



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

group A *Streptococcus*, 2007

ABCs Areas

California (3 county San Francisco Bay area); Colorado (5 county Denver area); Connecticut; Georgia (20 county Atlanta area); Maryland (6 county Baltimore area); Minnesota; New Mexico; New York (15 county Rochester and Albany areas); Oregon (3 county Portland area); Tennessee (11 urban counties)

ABCs Population

The surveillance areas represent 30,848,368 persons.
Source: National Center for Health Statistics bridged-race vintage 2007 postcensal file

ABCs Case Definition

Invasive group A streptococcal disease: isolation of group A *Streptococcus* from a normally sterile site or from a wound culture accompanied by purulent discharge, fasciitis, or streptococcal toxic shock syndrome in a resident of a surveillance area in 2007.

ABCs Methodology

ABCs personnel routinely contacted all microbiology laboratories serving acute care hospitals in their area to identify cases. Standardized case report forms that include information on demographic characteristics, clinical syndrome, and outcome of illness were completed for each identified case. Strains were *emm*-typed at CDC. Regular laboratory audits assessed completeness of active surveillance and detected additional cases.

All rates of invasive group A streptococcal disease were calculated using population estimates for 2007. For national estimates of cases, race- and age-specific rates of disease were applied from the aggregate surveillance area to the age and racial distribution of the 2007 U.S. population. Cases with unknown race were distributed by site based on reported race distribution for known cases within the eight age categories.

Reported ABCs Profiles

Race	No.	(Rate [*])
White	840	(3.5)
Black	221	(4.7)
Other	105	(4.7)

Unknown race (n=242) distributed amongst known

* Cases per 100,000 population for ABCs areas

Ethnicity	No.	(Rate [*])
Hispanic	128	(3.5)
Non-Hispanic	445	-----
Unknown	593	-----

* Cases per 100,000 population for ABCs areas

Citation

Centers for Disease Control and Prevention. 2008. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Group A *Streptococcus*, 2007. Available via the Internet: <http://www.cdc.gov/abcs/reports-findings/survreports/gas07.pdf>

Age (years)	Cases		Deaths	
	No.	(Rate [*])	No.	(Rate [*])
< 1	28	(6.44)	1	(0.23)
1	17	(3.96)	0	(0.00)
2-4	34	(2.70)	1	(0.08)
5-17	67	(1.24)	2	(0.04)
18-34	133	(1.89)	6	(0.09)
35-49	267	(3.73)	26	(0.36)
50-64	275	(4.89)	32	(0.57)
≥ 65	345	(9.87)	68	(1.95)
Total	1,166	(3.78)	136	(0.44)

* Cases or deaths per 100,000 population for ABCs areas

ABCs Area [*]	Most common <i>emm</i> types [†]	% of area isolates
California	1, 83, 4, 12, 59, 22, 90	62.7
Colorado	1, 12, 28, 76, 5, 89, 4, 11, 118	74.2
Georgia	1, 12, 28, 3	56.1
Maryland	1, 28, 83, 3, 12, 2, 87, 89	71.3
Minnesota	1, 28, 12, 4	64.2
New Mexico	76, 1, 12, 83, 11, 75, 118, 89	78.3
New York	1, 12, 2, 28, 89	76.6
Oregon	1, 28, 75, 2, 12	79.4
Tennessee	1, 12, 89, 28, 3, 4	85.7
Total	1, 12, 28, 89, 76, 3, 4, 83	66.8

* Connecticut contributed cases but no isolates; typing is pending for California, Maryland, New Mexico.

† Requires a minimum of 3 or more isolates and ≥ 5% of isolates typed

Syndrome	No.	(%)
Cellulitis	388	(33.3)
Necrotizing fasciitis	73	(6.3)
Pneumonia	142	(12.2)
Primary bacteremia	384	(32.9)
Streptococcal toxic shock	62	(5.3)

Note: Some cases had more than one syndrome.

Potentially preventable invasive group A streptococcal disease

During 2007, 4 cases (ages 10 months and 37, 49, and 54 years) of invasive group A streptococcal disease were detected in patients with varicella.

National Estimates of Invasive Disease

Cases: 11,400 (3.78/100,000)

Deaths: 1,350 (0.45/100,000)

For more information, visit our web site:

<http://www.cdc.gov/abcs>