

About the Data – Low Birthweight

Indicator Description

Low birthweight is a term used to describe infants who are born weighing less than 2500 grams or 5 pounds, 8 ounces.

Data Sources

California Department of Public Health, Birth Statistical Master File, 2007-2017: Compiled from information on birth certificates, including demographic information related to the infant and parents, as well as medical data related to the birth.

California Department of Public Health, California Comprehensive Master Birth File, 2018-2020: Compiled from information on birth certificates, including demographic information related to the infant and parents, as well as medical data related to the birth. Beginning in 2018, the California Comprehensive Master Birth File replaced the Birth Statistical Master File.

National Comparisons

Martin JA, Hamilton BE, Ventura SJ, et al. [Births: Final data for 2009](#). National vital statistics reports; vol 60 no 1. Hyattsville, MD: National Center for Health Statistics. 2011.

Martin JA, Hamilton BE, Osterman MJK, Driscoll AK. Births: [Births: Final Data for 2019](#). National Vital Statistics Reports; vol 70 no 2. Hyattsville, MD: National Center for Health Statistics. 2021.

Osterman MJK, Hamilton BE, Martin JA, Driscoll AK, Valenzuela CP. [Births: Final data for 2020](#). National Vital Statistics Reports; vol 70 no 17. Hyattsville, MD: National Center for Health Statistics. 2022.

Data Analysis

The low birthweight rate shown in these dashboards is the number of low birthweight births per 100 live births, stratified by selected birth and maternal characteristics. Rates are presented to the second decimal point to better identify smaller changes and differences. The 95% confidence interval presented in the tooltips indicates there is a 95% chance that the range contains the true prevalence or rate in the population. Rates or percentages with wide confidence intervals should be interpreted with caution. The state dashboard uses single year data; the county dashboard uses three-year aggregated data.

Denominators include all live births to California resident mothers/parents giving birth. Records with missing birthweight or with birthweights less than 227 grams or greater than 8165 grams were excluded. See Category and Subcategory Definitions below for additional inclusion/exclusion criteria.

Data Suppression

The numerator, rate and confidence interval are not shown when the numerator is less than 10.

Category and Subcategory Definitions

Age: Age of mother/parent giving birth at time of delivery. Excludes records with unknown age.

Birthweight Category: Weight of the infant at time of delivery, reported in grams. Excludes birthweights less than 227 grams, greater than 8165 grams and records with unknown birthweight.

Delivery method: Final route of delivery. Cesarean delivery includes primary and repeat cesarean births. Vaginal delivery includes vaginal birth after previous cesarean birth. Excludes records with unknown delivery method.

Education: Highest level of education attained by the mother/parent giving birth at time of delivery. High school graduate includes GED; some college includes college credit either without a degree or with an associate's degree; and college graduate includes bachelor's degree or higher. Excludes records with unknown education level.

Geography: State or county of maternal residence at time of delivery.

Gestational age: Obstetric estimate of gestation at time of delivery, in completed weeks. Excludes records with unknown gestational age or values less than 17 weeks or greater than 47 weeks.

Health insurance: Expected principal source of payment for delivery. Other includes Indian Health Service, CHAMPUS/TRICARE, other non-Medi-Cal government programs (federal, state or local), self-insured/self-funded plans or payments from local organized charities. Excludes records with unknown payment source and medically unattended births.

Nativity: Birthplace of mother/parent giving birth. Born outside U.S. includes U.S. territories, Canadian provinces and foreign countries. Excludes records with unknown birthplace.

Neighborhood poverty: Percentage of residents of a census tract who are living below the federal poverty threshold. Census tracts with a poverty rate of 30% or higher are considered high poverty neighborhoods. Data are based on geocoded maternal addresses beginning with

2010 and exclude records that did not geocode. Available from: [US Census Bureau American Community Survey 5-year estimates: Poverty status in the past 12 months](#)

Plurality: Single-gestation births or multiple-gestation births (i.e., twin, triplet and higher-order births).

Population density: Based on Medical Service Study Areas (MSSAs) where maternal residence is located. Data are based on geocoded maternal addresses beginning with 2010 and exclude records that did not geocode. MSSAs are sub-county geographical units with population, demographic and physician data. Available from: [California Department of Health Care Access and Information: Healthcare Workforce](#)

- An Urban MSSA has a population range of 75,000 to 125,000 and is homogeneous with respect to demographic and socio-economic characteristics.
- A Rural MSSA has a population density of less than 250 persons per square mile, and no population center exceeds 50,000 persons.
- A Frontier MSSA has a population density of less than 11 persons per square mile.

Prenatal Care: Early prenatal care is defined as prenatal care initiated during the first trimester (first, second or third month) of pregnancy. Excludes records with unknown prenatal care initiation. Adequacy of prenatal care utilization (often referred to as the Kotelchuck Index) is assessed by calculating the number of prenatal care visits completed, based on the expected number of visits given the infant's gestational age and the month that care began. Adequate prenatal care utilization includes women who initiated prenatal care within the first four months of pregnancy and completed at least 80% of expected visits. Excludes records with unknown Kotelchuck Index. The Kotelchuck Index uses recommendations for low-risk pregnancies and may not measure the adequacy of care for high-risk women. The Kotelchuck Index does not measure the quality of the care provided.

Prepregnancy weight: Body Mass Index (BMI) was calculated from self-reported weight and height, classified as underweight (<18.5), normal weight (18.5-24.99), overweight (25-29.99) or obese (30+). BMI was calculated only for women reporting height within 48-83 inches and weight within 75-399 pounds. BMI values outside 13-69.99 were excluded. BMI should not be used as the sole criterion for making health recommendations. It is a screening tool as part of an assessment for determining weight classifications. BMI may overestimate or underestimate body fatness in some individuals since it does not take into consideration an individual's muscle or bone mass.

Race/ethnicity: Hispanic includes all persons of Hispanic origin of any race, including Other and Unknown race. Multi-Race includes those of non-Hispanic origin who reported more than one race. The remaining groups are of non-Hispanic origin who reported a single race: American Indian or Alaska Native (AIAN), Asian, Black, Native Hawaiian or Other Pacific Islander (Pacific

Islander), White, Other or Unknown. Other and Unknown race are not shown on the dashboards but are available in the downloadable data table.

Sex: Sex of infant at birth is defined as either male or female. Excludes records with unknown and nonbinary sex.

Total live births: Total number of live births the mother/parent giving birth delivered prior to most recent birth. Twins, triplets and higher-order births are considered one birth. Excludes records with unknown number of live births.

Suggested Citation

California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, Birthweight Dashboard, Last Modified August 2022.

sn.cdph.ca.gov/Low-Birthweight-Dashboard