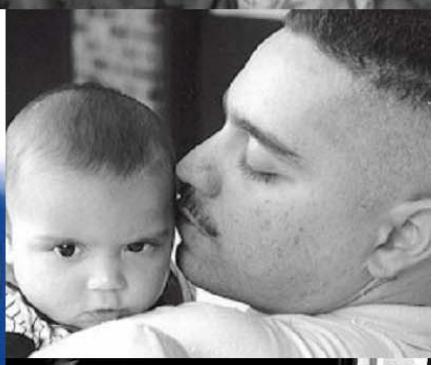
BIRTHS

Santa Cruz County

2011



THE GREAT SEAL OF THE COUNTY OF SANTA CRUZ
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INTRODUCTION

This report characterizes data on live births delivered in 2011 and has been compiled by the County of Santa Cruz Public Health Department's Maternal, Child and Adolescent Health Program in the Family Health Unit. Data was obtained from the local birth certificate registry that is locally managed by the Health Services Agency's Vital Statistics office.

In Summary:

· In 2011, there were 3,222 live births among mothers who reside in Santa Cruz County, which is 52 more births than in 2010.

· The General Fertility Rate in 2011 was 55.8 births per 1,000 females of typical childbearing age (15-44 years) among Santa Cruz County residents.

· An additional 423 births occurred in Santa Cruz County from mothers who are residents of other counties; 79% were residents of Monterey County.

· In this report, except where otherwise specified, all numbers refer to births to Santa Cruz County residents, not births to out-of-county residents that occurred in the county.

TEEN BIRTHS (19 and Under)

· In 2011, 90% of births to teens were to Latina teens, and 77% of teen mothers lived in south Santa Cruz County (see definition on page 2).

· Births to teens as a percentage of all births remained the same in 2011 as 2010 at 7.6%; the number of teen births was nearly unchanged, from 258 in 2010 to 256 in 2011.

· In 2011, there were 4 births to 14 year old females and 1 birth to a 13 year old female.

· Among teen births, 14% were delivering their second (or more) birth in 2011.

MEDI-CAL

· 53% of deliveries to residents were funded by Medi-Cal in 2011, compared to 55% in 2010.

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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
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.
Low Birthweight	Less than 2500 grams or 5.5 pounds
Very Low Birthweight	Less than 1500 grams or 3.3 pounds
Preterm	Gestation of less than 37 weeks from last menstrual period
Very Preterm	Gestation of less than 32 weeks from last menstrual period
VBAC	Vaginal Birth after Cesarean
Adequacy of Prenatal Care Utilization (Kotelchuck Index)	This measure is a ratio of actual prenatal visits compared to the American College of Obstetrics recommended number of visits (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 PNC); "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 levels (or the probability is less than 5% that the difference was due to normal variation), assuming normality. Statistical 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 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 2011 data were accessed on February 7, 2012 and analyzed using Cal Birth Info, aside from the Kotelchuck Index which was analyzed using the Kotelchuck SAS program.

Population data is from the California Department of Finance projections, "Race/Ethnic Population with Age and Sex Detail, 2000-2050," published in July 2007 (http://www.dof.ca.gov/HTML/DEMOGRAP/Data/RaceEthnic/Population-00-50/RaceData_2000-2050.php). This data source was chosen over Census population data because it provides estimates by each age year and race/ethnicity category; for more accurate population data, see the American Community Survey.

California 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).

Where applicable, Healthy People 2020 objectives are presented (http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx).

1. OVERALL COUNTY DEMOGRAPHICS

The California Department of Finance projected the total population in Santa Cruz County to be 269,938 in 2011 (see Table 1.1).

GENDER

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

AGE & ETHNICITY

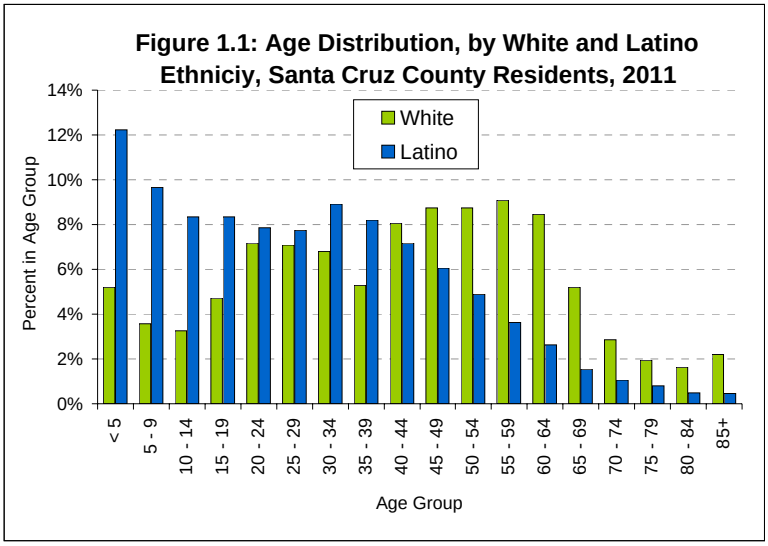
Over 90% of the county's population is either White (55%) or Latino (36%). The remaining groups account for much smaller fractions of the population: Asians and Pacific Islanders (5%), Blacks (1%), and multi-racial or other groups (3%).

In Santa Cruz County, the Latino population is much younger compared to the White population (see Figure 1.1). For example, 71% of the Latino population is under age 40 compared to 43% of the White population countywide.

Table 1.1: Demographics, Santa Cruz County Residents, 2011

	Number	Percent
GENDER		
Female	135,002	50%
Male	134,936	50%
AGE (Years)		
4 and Under	17,842	7%
5 – 19	48,131	18%
20 - 44	100,467	37%
45 - 64	75,889	28%
65 and Over	27,609	10%
ETHNICITY		
Asian & P.I.(1)	14,176	5%
Black	2,770	1%
Latino	97,581	36%
White	148,597	55%
Other	6,814	3%
TOTAL	***269,938***	***100%***

(1) P.I. = Pacific Islander



2. KEY HEALTH MEASURES

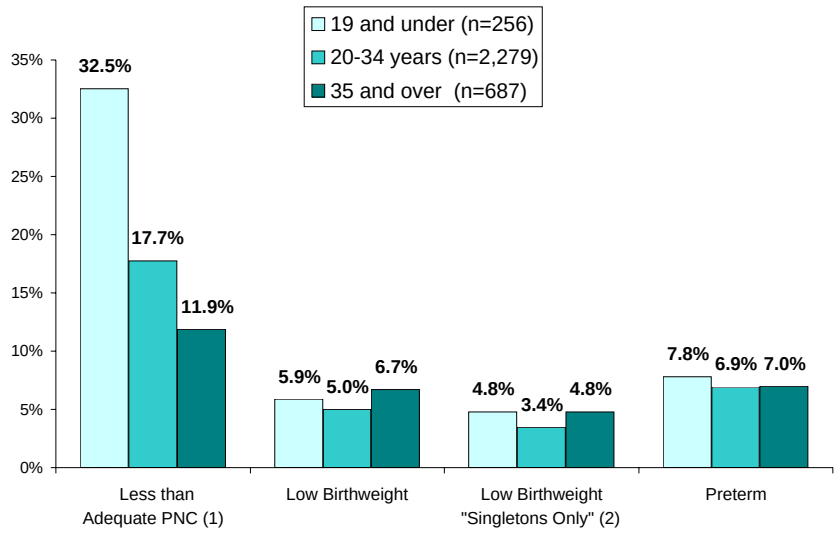
AGE OF MOTHER

In 2011, younger mothers were significantly more likely to under utilize prenatal care than their older counterparts (see Figure 2.1). Teenage mothers (age 19 and under) had the highest proportion of mothers under utilizing prenatal care with almost one-third receiving less than adequate amoun of prenatal care visits.

Low birthweight data is shown both for all births and for "Singletons Only" (excluding multiple births, such as twins). In 2011, there were 116 multiple births and 48% were low birthweight.

Neither low birthweight categories nor preterm percentages were significantly different by age group.

