

A close-up, color photograph of a pregnant woman's belly, showing the skin texture and the curve of the abdomen. The background is a soft, out-of-focus blue.

BIRTHS
Santa Cruz County
2012



Public Health
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TABLE OF CONTENTS

	Page
INTRODUCTION	1
DEFINITIONS AND TECHNICAL NOTES	2
1. OVERALL COUNTY DEMOGRAPHICS	3
2. KEY HEALTH MEASURES	4
Adequacy of Prenatal Care Utilization, Low Birthweight & Preterm Births by:	
AGE OF MOTHER	
ETHNICITY OF MOTHER	
EDUCATION OF MOTHER	
DELIVERY PAYMENT METHOD	
3. BIRTHS BY DEMOGRAPHICS OF MOTHER	6
AGE	
ETHNICITY	
4. TEEN BIRTHS	9
5. MOTHER'S WEIGHT GAIN & SMOKING STATUS	12
6. BIRTHS BY AGE OF FATHER	13
7. BIRTHS BY DELIVERY LOCATION	14
8. TRENDS	16

INTRODUCTION

This report characterizes data on live births delivered in 2012 and has been compiled by the County of Santa Cruz Public Health Department's Maternal, Child and Adolescent Health (MCAH) Program in the Family Health Unit. The report is partially funded through the California Department of Public Health's MCAH allocation funds. Data was obtained from the local birth certificate registry which is locally managed by the Public Health Department's Vital Statistics Program.

In Summary:

- In 2012, there were 3,075 live births among mothers who reside in Santa Cruz County, which is 147 or 5% fewer births than in 2011.
- The General Fertility Rate in 2012 was 54.8 births per 1,000 females of typical childbearing age (15-44 years) among Santa Cruz County residents compared to 55.8 in 2011. In 2011, the U.S. rate was 63.2 per 1,000 women -- the lowest ever reported for the United States (Source: CDC. "Births: Preliminary data for 2011").
- An additional 475 births were delivered in Santa Cruz County to mothers who are residents of other counties, primarily Monterey County (81%).

TEEN BIRTHS (19 and Under)

- In 2012, 87% of births to teens were to Latina teens, and 75% of all teen mothers lived in south Santa Cruz County (see definition on page 2).
- Births to teens as a percentage of all births decreased from 7.9% in 2011 to 7.3% in 2012, and the number of teen births was lower in 2012, with 224 births compared to 256 births in 2011.
- In 2012, there were 2 births to 14 year old females compared to 4 births to 14 year olds in 2011; there were zero births to 13 years old females in 2012 compared to 1 birth to a 13 year old in 2011.
- Among teen births, 12% were delivering their second (or more) birth in 2012 compared to 14% in 2011.

MEDI-CAL

- 52% of all deliveries to residents were funded by Medi-Cal in 2012, compared to 53% in 2011.

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For more copies of the report:

Refer to our website www.SantaCruzHealth.org, and go to the "Reports and Statistics" link.

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DEFINITIONS AND TECHNICAL NOTES

DEFINITIONS

For the purposes of this report, the following terms are defined as shown below:

TERM	MEANING
Residents	All mothers who self-identify as residing in Santa Cruz County, regardless of where they delivered. A small number of women identify as living in Santa Cruz County, but actually live in another county, usually Monterey. However, they are counted as Santa Cruz County residents in accordance with the county shown on their birth certificate.
Occurrence	All mothers who delivered in Santa Cruz County, regardless of where they reside
Mid-County	Aptos, Capitola, La Selva Beach, Seascape and Soquel
Santa Cruz Mountains (Mtns)	Ben Lomond, Boulder Creek, Brookdale, Felton, Lompico, Los Gatos and Mt. Hermon
Santa Cruz	Bonny Doon, Davenport and Santa Cruz
South County	Corralitos, Freedom, Pajaro and Watsonville
Ethnicity (includes Race)	In this report, ethnicity categories combine the concepts of race and ethnicity, which are collected separately on the birth certificate. The combination defines Latino to mean Latino ethnicity regardless of race chosen, and the remaining categories reflect a non-Latino ethnicity (e.g., White means non-Latino White). All categories are mutually exclusive. Note, Pac. Isl. or Pac. Islander = Pacific Islander and includes Native Hawaiian, but not Filipino.
Low Birthweight	Less than 2500 grams or 5.5 pounds
Very Low Birthweight	Less than 1500 grams or 3.3 pounds
Preterm	Less than 37 completed weeks of gestation
Very Preterm	Less than 32 completed weeks of gestation
VBAC	Vaginal Birth after Cesarean
General Fertility Rate	The number of live births per 1,000 women ages 15-44 (typical childbearing age)
Adequacy of Prenatal Care Utilization (Kotelchuck Index)	This measure is a ratio of actual prenatal visits compared to the number of visits recommended by the American College of Obstetricians and Gynecologists (i.e., one visit per month through 28 weeks, one visit every 2 weeks through 36 weeks, and one visit per week thereafter, adjusted for date of initiation of prenatal care); "Adequate or Better" is defined as attending 80% or more of recommended prenatal care visits, and "Less than Adequate" is a score of less than 80% of expected visits. The Kotelchuck Index was defined by Milton Kotelchuck in 1994 in an attempt to measure appropriate utilization of prenatal care.

TECHNICAL NOTES

The term "significant difference" used in this report does mean there is a statistically significant difference based on 95% confidence limits (the probability is less than 5% that the difference was due to normal variation), assuming a normal distribution. Statistical significance tests do not necessarily imply *meaningful* significance. Missing data are not included in the denominators of proportions, but they are included in totals unless otherwise noted; as missing data increases, the remaining rates become increasingly unreliable.

DATA SOURCES

All of the Santa Cruz County birth data in this report (unless otherwise noted) are directly extracted from the Santa Cruz County Automated Vital Statistics System where birth certificate records are maintained, and should be considered provisional until they have gone through data cleaning by the state, which often takes two years to complete. The 2012 data were accessed on February 20, 2013 and analyzed using Cal Birth Info, aside from the Kotelchuck Index which was analyzed using the Kotelchuck SAS program.

Population data is from the State of California, Department of Finance, Report P-3: State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010-2060. Sacramento, California, January 2013 (<http://www.dof.ca.gov/research/demographic/reports/projections/P-3/>).

California birth data is from the California Department of Public Health Vital Statistics Query System (<http://www.apps.cdph.ca.gov/vsq/default.asp>). United States data is from the Centers for Disease Control and Prevention, National Center for Health Statistics (<http://www.cdc.gov/nchs/index.htm>).

1. OVERALL COUNTY DEMOGRAPHICS

The California Department of Finance projected the total population in Santa Cruz County to be 267,569 in 2012 (see Table 1.1). The Department of Finance data was chosen instead of Census data because it provides annual population counts by sex, age and race/ethnicity which allows for rate calculations.

GENDER

Nearly equal numbers of males and females reside in Santa Cruz County, with slightly more females than males.

AGE & ETHNICITY

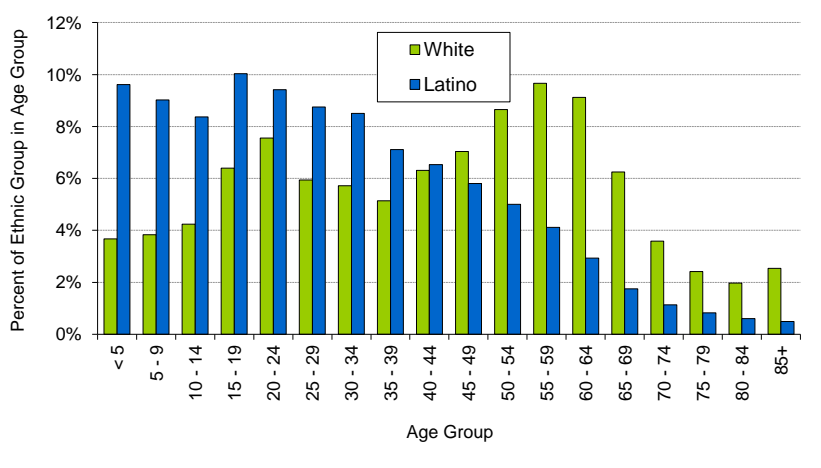
Over 90% of the county's population is either White (58.1%) or Latino (33.4%). The remaining groups account for much smaller fractions of the population: Asians and Pacific Islanders, Blacks, and multiple ethnicities and other ethnic groups (Table 1.1).

In Santa Cruz County, the Latino population is much younger compared to the White population (Figure 1.1). For example, 71% of the Latino population was under age 40, compared to 42% of the White population in 2012.

