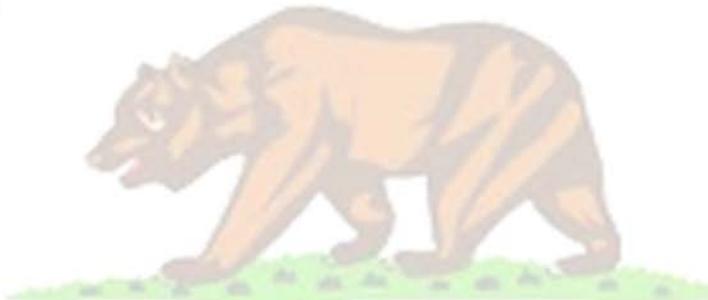


Medi-Cal Birth Report 2007



CALIFORNIA REPUBLIC

dhcs
RASB
research and analytic studies branch

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EXECUTIVE SUMMARY

In 2007, nearly 13% of all hospitalizations in the U.S. were for maternity care, and an additional 11.9% were for care of newborns.¹

Childbirth is the most common reason for hospital care in the U.S., and this phenomenon is no different in the Medi-Cal program. Among female beneficiaries under age 65, childbearing is the primary reason for seeking health care in the Medi-Cal program.

During calendar year 2007, 8.25 million Californians were eligible for Medi-Cal for at least one month. Of these beneficiaries, 23%, or 1.9 million, were women between the ages of 15 and 44.

Over the last two decades, the Medi-Cal program has implemented special programs for pregnant women designed to ensure access to no cost coverage for early prenatal, postpartum, and other services. In the late 1980s and early 1990s, federal legislation was enacted that expanded publically sponsored health insurance to low-income pregnant women. This provided state Medicaid programs the opportunity to improve birth outcomes among vulnerable women and newborns by improving access to early prenatal care. States invested in outreach activities, enrollment simplification, and enhanced prenatal benefits. And, because financial barriers may inhibit a women's access to postpartum services, a special postpartum program became

available, offering no cost Medi-Cal coverage for up to 60 days after the pregnancy ends.

The Medi-Cal Birth Report 2007 presents detailed data for 2007 California resident births that occurred in a hospital setting, including data on maternal characteristics, delivery methods, and select birth outcomes such as low birthweight and preterm delivery. New to this report is the inclusion of key comorbidities and health behaviors known to influence birth outcomes such as hypertension, diabetes, substance use, pre-pregnancy weight, and smoking during pregnancy.

This report presents birth statistics for women participating in the Medi-Cal Fee-For Service (FFS) and Medi-Cal managed care delivery systems, as well as births paid by private insurance, births covered under other public funding sources, and births among uninsured mothers. These data are important in several ways: 1) they provide a profile of the Medi-Cal beneficiaries that seek care for delivery services; 2) they identify factors that may contribute to variations in birth outcomes; and 3) they provide useful comparisons between Medi-Cal birth outcomes and those of other births in the state. Because birth outcomes can provide an indication as to how well the health care system is serving its members, routine monitoring of these data is essential.

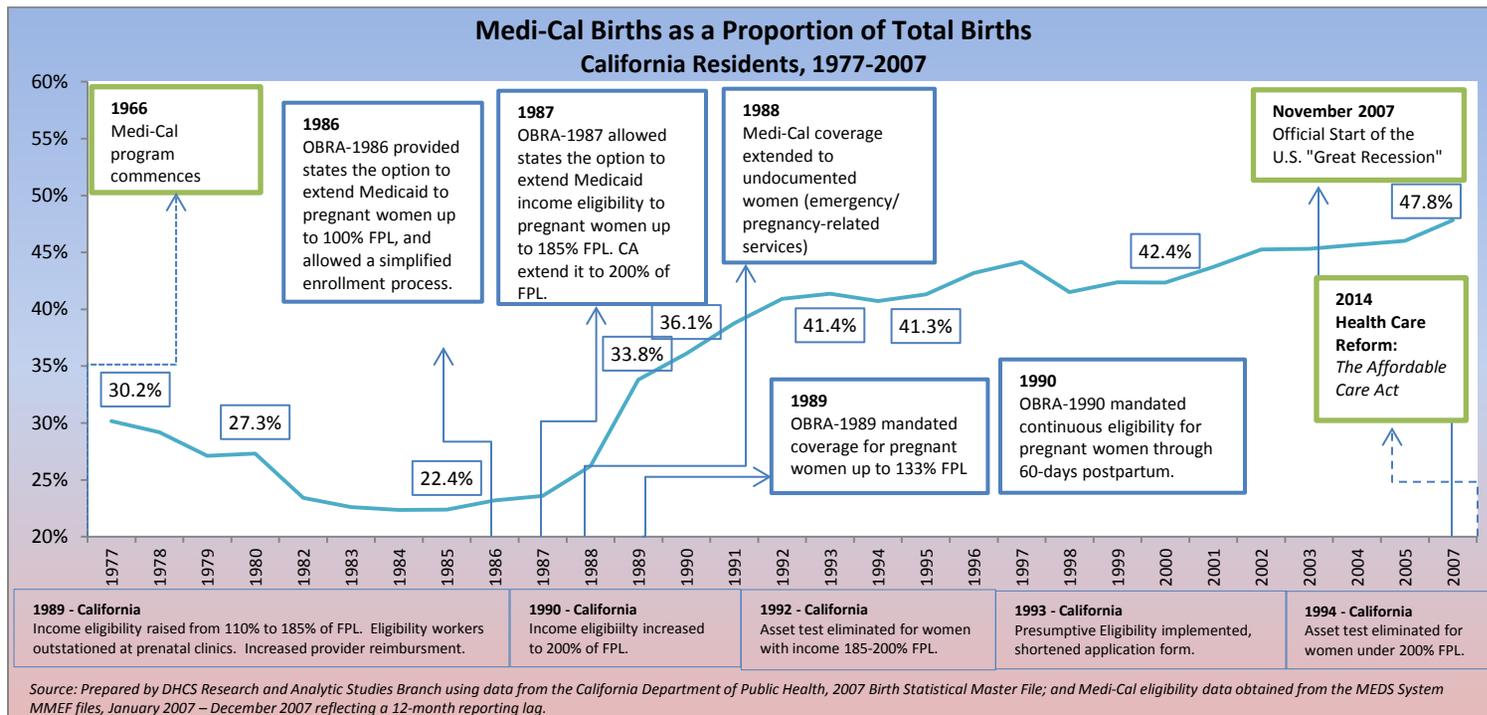


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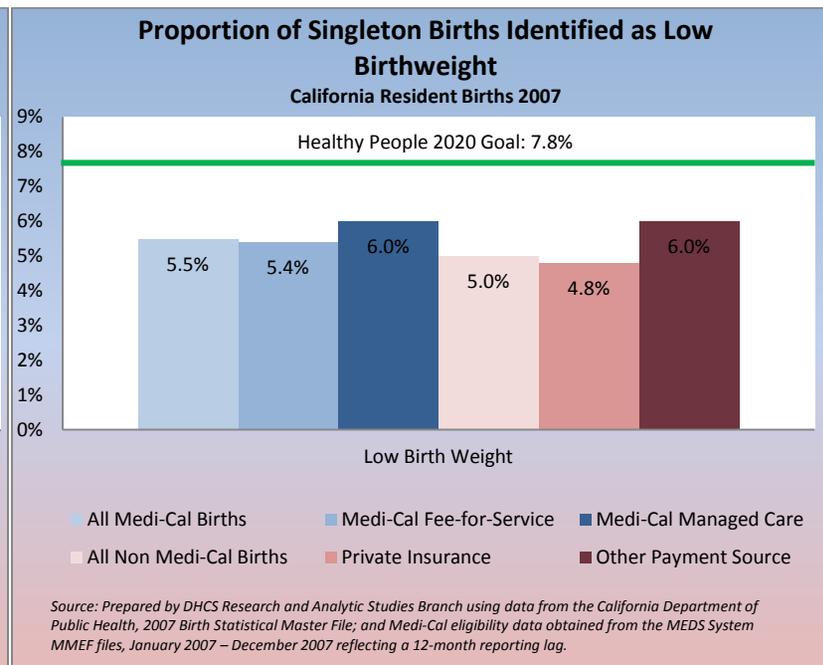
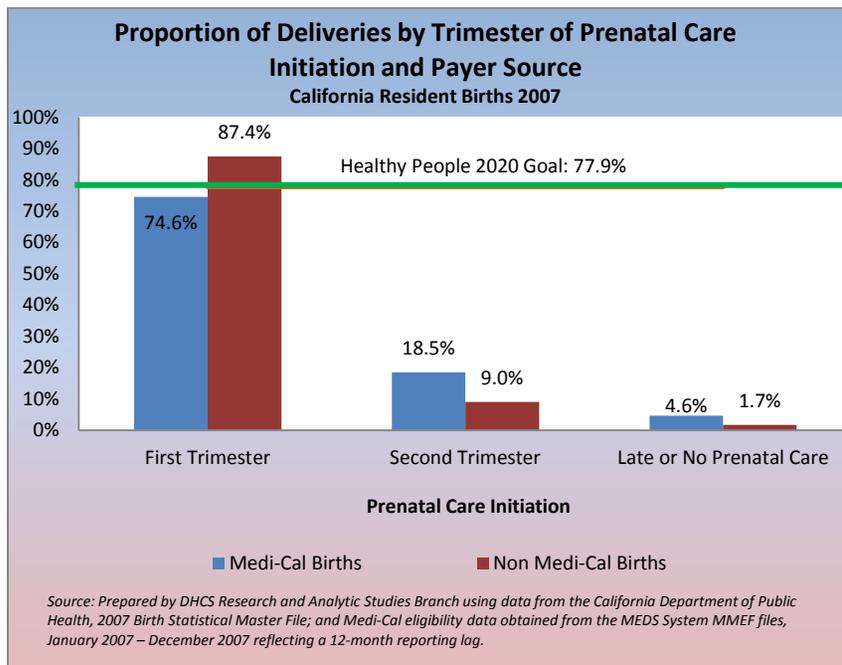
- In 2007, 47.8% of all births to Californian residents occurring in a hospital setting were covered by the Medi-Cal program. This is the largest proportion of Medi-Cal-funded births in the history of the program. Of the 268,342 births to Medi-Cal beneficiaries, 71.0% were to mothers in the FFS program and 29.0% were to managed care program beneficiaries.
- Medi-Cal mothers who gave birth in 2007 were younger compared to mothers with births financed by private insurance or other funding sources. The mean age of Medi-Cal mothers in 2007 was 25.71, as compared to non-Medi-Cal mothers whose mean age was 30.14. The Medi-Cal program finances a large proportion of teen

births. The proportion of births to teen mothers, aged 0-19 years, was three times higher (15.4%) among Medi-Cal beneficiaries as among births paid by non-Medi-Cal sources (4.3%).

