Topic

Cases and Deaths

Case Rates

Death Rates

Syndromes

Serotypes

Age and Serotypes

Surveillance Report

Year

2023

Dataset version: Mar 2025 Final run: Mar 20, 2025

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, 2023

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 45,871,009 persons. Source: Census Bureau's Vintage 2023 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 2023 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	285	3.4
White	755	2.4
Other	67	1.2
Total	1,106	2.4

National Estimates of Invasive Disease

Total Cases: 8,070 (2.4/100,000 population)

Deaths: 770 (0.23/100,000

population)

Serotype	В		Non	-В	Non	-Type†
Age (years)	No.	Rate*	No.	Rate*	No.	Rate*
<1	1	0.22	11	2.25	36	7.33
1	0	0.00	5	1.00	10	2.01
2-4	0	0.00	4	0.26	28	1.83
5-17	0	0.00	11	0.15	25	0.33
18-34	4	0.04	8	0.08	89	0.86
35-49	1	0.01	29	0.32	101	1.11
50-64	3	0.04	53	0.61	159	1.83
65-74	4	0.09	41	0.88	169	3.64
75-84	0	0.00	28	1.16	164	6.82
≥85	1	0.12	12	1.49	106	13.18
Total	15	0.03	202	0.44	886	1.93

*Per 100,000 population for ABCs areas

†Non-typeable isolates

Syndromes

	Cases		Deaths	
Syndrome	No.	% *	No.	Rate†
Bacteremia Without Focus	219	19.8	31	14.9
Meningitis	98	8.9	6	6.2
Pneumonia With Bacteremia	598	54.1	56	9.4
*Percent of cases				

†Deaths per 100 cases with known outcome

¶ Surveillance Note

Missing race (n=113) data were multiply imputed using sequential regression imputation methods.

Citation

Centers for Disease Control and Prevention. 2023. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Haemophilus influenzae, 2023.

www.cdc.gov/abcs/downloads/HFLU_Surveillance_Report_2023.pdf