



# Active Bacterial Core Surveillance (ABCs) Report

## Emerging Infections Program Network

### group A streptococcus, 2003



#### 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 31,777,914 persons.  
Source: National Center for Health Statistics bridged-race vintage 2003 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 2003. 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 2003 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	928 (3.8)
Black	261 (4.8)
Other	33 (1.8)

Unknown race (n=167) distributed among knowns

\* Cases per 100,000 population for ABCs areas

Ethnicity	No. (Rate*)
Hispanic	82 (3.3)
Non-Hispanic	542 -----
Unknown	598 -----

\*Cases per 100,000 population for ABCs areas

#### Citation

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Age (years)	Cases	Deaths
	No. (Rate*)	No. (Rate*)
< 1	23 (5.2)	0 (0.0)
1	12 (2.7)	3 (0.68)
2-4	44 (3.4)	3 (0.23)
5-17	92 (1.6)	6 (0.10)
18-34	149 (1.9)	5 (0.07)
35-49	275 (3.6)	27 (0.36)
50-64	248 (4.8)	55 (1.1)
≥ 65	379 (10.7)	90 (2.5)
Total	1,222 (3.8)	189 (0.59)

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

ABCs Area	Most common emm types*	% of area isolates
California	49, 1, 12, 3	51.2
Colorado	1, 12, 11, 3, 82, 89	69.8
Connecticut	1, 3, 89, 12, 28, 6	70.5
Georgia	1, 12, 6, 75, 18, 28	70.3
Maryland	1, 27G, 3, 22, 12, 6	65.0
Minnesota	1, 28, 3, 12, 89	75.5
New York	1, 28, 89, 3, 12	69.4
Oregon	92, 1, 4, 3, 2, 12, 22, 94	83.6
Tennessee	3, 1, 44/61, 6, 12, 28, 114	75.7
Total	1, 3, 12, 28, 89	56.6

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

Syndrome	No. (%)
Cellulitis	394 (32.2)
Necrotizing fasciitis	87 (7.1)
Pneumonia	211 (17.3)
Primary bacteremia	331 (27.1)
Streptococcal toxic shock	80 (6.5)

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: 11,275 (3.9/100,000)  
Deaths: 1,800 (0.62/100,000)

#### For more information, visit our web site:

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