



PUBLIC HEALTH
HEALTH SERVICES AGENCY

2022 BIRTHS

SANTA CRUZ COUNTY





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For more information about the data and methodology from this report, contact:
Population Health Team, population.health@santacruzcountyca.gov

For more resources regarding health-related services and locations throughout
Santa Cruz County, visit:
Health Services Agency's [Santa Cruz County Perinatal Resource Guide](#).

For more details on the Santa Cruz Health Services Agency, visit santacruzhealth.org

INTRODUCTION

This report provides data on live births delivered in 2022. The report was created by the Population Health Branch and the Children and Family Health Branch, in the Public Health Division of the Santa Cruz County Health Services Agency.

Land Acknowledgment:

The land on which we refer to as “Santa Cruz County” is the unceded territory of the Awaswas-speaking Uypi Tribe. The Amah Mutsun Tribal Band, comprised of the descendants of indigenous people taken to missions Santa Cruz and San Juan Bautista during Spanish colonization of the Central Coast, is today working hard to restore traditional stewardship practices on these lands and heal from historical trauma.

County Equity Statement:

Equity in action in Santa Cruz County is a transformative process that embraces individuals of every status, providing unwavering support, dignity, and compassion. Through this commitment, the County ensures intentional opportunities and access, fostering an environment where everyone can thrive and belong.

Executive Summary

In 2022, Santa Cruz County experienced a decline in overall births compared to 2018, with 2,493 births recorded. The highest proportion of births occurred among birthing parents aged 30 to 34, while the percentage of births for those aged 35–39 increased by 2.6% from 2018. Notably, the birth rate per 1,000 pregnant persons in this age group rose significantly, reaching 85% in 2022.

The fertility rate for individuals aged 15 to 44 was higher among Hispanic and Latinx birthing persons (55 per 1,000) compared to White birthing persons (33 per 1,000) in 2022. Additionally, the percentage of births delivered by cesarean section to low-risk birthing parents with a prior cesarean birth increased by 8% from 2018 to 2022, reaching 76.7%.

Regarding payment sources, 43% of deliveries to county residents were funded by Medi-Cal, continuing a slow decreasing trend since 2018. Across the county, irrespective of payment source, data indicates a decrease in the number of birthing parents receiving adequate number of prenatal care visits (fewer than 10 prenatal care visits) in 2022 compared to 2018.

For youth birthing persons under 19 years old, there was a notable decrease in the percentage of individuals receiving adequate prenatal care, rising from 16.3% in 2018 to 35.2% in 2022. The total number of births by parents under 19 years old also increased from 54% in 2018 to 85.2% in 2022.

Overall, the birth report reveals trends in age-specific birth rates, cesarean section deliveries, diabetes, smoking rates, delivery locations, prenatal care access, and other data providing valuable insights for healthcare planning and resource allocation in Santa Cruz County.



DEFINITIONS AND TECHNICAL NOTES

DEFINITIONS

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

TERM	MEANING
Birthing person/parent	A person who gives birth, regardless of gender identity
Non birthing person/parent	Refers to a person who plays a biological, adoptive, foster and/or kinship role with a child
Residents	All birthing persons self-identify as residing in Santa Cruz County, regardless of where they delivered. A small number of birthing persons identify as living in Santa Cruz County, but live in another county, usually Monterey. They are counted as Santa Cruz County residents, in accordance with the county shown on the birth certificate.
Occurrence	All birthing persons who delivered in Santa Cruz County, regardless of where they reside
North county	Zip codes located in 95060, 95065, 95067, 95066, 95018, 95033, 95006, 95007, 95005, 95041, 95064, 95061, 95017
Mid county	Zip codes located in 95062, 95010, 95073, 95001, 95003
South county	Zip codes located in 95076, 95077, 95019, 95063
Race/Ethnicity	In this report, ethnicity categories combine the concepts of race and ethnicity, which are collected separately on the birth certificate. The combination defines "Latinx" to mean Latino ethnicity regardless of race chosen, and the remaining categories reflect a non-Latino ethnicity (e.g., "White" means non-Latinx white). All categories are mutually exclusive.
Low Birthweight	Between 1500 and 2500 grams
Very Low Birthweight	Less than 1500 grams
Preterm	33 to 37 completed weeks of gestation
Very Preterm	Less than 33 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)
Non-Hospital	Births that occurred at home, in-transit to a hospital, or a hospital or clinic in Santa Cruz County other than: Dominican, Sutter, or Watsonville.

TECHNICAL NOTES

The term “significant difference,” as used in this report, means there is a statistically significant difference, based on 95% confidence intervals (CI). This means, 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. Where applicable, Kruskal-Wallis and Chi-Square tests were conducted to determine 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 rates become less reliable.

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 created and maintained and should be considered provisional until they have gone through data cleaning by the State, which often takes two years to complete. The 2022 data were accessed in April 2023.

LIMITATIONS

At this time, we do not have access to SOGIE (Sexual Orientation and Gender Identity and Expression) data, data on ACES (adverse childhood experiences) or data on substance use by birthing parents. Effective January 1, 2024, Assembly Bill No. 1163 will lead to the collection of voluntarily provided information about sexual orientation and gender identity and expression (SOGIE) in the regular course of collecting other types of demographic data.

Bill AB 2436 will be updated July 1, 2024. This bill will require the certificate of death to include the current first and middle names, birth last names, and the birthplaces of the parents, without reference to the parents’ gendered relationship to the decedent. Additionally, the State Registrar will be required to electronically capture information on the parents’ relationship to the decedent and any additional last names used by the parents, which would not be transcribed onto the actual hard copy of the death certificate.

OVERALL COUNTY DEMOGRAPHICS

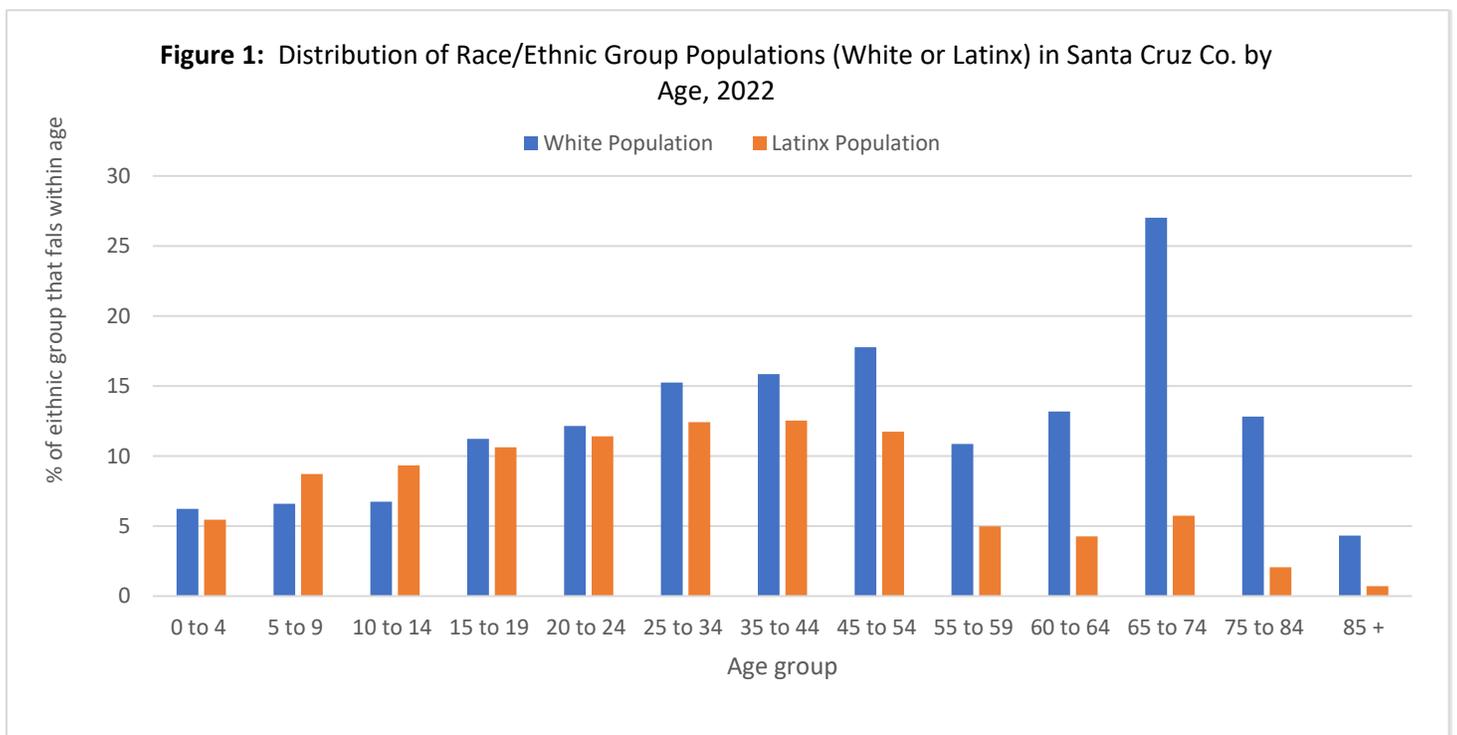
The California Department of Finance projected the total population in Santa Cruz County to be 276,024 in 2022. This data was chosen instead of Census data because it provides annual population counts by sex, age, and race/ethnicity, which allows for rate calculations.

AGE & ETHNICITY

Males (50.1%) between 20 to 44 years old (31%) who identify as White (56%) make up majority of the population. Over 90% of the county’s population is either White (56%) or Latinx (35%) (Table 1).

In Santa Cruz County, the age distribution of the White population is older than the Latinx population. The proportion of the White population over age 60 is 57%, compared to just 13% of the Latinx population (Figure 1).