- A large segment of Medi-Cal financed births were to mothers of Hispanic ethnicity (71.8%), foreign-born mothers (54.4%), and mothers with less than a high school education (45.0%). The prevalence of foreign-born mothers was much higher among Medi-Cal FFS beneficiaries (67.9%) than for Medi-Cal managed care beneficiaries (21.5%). The proportion of African American mothers among Medi-Cal managed care beneficiaries (15.1%) was nearly four times higher among births paid by non-Medi-Cal funding sources (see Table 1).



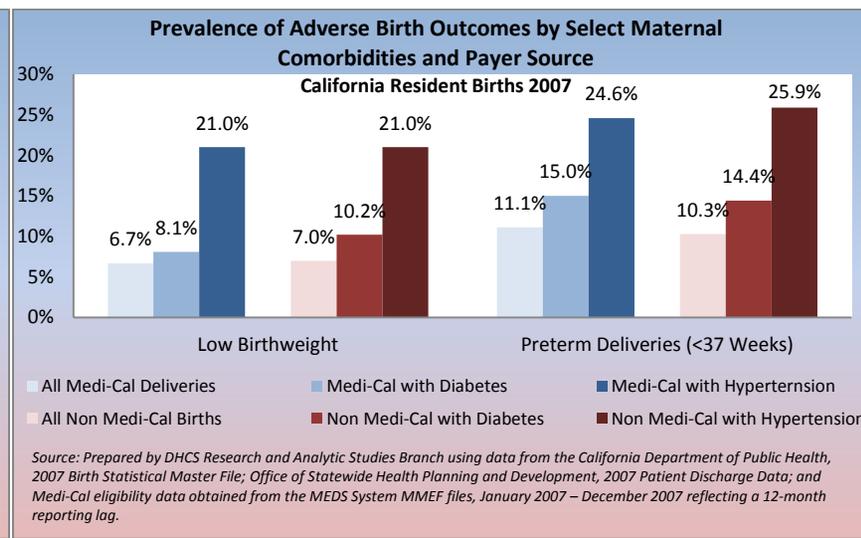
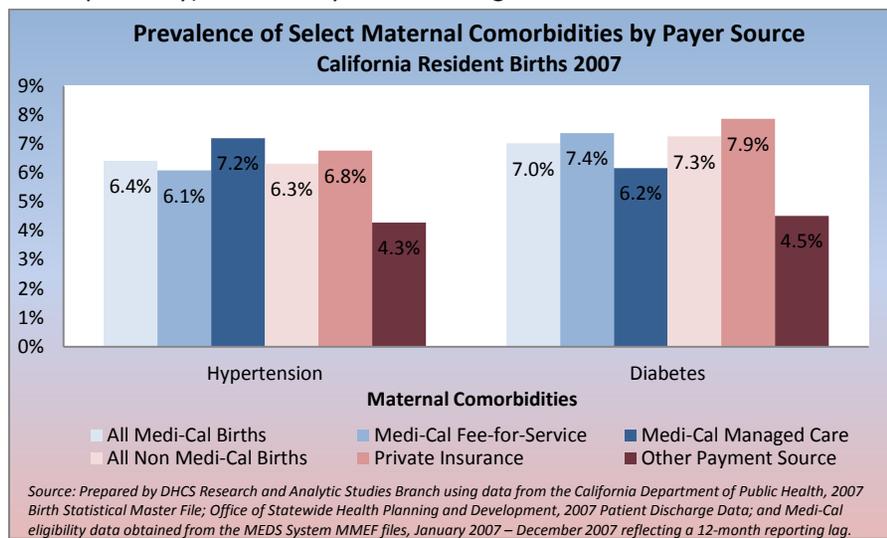
- Parity levels were higher among Medi-Cal beneficiaries than among non-Medi-Cal mothers. The proportion of mothers with two or more previous births was 35.6% among those receiving Medi-Cal services compared to only 24.6% among non-Medi-Cal mothers. However, multiple gestation births were more common among non-Medi-Cal mothers (4.0%) compared to Medi-Cal beneficiaries (2.2%) (Table 2).
- The proportion of Medi-Cal beneficiaries receiving prenatal care during their first trimester of pregnancy was 74.6%, which is below the nationally established Healthy People 2020 goal of 77.9%. In contrast, nearly 90% of mothers who were privately insured received prenatal care in the first trimester of pregnancy. Beneficiaries of the Medi-Cal managed care program had the lowest rates of early prenatal care initiation at 73.2% (see Table 2).
- Rates of low birthweight and very low birthweight were slightly higher among the privately insured and those with other funding sources combined (7.0% and 1.2%, respectively) as compared to deliveries funded by the Medi-Cal program (6.7% and 1.1%, respectively) (see Table 5a). However, when controlling for multiple gestation births, these differences were reversed.
- Among singleton births, 5.5% of Medi-Cal and 5.0% of non-Medi-Cal births were low birthweight. The prevalence of low birthweight ranged from 4.8% among births paid by private insurance to 6.0% for births to Medi-Cal managed care beneficiaries and those paid by other funding sources (see Table 5b). These rates compare favorably to the Healthy People 2020 goal for low birthweight, which is set at 7.8% (see Appendix C for Healthy People 2020 Measures).



- Preterm and very preterm births were more common among singleton Medi-Cal births (10.1% and 1.4%, respectively) compared to non-Medi-Cal births (8.4% preterm and 1.1% very preterm). The highest rates of preterm deliveries were among the Medi-Cal managed care beneficiaries at 10.7%. Rates of very preterm were also highest among Medi-Cal managed care births (1.5%) and births paid by other funding sources (1.6%) (see Table 5b).
- Among all hospital births in California, 33.1% were delivered by cesarean section, slightly above the national average (an all-time high of 32%).² Among Medi-Cal births, the cesarean section rate is slightly lower than the state average at 31.3%, but is similar across Medi-Cal managed care (31.2%) and FFS (31.3%) funded deliveries. Cesarean deliveries were slightly more common among the privately insured at 33.5% (see Table 2).
- The prevalence of hypertension was similar across Medi-Cal beneficiaries and privately-insured mothers (6.4% and 6.8%, respectively) but notably lower among mothers whose births were

funded by other sources (4.3%) (see Table 3). Hypertension was strongly associated with low birthweight and preterm deliveries for both Medi-Cal beneficiaries and mothers whose births were funded by non-Medi-Cal sources. Twenty one percent (21%) of low birthweight deliveries in both Medi-Cal and non-Medi-Cal were to mothers with a diagnosis of hypertension. Hypertension was also strongly associated with mothers delivering preterm newborns in the Medi-Cal program (24.6%) and among mothers whose deliveries were funded by non-Medi-Cal sources (25.9%).

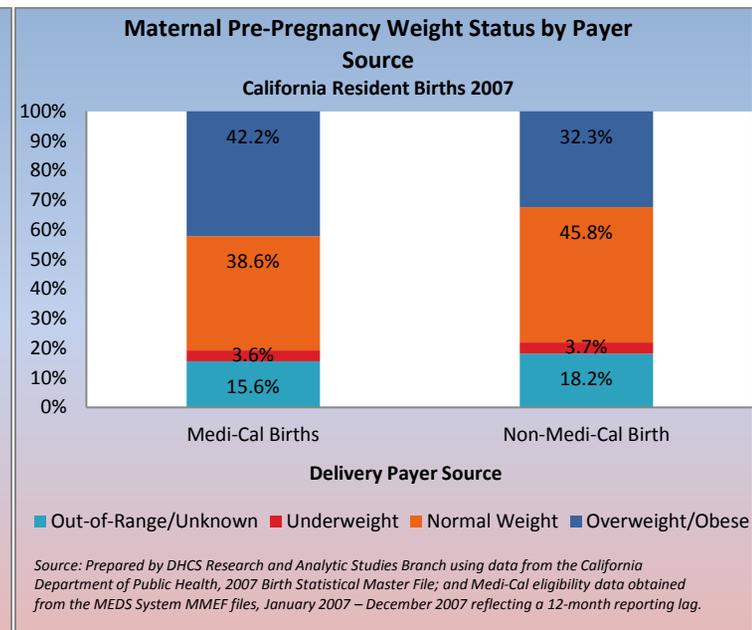
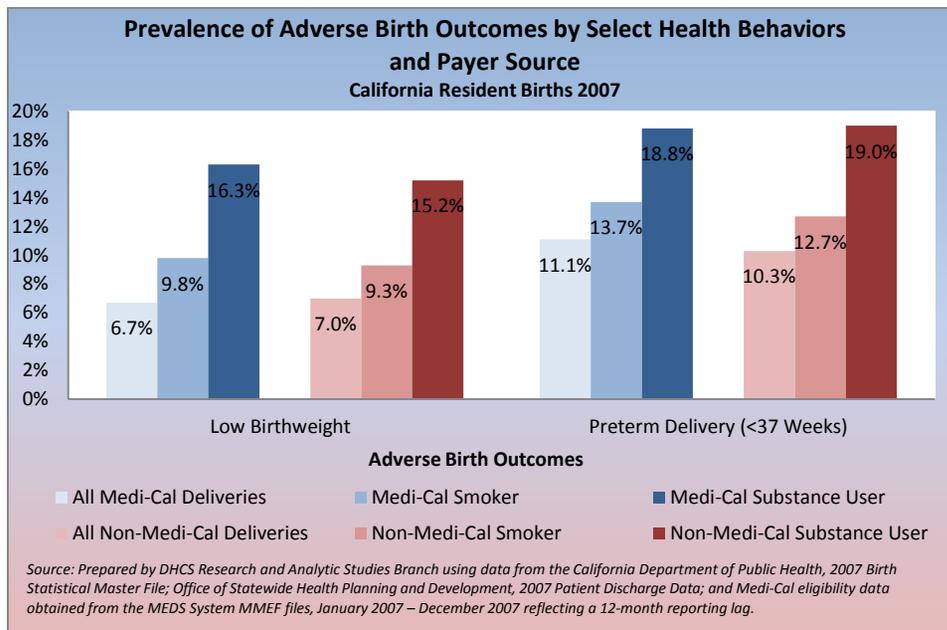
- Despite a similar prevalence of diabetes among Medi-Cal and non-Medi-Cal mothers (7.0% vs. 7.3%, respectively), diabetes had a slightly greater effect on birth outcomes among non-Medi-Cal mothers. Among Medi-Cal mothers diagnosed with diabetes either during pregnancy or before, low birthweight was 8.1%, whereas among non-Medi-Cal mothers with diabetes the prevalence was 10.2% (see Tables 6b and 6d).



