

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



### Neisseria meningitidis, 2004

#### **ABCs Areas**

California (3 county San Francisco Bay area); Colorado (5 county Denver area); Connecticut; Georgia; Maryland; Minnesota; New Mexico; New York (15 county Rochester and Albany areas); Oregon; Tennessee (11 urban counties)

#### **ABCs Population**

The surveillance areas represent 39,015,076 persons. Source: National Center for Health Statistics bridged-race vintage 2004 postcensal file

#### **ABCs Case Definition**

Invasive meningococcal disease: isolation of *Neisseria meningitidis* from normally sterile site in a resident of a surveillance area in 2004.

#### **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. Molecular subtyping was done on meningococcal isolates at CDC. Regular laboratory audits assessed completeness of active surveillance and detected additional cases.

All rates of invasive meningococcal disease were calculated using population estimates for 2004. 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 2004 U.S. population for 49 states (excluding Oregon). The Oregon reported cases were then added to obtain the national projections. 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 | 131 | (0.44)  |
| Black | 22  | (0.34)  |
| Other | 3   | (0.12)  |
| Total | 156 | (0.40)  |

Unknown race (n=27) distributed amongst known

<sup>\*</sup> Cases per 100,000 population for ABCs areas

|                          | <b>Cases</b> Deaths |                          |
|--------------------------|---------------------|--------------------------|
| Syndrome                 | No. (%*)            | No. (Rate <sup>†</sup> ) |
| Meningitis               | 90 (57.7)           | 8 (8.9)                  |
| Bacteremia without focus | 45 (28.8)           | 6 (13.6)                 |

<sup>\*</sup> Percent of cases

#### Serogroups

| Age         |     | В                  |     | C       |     | Y       | O   | ther <sup>‡</sup> |
|-------------|-----|--------------------|-----|---------|-----|---------|-----|-------------------|
| (years)     | No. | (Rate*)            | No. | (Rate*) | No. | (Rate*) | No. | (Rate*)           |
| < 1         | 21  | (3.9)              | 0   | (0.0)   | 3   | (0.55)  | 3   | (0.55)            |
| 1           | 2   | (0.37)             | 1   | (0.19)  | 0   | (0.0)   | 1   | (0.19)            |
| 2-4         | 12  | (0.75)             | 1   | (0.06)  | 3   | (0.19)  | 1   | (0.06)            |
| 5-17        | 15  | (0.21)             | 6   | (0.09)  | 4   | (0.06)  | 3   | (0.04)            |
| 18-34       | 14  | (0.15)             | 10  | (0.11)  | 5   | (0.05)  | 6   | (0.06)            |
| 35-49       | 6   | (0.07)             | 3   | (0.03)  | 5   | (0.05)  | 1   | (0.01)            |
| 50-64       | 3   | (0.05)             | 3   | (0.05)  | 1   | (0.02)  | 2   | (0.03)            |
| <u>≥</u> 65 | 3   | (0.07)             | 3   | (0.07)  | 10  | (0.22)  | 5   | (0.11)            |
| Total       | 76  | $(0.19)^{\dagger}$ | 27  | (0.07)  | 31  | (0.08)  | 22  | (0.06)            |

Unknown serogroup (n=9) distributed amongst known

# Rates of Meningococcal Disease in Adolescents and Young Adults

| S           | Overall<br>Serogroups | C/Y/W-135<br>Serogroups |  |
|-------------|-----------------------|-------------------------|--|
| Age (years) | No. (Rate*)           | No. (Rate*)             |  |
| 11-17       | 14 (0.36)             | 7 (0.18)                |  |
| 18-22       | 18 (0.67)             | 7 (0.26)                |  |

<sup>\*</sup> Cases per 100,000 population for ABCs areas

#### **National Projection for Invasive Disease**

Cases: 900 (0.31/100,000) Deaths: 125 (0.05/100,000)

#### **Healthy People 2010 Update**

Objective: Reduce the incidence of invasive meningococcal disease to 0.9 per 100,000 population.

|   | 2010 Objective | 2004 Rate*   |  |
|---|----------------|--------------|--|
|   | 0.9/100,000    | 0.31/100,000 |  |
| • |                |              |  |

<sup>\*</sup> Cases per 100,000 U.S. population

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

http://www.cdc.gov/abcs

#### Citation

Centers for Disease Control and Prevention. 2005. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, *Neisseria meningitidis*, 2004. Available via the Internet:

http://www.cdc.gov/ncidod/dbmd/abcs/survreports/mening04.pdf

<sup>†</sup> Deaths per 100 cases with known outcomes

<sup>\*</sup>Cases per 100,000 population for ABCs areas

<sup>&</sup>lt;sup>†</sup> The rate of serogroup B disease excluding Oregon is 0.12 cases per 100,000 population for ABCs areas

<sup>&</sup>lt;sup>‡</sup> Other includes serogroup W-135 and non-groupables