Table 1: Demographics, Santa Cruz County Residents, 2022		
	Number	Percent
GENDER		
Female	137598	49.9
Male	138426	50.1
AGE (Years)		
4 and Under	12589	4.6
5 – 19	56910	20.6
20 - 44	85873	31.1
45 - 64	66058	23.9
65 and Over	54594	19.8
RACE/ETHNICITY		
American Indian or Alaska Native	1046	0.4
Asian	11672	4.2
Black or African American	2564	0.9
Latinx	97149	35.2
Multiple Races	7826	2.8
Native Hawaiian or Other Pacific Islander	334	0.1
White	155433	56.3
TOTAL	276024	100.0



2.DEMOGRAPHICS OF BIRTHING PARENT

Table 2: Demographics of Birthing Parents by Key Variables, Santa Cruz County Residents 2022

									TOTAL	
	19 and Under		20-24		25-34		35 and Over		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
RACE/ETHNICITY¹										
American Native & Pac. Islander	0	0%	2	1%	3	0%	0	0%	5	0%
Asian	0	0%	3	1%	41	3%	45	6%	89	4%
Black or African American	0	0%	2	1%	4	0%	6	1%	12	1%
Hispanic or Latinx	62	86%	223	87%	665	55%	254	36%	1,204	53%
Two or More Races	1	1%	5	2%	41	3%	23	3%	70	3%
Unknown	2	3%	1	0%	28	2%	20	3%	51	2%
White	7	10%	19	7%	438	36%	360	51%	824	37%
AREA OF RESIDENCE¹										
North-county	12	17%	42	16%	350	29%	271	38%	675	30%
Mid-county	10	14%	36	14%	287	24%	207	29%	540	24%
South-county	50	69%	174	68%	579	47%	227	32%	1030	46%
Out of County	0	0%	3	1%	4	0%	3	0%	10	0%
PARITY										
1st Child	63	88%	147	58%	492	40%	224	32%	926	41%
2nd - 3rd Child	9	13%	103	40%	603	49%	358	51%	1073	48%
4th + Child	0	0%	5	2%	124	10%	126	18%	255	11%
PRENATAL CARE: INITIATION¹										
Early (1st Trimester)	45	63%	196	77%	1088	89%	647	91%	1976	88%
Late (2nd or 3rd Trimester)	26	36%	56	22%	119	10%	50	7%	251	11%
No Prenatal Care	1	1%	2	1%	3	0%	1	0%	7	0%
PRENATAL CARE: UTILIZATION										
Fewer Than 10 Visits	25	35%	77	30%	295	24%	160	23%	557	25%
At least 10 Visits	46	64%	178	70%	918	75%	540	76%	1,682	75%
BIRTH OUTCOMES: WEIGHT²										
Low Birthweight	3	4%	23	9%	78	6%	42	6%	146	6%
Normal Birthweight	68	94%	230	90%	1134	93%	659	93%	2,091	93%
Very Low Birthweight	1	1%	2	1%	8	1%	7	1%	18	1%
BIRTH OUTCOMES: GESTATIONAL AGE²										
Normal Gestation	66	92%	230	90%	1114	91%	640	90%	2,050	91%
Preterm	5	7%	22	9%	94	8%	61	9%	182	8%
Very Preterm	1	1%	3	1%	12	1%	7	1%	23	1%
DELIVERY METHOD										
Primary Cesarean	7	10%	28	11%	185	15%	149	21%	369	16%
Repeat Cesarean	0	0%	15	6%	129	11%	111	16%	255	11%
Vaginal	65	90%	209	82%	871	71%	432	61%	1,577	70%
VBAC	0	0%	3	1%	35	3%	16	2%	54	2%
PAYMENT FOR DELIVERY¹										
Medi-Cal	63	88%	203	80%	496	41%	198	28%	960	43%
No Insurance	0	0%	1	0%	28	2%	22	3%	51	2%
Other Insurance	0	0%	0	0%	4	0%	6	1%	10	0%
Private Insurance	9	13%	50	20%	692	57%	480	68%	1,231	55%
TOTAL	72	100%	255	100%	1,220	100%	708	100%	2,255	100%

¹ The sum of column categories does not equal the overall column total, because of missing information (percentages are out of known data).

² Outcomes are among all births and do not exclude multiple births.

AGE OF BIRTHING PARENT

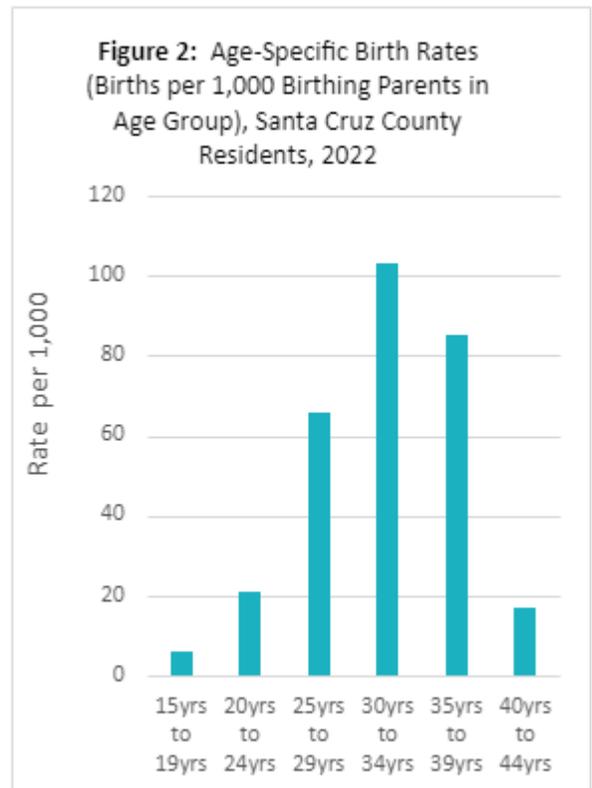
Table 3: Births by Birthing Parent's Age Group and Age-Specific Birth Rates per 1,000 Females, Santa Cruz County Residents, 2022

Mother's Age Group	Number of Births	Percent of Births	Total Female Population (per age group)	Birth Rate per 1,000	95% Confidence Intervals
10-14 ¹	1	0	8194	--	--
15-19	71	3	12019	6	(2,13)
20-24	256	11	12341	21	(13,32)
25-29	490	22	7369	66	(51,84)
30-34	733	32	7102	103	(84,125)
35-39	566	25	6673	85	(68,105)
40-44	131	6	7686	17	(10,27)
45 and over ¹	12	1	62252	--	--
TOTAL²	2,260	100.0%	53190	42	(30,57)

¹ Rate excluded due to instability from small numbers.

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 for females of "childbearing age," ages 15-44.

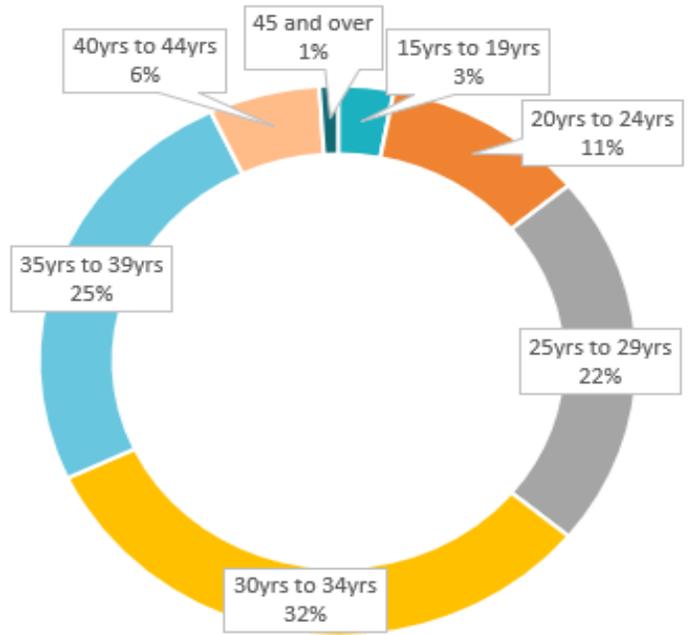
Out of all births to Santa Cruz County residents in 2022, birthing parents between the ages of 30 to 34 had the highest proportion of births (Table 3 and Figure 2). This age group also had the highest age-specific birth rate (the number of births per population in a specific age category), 103 births per 1,000 birthing parent (Table 3). The numbers and the birth rates in the 30 to 34 age group continue to remain the highest and the 35 to 39 age groups have been increasing, while 25 to 29 age group birth rates have been dropping since 2015 (Figure 3).



As the age of birthing parents increases it is important to consider the following:

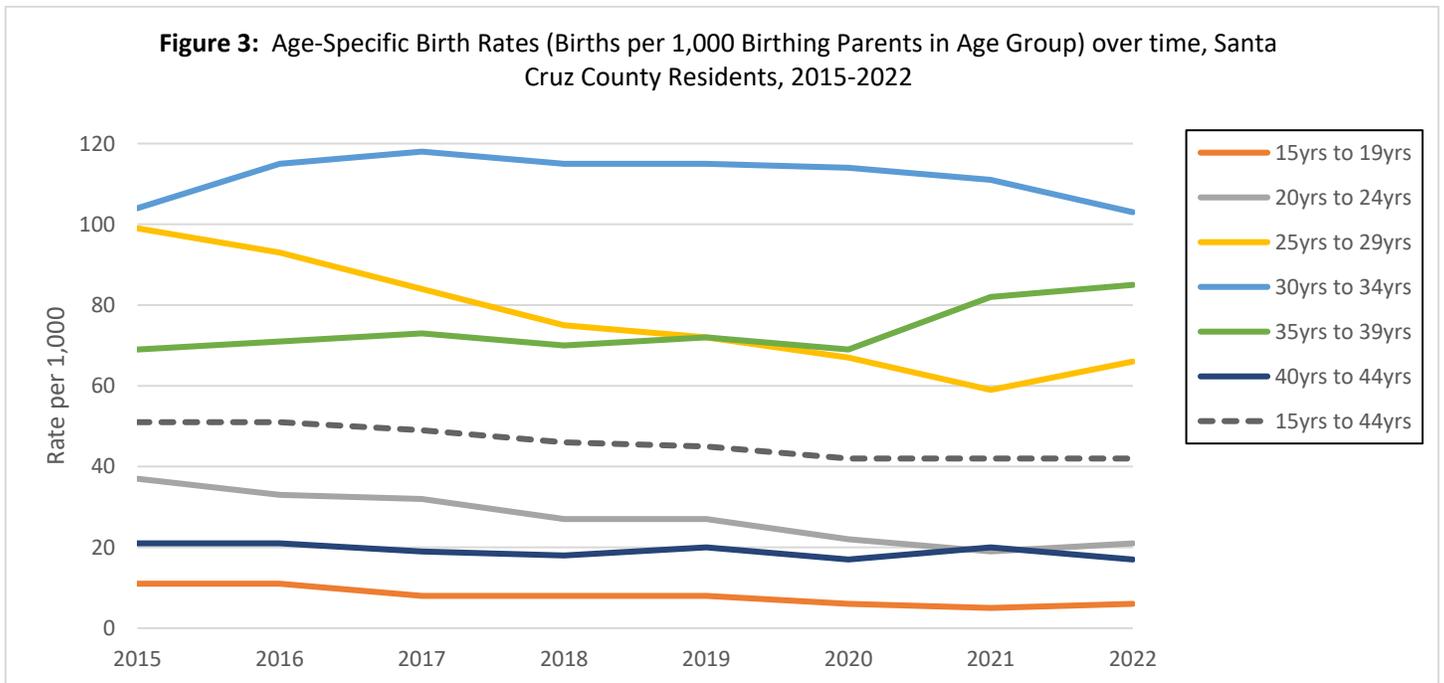
- Fertility begins to decline in your 30s and as you age. We may see an increase in demand for fertility treatment or high-risk pregnancy care if these trends continue.
- With increasing age there is greater risk that pregnant individuals may already be experiencing health conditions such as obesity, diabetes, and/or hypertension.
- The co-occurrence of pregnancy and many health conditions may increase the risk for pregnancy or birth related complications for the birthing parent or developing child.
- The risk for genetic conditions such as Down Syndrome also increases as birthing parent age increases.
- It is important that we ensure our community and reproductive age people are aware of these risks as they embark on family planning.

