

BIRTHS
Santa Cruz County
2009



TABLE OF CONTENTS

	Page
Introduction	3
1. Demographics of the County	4
2. Key Health Outcomes: Adequacy of Prenatal Care, Low Birth Weight & Preterm Births by:	5
- Age of Mother	
- Race/Ethnicity of Mother	
- Mother's Education	
- Delivery Pay Method	
3. Births by Mother's Age, Residents	7
4. Mother's Demographics	8
5. Mother's Weight Gain and Smoking During Pregnancy	10
6. "4P's Plus" Prenatal Substance Use Screening	11
7. Father's Demographics	14
8. Births by Hospital/Location	15
9. Birth Outcomes by Hospital	17
10. Teen Births (Age 19 and Under), Residents	18
11. Trends	21

INTRODUCTION

This report characterizes data on live births in 2009 and has been compiled by the Public Health Department's Maternal, Child and Adolescent Health (MCAH) Program using birth certificates filed in Santa Cruz County. Most of the data in this report pertain strictly to mothers whose primary residence is in this county. Tables and figures either refer to RESIDENTS (mothers who live in Santa Cruz County regardless of where they delivered) or the combination of both OCCURRENCE (mothers who delivered in Santa Cruz County regardless of where they normally reside) and RESIDENTS.

In this report, adequacy of prenatal care is measured using the Kotelchuck Index--also called the Adequacy of Prenatal Care Utilization (APNCU) Index. The measure uses two crucial elements obtained from birth certificate data--when prenatal care began and the number of prenatal visits. Unfortunately, one of these two data fields was left blank nearly 5% of the time--causing the remaining rates to be increasingly unstable. Further research may be needed to find out how our community can improve this aspect of data collection.

When describing a person's area of residence in this report, "Mid-County" is defined as: Aptos, Capitola and Soquel; "Santa Cruz" includes: Bonny Doon, Davenport, Live Oak and Santa Cruz; and "South County" includes: Aromas, Corralitos, Freedom, La Selva Beach, Royal Oaks, and Watsonville. Also note that when viewing race/ethnicity data, all categories (aside from Latino) are referring to non-Latino race groups—for example, White is the same as non-Latino White, whereas Latino is Latino whether the race is chosen as White or Black.

The authors have attempted to organize and format the information to be useful to the community for analyses and planning. However, for additional data requests, please use the contact info listed below. All the data in this report, unless otherwise noted, are from the Santa Cruz County Automated Vital Statistics System where birth certificate data are maintained, accessed in 2010 and analyzed using Cal Birth Information System. The data in this report should be considered provisional.

Key findings in this report:

- In 2009, there were 3,290 live births among mothers who reside in Santa Cruz County—236 less births than in 2008. An additional 469 births occurred in Santa Cruz County to mothers who are residents of other counties. The majority (74%) of births from out-of-county residents were to mothers who lived in Monterey County.
- Teen births increased both as a percentage of overall births at 10% in 2009 from 8.5% in 2008 and as a total number – up to 319 in 2009 from 304 in 2008. The increase is mostly among teens aged 15 to 17 compared to teens aged 18 to 19.
- 51% of deliveries were funded by Medi-Cal, a slight decrease from 52% in 2008.



For comments, questions or data requests, please contact:

Jessica Oltmanns, MPH

Jessica.Oltmanns@co.santa-cruz.ca.us; (831) 454 – 4647

For more copies of the report, please refer to our website www.santacruzhealth.org



Public Health
Prevent. Promote. Protect.

Suggested Citation:

County of Santa Cruz, Public Health Department. *Births, Santa Cruz County, 2009*. Santa Cruz County, CA. Jul 2010

1. DEMOGRAPHICS

The California Department of Finance estimated the total population in Santa Cruz County to be 266,776 residents in 2009.¹ In California, Santa Cruz is considered a mid-sized population county, and it ranked 24th largest among California's 58 counties in 2009.²

GENDER & AGE

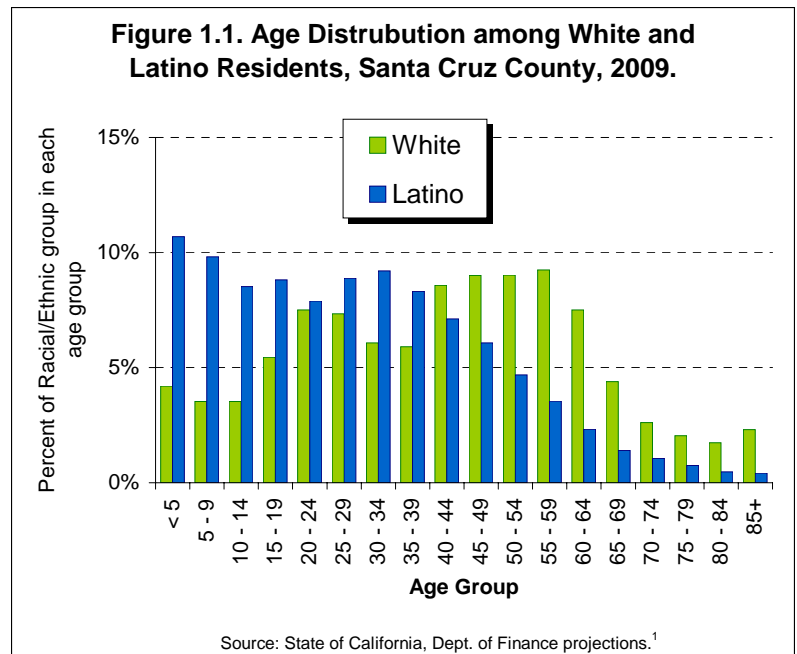
Nearly equal numbers of males and females reside in Santa Cruz County, with slightly more females than males – especially in older age groups. The largest percentage of residents is persons between the ages of 20 and 44.

ETHNICITY & RACE

Over 90% of the county's population is either White (57%) or Latino (35%).¹ The remaining groups account for much smaller fractions of the population: Asians (5%), Blacks (1%), Pacific Islanders (0.1%) and other/multi-racial groups (3%).

Children make up a far larger proportion of the Hispanic population than of the white population; this difference continues through every age group under 40, whereas every older age group makes up a much larger proportion of the white population than of the Hispanic population (see Figure 1.1).

	#	%
Gender		
Male	133,300	50%
Female	133,476	50%
Age		
Under 5	17,352	7%
5 - 19	48,761	18%
20 - 44	100,985	38%
45 - 64	73,822	28%
65 and Over	25,856	10%
Ethnicity / Race		
Latino	92,945	35%
White	150,942	57%
Asian	13,158	5%
Black	2,661	1%
Pacific Islander	364	0.1%
Other	6,706	3%
TOTAL	266,776	100%



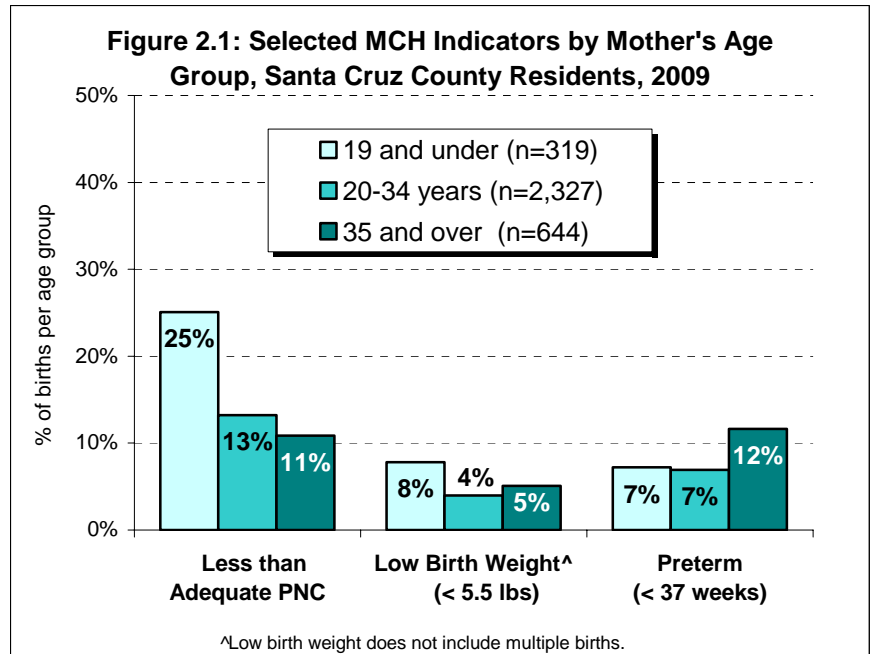
Sources

1. State of California, Department of Finance, *Race/Ethnic Population with Age and Sex Detail, 2000–2050*. Sacramento, CA, July 2007.
2. "Tables of July 2009 County Estimates Ranked by Size, Numeric and Percent Change." *Research and Demographics Unit*. California Department of Finance.

2. KEY HEALTH OUTCOMES

AGE OF MOTHER

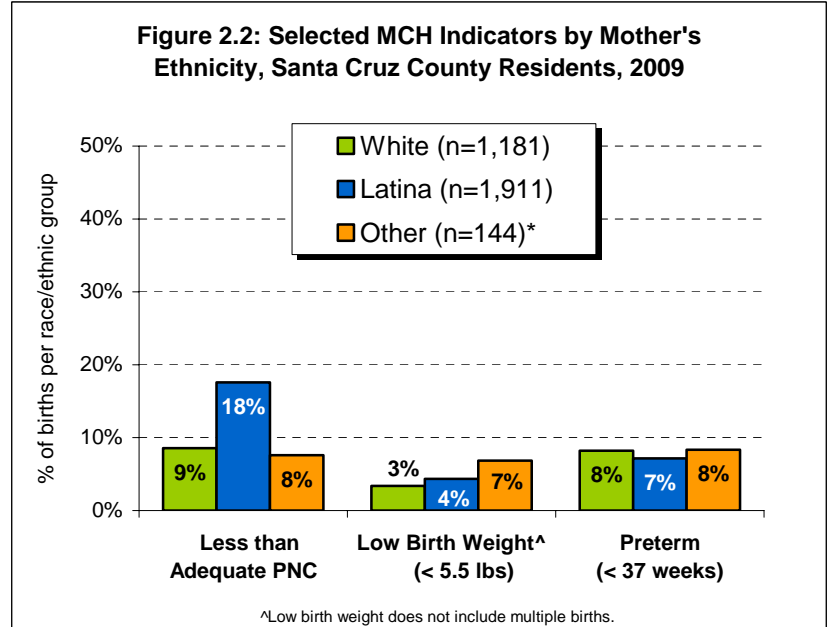
As shown in the Figure 2.1, 25% of teens (19 and under) received less than adequate prenatal care (PNC) compared to 13% and 11% of mothers 20-34 and 35 and over, respectively. It is also interesting to note the slightly higher percentages of low birth weight babies among teens and higher preterm births among mothers 35 and over.



