

Active Bacterial Core Surveillance (ABCs) Report Emerging Infections Program Network



Streptococcus pneumoniae, 1999

ABCs Areas

California (San Francisco County); Connecticut; Georgia (20 county Atlanta area); Maryland (6 county Baltimore area); Minnesota (7 county Twin Cities area); New York (7 county Rochester area and 8 county Albany area); Oregon (3 county Portland area); Tennessee (5 urban counties)

ABCs Population

The surveillance areas represent 18,550,681 persons. Source: U.S. Bureau of the Census, 1999

ABCs Case Definition

Invasive pneumococcal disease: isolation of *Streptococcus pneumoniae* from normally sterile site in resident of a surveillance area in 1999.

ABCs Methodology

Project personnel communicated at least monthly with contacts in 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, tested for susceptibility at reference laboratories using NCCLS methods, and serotyped at CDC. Regular laboratory audits assess completeness of active surveillance and detect additional cases.

All rates of invasive pneumococcal disease were calculated using U.S. Bureau of the Census postcensal population estimates for 1999. For national projections of cases, race-and age-specific rates of disease were applied from the aggregate surveillance area to the age and racial distribution of the 1999 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	2816	(19.3)
Black	1597	(52.0)
Other	109	(12.5)

Unknown race (n=449) distributed among knowns.

^{*}Cases per 100,000 population for ABCs areas.

Ethnicity	No. (Rate*)	
Hispanic	162 (19.5)	
Non-Hispanic	1825	
Unknown	2537	

^{*}Cases per 100,000 population for ABCs areas.

	Cases	D	eaths
Age (years)	No. (Rat	e*) No.	(Rate*)
<1	420 (162	2.7) 2	(0.77)
1	523 (205	5.4) 3	(1.18)
2-4	254 (33.	2) 4	(0.52)
5-17	146 (4.4	.) 3	(0.09)
18-34	342 (7.6	23	(0.51)
35-49	889 (19.	0) 88	(1.89)
50-64	640 (24.	2) 89	(3.37)
<u>></u> 65	1308 (61.	5) 276	(12.97)
Total	4524 (24.	4) 489	(2.64)

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

Syndrome	No	No. (%)	
Meningitis	234	(5.2)	
Bacteremia without focus	1699	(37.6)	
Bacteremic pneumonia	2430	(53.7)	
Antibiotic S*	\mathbf{I}^{\dagger}	\mathbf{R}^{i}	

Antibiotic Susceptibility	\mathbf{S}^*	\mathbf{I}^{\dagger}	\mathbf{R}^{\ddagger}
	%	%	%
Penicillin	73.2	10.2	16.5
Cefotaxime	83.1	10.9	5.9
Erythromycin	79.5	0.1	20.5
TMP/Sulfa	67.9	5.8	26.3
Levofloxacin	99.8	0.0	0.2
Vancomycin	100.0	0.0	0.0

Based on reference lab testing of 3,930 isolates.

National Projection of Invasive Disease:

Cases: 64,400 (23.63/100,000) Deaths: 7,300 (2.7/100,000)

Healthy People 2010 Update:

Objective: Decrease the incidence of invasive pneumococcal infections to 50 per 100,000 persons less than 5 years of age and to 46 per 100,000 persons aged 65 and older.

Age (year)	2010 Objective	1999 Rate*
< 5	50/100,000	87.4
≥ 65	46/100,000	61.1

*Projected cases per 100,000 U.S. population

For more information, visit our web site at:

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

^{*} Susceptible; † Intermediate; ‡ Resistant