Topic

Cases and Deaths

Case Rates

Death Rates

Syndromes

Serotypes

Antibiotic Resistance

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 Group B *Streptococcus*, 2022

ABCs Areas: California (3 county San Francisco Bay area); Colorado (5 county Denver area); Connecticut; Georgia (20 county + State <1 year); Maryland; Minnesota; New Mexico; New York (15 county Rochester and Albany areas); Oregon (3 county Portland area); Tennessee (20 counties).

ABCs Population: The surveillance areas represent 38,428,177 persons and 472,127 live births. Source: Census Bureau's Vintage 2022 population estimates and natality data from National Center for Health Statistics (NCHS)¹.

ABCs Case Definition: Invasive bacterial disease is defined as isolation of group B *Streptococcus* 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. Early-onset cases occur at <7 days old and late-onset between 7 and 89 days old.

ABCs Profiles									Cases		Deaths	
Race	No.	Rate* ▼	Et.	hnicity	No	. R	ate*	Age (years)	No.	Rate*	No.	Rate*
White	2,430	9.1	Hi	spanic	3	52	6.2	<1	208	44.0	11	2.33
Black	617	8.9	No	on-Hispani	c 2,6	16	-	1	1	0.3	0	0.00
Other	242	5.0	Ur	nknown	3	20	-	2-4	3	0.2	0	0.00
*Rates are per 100,000 population for ABCs areas								5-17	12	0.2	0	0.00
			Early Onset			Late Onset		18-34	149	1.7	7	0.08
			Cases			Cases		35-49	446	5.9	23	0.30
	Race		No.	Rate**	No.	Rate	e**	50-64	966	13.1	57	0.77
Black			31	0.30	30	C).29	65-74	701	18.7	60	1.60
White			46	0.15	66	C).21	75-84	529	28.2	59	3.14
Other			8	0.14	14	C).25	≥85	273	38.7	27	3.82
Total			85	0.18	110	C	0.23	Total	3,288	8.6	244	0.63

**Rates are per 1,000 live births for ABCs areas

*Rates are per 100,000 population for ABCs 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. From select surveillance areas, whole genome sequencing (WGS) was conducted for all group B *Streptococcus* isolates, which includes deduction of capsular serotype and minimum inhibitory concentration (MIC) predictions, including PBP2x typing to detect decreased beta lactam susceptibility. A strategic subset of isolates was targeted for conventional MIC determination. Regular laboratory audits assessed completeness of active surveillance and detected additional cases.

Rates of early-onset and late-onset group B streptococcal disease were calculated using live birth estimates for 2022. All other rates were calculated using population estimates from the Vintage 2022 file. 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 U.S. population and to live birth estimates for early-onset and late-onset disease. Cases with missing data, excluding ethnicity, were multiply imputed using sequential regression imputation methods.¶

National Estimates of Invasive Disease

Early-Onset Cases: 630 (0.17/1,000 live births)
Late-Onset Cases: 830 (0.23/1,000 live births)
Total Cases: 28,520 (8.6/100,000 population)
Deaths: 2,110 (0.63/100,000 population)

Reference (1)

National Center for Health Statistics. Vital Statistics Birth Data File. All-county file data file and documentation. 2022.

¶ Surveillance Note

Missing race (n=358, including 21 cases <1 year old) 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, Group B Streptococcus, 2022.