- Medi-Cal beneficiaries had higher rates of smoking and substance use, particularly among those enrolled in Medi-Cal managed care. Just over 6% of Medi-Cal managed care mothers smoked during pregnancy compared to only 3% among mothers in the Medi-Cal FFS delivery system. Mothers whose deliveries were funded by non-Medi-Cal sources had a smoking prevalence of only 1.2%. Substance use was over 3.5 times higher among Medi-Cal mothers than non-Medi-Cal mothers (1.8% compared to 0.5% respectively), and over 2.5 times higher among mothers in Medi-Cal managed care than mothers in Medi-Cal FFS delivery systems (3.1% compared to 1.2% respectively) (see Table 3). Medi-Cal mothers who smoked had a 51% increase in the number of low birthweight deliveries compared to those who did not smoke. An increase of 251% in low birthweight deliveries was observed among Medi-Cal

mothers who used substances during their pregnancy (see Table 6b) compared to those who did not.

- A mother's pre-pregnancy weight can have a tremendous impact on the health of a pregnancy (both mother and child). Among Medi-Cal beneficiaries, 42.2% entered their pregnancy as overweight or obese, compared to only 32.3% of mothers whose births were funded by non-Medi-Cal sources. Among certain Medi-Cal subpopulations, the prevalence of overweight or obese mothers prior to pregnancy was higher yet (see Table 3). Beneficiaries enrolled in Blind/Disabled aid codes had pre-pregnancy overweight/obesity rates as high as 46.7%, and for women enrolled in Families aid codes these rates were 44.1% (see Table 8a).



- The descriptive data presented in this report show that a larger proportion of women in Medi-Cal were from subgroups most vulnerable to adverse birth outcomes. These subgroups include women receiving services through the Blind/Disabled aid category (17.6% of deliveries among these beneficiaries were preterm, and 12.9% resulted in low birthweight), teen mothers, African American mothers, mothers of increased parity levels, and mothers of lower educational attainment. Modifiable risk factors that are associated with poor birth outcomes, such as smoking during pregnancy,

substance use and pre-pregnancy weight outside of normal ranges, were most prevalent among Medi-Cal mothers, and particularly among those in Medi-Cal managed care. Protective factors such as being foreign-born and receiving early prenatal care were less prevalent among the Medi-Cal managed care population. These factors may help explain some of the differences in rates of low birthweight, very low birthweight, preterm and very preterm deliveries that are reported here.

BACKGROUND ON THE MEDI-CAL PROGRAM

Medicaid is a significant financier of maternal and child health care services nationwide. In 2003, the Medicaid program paid for approximately 1.5 million births (41%) in the U.S.³ Each year California's Medicaid program, known as Medi-Cal, is responsible for financing over 40% of all births in the state. In 2007, the Medi-Cal program financed nearly 48% of all in-hospital births in California.

Medi-Cal provides comprehensive health care services at no cost or low cost for low-income individuals. The federal government dictates a mandatory set of basic services be provided to beneficiaries including, but not limited to: physician services, family nurse practitioner services, nursing facility services, hospital inpatient and outpatient services, laboratory and radiology services, family planning, and early and periodic screening, diagnosis, and treatment services for children. In addition to these mandatory services, the state provides optional benefits such as outpatient drugs, home- and community-based waiver services, and medical equipment.

Medi-Cal eligible beneficiaries are generally low-income or have limited means to pay for the cost of their health care services. In order to be eligible for Medi-Cal, individuals must fit into one of several categories:

- Individuals who are blind or disabled according to Social Security rules (SSI-Linked) may qualify for Medi-Cal,⁴
- Families with children may qualify as long as deprivation exists (CalWORKs-linked),

- Children or pregnant women may qualify for Medi-Cal without regard to deprivation or assets/property, or
- Individuals may qualify with specific health care needs, such as dialysis, tuberculosis, breast and cervical cancer, or being in need of nursing home services.

The method by which a beneficiary qualifies for Medi-Cal is also known as their "eligibility pathway." A beneficiary's eligibility pathway frequently has to do with income relative to the federal poverty level (FPL), but resources, health, age, and disability status are also factors in eligibility determinations. For administrative purposes these eligibility pathways are often represented as "aid codes." Aid codes are a combination of numbers and letters used administratively to track the criteria by which each person qualified for Medi-Cal.

A beneficiary's aid code represents whether that beneficiary will receive full- or limited-scope health coverage, whether the coverage will be free of cost or require the payment of premiums, and if the beneficiary will be required to meet a monthly share-of-cost (SOC) obligation to receive coverage. Full-scope coverage is offered to qualified Medi-Cal recipients and includes all federally-mandated Medicaid services and all "optional" services offered by the state. Some beneficiaries, such as immigrants without satisfactory immigrant status (SIS),⁵ or those enrolled in special programs like the Tuberculosis Program,⁶ only qualify for limited- or restricted-scope benefits. Beneficiaries with restricted-scope Medi-Cal usually receive only emergency services, pregnancy-related services, or services necessary to treat their qualifying condition.^{7,8}

Beneficiaries enrolled in aid codes associated with Medi-Cal’s SOC program are individuals and families whose incomes are too high to qualify for cash assistance but insufficient to cover their medical expenses. Beneficiaries with a SOC obligation must contribute to their medical expenses up to a predetermined monthly threshold; it is only after beneficiaries meet their monthly obligation that they qualify for Medi-Cal benefits.

Medi-Cal Service Delivery Methods

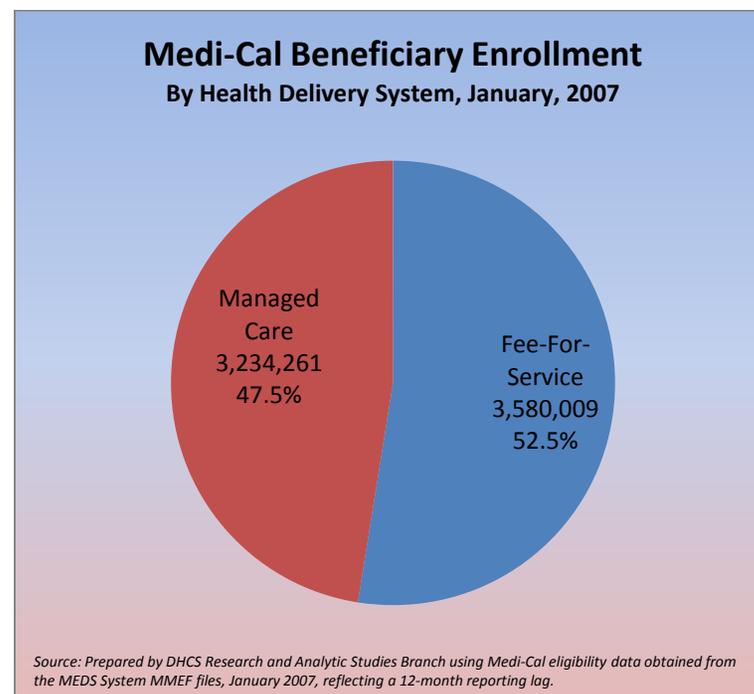
Once qualified for Medi-Cal, a beneficiary will receive care through one of Medi-Cal’s two service delivery models. The first service model—frequently called the “traditional service model”—is the FFS system. Under the FFS delivery model, beneficiaries seek medical services from a qualified Medi-Cal provider and the provider bills Medi-Cal for each service administered. Under the FFS system, beneficiaries must locate providers willing to accept Medi-Cal as a payer source.

Under the managed care delivery system, the Medi-Cal program contracts with health care plans to administer health care services to the enrolled population. The contracting health plans are paid a monthly prepayment for each enrolled member and assume the financial risk for all necessary health care services. Health plans assign beneficiaries to participating providers and arrange care through their network of providers.

Managed care in California is currently administered using three models based on county jurisdiction: the Two-Plan model, the Geographic Managed Care model (GMC), and the County Organized Health System (COHS) model. In counties with the Two-Plan model,

the Department of Health Care Services (DHCS) contracts with two plans, one commercial health plan and one locally-based county initiative, which allows beneficiaries to choose either plan. In GMC counties, DHCS contracts with several commercial health plans and beneficiaries choose the plan that suits their needs. In counties with a COHS model of care, enrollment in a county-level health plan is mandatory for almost all resident beneficiaries.