Table 1.1: Demographics, Santa Cruz County Residents, 2012

	Number	Percent
GENDER		
Female	134,037	50.1%
Male	133,532	49.9%
AGE (Years)		
4 and Under	15,477	5.8%
5 – 19	52,197	19.5%
20 - 44	92,991	34.8%
45 - 64	74,731	27.9%
65 and Over	32,172	12.0%
ETHNICITY		
American Indian / Alaska Native	969	0.4%
Asian / Pacific Islander	12,292	4.6%
Black	2,444	0.9%
Latino	89,385	33.4%
White	155,338	58.1%
Multiple Ethnicities	7,142	2.7%
TOTAL	267,569	100%

Figure 1.1: Age Distribution, by White and Latino Ethnicity, Santa Cruz County Residents, 2012



2. KEY HEALTH MEASURES

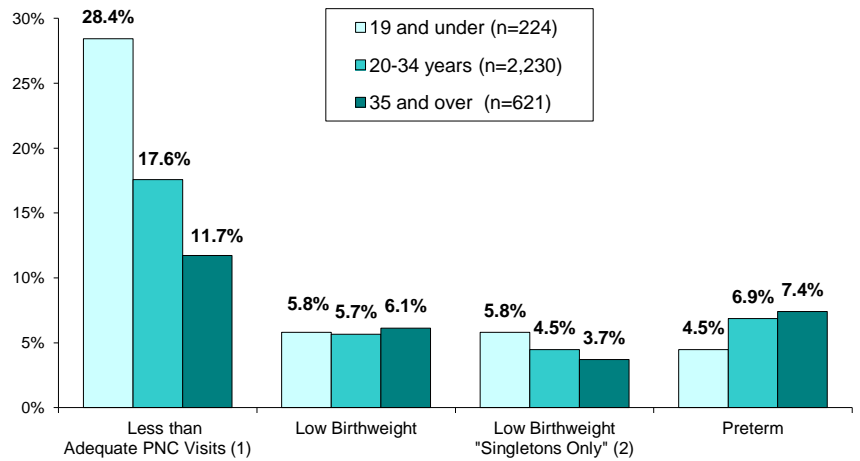
AGE OF MOTHER

In 2012, younger mothers were significantly more likely to under-utilize prenatal care than their older counterparts (Figure 2.1). Teenage mothers (age 19 and under) had the highest proportion of mothers with less than adequate utilization of prenatal care, with over one-quarter receiving less than adequate number of prenatal care visits.

Low birthweight data is shown both for all births and for "Singletons Only" (excluding multiple births, such as twins) because multiple births are known to have much higher rates of low birthweight. In 2012, there were 88 multiple births and 51% of those were low birthweight.

Neither low birthweight categories (all and "singletons only") nor preterm percentages were significantly different by age group.

Figure 2.1: Key Health Measures, by Age of Mother, Santa Cruz County Residents, 2012



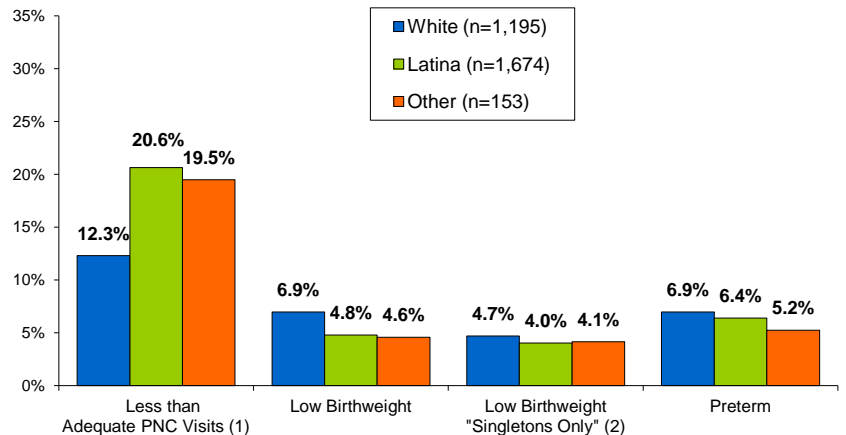
(1) There were 6, 67 and 15 deliveries missing a component of the Adequate PNC Visits measure for births to mothers in age groups: <20, 20-34, & 35+, respectively.
 (2) There were 0%, 1.8%, and 4.2% of births that were multiples born to mothers in the respective age groups: <20, 20-34, & 35+.

ETHNICITY OF MOTHER

White mothers had a significantly lower rate of less than adequate prenatal care compared to Latina and Other ethnicity mothers (Figure 2.2).

White mothers had a significantly higher percent of low birthweight births compared to Latina mothers. However, that difference did not remain when comparing births of singletons only. None of the other measures differed significantly.

Figure 2.2: Key Health Measures, by Ethnicity of Mother, Santa Cruz County Residents, 2012



There were 53 births to mothers with ethnicity listed as unknown or withheld; they have been excluded from the above calculations. Other ethnicity includes Asian, Black, Native American, Pacific Islander and those who identify as Other.
 (1) There were 40, 36, and 4 mothers missing a component of the Adequate PNC measure for births to White, Latina and Other ethnicity mothers, respectively.
 (2) There were 3.5%, 2.2%, and 5.2% of births that were multiples born to White, Latina and Other ethnicity mothers, respectively.

2. KEY HEALTH MEASURES

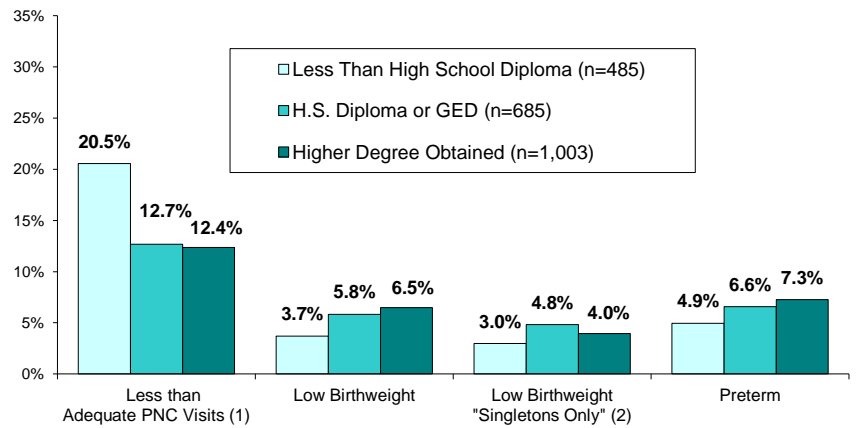
EDUCATION OF MOTHER

In 2012, 22% of mothers ages 25 and older did not have a high school diploma or equivalent. Of those mothers, 20.5% utilized less than adequate numbers of prenatal care visits, which was significantly greater than mothers who obtained a high school diploma or a higher degree (Figure 2.3).

Mothers with a higher education degree were significantly more likely to have a low birthweight baby compared to mothers who did not complete high school. However, this difference did not remain for births of singletons only -- indicating that the difference was due to multiple births which are more common among mothers with a higher degree.

None of the other measures differed significantly by education level.

Figure 2.3: Key Health Measures, by Education of Mother (Age 25 and Older), Santa Cruz County Residents, 2012



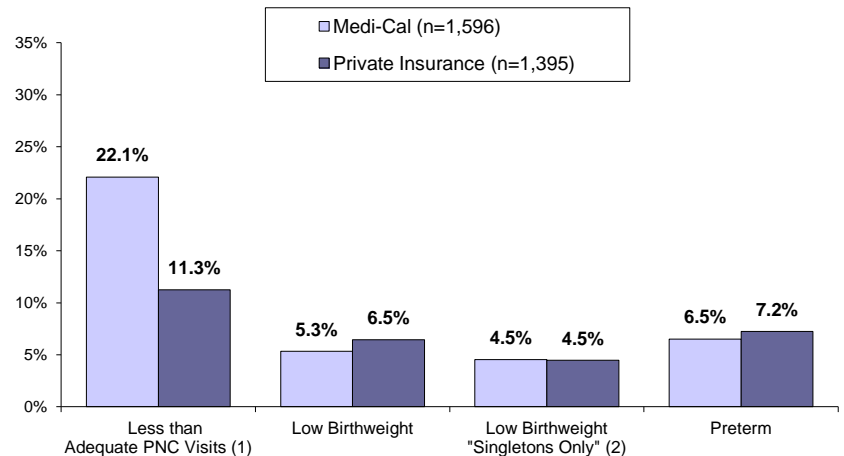
GED = General Equivalency Degree (or diploma)
 There were 117 out of 2290 births to mothers age 25 and over where education status was unknown or withheld; they have been excluded from the above calculations.
 (1) There were 8, 22, and 25 births to mothers missing a component of the Adequate PNC measure for <HS Diploma, HS/GED (incl. some college), Higher Degree Obtained (incl. Associate, Bachelor's, Master's, Doctorate and Professional School), respectively.
 (2) There were 2.7%, 3.2%, and 4.3% of births that were multiples born to mothers with <H.S. Diploma, H.S./GED (incl. some college), and Higher Degree Obtained, respectively.

DELIVERY PAYMENT SOURCE

In 2012, Medi-Cal funded 52% of deliveries to county residents and private insurance funded 45% of deliveries, the remainder were otherwise insured or not insured. Mothers with Medi-Cal funded deliveries were significantly more likely than mothers with privately insured deliveries to utilize less than adequate prenatal care visits.

Neither low birthweight categories nor preterm births differed significantly by delivery payment source.

Figure 2.4: Key Health Measures, by Delivery Payment Source, Santa Cruz County Residents, 2012



(1) There were 42 and 26 deliveries missing a component of the Adequate PNC measure for Medi-Cal and Private Insurance funded deliveries, respectively.
 (2) There were 2.2% and 3.7% of births that were multiples with deliveries funded by Medi-Cal and Private Insurance, respectively.

