



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

Streptococcus pneumoniae, 2003



ABCs Areas

California (San Francisco County and children < 5 years in Alameda and Contra Costa counties); Colorado (5 county Denver area); Connecticut; Georgia (20 county Atlanta area); 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 25,264,246 persons.
Source: National Center for Health Statistics bridged-race vintage 2003 postcensal file

ABCs Case Definition

Invasive pneumococcal disease: isolation of *Streptococcus pneumoniae* from normally sterile site in 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. Pneumococcal isolates were collected and sent to reference laboratories for susceptibility testing using NCCLS methods and serotyping. Regular laboratory audits assessed completeness of active surveillance and detected additional cases.

Rates of invasive pneumococcal disease were calculated using population estimates for 2003. For national projections, 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 area based on reported race distribution for known cases within the eight age categories.

Reported ABCs Profiles

Race	No. (Rate*)
White	2,409 (12.0)
Black	1,034 (26.5)
Other	86 (6.6)

Unknown race (n=459) distributed among knowns

* Cases per 100,000 population for ABCs areas

Citation

Centers for Disease Control and Prevention. 2004. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, *Streptococcus pneumoniae*, 2003. Available via the Internet:

<http://www.cdc.gov/abcs/reports-findings/survreports/spneu03.pdf>

Age (years)	Cases	Deaths
	No. (Rate*)	No. (Rate*)
< 1	155 (41.3)	4 (1.1)
1	134 (35.7)	2 (0.53)
2-4	144 (13.1)	2 (0.18)
5-17	133 (3.0)	2 (0.04)
18-34	250 (4.2)	14 (0.23)
35-49	793 (13.1)	72 (1.2)
50-64	744 (18.3)	102 (2.5)
≥ 65	1,176 (42.2)	255 (9.1)
Total	3,529 (14.0)	453 (1.8)

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

Syndrome	No. (%)
Meningitis	233 (6.6)
Bacteremia without focus	767 (21.7)
Pneumonia with bacteremia	2,397 (67.9)

Antibiotic Susceptibility	S* %	I† %	R‡ %
Penicillin	80.0	10.2	9.8
Cefotaxime	96.8	2.3	0.8
Erythromycin	82.6	0.1	17.3
TMP/Sulfa	76.7	6.3	17.0
Tetracycline	94.1	0.2	5.7
Levofloxacin	99.6	0.1	0.3
Vancomycin	100.0	0.0	0.0

Based on reference lab testing of 3,215 isolates

* Susceptible; † Intermediate; ‡ Resistant based on year 2003 NCCLS definitions

National Projections of Invasive Disease

Cases: 40,400 (13.9/100,000)

Deaths: 5,450 (1.9/100,000)

Healthy People 2010 Update

Objective: Decrease the incidence of invasive pneumococcal infections to 46 per 100,000 persons less than 5 years of age and to 42 per 100,000 persons aged 65 and older.

Age (year)	2010 Objective	2003 Rate*
< 5	46/100,000	22.8/100,000
≥ 65	42/100,000	42.1/100,000

* Cases per 100,000 U.S. population

For more information, visit our web site:

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