

Variables

- Live births that occurred before 37 completed weeks of gestation
- Live births that occurred at less than 32 weeks of gestation

Housing type matters. Preterm births to women living in public housing, single resident occupancy hotels (SRO), or shelters averaged 13.5 percent.

What is it?

Preterm birth is the birth of an infant before 37 weeks of pregnancy. Births that occur before 32 weeks of pregnancy are considered very preterm.¹ The national Healthy People 2020 objectives are to reduce preterm births to no more than 11.4 percent of live births, and to reduce very preterm births to no more than 1.8 percent of live births.²

A number of risk factors may contribute to premature birth. These include smoking, abuse of alcohol, or using drugs, especially cocaine, during pregnancy. Evidence also indicates that psychosocial factors play a role in causing preterm birth, including major life events, chronic and severe stress, maternal anxiety, experience of racism, and lack of support. Preterm births can be avoided by preventing unintended pregnancies and optimizing prepregnancy health care to limit mental health disorders, sexually transmitted infections, tobacco use, poor nutrition, obesity, diabetes, and hypertension.

Why is it important for health?

Prematurity is the leading cause of infant mortality in the United States. A developing baby goes through important growth during the last weeks and months of pregnancy. Many organ systems, including the brain, lungs, and liver, need the final weeks of pregnancy to fully develop. Preterm infants face a lifetime of disability, including learning disabilities and visual, hearing, and neurological problems.³

What is the status in San Francisco?

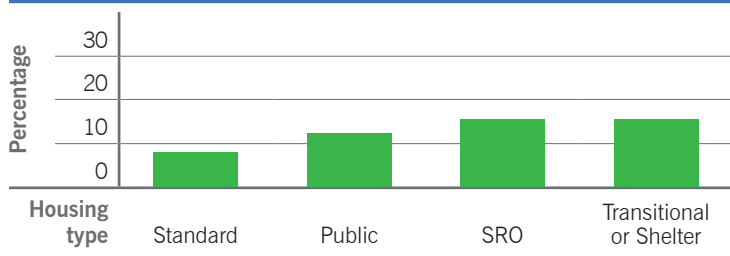
In 2012, 11.5 percent of live births to women in the United States were preterm births while 8.6 percent of live births to San Francisco residents were preterm births. Fewer than 1 percent of live births were very preterm.

While San Francisco, as a city, meets national HP 2020 targets for risk of preterm birth, vulnerable population groups in San Francisco continue to have elevated risk of preterm birth. In 2012, 16.4 percent of Black/African American live births in San Francisco were preterm; 13.5 percent of live births for women living in public housing, single resident occupancy (SRO) hotels, or shelters were preterm. Preterm birth risk also varies by type of insurance and neighborhood. (See **Figures A, B, C, D.**)

Sources

CDPH California Department of Public Health. Births Statistical Master File.

Figure A: Live births that occurred before 37 weeks gestation, by housing type

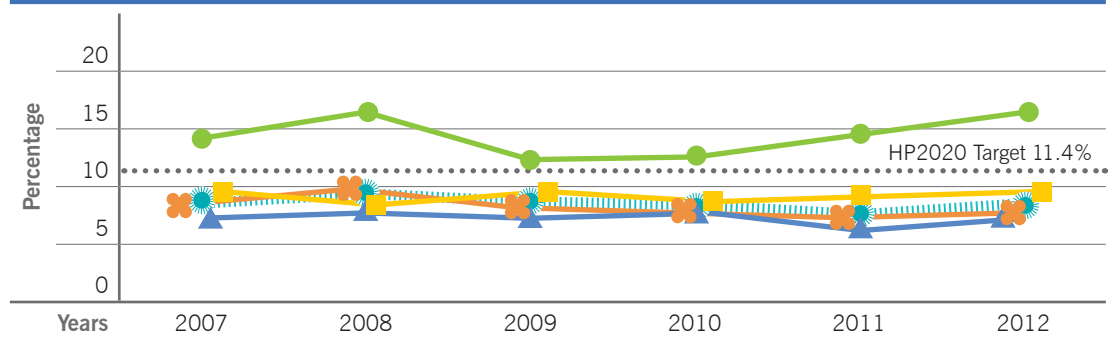


Data source: CDPH, Births Statistical Master File.