3. BIRTHS BY DEMOGRAPHICS OF MOTHERS

TABLE 3.1: Characteristics of Mothers, by Age Group, Santa Cruz County Residents, 2012

									TOTAL	
	19 and Under		20-24		25-34		35 and Over		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
ETHNICITY										
Asian & Pac. Islander	0	0%	4	0.9%	58	4%	39	7%	101	3%
Black	3	1%	5	1%	10	1%	7	1%	25	1%
Latina	195	89%	444	80%	811	49%	224	37%	1,674	55%
White	19	9%	96	17%	759	46%	321	54%	1,195	40%
Other	3	1%	5	1%	11	1%	8	1%	27	1%
AREA OF RESIDENCE										
Mid-County	6	3%	30	5%	259	16%	97	16%	392	13%
Santa Cruz Mtns	4	2%	22	4%	127	8%	61	10%	214	7%
Santa Cruz	41	18%	111	20%	499	30%	238	38%	889	29%
Scotts Valley	3	1%	7	1%	81	5%	22	4%	113	4%
South County	170	76%	391	70%	703	42%	203	33%	1,467	48%
PARITY										
1st Child	198	88%	299	53%	608	37%	165	27%	1,270	41%
2nd - 3rd Child	26	12%	247	44%	887	53%	323	52%	1,483	48%
4th+ Child	0	0%	14	3%	170	10%	130	21%	314	10%
PRENATAL CARE INITIATION AND UTILIZATION										
Early (1st Trimester)	145	66%	405	73%	1,429	86%	547	89%	2,526	83%
Late (2nd or 3rd Trimester)	74	34%	146	26%	222	13%	69	11%	511	17%
No Prenatal Care	1	0%	1	0.2%	3	0.2%	0	0%	5	0.2%
Adequate or Better	156	72%	413	76%	1,370	85%	535	88%	2,474	83%
Less than Adequate	62	28%	133	24%	247	15%	71	12%	513	17%
Early <i>and</i> Adequate	131	60%	362	66%	1,281	77%	502	81%	2,276	76%
BIRTH OUTCOMES										
Low Birthweight	13	5.8%	30	5.3%	96	5.8%	38	6.1%	177	5.8%
Very Low Birthweight	0	0.0%	5	0.9%	20	1.2%	10	1.6%	35	1.1%
Preterm	10	4.5%	43	7.7%	110	6.6%	46	7.4%	209	6.8%
Very Preterm	1	0.4%	9	1.6%	18	1.1%	10	1.6%	38	1.2%
DELIVERY METHOD										
Primary Cesarean	38	17%	86	15%	250	15%	116	19%	490	16%
Repeat Cesarean	7	3%	43	8%	217	13%	118	19%	385	13%
Vaginal	179	80%	431	77%	1,183	71%	376	61%	2,169	71%
VBAC	0	0%	1	0.2%	19	1%	11	2%	31	1%
PAYMENT FOR DELIVERY ⁽¹⁾										
Medi-Cal	193	86%	447	80%	759	46%	197	32%	1,596	52%
Private Insurance	27	12%	104	19%	860	52%	404	65%	1,395	45%
Other Insurance	2	1%	2	0.4%	7	0.4%	0	0%	11	0.4%
No Insurance	2	1%	6	1%	40	2%	20	3%	68	2%
TOTAL	224	7%	561	18%	1,669	54%	621	20%	3,075	100%

Note: The sum of column categories does not always equal the overall column total either because of missing information (percentages are out of known data) or because of the nature of the column, such as "Birth Outcomes," which does not detail the comprehensive list of mutually exclusive categories.

HP2020 Targets: Reduce low birthweight (< 5.5 lbs) to 7.8%; reduce very low birthweight (<3.3 lbs) to 1.4%; reduce preterm (<37 weeks) to 11.4% and very preterm (<32 weeks) to 1.8%

3. BIRTHS BY DEMOGRAPHICS OF MOTHERS

AGE OF MOTHER

The selected demographics shown in Figure 3.1 differ significantly by age group. For example, a larger proportion of mothers age 19 and under are Latina (88.6%) compared to mothers age 35 and over (44.6%). The demographics shown were selected because of their well-known associations with age.

The age category with the largest number of births was to women ages 30-34 years. The highest age-specific birth rate (the number of births per population in a specific age category), 82 births per 1,000 women, was also in that age group (Table 3.1 and Figure 3.2). For more information on teen births, go to page 9.

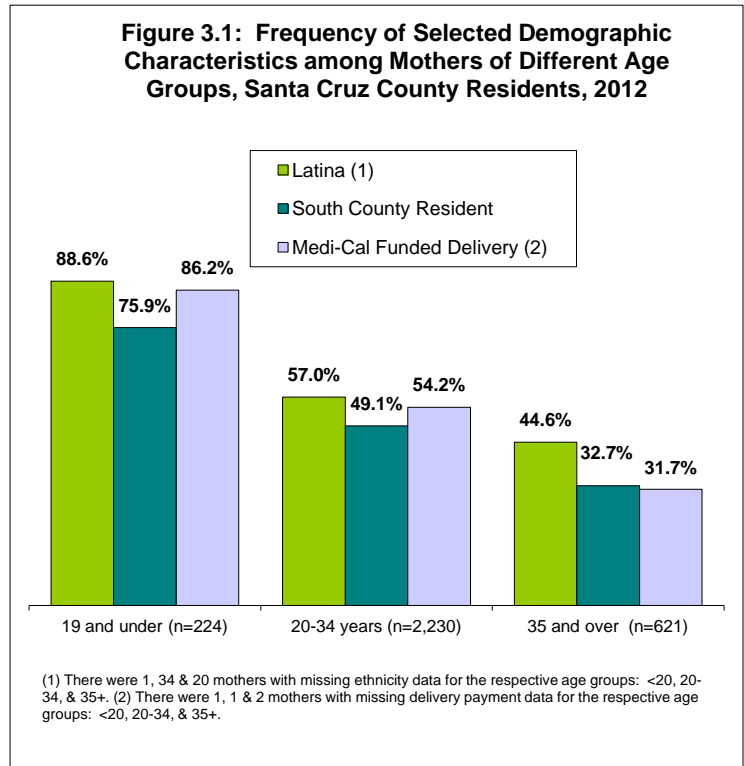
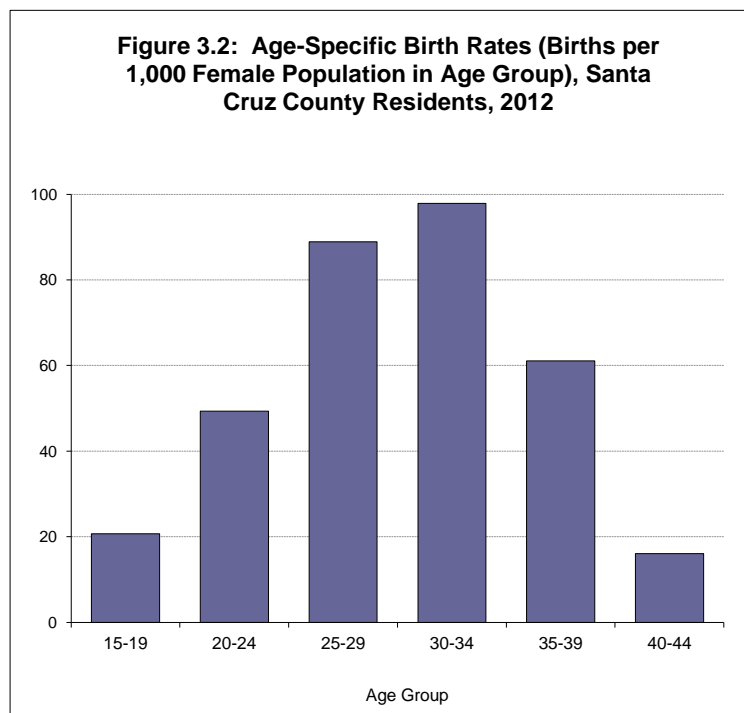


Table 3.1: Births by Mother’s Age Group and Age-Specific Birth Rate per 1,000 Females, Santa Cruz County Residents, 2012

Mother's Age Group	Number of Births	Percent of Births	Total Female Population (per age group)	Birth Rate per 1,000 Popl'n
10-14	2	0.1%	7,351	0.3
15-19	222	7.2%	10,731	20.7
20-24	561	18.2%	11,372	49.3
25-29	780	25.4%	8,777	88.9
30-34	889	28.9%	9,082	97.9
35-39	488	15.9%	7,990	61.1
40-44	124	4.0%	7,713	16.1
45-49	9	0.3%	8,839	1.0
TOTAL	3,075	100%	55,665	55.2

Rates are age-specific and are calculated by dividing the total number of births to females in an age group by the total female population in that age group. The "TOTAL" birth rate in this table is also known as the general fertility rate which is the number of births divided by the total female population ages 15-44 ("childbearing age"). Note that the "TOTAL" Female Population only includes the female population ages 15-44.



3. BIRTHS BY DEMOGRAPHICS OF MOTHERS

ETHNICITY OF MOTHER

Among the “primary childbearing age” population (defined as females ages 15-44) in Santa Cruz County, approximately 39% are Latina and 50% are White. However, Latina mothers delivered 54% of the babies, whereas White mothers delivered 39% of babies in 2012.

The difference by ethnicities can also be seen by comparing ethnicity-specific fertility rates (Table 3.3 and Figure 3.4). The fertility rate (births per 1,000 women ages 15 to 44), is nearly twice as high among Latinas (76.8 per 1,000) compared to Whites (42.8 per 1,000).