Figure 2.1: Key Health Measures, by Age of Mother, Santa Cruz County Residents, 2011



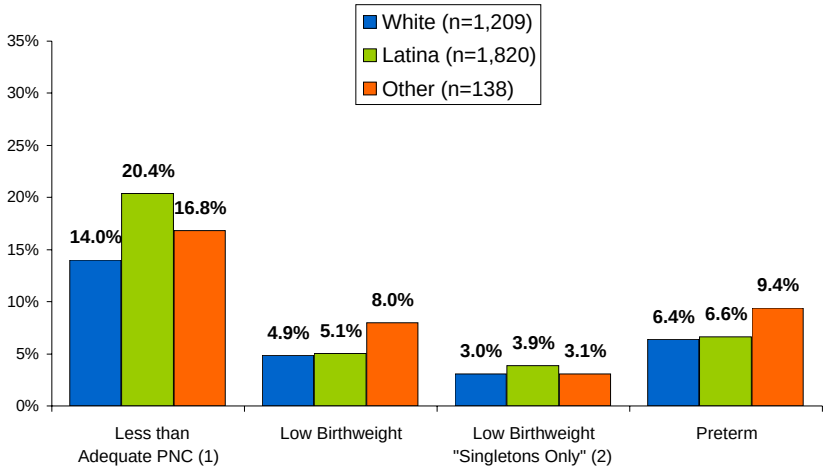
(1) There were 1, 59 and 12 deliveries missing a component of the Adequate PNC measure for births to mothers in age group <20, 20-34, & 35+, respectively. (2) There were 250, 2208, and 648 singletons born to mothers respective age groups: <20, 2 34, & 35+.

ETHNICITY OF MOTHER

Latina mothers had a significantly higher rate of less than adequate prenatal care compared to White mothers (see Figure 2.2).

Neither low birthweight categories nor preterm percentages were significantly different by ethnicity. The Other Ethnicity category numbers were very high, but the events were too few for statistical reliability.

Figure 2.2: Key Health Measures, by Ethnicity of Mother, Santa Cruz County Residents, 2011



Note: There were 55 births to mothers with ethnicity listed as unknown or withheld; they have been excluded from the above calculations.
(1) There were 25, 33, and 7 mothers missing a component of the Adequate PNC measure for births to White, Latina and Other ethnicity mothers, respectively. (2) There were 1150, 1775, and 130 singletons born to White, Latina and Other Ethnicity mothers, respectively.

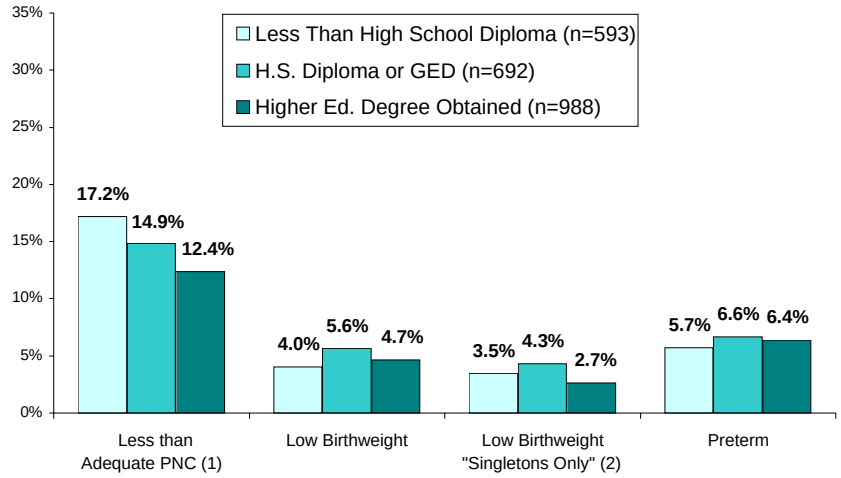
2. KEY HEALTH MEASURES

EDUCATION OF MOTHER

In 2011, 26% of mothers ages 25 and older did not have a high school diploma or equivalent (i.e., GED). Of those mothers, 17.2% utilized less than adequate amount of prenatal care visits which was significantly more than mothers who obtained a higher education degree.

Neither low birthweight categories nor preterm births differ significantly by education level.

Figure 2.3: Key Health Measures, by Education of Mother (Age 25 and Older), Santa Cruz County Residents, 2011



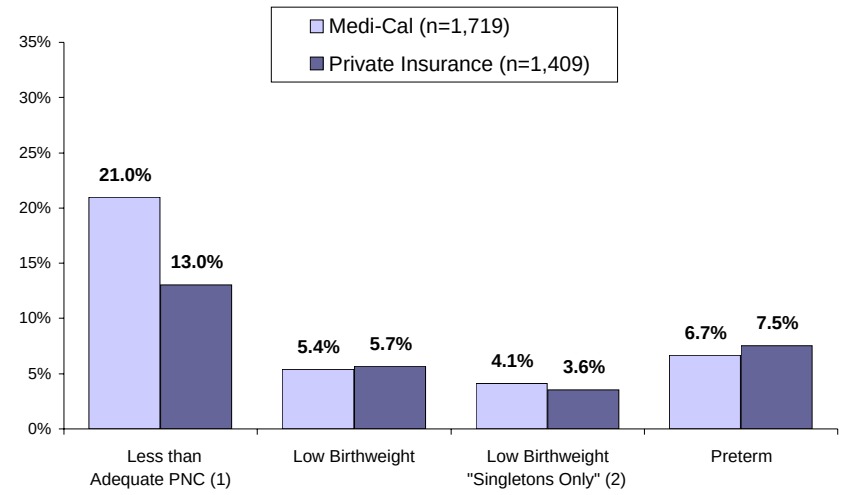
Note: There were 97 out of 2370 births to mothers age 25 and over where education status was unknown or withheld; they have been excluded from the above calculations.
(1) There were 6, 19, and 17 births to mothers missing a component of the Adequate PNC measure for <HS Diploma, HS/GED (incl. some college), Degree Obtained (incl. Associate, Bachelor's, Master's, Doctorate and Professional School), respectively. (2 There were 577, 674 and 943 singletons born to mothers with <H.S. Diploma, H.S./GED (incl. some college), and Degree Obtained, respectively; GED = General equivalency degree (of diploma).

DELIVERY PAYMENT SOURCE

In 2011, Medi-Cal funded 53% of deliveries to county residents and private insurance funded 44% of deliveries. Comparing the two groups, Medi-Cal funded deliveries had significantly more mothers who utilized less than adequate amounts of prenatal care compared to mothers with private insurance.

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

Figure 2.4: Key Health Measures, by Delivery Payment Source, Santa Cruz County Residents, 2011



(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 1663 and 1349 singletons 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, 2011

	AGE OF MOTHER (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		
ETHNICITY												
Asian & P.I. [1]	0	0%	1	1%	10	2.1%	51	3%	40	6%	102	3%
Black	0	0%	0	0%	6	1%	5	0%	4	1%	15	0%
Latina	82	93%	147	88%	461	78%	863	52%	267	40%	1,820	57%
White	6	7%	16	10%	111	19%	728	44%	347	52%	1,208	38%
Other	0	0%	3	2%	0	0%	10	1%	8	1%	21	1%
AREA OF RESIDENCE												
Mid-County	5	6%	9	5%	46	8%	239	14%	90	13%	389	12%
Santa Cruz Mtns	1	1%	6	4%	27	5%	134	8%	76	11%	244	8%
Santa Cruz	9	10%	25	15%	115	19%	456	27%	239	35%	844	26%
Scotts Valley	2	2%	1	1%	12	2%	63	4%	30	4%	108	3%
South County	71	81%	127	76%	395	66%	792	47%	251	37%	1,636	51%
PARITY												
1st Child	86	98%	135	80%	298	50%	571	34%	188	27%	1,278	40%
2nd - 3rd Child	2	2%	32	19%	280	47%	924	55%	360	53%	1,598	50%
4th+ Child	0	0%	1	1%	17	3%	188	11%	137	20%	343	11%
PRENATAL CARE INITIATION AND UTILIZATION												
Early (1st Trimester)	45	51%	105	63%	429	73%	1,435	86%	618	90%	2,632	82%
Late (2nd or 3rd Trimester)	40	45%	61	36%	155	26%	228	14%	65	10%	549	17%
No Prenatal Care	3	3%	2	1%	2	0.3%	7	0.4%	0	0%	14	0.4%
Adequate or Better	52	59%	120	72%	432	75%	1,394	85%	594	88%	2,592	82%
Less than Adequate	36	41%	47	28%	144	25%	250	15%	80	12%	557	18%
Early & Adequate	38	43%	93	56%	383	66%	1,292	79%	558	83%	2,364	75%
BIRTH OUTCOMES												
Low Birthweight	3	3.4%	11	6.5%	35	5.9%	79	4.7%	46	6.7%	174	5.4%
Very Low Birthweight	1	1.1%	1	0.6%	11	1.8%	9	0.5%	9	1.3%	31	1.0%
Preterm	4	4.5%	16	9.5%	50	8.4%	108	6.4%	48	7.0%	226	7.0%
Very Preterm	0	0%	2	1.2%	16	2.7%	9	0.5%	7	1.0%	34	1.1%
DELIVERY METHOD												
Primary Cesarean	12	14%	36	21%	95	16%	229	14%	130	19%	502	16%
Repeat Cesarean	0	0%	9	5%	52	9%	228	14%	136	20%	425	13%
Vaginal	76	86%	123	73%	447	75%	1213	72%	413	60%	2,272	71%
VBAC	0	0%	0	0%	1	0.2%	14	1%	7	1%	22	1%
PAYMENT FOR DELIVERY [2]												
Medi-Cal	75	86%	139	83%	464	78%	820	49%	221	32%	1,719	54%
Private Insurance	8	9%	25	15%	122	21%	806	48%	448	65%	1,409	44%
Other Insurance	1	1%	1	1%	2	0.3%	6	0.4%	0	0%	10	0.3%
No Insurance	3	3%	3	2%	7	1%	46	3%	15	2%	74	2%
TOTAL	***88***	***3%***	***168***	***5%***	***595***	***18%***	***1,684***	***52%***	***687***	***21%***	***3,222***	***100%***