Figure 2.1: Percentage of Births By Age of Birthing Parent (N=2260), Santa Cruz County Residents, 2022



(American College of Obstetricians and Gynecologists., 2023)

Figure 3: Age-Specific Birth Rates (Births per 1,000 Birthing Parents in Age Group) over time, Santa Cruz County Residents, 2015-2022



RACE/ETHNICITY OF BIRTHING PARENT

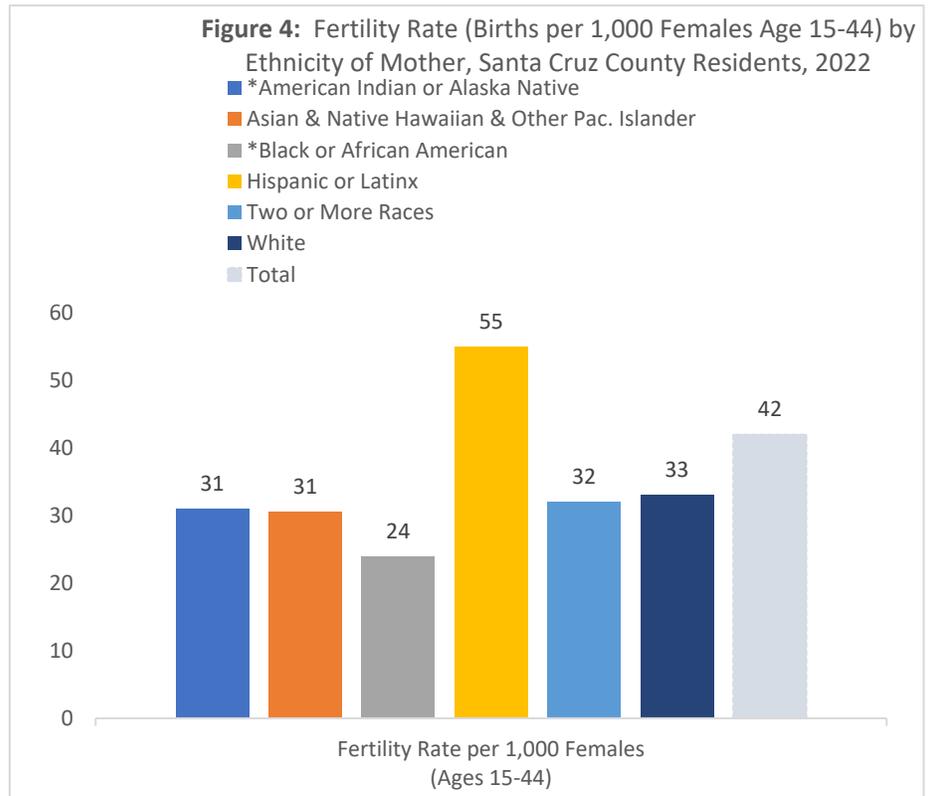
Among the “primary childbearing age” population (defined as females ages 15–44) in Santa Cruz County, approximately 41.46% are Latinx and 47.69% are White. However, Latinx or Hispanic birthing persons delivered 53% of the babies in 2022, while White birthing persons delivered 37% of the babies (Table 4; Figure 4).

Race/ethnicity of birthing parent	Number of Births	Percent of Births	Total Female Population (Ages 15-44)	Fertility Rate per 1,000 Females (Ages 15-44)	95% Confidence Intervals
*American Indian or Alaska Native	5	0	162	31	(21,44)
Asian & Native Hawaiian & Other Pac. Islander	89	4	2907	31	(21,44)
*Black or African American	12	1	496	24	(15,36)
Hispanic or Latinx	1206	53	22054	55	(41,72)
Two or More Races	70	3	2201	32	(22,45)
Unknown	53	2	--	--	--
White	825	37	25370	33	(23,46)
Total	2260	100	53190	42	(30,57)
The ethnicity-specific "Fertility Rate" is the number of births per ethnicity divided by the female population (ages 15-44) per ethnicity.					
* Unstable rates					

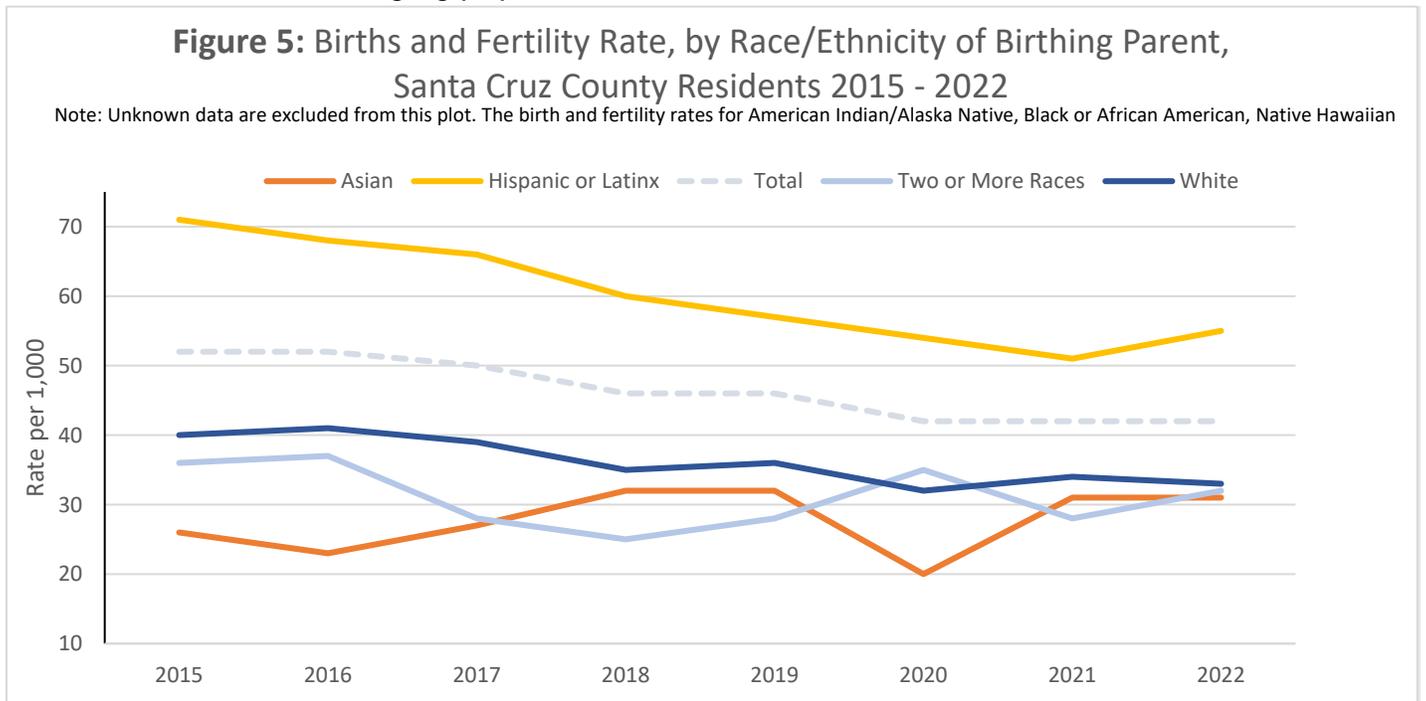
Fertility rates are a key determinant of population growth and provide valuable information for planning at the societal, economic, and individual levels. Monitoring and analyzing these rates contribute to informed decision-making and the development of effective policies for the well-being of populations.

The difference between ethnicities can also be seen by comparing ethnicity-specific fertility rates (Table 4; Figure 4). The fertility rate (births per 1,000 birthing persons ages 15 to 44) was much higher among Latinx and Hispanic persons (55 per 1,000) than among white persons (33 per 1,000).

In addition, the fertility rate among birthing persons with multiple or other ethnicities has increased by 21% from 2018 to 2022 (26.4 per 1,000 (other ethnicities) and 32 per 1,000 (multiple-two or more races) respectively). However, birthing persons with multiple or other ethnicities of “primary childbearing age” remain in the minority (Table 4; Figure 4).



Fertility rates are critical for planning social services and healthcare infrastructure. A higher fertility rate may necessitate increased investment in education, healthcare, and other services for a growing young population. Conversely, a declining fertility rate may require adjustments to address the needs of an aging population, such as healthcare for seniors.



3. KEY HEALTH MEASURES

BIRTHWEIGHT

Low Birthweight (LBW), Very Low Birthweight (VLBW) and Gestational Age are key indicators of infant health and have implications for short-term and long-term outcomes. Low and Very Low Birthweights are associated with higher risk of health complications immediately after birth. Gestational Age constitutes as Appropriate for Gestational Age (AGA), Small for Gestational Age (SGA), which means that a baby's weight is less than expected for the gestational age (weight less than 10th percentile) or Large for Gestational Age (LGA), a baby's weight is more than expected for the gestational age (weight more than the 90th percentile). Monitoring of birthweights and gestational age rates can help with identifying disparities and targeting preventive interventions during pregnancy such as prenatal care, nutritional support, and management of birthing parents' health conditions to optimize fetal growth.

Preterm refers to delivery of a baby before 37 weeks of gestation. Similar importance as birthweight, preterm infants may face health challenges, including respiratory distress syndrome, infections, developmental delays, and other complications that could lead to newborn death (De Costa et al., 2021).

Multiple births have significantly higher percentages of Low or Very Low Birthweight [compared to single births] ($p < .001$). In 2022, there were 78 multiple births, and 43 (55%) were Low or Very Low Birthweight. In 2022, there was not a significant difference in the proportion of multiple births between birthing parents 20 to 34 years old and birthing parents over 35 ($p = 0.29$).