RACE/ETHNICITY OF MOTHER

Latina mothers had a higher rate of less than adequate prenatal care, yet their other outcomes were approximately the same as those of White mothers (see Figure 2.2).

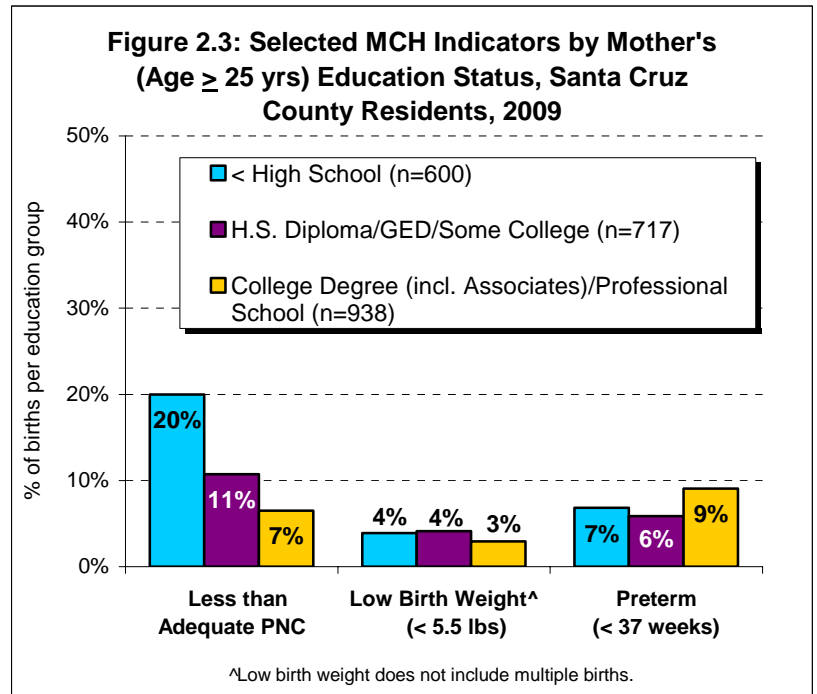
Note: "Other" race category includes: Asian, Black, Pacific Islander, Native American/Alaska Native, multi-race, and others not listed.



2. KEY HEALTH OUTCOMES (CONT.)

MOTHER'S EDUCATION

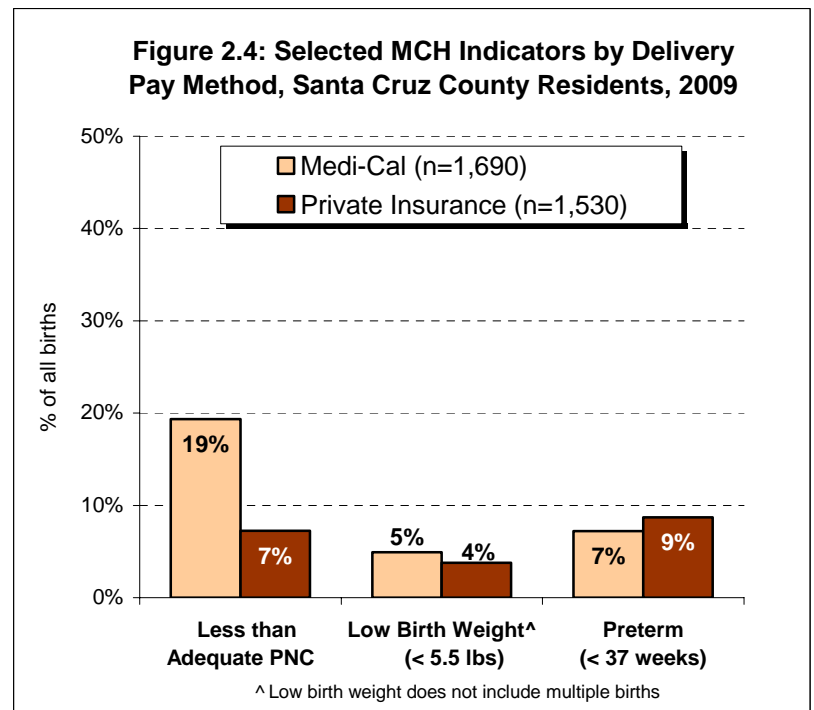
Among mothers (ages 25 and over), approximately 18% did not have a high school diploma or its equivalent (i.e. GED) in 2009. Of those mothers, 20% received less than adequate prenatal care—nearly twice that of their more educated counterparts.



DELIVERY PAY METHOD

Medi-Cal births decreased slightly from 52% in 2008 to 51% in 2009. Mothers with Medi-Cal funded deliveries had a much higher rate of less than adequate prenatal care compared to mothers with private insurance—over double.

However, other outcomes (low birth weight and premature births) were approximately the same when comparing Medi-Cal with private insurance.



3. BIRTHS BY MOTHER'S AGE, RESIDENTS

TABLE 3.1: Characteristics of Births by Mother's Age, Santa Cruz County Residents, 2009

	AGE OF MOTHER (years)										TOTAL	
	17 and Under		18-19		20-24		25-34		35 and Over		#	%
RACE/ETHNICITY OF MOTHER												
Asian	0	0%	1	1%	4	1%	28	2%	16	3%	49	2%
Black	5	4%	3	2%	6	1%	10	1%	7	1%	31	1%
Latina	107	90%	166	85%	479	78%	909	54%	250	40%	1,911	59%
Pacific Islander	0	0%	0	0%	3	0.5%	21	1%	13	2%	37	1%
White	7	6%	25	13%	116	19%	695	41%	338	54%	1,181	36%
Other	0	0%	1	1%	6	1%	17	1%	3	0.5%	27	1%
AREA OF RESIDENCE OF MOTHER												
Mid-County	2	2%	12	6%	49	8%	204	12%	106	16%	373	11%
San Lorenzo Valley	0	0%	6	3%	28	5%	129	8%	55	9%	218	7%
Santa Cruz	12	10%	32	16%	114	18%	498	29%	219	34%	875	27%
Scotts Valley	0	0%	2	1%	8	1%	61	4%	41	6%	112	3%
South County	105	88%	148	74%	419	68%	817	48%	223	35%	1,712	52%
PARITY												
1st Child	110	92%	163	82%	306	50%	575	34%	167	26%	1,321	40%
2nd - 3rd Child	9	8%	36	18%	291	47%	927	54%	341	53%	1,604	49%
4th+ Child	0	0%	1	1%	21	3%	206	12%	135	21%	363	11%
PRENATAL CARE¹												
Early (1st Trimester)	69	59%	139	72%	454	75%	1,405	84%	547	87%	2,614	81%
Late (>1st Trimester)	47	40%	55	28%	151	25%	268	16%	82	13%	603	19%
Adequate/Adequate+	81	68%	145	73%	476	77%	1,435	84%	548	85%	2,685	82%
Less than Adequate	18	15%	44	22%	114	18%	194	11%	70	11%	440	13%
Early & Adequate	65	55%	127	64%	415	67%	1,303	76%	507	79%	2,417	73%
No Prenatal Care	1	1%	0	0%	1	0.2%	2	0.1%	2	0.3%	6	0.2%
BIRTH OUTCOMES												
VLBW (<2.5 lbs) [^]	0	0%	5	3%	3	0.5%	11	1%	4	1%	23	1%
LBW (<5.5 lbs)	6	5%	17	9%	21	3%	66	4%	29	5%	139	4%
< 32 weeks gest.	0	0%	5	3%	7	1%	18	1%	11	2%	41	1%
32 - 36 weeks gest.	6	5%	12	6%	36	6%	100	6%	64	10%	218	7%
DELIVERY METHOD												
Primary C	23	19%	36	18%	92	15%	252	15%	137	21%	540	16%
Repeat C	1	1%	5	3%	57	9%	241	14%	112	17%	416	13%
Vaginal	95	80%	159	80%	466	75%	1204	70%	386	60%	2,310	70%
VBAC ²	0	0%	0	0%	3	0.5%	12	1%	9	1%	24	1%
PAYMENT FOR DELIVERY												
Medi-Cal	92	77%	166	83%	480	78%	768	45%	184	29%	1,690	51%
Private Insurance	22	18%	30	15%	128	21%	906	53%	444	69%	1,530	47%
Other	2	2%	1	1%	1	0.2%	4	0.2%	1	0.2%	9	0.3%
No Insurance	3	3%	3	2%	9	1%	27	2%	15	2%	57	2%
TOTAL	119	4%	200	6%	618	19%	1,709	52%	644	20%	3,290	100%

"Other" race/ethnicity includes Native Americans, mixed races and other groups not listed; ^ (LBW) Low birth weight includes (VLBW) very low birth weight; both counts exclude the 110 multiple births.

(1) Where percentages do not add up to 100% for prenatal care utilization (adequate or better versus inadequate), the remaining percentage is due to missing data fields. When the percentage is higher than 2%, the remaining rates become increasingly unreliable; (2) VBAC: Vaginal birth after C-section.

Note: In all row groupings aside from "Birth Outcomes," totals that do not add up to the bottom row are due to missing data. Percentages are calculated out of total known. For "Birth Outcomes," births not listed in this section were neither low birth weight nor gestation <37 weeks. Also, total row %'s are out of the total, for example, 19% of mothers were ages 20-24.

Source: 2009 Santa Cruz County Automated Vital Statistics System, accessed in 2010. Analyzed using Cal Birth Information System.

4. MOTHER'S DEMOGRAPHICS

AGE

Age is associated with selected demographics among mothers residing in Santa Cruz County (see Figure 4.1). For example, 82% of deliveries to females 19 and under are funded by Medi-Cal compared to 29% of deliveries to females ages 35 and over.

The majority (71%) of births occur to mothers between ages 20 to 34, with the largest number (n=871) among women 25 to 29 years old. However, when looking at the number of births per population, the fertility rate is highest among mothers between ages 30 to 34 with 92 births per 1,000 women in that age group.