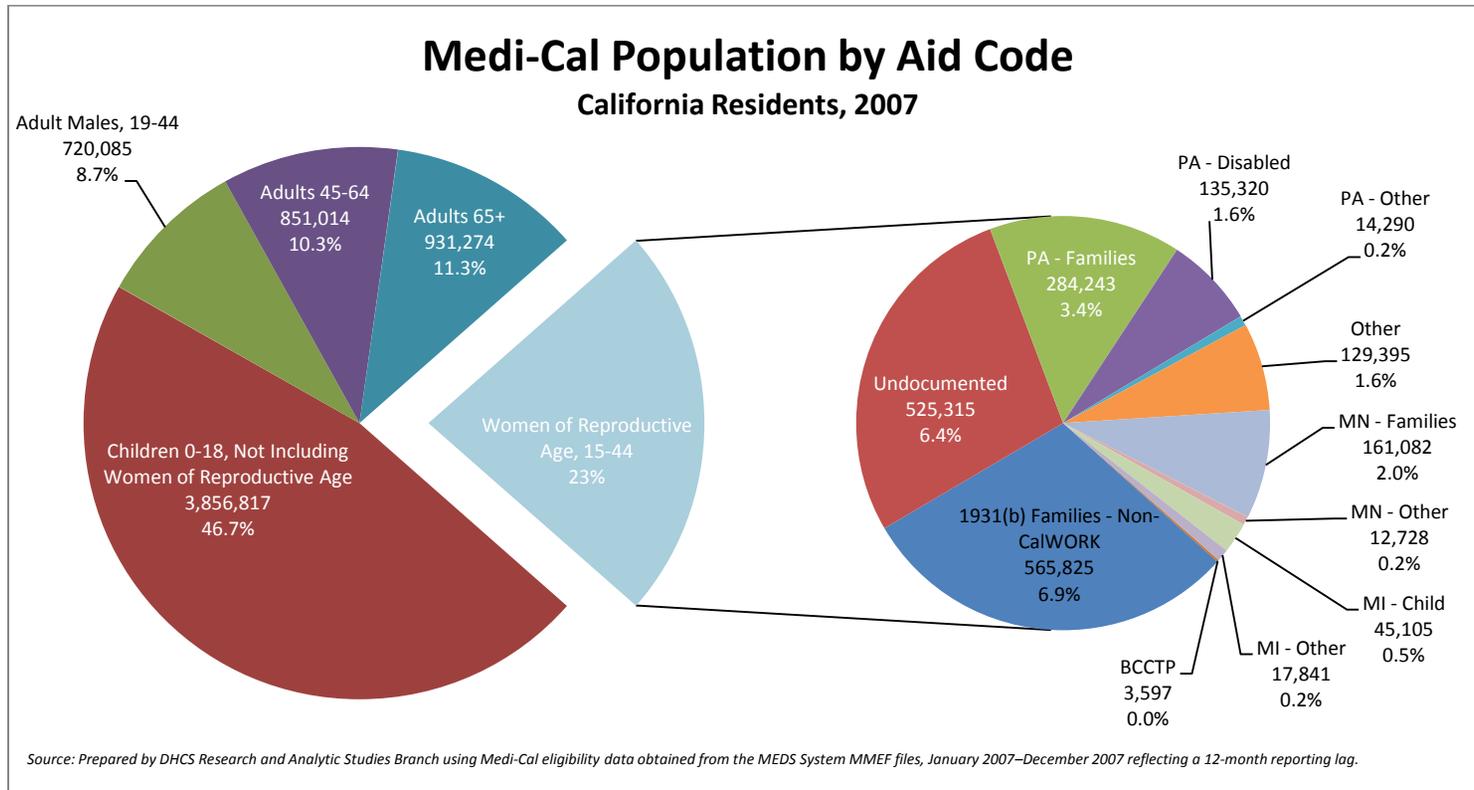
In 2007, Medi-Cal enrollment was slightly lower for those participating in managed care than those participating in FFS.



Medi-Cal's Population

During calendar year 2007, 8.25 million Californians were eligible for Medi-Cal for at least one month. Of these beneficiaries, 23%, or 1.9 million, were women between the ages of 15 and 44. Among women of reproductive age, the most common eligibility pathways included 1931(b) Families – Non-CalWORKs, Undocumented (lacking SIS), Public Assistance – Families, Medically Needy Families, Public Assistance Disabled, and 200% Income Disregard and Asset Waiver Program. The figure below shows the break-down of the Medi-Cal population by eligibility pathway.

As previously noted, a beneficiary's eligibility pathway represents whether they are entitled to full-scope Medi-Cal benefits without a SOC, full-scope benefits after meeting a monthly SOC obligation, or limited scope services such as emergency and pregnancy-related services. Some women may be enrolled in an aid code that requires a monthly SOC obligation prior to pregnancy, but become eligible during pregnancy for special programs designed to ensure access to early prenatal, postpartum, and other services without a SOC obligation.



Medi-Cal's Special Pregnancy Related Programs

In the late 1980s and early 1990s, federal legislation was enacted that expanded publically sponsored health insurance to low-income pregnant women.⁹ This provided states the opportunity to improve birth outcomes among vulnerable women and newborns by improving access to early prenatal care. States invested in outreach activities, enrollment simplification, and enhanced prenatal benefits. The passage of federal simplification legislation provided states with the flexibility to adopt:

- A simplified enrollment processes,
- Continuous eligibility through pregnancy and 60 days postpartum,
- Presumptive eligibility,
- Outstationed eligibility workers in community health centers and safety-net hospitals,
- Dropping asset tests, and
- Expediting eligibility determinations.

California enacted legislation in response to these federal legislative changes which resulted in the establishment of several special Medi-Cal eligibility pathways for pregnant women. These eligibility pathways were designed to encourage early and appropriate prenatal care and to ensure that pregnant women could easily gain Medi-Cal coverage. With many of these special pregnancy programs it is possible for a woman to be simultaneously enrolled in Medi-Cal under an aid code that entitles her to Medi-Cal services after meeting a monthly SOC obligation, which allows her access to non-pregnancy related services.

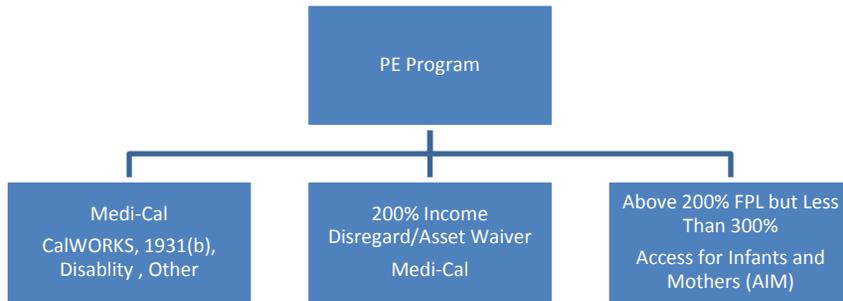
Presumptive Eligibility (PE) Program

Medi-Cal's PE program enables providers to bestow immediate, temporary prenatal Medi-Cal coverage to a pregnant woman based on her response to a few income and residency questions.¹⁰ This coverage is given under the assumption that the pregnant woman will be eligible for Medi-Cal once she applies; once the beneficiary becomes eligible for the PE program, they must start the formal Medi-Cal application process by the end of the month following the month the temporary presumptive benefits started.¹¹ Beneficiaries who apply for Medi-Cal coverage or CalWORKS during the PE period will receive another 60 days of PE coverage.¹² After a PE beneficiary has been determined eligible at the county level, their PE coverage ends and they are enrolled into one of the other Medi-Cal programs.¹³ If the Medi-Cal application is denied, PE coverage ends at the end of the month that the applicant is found ineligible.¹⁴

The PE program covers all ambulatory prenatal care services,¹⁵ but does not cover the costs of delivery, family planning, or induced abortion procedures.¹⁶ Women receiving coverage under the PE program may also be eligible for Medi-Cal through the Medically Indigent (MI) or Medically Needy (MN) programs, which may require a SOC. These women may receive Medi-Cal covered services unrelated to pregnancy through this eligibility linkage.

When a pregnant woman with PE coverage is deemed eligible for Medi-Cal, she will be transferred into the Medi-Cal program that best reflects her eligibility status. Former PE eligibles may move into a specialized Medi-Cal pregnancy category of eligibility such as the 200% Income Disregard/Asset Waiver Program, or may seek enrollment into California's Access for Infants and Mothers (AIM) program.

Potential Coverage Options after PE Coverage Ends



Income Disregard and Asset Waiver Program (200% Program)¹⁷

Pregnant women with an income below 200% FPL qualify for this program.¹⁸ This program covers eligible women with no SOC and beneficiaries cannot be charged co-payments or deductibles.¹⁹ In determining a pregnant woman’s eligibility, Medi-Cal counts the pregnant woman as a family of two. A woman who was enrolled in Medi-Cal under a SOC aid code prior to becoming pregnant may also enroll in the Income Disregard and Asset Waiver Program and receive no-cost pregnancy-related health care services. These women will receive no-cost pregnancy-related health care services under the Income Disregard and Asset Waiver Program and non-pregnancy-related services under the SOC aid code. Pregnant women may enter this program directly or through the PE program.

Both citizens and non-citizens (residents who cannot prove SIS) may participate in this program. Beneficiaries lacking SIS are entitled to only emergency and family planning services. Pregnant women without SIS

are also entitled to medically necessary pregnancy-related services.²⁰ “Pregnancy-related services” are defined as those required to ensure the health of the pregnant women and the fetus.²¹ In practice, this includes office visits, prenatal care, services for complications of pregnancy, lab tests, prescription medicine, anesthesia, labor and delivery, postpartum care and family planning services.

Transferring From a Limited Scope Coverage Program to a Full Scope Coverage Program during Pregnancy

It is possible for women to transfer to a full-scope Medi-Cal program such as 1931(b) non-CalWORKS in the third trimester of their pregnancy.²² In this situation, the difference between a full-scope program and a restricted program is that eligible women can receive not only pregnancy-related services, but all services contained within the state plan, which includes non-pregnancy related services.

Medi-Cal’s 1931(b) Non-CalWORKS program provides children through age 18 (19 if they’re expected to graduate), their parents, and caretaker relatives with free Medi-Cal with no SOC, based on the deprivation of the child. If a family meets the income and property-limit requirements and can prove that the child is deprived (deprivation determination is based on the absence of one parent in the family, or the underemployment or unemployment of the principal wage earner) they may receive full-scope 1931(b) coverage with no time limit.²³ A pregnant woman can be evaluated for 1931(b) coverage based on the deprivation of the unborn child during the third trimester of the pregnancy. The father of the child is not eligible to receive coverage under 1931(b) until the birth of the child.²⁴

In many counties, when a woman enrolls in a full scope aid code such as 1931(b), she is mandatorily required to participate in a Medi-Cal managed care plan. If a pregnant woman has established a relationship with a specific FFS provider who is not a participant of the Medi-Cal managed care plan's provider network, Medi-Cal provides for a medical exemption option.²⁵ This allows the pregnant woman to maintain continuity of care; she will be allowed to remain in Medi-Cal's FFS system and continue to receive health care services from her established Medi-Cal FFS provider. A woman may therefore, initiate enrollment into Medi-Cal via the PE program, transition to Medi-Cal's Income Disregard/Asset Waiver Program (200% Program), and finally enroll into Medi-Cal under the 1931(b) program, having established eligibility in three different aid codes throughout her pregnancy.

It is important to point out that this transition results in complexity when attempting to compare one health care system to another with respect to outcomes such as early initiation of prenatal care. For example, a woman may transition from Medi-Cal's traditional FFS system in her third trimester into a Medi-Cal managed care plan. In this scenario, the woman's birth event, using the aid code at time of birth, will assign this pregnancy event to Medi-Cal managed care. But in the case of early prenatal initiation, the woman's first six months of pregnancy occurred while enrolled in Medi-Cal's FFS system. It was the FFS system, which was responsible for initiating early prenatal care.²⁶ The FFS system's effectiveness, in this case, will inappropriately accrue to Medi-Cal managed care if not accounted for properly.

