a bed net if sleeping outside or in rooms without screens.
- Find out if your travel destination has ongoing Zika transmission at the CDC Traveler's Health site: cdc.gov/travel.
- Watch for the symptoms listed above for about seven days after traveling to any area where Zika transmission is occurring. If you experience these symptoms seek medical care. You could be infected with Zika or another disease carried by mosquitoes.
- Continue preventive measures for 3 weeks after returning from an area where Zika transmission is occurring to protect your community and prevent infection of mosquitoes locally.

Zika and sex

- Zika can be spread during sex (vaginal, anal or oral).
- Couples that include a man who has been diagnosed with Zika, had symptoms of Zika or traveled to an area with active Zika transmission but did not have symptoms, should correctly and consistently use condoms OR abstain from sex for at least 6 months.
- Couples that include a woman who has been diagnosed with Zika, or had symptoms of Zika, should correctly and consistently use condoms OR abstain from sex for at least 8 weeks.
- Couples that include a woman who traveled to an area with Zika but did not develop symptoms, should consider using condoms OR abstaining from sex for at least 8 weeks after returning.
- Pregnant women with sex partners who have traveled to areas with active Zika virus transmission, who have been diagnosed with Zika or who suspect Zika should use condoms OR abstain from sex for the duration of the pregnancy.

If you suspect Zika

- Call your doctor immediately and tell him or her about your travel history or possible sexual exposure.
- Avoid mosquito bites and use insect repellent and other protective measures as needed.
- Use condoms correctly and consistently when having sex OR abstain from having sex.

If you are planning on traveling, find out if your destination has Zika at the CDC Travelers' Health site: cdc.gov/travel.



Updates to the List of Reportable Conditions for 2017

Tashauna T. Lane

South Carolina Law 44-29-10 and Regulation 61-20 require reporting of conditions on the Official List of Reportable Conditions in the manner prescribed by DHEC. Changes in reporting criteria for 2017 are listed below.

- Abbreviation Key: "(S) Submission of specimen to Bureau of Laboratories only." Individual patient lab reports should not be submitted to DADE.
- Footnote 9: "Carbapenem-resistant Enterobacteriaceae infections from all specimen types for the following species: E. Coli, Enterobacter, and Klebisella."
- Footnote 10: "Appropriate specimen types: A pure, low passage isolate is preferred submitted on a noninhibitory, non-selective agar plate or slant. If available submit one original culture plate."
- Footnote 11: "Specimen source submission to the Bureau of Laboratories is required for Streptococcus pneumoniae, invasive in cases < 5 years of age."

Links for Disease Reporting Information

Reportable Diseases Page on DHEC website

 www.scdhec.gov/Health/FHPF/ ReportDiseasesAdverseEvents/ ReportableConditionsInSC

PDF List of Reportable Conditions

www.scdhec.gov/library/CR-009025.pdf

SC DHEC Disease Reporting Form

www.scdhec.gov/library/D-1129.pdf

Questions?

For questions about Disease Reporting or to discuss electronic disease reporting via DHEC's electronic disease surveillance reporting system, call the DHEC Bureau of Disease Control in Columbia: 803-898-0861 (M-F 8:30 a.m. to 5 p.m.). To learn about DHEC's web-based reporting system, call 800-917-2093 (M-F 8:30 a.m. to 5 p.m.).

Conditions Added

 Carbapenem-resistant Enterobacteriaceae (CRE) has been added to reportable within 3 business days.
 Submission of specimen to Bureau of Laboratories only.

- Carbapenem-resistant Pseudomonas aeruginosa (CRPA) has been added to reportable within 3 business days. Submission of specimen to Bureau of Laboratories only.
- Zika has been added to urgently reportable within 24 hours by phone. Ship specimens immediately and urgently reportables within 1 business day.

Condition Removed

 Clostridium difficile data will be collected by the National Healthcare Safety Network (NHSN), which provides hospital-onset and limited community-onset case classifications. The information collected by the state surveillance system did not provide the ability to distinguish hospital-onset versus community-onset cases.

Updates to Reportable Conditions

- "Campylobacteriosis" specimen submission to the Bureau of Laboratories is required. Ship 3-day reportables within 3 business days.
- "HIV 1 or HIV 2 positive test results (detection and confirmatory tests)" reporting is done by laboratories only.
- "Shiga toxin positive" specimen submission to the Bureau of Laboratories is required. Ship urgently reportables within 1 business day.

