



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

group A streptococcus, 2003 – preliminary



ABCs Areas

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

ABCs Population

The surveillance areas represent 31,517,562 persons.
Source: National Center for Health Statistics bridged-race vintage 2002 postcensal file

ABCs Case Definition

Invasive group A streptococcal disease: isolation of group A streptococcus (*S. pyogenes*) from a normally sterile site or from a wound culture accompanied by necrotizing fasciitis or streptococcal toxic shock syndrome in a resident of a surveillance area in 2003.

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 2002. For national projections of cases, race- and age-specific rates of disease were applied from the aggregate surveillance area to the age and racial distribution of the 2002 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	889 (3.6)
Black	273 (5.1)
Other	34 (1.9)

Unknown race (n=248) distributed among knowns.

*Cases per 100,000 population for ABCs areas.

Ethnicity	No. (Rate*)
Hispanic	76 (3.1)
Non-Hispanic	531 ----
Unknown	590 ----

*Cases per 100,000 population for ABCs areas.

Age (years)	Cases	Deaths
	No. (Rate*)	No. (Rate*)
<1	24 (5.4)	0 (0.0)
1	12 (2.7)	3 (0.7)
2-4	43 (3.4)	2 (0.2)
5-17	91 (1.6)	6 (0.1)
18-34	147 (1.9)	5 (0.1)
35-49	267 (3.5)	27 (0.4)
50-64	243 (4.9)	50 (1.0)
≥65	369 (10.5)	84 (2.4)
Total	1,196 (3.8)	177 (0.6)

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

ABCs Area	Most common <i>emm</i> types*	% of area isolates
	Types	
California	49, 1, 12, 3	50.8
Colorado	1, 12, 11, 82, 89, 3, 28	74.4
Connecticut	1, 3, 89, 12, 28, 6	70.5
Georgia	1, 12, 6, 75, 18, 28	71.4
Maryland	1, 27G, 3, 22, 12	61.5
Minnesota	1, 28, 3, 12, 89	75.8
New York	1, 28, 89, 3, 12	69.5
Oregon	92, 1, 4, 3, 2, 12, 22, 94	83.6
Tennessee	3, 1, 44/61, 6, 12, 28, 114	75.1
Total	1, 3, 12, 28, 89	56.5

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

Syndrome	No. (%)
Cellulitis	387 (32.3)
Necrotizing fasciitis	82 (6.9)
Pneumonia	202 (16.9)
Primary bacteremia	315 (26.3)
Streptococcal toxic shock	77 (6.4)

Note: Some cases had more than one syndrome.

Potentially preventable invasive group A streptococcal disease: During 2003, 4 cases (ages 6 months, and 27, 31, and 45 years) of invasive GAS disease were detected in patients with varicella.

National Projection of Invasive Disease:

Cases: 11,000 (3.8/100,000)

Deaths: 1,700 (0.6/100,000)

For more information, visit our web site

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

Centers for Disease Control and Prevention. 2004. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Group A Streptococcus, 2003 – *provisional*. Available via the Internet: <http://www.cdc.gov/ncidod/dbmd/abcs/survreports/gas03.pdf>