Postpartum Program

Because financial barriers may inhibit a woman's access to postpartum services, a special postpartum program is available. The postpartum

program offers coverage with no SOC for up to 60 days after the pregnancy ends. Women who participated in a MN program or MI program when they are pregnant may enroll in this program to receive postpartum care without a SOC obligation.²⁷

Access for Infants and Mothers (AIM)

Although the AIM program is not a Medi-Cal program it provides medically necessary services to pregnant women with incomes between 200 and 300 percent of poverty through participating health plans. The AIM program is administered by the Managed Risk Medical Insurance Board. Women qualify for participation in this program if they have no maternity insurance, or have health insurance with a high maternity-only deductible (over \$500), and have family income too high to qualify for no-cost Medi-Cal.²⁸

AIM provides full coverage private health insurance at low cost to pregnant women during pregnancy as well as 60 days postnatal care. As noted previously, to be eligible for AIM, a pregnant woman must have a family income between 200% and 300% of the FPL as determined by family size. There is no property limit.

REPORT INTRODUCTION

The current report presents detailed data for 2007 California resident births occurring in a hospital setting, including data on maternal and birth characteristics and select outcomes for births paid under the FFS and managed care programs of Medi-Cal. The report will compare births in the Medi-Cal FFS and Medi-Cal managed care programs, as well as births paid for by private insurance and those funded by other sources. These data are important in several ways: 1) they provide a profile of the Medi-Cal beneficiaries that seek care for delivery services; 2) they identify factors that may contribute to variations in birth outcomes; and 3) they provide useful comparisons between Medi-Cal birth outcomes and those of other births in the state. Because birth outcomes can provide an indication as to how well the health care system is serving its members, routine monitoring of these data is essential.

METHODS

The primary source of data for this report comes from the birth certificates registered in California and recorded on the 2007 birth statistical master file maintained by the California Department of Public Health, Center for Health Statistics. Additional data from the Office of Statewide Health Planning and Development (OSHPD) hospital discharge file identified comorbidities among women with hospital deliveries. Medi-Cal inpatient hospital claims containing dates of service from January 1, 2007 through December 31, 2007, and containing a delivery diagnosis code confirmed birth certificate records for women giving birth in 2007 under the Medi-Cal FFS program. Women with a delivery under the managed care program were

confirmed in the birth statistical master file by using Medi-Cal eligibility records from the Medi-Cal Eligibility Determination System (MEDS).

Over 96% of birth certificate records indicating a hospital delivery were confirmed with data from the OSHPD hospital discharge file, totaling 560,884 hospital-based births to California residents.

The data were grouped into four broad categories based on the Medi-Cal confirmations made in the process described above and by using the payer source reported in the birth statistical master file. These groupings are: Medi-Cal FFS, Medi-Cal managed care, Private Insurance, and Other. The “Other” grouping includes 25,207 birth records with a payer source of “Medi-Cal” that could not be confirmed using the Medi-Cal eligibility data or data from FFS claims. The “Other” insurance category also includes birth records containing a reported payer source of “Other Federal State or Local Government Programs,” “Self Pay,” “Indian Health,” “Champus/Tricare,” “Other,” and “Unknown.”

Data presented on maternal characteristics (mother’s age, race/ethnicity, nativity, and education), birth characteristics (singleton/multiple birth, delivery method, prenatal care), and birth outcomes (birthweight, gestational age) are the data as reported on the birth certificate. Beginning in 2007, data pertaining to pre-pregnancy weight and smoking were collected on California birth certificates and are included in this report. Data pertaining to maternal comorbidities such as hypertension, diabetes, and substance use are data contained on the OSHPD hospital discharge file. Comorbid conditions reported during the hospital delivery were identified using the Clinical Classification Software (CCS) available from the Agency for

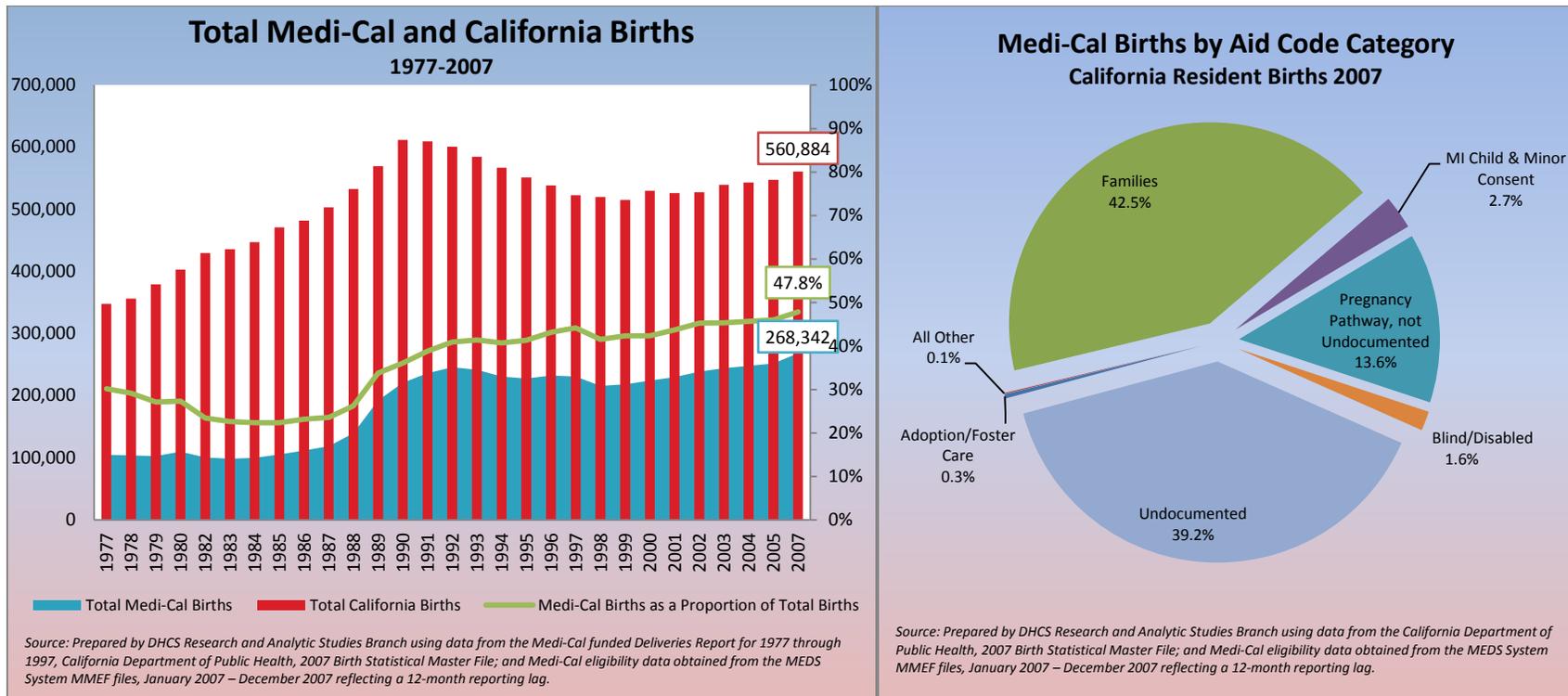
Healthcare Research and Quality (AHRQ). Medi-Cal Aid groupings are derived using data from the Medi-Cal eligibility file for the month during which the birth occurred, and are reported for both FFS and Managed Care beneficiaries. Detailed data tables are presented in the appendices of this report. Data tables which reflect county-specific tabulations have been censored for counties with populations less than 50,000 (based on county population estimates, Department of Finance, Table E-2) to protect the confidentiality of Medi-Cal beneficiaries.²⁹

FINDINGS

Medi-Cal Characteristics

In 2007, a record 47.8% of births to California residents were paid for by the Medi-Cal program. More than half of these births were to beneficiaries residing in Los Angeles, Orange, San Bernardino, Riverside and San Diego counties. Of the 268,342 Medi-Cal financed births, 71.0% were to beneficiaries in the FFS program while the remaining 29.0% were to managed care program beneficiaries (see Table 1).

A large segment of the Medi-Cal financed births were to beneficiaries eligible for services through the Undocumented aid codes (39.2%) or through aid codes associated with Families (42.5%) (see Table 9c). More than half (58.9%) of Medi-Cal beneficiaries who gave birth in 2007 were between the ages of 20 and 29, were Hispanic mothers (71.8%), and were foreign-born (54.4%) (see Table 1).

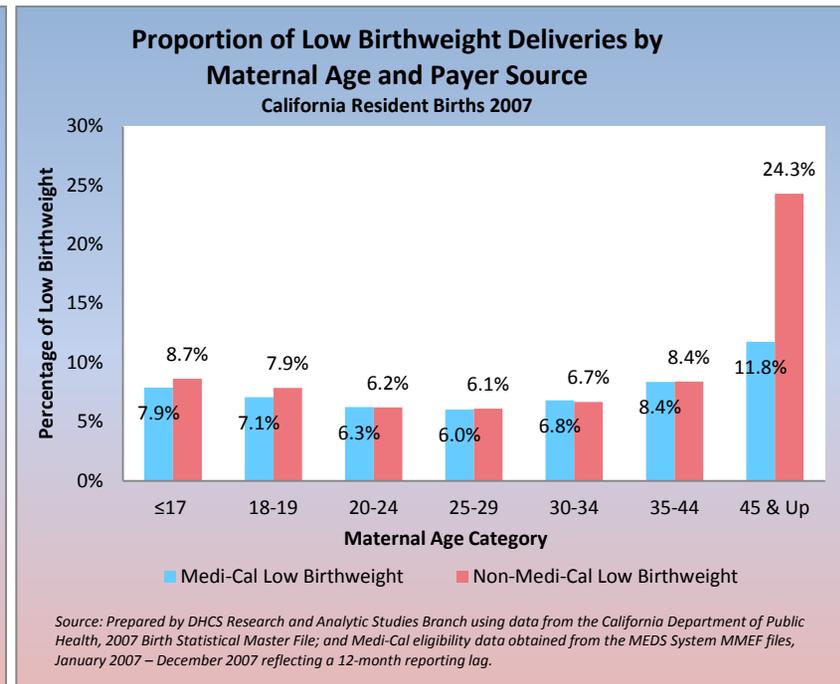
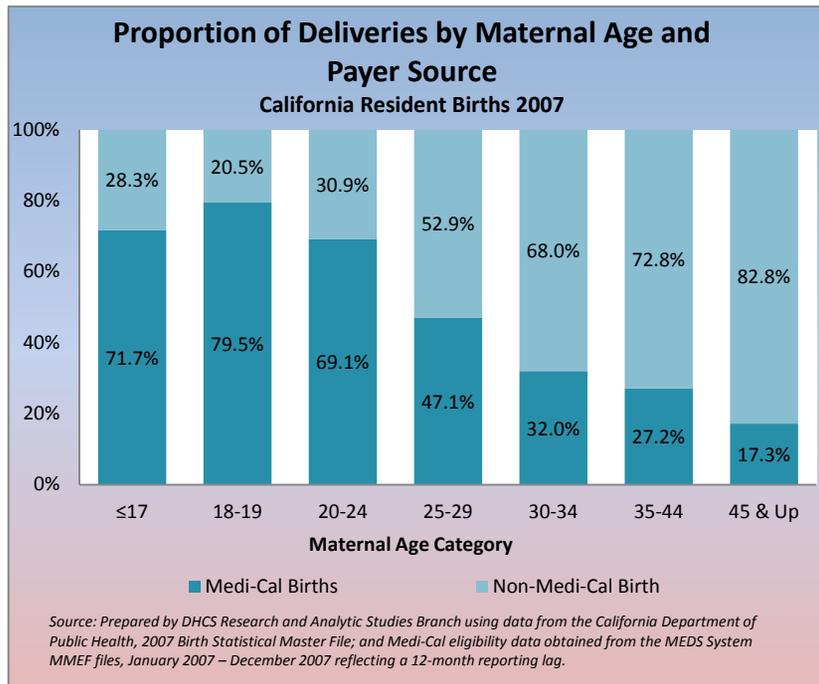