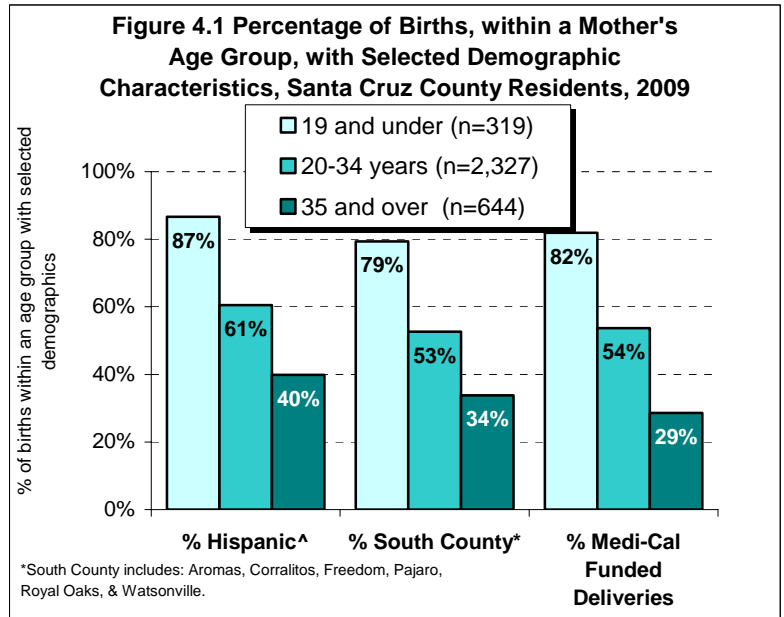


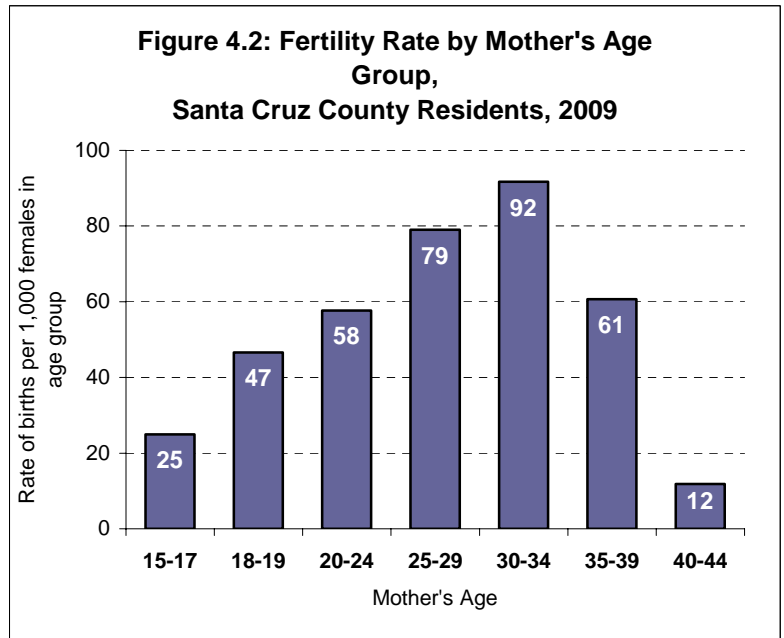
Table 4.1: Mother's Age Group and Rate, Santa Cruz County Residents, 2009.

Mother's Age Group	# births	% of births	Total Female Popl'n, 2009	Birth Rate per 1,000 Popl'n
14	5	0.2%	1,457	3.4
15-17	114	3%	4,560	25.0
18-19	200	6.1%	4,287	46.7
20-24	618	19%	10,710	57.7
25-29	871	26.5%	11,022	79.0
30-34	838	25%	9,140	91.7
35-39	509	15.5%	8,395	60.6
40-44	122	4%	10,332	11.8
45-50	13	0.4%	12,099	1.1
TOTAL	3,290	100%	58,446	56.0

Note: Rates are age-specific and are calculated by dividing the total number of births by the total female population in an age group, this is also known as an age-specific rate. The "TOTAL" rate in this table is also known as the general fertility rate. It is the number of births to individuals ages 15-44 divided by the total female population ages 15-44 ("childbearing age").

Source: 2009 Santa Cruz County Automated Vital Statistics System, accessed in 2010. 2009 Estimated Population data provided by State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007.

Healthy People 2010 Objective: Reduce pregnancies among adolescent females (age 15-17) to 43 per 1,000 population.



4. MOTHER'S DEMOGRAPHICS (CONT.)

RACE / ETHNICITY

Although Latinos make up 34% of the overall county population, 60% of all county births are to Latina mothers, whereas Whites make up 57% of the population, yet only 36% of births.

This trend can also be seen when comparing fertility rates--with 87 births per 1,000 Latinas ages 15 to 44 compared to 38 births per 1,000 White women ages 15 to 44 -- approximately 2.3 times higher among Latinas compared to Whites.

Figure 4.4 shows a substantially higher fertility rate among Pacific Islanders compared to any other racial/ethnic group. Although Pacific Islanders only account for 1% of all births, their population is relatively small, so their fertility rate is very large—however, their rate is considered unstable and will likely change greatly from year-to-year.

Table 4.2: Mother's Race/Ethnicity and Fertility Rate, Santa Cruz County Residents, 2009

Mother's Race/Ethnicity	# births	% of births	Total Female Popl'n (Ages 15-44)	Fertility Rate per 1,000 Popl'n
Asian	49	1.5%	3,462	14.2
Black	31	1.0%	539	57.5
Latina	1,911	59%	21,877	87.0
Other	27	0.8%	1,360	19.9
Pacific Islander	37	1.1%	86	430.2*
White	1,181	36%	31,122	37.7
TOTAL	3,236	100%	58,446	56.0

* Rate considered extremely unstable rate due to the population being less than 100.

Note: There are 54 mothers for whom race/ethnicity is unknown. Also, the "Fertility Rate" is calculated using only the number of births by women age 15-44 divided by the total female population ages 15-44 per racial/ethnic group. "Other" includes Native Americans and persons with multiple races.

Source: 2009 Santa Cruz County Automated Vital Statistics System, accessed in 2010. 2009 Estimated Population data provided by State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007.

Figure 4.3: Percent of Births by Mother's Race/Ethnicity, Santa Cruz County Residents, 2009

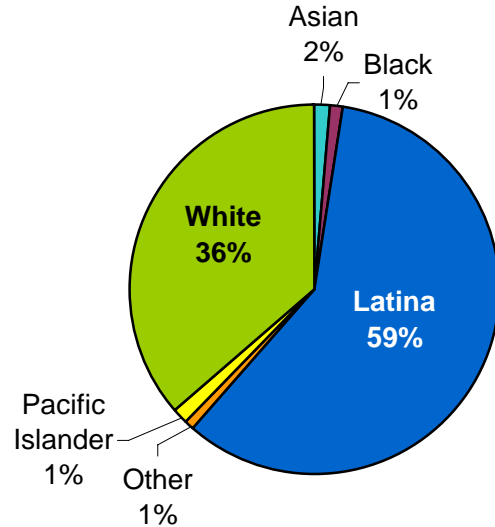
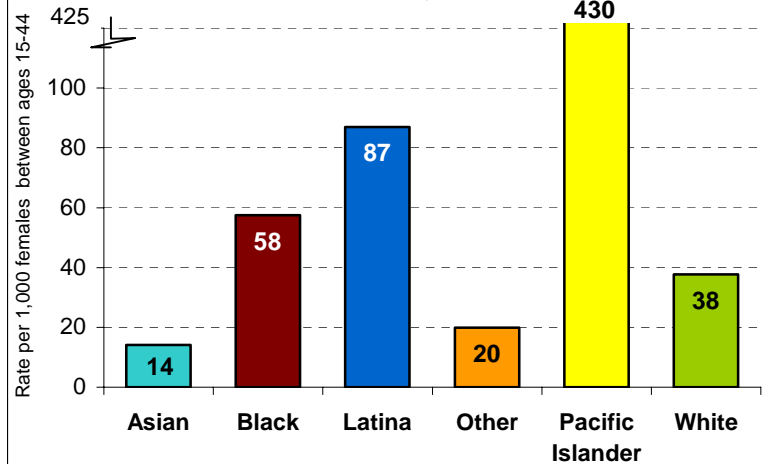


Figure 4.4: Fertility Rate (per 1,000 Females) by Mother's Race/Ethnicity, Santa Cruz County Residents, 2009

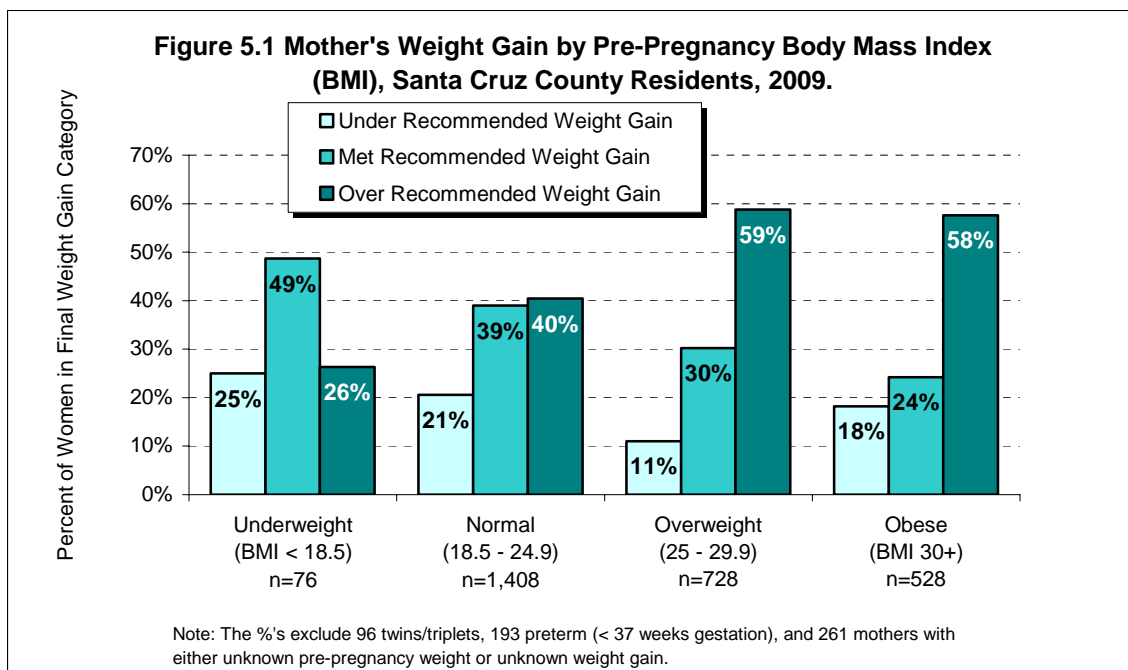


5. MOTHER'S WEIGHT GAIN AND SMOKING STATUS

In 2009, the Institute of Medicine and the National Research Council released a report recommending new guidelines for weight gain during pregnancy. The report updates guidelines that were last set in 1990 and takes into account changing US demographics, particularly the increase in the numbers of women of childbearing age who are overweight and obese. The new guidelines are based on World Health Organization cutoff points for body mass index (BMI) categories, unlike the earlier guidelines, which were based on weight categories taken from the Metropolitan Life Insurance tables. They also recommend a more narrow range of weight gain for obese women.