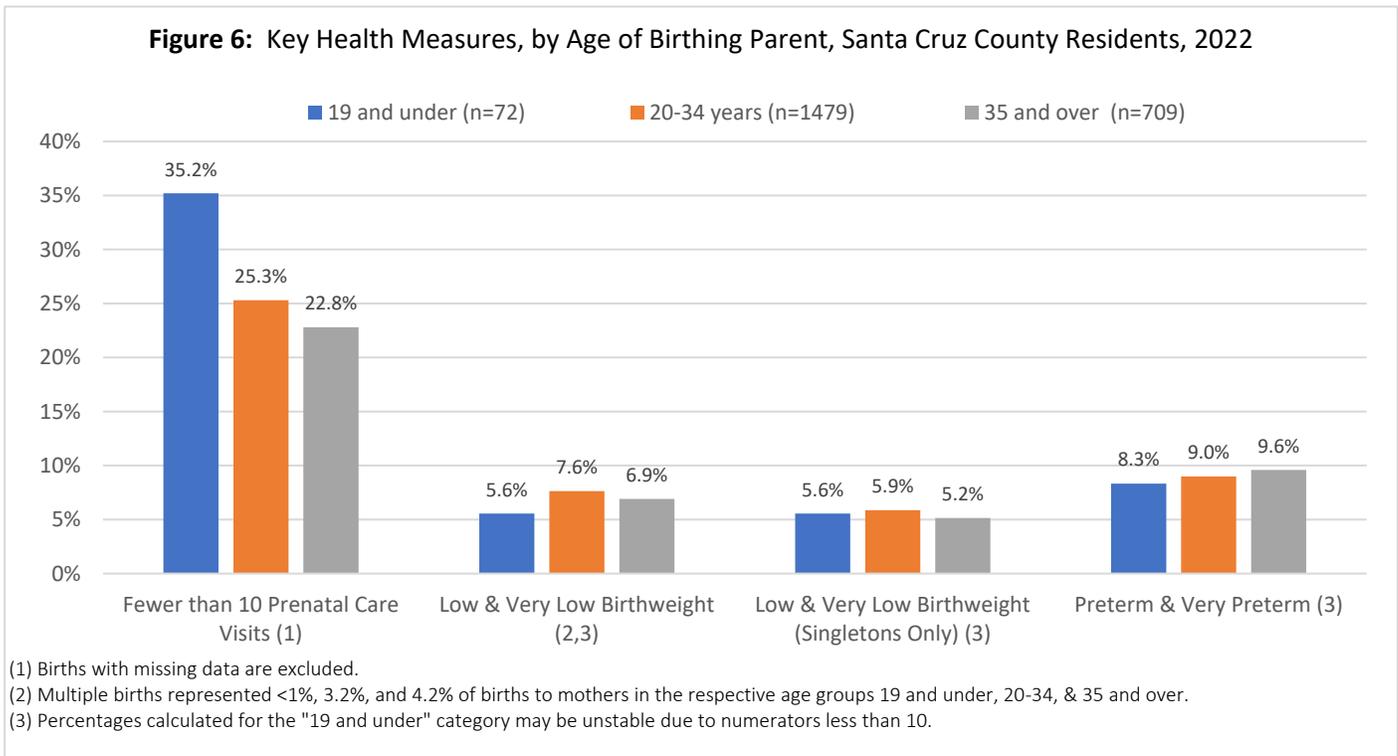
In 2022, there was not a significant difference in the proportion of multiple births between birthing parents 20 to 34 years old and birthing parents over 35 years old ($p = 0.29$).



AGE OF BIRTHING PARENT

Birthing persons under 19 years old received less prenatal care than their older counterparts, with 35.2% receiving fewer than 10 prenatal care visits (Figure 6). The percent of birthing parents aged 19 and under receiving fewer than 10 prenatal visits increased between 2018 and 2022 (16.3% and 35.2 % respectively).

Out of all births in 2022, 4% (72) were to birthing parents 19 and under (Figure 6). This was a decrease compared to 2018 with 89 births in the same age group.

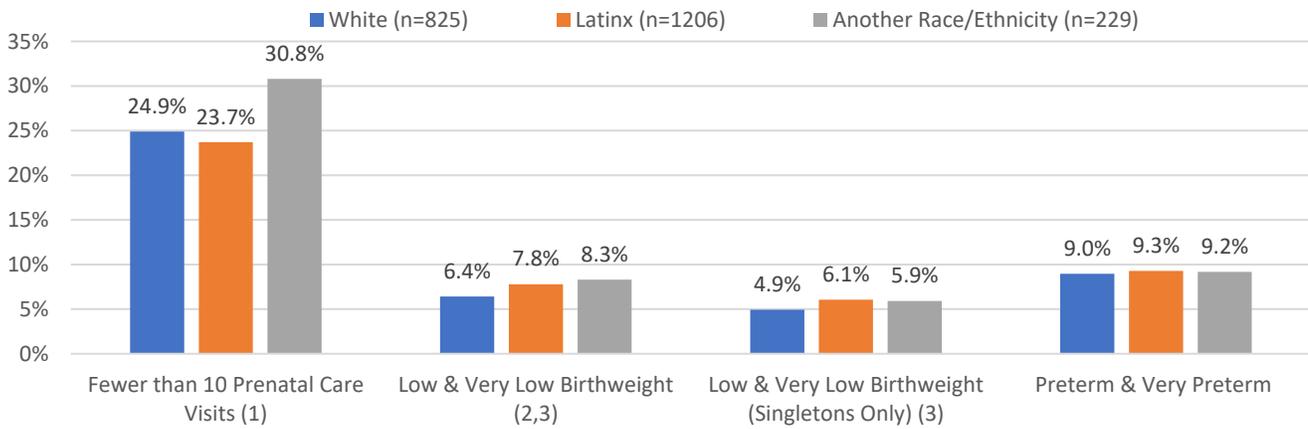


RACE/ETHNICITY OF BIRTHING PARENT

The number of Latinx and Hispanic birthing persons receiving fewer than 10 prenatal care visits has decreased between 2016–2018: 17.6% in 2016, 15.4% in 2017, and 12.1% in 2018. In 2022 there was an increase to 23.7% in 2022 (Figure 7). While the number of White and Latinx birthing parents decreased from 2018 to 2022, birthing parents that identify as ‘another race/ethnicity’ rose by 30.8%.

In 2022, the gap in prenatal care visits between Latinx and White birthing parents was very small and not statistically significantly different by ethnicity (p=0.59). Latinx birthing parents had higher rates of low and very low birthweight and preterm and very preterm births compared to White birthing parents, though these percentages were not found to be significantly different by race/ethnicity (p=0.27 and p=0.84 respectively).

Figure 7: Key Health Measures, by Race and Ethnicity of Birthing Parent, Santa Cruz County Residents, 2022



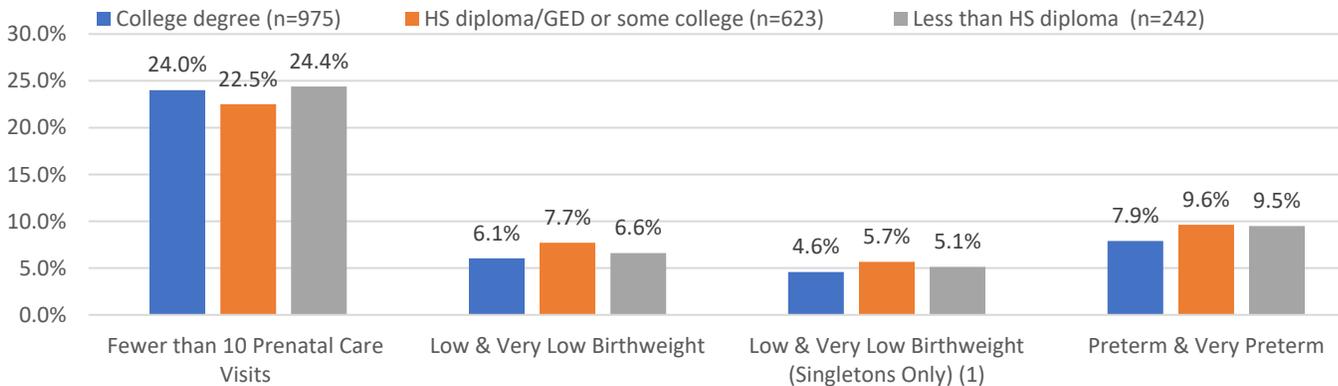
Race and Ethnicity was unknown for 53 births; they have been excluded from the above calculations. "Another race/ethnicity" here includes those who identify as American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian and other Pacific Islander, Multiracial, or another race or ethnicity not listed.

EDUCATION OF BIRTHING PARENT

Figure 8, detailing Key Health Measures, by Education of Birthing Parent (Age 25 and older) can be found on the following page. In 2022, 13.2% of new birthing persons ages 25 and older did not have a high school diploma or equivalent, compared to 14% of birthing persons with a high school diploma in 2018. Also, prenatal care visits are not statistically significantly different by education level ($p=.73$).

Low and very low birthweight rates were not significantly different across education levels among birthing parents over the age of 25 with all or singleton births ($p=0.51$ and $p=0.83$ respectively). Preterm and very preterm rates among mothers 25 and older were also not significantly different across the education levels for all or singleton births ($p=0.40$ and $p=0.65$ respectively).

Figure 8: Key Health Measures, by Education of Birthing Parent (Age 25 and Older), Santa Cruz County Residents, 2022



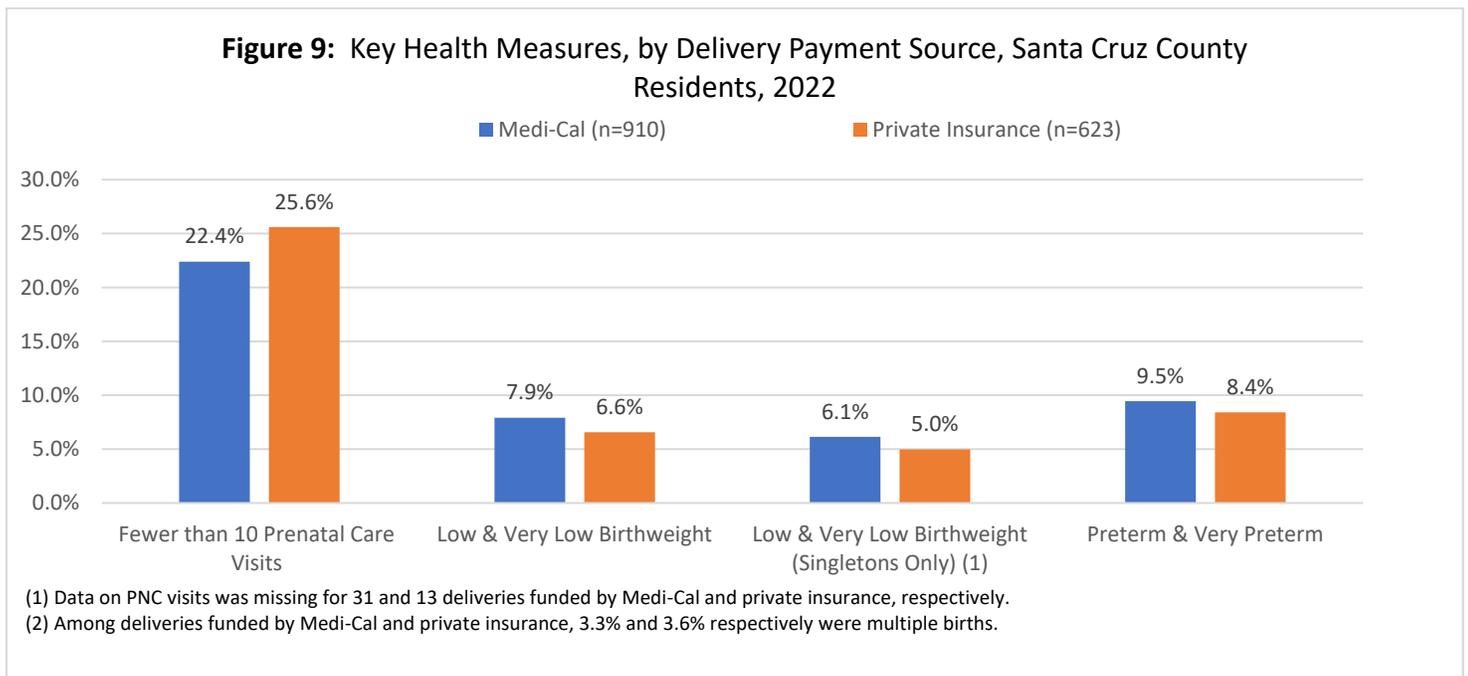
GED = General Equivalency Degree (or diploma)