Maternal Demographic Characteristics

Age: Mothers with Medi-Cal financed births were, on average, younger than mothers whose births were paid by other sources. Among Medi-Cal paid births, the mean maternal age was 25.7 (median = 25), whereas the mean maternal age among non-Medi-Cal births was 30.1 (median=30). The largest proportion of Medi-Cal financed births were to mothers age 20-34 (74.9%), an additional

15.4% of Medi-Cal births were to teen mothers (age ≤19), and 9.8% were to older mothers (≥35).

Medi-Cal paid for 3.5 times as many teen births compared to births paid by private insurance or other funding sources (see Table 1). Births to teen mothers are of particular concern since they are more likely to be premature and of low birthweight.^{30,31,32} Premature and low birthweight newborns are at increased risk for death and a host of disabling health conditions.

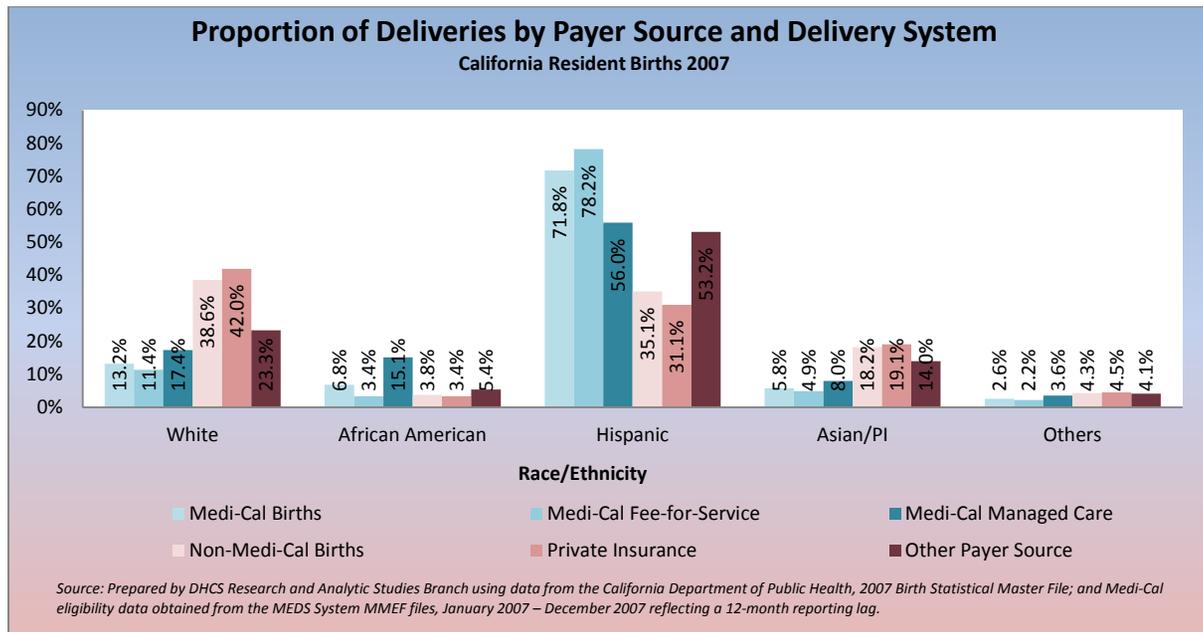


Race/Ethnicity: Mothers of Hispanic ethnicity comprise the largest segment of Medi-Cal financed births. Overall, 71.8% of births paid by Medi-Cal are to Hispanic mothers, while only 35.1% of non-Medi-Cal financed births are to mothers of Hispanic ethnicity (see Table 1). Additionally, 13.2% of Medi-Cal financed births were to white mothers compared to 38.6% of non-Medi-Cal mothers.

The remaining Medi-Cal births were attributed to the following groups (in descending order): 6.8% to African-American mothers, 5.8% to Asian or Pacific Islander mothers, and 2.6% to mothers of other race/ethnic backgrounds. These groups were represented in non-Medi-Cal births in significantly different proportions; Asian or Pacific Islander mothers composed 18.2%, African American mothers were 3.8% and

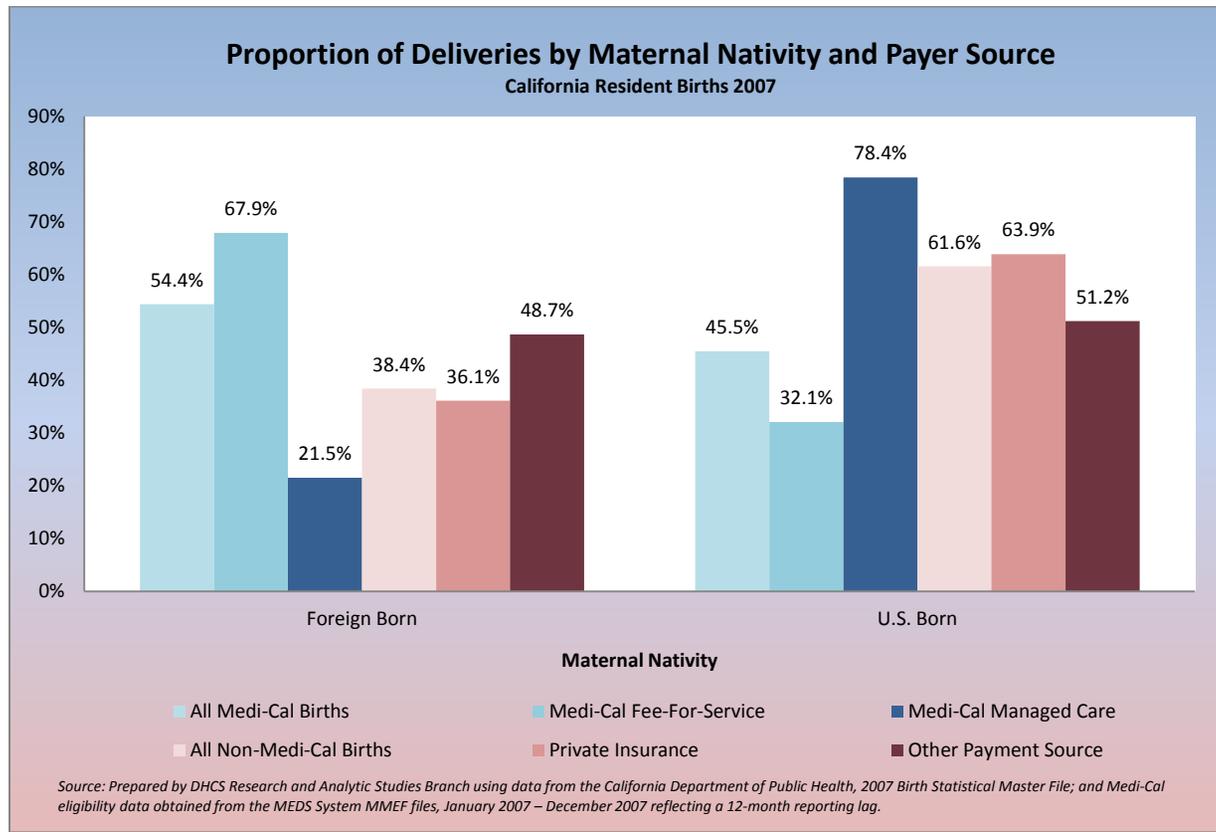
mothers of other race/ethnic backgrounds made up 4.3% of the total births (see Table 1).

Differences in race/ethnic composition exist between mothers receiving services in the Medi-Cal FFS program compared to those receiving services in Medi-Cal managed care. While 6.8% of all Medi-Cal births are to African-American mothers, the proportion of African-American births financed through the Medi-Cal managed care program is nearly 2.5 times that or 15.1% (see Table 1). These differences are important to recognize since, compared with most other race/ethnic groups; African-American mothers have higher rates of low birthweight and preterm deliveries, which are leading contributors to infant mortality.^{33,34,35,36}