Poverty and its associated hardships and stress are risk factors for preterm birth. In San Francisco, 13.5% of live births born to women living in public housing, single resident occupancy hotels, or shelters were preterm.

Approximately 8% of babies born to mothers living in standard housing were preterm.

Figure B: Live births that occurred before 37 weeks gestation, by ethnicity



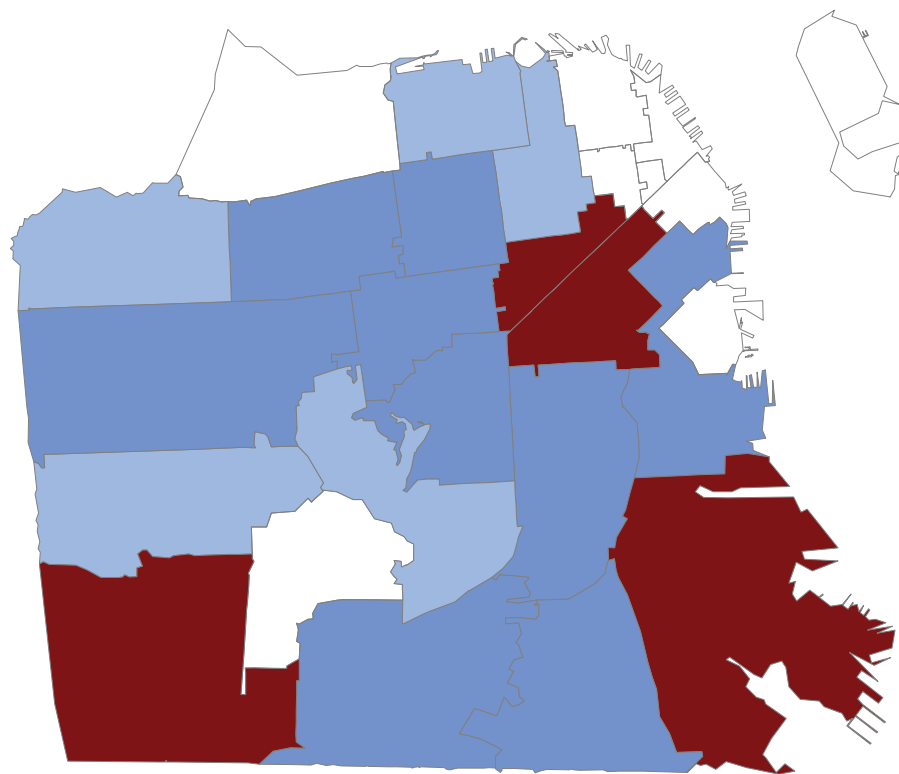
San Francisco, API, B/AA, Latina, White. Data source: CDPH, Births Statistical Master File.

Map: Percentage of live births that occurred before 37 weeks of gestation, 2012

The number of preterm births per 100 births

- No data
- 0.01–7.30
- 7.31–8.70
- 8.71–10.10
- 10.11–11.90

Data Source: CDPH.



Half of the infant deaths in San Francisco are associated with preterm birth.

References

1. American Congress of Obstetricians and Gynecologists, “Committee opinion: Method for estimating due date,” no. 611 (November 2014). <http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Method-for-Estimating-Due-Date>
2. Healthy People 2020, “Preterm births and infant deaths.” <https://www.healthypeople.gov/2020/leading-health-indicators/infographic/maternal-infant-and-child-health-0>
3. Centers for Disease Control, “Preterm birth.” <http://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm>

Methodology and Limitations

The best obstetric estimates of gestational age, determined by ultrasound measurements of the embryo or fetus during the first trimester of pregnancy, were used to determine preterm and very preterm births.

