Active Bacterial Core Surveillance (ABCs) Report
Emerging Infections Program Network
Group A *Streptococcus*, 2012

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 (20 urban counties)

ABCs Population

The surveillance areas represent 32,777,740 persons. Source: National Center for Health Statistics bridged-race vintage 2012 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 2012.

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 2012. 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 2012 U.S. population. Cases with missing data, excluding ethnicity, were multiply imputed using the sequential regression imputation method.[¶]

Reported ABCs Profiles

Race	No.	(Rate[*])
White	798	(3.2)
Black	207	(3.9)
Other	112	(4.0)

[*] Cases per 100,000 population for ABCs areas

Ethnicity	No.	(Rate[*])
Hispanic	117	(2.7)
Non-Hispanic	667	------
Unknown	333	------

[*] Cases per 100,000 population for ABCs areas

¶ Surveillance Note

Missing race (n=150) data were multiply imputed using sequential regression imputation methods.

Age (years)	Cases No.	(Rate[*])	Deaths No.	(Rate[*])
< 1	22	(5.4)	2	(0.49)
1	13	(3.2)	0	(0.00)
2-4	27	(2.2)	0	(0.00)
5-17	42	(0.8)	2	(0.04)
18-34	157	(2.0)	3	(0.04)
35-49	230	(3.4)	14	(0.21)
50-64	290	(4.5)	36	(0.56)
≥ 65	336	(8.1)	59	(1.42)
Total	1,117	(3.4)	116	(0.35)

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

ABCs Area[*]	Most common *emm* types[†]	% of area isolates
California	1, 92, 82, 89, 12, 28, 87	70.2
Colorado	1, 12, 28, 2, 118, 11, 89, 6	78.6
Georgia	89, 1, 4, 77, 11, 12, 28	71.0
Maryland	1, 89, 77, 28 12, 3, 87	65.4
Minnesota	59, 1, 28, 4, 89, 12, 2	74.1
New Mexico	89, 82, 12, 118, 87, 1, 28, 6, 75	77.3
New York	89, 12, 118, 28, 1, 77, 75	73.3
Oregon	92, 89, 1, 59, 3	75.5
Tennessee	89, 1, 12, 3, 118, 87, 4	77.5
Total	1, 89, 12, 28, 118, 59	54.7

[*] Connecticut contributed cases but no isolates.

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

Syndrome	No.	(%)
Cellulitis	447	(40.0)
Necrotizing fasciitis	75	(6.7)
Pneumonia	157	(14.1)
Primary bacteremia	257	(23.0)
Streptococcal toxic shock	40	(3.6)

Note: Some cases had more than one syndrome.

Potentially preventable invasive group A streptococcal disease

During 2012, 1 case (age 70 years) of invasive GAS disease was detected in patients with varicella.

National Estimates of Invasive Disease

Cases: 10,700 (3.4/100,000)
Deaths: 1,100 (0.35/100,000)

Citation