Active Bacterial Core Surveillance (ABCs) Report
Emerging Infections Program Network
Haemophilus influenzae, 2016

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 urban counties)

ABCs Population
The surveillance areas represent 44,190,494 persons.
Source: National Center for Health Statistics bridged-race vintage 2016 postcensal file

ABCs Case Definition
Invasive *Haemophilus influenzae* (Hi) disease: isolation of Hi from normally sterile site in a resident of a surveillance area in 2016.

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. Serotyping was done on Hi isolates at CDC and state laboratories. Regular laboratory audits assessed completeness of active surveillance and detected additional cases.

All rates of invasive Hi disease were calculated using population estimates for 2016 from the bridged-race vintage 2016 postcensal file. For national estimates, race- and age-specific rates of disease were applied from the aggregate surveillance areas to the race- and age-specific distribution of the 2016 U.S. population. Cases with missing data, excluding ethnicity, were multiply imputed using sequential regression imputation methods.¶

Reported ABCs Profiles

Race	No.	(Rate*)
White	673	(2.1)
Black	147	(1.8)
Other	48	(1.3)
Total	868	(2.0)

* Per 100,000 population for ABCs areas

¶ Surveillance Note
Missing race (n=55) data were multiply imputed using sequential regression imputation methods.

	Cases		Deaths	
Syndrome	No.	(%*)	No.	(Rate†)
Meningitis	54	(6.2)	3	(5.6)
Bacteremia without focus	199	(22.9)	23	(11.6)
Pneumonia with bacteremia	497	(57.3)	74	(14.9)

* Percent of cases
† Deaths per 100 cases with known outcome

	Serotype			
	B	Non-B	Non-Type†	Unknown
Age (years)	No. (Rate*)	No. (Rate*)	No. (Rate*)	No. (Rate*)
< 1	2(0.38)	20(3.76)	35(6.58)	5(0.94)
1	2(0.37)	7(1.30)	5(0.93)	1(0.19)
2-4	2(0.12)	9(0.56)	7(0.44)	4(0.25)
5-17	2(0.03)	10(0.14)	17(0.23)	5(0.07)
18-34	0(0.00)	6(0.06)	35(0.34)	7(0.07)
35-49	2(0.02)	21(0.24)	37(0.43)	9(0.10)
50-64	1(0.01)	42(0.48)	99(1.13)	23(0.26)
65-74	2(0.05)	39(1.02)	119(3.11)	15(0.39)
75-84	0(0.00)	24(1.33)	108(5.97)	10(0.55)
≥85	0(0.00)	14(1.71)	105(12.81)	17(2.07)
Total	13(0.03)	192(0.43)	567(1.28)	96(0.22)

* Per 100,000 population for ABCs areas
† Non-typeable isolates

National Estimates of Invasive Disease
Cases: 6,400 (1.99/100,000)
Deaths: 900 (0.29/100,000)

Healthy People 2020 Update
Invasive *Haemophilus influenzae* type B disease
Objective: Decrease the incidence of invasive *Haemophilus influenzae* type B disease to 0.27 cases per 100,000 persons less than 5 years of age

Age (year)	2020 Objective	2016 Rate*
< 5	0.27/100,000	0.22/100,000

* Per 100,000 U.S. population < 5 years

For more information, visit our web site:
http://www.cdc.gov/abcs

Citation
Centers for Disease Control and Prevention. 2016. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, *Haemophilus influenza* 2016.
Available via the internet:
http://www.cdc.gov/abcs/reports-findings/survreports/hi16.pdf