



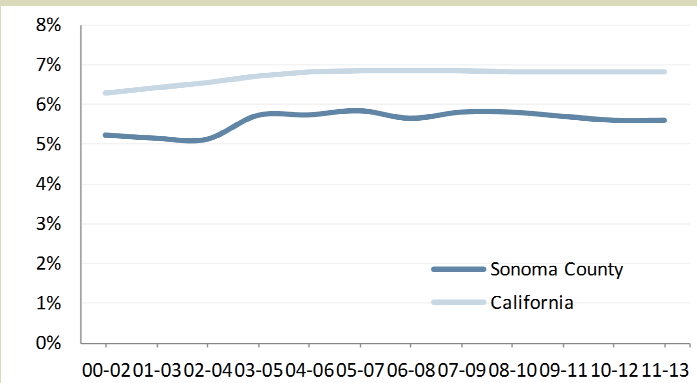
Overview

Infants born at low birth weight (less than 2,500 grams or 5.5 pounds) are more likely than infants of normal birth weight to die in the first year of life and to experience chronic physical and developmental health problems over the life course.¹ Prematurity—born before 37 weeks gestation—and fetal growth restriction in utero can both lead to low birth weight. Risk factors associated with delivering a low birth weight infant include:²

- teen (< 20 years) or older (more than 35 years) mother
- multiple births (birth to twins or more)
- mother with hypertension or diabetes
- no or inadequate prenatal care
- alcohol or drug use during pregnancy
- tobacco use during pregnancy
- inadequate maternal weight gain and poor nutrition
- closely spaced pregnancies
- perceived maternal stress

The Healthy People 2020 objective is to reduce the percent of infants born low birth weight to 7.8% of total births.

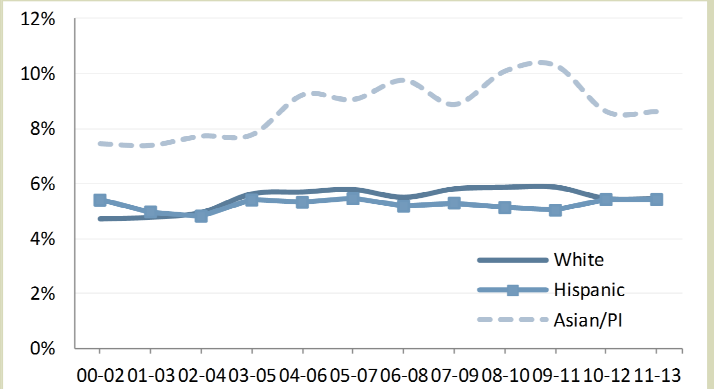
Figure 1. Percent births born at a low birth weight, three year moving average— Sonoma County and California 2000-2013



Trend

- The percent of births to Sonoma County residents born weighing less than 2500 grams (low birth weight—about 5.5 pounds) increased significantly over the time period. The state experienced a similar increase.
- The percent of births born at a low birth weight continued to be significantly lower for Sonoma County than for California.

Figure 2. Percent births born at a low birth weight by mother’s race/ethnicity, three year moving average— Sonoma County 2000-2013



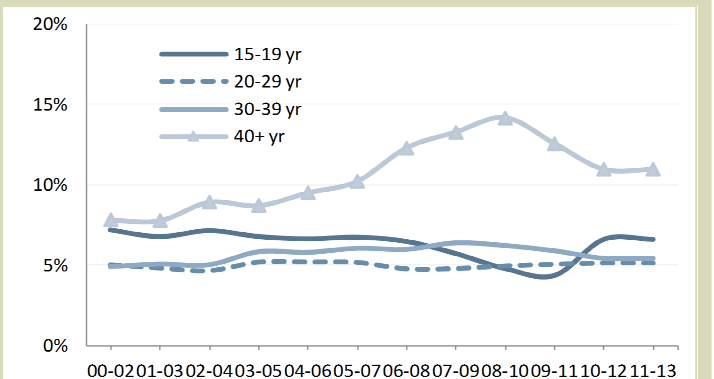
Race/Ethnicity[‡]

- The percent of births born at a low birth weight increased significantly among births to white mothers (4.7% to 5.5%) and Asian/Pacific Islander mothers (7.5% to 8.6%) during the time period.
- The percent of births born at a low birth weight continued to be significantly higher among births to Asian/Pacific Islander mothers than white or Hispanic mothers.