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



Smoking status was added to the birth certificate in 2008. The number of the mothers who reported smoking decreased at each pregnancy stage/trimester—most notably earlier on in the pregnancy.

TABLE 5.2: Mother's Smoking Status During Pregnancy, 2009

Mother's Smoking Status	3 Months Before Conception		During 1st Trimester		During 2nd Trimester		During 3rd Trimester	
	#	%	#	%	#	%	#	%
Smoked at least 1 cigarette per day								
Yes	86	2.6%	58	1.8%	31	0.9%	30	0.9%
No	3,181	97.4%	3,214	98.2%	3,241	99.1%	3,243	99.1%
TOTAL	3,267	100%	3,272	100%	3,272	100%	3,273	100%

Note: This table does not include births for whom mother's cigarette smoking status was unknown: 23 women for 3 mo. before conception; 18 for during 1st trimester; 18 for during 2nd trimester; and 17 for during 3rd trimester.

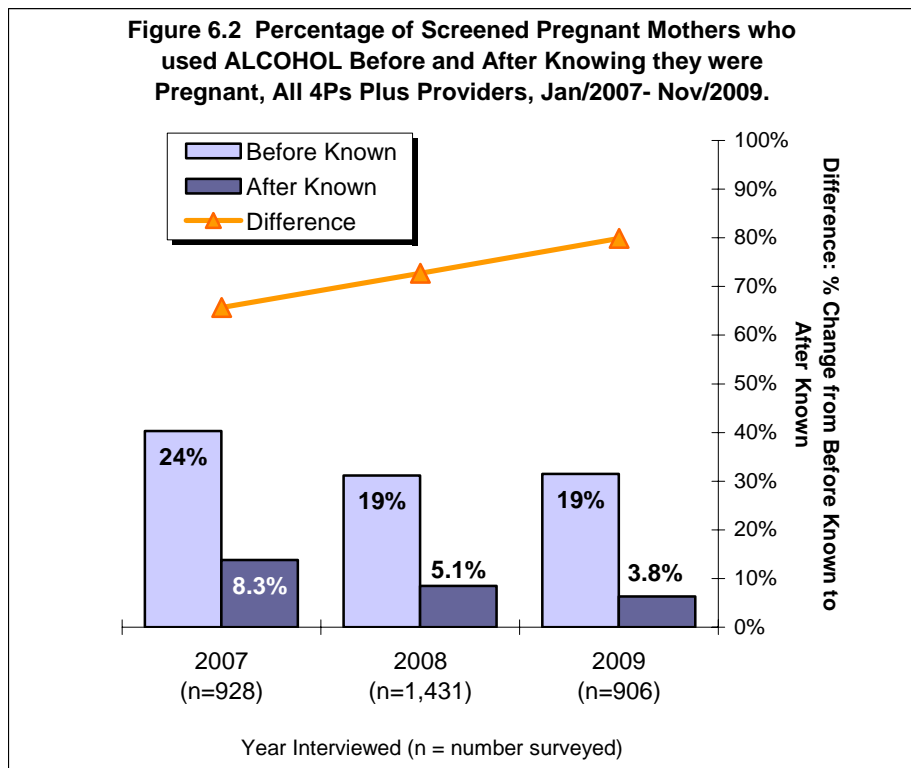
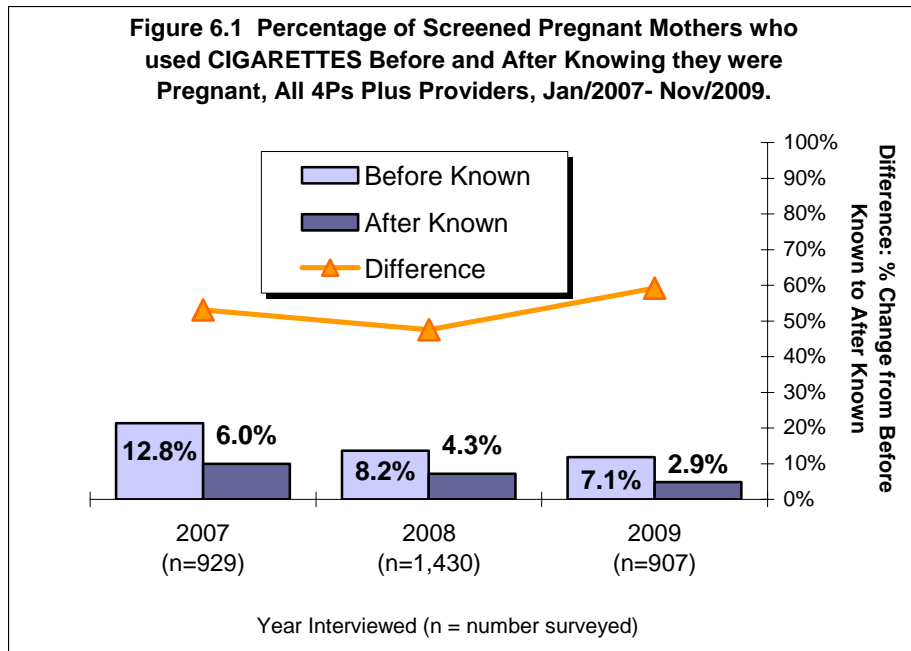
Healthy People 2010 Objective: Increase abstinence from cigarette smoking to 99% or more of all pregnant women.

Source: 2009 Santa Cruz County Automated Vital Statistics System, accessed in 2010. 2009 Estimated Population data provided by State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2050. Sacramento, CA, July 2007.

6. "4P's Plus" Prenatal Substance Use Screening

"4Ps Plus" is an evidence-based prenatal substance use risk screening tool created by Dr. Ira Chasnoff, et al. It is continuing to be adopted nationally by medical practitioners to facilitate substance use discussions between the patient and the clinician. Santa Cruz County Public Health has worked with 6 local prenatal care provider groups to integrate the screening tool into their medical practices. Of note, approximately 63% of those screened are Medi-Cal clients—compared to 51% countywide, so the percentages should not be used to describe the entire population of pregnant mothers.

The figure below (Figure 6.1) shows the percent of pregnant mothers that smoked before knowing they were pregnant, what percent continued to smoke after knowing they were pregnant, and the percent change from before known to after known. The remaining figures address alcohol consumption and marijuana use.



6. "4P's Plus" Prenatal Substance Use Screening (CONT.)

Figure 6.3 Percentage of Screened Pregnant Mothers who used MARIJUANA Before and After Knowing they were Pregnant, All 4Ps Plus Providers, Jan/2007- Nov/2009.

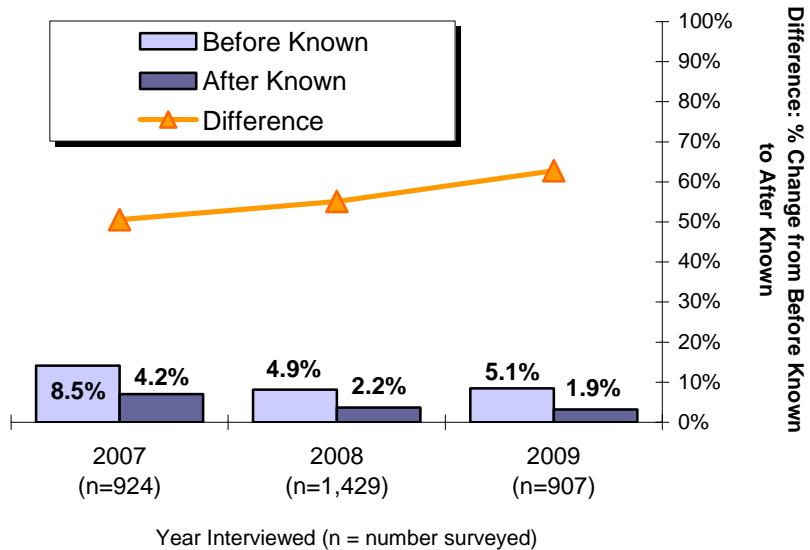
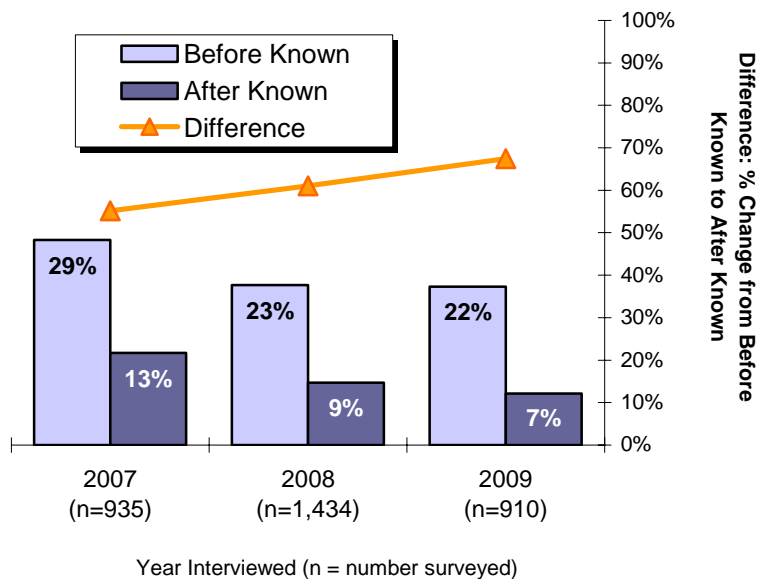
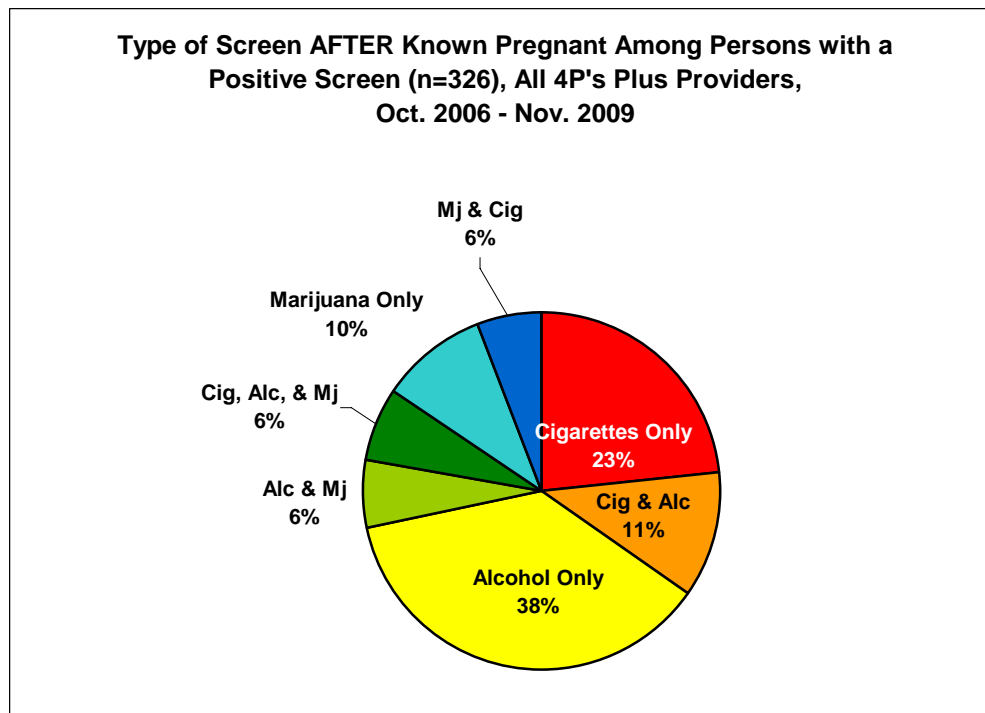
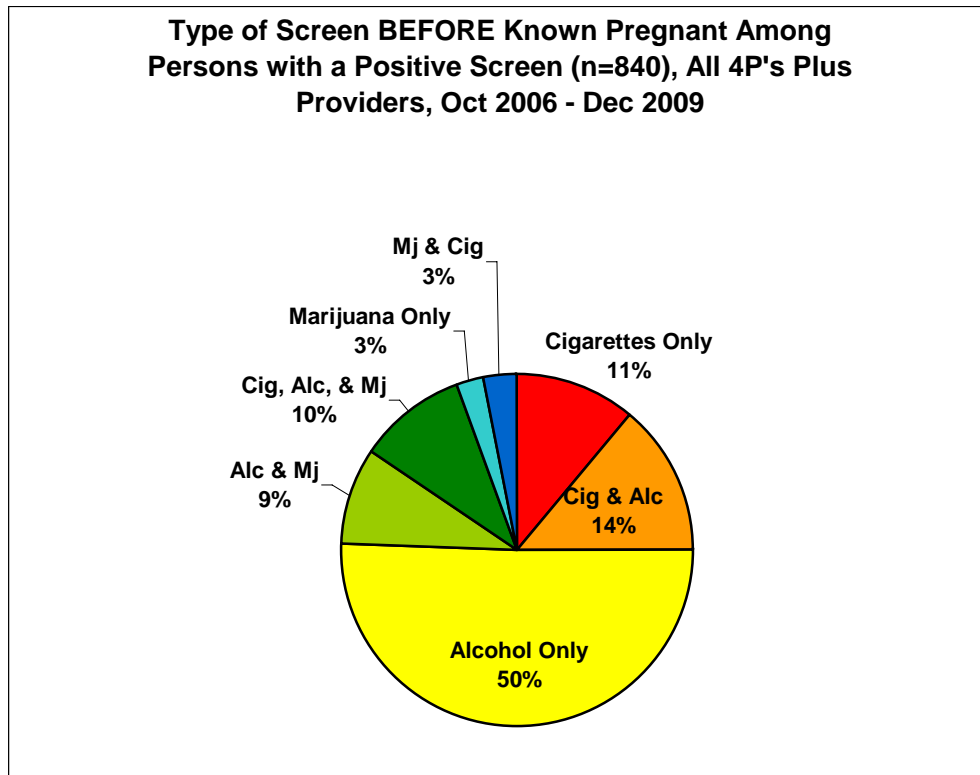