Note: The sum of column categories do 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 do not detail the comprehensive list of mutually exclusive categories.

(1) P.I. = Pacific Islander. (2) There were 6 unattended births (4 among 25-34 year olds and 1 to a mother 35 years or older).

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

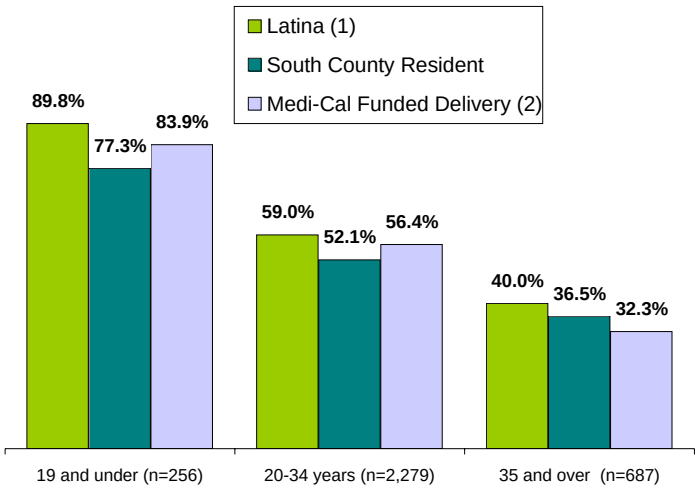
3. BIRTHS BY DEMOGRAPHICS OF MOTHERS (CONT.)

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 (89.8%) compared to mothers age 35 and over (40.1%). The demographics shown were selected because of their well-known associations with age.

The age category with the largest number of births changed from ages 25-29 in 2010 to ages 30-34 years in 2011. 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--see Table 3.1 and Figure 3.2.

Figure 3.1: Percentage of Selected Demographic Characteristics among Mothers, by Age Group, Santa Cruz County Residents, 2011



(1) There were 1, 34 & 20 mothers with missing ethnicity data for the respective age groups: <20, 20-34, & 35+. (2) There were 1, 1 & 2 mothers with missing delivery payment data for the respective age groups: <20, 20-34, & 35+.

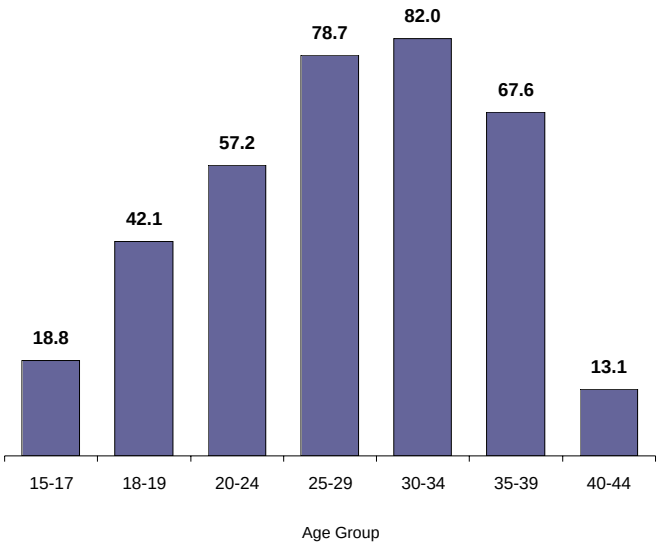
Table 3.1: Births by Mother's Age Group and Age-Specific Birth Rate per 1,000 Females, Santa Cruz County Residents, 2011

Mother's Age Group	Number of Births	Percent of Births	Total Female Popl'n	Birth Rate per 1,000 Popl'n
13-14	5	0.2%	2,755	1.8
15-17	83	2.6%	4,425	18.8
18-19	168	5.2%	3,990	42.1
20-24	595	18.5%	10,404	57.2
25-29	829	25.7%	10,527	78.7
30-34	855	26.5%	10,424	82.0
35-39	540	16.8%	7,990	67.6
40-44	131	4.1%	10,024	13.1
45 and Over	16	0.5%	-	-
TOTAL	***3,222***	***100%***	***57,784***	***55.8***

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.

Healthy People 2020 Objectives: Reduce the pregnancy rate among females (age 15-17) to 36.2 pregnancies per 1,000 population (Obj FP-8.1). Reduce the pregnancy rate among females (age 18-19) to 105.9 pregnancies per 1,000 population (Obj FP-8.2).

Figure 3.2: Age-Specific Birth Rates (Births per 1,000 Female Population in Age Group), Santa Cruz County Residents, 2011

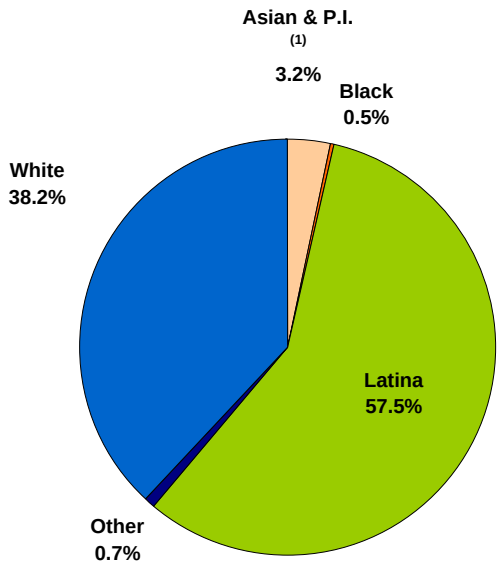


ETHNICITY OF MOTHER

Among the "primary childbearing age" population (defined as females ages 15-44) in Santa Cruz County, approximately 40% are Latina and 51% are White. However, Latina mothers delivered 58% of the babies, whereas White mothers delivered 38% of babies in 2011.

The difference by ethnicities can also be seen by comparing fertility rates per ethnicity (see Table 3.3 and Figure 3.4). The fertility rate (births per 1,000 women ages 15 to 44), is more than twice as high among Latinas (79.9 per 1,000) compared to Whites (39.6 per 1,000).

Figure 3.3: Percentage of Births, by Ethnicity of Mother (n=3,167)[2], Santa Cruz County Residents, 2011



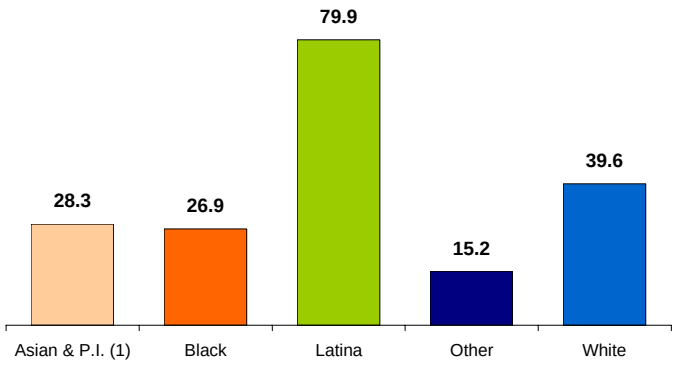
(1) P.I. = Pacific Islander. (2) There were 55 mothers without ethnicity data.