(1) Multiple births represented 3.7%, 3.7%, and 3.3% of births to mothers age 25 and over with a college degree, HS diploma/GED or some college, and less than HS diploma obtained, respectively.

PAYMENT SOURCE

Across the county and regardless of payment source, data shows that more birthing people received fewer than 10 prenatal care visits in 2022 than 2018. When looking specifically at payment sources for those who received fewer than 10 prenatal care visits – in 2022, Medi-Cal was used 22.4% of the time and those with private insurances, 25.6%; in 2018, the payment source of Medi-Cal was used 13.8% of the time and private insurances, 10.4%.

Prenatal care utilization was not significantly different between mothers with Medi-Cal insured and privately insured deliveries ($p=0.08$). Similarly, the rate of preterm and very preterm births and the rate of low and very low birthweights were not significantly different between Medi-Cal-funded deliveries and deliveries with private insurance ($p=0.18$ and $p=0.43$ respectively).



4. BIRTHING PARENT’S WEIGHT GAIN & SMOKING STATUS

In 2009, the Institute of Medicine released a report recommending new guidelines for weight gain during pregnancy. In 2013, the American College of Obstetricians and Gynecologists added weight gain recommendations for mothers carrying twins, this information was reaffirmed in 2023. The recommended total weight gain range for each category of pre-pregnancy BMI is as follows:

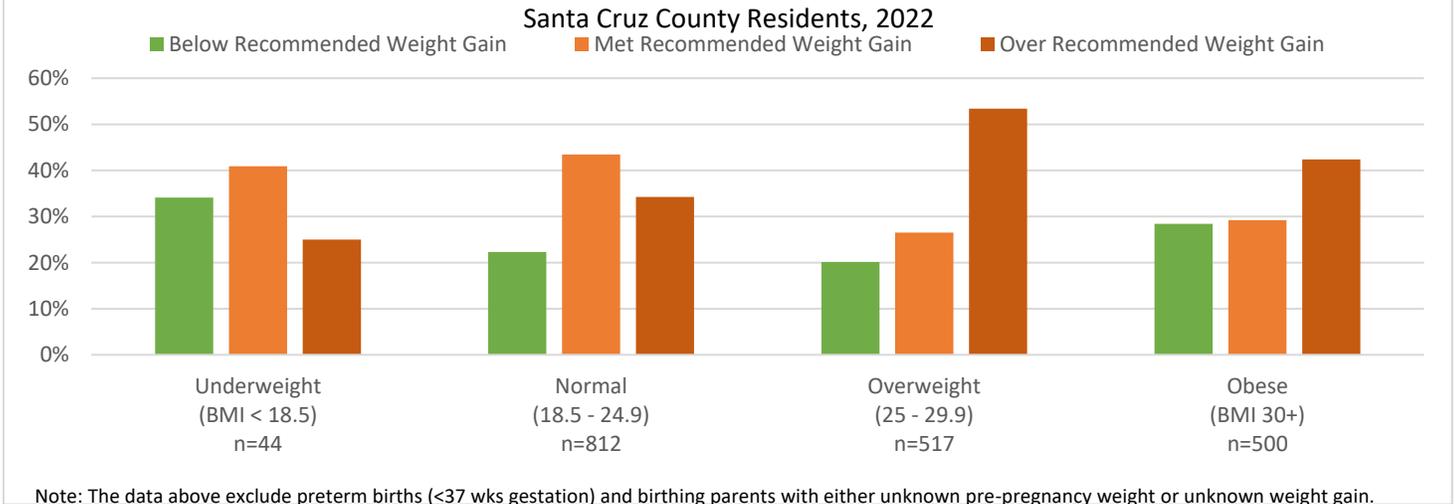
<u>Pre-pregnancy Weight & BMI (kg/m²)</u>		<u>Recommended Range of Total Added Weight (lbs) Singletons</u>	<u>Recommended Range of Total Added Weight (lbs) Twins</u>
Underweight	< 18.5	28 – 40 lbs.	--
Normal	18.5 – 24.9	25 – 35 lbs.	37 – 54 lbs.
Overweight	25.0 – 29.9	15 – 25 lbs.	31 – 50 lbs.
Obese	≥ 30.0	11 – 20 lbs.	25 – 42 lbs.

In 2022, 42% of birthing persons to term singletons gained more weight than recommended during their pregnancy, compared to 54% in 2018. A higher rate of birthing persons whose pre-pregnancy body mass index (BMI) was categorized as overweight or obese exceeded the weight gain recommendation compared to birthing persons with normal or underweight BMI levels (Figure 10). In 2022, 55% of all birthing persons began pregnancy as overweight (BMI 25-29.9) or obese (BMI 30+).

“Birthing parents who are overweight or obese before becoming pregnant and/or gain excessive weight during pregnancy have increased risk for numerous adverse health conditions such as preeclampsia, gestational diabetes, cesarean delivery and hypertension” and dying of pregnancy related causes (CDPH, 2022). However, gaining a healthy amount of weight during pregnancy is important for a child’s health (CDPH, 2022).

Starting pregnancy at a healthy weight can help reduce the risk of pregnancy complications and improve maternal and infant outcomes. It is recommended that birthing people who begins pregnancy with an overweight or obese BMI work closely with their health providers to track and meet weight gain goals at the beginning and throughout their pregnancy. Moreover, it is recommended that overweight and obese birthing parents maintain a balanced diet that is low in sugar and saturated fat and engage in at least 150 minutes (2½ hours) of moderate intensity aerobic activity (such as brisk walking) per week. (CDC, 2022)

Figure 10: Percentage of Birthing Parents to Singletons in Actual Weight Gain Categories Compared to Recommendations, by Pre-Pregnancy Body Mass Index (BMI),



SMOKING STATUS

The numbers and percentages of birthing persons who self-reported smoking at least one tobacco cigarette a day during different time periods before and during pregnancy are shown below in Table 5.

Smoking can cause serious health problems for the birthing parent and their child. According to the CDC (Center for Disease Control and Prevention), smoking tobacco can affect fertility in parents regardless of sex, and smoke can be harmful for babies. Other risks include increased chance of a premature birth (giving birth 3 weeks or more before due date), can cause various birth defects such as a cleft lip and/or cleft palate, there is a higher risk for SIDS (sudden infant death syndrome), harm to baby’s developing lungs and brain (CDC, 2022). The CDC recommends that the best time to quit smoking is before pregnancy. Californians who want to quit have access to free, customized one-on-one coaching and quit support through Kick It California. Call 800-300-8086 or visit the webpage to learn more about the programs they offer: <https://kickitca.org/>.

In Santa Cruz County, the percentage of birthing people who said they smoked before pregnancy has varied from 1.4% to 2.5% over the last several years. In 2022, the percentage varies from 0.2-0.4% throughout the pregnancy, the lowest % in years.

TABLE 5: Birthing Parent Smoking Status during Pregnancy, by Trimester, Santa Cruz County Residents, 2022

Birthing Parent's Smoking Status	3 Months Before Conception		During 1 st Trimester		During 2 nd Trimester		During 3 rd Trimester	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Smoked at least 1 cigarette per day								
Yes	9	0.4%	5	0.2%	5	0.2%	5	0.2%
No	2,237	99.6%	2,241	99.8%	2,241	99.8%	2,241	99.8%
TOTAL	2,246	100%	2,246	100%	2,246	100%	2,246	100%

Note: This table does not include births for whom the mother's cigarette smoking status was missing.

State-wide however, about 12-15% of California adults are smokers. According to the California Department of Public Health (CDPH), California Tobacco Control Program, between 2017-2019, 7.9% of pregnant persons in California who had a recent live birth smoked cigarettes before pregnancy. 33% of pregnant persons who had smoked cigarettes before pregnancy and quit by third trimester started smoking again postpartum (CDPH, California Tobacco Control Program).



5. BIRTHS BY AGE OF NON-BIRTHING PARENT (RESIDENT PARENT)

In 2022, there were more births by parents 19 and under (85.2% (n=23) in 2022 than in 2018 (54% (n=17)). In 2018, 92% of those parents at 19 years and under were Hispanic or Latinx compared to 77.8% in 2022.

