



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

Neisseria meningitidis, 2010



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 (20 counties)

ABCs Population

The surveillance areas represent 41,981,509 persons. Source: National Center for Health Statistics bridged-race vintage 2010 postcensal file

ABCs Case Definition

Meningococcal disease: isolation of *Neisseria meningitidis* from normally sterile site in a resident of a surveillance area in 2010.

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. Serogrouping of meningococcal isolates was done at CDC. Regular laboratory audits assessed completeness of active surveillance and detected additional cases.

All rates of meningococcal disease were calculated using population estimates for 2010. For national estimates of cases, race- and age-specific rates of disease were applied from the aggregate surveillance area to the age and racial distribution of the 2010 U.S. population for 49 states (excluding Oregon due to an outbreak of serogroup B disease). The Oregon reported cases were then added to obtain the national estimates. Cases with missing data, excluding ethnicity, were multiply imputed using the sequential regression imputation method.[¶]

Reported ABCs Profiles

Race	No.	(Rate*)
White	62	(0.20)
Black	20	(0.27)
Other	4	(0.13)
Total	86	(0.20)

* Cases per 100,000 population for ABCs areas

Syndrome	Cases		Deaths	
	No.	(%*)	No.	(Rate†)
Meningitis	40	(46.5)	5	(12.8)
Bacteremia without focus	27	(31.4)	3	(11.5)

* Percent of cases † Deaths per 100 cases

¶ Surveillance Note

At the start of this surveillance year (2010), missing race (n=15) and deaths (n=3) data were multiply imputed using sequential regression imputation methods. Previously, missing race data were distributed in the same proportion as known cases. For comparison, a 2010 surveillance report based on the previous method can be found at: <http://www.cdc.gov/abc/reports-findings/surveys/mening10-orig.pdf>

Serogroups

Age (years)	B		C		Y		Other‡	
	No.	(Rate*)	No.	(Rate*)	No.	(Rate*)	No.	(Rate*)
< 1	5	(1.03)	2	(0.41)	4	(0.82)	0	(0.00)
1	1	(0.20)	1	(0.20)	0	(0.00)	0	(0.00)
2-4	1	(0.07)	0	(0.00)	1	(0.07)	0	(0.00)
5-17	0	(0.00)	1	(0.01)	4	(0.06)	0	(0.00)
18-34	1	(0.01)	6	(0.07)	4	(0.05)	1	(0.01)
35-49	1	(0.01)	5	(0.06)	5	(0.06)	0	(0.00)
50-64	1	(0.01)	0	(0.00)	1	(0.01)	0	(0.00)
≥ 65	1	(0.02)	2	(0.04)	8	(0.17)	0	(0.00)
Total †	11	(0.03)	17	(0.04)	27	(0.07)	1	(0.00)

Unknown serogroup (n=2) distributed amongst known

* Cases per 100,000 population for ABCs areas excluding Oregon

† All rates exclude Oregon. Rates including Oregon are serogroup B 0.06, serogroup C 0.05, serogroup Y 0.08, and serogroup Other 0.01 cases per 100,000 population for ABCs areas

‡ Other includes serogroup W-135 and non-groupables

Rates of Meningococcal Disease in Adolescents and Young Adults†

Age (years)	Overall Serogroups		C/Y/W-135 Serogroups	
	No.	(Rate*)	No.	(Rate*)
11-17	2	(0.06)	2	(0.06)
18-22	7	(0.26)	5	(0.19)

* Cases per 100,000 population for ABCs areas excluding Oregon

† All rates exclude Oregon. Rates including Oregon are, for 11-17 year olds, overall serogroups 0.18 and serogroup C/Y/W-135 0.10; for 18-22 year olds, overall serogroups 0.31 and serogroup C/Y/W-135 0.24 cases per 100,000 population for ABCs areas

National Estimates for Disease‡

Cases: 475 (0.15/100,000)
Deaths: 75 (0.02/100,000)

‡ In 2010, 845 cases of meningococcal disease (all case statuses) were reported to the National Notifiable Disease Surveillance System (incidence 0.27/100,000 population)

Healthy People 2020 Update

Objective: Reduce the incidence of meningococcal disease to 0.3 per 100,000 population.

2020 Objective	2010 Rate*
0.3/100,000	0.15/100,000

* Cases per 100,000 U.S. population

For more information, visit our web site:

<http://www.cdc.gov/abc/index.html>

Citation

Centers for Disease Control and Prevention. 2012. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, *Neisseria meningitidis*, 2010. Available via the Internet:

<http://www.cdc.gov/abc/reports-findings/surveys/mening10.pdf>