



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

group A streptococcus, 2002



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 2002.

ABCs Methodology

Project personnel communicated at least monthly with contacts in 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 typed by the *emm* system at CDC. Regular laboratory audits assess completeness of active surveillance and detect 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	735 (3.0)
Black	208 (3.9)
Other	43 (2.4)

Unknown race (n=146) distributed among knowns.

*Cases per 100,000 population for ABCs areas.

Ethnicity	No. (Rate*)
Hispanic	68 (2.8)
Non-Hispanic	426 ----
Unknown	493 ----

*Cases per 100,000 population for ABCs areas.

Age (years)	Cases	Deaths
	No. (Rate*)	No. (Rate*)
<1	31 (6.9)	1 (0.2)
1	16 (3.6)	1 (0.2)
2-4	34 (2.7)	3 (0.2)
5-17	74 (1.3)	1 (0.02)
18-34	120 (1.6)	6 (0.1)
35-49	202 (2.7)	22 (0.3)
50-64	198 (4.0)	28 (0.6)
≥65	311 (8.9)	80 (2.3)
Total	986 (3.1)	142 (0.5)

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

ABCs Area	Most common <i>emm</i> types*	% of area isolates
	Types	
California	1, 49, 12, 28, 4, 3, 92	63.6
Colorado	1, 82, 28, 12, 114, 89	71.3
Connecticut	1, 3, 12, 89, 28, 5	79.1
Georgia	1, 6, 75, 12, 3, 28	72.5
Maryland	1, 28, 89, 73, 77	59.5
Minnesota	1, 28, 12, 3, 2, 5, 89	83.3
New York	1, 28, 89, 12	56.0
Oregon	1, 12, 28, 3, 4	70.7
Tennessee	1, 12, 28, 73, 3, 114, 43	70.7
Total	1, 28, 12, 3, 89	58.5

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

Syndrome	No. (%)
Cellulitis	359 (36.4)
Necrotizing fasciitis	60 (6.1)
Pneumonia	145 (14.7)
Primary bacteremia	275 (27.9)
Streptococcal toxic shock	59 (6.0)

Note: Some cases had more than one syndrome.

Potentially preventable invasive group A streptococcal disease: During 2002, 9 cases (ages 8 months, and 1, 4, 45, 53, 55, 56, 67, and 91 years) of invasive GAS disease were detected in patients with varicella.

National Projection of Invasive Disease:

Cases: 9,100 (3.2/100,000)

Deaths: 1,350 (0.5/100,000)

For more information, visit our web site

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

Centers for Disease Control and Prevention. 2003. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Group A Streptococcus, 2002. Available via the Internet: <http://www.cdc.gov/ncidod/dbmd/abcs/gas02.pdf>