



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

Legionellosis, 2014



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 37,356,033 persons.
Source: National Center for Health Statistics bridged-race vintage 2014 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 2014.

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 2014. 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 2014 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	350	(1.9)
Female	227	(1.2)

* Cases per 100,000 population for ABCs areas

Race	No.	(Rate [*])
White	376	(1.4)
Black	192	(3.0)
Other	9	(0.3)

* Cases per 100,000 population for ABCs areas

Age (years)	Cases		Deaths	
	No.	(Rate [*])	No.	(Rate [*])
< 10	1	(0.02)	0	(0.00)
10-19	1	(0.02)	0	(0.00)
20-29	21	(0.40)	0	(0.00)
30-39	38	(0.75)	0	(0.00)
40-49	68	(1.36)	0	(0.00)
50-59	153	(2.90)	5	(0.09)
60-69	129	(3.25)	15	(0.38)
70-79	99	(4.76)	10	(0.48)
≥ 80	67	(5.04)	12	(0.98)
Total	577	(1.54)	43	(0.12)

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

Site	Cases		Deaths	
	No.	(Rate [*])	No.	(Rate [*])
California**	14	(0.39)	2	(0.06)
Colorado**	42	(1.59)	6	(0.23)
Connecticut	58	(1.61)	4	(0.11)
Georgia**	30	(0.76)	1	(0.03)
Maryland	145	(2.43)	10	(0.17)
Minnesota	58	(1.06)	1	(0.02)
New Mexico	9	(0.43)	0	(0.00)
New York**	88	(4.03)	12	(0.55)
Oregon	29	(0.73)	4	(0.10)
Tennessee**	104	(2.63)	3	(0.08)
Total	577	(1.54)	43	(0.12)

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

** Data from select counties

Testing Methodology	No.	(%)
Urine Antigen	545	(93.8)
Culture	44	(7.6)
Serology	4	(0.7)

Note: Some cases had more than one testing method

Illness Severity	No.	(%)
Hospitalization	564	(97.1)
ICU admission	211	(36.3)
Mechanical ventilation	123	(21.2)
Death	44	(7.6)

National Estimates of Disease

Cases: 4,815 (1.51/100,000)
Deaths: 371 (0.12/100,000)

Citation

Centers for Disease Control and Prevention. 2017. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Legionellosis, 2014.

Available via the internet: www.cdc.gov/abcs/reports-findings/survreports/leg14.pdf