Table 3.2: Number of Births and Fertility Rate, by Ethnicity of Mother, Santa Cruz County Residents, 2011

Ethnicity of Mother	Number of Births	Percent of Births	General Female Population (Ages 15-44)	Fertility Rate per 1,000 Females (Ages 15-44)
Asian & P.I. [1]	102	3.2%	3,604	28.3
Black	15	0.5%	557	26.9
Latina	1,820	56.5%	22,611	79.9
Other	21	0.7%	1,384	15.2
White	1,209	37.5%	29,628	39.6
TOTAL [2]	***3,222***	***100%***	***57,784***	***55.7***

(1) P.I. = Pacific Islander; (2) There are 55 mothers missing ethnicity information. The "TOTAL" does not omit the missing data, but is the entire number of births in order to accurately reflect the Fertility Rate. Also, 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 Rates (Births per 1,000 Females age 15-44), by Ethnicity of Mother, Santa Cruz County Residents, 2011



(1) P.I. = Pacific Islander

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

TABLE 4.1: Characteristics of Teenage Mothers, by Age Group, Santa Cruz County Residents, 2011

	AGE OF MOTHER (Years)						*TOTAL*	
	14 and Under		15-17		18-19		Number	Percent
	Number	Percent	Number	Percent	Number	Percent		
ETHNICITY								
Asian & P.I. [1]	0	0%	0	0%	1	1%	1	0%
Black	0	0%	0	0%	0	0%	0	0%
Latina	5	100%	77	93%	147	88%	229	90%
White	0	0%	6	7%	16	10%	22	9%
Other	0	0%	0	0%	3	2%	3	1%
AREA OF RESIDENCE								
Mid-County	0	0%	5	6%	9	5%	14	5%
Santa Cruz Mtns	0	0%	1	1%	6	4%	7	3%
Santa Cruz	1	20%	8	10%	25	15%	34	13%
Scotts Valley	0	0%	2	2%	1	1%	3	1%
South County	4	80%	67	81%	127	76%	198	77%
PRENATAL CARE INITIATION AND UTILIZATION								
Early (1st Trimester)	0	0%	45	54%	105	63%	150	59%
Late (2nd or 3rd Trimester)	4	80%	36	43%	61	36%	101	39%
No Prenatal Care	1	20%	2	2%	2	1%	5	2%
Adequate or Better	1	20%	51	61%	120	71%	172	67%
Less than Adequate	4	80%	32	39%	47	28%	83	32%
Early & Adequate	0	0%	38	46%	93	55%	131	51%
PARITY								
1st Child	5	100%	81	98%	135	80%	221	86%
2nd Child	0	0%	2	2%	28	17%	30	12%
3rd+ Child	0	0%	0	0%	5	3%	5	2%
BIRTH OUTCOMES								
Low Birthweight	1	20%	3	3.6%	11	6.5%	15	5.9%
Very Low Birthweight	1	20%	0	0%	1	0.6%	2	0.8%
Preterm	0	0%	4	4.8%	16	9.5%	20	7.8%
Very Preterm	0	0%	0	0%	2	1.2%	2	0.8%
METHOD OF DELIVERY								
Primary Cesarean	1	20%	11	13%	36	21%	48	19%
Repeat Cesarean	0	0%	0	0%	9	5%	9	4%
Vaginal	4	80%	72	87%	123	73%	199	78%
VBAC	0	0%	0	0%	0	0%	0	0%
PAYMENT FOR DELIVERY								
Medi-Cal	3	75%	72	87%	139	83%	214	84%
Private Insurance	1	25%	7	8%	25	15%	33	13%
Other Insurance	0	0%	1	1%	1	1%	2	1%
No Insurance	0	0%	3	4%	3	2%	6	2%
TOTAL	***5***	***2%***	***83***	***32%***	***168***	***66%***	***256***	***100%***

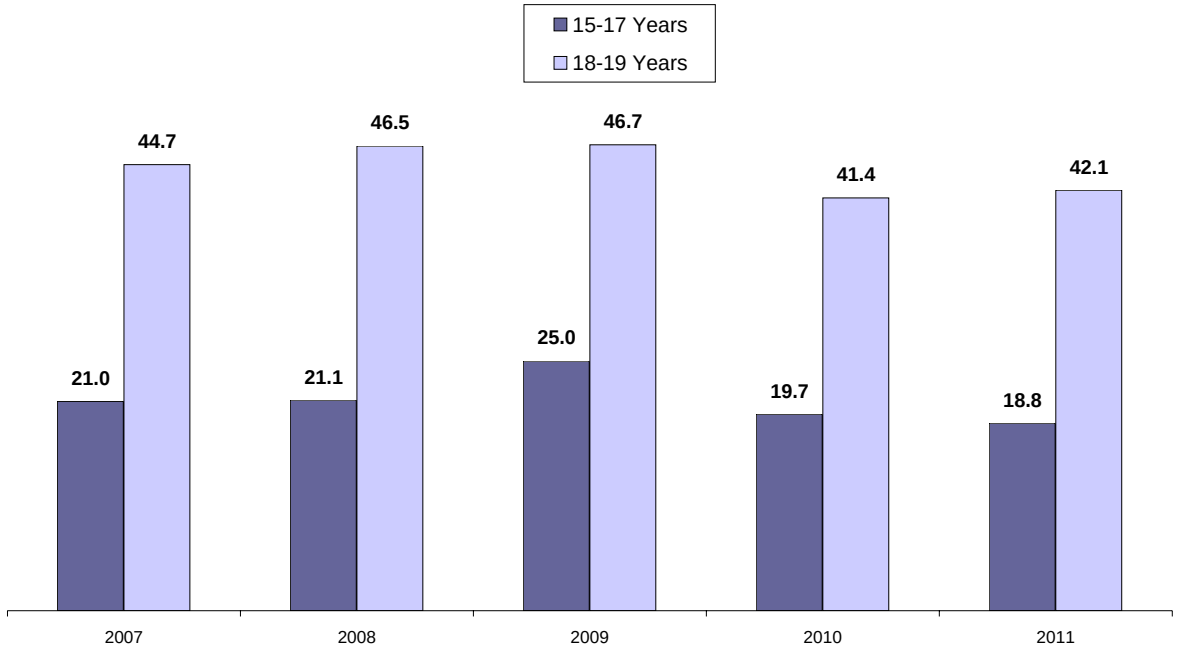
Note: The sum of column categories do not always equal the overall column total either because of missing information (percentages are out of known data) or because of the nature of the column, such as "Birth Outcomes" which does not detail the comprehensive list of mutually exclusive categories.

(1) P.I. = Pacific Islander

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

In 2011, the birth rate among females ages 15-17 and 18-19 years remained similar to previous years (see Figure 4.1), and none of the variation in the past five years has been significantly different from year to year.

Figure 4.1: Age-Specific Teen Birth Rates per 1,000 Females, by Age Group, Santa Cruz County Residents, 2007-2011



AREA OF RESIDENCE

The distribution of births by ZIP Code of residence often differs for teens compared to all age groups (see Table 4.2). For example, residents in ZIP Code 95076 account for 70% of teen births, but only 47% 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, 2011

Mother's Area of Residence	ZIP Code(s)	Teen Births (19 and Under)		Total Births (All Ages)	
		Number	Percent	Number	Percent
Aptos	95001,3	5	2%	189	6%
Capitola	95010	4	2%	110	3%
Davenport	95017	1	0.4%	8	0.2%
Freedom	95019	19	7%	123	4%
Los Gatos	95033	1	0.4%	28	1%
San Lorenzo Valley	95005-7,18,41	6	2%	217	7%
Santa Cruz	95060-5	33	13%	832	26%
Scotts Valley	95066	3	1%	112	3%
Soquel	95073	5	2%	74	2%
Watsonville	95076	179	70%	1,529	47%
TOTAL		***256***	***100%***	***3,222***	***100%***

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

The percent of teen births out of the total number of births decreased slightly from 8.1% in 2010 to 7.9% in 2011. The rate of births per 1,000 teen female population (age 15-19 years) continued to decrease statewide and nationally. In Santa Cruz County, the rate was 29.8 per 1,000 population in 2011, slightly higher than the county and statewide rate of 29.0 per 1,000 population in 2010, but well below the 2010 national rate.