Figure 3.3: Percentage of Births by Ethnicity of Mother (n=3,075), Santa Cruz County Residents, 2012

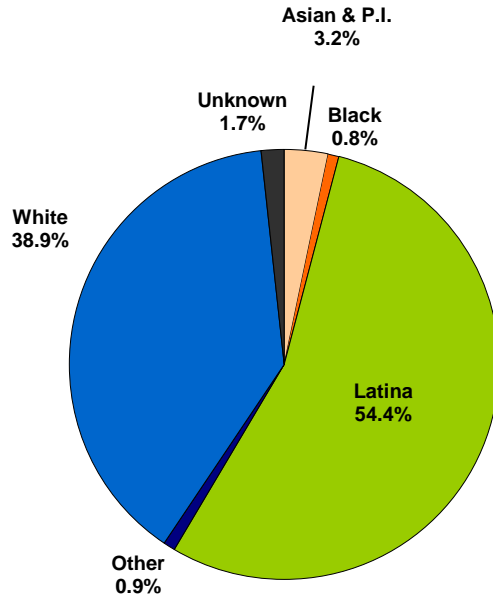
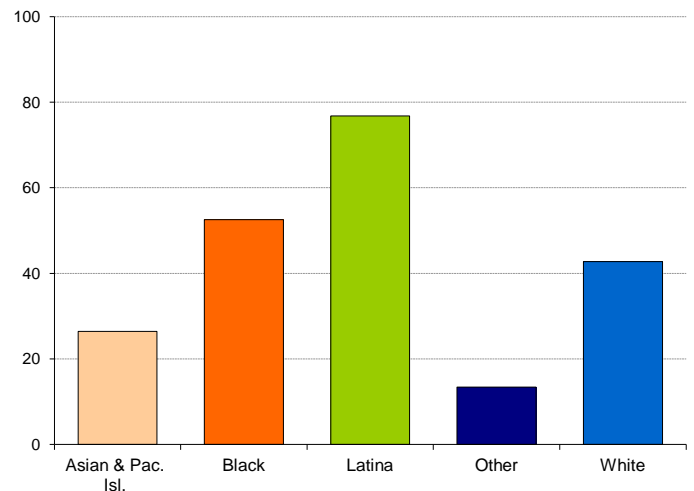


Table 3.2: Births and Fertility Rate, by Ethnicity of Mother, Santa Cruz County Residents, 2012

Ethnicity of Mother	Number of Births	Percent of Births	Total Female Population (Ages 15-44)	Fertility Rate per 1,000 Females (Ages 15-44)
Asian & Pac. Isl.	101	3.3%	3,825	26.4
Black	25	0.8%	476	52.5
Latina	1,674	54.4%	21,802	76.8
Other	27	0.9%	2,018	13.4
White	1,195	38.9%	27,952	42.8
Unknown	53	1.7%	--	--
TOTAL⁽²⁾	3,075	100%	56,073	57.4

Other includes American Indian / Alaska Native and Multiple Race Categories. The ethnicity-specific "Fertility Rates" are the number of births per ethnicity divided by the female population (ages 15-44) per ethnicity.

Figure 3.4: Fertility Rate (Births per 1,000 Females Age 15-44) by Ethnicity of Mother, Santa Cruz County Residents, 2012



4. TEEN BIRTHS (AGE 19 AND UNDER), RESIDENTS

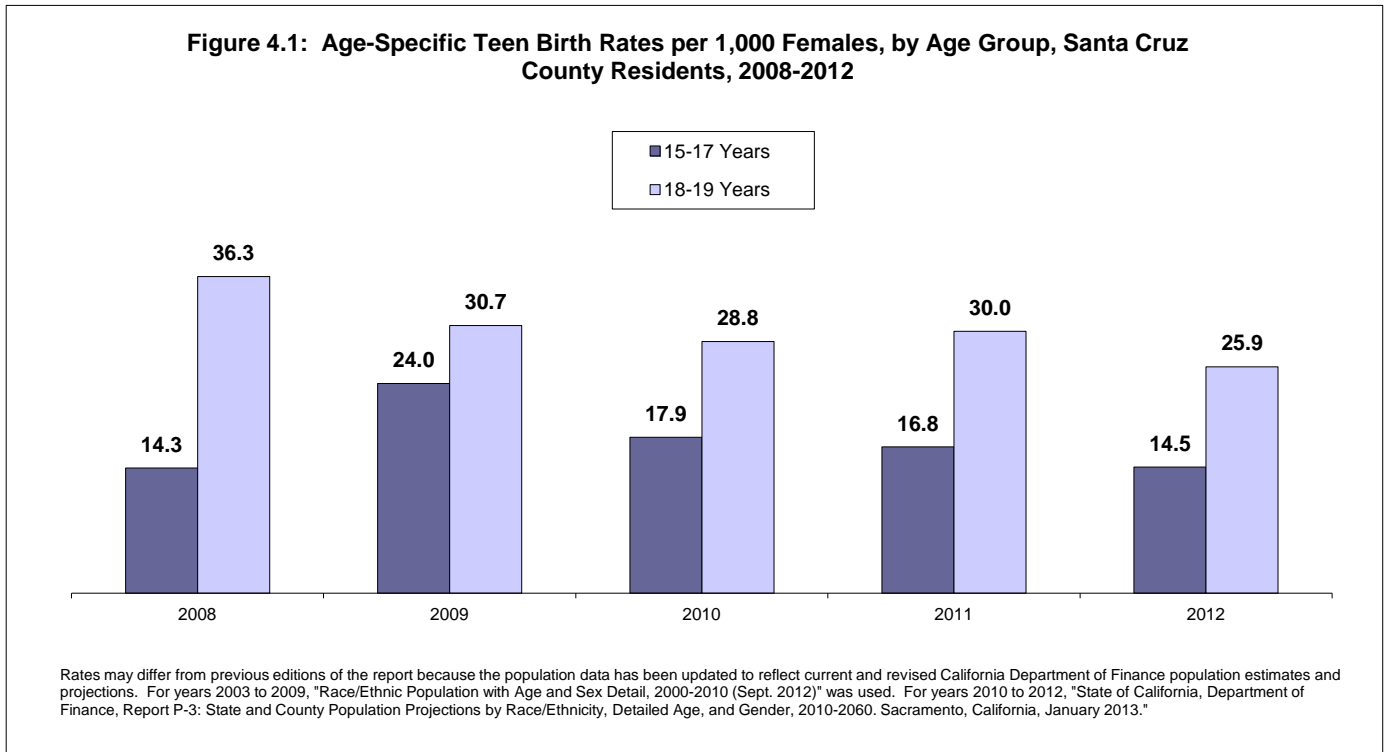
TABLE 4.1: Characteristics of Teenage Mothers, by Age Group, Santa Cruz County Residents, 2012

	AGE OF MOTHER (Years)						TOTAL	
	14 and Under		15-17		18-19		Number	Percent
	Number	Percent	Number	Percent	Number	Percent		
ETHNICITY								
Asian & Pacific Islander	0	0%	0	0%	0	0%	0	0%
Black	0	0%	1	1%	2	1%	3	1%
Latina	2	100%	64	91%	129	88%	195	89%
White	0	0%	5	7%	14	10%	19	9%
Other	0	0%	0	0%	2	1%	2	1%
AREA OF RESIDENCE								
Mid-County	0	0%	0	0%	6	4%	6	3%
Santa Cruz Mtns	0	0%	1	1%	3	2%	4	2%
Santa Cruz	0	0%	11	15%	30	20%	41	18%
Scotts Valley	0	0%	3	4%	0	0%	3	1%
South County	2	100%	56	79%	112	74%	170	76%
PRENATAL CARE INITIATION AND UTILIZATION								
Early (1st Trimester)	1	50%	39	56%	105	71%	145	66%
Late (2nd or 3rd Trimester)	1	50%	30	43%	43	29%	74	34%
No Prenatal Care	0	0%	1	1%	0	0%	1	0.5%
Adequate or Better	0	0%	44	62%	112	74%	156	70%
Less than Adequate	1	50%	26	37%	35	23%	62	28%
Early & Adequate	0	0%	34	48%	97	64%	131	58%
PARITY								
1st Child	2	100%	67	94%	129	85%	198	88%
2nd Child	0	0%	4	6%	21	14%	25	11%
3rd+ Child	0	0%	0	0%	1	1%	1	0.4%
BIRTH OUTCOMES								
Low Birthweight	1	50%	1	1.4%	11	7.3%	13	5.8%
Very Low Birthweight	0	0%	0	0%	0	0%	0	0%
Preterm	1	50%	3	4.2%	6	4.0%	10	4.5%
Very Preterm	0	0%	0	0%	1	0.7%	1	0.4%
METHOD OF DELIVERY								
Primary Cesarean	0	0%	15	21%	23	15%	38	17%
Repeat Cesarean	0	0%	1	1%	6	4%	7	3%
Vaginal	2	100%	55	77%	122	81%	179	80%
VBAC	0	0%	0	0%	0	0%	0	0%
PAYMENT FOR DELIVERY								
Medi-Cal	1	50%	60	85%	132	87%	193	86%
Private Insurance	0	0%	9	13%	18	12%	27	12%
Other Insurance	1	50%	0	0%	1	1%	2	1%
No Insurance	0	0%	2	3%	0	0%	2	1%
TOTAL	2	1%	71	32%	151	67%	224	100%

Note: The sum of column categories does not always equal the overall column total either because of missing information (percentages are out of known data) or because of the nature of the column, such as "Birth Outcomes," which does not detail the comprehensive list of mutually exclusive categories.

4. TEEN BIRTHS (AGE 19 AND UNDER), RESIDENTS

In 2012, the birth rate among females ages 15-17 and 18-19 years was lower than 2011, but not significantly lower (Figure 4.1). However, the lower rate is in line with a continuing local, statewide, and nationwide trend of decreasing teen birth rates.



AREA OF RESIDENCE

The distribution of births by ZIP Code of residence often differs for teens compared to all age groups (Table 4.2). For example, residents in ZIP Code 95076 account for 68% of teen births, but only 45% of all births. One notable limitation of this table is that it does not adjust for the differing age groups within ZIP Codes.

TABLE 4.2: Teen Births and Overall Births, by Area of Residence, Santa Cruz County Residents, 2012

Mother's Area of Residence	ZIP Code(s)	Teen Births (19 and Under)		Total Births (All Ages)		Percent of Births to Teens
		Number	% of Teen Births in ZIP code	Number	% of Total Births in ZIP code	% of Teen Births among Total Births in ZIP Code
Aptos	95001,3	4	2%	187	6%	2%
Capitola	95010	1	0.4%	100	3%	1%
Davenport	95017	1	0%	8	0%	13%
Freedom	95019	17	8%	108	4%	16%
Los Gatos	95033	0	0%	31	1%	0%
San Lorenzo Valley	95005-7,18,41	4	2%	183	6%	2%
Santa Cruz	95060-5	40	18%	882	29%	5%
Scotts Valley	95066	3	1%	113	4%	3%
Soquel	95073	1	0%	92	3%	1%
Watsonville	95076	153	68%	1,371	45%	11%
TOTAL		224	100%	3,075	100%	7.3%

4. TEEN BIRTHS (AGE 19 AND UNDER), RESIDENTS

The percent of total births that are to teens decreased slightly from 7.9% in 2011 to 7.3% in 2012. The rate of births per 1,000 teen female population (age 15-19 years) continued to decrease locally, statewide, and nationwide over recent years. In Santa Cruz County, the rate was 20.7 per 1,000 population in 2012, compared to 23.8 per 1,000 population in 2011.