Estimates of preterm birth are based on gestational age information reported on the birth certificate. The birth certificate reports the gestational age of the infant in two ways, as the number of days between the first day of the mother’s last normal menstrual period and the date of birth, and in terms of the best obstetric estimate of the number of weeks of gestation. Measures based on the last menstrual period are subject to error related to imperfect maternal recall, post-conception bleeding, delayed ovulation, or intervening early miscarriage. Before 2014, the length of the pregnancy, or gestational age of the infant, was estimated as the time between the first day of the mother’s last normal menstrual period and the date of birth. Starting in 2014, the Centers for Disease Control, American Congress of Obstetricians and Gynecologists, and California Department of Public Health began shifting to best obstetric estimates of gestational age, determined by ultrasound measurements of the embryo or fetus during the first trimester of pregnancy.³

Figure C: Live births that occurred before 37 weeks gestation, by health insurance or coverage, 2007-12

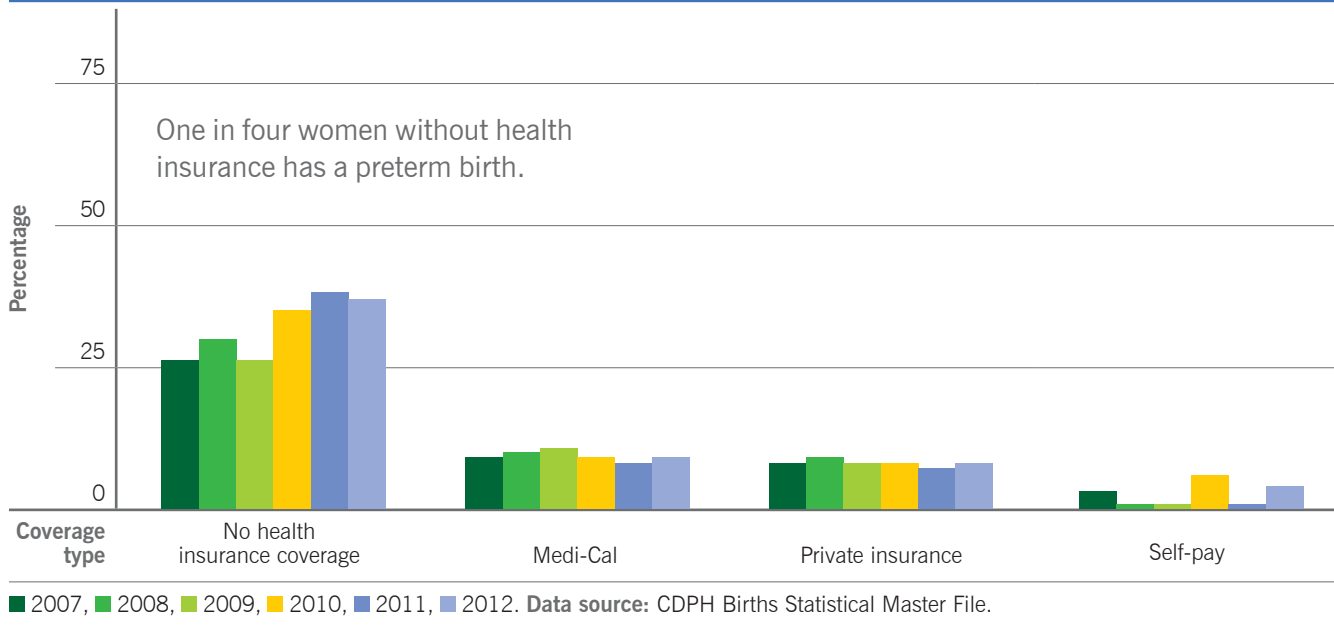


Table I: Percentage of live births that occurred before 37 completed weeks of gestation¹

