



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

Group A *Streptococcus*, 2008

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 31,143,540 persons.
Source: National Center for Health Statistics bridged-race vintage 2008 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 necrotizing fasciitis or streptococcal toxic shock syndrome in a resident of a surveillance area in 2008.

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 2008. 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 2008 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	866	(3.6)
Black	256	(5.3)
Other	83	(3.6)

Unknown race (n=239) distributed amongst known

* Cases per 100,000 population for ABCs areas

Ethnicity	No.	(Rate [*])
Hispanic	113	(3.0)
Non-Hispanic	525	-----
Unknown	567	-----

* Cases per 100,000 population for ABCs areas

Citation

Centers for Disease Control and Prevention. 2009. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Group A *Streptococcus*, 2008.

Available via the Internet:

<http://www.cdc.gov/abcs/reports-findings/survreports/gas08.pdf>

Age (years)	Cases		Deaths	
	No.	(Rate [*])	No.	(Rate [*])
< 1	28	(6.4)	0	(0.00)
1	23	(5.3)	1	(0.23)
2-4	31	(2.4)	2	(0.16)
5-17	80	(1.5)	4	(0.07)
18-34	140	(2.0)	6	(0.08)
35-49	268	(3.8)	27	(0.38)
50-64	306	(5.3)	51	(0.88)
≥ 65	329	(9.2)	67	(1.86)
Total	1,205	(3.9)	158	(0.51)

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

ABCs Area [*]	Most common <i>emm</i> types [†]	% of area isolates
California	1, 12, 28, 83, 59, 75, 76, 87	62.9
Colorado	1, 118, 28, 12, 89, 11	63.2
Georgia	12, 1, 28, 89, 2	69.7
Maryland	1, 83, 12, 89, 3, 28, 60	68.4
Minnesota	1, 118, 12, 28, 3	73.3
New Mexico	1, 76, 12, 83, 3, 22, 28	73.8
New York	1, 89, 28, 73, 2, 3, 12	82.4
Oregon	1, 3, 12, 28, 82, 89	76.8
Tennessee	1, 89, 12, 3, 28, 5	77.3
Total	1, 12, 28, 89, 3, 118	64.0

* Connecticut contributed cases but no isolates.

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

Syndrome	No.	(%)
Cellulitis	379	(31.5)
Necrotizing fasciitis	80	(6.6)
Pneumonia	205	(17.0)
Primary bacteremia	361	(30.0)
Streptococcal toxic shock	62	(5.2)

Note: Some cases had more than one syndrome.

Potentially preventable invasive group A streptococcal disease

During 2008, 2 cases (aged 41 and 79 years) of invasive GAS disease and 1 death (aged 41 years) were detected in patients with varicella.

National Estimates of Invasive Disease

Cases: 12,000 (3.9/100,000)

Deaths: 1,600 (0.5/100,000)

For more information, visit our web site:

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