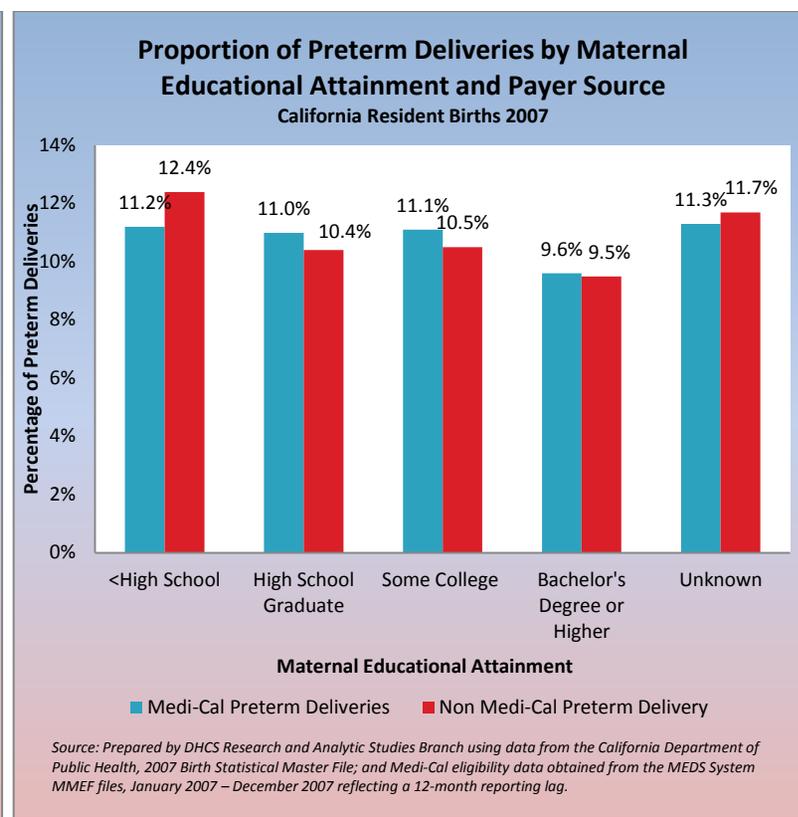
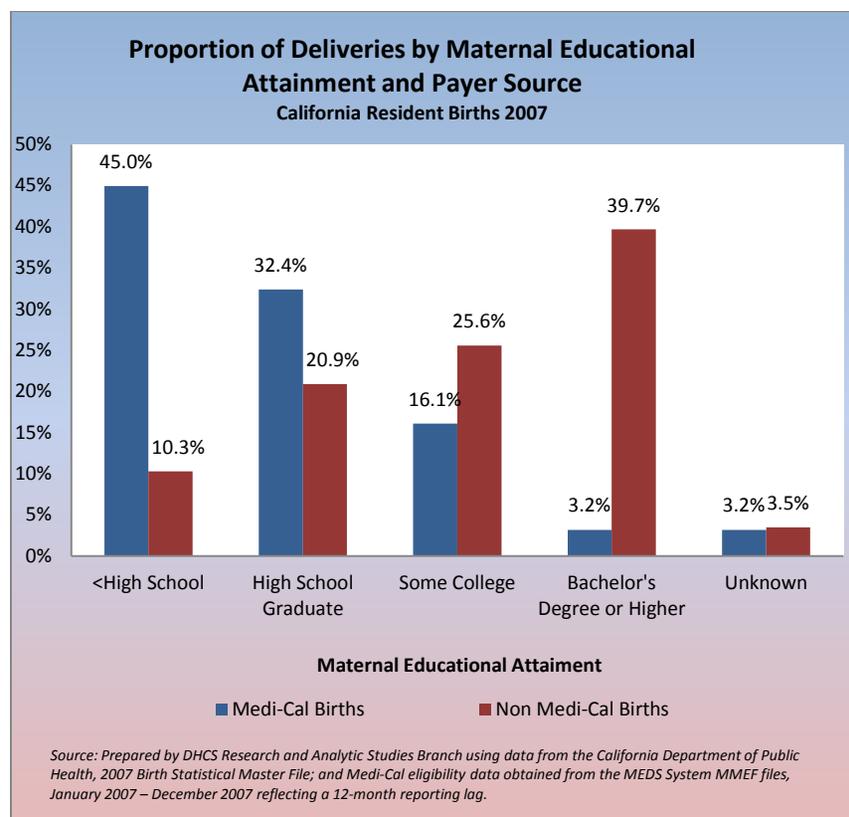
Nativity: Differences between U.S.-born and foreign-born mothers with regard to low birthweight and premature births have long been reported in the literature. Foreign-born mothers of virtually every racial and ethnic group in the U.S. experience better birth outcomes compared to their U.S.-born counterparts, despite their low socioeconomic status, low educational attainment, and lack of or late initiation of prenatal care.^{37,38} Among Medi-Cal financed births, 45.5% are to U.S.-born mothers and 54.4% are to foreign-born mothers. A larger segment of the non-Medi-Cal financed births are U.S.-born

mothers (61.6%), and a smaller segment (38.4%) are foreign-born mothers. Stark differences exist when comparing the Medi-Cal managed care beneficiaries with the Medi-Cal FFS beneficiaries. In Medi-Cal managed care, 21.5% of mothers are foreign-born whereas over 67.9% of mothers in the Medi-Cal FFS program are foreign-born (see Table 1).



Education Status: Maternal educational attainment has an important effect on the number of births and the likelihood of adverse birth outcomes.³⁹ Mothers with Medi-Cal financed births had lower educational attainment than mothers with non-Medi-Cal financed births. Overall, 45.0% of mothers in Medi-Cal had less than a high school education, 32.4% had a high school diploma, and 16.1% had

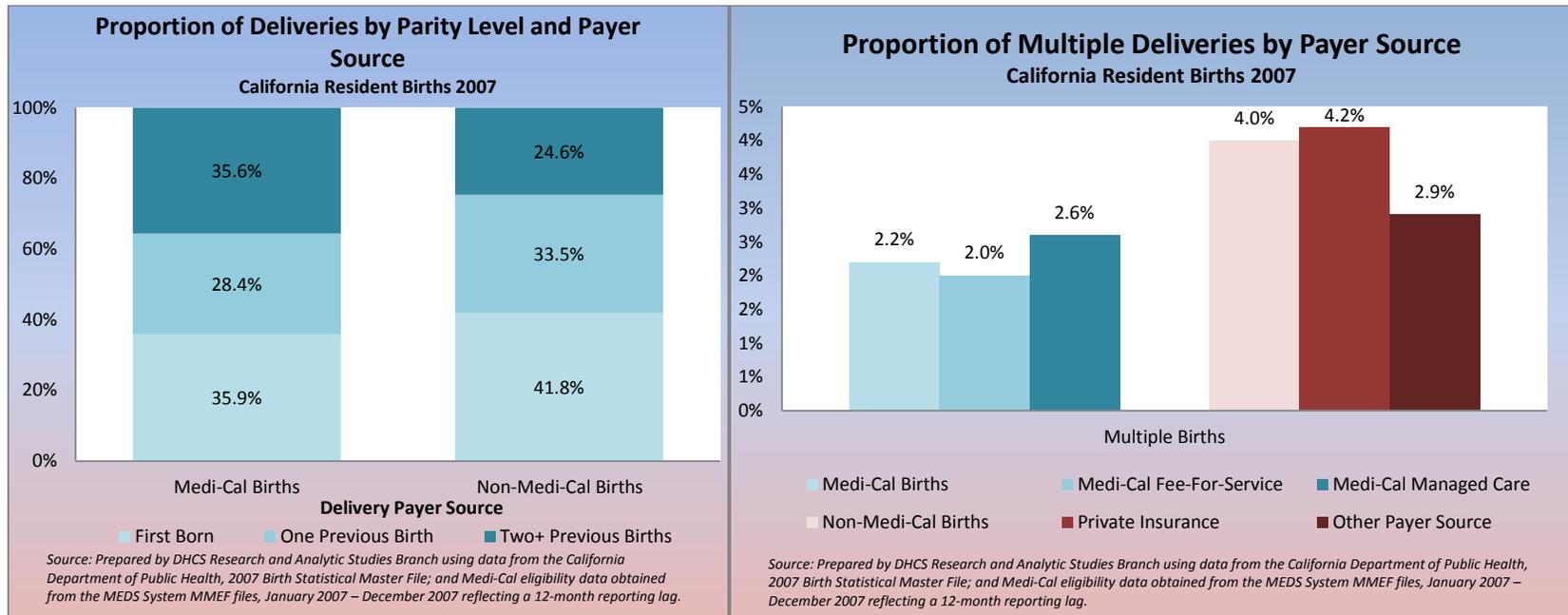
some college or a college degree. Conversely, 65.3% of non-Medi-Cal mothers had some college or attained a college degree, while 20.9% had a high school diploma and 10.3% had less than a high school education. Among both Medi-Cal and non-Medi-Cal funded births, mothers with the highest educational attainment had the lowest rates of low birthweight and preterm deliveries (see Table 1 and Table 7a).



Birth Characteristics

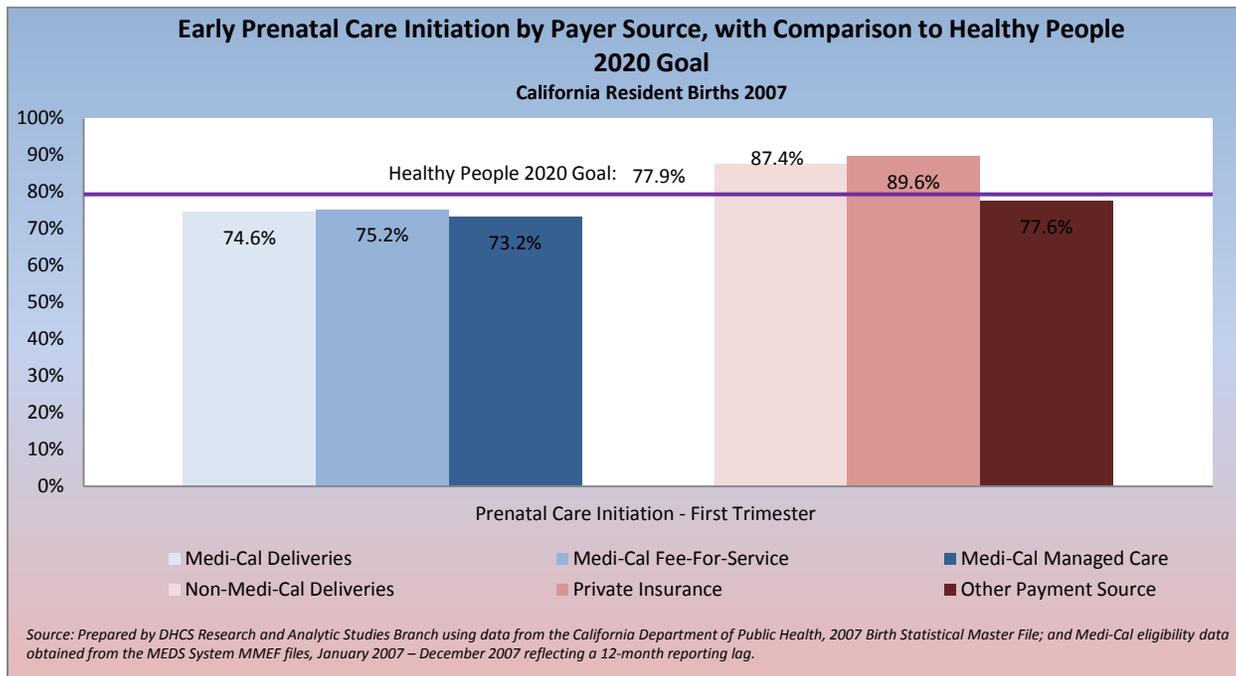
Parity: High parity can increase the risk for adverse birth outcomes such as low birthweight, premature birth, stillbirth and neonatal death.^{40,41} Among Medi-Cal beneficiaries, 35.9% were first time mothers, 28.4% had one previous birth, and 35.6% had two or more previous births. Medi-Cal managed care mothers had the highest parity with 38.8% having two or more previous births. Among non-Medi-Cal births, and particularly among the privately insured, mothers had lower parity. A total 41.8% of non-Medi-Cal mothers were first time mothers; 33.5% had one previous birth, and 24.6% had two or more previous births (see Table 2).

