



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

Legionellosis, 2011



ABCs Areas

California (3 county San Francisco Bay area); Colorado (5 county Denver area); Connecticut; Georgia (8 county Atlanta area); Maryland; Minnesota; New Mexico; New York (15 county Rochester and Albany areas); Oregon; Tennessee (20 urban counties)

ABCs Population

The surveillance areas represent 36,360,182 persons.
Source: National Center for Health Statistics bridged-race vintage 2011 postcensal file

ABCs Case Definition

Confirmed legionellosis case: A positive culture of any *Legionella* organism from a body site, detection of *L. pneumophila* serogroup 1 antigen in urine, or fourfold or greater rise in specific serum antibody titer to *L. pneumophila* serogroup 1 between acute and convalescent sera in a resident of a surveillance area in 2011.

ABCs Methodology

ABCs personnel actively contacted all laboratories serving persons in the surveillance 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. Regular laboratory audits assessed completeness of active surveillance and detected additional cases.

All rates of legionellosis were calculated using population estimates for 2011. 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 2011 U.S. population. Cases with unknown race were distributed by site based on reported race distribution for known cases within the nine age categories.[†]

Reported ABCs Profiles

Sex	No.	(Rate [*])
Male	302	(1.7)
Female	180	(1.0)

* Cases per 100,000 population for ABCs areas

Race	No.	(Rate [*])
White	351	(1.3)
Black	126	(2.1)
Other	5	(0.2)

* Cases per 100,000 population for ABCs areas

Age (years)	Cases		Deaths	
	No.	(Rate [*])	No.	(Rate [*])
< 10	0	(0.00)	0	(0.00)
10-19	0	(0.00)	0	(0.00)
20-29	8	(0.21)	0	(0.00)
30-39	27	(0.44)	1	(0.02)
40-49	74	(1.53)	6	(0.11)
50-59	130	(2.60)	12	(0.23)
60-69	103	(3.24)	8	(0.23)
70-79	72	(4.17)	7	(0.38)
≥ 80	68	(4.47)	12	(0.93)
Total	482	(1.40)	46	(0.13)

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

Site	Cases		Deaths	
	No.	(Rate [*])	No.	(Rate [*])
California**	11	(0.32)	3	(0.09)
Colorado**	29	(1.17)	3	(0.19)
Connecticut	82	(2.29)	6	(0.14)
Georgia**	24	(0.64)	1	(0.13)
Maryland	142	(2.44)	11	(0.20)
Minnesota	28	(0.52)	4	(0.06)
New Mexico	12	(0.58)	2	(0.00)
New York**	90	(4.14)	11	(0.28)
Oregon	22	(0.57)	2	(0.00)
Tennessee**	42	(1.10)	3	(0.05)
Total	482	(1.33)	46	(0.13)

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

** Data from select counties

Testing Methodology	No.	(%)
Urine Antigen	465	(95.7)
Culture	48	(9.8)
Serology	4	(0.8)

Note: Some cases had more than one testing method

Illness Severity	No.	(%)
Hospitalization	476	(97.9)
ICU admission	187	(38.5)
Mechanical ventilation	130	(26.8)
Death	47	(9.7)

National Estimates of Disease

Cases: 4,108 (1.32/100,000)
Deaths: 402 (0.13/100,000)

Citation

Centers for Disease Control and Prevention. 2017. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Legionellosis, 2011.

Available via the internet: www.cdc.gov/abcs/reports-findings/survreports/leg11.pdf