Figure 4.2: Teen (Ages 15 to 19) Birth Rate per 1,000 Population, Santa Cruz County Residents, California, and United States, 2002-2011

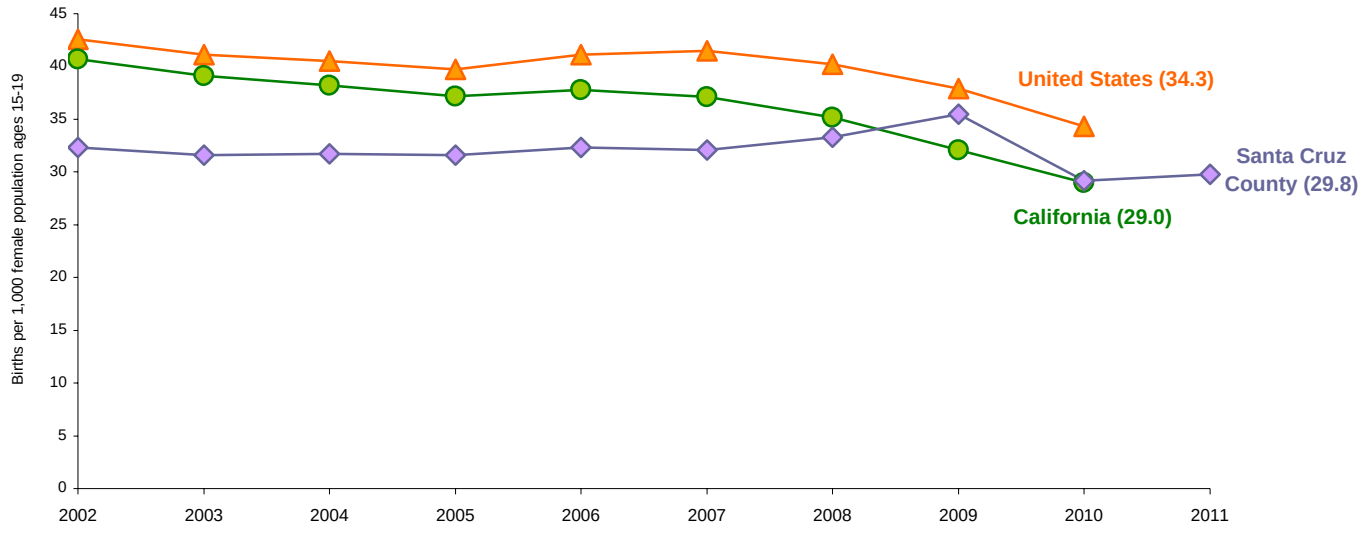
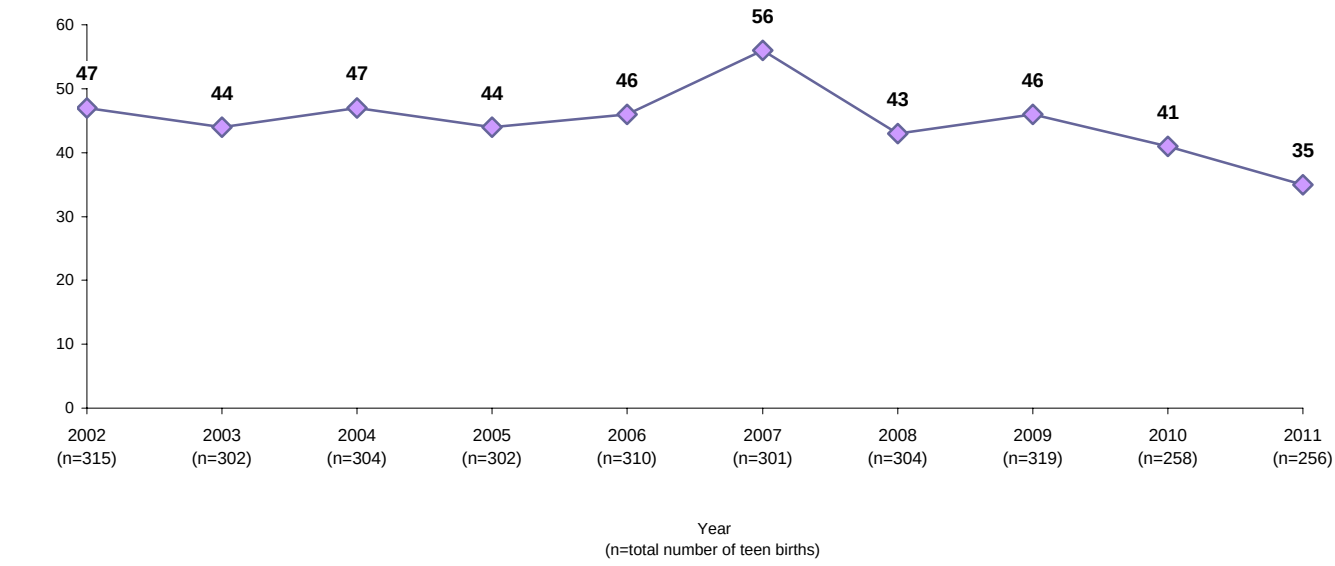


Figure 4.3 shows the number of teen mothers who were delivering their second (or more) birth. In 2011, four teenage mothers delivered their third child, and one delivered her fourth.

Figure 4.3: Number of Teens (Ages 19 and Under) Delivering their 2nd or More Birth, Santa Cruz County Residents, 2002-2011



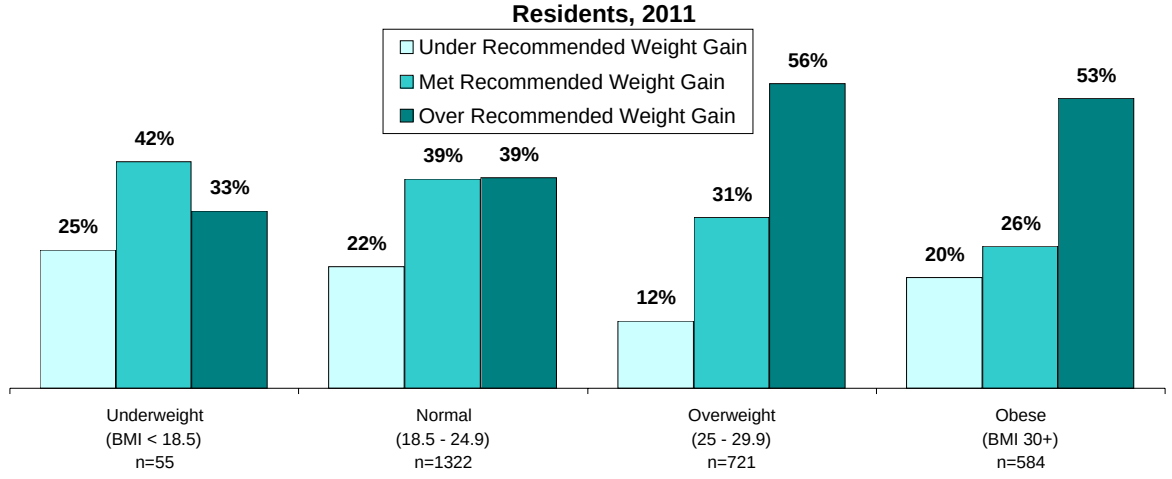
5. MOTHER'S WEIGHT GAIN & SMOKING STATUS

In 2011, 47% of mothers gained more weight than recommended during their pregnancy. This percentage excludes mothers carrying multiples (i.e. twins), premature births and mothers with missing pre and post pregnancy weight data, which leaves 2,682 births or 83% of all births. Mothers whose pre-pregnancy body mass index (BMI) was overweight or obese exceeded weight gain recommendation significantly more often than mothers with normal and underweight BMI levels. In 2011, nearly half (49%) of mothers had an overweight or obese pre-pregnancy weight.

In 2009, the Institute of Medicine and the National Research Council released a report recommending new guidelines for weight gain during pregnancy. The recommended weight gain for each category of pre-pregnancy BMI is as follows:

- Underweight (< 18.5 kg/m2); total weight gain range: 28 to 40 pounds
- Normal weight (18.5 - 24.9 kg/m2); total weight gain range: 25 to 35 pounds
- Overweight (25.0 - 29.9 kg/m2); total weight gain range: 15 to 25 pounds
- Obese (≥ 30.0 kg/m2); total weight gain range: 11 to 20 pounds

Figure 5.1 Percentage of Mothers in Weight Gain Categories Compared to Recommednations, by Pre-Pregnancy Body Mass Index (BMI), Santa Cruz County Residents, 2011



Note: The percentages exclude 116 multiples, 174 preterm (< 37 weeks gestation), and 249 mothers with either unknown pre-pregnancy weight or unknown weight gain.

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 conception are shown below in Table 5.1.