Figure 6.4 Percentage of Screened Pregnant Mothers who used ALCOHOL, CIGARETTES and/or MARIJUANA Before and After Knowing they were Pregnant, All 4Ps Plus Providers, Jan/2007- Nov/2009.



6. "4P's Plus" Prenatal Substance Use Screening (CONT.)

Figures 6.5 and 6.6 represent what type of substance use pregnant mothers participated in before knowing they are pregnant and after that knowledge.



7. BIRTHS BY FATHER'S AGE, (MOTHERS are RESIDENTS)

TABLE 7.1: Characteristics of Fathers by Age, Santa Cruz County, 2009

	AGE OF FATHER (years)										TOTAL	
	17 and Under		18-19		20-24		25-34		35 and Over		#	%
AGE OF MOTHER												
17 and Under	26	68%	28	30%	37	8%	5	0%	0	0%	96	3%
18 - 19	7	18%	46	50%	93	20%	24	2%	2	0%	172	6%
20 - 24	3	8%	15	16%	238	51%	273	19%	24	2%	553	18%
25 - 34	2	5%	3	3%	95	20%	1,044	72%	499	48%	1,643	53%
35 and Over	0	0%	0	0%	6	1%	105	7%	512	49%	623	20%
RACE/ETHNICITY OF FATHER												
Asian	0	0%	0	0%	1	0.2%	19	1%	19	2%	39	1%
Black	0	0%	0	0%	5	1%	11	1%	14	1%	30	1%
Latino	37	100%	87	95%	396	85%	873	61%	400	40%	1,793	59%
Pacific Islander	0	0%	0	0%	1	0.2%	14	1%	12	1%	27	1%
White	0	0%	5	5%	61	13%	501	35%	563	56%	1,130	37%
Other	0	0%	0	0%	0	0%	11	1%	3	0.3%	14	0.5%
AREA OF RESIDENCE OF FATHER												
Mid-County	1	3%	4	4%	29	6%	171	12%	154	15%	359	12%
San Lorenzo Valley	0	0%	0	0%	19	4%	91	6%	98	9%	208	7%
Santa Cruz	4	11%	12	13%	66	14%	373	26%	372	36%	827	27%
Scotts Valley	0	0%	0	0%	5	1%	51	4%	50	5%	106	3%
South County	33	87%	76	83%	350	75%	765	53%	363	35%	1,587	51%
FATHER'S EDUCATION												
8th Grade & Under	5	14%	11	12%	88	20%	275	20%	150	15%	529	9%
Some High School	29	81%	30	33%	108	24%	215	15%	71	7%	453	8%
HS Diploma or GED	2	6%	43	47%	176	40%	391	28%	176	18%	788	13%
At Least Some College	0	0%	7	8%	73	16%	508	37%	575	59%	1,163	19%
TOTAL	38	1%	92	3%	469	15%	1,451	47%	1,037	34%	3,087	100%

Note: There are 203 fathers with missing age. Within each category, totals that do not add up to the bottom row are due to missing data. Percentages are calculated out of total known. Also, total row %'s are out of the total, for example, 15% of fathers were ages 20-24.

Source: 2009 Santa Cruz County Automated Vital Statistics System, accessed in 2010. Analyzed using Cal Birth Information System.

8. BIRTHS BY HOSPITAL/LOCATION

TABLE 8.1 Characteristics of Births by Hospital/Location, Residents and Occurrence, 2009

	PLACE OF BIRTH										TOTAL	
	Watsonville		Dominican		Sutter		Non-Hospital		Out of County		#	%
AGE OF MOTHER												
17 and Under	104	7%	21	2%	17	2%	0	0%	2	1%	144	4%
18 - 19	132	9%	44	4%	38	4%	2	3%	8	4%	224	6%
20 - 24	401	26%	157	16%	152	15%	6	10%	18	9%	734	20%
25 - 34	701	46%	534	54%	569	57%	36	61%	102	53%	1,942	52%
35 and Over	185	12%	236	24%	216	22%	15	25%	63	33%	715	19%
RACE/ETHNICITY OF MOTHER												
Asian	1	0.1%	23	2%	20	2%	0	0%	9	5%	53	1%
Black	0	0%	10	1%	22	2%	0	0%	1	1%	33	1%
Hispanic	1,438	94%	402	41%	329	34%	5	9%	71	41%	2,245	61%
Pacific Islander	11	1%	15	2%	10	1%	0	0%	5	3%	41	1%
White	72	5%	504	52%	583	60%	53	91%	86	49%	1,298	35%
Other	1	0.1%	16	2%	14	1%	0	0%	2	1%	33	1%
MOTHER'S EDUCATION¹												
8th Grade & Under	361	41%	54	8%	15	2%	0	0%	10	7%	440	17%
Some High School	208	23%	36	5%	23	3%	0	0%	4	3%	271	11%
HS Diploma or GED	137	15%	189	26%	133	18%	6	12%	15	11%	480	19%
At least Some College	180	20%	439	61%	584	77%	44	88%	113	80%	1,360	53%
PRENATAL CARE²												
Early (1st Trimester)	1,046	69%	872	91%	834	87%	48	81%	166	87%	2,966	80%
Late (>1st Trimester)	466	31%	83	9%	130	13%	11	19%	24	13%	714	19%
Adequate/Adequate+	1,185	78%	783	79%	888	90%	47	80%	154	80%	3,057	81%
Less than Adequate	330	22%	105	11%	61	6%	12	20%	37	19%	545	14%
Early & Adequate	1,000	66%	755	76%	808	81%	40	68%	145	75%	2,748	73%
None	3	0.2%	3	0.3%	0	0%	0	0%	1	1%	7	0.2%
BIRTH OUTCOMES												
VLBW (<2.5 lbs) [^]	0	0%	9	1.0%	1	0.1%	0	0%	14	8.0%	24	0.6%
LBW (<5.5 lbs)	46	3.1%	54	5.8%	15	1.5%	0	0%	37	21.1%	152	4.0%
< 32 weeks gest.	4	0.3%	13	1.3%	1	0.1%	1	1.7%	24	12.4%	43	1.1%
32 - 36 weeks gest.	80	5.3%	121	12.2%	13	1.3%	1	1.7%	25	13.0%	240	6.4%
METHOD OF DELIVERY												
Primary C	220	14%	169	17%	158	16%	0	0%	55	28%	602	16%
Repeat C	248	16%	112	11%	110	11%	0	0%	20	10%	490	13%
Vaginal	1,046	69%	710	72%	702	71%	58	98%	115	60%	2,631	70%
VBAC ³	9	1%	1	0.1%	22	2%	1	2%	3	2%	36	1%
PAYMENT FOR DELIVERY												
Medi-Cal	1,202	79%	413	42%	300	30%	2	3%	44	23%	1,961	52%
Private Insurance	302	20%	569	57%	687	69%	20	34%	144	75%	1,722	46%
Other ⁴	1	0.1%	6	1%	0	0%	0	0%	2	1%	9	0.2%
No Insurance	18	1%	3	0.3%	2	0.2%	37	63%	3	2%	63	2%
TOTAL	1,523	41%	992	26%	992	26%	59	2%	193	5%	3,759	100%

"Other" race/ethnicity includes Native Americans, mixed races and other groups not listed; ^ (LBW) Low birth weight includes (VLBW) very low birth weight; excludes 104 multiple births.