Reporting reminders

1. What to report:

For all suspected and confirmed cases, report the following:

- · Patient's name
- Patient's complete address, phone number, county, date of birth, race, sex, last five digits of 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 symptoms
- · Lab results, specimen site, collection date
- If female, pregnancy status
- Patient status: In child care, food-handler, health care worker, child care worker, nursing home, prisoner/detainee, travel in last 4 weeks

2. How to report

This section's layout was updated to clarify where specific conditions should be reported.

HIV, AIDS and STDs (excluding Hepatitis): Do not fax HIV, AIDs or STD results to DHEC

Call 1-800-277-0873;

Submit electronically via DHEC's web-based reporting

system; or Mail to:

Division of Surveillance & Technical Support

Mills/Jarrett Complex

Box 101106, Columbia, SC 29211

LEAD:

Mail to:

Division of Children's Health, Lead Program

Mills/Jarrett Complex

2100 Bull Street, Columbia, SC 29201

Fax: (803) 898-0577

Call (803) 898-0767 to establish electronic reporting

This section's layout was updated to reflect the changes in the telephone numbers for the Upstate. TB must be reported to the public health office in the region in which the patient resides.

Where to Report Tuberculosis						
Lowcountry	Midlands	Pee Dee	Upstate			
Berkeley, Charleston Office: (843) 719-4612 Fax: (843) 719-4778	Chester, Kershaw, Lancaster, Newberry, York Office: (803) 909-7357 Fax: (803) 327-4391	Dillon, Georgetown, Horry, Marion Office: (843) 915-8798 Fax: (843) 915-6504	Cherokee, Spartanburg, Union Office: (864) 596-2227 ext. 108 Fax: (864) 596-3340			
Allendale, Bamberg, Beaufort, Calhoun, Colleton, Dorchester, Hampton, Jasper, Orangeburg Office: (843) 549-1516 ext 117 Fax: (843) 549-6845	Aiken, Barnwell, Edgefield, Fairfield, Lexington, Richland, Saluda Office: (803) 576-2870 Fax: (803) 576-2880	Chesterfield, Clarendon, Darlington, Florence, Lee, Marlboro, Sumter, Williamsburg Office: (843) 673-6693 Fax: (843) 661-4844	Abbeville, Anderson, Greenwood, Laurens, McCormick, Oconee, Pickens Office: (864) 227-5955 Fax: (864) 942-3690			
			Greenville Office: (864) 372-3198 Fax:(864) 282-4294			
-+Nights/Weekends/Holidays: (803) 898-0558 Fax: (803) 898-0685						

This section's layout was updated to reflect the changes in the telephone numbers for the Upstate. All conditions other than HIV, AIDS, STDs, Lead and TB must be reported to the public health office in the region in which the patient resides. Immediately and urgently reportable conditions must be reported by telephone. Conditions that are routinely reportable must be reported via mail, fax or submitted electronically via DHEC's web-based reporting system.

Immediate and Urgent Reporting (TELEPHONE)				3-Day Reporting (MAIL or FAX)
Lowcountry	Midlands	Pee Dee	Upstate	Lowcountry 4050 Bridge View Drive, Suite 600 N. Charleston, SC 29405 Fax: (843) 953-0051
Berkeley, Charleston, Dorchester Phone: (843) 953-0043	Kershaw, Lexington, Newberry, Richland Phone: (803) 576-2749	Chesterfield, Darlington, Dillon, Florence, Marion, Marlboro Phone: (843) 661-4830	Anderson, Oconee Phone: (864) 260-5581	
Beaufort, Colleton, Hampton, Jasper Phone: (843) 322-2453	Chester, Fairfield, Lancaster, York Phone: (803) 286-9948	Clarendon, Lee, Sumter Phone: (803) 773-5511	Abbeville, Greenwood, McCormick Phone: (864) 260-5581	Midlands 2000 Hampton Street Columbia, SC 29204 Fax: (803) 576-2993
Allendale, Bamberg, Calhoun, Orangeburg Phone: (803) 268-5833	Aiken, Barnwell, Edgefield, Saluda Phone: (803) 642-1618	Georgetown, Horry, Williamsburg Phone: (843) 915-8804	Cherokee, Greenville, Laurens, Pickens, Spartanburg, Union Phone: (864) 372-3133	Pee Dee 145 E. Cheves Street Florence, SC 29506 Fax: (843) 661-4859
Nights/Weekends Phone: (843) 441-1091	Nights/Weekends Phone: (888) 801-1046	Nights/Weekends Phone: (843) 915-8845	Nights/Weekends Phone: (866) 298-4442	Upstate 200 University Ridge Greenville, SC 29602 Fax: (864) 282-4373

