

Active Bacterial Core Surveillance (ABCs) Report Emerging Infections Program Network Streptococcus pneumoniae, 2002



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 (7 county Rochester area and 8 county Albany area); Oregon (3 county Portland area); Tennessee (11 urban counties)

ABCs Population

The surveillance areas represent 25,051,246 persons. Source: National Center for Health Statistics bridged-race vintage 2002 postcensal file

ABCs Case Definition

Invasive pneumococcal disease: isolation of *Streptococcus pneumoniae* from normally sterile site in resident of a surveillance area in 2002.

ABCs Methodology

Project personnel communicated at least monthly with contacts in all microbiology laboratories serving acute care hospitals in their area to identify cases. A standardized case report form included information on demographic characteristics, clinical syndrome, and illness outcome and was completed for each case. Pneumococcal isolates were collected, tested for susceptibility at reference laboratories using NCCLS methods, and serotyped at CDC. Regular laboratory audits assessed completeness of active surveillance and detected additional cases.

Rates of invasive pneumococcal disease were calculated using population estimates for 2002. 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 2002 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		2,476	(12.4)	
Black		1,016	(26.5)	
Other		70	(5.5)	

Unknown race (n=493) distributed among knowns.

*Cases per 100,000 population for ABCs areas

Citation

Centers for Disease Control and Prevention. 2003. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, *Streptococcus pneumoniae*, 2002. Available via the Internet:

http://www.cdc.gov/ncidod/dbmd/abcs/spneu02.pdf

	Cases	Deaths
Age	No. (Rate [*])	No. (Rate [*])
<1	148 (38.5)	3 (0.8)
1	121 (31.5)	0 (0.0)
2-4	172 (15.8)	3 (0.3)
5-17	145 (3.2)	8 (0.2)
18-34	243 (4.1)	13 (0.2)
35-49	801 (13.3)	97 (1.6)
50-64	733 (18.7)	109 (2.8)
<u>></u> 65	1,199 (43.3)	247 (8.9)
Total	3,562 (14.2)	480 (1.9)
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* Cases or deaths per 100,000 population for ABCs areas

Syndrome		No. (%)	
Meningitis	244	(6.9)	
Bacteremia without	751	(21.1)	
Pneumonia with		2,454	(68.9)
Antibiotic	\mathbf{S}^{*}	\mathbf{I}^{\dagger}	R [‡]
Susceptibility	%	%	%
Penicillin	78.9	9.9	11.3
Cefotaxime 2002	95.9	2.6	1.5
Cefotaxime	88.3	8.3	3.4
Erythromycin	83.2	0.03	16.8
TMP/Sulfa	75.1	6.7	18.2
Levofloxacin	99.5	0.0	0.5
Vancomycin	100.0	0.0	0.0

Based on reference lab testing of 3,120 isolates.

* Susceptible; [†] Intermediate; [‡] Resistant based on year 2002 NCCLS definitions except for cefotaxime (2001 and 2002)

§ 2001 NCCLS definition

National Projections of Invasive Disease

Cases: 40,900 (14.2/100,000) Deaths: 5,700 (2.0/100,000)

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	2002 Rate
< 5	46/100,000	23.2/100,000
<u>> 65</u>	42/100,000	43.3/100,000

For more information, visit our web site

http://www.cdc.gov/ncidod/dbmd/abcs Oct2003 File-13Nov2003