



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

Legionellosis, 2015



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 37,689,744 persons.
Source: National Center for Health Statistics bridged-race vintage 2015 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 2015.

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 2015. 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 2015 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	319	(1.7)
Female	222	(1.2)

* Cases per 100,000 population for ABCs areas

Race	No.	(Rate [*])
White	381	(1.4)
Black	148	(2.3)
Other	13	(0.4)

* Cases per 100,000 population for ABCs areas

Age (years)	Cases		Deaths	
	No.	(Rate [*])	No.	(Rate [*])
< 10	8	(0.17)	0	(0.00)
10-19	3	(0.06)	0	(0.00)
20-29	16	(0.31)	0	(0.00)
30-39	37	(0.72)	1	(0.02)
40-49	62	(1.25)	5	(0.10)
50-59	124	(2.35)	7	(0.13)
60-69	148	(3.60)	6	(0.15)
70-79	79	(3.67)	11	(0.51)
≥ 80	65	(4.83)	8	(0.59)
Total	542	(1.44)	38	(0.10)

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

Site	Cases		Deaths	
	No.	(Rate [*])	No.	(Rate [*])
California**	30	(0.83)	2	(0.06)
Colorado**	54	(2.01)	3	(0.11)
Connecticut	56	(1.56)	3	(0.08)
Georgia**	46	(1.15)	4	(0.10)
Maryland	147	(2.45)	8	(0.13)
Minnesota	50	(0.91)	9	(0.16)
New Mexico	16	(0.77)	0	(0.00)
New York**	70	(3.21)	6	(0.28)
Oregon	49	(1.22)	4	(0.07)
Tennessee**	24	(0.60)	0	(0.00)
Total	542	(1.44)	38	(0.10)

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

** Data from select counties

Testing Methodology	No.	(%)
Urine Antigen	513	(94.6)
Culture	39	(7.2)
Serology	4	(0.7)

Note: Some cases had more than one testing method

Illness Severity	No.	(%)
Hospitalization	520	(95.9)
ICU admission	212	(39.1)
Mechanical ventilation	98	(18.1)
Death	38	(7.0)

National Estimates of Disease

Cases: 4,564 (1.42/100,000)
Deaths: 334 (0.10/100,000)

Citation

Centers for Disease Control and Prevention. 2017. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Legionellosis, 2015. Available via the internet: www.cdc.gov/abc/reports-findings/survreports/leg15.pdf