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South Carolina 2017 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 regional 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 for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512)

- ! Immediately reportable by phone call to a live person at the regional public health office, 24/7
- * Urgently reportable within 24 hours by phone

All other conditions reportable within 3 business days

REPORT UPON RECOGNITION OF A SUSPECTED CASE, DIAGNOSIS, OR POSITIVE LABORATORY EVIDENCE (SEE "HOW TO REPORT" ON BACK)

Suspected means clinical suspicion and/or initial laboratory detection, isolation, identification, or presence of supportive laboratory results.

! Any case that may be caused by chemical, biological, or radiological threat, novel infectious agent, or any cluster of cases, or outbreak of a disease or condition that might pose a substantial risk of human morbidity or mortality (1) (5)

- * Animal (mammal) bites (6)
- 🕅 ! Anthrax (Bacillus anthracis) (5)

Babesiosis (Babesia microti)

- 🔯! Botulism (Clostridium botulinum or Botulinum toxin)
- 🖈 * Brucellosis (Brucella) (5)

Campylobacteriosis (2) (5)

Carbapenem-resistant Enterobacteriaceae (CRE) (S) (5) (9) (10) Carbapenem-resistant *Pseudomonas aeruginosa* (CRPA) (S) (5) (10)

Chancroid (Haemophilus ducreyi)

Chikungunya (5)

Chlamydia trachomatis

* Ciguatera

Creutzfeldt-Jakob Disease (Age < 55 years only)

Cryptosporidiosis (Cryptosporidium)

Cyclosporiasis (Cyclospora)

- Dengue (5)
- * Diphtheria (Corynebacterium diphtheriae) (5)
- * Eastern Equine Encephalitis (EEE) (5)
- * Escherichia coli, Shiga toxin producing (STEC) (5)

Ehrlichiosis / Anaplasmosis (Ehrlichia / Anaplasma phagocytophilum) Giardiasis (Giardia)

Gonorrhea (Neisseria gonorrhoeae) (2)

- * Haemophilus influenzae, all types, invasive disease (H flu) (2) (3) (5)
- * Hantavirus
- * Hemolytic uremic syndrome (HUS), post-diarrheal
- * Hepatitis (acute) A, B, C, D, & E

Hepatitis (chronic) B, C, & D

Hepatitis B surface antigen + with each pregnancy

HIV and AIDS clinical diagnosis

HIV CD4 test results (all results) (L)

HIV subtype, genotype, and phenotype (L)

HIV 1 or HIV 2 positive test results (detection and confirmatory tests) (L)

HIV viral load (all results) (L)

HIV HLA-B5701 and co-receptor assay (L)

! Influenza A, avian or other novel strain

* Influenza associated deaths (all ages)

Influenza

- Lab-confirmed cases (culture, RT-PCR, DFA, IFA) (2)
- Lab-confirmed hospitalizations (7)
- Positive rapid antigen detection tests (7)
- * La Crosse Encephalitis (LACV) (5)

Lead tests, all results - indicate venous or capillary specimen Legionellosis Leprosy (Mycobacterium leprae) (Hansen's Disease)

Leptospirosis

Listeriosis (5)

Lyme disease (Borrelia burgdorferi)

Lymphogranuloma venereum

Malaria (Plasmodium)

- ! Measles (Rubeola)
- Meningococcal disease (Neisseria meningitidis) (2) (3) (4) (5)
- Mumps
- * Pertussis (Bordetella pertussis)
- ! Plague (Yersinia pestis) (5)
 - ! Poliomyelitis
- Psittacosis (Chlamydophila psittaci)
- * Q fever (Coxiella burnetii)
 - ! Rabies (human)

Rabies Post Exposure Prophylaxis (PEP) when administered (6)

* Rubella (includes congenital)

Rocky Mountain Spotted Fever (Rickettsia rickettsii) (Spotted Fever group)

Salmonellosis (2) (5)

Shiga toxin positive (5)

Shigellosis (2) (5)

- ⟨ ! Smallpox (Variola)
 - Staphylococcus aureus, vancomycin-resistant or intermediate (VRSA/VISA) (2) (5)

Streptococcus group A, invasive disease (2) (3)

