

About the Data – Weight Gain During Pregnancy

Indicator Description

Weight gain during pregnancy is the difference between an individual’s weight at delivery and prepregnancy weight.

Excessive weight gain during pregnancy is based on the National Academy of Medicine, previously the Institute of Medicine (IOM), guidelines for recommended weight gain during pregnancy (limited to full-term, singleton births) that are specific to an individual’s prepregnancy Body Mass Index (BMI).

Prepregnancy BMI	IOM Weight Gain Categories		
	Inadequate	Appropriate	Excessive
Underweight (BMI <18.5)	<28 pounds	28-40 pounds	>40 pounds
Normal weight (BMI 18.5-24.99)	<25 pounds	25-35 pounds	>35 pounds
Overweight (BMI 25-29.99)	<15 pounds	15-25 pounds	>25 pounds
Obese (BMI 30+)	<11 pounds	11-20 pounds	>20 pounds

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.

Data Analysis

Weight gain during pregnancy shown in these dashboards is the number of women/parents giving birth in a specific weight gain category per 100 women/parents giving birth, stratified by selected birth and maternal characteristics. Excessive weight gain is the number of women/parents giving birth with excessive weight gain during pregnancy who delivered a full-term, singleton birth per 100 women/parents giving birth who delivered to a full-term, singleton birth, stratified by selected birth and maternal characteristics. 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 California resident mothers/parents giving birth with full-term, singleton births. Records with missing prepregnancy height, prepregnancy weight, gestational age of infant or invalid BMI 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: 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](#)

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 (trimester of initiation): Trimester of pregnancy in which the mother/parent giving birth first received prenatal care. Excludes records with unknown prenatal care initiation.

Prenatal care (adequacy of utilization): Often referred to as the Kotelchuck Index, adequacy of prenatal care utilization is based on the month prenatal care began and the number of visits adjusted for gestational age. The number of visits is assessed by comparing the number of reported visits with the number of expected visits for a particular gestational age, based on recommendations from ACOG. Inadequate care is defined as all prenatal care that began after the fourth month of pregnancy, as well as prenatal care that included less than 50% of the recommended number of visits. Intermediate care includes 50%–79% of the recommended visits, adequate care includes 80%–109%, and adequate plus care is 110% or more of the recommended visits. The Kotelchuck Index uses recommendations from ACOG 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: 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.

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

Weight gain category: Weight gained during pregnancy, given prepregnancy BMI, is based on guidelines from the National Academy of Medicine, previously the IOM, and restricted to women/parents giving birth who meet the following criteria: delivered at 37-42 weeks gestation; had singleton births; and registered prenatal weight gain within 0-97 pounds, height within 48-83 inches, prepregnancy weight within 75-399 pounds, and BMI values within 13-69.99.

Suggested Citation

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