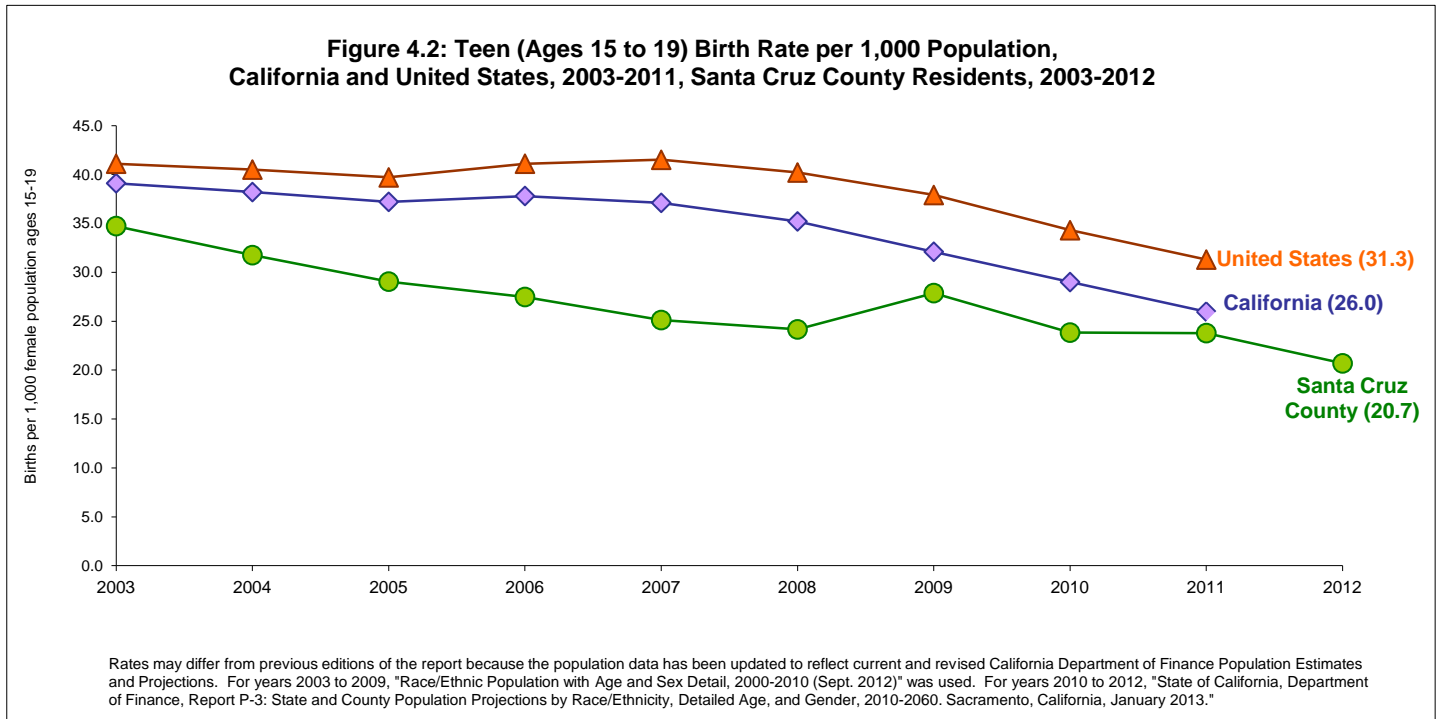
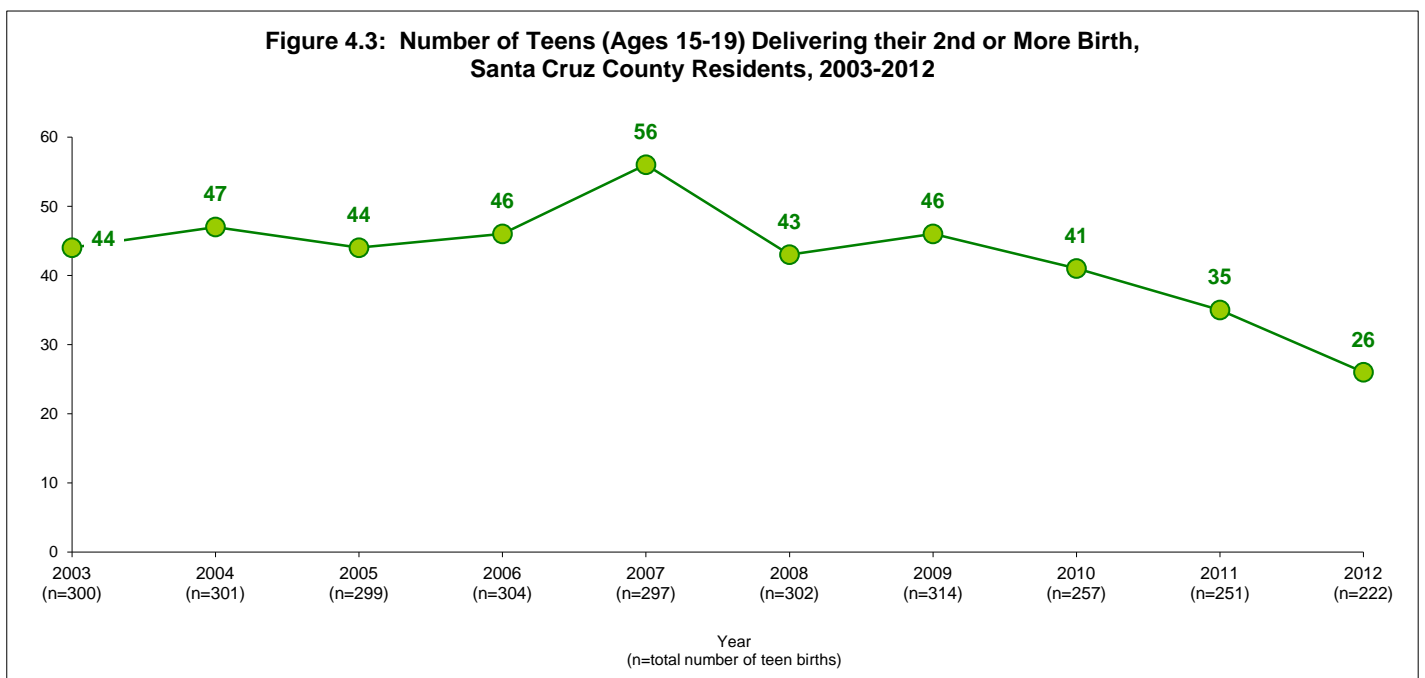


Figure 4.3 shows the number of teen mothers who were delivering their second (or more) birth. In 2012, one teenage mother delivered her third child. The repeat teen birth rate in the U.S. in 2011 was 20% compared to 13.9% in Santa Cruz County that year. In 2012, the percent decreased to 11.7% in Santa Cruz County.

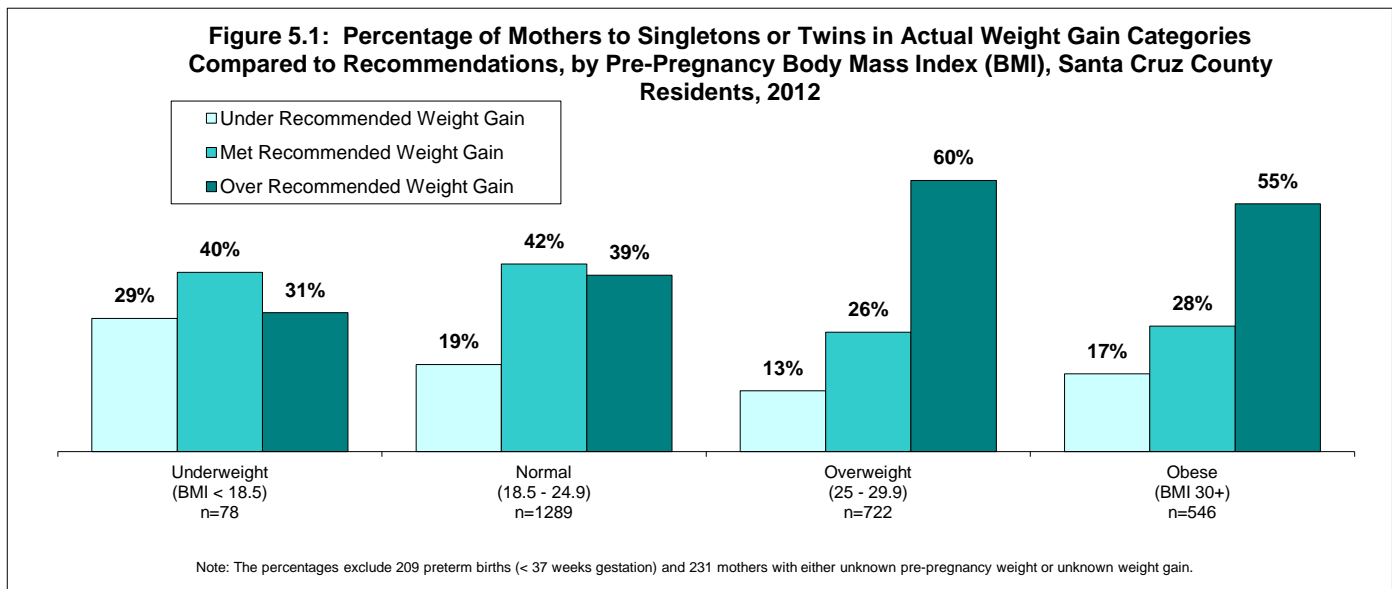


5. MOTHER'S WEIGHT GAIN & SMOKING STATUS

The Institute of Medicine released a report recommending new guidelines for weight gain during pregnancy in 2009. In 2013, American College of Obstetricians and Gynecologists added weight gain recommendations to mothers carrying twins. The recommended total weight gain range for each category of pre-pregnancy BMI is as follows:

Pre-pregnancy Weight & BMI (kg/m ²)	Weight Gain for Singletons	Weight Gain for Twins
Underweight < 18.5	28 - 40 lbs.	--
Normal 18.5 - 24.9	25 - 35 lbs.	37 - 54 lbs.
Overweight 25.0 - 29.9	15 - 25 lbs.	31 - 50 lbs.
Obese ≥ 30.0	11 - 20 lbs.	25 - 42 lbs.