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|------|------|------|------|------|------|
| California | 11.1 | 10.7 | 10.4 | 10.0 | 9.9 | 9.7 |
| San Francisco | 8.7 | 9.3 | 8.8 | 8.6 | 7.7 | 8.6 |
| Percentage by mother's age | | | | | | |
| Less than 20 years | 13.3 | 11.8 | 12.3 | * | * | * |
| 20–34 years | 8.3 | 8.6 | 8.0 | 7.9 | 7.4 | 8.0 |
| 35-plus years | 9.2 | 10.4 | 10.0 | 9.6 | 8.2 | 9.4 |
| Percentage by ethnicity | | | | | | |
| Asian | 8.6 | 9.9 | 8.3 | 8.0 | 7.6 | 7.9 |
| B/AA | 14.2 | 16.3 | 12.3 | 12.6 | 14.6 | 16.4 |
| Latino | 9.6 | 8.5 | 9.6 | 8.7 | 9.1 | 9.7 |
| White | 7.2 | 7.9 | 7.8 | 7.9 | 6.2 | 7.4 |
| Percentage by type of insurance coverage | | | | | | |
| Private | 8.4 | 9.2 | 8.1 | 8.3 | 7.4 | 8.2 |
| Medi-Cal | 9.4 | 9.5 | 10.1 | 8.9 | 8.4 | 9.1 |
| Other** | * | 21.7 | 17.7 | 15.6 | 12.6 | 10.3 |

¹Based on best obstetric estimate. *Data is suppressed where the number of observations is below 20. Data source: CDPH Births Statistical Master File.

Table continues on the next page.

Table 1: Percentage of live births that occurred before 37 completed weeks of gestation¹ (continued)

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------------------|------|------|------|------|------|------|
| Percentage by zip code | | | | | | |
| 94102 | 9.9 | 10.3 | 9.4 | * | 11.1 | 11.0 |
| 94103 | 9.0 | * | * | 11.6 | 9.6 | 11.9 |
| 94107 | 9.9 | 12.3 | 8.4 | 9.9 | 10.4 | 8.4 |
| 94109 | 8.7 | 10.6 | 7.8 | 7.5 | 7.5 | 6.4 |
| 94110 | 8.0 | 8.4 | 9.7 | 8.0 | 7.2 | 8.3 |
| 94112 | 9.7 | 9.2 | 8.8 | 10.7 | 9.8 | 9.1 |
| 94114 | 9.2 | 9.9 | 10.8 | 8.9 | * | 9.2 |
| 94115 | 11.3 | 9.4 | 7.0 | 8.0 | * | 8.7 |
| 94116 | 7.0 | 6.2 | 9.6 | 7.8 | 6.7 | 6.6 |
| 94117 | 9.3 | 8.1 | 9.3 | 8.0 | 6.3 | 10.1 |
| 94118 | 7.4 | 10.9 | 7.6 | 7.3 | 7.3 | 8.2 |
| 94121 | 8.5 | 9.1 | 6.5 | 9.5 | 7.5 | 6.5 |
| 94122 | 6.8 | 8.7 | 7.5 | 8.8 | 7.9 | 8.4 |
| 94123 | 11.1 | 11.4 | 7.5 | 7.7 | 8.7 | 7.3 |
| 94124 | 10.9 | 11.6 | 13.0 | 10.6 | 9.2 | 11.8 |
| 94131 | 7.1 | 7.5 | 8.3 | 5.8 | 7.4 | 7.0 |
| 94132 | * | * | 10.0 | 9.5 | * | 11.6 |
| 94134 | 8.8 | * | 10.1 | 9.4 | 8.3 | 9.4 |

¹Based on best obstetric estimate. *Data is suppressed where the number of observations is below 20. ***Other includes women who had “no prenatal care”, “other government insurance”, “other”, “unknown”, and/or “unreported.” **Data source:** CDPH Births Statistical Master File.

Table 2: Percentage of live births that occurred before 32 completed weeks of gestation¹

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------|------|------|------|------|------|------|
| San Francisco | 1.3 | 1.4 | 1.0 | 1.2 | 1.2 | 0.8 |

¹Based on best obstetric estimate. **Data source:** CDPH Births Statistical Master File.