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This is an official DHEC Health Advisory

Pertussis Investigation in Florence County

Background Information

Recently, an outbreak of pertussis (whooping cough) has been detected in Florence County. From May 14th through June 2nd, 2009, 14 cases have been confirmed either through Real Time Polymerase Chain Reaction (RT-PCR) testing, or by clinical diagnosis with epidemiologic links to laboratory confirmed cases.

Transmission and Clinical Presentation of Pertussis

Pertussis is a highly transmissible respiratory disease caused by the gram-negative bacteria, *Bordatella pertussis*. Transmission occurs via direct contact with large droplet discharges from the respiratory mucous membranes of infected individuals. Clinical diagnosis of pertussis requires at least two of the following symptoms having duration of at least 2 weeks:

- Paroxysms of coughing
- Inspiratory "whoop"
- Post-tussive vomiting
- Difficulty breathing or feeling light-headed after coughing, and worsening cough at night

Appropriate testing for symptomatic patients

Pertussis can be confirmed with either culture isolation or RT-PCR testing. The CDC recommends that culture be performed when requesting RT-PCR testing. Because laboratory capacity is limited, it is imperative that culture and RT-PCR testing be limited to only individuals with clinical symptoms of pertussis.

DHEC Bureau of Laboratories will test some individuals either determined to be related to this outbreak, or one year of age or younger, to ensure appropriate outbreak-related associations have been made among cases. The DHEC lab may not test all outbreak-related and non-associated specimens; however it may still be appropriate to send specimens to your usual reference lab to assist with clinical management of cases.

Physicians are requested to call Fran Hall, RN, or another member of the Florence County Health Department epidemiology staff, at (843) 661-4830 to report a suspect case of pertussis. The epidemiology staff will then determine if this suspect case can be tested by the DHEC Bureau of Laboratories.

Treatment and Post-exposure Prophylaxis Guidelines

CDC recommended antibiotic therapy guidelines for pertussis cases are found in *Recommended Antimicrobial Agents for the Treatment and Postexposure Prophylaxis of Pertussis*, Morbidity and Mortality Reports (MMWR): December 9, 2005 / 54(RR14);1-16. This MMWR may be accessed electronically at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5414a1.htm>.

Because pertussis is highly transmissible, post-exposure prophylaxis (PEP) is recommended for all household and other close contacts, who have had face-to-face exposure within 3 feet of pertussis cases.

See the table below for a chart of treatment and PEP guidelines. Information in the table is provided by The Red Book, 27th ed, American Academy of Pediatrics, 2006, p.501.

Recommended Antimicrobial Therapy and Postexposure Prophylaxis for Pertussis in Infants, Children, Adolescents, and Adults				
	Recommended Drugs			Alternative
Age	Azithromycin	Erythromycin	Clarithromycin	TMP-SMX
< 1 month	10 mg/kg per day as a single dose for 5 days ¹	40-50 mg/kg per day in 4 divided doses for 14 days	Not recommended	Contraindicated at < 2 months of age
1 – 5 months	See above	See above	15 mg/kg per day in 2 divided doses for 7 days	>= 2 months of age; TMP, 8 mg/kg per day; SMX, 40 mg/kg per day in 2 doses for 14 days
>= 6 months and children	10 mg/kg as a single dose on day 1 (maximum 500 mg); then 5 mg/kg per day as a single dose on days 2-5 (maximum 250 mg/day)	See above (maximum 2 g/day)	See above (maximum 1 g/day)	See above
Adolescents and adults	500 mg as a single dose on day 1, then 250 mg as a single dose on days 2-5	2 g/day in 4 divided doses for 14 days	1 g/day in 2 divided doses for 7 days	TMP, 300 mg/day; SMX, 1600 mg/day in 2 divided doses for 14 days

Footnotes:

TMP indicates trimethoprim; SMX, sulfamethoxazole

¹ Preferred macrolide for this age because of risk of idiopathic hypertrophic pyloric stenosis associated with erythromycin.

Information about Pertussis

Additional information regarding pertussis can be found at the following CDC websites:

- Current CDC case definition for pertussis:
 - www.cdc.gov/ncphi/diss/nndss/casedef/pertussis_current.htm
- General information about pertussis:
 - www.cdc.gov/ncidod/diseases/submenus/sub_pertussis.htm
- Information related to pertussis surveillance and trend data:
 - www.cdc.gov/vaccines/pubs/pinkbook/downloads/pert.pdf

DHEC Contact Information for Reportable Diseases and Reporting Requirements

All cases or probable cases of pertussis are urgently reportable by phone within 24 hours of identification to the local county/regional health department. The local health department will

provide assistance in the identification of close contacts and the proper laboratory diagnosis, treatment and prophylaxis of pertussis.

Reporting of cases or probable cases of pertussis 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 2004 List of Reportable Conditions available at: http://www.scdhec.gov/health/disease/docs/reportable_conditions.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 – 2009

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

736 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
51 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

Chester, Lancaster, York

PO Box 817
833 Pageland Highway
Lancaster, SC 29721
Phone: (803) 286-9948
Fax: (803) 286-5418
Nights / Weekends: 1-866-867-3886

Region 3 (continued)

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 4

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

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

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) 746-3860
Fax: (843) 746-3851
Nights / Weekends: (843) 219-8470

Region 8

Beaufort, Colleton, Hampton, Jasper

219 S. Lemacks Street
Walterboro, SC 29488
Phone: (843) 549-1516, x-214
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



www.scdhec.gov

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.