In 2012, 48% of mothers gained more weight than recommended during their pregnancy. This percentage excludes mothers with preterm births and mothers with missing pre and post pregnancy weight data, which leaves 2,635 births or 86% of all births. Mothers whose pre-pregnancy body mass index (BMI) was categorized as overweight or obese exceeded weight gain recommendation significantly more often than mothers with normal and underweight BMI levels. In 2012, nearly half (48%) of mothers began pregnancy as overweight or obese.



DAILY SMOKING STATUS

The number and percentage of females who self-reported smoking **at least one cigarette a day** during different times before and throughout pregnancy are shown below in Table 5.1. The percent who smoked before pregnancy decreased from 2.5% in 2011 to 1.4% in 2012.

TABLE 5.1: Mother's Smoking Status during Pregnancy, by Trimester, Santa Cruz County Residents, 2012

Mother's Smoking Status	3 Months Before Conception		During 1st Trimester		During 2nd Trimester		During 3rd Trimester	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Smoked at least 1 cigarette per day								
Yes	43	1.4%	25	0.8%	19	0.6%	21	0.7%
No	2,988	98.6%	3,006	99.2%	3,012	99.4%	3,010	99.3%
TOTAL	3,031	100%	3,031	100%	3,031	100%	3,031	100%

Note: This table does not include 44 births for whom mother's cigarette smoking status was missing for one or more of the above time periods.

6. BIRTHS BY AGE OF FATHER, MOTHERS ARE RESIDENTS

TABLE 6.1: Characteristics of Fathers, by Age Group, Santa Cruz County Mothers are Residents, 2012

	AGE OF FATHER (Years)										TOTAL	
	17 and Under		18-19		20-24		25-34		35 and Over		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
AGE OF MOTHER (Years)												
17 and Under	13	68%	23	33%	17	4%	1	0.1%	0	0%	54	2%
18 - 19	5	26%	27	39%	72	19%	18	1%	2	0%	124	4%
20 - 24	1	5%	17	25%	217	56%	250	17%	27	3%	512	17%
25 - 34	0	0%	2	3%	75	19%	1,070	74%	478	46%	1,625	55%
35 and Over	0	0%	0	0%	8	2%	106	7%	527	51%	641	22%
ETHNICITY OF FATHER												
Asian & P.I. ⁽¹⁾	0	0%	1	1%	4	1%	37	3%	41	4%	83	3%
Black	0	0%	2	3%	6	2%	16	1%	18	2%	42	1%
Latino	15	79%	62	90%	327	84%	794	55%	330	35%	1,528	53%
White	3	16%	3	4%	45	12%	573	40%	523	55%	1,147	40%
Other	0	0%	0	0%	2	1%	7	0%	12	1%	21	1%
Unknown	1	5%	1	1%	5	1%	18	1%	29	3%	54	2%
EDUCATION OF FATHER												
8th Grade & Under	2	11%	10	14%	70	18%	195	14%	127	13%	404	14%
Some High School	12	63%	20	29%	86	22%	211	15%	57	6%	386	13%
HS Diploma or GED ⁽²⁾	3	16%	36	52%	202	52%	546	38%	252	27%	1,039	36%
Higher Degree Obtained	0	0%	1	1%	16	4%	413	29%	459	48%	889	31%
Withheld	2	11%	2	3%	14	4%	70	5%	55	6%	143	5%
TOTAL	19	1%	69	2%	389	14%	1,445	50%	953	33%	2,875	100%

Note: There were 200 (6.5%) fathers without age information.

(1) P.I. = Pacific Islander; (2) GED = General Equivalency Degree (or Diploma); includes those with some college

7. BIRTHS BY DELIVERY LOCATION

TABLE 7.1: Characteristics of Births, by Delivery Location, Santa Cruz County Occurrence or Residence, 2012

	DELIVERY LOCATION										TOTAL	
	Dominican		Sutter		Watsonville		Non-Hospital		Out of County		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
AGE OF MOTHER (Years)												
17 and Under	12	1%	9	1%	62	5%	0	0%	4	2%	87	2%
18 - 19	30	3%	21	2%	113	8%	0	0%	6	3%	170	5%
20 - 24	135	14%	115	12%	395	29%	2	3%	22	11%	669	19%
25 - 34	555	59%	577	59%	624	46%	52	70%	107	55%	1,915	54%
35 and Over	206	22%	252	26%	174	13%	20	27%	57	29%	709	20%
ETHNICITY OF MOTHER												
Asian & P.I. ⁽¹⁾	40	4%	43	4%	12	1%	1	1%	16	9%	112	3%
Black	9	1%	11	1%	2	0.1%	0	0%	3	2%	25	1%
Latina	371	41%	267	28%	1,290	94%	6	8%	56	32%	1,990	57%
White	480	53%	627	65%	61	4%	63	89%	99	57%	1,330	38%
Other	13	1%	14	1%	3	0.2%	1	1%	1	1%	32	1%
EDUCATION OF MOTHER												
8th Grade & Under	42	5%	9	1%	327	30%	0	0%	10	6%	388	13%
Some High School	67	9%	23	3%	284	26%	0	0%	9	5%	383	13%
HS Diploma or GED ⁽²⁾	304	39%	319	39%	416	38%	14	19%	46	27%	1,099	38%
Higher Degree Obtained	361	47%	457	57%	71	6%	59	81%	105	62%	1,053	36%
PRENATAL CARE INITIATION AND UTILIZATION												
Early (1st Trimester)	821	89%	876	91%	959	70%	54	73%	160	83%	2,870	82%
Late (2nd or 3rd Trimester)	96	10%	89	9%	402	30%	20	27%	31	16%	638	18%
No Prenatal Care	2	0.2%	0	0%	1	0.1%	0	0%	2	1%	5	0.1%
Adequate or Better	738	86%	887	92%	1,027	75%	59	81%	127	66%	2,838	82%
Less than Adequate	124	14%	77	8%	335	25%	14	19%	66	34%	616	18%
Early & Adequate	694	81%	841	87%	893	66%	49	67%	116	60%	2,593	75%
BIRTH OUTCOMES ⁽³⁾												
Low Birthweight	97	10.3%	30	3.1%	54	3.9%	0	0%	27	13.8%	208	5.9%
Very Low Birthweight	16	1.7%	3	0.3%	8	0.6%	0	0%	11	5.6%	38	1.1%
Preterm	122	13.0%	17	1.7%	67	4.9%	0	0%	32	16.3%	238	6.7%
Very Preterm	18	1.9%	0	0%	10	0.7%	0	0%	12	6.1%	40	1.1%
DELIVERY METHOD												
Primary Cesarean	152	16%	139	14%	228	17%	0	0%	40	20%	559	16%
Repeat Cesarean	103	11%	98	10%	250	18%	0	0%	19	10%	470	13%
Vaginal	664	71%	715	73%	885	65%	74	100%	134	68%	2,472	70%
VBAC	19	2%	22	2%	5	0.4%	0	0%	3	2%	49	1%
PAYMENT FOR DELIVERY												
Medi-Cal	410	44%	248	26%	1,166	85%	1	1%	45	23%	1,870	53%
Private Insurance	518	55%	714	74%	192	14%	21	28%	147	75%	1,592	45%
Other Insurance	5	1%	2	0.2%	1	0.1%	2	3%	3	2%	13	0.4%
No Insurance	5	1%	6	1%	9	1%	50	68%	1	0.5%	71	2%
TOTAL	938	26%	974	27%	1,368	39%	74	2%	196	6%	3,550	100%

Note: Education categories describe mothers of all ages, unlike Figure 2.3 on page 5 which excludes mothers under age 25 years to compare key health measures. All ages have been included in Table 7.1 to describe the entire patient population by delivery location.

(1) P.I. = Pacific Islander; (2) GED = General Equivalency Degree (or Diploma), includes some college; (3) Outcomes are among all births and do not exclude multiple births.

7. BIRTHS BY DELIVERY LOCATION

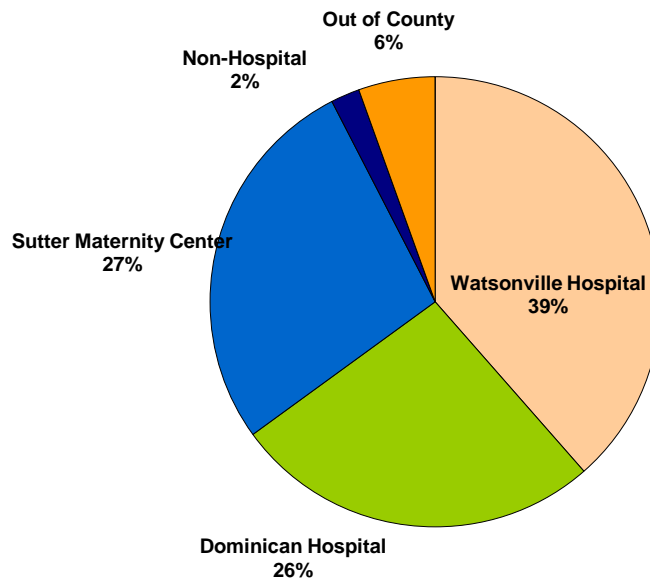
This table provides more details about where Santa Cruz County residents and non-residents deliver. The great majority of non-residents who deliver in Santa Cruz County are residents of Monterey County, and the majority of those births are delivered at Watsonville Community Hospital.