Table 6: Characteristics of Non Birthing Parent, by Age Group, Santa Cruz County Resident Birthing Parent, 2022

	AGE OF NON BIRTHING PARENT				
	19 and under N=27	20 - 24 N=161	25 - 34 N=1030	35 and over N=1042	Total N=2260
AGE OF BIRTHING PARENT (yrs):					
19 and under	23 (85.2%)	20 (12.4%)	7 (0.68%)	22 (2.11%)	72 (3.19%)
20 - 24	4 (14.8%)	106 (65.8%)	105 (10.2%)	41 (3.93%)	256 (11.3%)
25 - 34	0 (0.00%)	35 (21.7%)	801 (77.8%)	387 (37.1%)	1223 (54.1%)
35 and over	0 (0.00%)	0 (0.00%)	117 (11.4%)	592 (56.8%)	709 (31.4%)
RACE/ETHNICITY OF NON BIRTHING PARENT:					
American Indian or Alaska Native	0 (0.00%)	0 (0.00%)	1 (0.10%)	1 (0.10%)	2 (0.09%)
Another race/ethnicity	0 (0.00%)	0 (0.00%)	2 (0.19%)	0 (0.00%)	2 (0.09%)
Asian	0 (0.00%)	0 (0.00%)	12 (1.17%)	27 (2.59%)	39 (1.73%)
Black or African American	1 (3.70%)	3 (1.86%)	6 (0.58%)	10 (0.96%)	20 (0.88%)
Hispanic or Latinx	21 (77.8%)	149 (92.5%)	617 (59.9%)	341 (32.7%)	1128 (49.9%)
Native Hawaiian and Other Pacific Islander	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (0.10%)	1 (0.04%)
Two or More Races	0 (0.00%)	1 (0.62%)	28 (2.72%)	23 (2.21%)	52 (2.30%)
Unknown	1 (3.70%)	1 (0.62%)	25 (2.43%)	137 (13.1%)	164 (7.26%)
White	4 (14.8%)	7 (4.35%)	339 (32.9%)	502 (48.2%)	852 (37.7%)
EDUCATION OF NON BIRTHING PARENT:					
College Degree	0 (0.00%)	7 (4.35%)	336 (32.6%)	444 (42.6%)	787 (34.8%)
High School Diploma/GED/or some college	11 (40.7%)	99 (61.5%)	462 (44.9%)	296 (28.4%)	868 (38.4%)
Less than High School Diploma	14 (51.9%)	51 (31.7%)	178 (17.3%)	143 (13.7%)	386 (17.1%)
Withheld or Unknown	2 (7.41%)	4 (2.48%)	54 (5.24%)	159 (15.3%)	219 (9.69%)

GED = General Equivalency Degree (or diploma); includes those with some college

6. BIRTHS BY DELIVERY LOCATION

Table 7: Characteristics of Births, by Delivery Location, Santa Cruz County Occurrence or Residence, 2022

	DELIVERY LOCATION					
	DOMINICAN	SUTTER	WATSONVILLE	NON-HOSPITAL	OUT OF COUNTY	TOTAL
	N=849	N=716	N=864	N=64	N=317	N=2810
AGE OF BIRTHING PARENT (Years) ¹						
19 and under	29 (3.42%)	6 (0.84%)	51 (5.90%)	0 (0.00%)	3 (0.95%)	89 (3.17%)
20 - 24	109 (12.8%)	40 (5.59%)	175 (20.3%)	1 (1.56%)	14 (4.42%)	339 (12.1%)
25 - 34	458 (53.9%)	419 (58.5%)	464 (53.7%)	38 (59.4%)	180 (56.8%)	1559 (55.5%)
35 and over	253 (29.8%)	251 (35.1%)	174 (20.1%)	25 (39.1%)	120 (37.9%)	823 (29.3%)
RACE/ETHNICITY OF BIRTHING PARENT ³						
American Indian or Alaska Native	3 (0.35%)	1 (0.14%)	2 (0.23%)	0 (0.00%)	1 (0.32%)	7 (0.25%)
Asian	32 (3.77%)	28 (3.91%)	9 (1.04%)	1 (1.56%)	30 (9.46%)	100 (3.56%)
Black or African American	8 (0.94%)	2 (0.28%)	1 (0.12%)	1 (1.56%)	3 (0.95%)	15 (0.53%)
Hispanic or Latinx	477 (56.2%)	274 (38.3%)	772 (89.4%)	4 (6.25%)	76 (24.0%)	1603 (57.0%)
Native Hawaiian and Other Pacific Islander	0 (0.00%)	0 (0.00%)	1 (0.12%)	0 (0.00%)	0 (0.00%)	1 (0.04%)
Two or More Races	13 (1.53%)	39 (5.45%)	9 (1.04%)	8 (12.5%)	18 (5.68%)	87 (3.10%)
Unknown	7 (0.82%)	25 (3.49%)	0 (0.00%)	4 (6.25%)	27 (8.52%)	63 (2.24%)
White	309 (36.4%)	347 (48.5%)	70 (8.10%)	46 (71.9%)	162 (51.1%)	934 (33.2%)
EDUCATION OF BIRTHING PARENT ^{2,3}						
College Degree	338 (39.8%)	466 (65.1%)	121 (14.0%)	50 (78.1%)	215 (67.8%)	1190 (42.3%)
High School Diploma/GED/or some college	392 (46.2%)	226 (31.6%)	293 (33.9%)	8 (12.5%)	61 (19.2%)	980 (34.9%)
Less than High School Diploma	54 (6.36%)	12 (1.68%)	450 (52.1%)	0 (0.00%)	4 (1.26%)	520 (18.5%)
UNKNOWN	65 (7.66%)	12 (1.68%)	0 (0.00%)	6 (9.38%)	37 (11.7%)	120 (4.27%)
PRENATAL CARE: INITIATION						
1ST TRIMESTER	769 (90.6%)	681 (95.1%)	616 (71.3%)	47 (73.4%)	297 (93.7%)	2410 (85.8%)
2ND OR 3RD TRIMESTER	68 (8.01%)	24 (3.35%)	241 (27.9%)	9 (14.1%)	18 (5.68%)	360 (12.8%)
NONE	5 (0.59%)	0 (0.00%)	6 (0.69%)	0 (0.00%)	0 (0.00%)	11 (0.39%)
UNKNOWN	7 (0.82%)	11 (1.54%)	1 (0.12%)	8 (12.5%)	2 (0.63%)	29 (1.03%)
PRENATAL CARE: UTILIZATION						
FEWER THAN 10	168 (19.8%)	187 (26.1%)	200 (23.1%)	26 (40.6%)	106 (33.4%)	687 (24.4%)
GREATER OR EQUAL TO 10	673 (79.3%)	519 (72.5%)	664 (76.9%)	36 (56.2%)	209 (65.9%)	2101 (74.8%)
UNKNOWN	8 (0.94%)	10 (1.40%)	0 (0.00%)	2 (3.12%)	2 (0.63%)	22 (0.78%)
BIRTH OUTCOMES: WEIGHT ⁴						
LOW BIRTHWEIGHT	82 (9.66%)	10 (1.40%)	44 (5.09%)	0 (0.00%)	39 (12.3%)	175 (6.23%)
NORMAL	757 (89.2%)	706 (98.6%)	818 (94.7%)	64 (100%)	267 (84.2%)	2612 (93.0%)
VERY LOW BIRTHWEIGHT	10 (1.18%)	0 (0.00%)	2 (0.23%)	0 (0.00%)	11 (3.47%)	23 (0.82%)
BIRTH OUTCOMES: GESTATION AGE ⁴						
NORMAL	736 (86.7%)	699 (97.6%)	802 (92.8%)	64 (100%)	258 (81.4%)	2559 (91.1%)
PRETERM	105 (12.4%)	17 (2.37%)	58 (6.71%)	0 (0.00%)	42 (13.2%)	222 (7.90%)
VERY PRETERM	8 (0.94%)	0 (0.00%)	4 (0.46%)	0 (0.00%)	17 (5.36%)	29 (1.03%)
DELIVERY METHOD						
PRIMARY CESAREAN	150 (17.7%)	117 (16.3%)	86 (9.95%)	0 (0.00%)	93 (29.3%)	446 (15.9%)
REPEAT CESAREAN	111 (13.1%)	68 (9.50%)	116 (13.4%)	0 (0.00%)	35 (11.0%)	330 (11.7%)
VAGINAL	549 (64.7%)	530 (74.0%)	625 (72.3%)	59 (92.2%)	186 (58.7%)	1949 (69.4%)
VBAC	39 (4.59%)	1 (0.14%)	37 (4.28%)	5 (7.81%)	3 (0.95%)	85 (3.02%)
PAYMENT FOR DELIVERY						
MEDICAL	396 (46.6%)	110 (15.4%)	722 (83.6%)	1 (1.56%)	31 (9.78%)	1260 (44.8%)
NO INSURANCE	3 (0.35%)	2 (0.28%)	3 (0.35%)	49 (76.6%)	1 (0.32%)	58 (2.06%)
OTHER	2 (0.24%)	4 (0.56%)	3 (0.35%)	1 (1.56%)	6 (1.89%)	16 (0.57%)
PRIVATE INSURANCE	447 (52.7%)	598 (83.5%)	136 (15.7%)	12 (18.8%)	278 (87.7%)	1471 (52.3%)
UNKNOWN	1 (0.12%)	2 (0.28%)	0 (0.00%)	1 (1.56%)	1 (0.32%)	5 (0.18%)

¹ All ages have been included to describe the entire patient population by delivery location.

² Education categories include mothers of all ages, unlike on page 8, which excludes mothers under age 25 years to compare key health measures.

³ GED = General Equivalency Degree (or diploma); includes "some college."

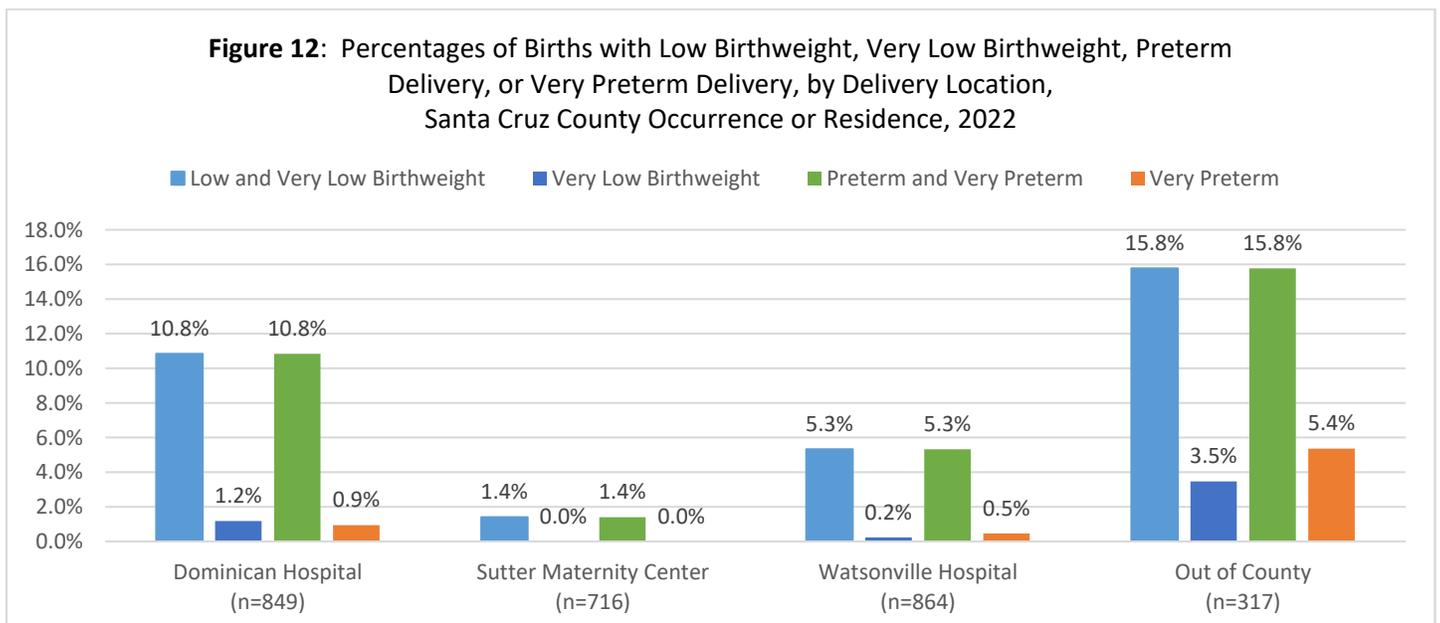
⁴ Outcomes are among all births and do not exclude multiple births.