(1) Education does not include mothers < 25 years old; (2) Where percentages do not add up to 100% for prenatal care utilization (adequate or better versus inadequate), the remaining percentage is due to missing data fields. When the missing percentage is higher than 2%, the remaining rates become increasingly unreliable; (3) VBAC: Vaginal birth after C-section; (4) "Other" payment of delivery includes unattended births, other/govt programs, and others not listed.

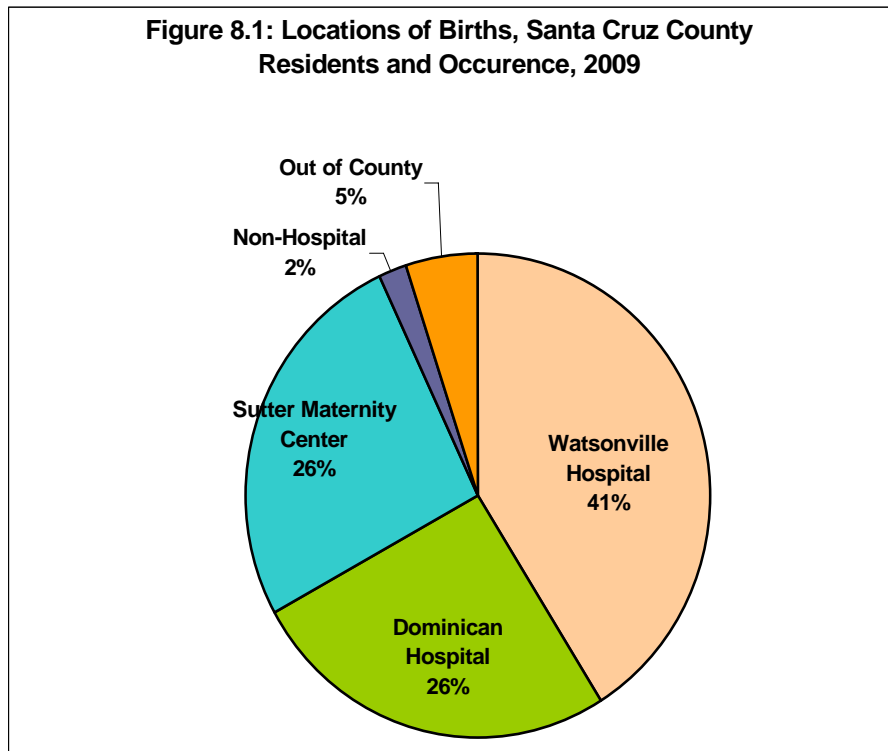
Note: Also, in all row groupings aside from "Birth Outcomes" and "Prenatal Care" (PNC) totals that do not add up to the bottom row are due to missing or unknown data. Percentages are calculated out of total known. However, for "Birth Outcomes," if births are not listed in this section, they were neither low birth weight nor gestation <37 weeks. This is also true for early PNC, where prenatal care was not sought early or not sought at all, it was late.

8. BIRTHS BY HOSPITAL/LOCATION (CONT.)

TABLE 8.2: Mother's Area of Residence by Location of Birth, Residents and Occurrence, 2009

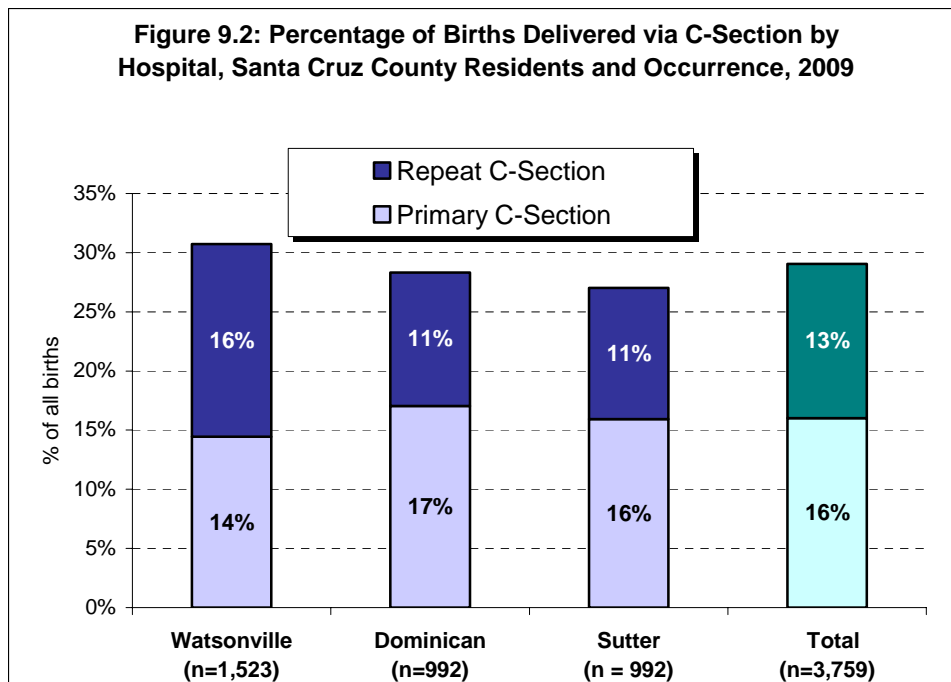
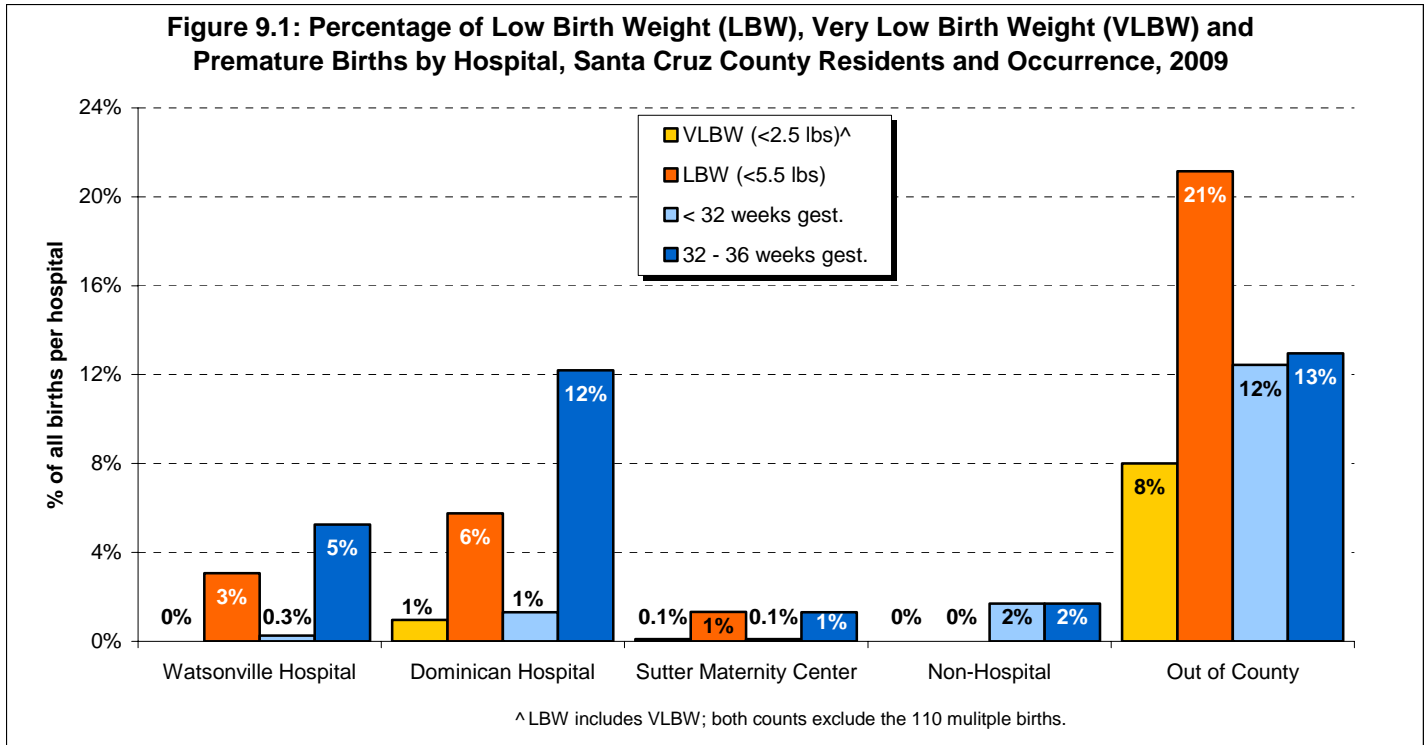
AREA of RESIDENCE:	PLACE OF BIRTH										TOTAL	
	Watsonville		Dominican		Sutter		Non-Hospital		Out of County		n	%
SANTA CRUZ Co.	1,236	81%	932	94%	871	88%	58	98%	193	100%	3,290	88%
<i>Mid-County</i>	16	1%	169	18%	158	18%	8	14%	22	11%	373	11%
<i>Santa Cruz Mtns.</i>	1	0.1%	85	9%	79	9%	8	14%	45	23%	218	7%
<i>Santa Cruz</i>	3	0.2%	461	49%	340	39%	37	64%	34	18%	875	27%
<i>Scotts Valley</i>	1	0.1%	46	5%	51	6%	2	3%	12	6%	112	3%
<i>South County</i>	1,215	98%	171	18%	243	28%	3	5%	80	41%	1,712	52%
MONTEREY Co.	251	16%	26	3%	71	7%	-	-	-	-	348	8%
SAN BENITO Co.	23	2%	9	1%	11	1%	-	-	-	-	43	1%
SANTA CLARA Co.	8	1%	19	2%	26	3%	-	-	-	-	53	1%
Other Counties	5	0%	6	1%	13	1%	1	2%	-	-	25	1%
TOTAL	1,523	41%	992	26%	992	26%	59	2%	193	5%	3,759	100%

Figure 8.1: Locations of Births, Santa Cruz County Residents and Occurrence, 2009



9. BIRTH OUTCOMES BY HOSPITAL

Although births went down overall in 2009, different hospitals had different experiences. Watsonville Community Hospital continued to have the highest number of births (1,523 in 2009), yet there was a large decrease from 2008 (1,712 births). Dominican Hospital CHW also saw a slight decline in births from 1,031 in 2008 to 992 in 2009 while Sutter Maternity and Surgery Center experienced a moderate increase from 927 in 2008 to 992 in 2009.