Streptococcus group B, age < 90 days (2)

Streptococcus pneumoniae, invasive (pneumococcal) (2) (3) (11)

- * St. Louis Encephalitis (SLEV) (5)
- * Syphilis: congenital, primary, or secondary (lesion or rash) or Darkfield positive

Syphilis: early latent, latent, tertiary, or positive serological test Tetanus (Clostridium tetani)

Toxic Shock (specify staphylococcal or streptococcal)

- Trichinellosis (Trichinella spiralis)
- * Tuberculosis (Mycobacterium tuberculosis) (5) (8)
- * Tularemia (Francisella tularensis) (5)
 - * Typhoid fever (Salmonella typhi) (2) (5)
- * Typhus, epidemic (Rickettsia prowazekii) Varicella
 - Vibrio, all types, including Vibrio cholerae O1 and O139 (5)
- ! Viral Hemorrhagic Fevers (Ebola, Lassa, Marburg viruses)
 - * West Nile Virus (5)
 - Yellow Fever

Yersiniosis (Yersinia, not pestis)

Zika (5)

- ♦ Potential agent of bioterrorism
- (L) Only Labs required to report.
- (S) Submission of specimen to Bureau of Laboratories only.
- An outbreak is the occurrence of more cases of disease than normally expected within a specific place or group of people over a given period of time. Clinical specimens may be required.
- 2. Included drug susceptibility profile
- 3. Invasive disease = isolated from normally sterile site. Always specify site of isolate.
- 4. Report Gram-negative diplococcic in blood or CSF.
- Specimen submission to the Bureau of Laboratories is required. Ship immediately and urgently reportables within 1 business day. Ship 3 day reportables within 3 business days. Contact regional epi if assistance is needed.
- Rabies PCP guidance: www.scdhec.gov/environment/envhealth/rabies/rabiespep.htm. Consultation is available from DHEC Regional Public Health Office.

- 7. Report aggregate totals weekly.
- Report all cases of suspect and confirmed tuberculosis (TB). A suspect case of TB
 is a person whom a health care provider believes, after weighing signs, symptoms,
 and/or laboratory evidence, to probably have TB. Centers for Disease Control
 and Prevention case definition of confirmed cases: https://wwwn.cdc.gov/nndss/
 conditions.
- 9. Carbapenem-resistant Enterobacteriaceae infections from all specimen types for the following species: E. Coli, Enterobacter, and Klebsiella.
- Appropriate specimen types: A pure, low passage isolate is preferred submitted on a noninhibitory, non-selective agar plate or slant. If available submit one original culture plate.
- 11. Specimen submission to the Bureau of Laboratories is required for *Streptococcus pneumoniae*, invasive in cases < 5 years of age.

South Carolina 2017 List of Reportable Conditions

http://www.dhec.sc.gov/library/D-1129.pdf

What to Report

- · Patient's name
- Patient's complete address, phone, county, date of birth, race, sex, last five digits of 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 symptoms
- · Lab results, specimen site, collection date
- · If female, pregnancy status
- Patient status: In childcare, food-handler, health care worker, childcare worker, nursing home, prisoner/detainee, travel in last 4 weeks

How to Report-

HIV, AIDS, and STDs (excluding Hepatitis):

Do not fax HIV, AIDs, or STD results to DHEC

- Call 1-800-277-0873;
- Submit electronically via DHEC's web-based reporting system; or
- Mail to: Division of Surveillance & Technical Support Mills/Jarrett Complex Box 101106, Columbia, SC 29211

Lead:

- Mail to: Division of Children's Health, Lead Program Mills/Jarrett Complex
 2100 Bull Street, Columbia, SC 29201; or
- Fax: (803) 898-0577
- Call (803) 898-0767 to establish electronic reporting.

Where to Report Tuberculosis

Report to the public health office (listed below) in the region in which the patient resides.