TABLE 7.2: Mother's Area of Residence, by Delivery Location, Santa Cruz County Occurrence or Residence, 2012

AREA OF RESIDENCE	DELIVERY LOCATION										TOTAL	
	Dominican		Sutter		Watsonville		Non-Hospital		Out of County		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
SANTA CRUZ COUNTY	855	91%	853	88%	1,098	80%	74	100%	195	100%	3,075	87%
Mid-County	174	20%	163	19%	18	2%	13	18%	24	12%	1,472	48%
Santa Cruz Mtns.	82	10%	76	9%	0	0%	11	15%	45	23%	232	8%
Santa Cruz	425	50%	364	43%	12	1%	47	64%	41	21%	877	29%
Scotts Valley	43	5%	52	6%	1	0.1%	1	1%	16	8%	124	4%
South County	131	15%	198	23%	1,067	97%	2	3%	69	35%	401	13%
MONTEREY COUNTY	56	6%	86	9%	243	18%	-	-	-	-	385	11%
SAN BENITO COUNTY	7	1%	21	2%	17	1%	-	-	-	-	45	1%
SANTA CLARA COUNTY	10	1%	7	1%	5	0.4%	-	-	-	-	22	1%
OTHER COUNTIES	10	1%	7	0.7%	5	0.4%	-	-	-	-	22	0.6%
TOTAL	938	26%	974	27%	1,368	39%	74	2%	195	5%	3,549	100%

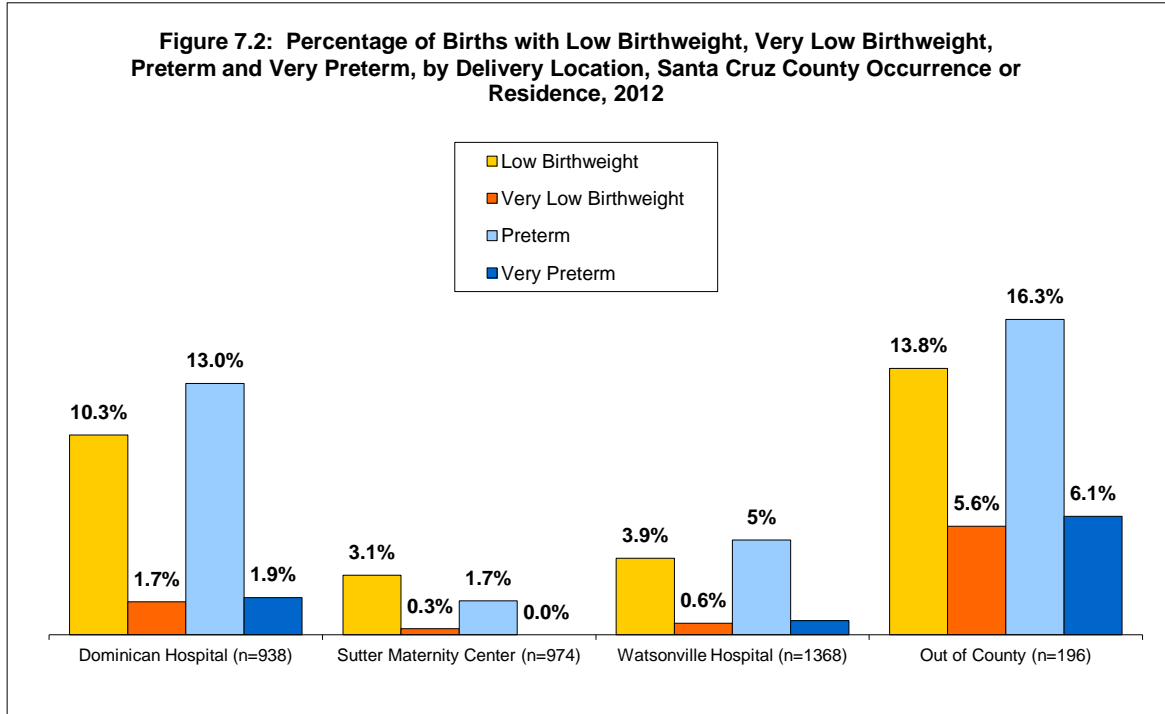
Note: 1 mother from an unknown county delivered "Out of County." She is not included in the table above.

Figure 7.1: Percentage of Births, by Delivery Location, Santa Cruz County Occurrence or Residence, 2012



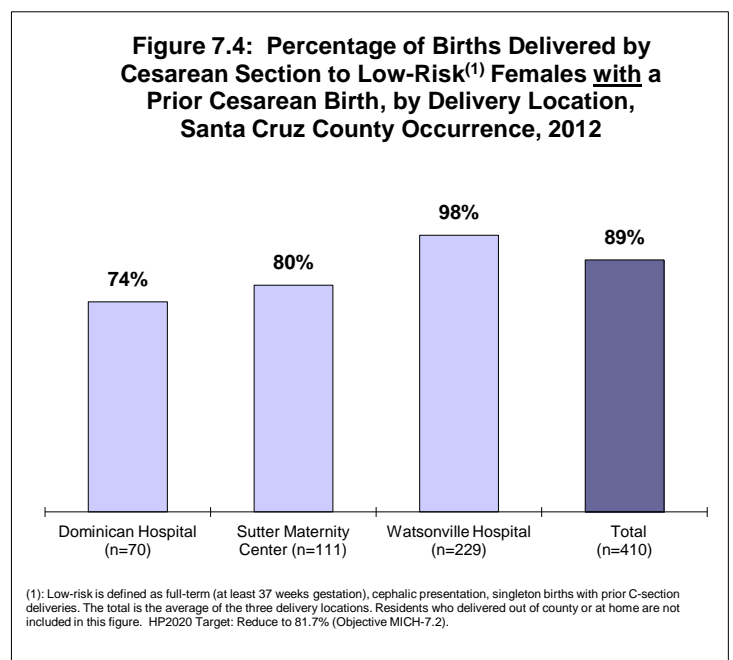
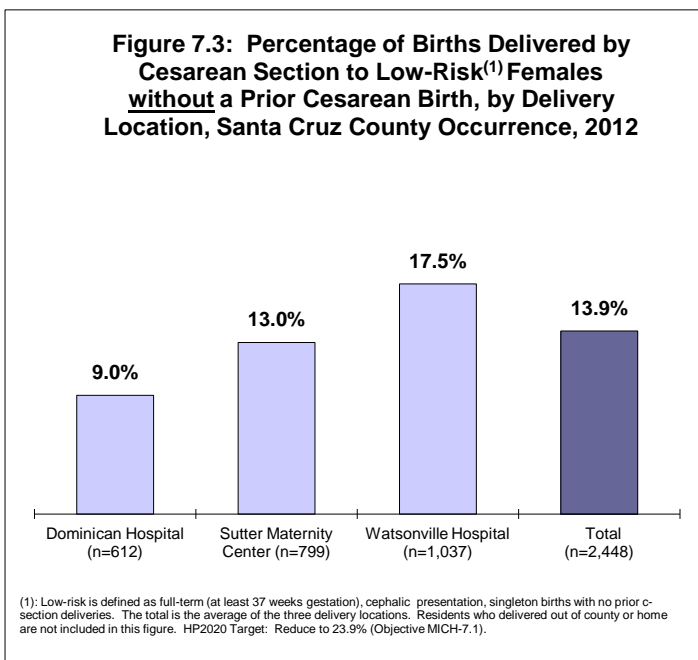
7. BIRTHS BY DELIVERY LOCATION

The medical authority to handle high-risk births varies by hospital. Oftentimes when a resident travels out of county, it is to deliver at a hospital that is designated as having the ability to deliver very high-risk births. In Santa Cruz County, Dominican Hospital has the only Level 3 Neonatal Intensive Care Unit—which greatly influences their outcome data, since other hospitals may send high-risk pregnant women to Dominican Hospital for delivery.