TABLE 5.1: Mother's Smoking Status during Pregnancy, by Trimester, Santa Cruz County Residents, 2011

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	76	2.4%	50	1.6%	32	1.0%	31	1.0%
No	3,117	97.6%	3,143	98.4%	3,161	99.0%	3,162	99.0%
TOTAL	***3,193***	***100%***	***3,193***	***100%***	***3,193***	***100%***	***3,193***	***100%***

Note: This table does not include 28 births for whom mother's cigarette smoking status was missing for one or more of the above time periods.

Healthy People 2020 Objective: Increase abstinence from cigarettes to 98.6% or more of all pregnant women (MICH-11.3).

6. BIRTHS BY AGE OF FATHER, MOTHERS ARE RESIDENTS

TABLE 6.1: Characteristics of Fathers, by Age Group, Santa Cruz County Mothers are Residents, 2011

	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	21	66%	26	35%	18	5%	2	0.1%	0	0%	67	2%
18 - 19	8	25%	32	43%	78	20%	27	2%	2	0%	147	5%
20 - 24	2	6%	13	17%	226	58%	264	18%	27	3%	532	18%
25 - 34	1	3%	4	5%	65	17%	1,055	72%	478	46%	1,603	53%
35 and Over	0	0%	0	0%	5	1%	126	9%	527	51%	658	22%
ETHNICITY OF FATHER												
Asian & P.I. (1)	0	0%	0	0%	2	1%	33	2%	33	3%	68	2%
Black	0	0%	1	1%	5	1%	13	1%	19	2%	38	1%
Latino	30	94%	67	89%	339	87%	852	59%	397	39%	1,685	57%
White	2	6%	6	8%	44	11%	552	38%	551	55%	1,155	39%
Other	0	0%	1	1%	0	0%	4	0%	7	0.7%	12	0.4%
EDUCATION OF FATHER												
8th Grade & Under	2	7%	11	15%	71	19%	241	17%	136	14%	461	16%
Some High School	26	87%	32	43%	88	23%	221	16%	86	9%	453	16%
HS Diploma or GED(2)	1	3%	22	30%	157	42%	389	28%	212	22%	781	27%
At Least Some College	1	3%	9	12%	60	16%	560	40%	545	56%	1,175	41%
TOTAL	***32***	***1%***	***75***	***2%***	***392***	***13%***	***1,474***	***49%***	***1,034***	***34%***	***3,007***	***100%***

Note: There were 214 (6.7%) fathers without age information.

(1) P.I. = Pacific Islander; (2) GED = General Equivalency Degree (or Diploma)

7. BIRTHS BY DELIVERY LOCATION

TABLE 7.1: Characteristics of Births, by Delivery Location, Santa Cruz County Occurrence or Residence, 2011

	DELIVERY LOCATION										TOTAL	
	Watsonville		Dominican		Sutter		Non-Hospital		Out of County		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
AGE OF MOTHER (Years)												
17 and Under	70	5%	16	2%	10	1%	0	0%	1	1%	97	3%
18 - 19	130	9%	31	3%	30	3%	0	0%	8	4%	199	5%
20 - 24	387	26%	145	16%	125	13%	3	4%	28	15%	688	19%
25 - 34	705	47%	497	55%	570	59%	49	73%	82	44%	1,903	52%
35 and Over	220	15%	221	24%	236	24%	15	22%	66	36%	758	21%
ETHNICITY OF MOTHER												
Asian & P.I. [1]	14	1%	41	5%	44	5%	0	0%	11	7%	110	3%
Black	1	0.1%	6	1%	9	1%	0	0%	2	1%	18	1%
Latina	1,416	94%	361	40%	282	29%	7	12%	53	33%	2,119	59%
White	78	5%	474	53%	623	65%	52	87%	90	57%	1,317	37%
Other	3	0.2%	10	1%	6	1%	1	2%	3	2%	23	1%
EDUCATION OF MOTHER												
8th Grade & Under	503	33%	39	5%	13	1%	0	0%	4	3%	559	16%
Some High School	410	27%	88	10%	42	4%	0	0%	14	9%	554	16%
HS Diploma or GED[2]	334	22%	271	32%	223	24%	4	7%	23	15%	855	24%
At least Some College	264	17%	444	53%	663	70%	57	93%	114	74%	1,542	44%
PRENATAL CARE INITIATION AND UTILIZATION												
Early (1st Trimester)	1,074	71%	819	91%	855	89%	50	75%	154	83%	2,952	82%
Late (2nd or 3rd Trimester)	428	28%	72	8%	104	11%	14	21%	28	15%	646	18%
No Prenatal Care	2	0.1%	10	1%	1	0.1%	3	4%	3	2%	19	1%
Adequate or Better	1,150	77%	718	84%	857	90%	56	85%	133	72%	2,914	82%
Less than Adequate	353	23%	134	16%	98	10%	10	15%	52	28%	647	18%
Early & Adequate	1,003	66%	687	75%	794	82%	46	69%	122	66%	2,652	73%
BIRTH OUTCOMES												
Low Birthweight	62	4.1%	79	8.7%	14	1.4%	0	0%	42	22.7%	197	5.4%
Very Low Birthweight	5	0.3%	9	1.0%	1	0.1%	0	0%	18	9.7%	33	0.9%
Preterm	79	5.2%	104	11.4%	20	2.1%	0	0%	43	23.2%	246	6.7%
Very Preterm	8	0.5%	10	1.1%	0	0%	0	0%	19	10.3%	37	1.0%
DELIVERY METHOD												
Primary Cesarean	195	13%	162	18%	157	16%	0	0%	42	23%	556	15%
Repeat Cesarean	282	19%	96	11%	86	9%	0	0%	27	15%	491	13%
Vaginal	1,033	68%	647	71%	707	73%	67	100%	115	62%	2,569	70%
VBAC	2	0.1%	5	1%	21	2%	0	0%	1	1%	29	1%
PAYMENT FOR DELIVERY												
Medi-Cal	1,254	83%	383	42%	287	30%	1	1.5%	49	26%	1,974	54%
Private Insurance	234	15%	516	57%	676	70%	18	27%	128	69%	1,572	43%
Other Insurance	0	0%	3	0.3%	5	1%	1	1%	7	4%	16	0.4%
No Insurance	23	2%	6	1%	2	0.2%	47	70%	1	1%	79	2%
TOTAL	***1,512***	***41%***	***910***	***25%***	***971***	***27%***	***67***	***2%***	***185***	***5%***	***3,645***	***100%***

Note: Education categories describe mothers of all ages, unlike Figure 2.3 on page 5 which exlcludes 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)

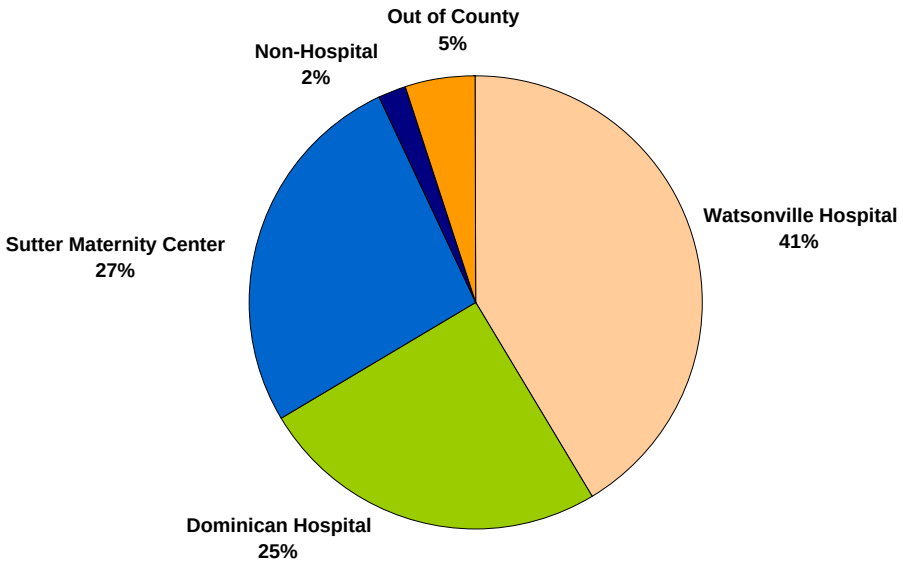
7. BIRTHS BY DELIVERY LOCATION (CONT.)