10. TEEN BIRTHS (Age 19 and Under), RESIDENTS

TABLE 10.1: Characteristics of Teenage Mothers by Age Group, Santa Cruz County Residents, 2009

	TEENAGE MOTHERS						TOTAL	
	14 and Under		15-17		18-19		#	%
MOTHER'S RACE/ETHNICITY								
Asian	0	0%	0	0%	1	1%	1	0.3%
Black	0	0%	5	4%	3	2%	8	3%
Hispanic	5	100%	102	89%	166	85%	273	87%
Pacific Islander	0	0%	0	0%	0	0%	0	0%
White	0	0%	7	6%	25	13%	32	10%
Other	0	0%	0	0%	1	1%	1	0.3%
AREA of RESIDENCE								
Mid-County	0	0%	2	2%	12	6%	14	4%
San Lorenzo Valley	0	0%	0	0%	6	3%	6	2%
Santa Cruz	0	0%	12	11%	32	16%	44	14%
Scotts Valley	0	0%	0	0%	2	1%	2	1%
South County	5	100%	100	88%	148	74%	253	79%
PRENATAL CARE¹								
Early (1st Trimester)	2	40%	67	60%	139	72%	208	67%
Late (>1st Trimester)	3	60%	44	39%	55	28%	102	33%
Adequate/Adequate +	3	60%	78	68%	145	73%	226	71%
Less than Adequate	2	40%	34	30%	44	22%	80	25%
Early & Adequate	2	40%	63	55%	127	64%	192	60%
None	0	0%	1	1%	0	0%	1	0.3%
PARITY								
1st Child	5	100%	105	98%	163	82%	273	88%
2nd Child	0	0%	2	2%	32	16%	34	11%
3rd+ Child	0	0%	0	0%	5	3%	5	2%
BIRTH OUTCOMES								
VLBW (<2.5 lbs) [^]	0	0%	0	0%	5	3%	5	2%
LBW (<5.5 lbs)	0	0%	6	5%	19	10%	25	8%
< 32 weeks gest.	0	0%	0	0%	5	17%	5	14%
32 - 36 weeks gest.	0	0%	6	5%	12	71%	18	78%
DELIVERY METHOD								
Primary C	2	40%	21	18%	36	18%	59	18%
Repeat C	0	0%	1	1%	5	3%	6	2%
Vaginal	3	60%	92	81%	159	80%	254	80%
VBAC ²	0	0%	0	0%	0	0%	0	0%
PAYMENT OF DELIVERY								
Medi-Cal	5	100%	87	78%	166	84%	258	82%
Private Insurance	0	0%	22	20%	30	15%	52	17%
Other	0	0%	2	2%	1	1%	3	1%
No Insurance	0	0%	3	3%	3	1%	6	2%
TOTAL	5	2%	114	36%	200	63%	319	100%

"Other" race/ethnicity includes Native Americans, mixed races and other groups not listed.

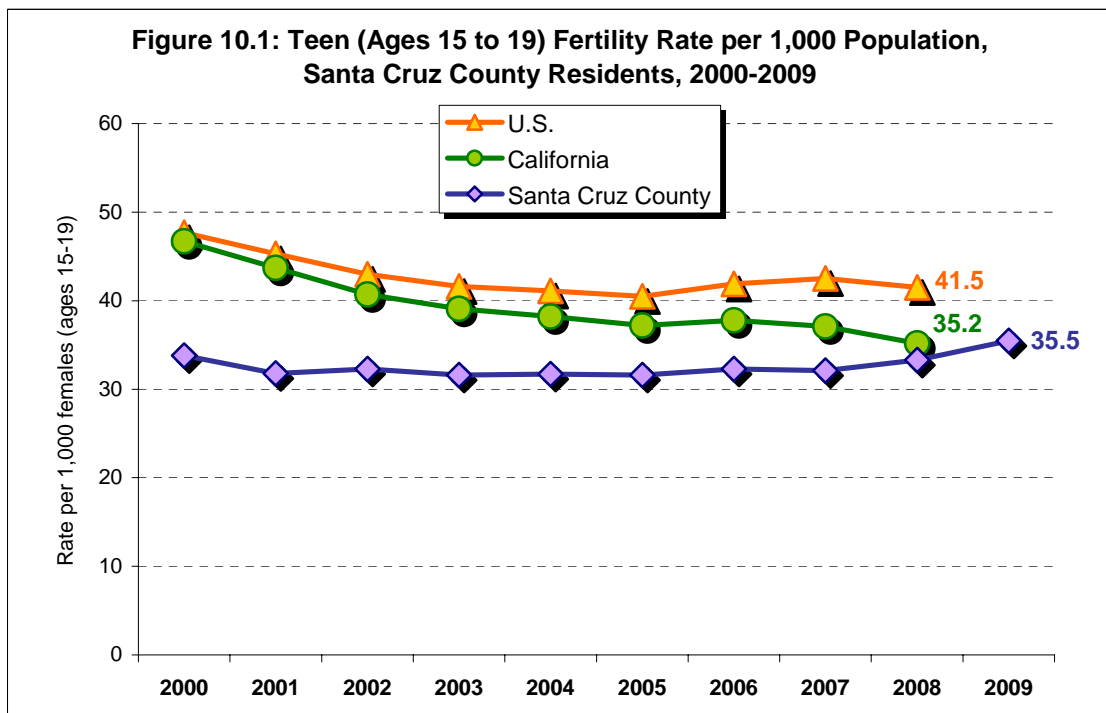
(1) Where percentages do not add up to 100% for prenatal care utilization (adequate or better versus inadequate), the remaining percentage is due to missing data fields. When the percentage is higher than 2%, the remaining rates become increasingly unreliable; (2) VBAC: Vaginal birth after C-section.

Note: Of the 5 teens who were "14 and Under", all were age 14. In all row groupings aside from "Birth outcomes," totals that do not add up to the bottom row are due to missing data. Percentages are calculated out of total known. For "Birth Outcomes," births not listed in this section were neither low birthweight nor gestation < 37 weeks.

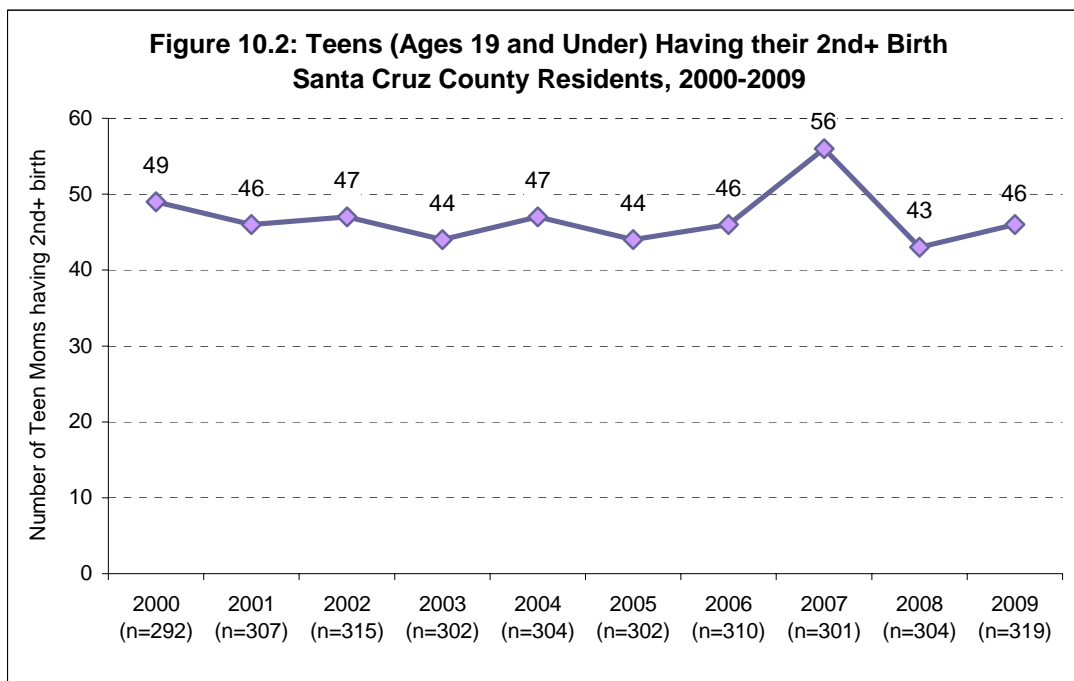
Source: 2009 Santa Cruz County Automated Vital Statistics System, accessed in 2010. Analyzed using Cal Birth Information System.

10. TEEN BIRTHS (Age 19 and Under), RESIDENTS (CONT.)

The percentage of teen births out of total births increased from 8.5% in 2008 to 9.7% in 2009. As well, the rate of teen births per 1,000 population continued to increase in Santa Cruz County while state and national rates declined.

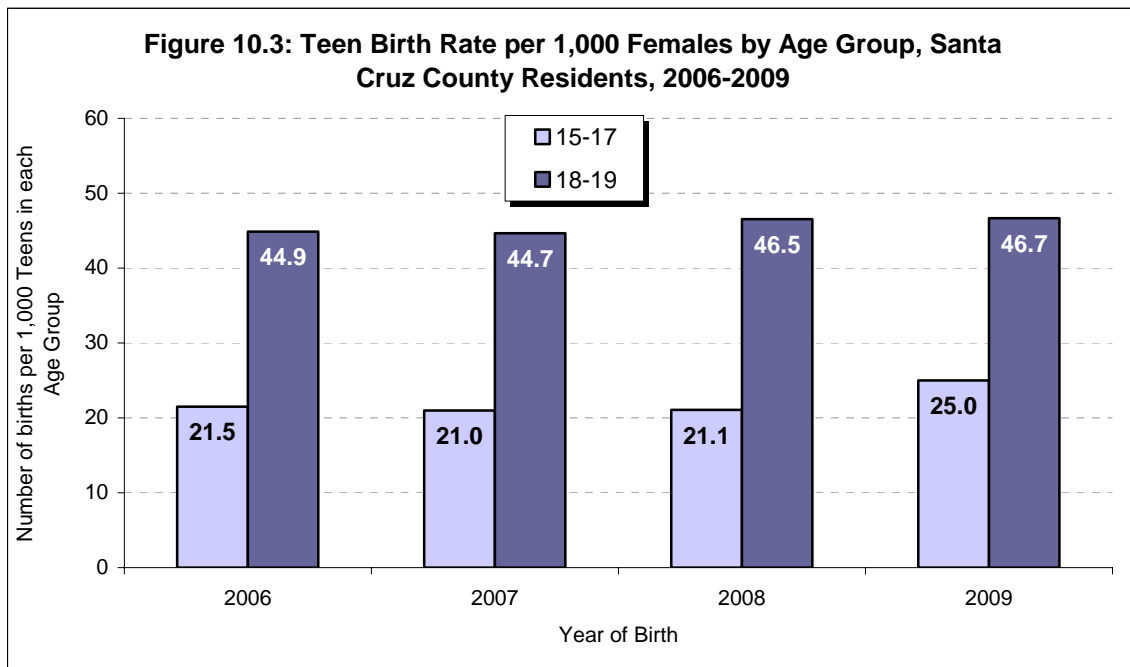


The trend chart below shows the number of teens having their second (or more) child. In 2009, five teenage mothers delivered their third child.



