Active Bacterial Core Surveillance (ABCs) Report
Emerging Infections Program Network
group B *Streptococcus*, 2016

CDC

ABCs Areas
California (3 county San Francisco Bay area); Colorado (5 county Denver area); Connecticut; Georgia (20 county); 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 36,969,779 persons and 443,140 live births. Source: National Center for Health Statistics bridged-race vintage 2016 postcensal file and 2016 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 2016. 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, WGS testing was conducted for all group B *Streptococcus* isolates, which includes deduction of capsular serotype and 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 2015**. All other rates were calculated using population estimates for 2016 from the bridged-race vintage 2016 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 2016 U.S. population and to the **2015 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[*])
White	2,549	(9.4)
Black	737	(11.2)
Other	224	(6.6)

[*] Per 100,000 population for ABCs areas

Ethnicity	No.	(Rate[*])
Hispanic	326	(6.5)
Non-Hispanic	2,477	------
Unknown	707	------

[*] Per 100,000 population for ABCs areas

For more information, visit our website:
http://www.cdc.gov/abcs/index.html

Age (years)	Cases No.	(Rate[*])	Deaths No.	(Rate[*])
< 1	237	(52.8)	17	(3.79)
1	2	(0.5)	0	(0.00)
2-4	0	(0.0)	0	(0.00)
5-17	10	(0.2)	0	(0.00)
18-34	221	(2.5)	3	(0.03)
35-49	465	(6.3)	16	(0.22)
50-64	1050	(14.3)	59	(0.80)
65-74	731	(24.3)	36	(1.20)
75-84	480	(33.4)	34	(2.36)
≥85	314	(46.0)	29	(4.25)
Total	3,510	(9.5)	194	(0.52)

[*] Per 100,000 population for ABCs areas

Race	Early-Onset No.	(Rate[*])	Late-Onset No.	(Rate[*])
White	52	(0.17)	64	(0.21)
Black	47	(0.51)	53	(0.57)
Other	5	(0.11)	4	(0.09)
	105	(0.24)	121	(0.27)

[*] Per 1,000 live birth for ABCs areas

National Estimates of Invasive Disease
Early-Onset Cases: 880 (0.22/1,000 live births)
Late-Onset Cases: 1,050 (0.25/1,000 live births)
Total Cases: 30,800 (9.6/100,000 population)
Deaths: 1,700 (0.53/100,000 population)

Healthy People 2020 Update
Early-Onset Disease
Objective: Decrease the incidence of invasive early-onset group B streptococcal disease to 0.25 cases per 1,000 live births.

Race	2020 Objective	2016 Rate[*]
White	0.25/1,000	0.17/1,000
Black	0.25/1,000	0.51/1,000
Other	0.25/1,000	0.11/1,000
Total	0.25/1,000	0.24/1,000

[*] Per 1,000 U.S. live births

[¶] Surveillance Note
Missing race (n=327, 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, 2015. All-county file data file and documentation. 2016.

Citation
Centers for Disease Control and Prevention. 2016. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Group B Streptococcus, 2016.
Available via the internet: http://www.cdc.gov/abcs/reports-findings/survreports/gbs16.pdf