Lowcountry

Berkeley, Charleston

Office: (843) 719-4612 Fax: (843) 719-4778

Allendale, Bamberg, Beaufort, Calhoun, Colleton, Dorchester, Hampton, Jasper, Orangeburg Office: (843) 549-1516 ext. 117

Fax: (843) 549-6845

<u>Midlands</u>

Chester, Kershaw, Lancaster, Newberry, York

Office: (803) 909-7357 Fax: (803) 327-4391

Aiken, Barnwell, Edgefield, Fairfield, Lexington, Richland, Saluda Office: (803) 576-2870

Fax: (803) 576-2880

Pee Dee

Dillon, Georgetown, Horry, Marion

Office: (843) 915-8798 Fax: (843) 915-6504

Chesterfield, Clarendon, Darlington, Florence, Lee, Marlboro, Sumter, Williamsburg

Office: (843) 673-6693 Fax: (843) 661-4844

Upstate

Cherokee, Spartanburg, Union Office: (864) 596-2227 ext. 108 Fax: (864) 596-3340

Abbeville, Anderson, Greenwood, Laurens, McCormick, Oconee, Pickens

Office: (864) 260-5562 Fax: (864) 260-5564

Greenville

Office: (864) 372-3198 Fax: (864) 282-4294

Where to Report All Other Conditions

Nights/Weekends/Holidays: (803) 898-0558 Fax: (803) 898-0685

Report all other conditions to the public health office (listed below) in the region in which the patient resides.

Immediate and Urgent Reporting (TELEPHONE)

Lowcountry

Berkeley, Charleston, Dorchester

Phone: (843) 953-0043

Beaufort, Colleton, Hampton, Jasper Phone: (843) 322-2453

Allendale, Bamberg, Calhoun, Orangeburg Phone: (803) 268-5833

Nights/Weekends Phone: (843) 441-1091

Midlands

Kershaw, Lexington, Newberry, Richland Phone: (803) 576-2749

Chester, Fairfield, Lancaster, York Phone: (803) 286-9948

Aiken, Barnwell, Edgefield, Saluda Phone: (803) 642-1618

Nights/Weekends Phone: (888) 801-1046

Pee Dee

Chesterfield, Darlington, Dillon, Florence, Marion, Marlboro

Phone: (843) 661-4830

Clarendon, Lee, Sumter Phone: (803) 773-5511

Georgetown, Horry, Williamsburg

Phone: (843) 915-8804

Nights/Weekends Phone: (843) 915-8845

Upstate

Anderson, Oconee Phone: (864) 260-5581

Abbeville, Greenwood, McCormick

Phone: (864) 260-5581

Cherokee, Greenville, Laurens, Pickens, Spartanburg, Union Phone: (864) 372-3133

Nights/Weekends Phone: (866) 298-4442 3-Day Reporting (MAIL or FAX)

Lowcountry

4050 Bridge View Drive, Suite 600 N. Charleston, SC 29405 Fax: (843) 953-0051

<u>Midlands</u>

2000 Hampton Street Columbia, SC 29204 Fax: (803) 576-2993

Pee Dee

145 E. Cheves Street Florence, SC 29506 Fax: (843) 661-4859

Upstate

200 University Ridge Greenville, SC 29602 Fax: (864) 282-4373



DHEC Bureau of Disease Control

Division of Acute Disease Epidemiology • 2100 Bull Street • Columbia, SC 29201 Phone: (803) 898-0861 • Fax: (803) 898-0897 • Nights/Weekends: (888) 847-0902 www.scdhec.gov/Health/FHPF/ReportDiseasesAdverseEvents/ReportableConditionsInSC

To learn about DHEC's web-based reporting system, call 1-800-917-2093.



Chickenpox (Varicella)

Teresa (Tracy) Foo, MD, MPH

Chickenpox (varicella) used to be very common in the United States before the chickenpox vaccine became available in 1995. Vaccination is the best way to prevent chickenpox; two doses of the vaccine are about 90% effective at preventing the disease. The vaccine prevents almost all cases of severe disease; some people who are vaccinated against chickenpox may still get the disease but the symptoms are usually milder with fewer skin lesions. According to CDC, each year, more than 3.5 million cases of varicella, 9,000 hospitalizations and 100 deaths are prevented by varicella vaccination in the United States.

Even with the success of vaccination in the US, chickenpox cases are still seen in both children and adults. To better monitor vaccine impact on morbidity, varicella was included in the list of nationally notifiable diseases. South Carolina health care providers are required to report varicella cases and varicella-related deaths to the county health department where the patient resides within three business days. For more information about reporting conditions in SC, go to www.scdhec.gov/library/CR-009025.pdf.