This table is included to provide more details about where Santa Cruz County residents deliver as well as where non-residents are coming from when they deliver at locations in Santa Cruz County. The majority of non-resident delivering 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 Deliverly Location, Santa Cruz County Occurrence or Residence, 2011

	DELIVERY LOCATION										TOTAL	
	Watsonville		Dominican		Sutter		Non-Hospital		Out of County		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
AREA OF RESIDENCE												
SANTA CRUZ COUNTY	1,232	81%	846	93%	892	92%	66	99%	185	100%	3,221	88%
Mid-County	*21*	*2%*	*172*	*20%*	*161*	*18%*	*9*	*14%*	*26*	*14%*	*389*	*12%*
Santa Cruz Mtns.	*3*	*0%*	*92*	*11%*	*92*	*10%*	*13*	*20%*	*44*	*24%*	*244*	*8%*
Santa Cruz	*9*	*1%*	*387*	*46%*	*378*	*42%*	*32*	*48%*	*38*	*21%*	*844*	*26%*
Scotts Valley	*3*	*0%*	*42*	*5%*	*53*	*6%*	*2*	*3%*	*8*	*4%*	*108*	*3%*
South County	*1,196*	*97%*	*153*	*18%*	*208*	*23%*	*10*	*15%*	*69*	*37%*	*1636*	*51%*
MONTEREY COUNTY	255	17%	31	3%	48	5%	-	-	-	-	334	9%
SAN BENITO COUNTY	13	1%	6	1%	11	1%	-	-	-	-	30	1%
SANTA CLARA COUNTY	3	0%	12	1%	15	2%	-	-	-	-	30	1%
OTHER COUNTIES	9	0.6%	15	1.6%	5	0.5%	1	1.5%	-	-	30	0.8%
TOTAL	***1,512***	***41%***	***910***	***25%***	***971***	***27%***	***67***	***2%***	***185***	***5%***	***3,645***	***100%***

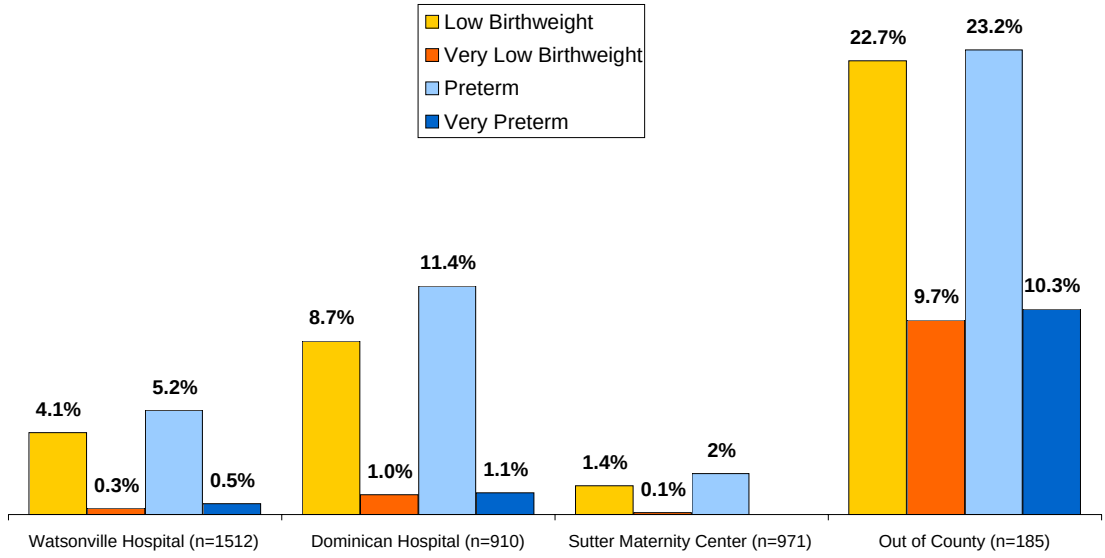
Figure 7.1: Percentage of Births, by Delivery Location
Santa Cruz County Occurrence or Residence, 2011



7. BIRTHS BY DELIVERY LOCATION (CONT.)

The 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.

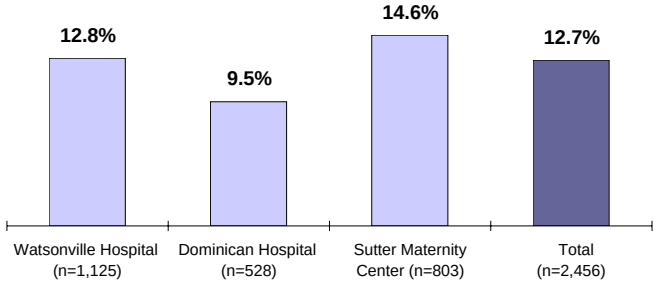
Figure 7.2: Percentage of Births with Low Birthweight, Very Low Birthweight, Preterm and Very Preterm, by Delivery Location, Santa Cruz County Occurrence or Residence 2011



CESAREAN BIRTHS

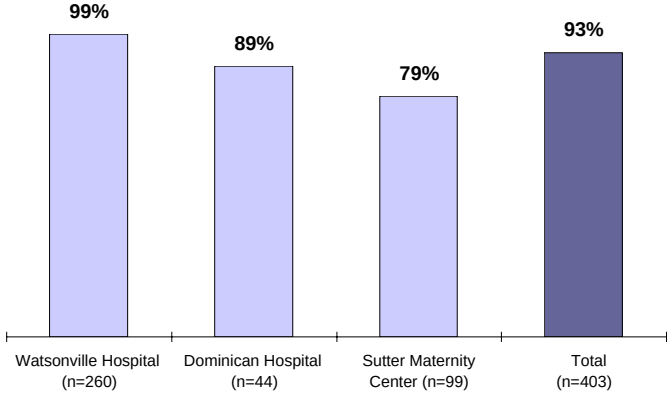
Below are figures on the percent of cesarean births among low-risk births to females either without a prior cesarean birth (Figure 7.3) or with a prior cesarean birth (Figure 7.4). Low-risk births are defined in the figure notes.

Figure 7.3: Percentage of Births Delivered by Cesarean Section to Low-Risk[(1)] Females <u>without</u> a Prior Cesarean Birth, by Delivery Location, Santa Cruz County Occurrence, 2011



(1): Low-risk is defined as full-term (at least 37 weeks gestation), cephalic, singleton births with no prior c-section deliveries. The total is the average of the three delivery locations. Residents who delivered out of county or at home are not included in this figure. HP2020 Target: Reduce to 23.9% (Objective MICH-7.1).

Figure 7.4: Percentage of Births Delivered by Cesarean Section to Low-Risk[(1)] Females <u>with</u> a Prior Cesarean Birth, by Delivery Location, Santa Cruz County Occurrence, 2011



(1): Low-risk is defined as full-term (at least 37 weeks gestation), cephalic, singleton births with prior C-section deliveries. The total is the average of the three delivery locations. Residents who delivered out of county or at home are not included in this figure. HP2020 Target: Reduce to 81.7% (Objective MICH-7.2).

8. TRENDS

EARLY PRENATAL CARE

The percentage of mothers who received early prenatal care (1st trimester) was 82.4% in 2011 compared to 82.6% in 2010 (see 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.

Figure 10.1: Percentage of Births Receiving Early Prenatal Care (1st Trimester), Santa Cruz County Residents, California and Healthy People 2020 Objective, 2002-2011