Age of Mother

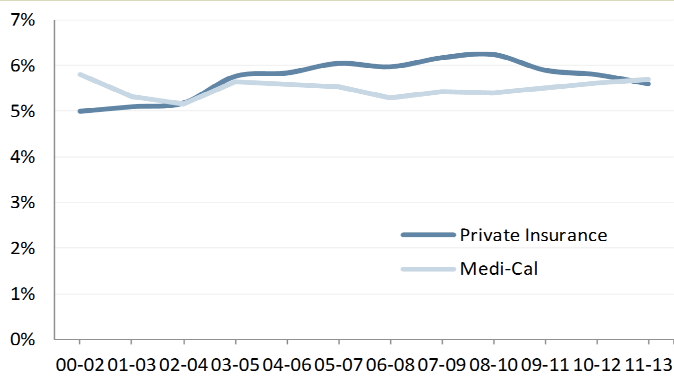
- From 2000-2013 the percent of births born at a low birth weight increased significantly among mothers 40 years and over. There was no significant change among mothers in other age categories.
- The percent of births born at a low birth weight among mothers 40 years and over remained significantly higher than among younger mothers.

Figure 3. Percent births born at a low birth weight by mother’s age, three year moving average— Sonoma County 2000-2013



[‡] Only race/ethnicities with stable rates are presented (n>10)

Figure 4. Percent births born at a low birth weight by pay source, three year moving average— Sonoma County 2000-2013



Pay Source

- From 2000-2002 to 2011-2013 the percent of births born at a low birth weight increased significantly among private insurance funded births. There was no significant change among births paid by Medi-Cal.
- Low birth weight rates were similar among births paid by private insurance and those funded by Medi-Cal.

Table 1. Percent of birth born low birth weight by maternal characteristics , three year moving average— Sonoma County 2000-2013

	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	
Sonoma County	5.2%	5.2%	5.1%	5.7%	5.7%	5.8%	5.6%	5.8%	5.8%	5.7%	5.6%	5.6%	^
California	6.3%	6.4%	6.6%	6.7%	6.8%	6.9%	6.9%	6.8%	6.8%	6.8%	6.8%	6.8%	
<i>Race/ethnicity</i>													
White non-Hispanic	4.7%	4.8%	5.0%	5.6%	5.7%	5.8%	5.5%	5.8%	5.9%	5.9%	5.5%	5.5%	^
Hispanic	5.4%	5.0%	4.8%	5.4%	5.3%	5.4%	5.2%	5.3%	5.1%	5.0%	5.4%	5.4%	
Asian/Pacific Islander	7.5%	7.4%	7.7%	7.8%	9.2%	9.1%	9.8%	8.9%	10.1%	10.3%	8.6%	8.6%	^
<i>Mother's age</i>													
15-19 yr	7.2%	6.8%	7.1%	6.8%	6.6%	6.7%	6.5%	5.7%	4.8%	4.4%	6.6%	6.6%	
20-29 yr	5.0%	4.8%	4.6%	5.2%	5.2%	5.2%	4.8%	4.8%	5.0%	5.1%	5.2%	5.2%	
30-39 yr	4.9%	5.1%	5.1%	5.8%	5.8%	6.0%	6.0%	6.4%	6.2%	5.9%	5.4%	5.4%	
40+ yr	7.8%	7.8%	8.9%	8.7%	9.5%	10.2%	12.3%	13.3%	14.1%	12.6%	11.0%	11.0%	^
<i>Pay source for delivery</i>													
Private Insurance	5.0%	5.1%	5.2%	5.8%	5.8%	6.0%	6.0%	6.2%	6.2%	5.9%	5.8%	5.6%	^
Medi-Cal	5.8%	5.3%	5.2%	5.6%	5.6%	5.5%	5.3%	5.4%	5.4%	5.5%	5.6%	5.7%	

v Significant decrease from 2000-2002 to 2011-2013 p<.05

^ Significant increase from 2000-2002 to 2011-2013 p<.05

Table 2. Percent of birth born low birth weight by maternal characteristics, three year average— Sonoma County 2011-2013

	Annual average	% total births	95% Confidence Interval
Sonoma County	285	5.6%	5.2-6.0
California	33846	6.8%	6.7-6.8
<i>Race/ethnicity</i>			
White non-Hispanic	130	5.5%	5.0-6.0
Hispanic	108	5.4%	4.9-6.0
Asian/Pacific Islander	20	8.6%	8.7-11.0
<i>Mother's age</i>			
15-19 yr	17	6.6%	5.0-8.6
20-29 yr	118	5.2%	4.6-5.7
30-39 yr	127	5.4%	4.9-6.0
40+ yr	24	11.0%	8.7-13.6
<i>Pay source for delivery</i>			
Private Insurance	158	5.6%	5.1-6.1
Medi-Cal	123	5.7%	5.1-6.3

References

1. U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *Child Health USA 2013*. Rockville, MD: U.S. Department of Health and Human Services, 2013.
2. V. R. Chomitz, L.W.Y Cheung, and E. Lieberman, "The Role of Lifestyle in Preventing Low Birth Weight," *The Future of Children*, Vol. 5 No. 1, 1995, pp. 121-138; Richard E. Behrman, Adrienne Stith Butler, eds., *Preterm Birth: Causes, Consequences and Prevention*, Institute of Medicine, Committee on Understanding Premature Birth and Assuring Healthy Outcomes, Washington, D.C.: National Academies Press, 2007