10. TEEN BIRTHS (Age 19 and Under), RESIDENTS (CONT.)

The increase of the teen birth rate in 2009 was predominantly among teenage mothers between the ages of 15 and 17. However, the increase is still within levels of normal variation.



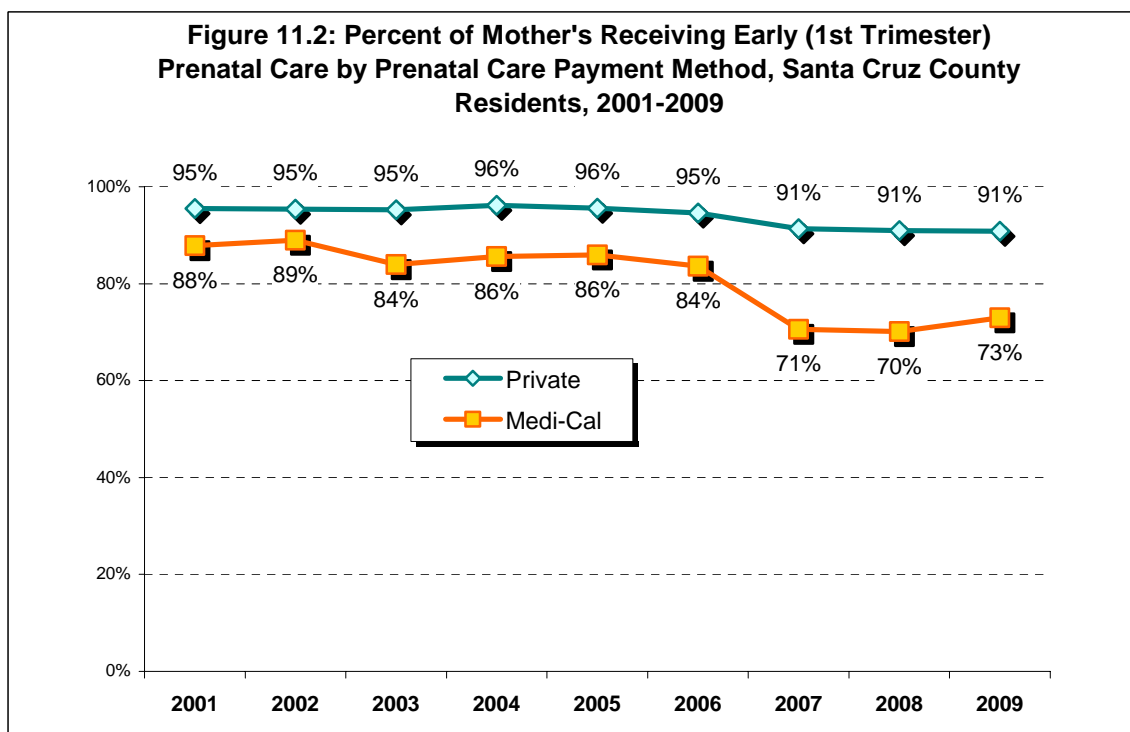
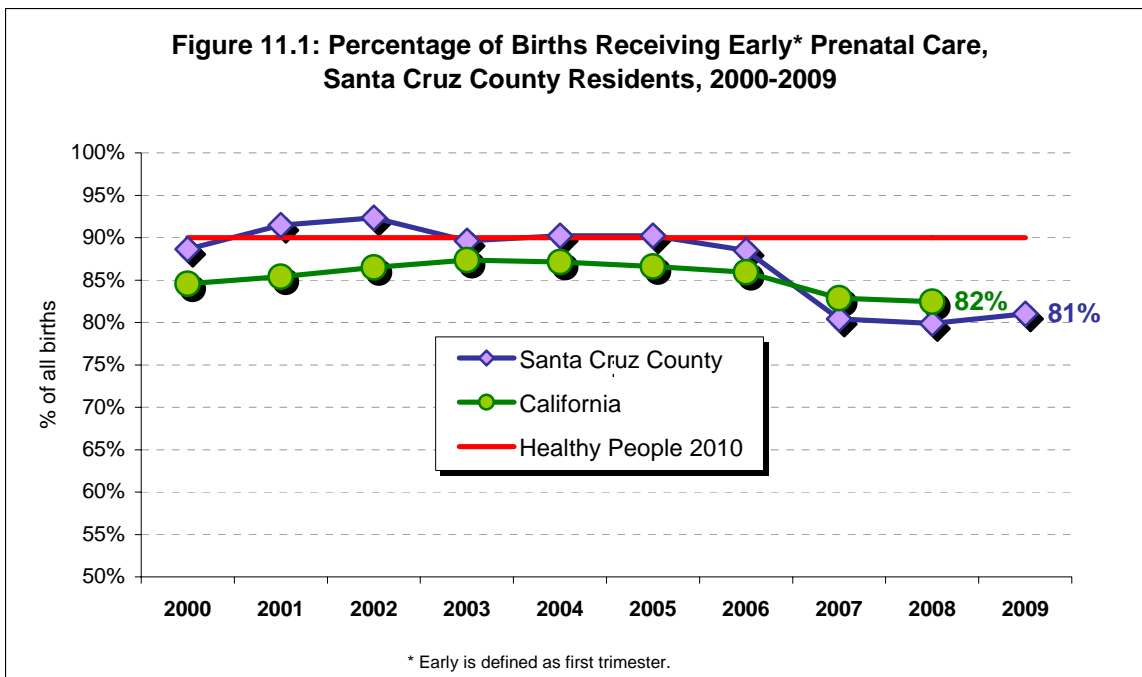
The distribution of teen births is different than that of total births; both Watsonville and Freedom maintain a higher percentage of births to teens compared to total births.

Table 10.2: Teen Births by Area of Residence, 2009

Mother's Area of Residence	ZIP Code(s)	Teen Births (19 and Under)		Total Births (All Ages)	
		#	% per Area	#	% per Area
Aptos	95003	3	1%	192	6%
Aromas	95004	0	0%	0	0%
Capitola	95010	3	1%	90	3%
Davenport	95017	0	0%	5	0%
Freedom	95019	26	8%	165	5%
Los Gatos	95033	0	0%	21	1%
San Lorenzo Valley	95005-7,18,41	6	2%	197	6%
Santa Cruz	95060-5	45	14%	870	26%
Scotts Valley	95066	2	1%	113	3%
Soquel	95073	7	2%	90	3%
Watsonville	95076	227	71%	1,547	47%
TOTAL		319	100%	3,290	100%

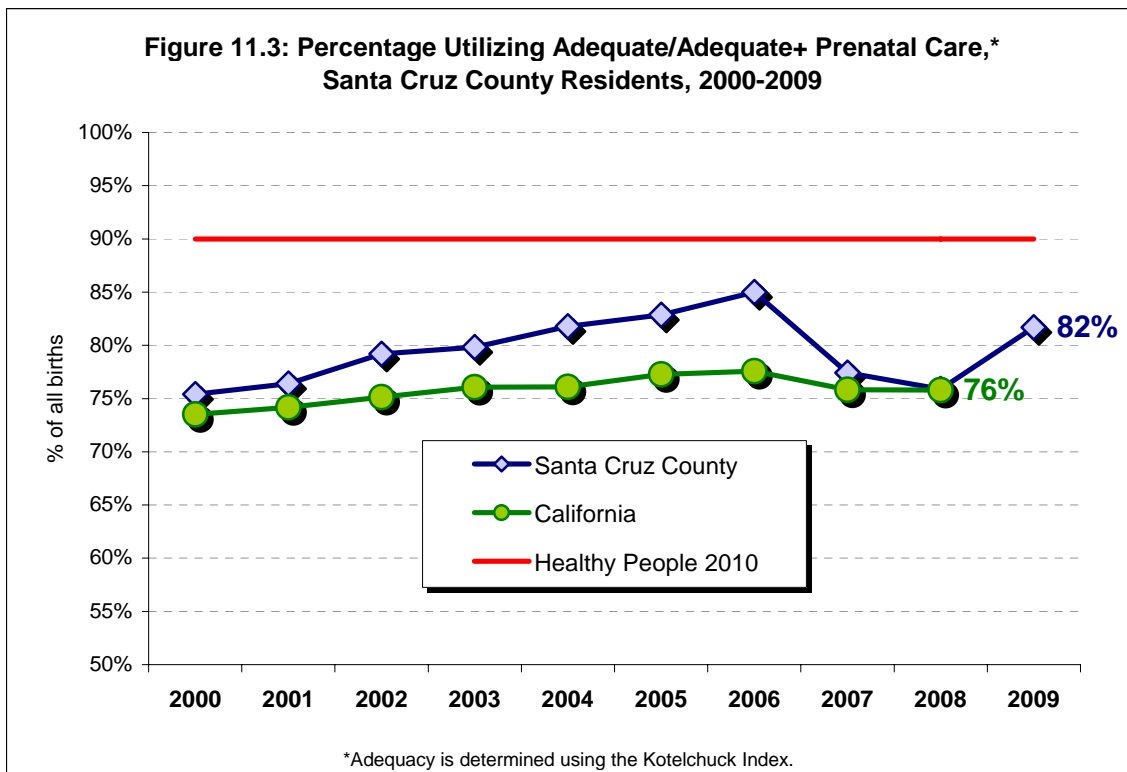
11. TRENDS IN PRENATAL CARE

The percentage of mothers receiving early (1st trimester) prenatal care remained well below the Healthy People 2010 objective in 2009. The drop that happened in 2007 appears to be continuing. Figure 11.2 shows an association of early prenatal care with prenatal care payer source—Medi-Cal patients being the most negatively impacted.



11. TRENDS IN PRENATAL CARE (CONT.)

Adequacy of utilizing prenatal care (based on the Kotelchuck Index) increased in 2009 compared to a drop the previous two years.



In 2009, 80% of the births at Watsonville Community Hospital were paid for by Medi-Cal, compared to 43% at Dominican Hospital and 30% at Sutter Maternity.