Table 8 provides more details about where Santa Cruz County residents and non-residents deliver. The three leading locations of delivery remained consistent as Dominican Hospital, Watsonville Hospital and Sutter Maternity Center. Since 2018, the percentage of births by delivery location saw an increase of births at Dominican Hospital and decrease at Sutter Maternity Center. Watsonville Hospital leads with 31% of births in 2022, and 30% of births in 2018; Dominican Hospital follows with 30% of births in 2022, while only having 27% of births in 2018; Sutter Maternity Center shows a decrease of 25% of births in 2022 and 31% of births in 2018.

TABLE 8: Birthing Parent Area of Residence, by Delivery Location, Santa Cruz County Occurrence or Residence, 2022

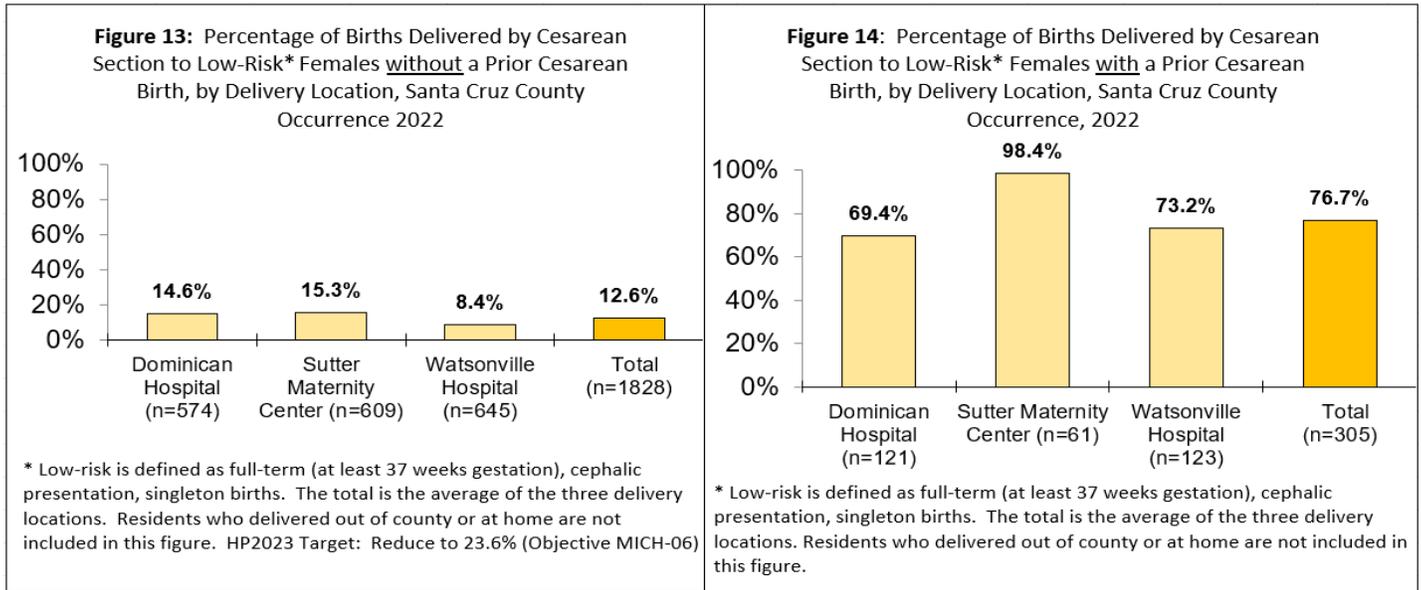
AREA OF RESIDENCE	DELIVERY LOCATION										TOTAL	
	Dominican		Sutter		Watsonville		Non-Hospital		Out of County		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
SANTA CRUZ COUNTY	750	88%	600	84%	574	66%	54	84%	282	89%	2,260	80%
Mid-County	209	28%	216	36%	27	5%	17	31%	72	26%	541	24%
North-County	258	34%	232	39%	10	2%	30	56%	146	52%	676	30%
South-County	280	37%	149	25%	535	93%	7	13%	62	22%	1,033	46%
Unknown	3	0%	3	1%	2	0%	0	0%	2	1%	10	0%
MONTEREY COUNTY	51	6%	80	11%	258	30%	1	2%	3	--	393	14%
SAN BENITO COUNTY	16	2%	16	2%	20	2%	2	3%	--	--	54	2%
SANTA CLARA COUNTY	7	1%	11	2%	5	1%	5	8%	32	--	60	2%
OTHER CA COUNTIES	20	2%	6	1%	6	1%	2	3%	--	--	34	1%
OUT OF STATE	4	0%	2	0%	1	0%	0	0%	--	--	7	0%
TOTAL	848	30%	715	25%	864	31%	64	2%	317	11%	2,808	100%

The medical capability to handle high-risk births varies by hospital. Often when a birthing person travels out of county, it is to deliver in a hospital with the reputation and 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 birthing persons to Dominican Hospital for delivery.



CESAREAN BIRTHS

Below are figures on the percentage of cesarean births among low-risk births to birthing people without a prior cesarean birth (Figure 13) compared to low-risk births with a prior cesarean birth (Figure 14); low-risk births are defined in the figure notes. In 2022, the percentage of births delivered by cesarean section to low-risk birthing people with a prior cesarean birth rose by 8% from 68.7% in 2018, to 76.7% in 2022.



Healthy People 2030 seeks to reduce cesarean births among low-risk birthing persons with no prior births, the nationwide average being 25.9% while the Healthy People 2030 goal is 23.6% (Healthy People, 2030). Santa Cruz County falls significantly below this rate at 12.6% of birthing persons with a low-risk pregnancy having a primary cesarean (Cesarean birth among birthing people who have not had a previous cesarean delivery).



7. TRENDS

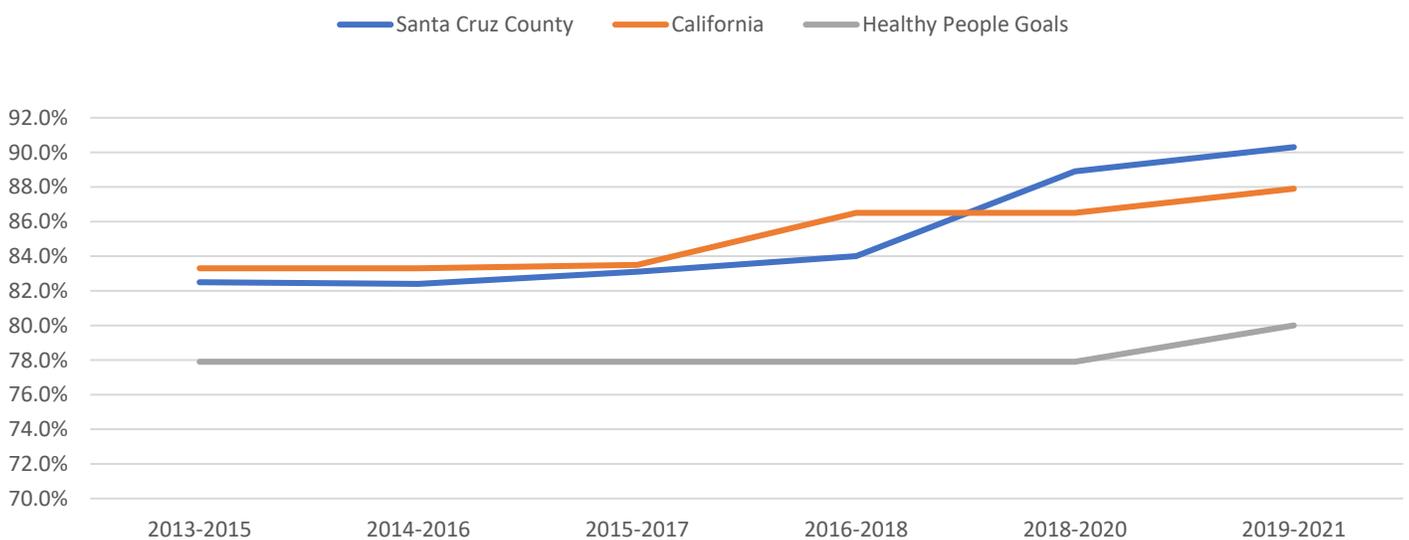
EARLY PRENATAL CARE

Prenatal care visits rates may be used to evaluate healthcare access, identify disparities, and understand potential areas for improvement in maternal and fetal health outcomes. Between 10-15 prenatal visits, during a low-risk pregnancy, is recommended by the American College of Obstetricians and Gynecologists (ACOG) and the American Academy of Pediatrics (AAP).

As seen in Figure 15, the percentage of birthing people who received early prenatal care (1st trimester) was 86.6% in 2018 (Figure 15). The Healthy People objective was lowered from 90% in 2010 to 77.9% for 2020 then up to 80% for 2030; the 2030 objective has been met or nearly met countywide for the past 10 years. However, during 2019-2021, Santa Cruz County surpassed this objective with 90.3% of birthing people receiving early prenatal care and surpassed the 2019-2021 objective of 80% of birthing people receiving early prenatal care by 10.3% (Office of Disease Prevention, 2023).