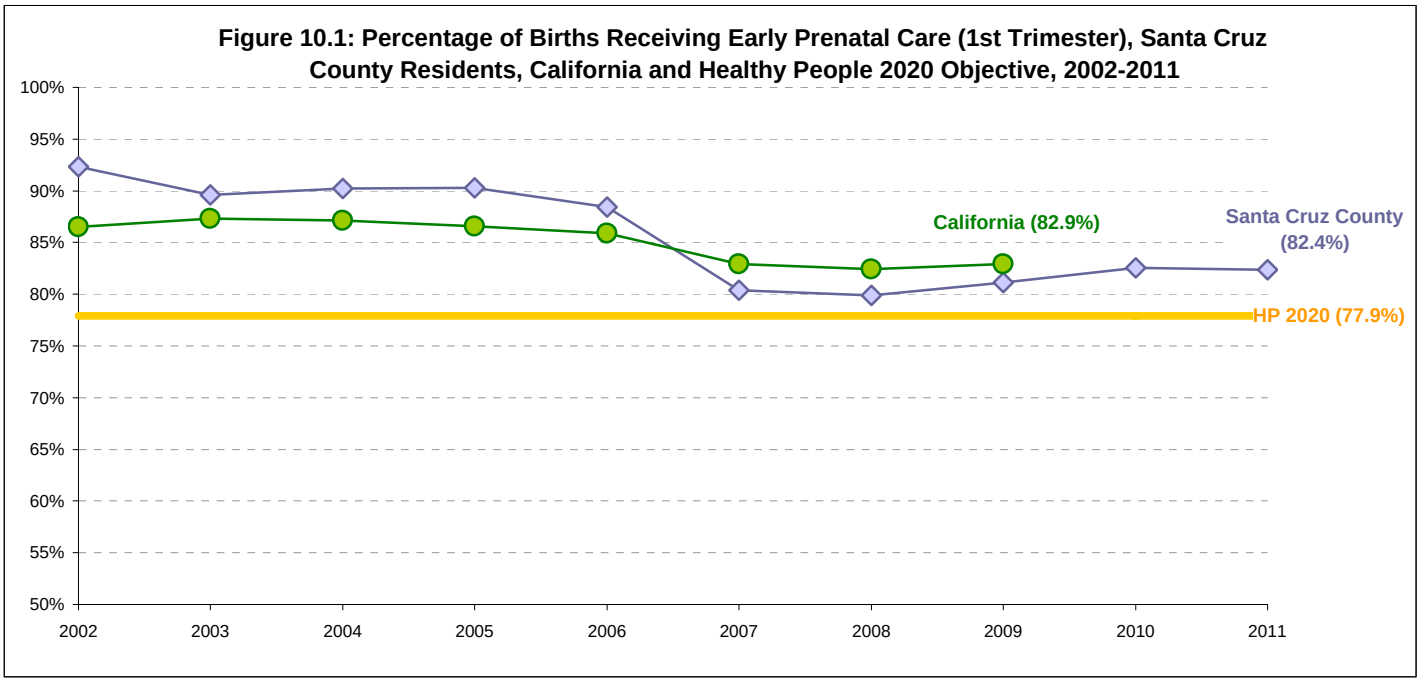
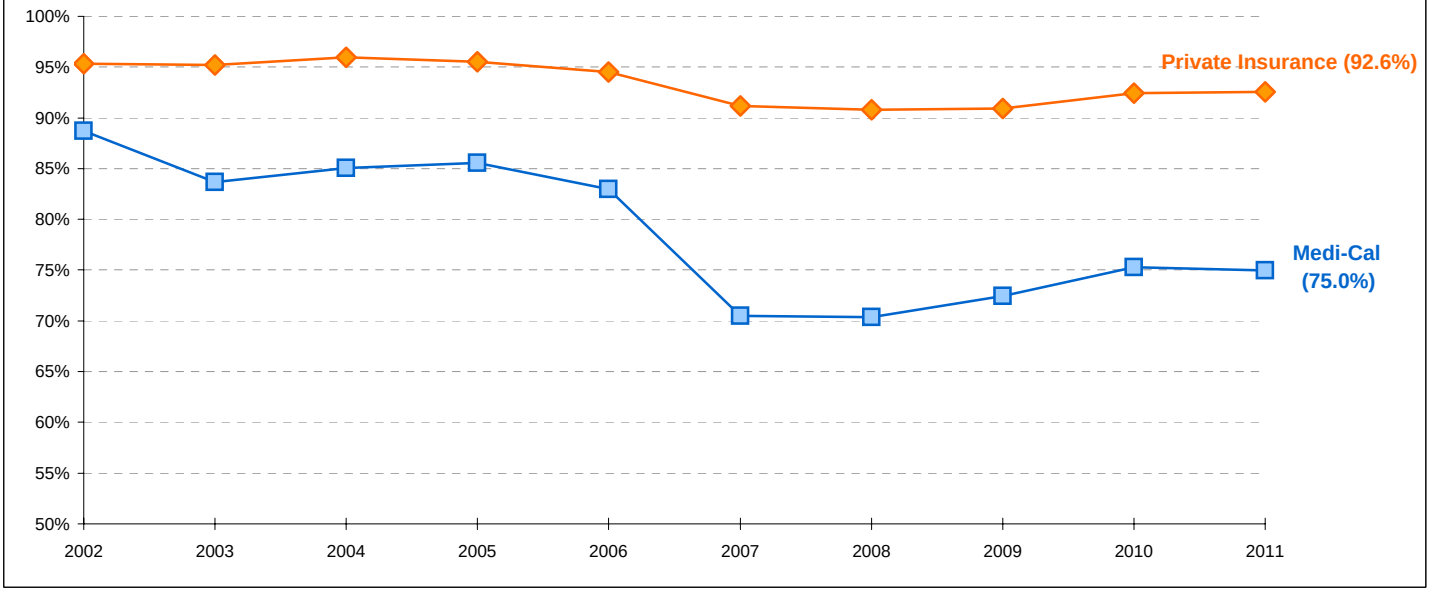


Figure 10.2: Percentage of Births Receiving Early Prenatal Care (1st Trimester), by Delivery Payment Source, Santa Cruz County Residents, 2002-2011

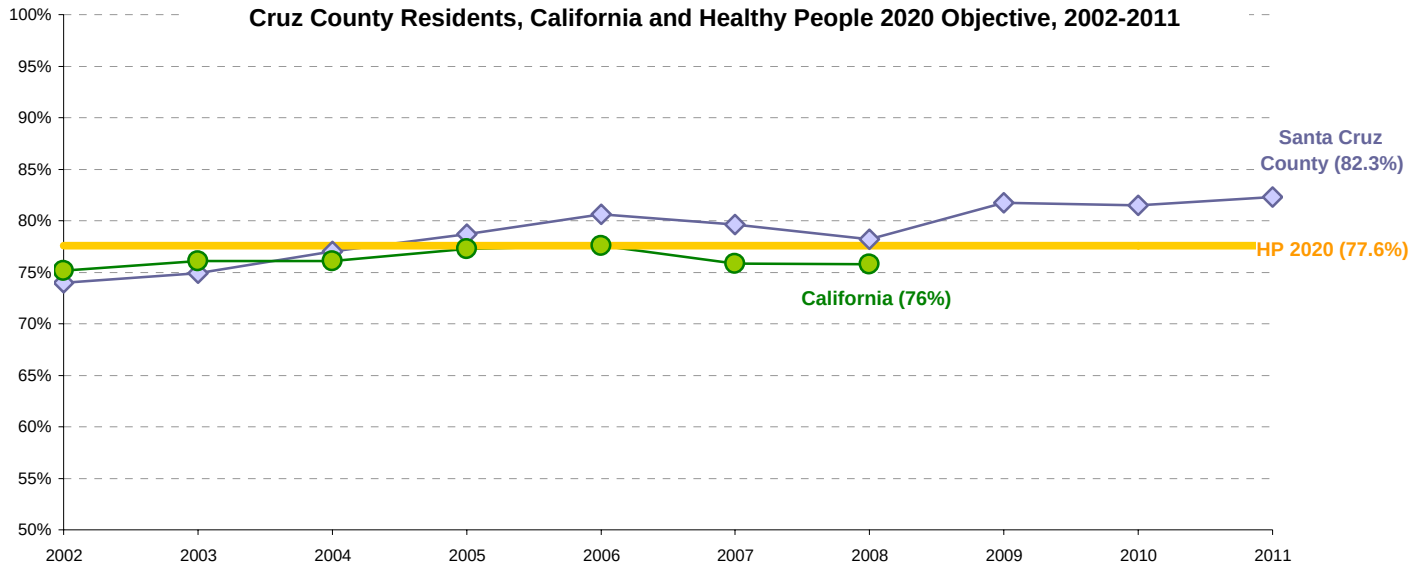


8. TRENDS (CONT.)

ADEQUACY OF PRENATAL CARE UTILIZATION

The percentage of mothers who adequately utilized prenatal care (Kotelchuck Index, see Definitions on page 2) was 82.3% in 2011 compared to 74.0% in 2002 (see Figure 10.3). The trend is going in the desired direction, and although we have m the Healthy People 2020 target, there is still room for improvement. The 2008 California data is the most current year tha is publicly available.

Figure 10.3: Percentage of Births Utilizing Adequate or Better Prenatal Care Services, Santa Cruz County Residents, California and Healthy People 2020 Objective, 2002-2011



MEDI-CAL FUNDED DELIVERIES

Figure 10.4 shows the trend in the percentage of deliveries funded by Medi-Cal. In 2011, 53% of Santa Cruz County residents delivering in the county were funded by Medi-Cal, compared to 45% in 2002.

Figure 10.4: Percentage of Medi-Cal Funded Deliveries by Hospital and Overall, Santa Cruz County Residents, 2002-2011