



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

group A streptococcus, 2005

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 30,056,841 persons.
Source: National Center for Health Statistics bridged-race vintage 2005 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 2005.

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 2005. 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 2005 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 | 804 (3.4) |
| Black | 198 (4.4) |
| Other | 75 (3.5) |

Unknown race (n=195) distributed amongst known

* Cases per 100,000 population for ABCs areas

| Ethnicity | No. (Rate *) |
|--------------|--------------|
| Hispanic | 113 (3.4) |
| Non-Hispanic | 432 ----- |
| Unknown | 532 ----- |

* Cases per 100,000 population for ABCs areas

Citation

Centers for Disease Control and Prevention. 2006. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Group A Streptococcus, 2005. Available via the Internet: <http://www.cdc.gov/abcs/reports-findings/survreports/gas05.pdf>

| Age (years) | Cases | Deaths |
|-------------|--------------|--------------|
| | No. (Rate *) | No. (Rate *) |
| < 1 | 24 (5.8) | 3 (0.73) |
| 1 | 21 (5.1) | 1 (0.24) |
| 2-4 | 34 (2.8) | 1 (0.08) |
| 5-17 | 77 (1.4) | 2 (0.04) |
| 18-34 | 149 (2.1) | 10 (0.14) |
| 35-49 | 238 (3.4) | 20 (0.28) |
| 50-64 | 234 (4.5) | 41 (0.79) |
| ≥ 65 | 300 (8.9) | 70 (2.1) |
| Total | 1,077 (3.6) | 148 (0.49) |

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

| ABCs Area * | Most common emmtypes† | % of area isolates |
|-------------|-------------------------|--------------------|
| California | 49, 1, 12, 83, 22 | 56.6 |
| Colorado | 101, 1, 3, 28, 5, 89 | 64.9 |
| Georgia | 1, 3, 4, 28, 75, 12, 73 | 68.4 |
| Maryland | 1, 3, 12, 4, 28 | 51.1 |
| Minnesota | 28, 1, 12, 89, 4, 3, 92 | 72.7 |
| New Mexico | 1, 3, 12, 28, 68, 73 | 63.8 |
| New York | 1, 3, 6, 12, 11, 5 | 71.4 |
| Oregon | 1, 28, 89, 83, 3, 4, 12 | 79.6 |
| Tennessee | 1, 28, 44, 58, 3, 4, 12 | 73.9 |
| Total | 1, 3, 28, 12, 4 | 48.4 |

* Connecticut contributed cases but no isolates.

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

| Syndrome | No. (%) |
|---------------------------|------------|
| Cellulitis | 345 (32.0) |
| Necrotizing fasciitis | 77 (7.1) |
| Pneumonia | 178 (16.5) |
| Primary bacteremia | 303 (28.1) |
| Streptococcal toxic shock | 50 (4.6) |

Note: Some cases had more than one syndrome.

Potentially preventable invasive group A streptococcal disease

During 2005, 4 cases (ages 10, 18, and 31 months and 73 years) of invasive GAS disease were detected in patients with varicella.

National Estimates of Invasive Disease

Cases: 10,700 (3.6/100,000)
Deaths: 1,500 (0.51/100,000)

For more information, visit our web site:

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