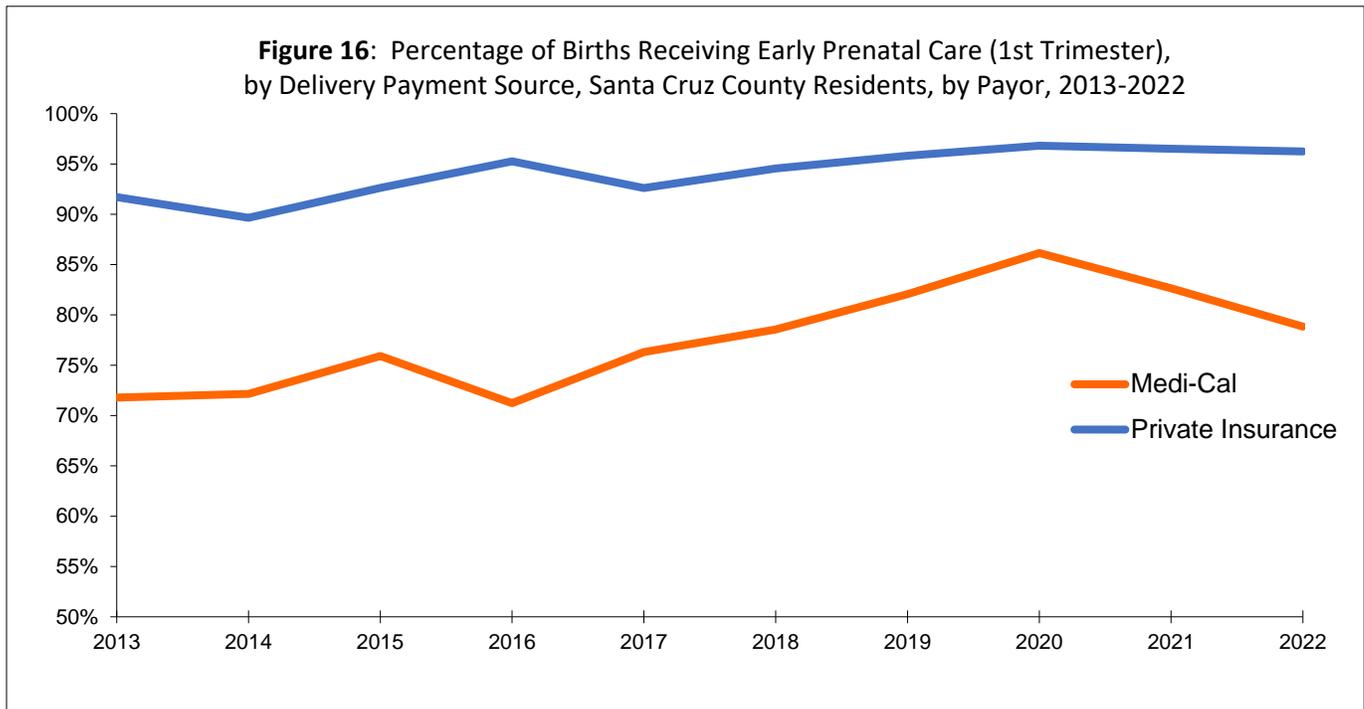
“Pre-Pregnancy and prenatal care can help prevent complications and inform [parents] about important steps they can take to protect their infant and ensure a healthy pregnancy” (NICHD, 2017). Prenatal visits usually include a physical exam, weight checks, blood tests and imaging tests, such as ultrasound exams. Additionally, during prenatal visits, pregnant parents discuss adherence to prenatal vitamins, ensure medication safety, and work closely with their health care providers to control existing conditions, such as high blood pressure and diabetes. (NICHD, 2017)

Figure 15: Percentage of Births Receiving Early Prenatal Care (1st Trimester) — Healthy People Objective (HP 2020 & 2030), California and Santa Cruz County Residents 2013-2021



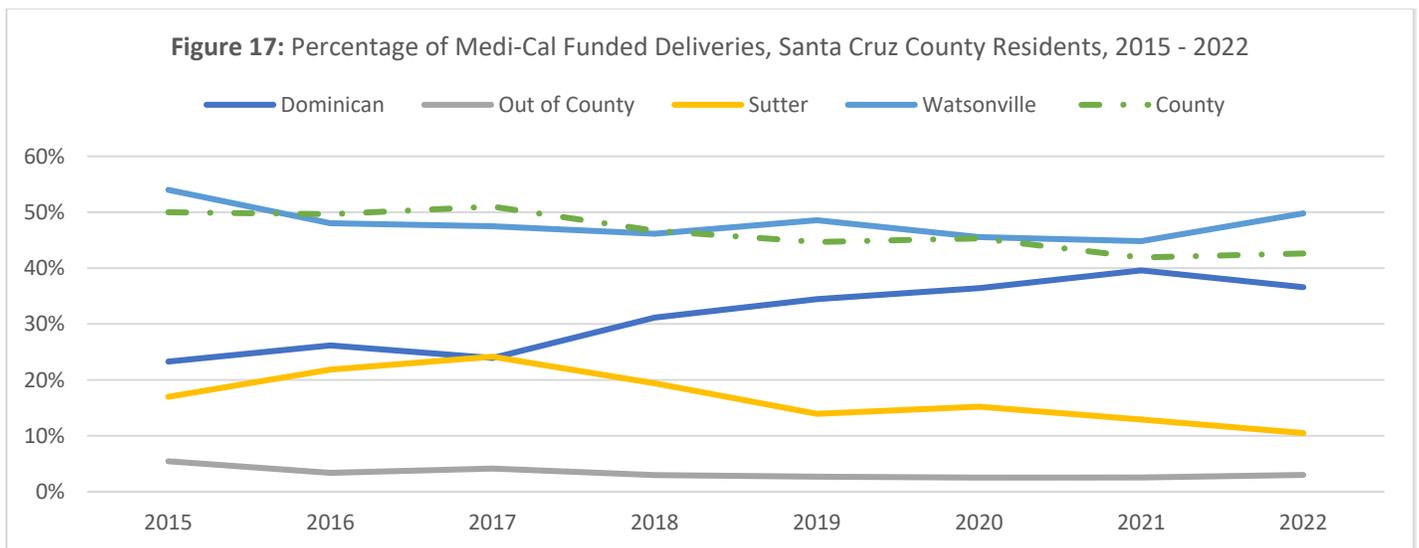
Data source: Data are from CDPH County Health Status Profiles.
Note: The percentages are based on three-year averages.

On the following page, Figure 16 compares early prenatal care for deliveries paid by Medi-Cal versus those paid by private insurance. Both Medi-Cal patients and patients with private insurance experienced an increase in early prenatal care.



MEDI-CAL FUNDED DELIVERIES

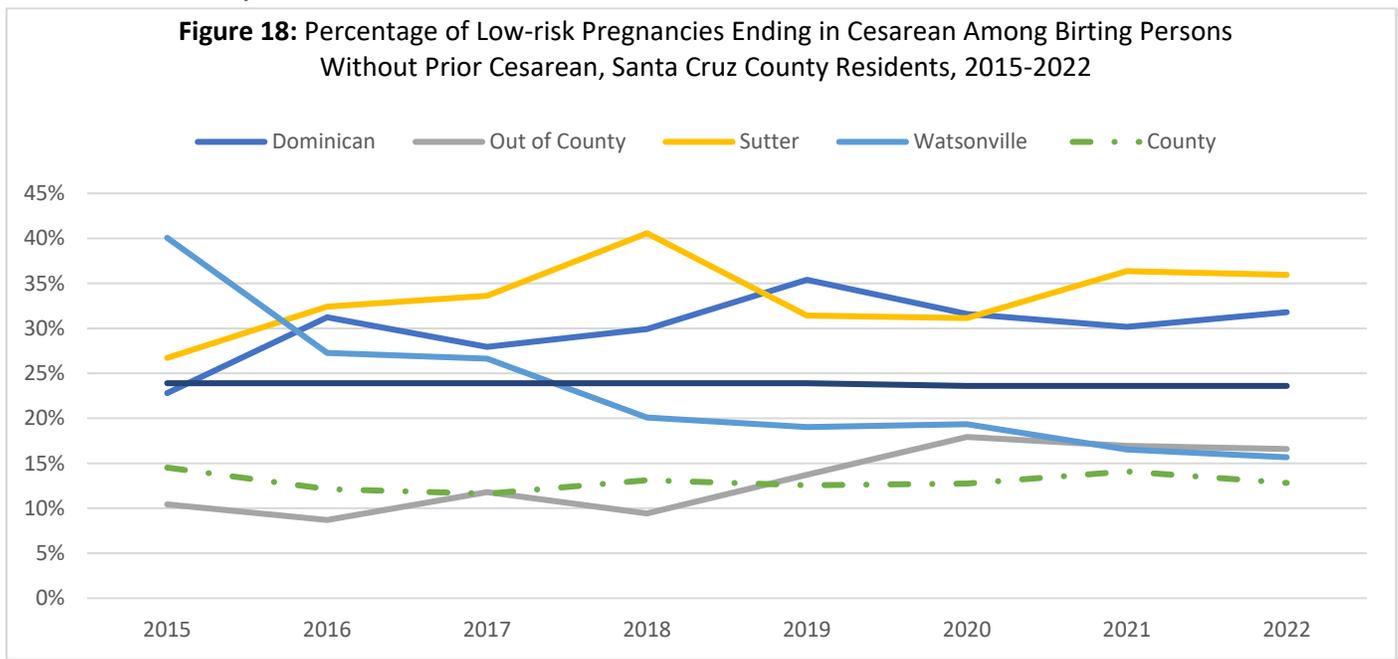
Figure 17 shows the trend in the percentage of deliveries funded by Medi-Cal at each facility. In 2022, 46.7% of Santa Cruz County residents' deliveries were funded by Medi-Cal, continuing the decreasing trend since the peak in 2010 (53.4%). Sutter experienced the biggest reduction in Medi-Cal funded deliveries: from 37% in 2017 to 28.9% in 2018 and now less than half of that, at 10% in 2022.



LOW-RISK PRIMARY CESAREAN RATES

Figure 18 shows the trend at each facility in recent years for cesarean birth rates among low-risk births (defined as full-term singleton births where the baby presents in vertex position) where the birthing person had no prior cesarean. Cesarean rates overall have increased substantially in the last two decades (from about one to five births to about one in three births in California), without any corresponding improvement in birth outcomes. Unnecessary cesareans increase morbidity and mortality among birthing persons and babies (Santa Cruz County Birth Report, 2018).

The Healthy People goal of 2030 aims for counties to fall below 23.6% of cesarean birth rates among low-risk births and Santa Cruz County's total cesarean births sits at 13% (Office of Disease Prevention, 2023).



Important to note:

Tracking cesarean births is essential for promoting safe and evidence-based maternity care, understanding healthcare practices, and addressing potential disparities. The goal is to ensure that C-sections are performed when medically necessary, promoting the health and well-being of both birth parents and infants.

Cesareans are major surgical procedures, and tracking their rates is crucial for monitoring birth parents' health and safety. High rates of unnecessary C-sections can lead to increased risks of complications for birthing parents, such as infections, blood clots, and longer recovery times.

While cesareans can be necessary and lifesaving in certain situations, they are associated with different infant outcomes compared to vaginal births. Tracking cesarean birth rates helps assess the impact on newborns, including respiratory issues and potential complications related to prematurity.

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