Topic

Cases and Deaths

Case Rates

Death Rates

Syndromes

Serotypes

Age and Serotypes

Surveillance Report

Year

2022

Dataset version: Jun 2024 Final run: Jul 5, 2024

Note: Click <u>here</u> to access and download Surveillance Reports.



Data Download

Group A *Streptococcus* (GAS)

Group B *Streptococcus* (GBS)

Haemophilus influenzae (HFlu)

Neisseria meningitidis (NMen)

Streptococcus pneumoniae (SPN)



Active Bacterial Core Surveillance (ABCs) Report Emerging Infections Program Network Haemophilus influenzae, 2022

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 45,681,541 persons. Source: Census Bureau's Vintage 2022 population estimates.

ABCs Case Definition: For routine ABCs surveillance, a case of invasive bacterial disease is defined as isolation of *Haemophilus influenzae* from a normally sterile site or detection of ABCs pathogen-specific nucleic acid in a specimen obtained from a normally sterile body site, using a validated molecular test in a resident of one of the surveillance areas.

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 *Haemophilus influenzae* isolates at CDC and state laboratories. Regular laboratory audits assessed completeness of active surveillance and detected additional cases.

All rates of invasive *Haemophilus influenzae* disease were calculated using population estimates from the Vintage 2022 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 U.S. population. Cases with missing data, excluding ethnicity, were multiply imputed using sequential regression imputation methods.¶ Cases with unknown serotypes were distributed based on age and race distribution for known cases.

ABCs Profiles

Race	No.	Rate*
Black	184	2.2
White	591	1.8
Other	41	0.8
Total	815	1.8

National Estimates of Invasive Disease

Total Cases: 5,940 (1.8/100,000 population)

Deaths: 720 (0.22/100,000

population)

Serotype	В	Non-B		Non-Type†		
Age (years)	No.	Rate*	No.	Rate*	No.	Rate*
<1	0	0.00	14	2.82	29	5.85
1	0	0.06	4	0.82	8	1.58
2-4	1	0.07	7	0.46	19	1.25
5-17	2	0.03	7	0.10	24	0.33
18-34	4	0.04	3	0.03	58	0.55
35-49	3	0.03	14	0.16	84	0.94
50-64	0	0.00	46	0.53	129	1.48
65-74	2	0.05	40	0.88	137	3.01
75-84	0	0.00	18	0.78	101	4.40
≥85	1	0.13	9	1.07	50	5.94
Total	14	0.03	162	0.35	638	1.40

*Per 100,000 population for ABCs areas

†Non-typeable isolates

Syndromes

	Cases		Deaths	
Syndrome	No.	% *	No.	Rate†
Bacteremia Without Focus	175	21.5	20	12.0
Meningitis	72	8.8	1	1.4
Pneumonia With Bacteremia	405	49.7	58	14.4
*Percent of cases	_			

†Deaths per 100 cases with known outcome

¶ Surveillance Note

Missing race (n=69) data were multiply imputed using sequential regression imputation methods.

Citation

Centers for Disease Control and Prevention. 2022. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Haemophilus influenzae, 2022.