CESAREAN BIRTHS

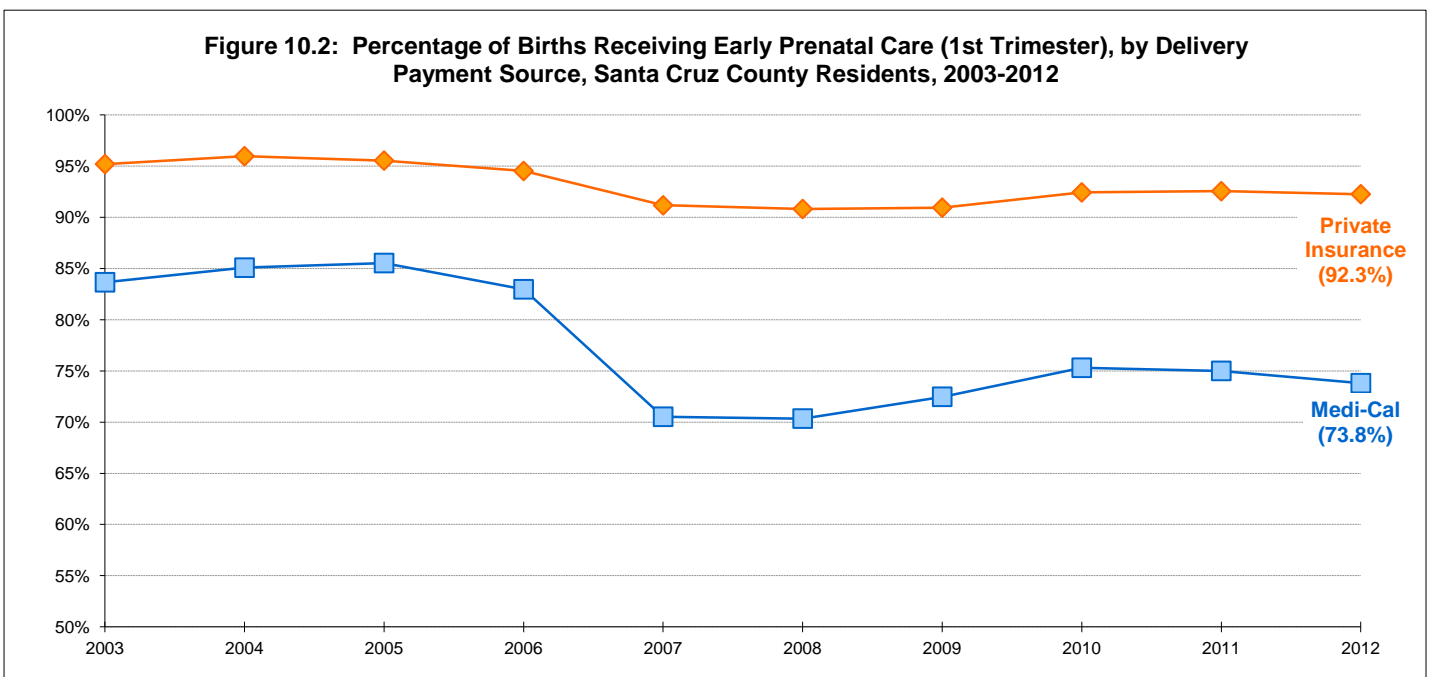
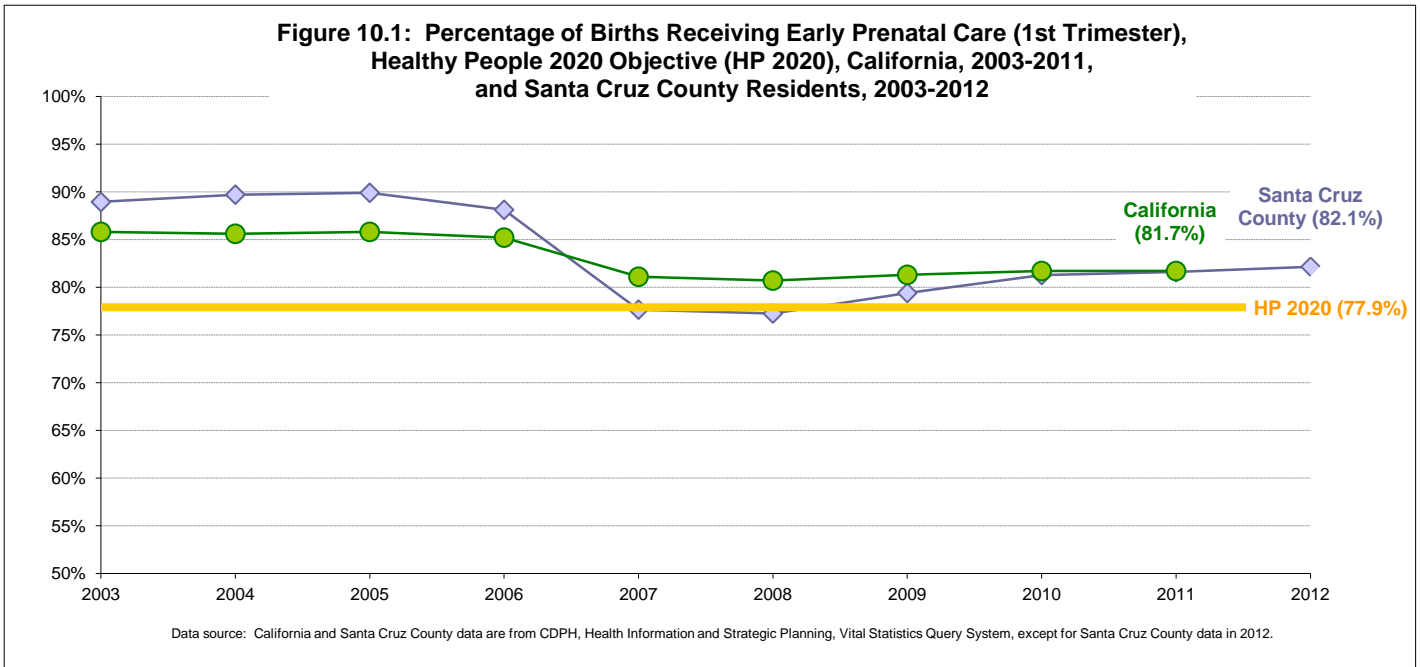
Below are figures on the percent of cesarean births among low-risk births to females either without a prior cesarean birth (Figure 7.3) or with a prior cesarean birth (Figure 7.4); low-risk births are defined in the figure notes.



8. TRENDS

EARLY PRENATAL CARE

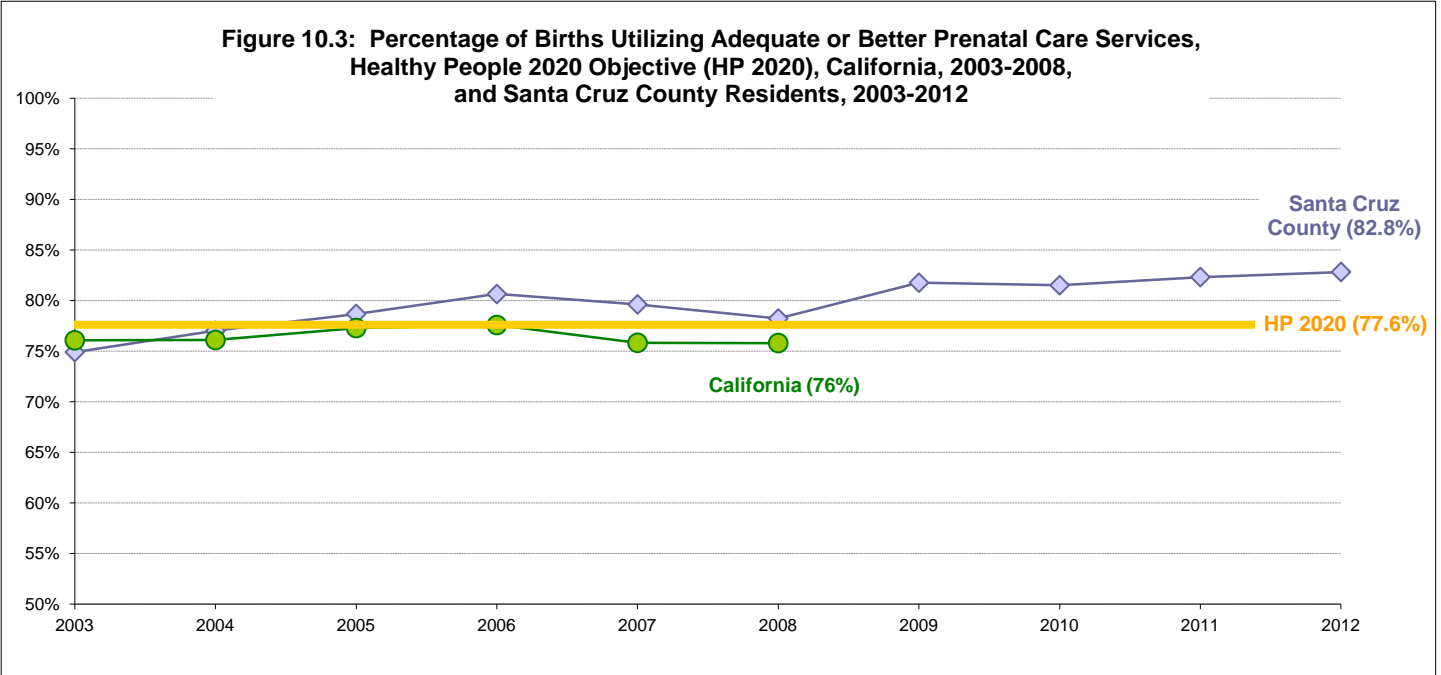
The percentage of mothers who received early prenatal care (1st trimester) was 82.1% in 2012 compared to 82.4% in 2011 (Figure 10.1). The Healthy People objective was lowered to 77.9% for 2020 from 90% in 2010; the 2020 objective has been met countywide and statewide for at least ten years. Figure 10.2 shows early prenatal care by either Medi-Cal or private insurance as the delivery payment source. Medi-Cal patients represented the larger portion of the decline that occurred in 2007 -- the year Medi-Cal replaced the in-person application process with a call center and required a birth certificate for mothers who were not born in California.



8. TRENDS

ADEQUACY OF PRENATAL CARE UTILIZATION

The percentage of mothers who adequately utilized prenatal care (Kotelchuck Index, see Definitions on page 2) was 82.8% in 2012 compared to 74.9% in 2003 (Figure 10.3). The county trend is going in the desired direction, and although we have met the Healthy People 2020 target, there is still room for improvement. The 2008 California data is the most current year that is publicly available.



MEDI-CAL FUNDED DELIVERIES

Figure 10.4 shows the trend in the percentage of deliveries funded by Medi-Cal. In 2012, 52% of Santa Cruz County residents delivering in the county were funded by Medi-Cal, compared to 44% in 2003.

