



Active Bacterial Core Surveillance (ABCs) Report

Emerging Infections Program Network

group B *Streptococcus*, 2018



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)

* Note: 2018 is the first time GADPH is being reported on the Surveillance Report

ABCs Population

The surveillance areas represent 37,756,888 persons and 481,632 live births. Source: National Center for Health Statistics bridged-race vintage 2018 postcensal file and 2018 natality data from National Center for Health Statistics (NCHS)¹.

ABCs Case Definition

Invasive group B streptococcal disease: isolation of Group B *Streptococcus* from a normally sterile site in a resident of a surveillance area in 2018. Early-onset cases occur at < 7 days of age and late-onset occur between 7 and 89 days of age.

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 2018**. All other rates were calculated using population estimates for 2018 from the bridged-race vintage 2018 postcensal 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 2018 U.S. population and to the **2018 live birth estimates** for early-onset and late-onset disease. Cases with missing data, excluding ethnicity, were multiply imputed using sequential regression imputation methods[¶]

Reported ABCs Profiles

Race	No.	(Rate [*])
Black	826	(12.0)
White	2,701	(9.9)
Other	217	(6.0)

* Per 100,000 population for ABCs areas

Ethnicity	No.	(Rate [*])
Hispanic	318	(6.0)
Non-Hispanic	2,871	-----
Unknown	555	-----

* Per 100,000 population for ABCs areas

Age (years)	Cases		Deaths	
	No.	(Rate [*])	No.	(Rate [*])
< 1	279	(56.8)	15	(3.06)
1	1	(0.2)	0	(0.00)
2-4	1	(0.1)	0	(0.00)
5-17	8	(0.1)	0	(0.00)
18-34	179	(2.0)	4	(0.05)
35-49	490	(6.6)	21	(0.28)
50-64	1,152	(15.6)	49	(0.66)
65-74	749	(22.3)	42	(1.25)
75-84	570	(35.4)	46	(2.86)
≥85	315	(44.5)	29	(4.09)
Total	3,744	(9.9)	206	(0.55)

* Per 100,000 population for ABCs areas

Race	Early-Onset		Late-Onset	
	No.	(Rate [*])	No.	(Rate [*])
Black	36	(0.32)	58	(0.52)
White	78	(0.24)	72	(0.22)
Other	7	(0.15)	12	(0.26)
Total	121	(0.25)	142	(0.29)

* Per 1,000 live birth for ABCs areas

National Estimates of Invasive Disease

Early-Onset Cases: 930 (0.25/1,000 live births)
 Late-Onset Cases: 1,050 (0.28/1,000 live births)
 Total Cases: 32,400 (9.9/100,000 population)
 Deaths: 1,800 (0.55/100,000 population)

¶ Surveillance Note

Missing race (n=349, including 36 cases <1 year old) data were multiply imputed using sequential regression imputation methods.

Reference:

1. National Center for Health Statistics. Vital Statistics Birth Data File, 2018. All-county file data file and documentation. 2018.

Citation

Centers for Disease Control and Prevention. 2018. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Group B *Streptococcus*, 2018.

Available via the internet: <http://www.cdc.gov/abcs/reports-findings/surveys/gbs18.pdf>

For more information, visit our website:

<http://www.cdc.gov/abcs/index.html>