



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

group A streptococcus, 2000



ABCs Areas

California (3 county San Francisco Bay area); Connecticut; Georgia; Maryland (6 county Baltimore area); Minnesota; New York (7 county Rochester and 8 county Albany area); Oregon (3 county Portland area); Tennessee (11 urban counties)

ABCs Population

The surveillance areas represent 28,565,842 persons.
Source: U.S. Bureau of the Census, 2000

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 necrotizing fasciitis or streptococcal toxic shock syndrome in a resident of a surveillance area in 2000.

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 U.S. Bureau of the Census population estimates for 2000. 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 2000 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	601 (2.9)
Black	256 (5.3)
Other	59 (2.1)
Unknown race (n=109) distributed among knowns.	

*Cases per 100,000 population for ABCs areas.

Ethnicity	No. (Rate*)
Hispanic	42 (2.4)
Non-Hispanic	413 ----
Unknown	461 ----

*Cases per 100,000 population for ABCs areas.

Age (years)	Cases	Deaths
	No. (Rate*)	No. (Rate*)
<1	20 (5.2)	1 (0.3)
1	23 (6.0)	0 (0.0)
2-4	20 (1.7)	0 (0.0)
5-17	82 (1.5)	5 (0.1)
18-34	123 (1.8)	4 (0.1)
35-49	223 (3.2)	18 (0.3)
50-64	149 (3.5)	20 (0.5)
≥65	276 (8.5)	59 (1.8)
Total	916 (3.2)	107 (0.4)

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

Most Common *emm* types*

ABCs Area	Types	% of area isolates
California	1, 12, 41, 114, 2, 3, 11, 31	56.8
Connecticut	1, 28, 3, 89, 12, 22	67.9
Georgia	1, 3, 12, 75, 22, 77, 73, 28	77.7
Maryland	82, 1, 28, 73, 89	60.5
Minnesota	1, 3, 28, 12	59.0
New York	1, 3, 4, 12, 28, 89, 83	70.1
Oregon	114, 1, 11, 3	63.3
Tennessee	1, 12	48.6
Total	1, 3, 12, 28, 82	50.4

*Requires a minimum of 4 isolates and ≥5% of isolates typed

Syndrome	No. (%)
Cellulitis	305 (33.3)
Necrotizing fasciitis	55 (6.0)
Pneumonia	128 (14.0)
Primary bacteremia	323 (35.3)
Streptococcal Toxic Shock	37 (4.0)

Note: Some cases had more than one syndrome.

Potentially preventable invasive group A streptococcal disease:

During 2000, 16 cases (ages 4, 8, 10 and 11 months, and 1, 4, 5, 6, 7, 9, 11, 12, 27, and 33 years) of invasive GAS disease were detected in patients with varicella.

National Projection of Invasive Disease:

Cases: 8,800 (3.1/100,000)
Deaths: 1,000 (0.4/100,000)

For more information, visit our web site at:

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