The Council of State and Territorial Epidemiologists (CSTE) approves cases definitions for surveillance so that conditions, like varicella, that are counted meet consistent clinical and laboratory criteria. The clinical case definition of varicella is an illness with acute onset of diffuse (generalized) maculopapulovesicular rash without other apparent cause. In persons who develop varicella more than 42 days after vaccination (breakthrough disease), the disease is usually mild with fewer than 50 skin lesions and shorter duration of illness. The rash may also be atypical in appearance (maculopapular with few or no vesicles). Laboratory confirmation of illness can be useful for diagnosing breakthrough disease. For both unvaccinated and vaccinated persons, PCR is the most reliable method for confirming varicella infection. However, laboratory confirmation of illness is not required for a diagnosis of varicella, and regardless of the presence of laboratory results, any suspect cases should be reported by health care providers to the health department.

For more information about varicella, go to www.cdc. gov/chickenpox/hcp/index.html.

Acute Flaccid Myelitis

Teresa (Tracy) Foo, MD, MPH

Acute flaccid myelitis (AFM) is a condition that affects the nervous system, specifically the spinal cord, which can result from a variety of causes, including viral infections. It is characterized by a sudden onset of limb weakness, along with loss of muscle tone and decreased or absent reflexes. In addition to limb weakness, individuals may experience facial droop or weakness, difficulty moving the eyes, drooping eyelids or difficulty with swallowing or slurred speech. Several viruses cause AFM, including enteroviruses (polio and non-polio), West Nile virus and viruses in the same family as West Nile virus, specifically Japanese encephalitis virus and Saint Louis encephalitis virus, herpesviruses (such as cytomegalovirus and Epstein-Barr virus) and adenoviruses. AFM is one of a number of conditions that can result in neurologic illness with limb weakness. Many times, despite extensive laboratory testing, a cause for AFM cannot be identified.

From August 2014 to July 2015, CDC verified reports of 120 children in 34 states who developed AFM that met the CDC outbreak case definition (onset of acute limb weakness on or after August 1, 2014, and a MRI showing a spinal cord lesion largely restricted to gray matter in a patient age <21 years). The apparent increase in cases of AFM in 2014 coincided with a national outbreak of severe respiratory illness among children caused by enterovirus D68 (EV-D68). However, despite the close temporal association, a cause for the 2014 AFM cases was not determined.

In June 2015, the Council of State and Territorial Epidemiologists (CSTE) adopted a standardized case definition for acute flaccid myelitis. To be considered a confirmed case, a patient must meet the following criteria: 1. Acute onset of focal limb weakness, and 2. An MRI showing a spinal cord lesion largely restricted to gray matter and spanning one or more spinal segments. To be considered a probable case, a patient must meet the following criteria: 1. Acute onset of focal limb weakness, and 2. Cerebrospinal fluid (CSF) with pleocytosis (white blood cell count >5 cells/mm3, adjusting for presence of red blood cells by subtracting 1 white blood cell for every 500 red blood cells present).

Clinicians should collect specimens from patients suspected of having AFM as early as possible in the course of illness, preferably on the day of onset of limb weakness, including:

- cerebrospinal fluid (CSF),
- blood (serum and whole blood),
- a nasopharyngeal aspirate, nasopharyngeal wash, or nasopharyngeal swab with lower respiratory specimen if indicated, and an oropharyngeal swab, and
- stool, preferably two stool specimens collected as soon after onset of limb weakness and separated by 24 hours.

Clinicians treating patients meeting the AFM case definition should consult with their regional public health office for assistance obtaining laboratory testing of CSF, blood, serum, respiratory and stool specimens for enteroviruses, West Nile virus and other known infectious etiologies. Specimens submitted to the DHEC Bureau of Laboratories can be forwarded to CDC for EV-D68 testing, if needed.

Twenty-one confirmed cases of AFM were reported to CDC from January 1 through June 30, 2016, among persons 6 months to 64 years of age (median age 7 years). During the same time period in 2015, only five confirmed cases were reported. CDC is urging all public health officials and clinicians to continue to be vigilant for AFM and report all patients with sudden onset of neurologic illness associated with limb weakness that meet the case definition for acute flaccid myelitis. CDC is also requesting prompt specimen collection for suspect AFM cases. Clinicians should report patients who meet the case definition for AFM regardless of any laboratory results. Since August of 2016 five cases of AFM have been reported to DHEC. In South Carolina, clinicians should report suspect cases to the regional public health office where the patient resides.

For more information, go to: www.cdc.gov/acute-flaccid-myelitis/index.html

Reference:

Acute Flaccid Myelitis. Atlanta (GA): Centers for Disease Control and Prevention. http://www.cdc.gov/acute-flaccid-myelitis/index.html. Updated August 10, 2016. Accessed August 18, 2016.



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