



# Active Bacterial Core Surveillance (ABCs) Report

## Emerging Infections Program Network

### *Streptococcus pneumoniae*, 2001



#### 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 (7 county Twin Cities area); 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 22,479,308 persons.

Source: National Center for Health Statistics bridged-race vintage 2001 postcensal file

#### ABCs Case Definition

Invasive pneumococcal disease: isolation of *Streptococcus pneumoniae* from normally sterile site in resident of a surveillance area in 2001.

#### 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 included information on demographic characteristics, clinical syndrome, and illness outcome were 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 2001. 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 2001 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 | 2,541 (14.5) |
| Black | 1,284 (34.3) |
| Other | 87 (7.5)     |

Unknown race (n=450) distributed among knowns.

\*Cases per 100,000 population for ABCs areas

| Ethnicity    | No. (Rate*) |
|--------------|-------------|
| Hispanic     | 199 (11.9)  |
| Non-Hispanic | 1,832 ----- |
| Unknown      | 1,882 ----- |

\*Cases per 100,000 population for ABCs areas.

| Age (years) | Cases        | Deaths      |
|-------------|--------------|-------------|
|             | No. (Rate*)  | No. (Rate*) |
| <1          | 187 (52.3)   | 2 (0.6)     |
| 1           | 232 (68.6)   | 4 (1.2)     |
| 2-4         | 275 (27.5)   | 5 (0.5)     |
| 5-17        | 153 (3.8)    | 4 (0.1)     |
| 18-34       | 282 (5.2)    | 15 (0.3)    |
| 35-49       | 875 (16.0)   | 98 (1.8)    |
| 50-64       | 687 (20.2)   | 105 (3.1)   |
| ≥65         | 1,221 (50.8) | 283 (11.8)  |
| Total       | 3,913 (17.4) | 517 (2.3)   |

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

| Syndrome                 | No. (%)      |
|--------------------------|--------------|
| Meningitis               | 209 (5.3)    |
| Bacteremia without focus | 896 (22.9)   |
| Pneumonia with           | 2,666 (68.1) |

| Antibiotic Susceptibility | S*    | I†   | R‡   |
|---------------------------|-------|------|------|
|                           | %     | %    | %    |
| Penicillin                | 74.9  | 9.6  | 15.5 |
| Cefotaxime                | 83.9  | 10.5 | 5.6  |
| Erythromycin              | 80.6  | 0.2  | 19.2 |
| TMP/Sulfa                 | 70.4  | 5.6  | 24.0 |
| Levofloxacin              | 99.3  | 0.0  | 0.7  |
| Vancomycin                | 100.0 | 0.0  | 0.0  |

Based on reference lab testing of 3,447 isolates.

\* Susceptible; † Intermediate; ‡ Resistant based on year 2001 NCCLS definitions

#### National Projections of Invasive Disease

Cases: 48,650 (17.1/100,000)

Deaths: 6,900 (2.4/100,000)

#### 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 | 2001 Rate    |
|------------|----------------|--------------|
| < 5        | 50/100,000     | 38.9/100,000 |
| ≥ 65       | 46/100,000     | 50.7/100,000 |

#### For more information, visit our web site

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

Centers for Disease Control and Prevention. 2003. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, *Streptococcus pneumoniae*, 2001. Available via the Internet: <http://www.cdc.gov/abcs/reports-findings/survreports/spneu01.pdf>

Aug2003 File-5Sept2003