Multiple Gestation Births: Newborns born in multiple gestation births (twins or higher) are more likely to be of low birthweight or to be born prematurely.⁴² Multiple gestation births are more common among older mothers or mothers using artificial reproductive technology.^{43,44} These newborns are also more likely to be delivered via cesarean section. Among Medi-Cal FFS beneficiaries, 2.0% were multiple gestation births, while among Medi-Cal managed care beneficiaries, 2.6% were to multiple gestation births. Twin or higher births were more common among all non-Medi-Cal births at 4.0%, and particularly among births that were paid by private insurance sources (4.2%) (see Table 2).



Prenatal Care: Since important developments occur within the fetus in the first 12 weeks of pregnancy, timely prenatal care is essential. Women who receive prenatal care later in their pregnancies are at increased risk for having a preterm or low birthweight newborn, and having a newborn requiring care in an intensive care unit.⁴⁵ Experts across the nation agree that early prenatal care initiation can help assure healthier deliveries, and have set the Healthy People 2020 goal that 77.9% or more of all pregnant women in the U.S. receive prenatal care in their first trimester of pregnancy.⁴⁶ Among all Medi-Cal beneficiaries, 74.6% received prenatal care during their first trimester of pregnancy, 18.5% began prenatal care in their second trimester, and

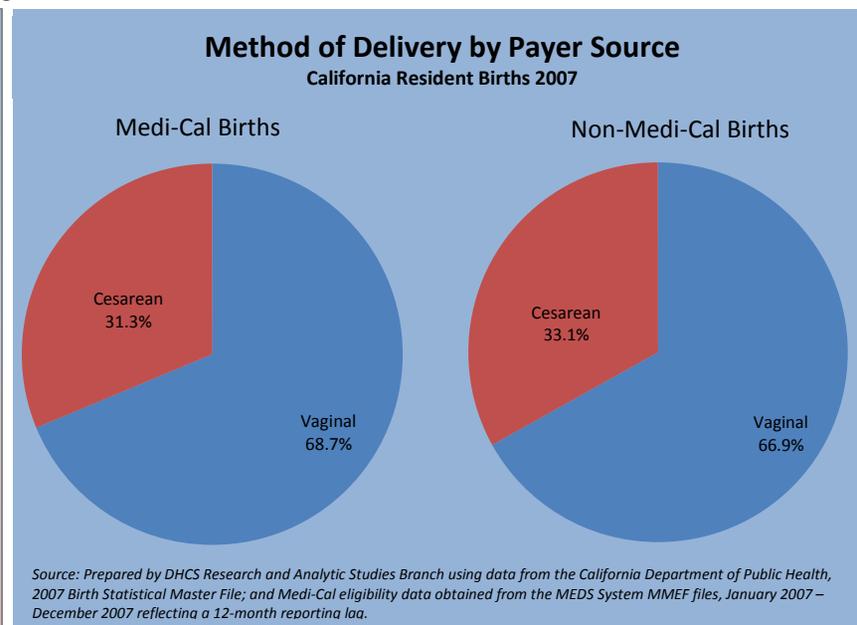
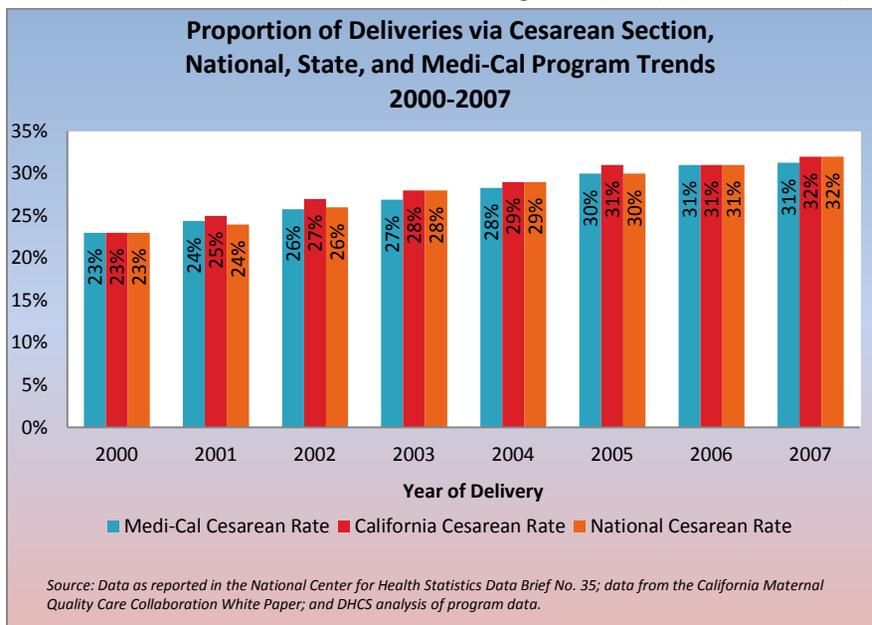
3.9% began care in their third trimester of pregnancy. In contrast, 89.6% of privately-insured mothers received prenatal care in their first trimester, while only 8.7% received care during their second or third trimester of pregnancy. The lowest rates of early prenatal care were among the Medi-Cal managed care beneficiaries (73.2%) and mothers with births paid by other funding sources (77.6%) (see Table 2). Medi-Cal beneficiaries receiving care via the Undocumented and Pregnancy Pathway aid categories had the highest rates of prenatal care during the first trimester of pregnancy (78.5% and 76.5%, respectively) (see Table 8b).



Delivery Method: In 2007, 32% of all births in the U.S. were delivered via cesarean section, a method that is costly and poses additional health risks for both mother and infant.⁴⁷ Among California births occurring in a hospital, 32.3% were delivered via cesarean section, slightly above the national average. Among Medi-Cal births, the cesarean section rate is slightly lower than the state average at 31.3%, but is similar across Medi-Cal managed care and FFS funded deliveries. Among non-Medi-Cal funded births, the cesarean delivery rate is 33.1% and highest among privately insured deliveries at 33.5%. Primary cesarean section is lower among Medi-Cal than among non-Medi-Cal deliveries (16.5% and 20.2%, respectively). Among Medi-Cal beneficiaries, the primary cesarean section rate was highest among mothers under age 15 (20%), older women over age 45 (30.9%), African Americans (20.5%), Pacific Islanders (20.4%), and women who self-identified with two or more race categories (20%) (see Table 4a).

Medi-Cal beneficiaries with higher educational attainment also delivered via primary C-section at rates higher than the program average (20.9% vs. 16.5%, respectively). Mothers whose deliveries were funded by non-Medi-Cal sources had similar trends in primary C-section rates. For example, those ages 15 and under (21.3%), older mothers age 45 and over (43.1%), and African American women (24.1%) experienced higher than average primary C-section deliveries rates (See Table 4b).

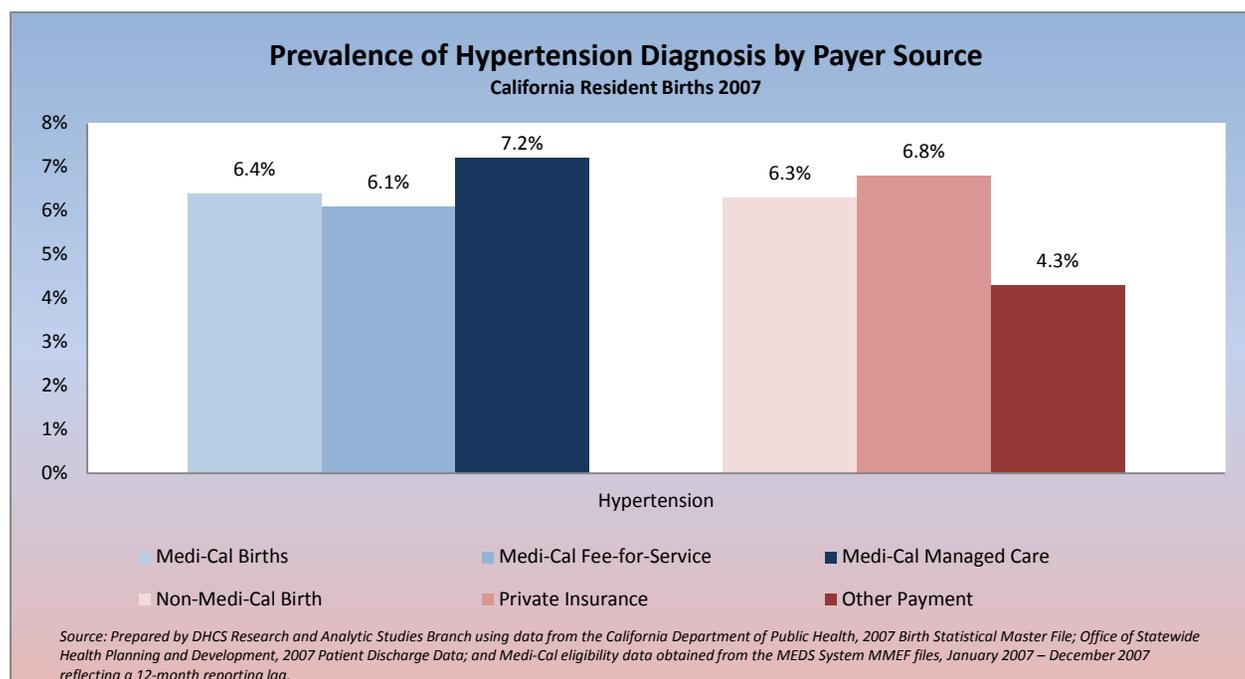
Medi-Cal’s overall cesarean rates have increased by 36.7% in the last several years, from 22.9% in 2000 to 31.3% in 2007. Clear clinical indications exist for undergoing a cesarean delivery, but non-medical factors also influence these rates and include maternal choice, physician practice patterns, and nationally recommended practice guidelines.



Maternal Comorbidities and Health Behaviors

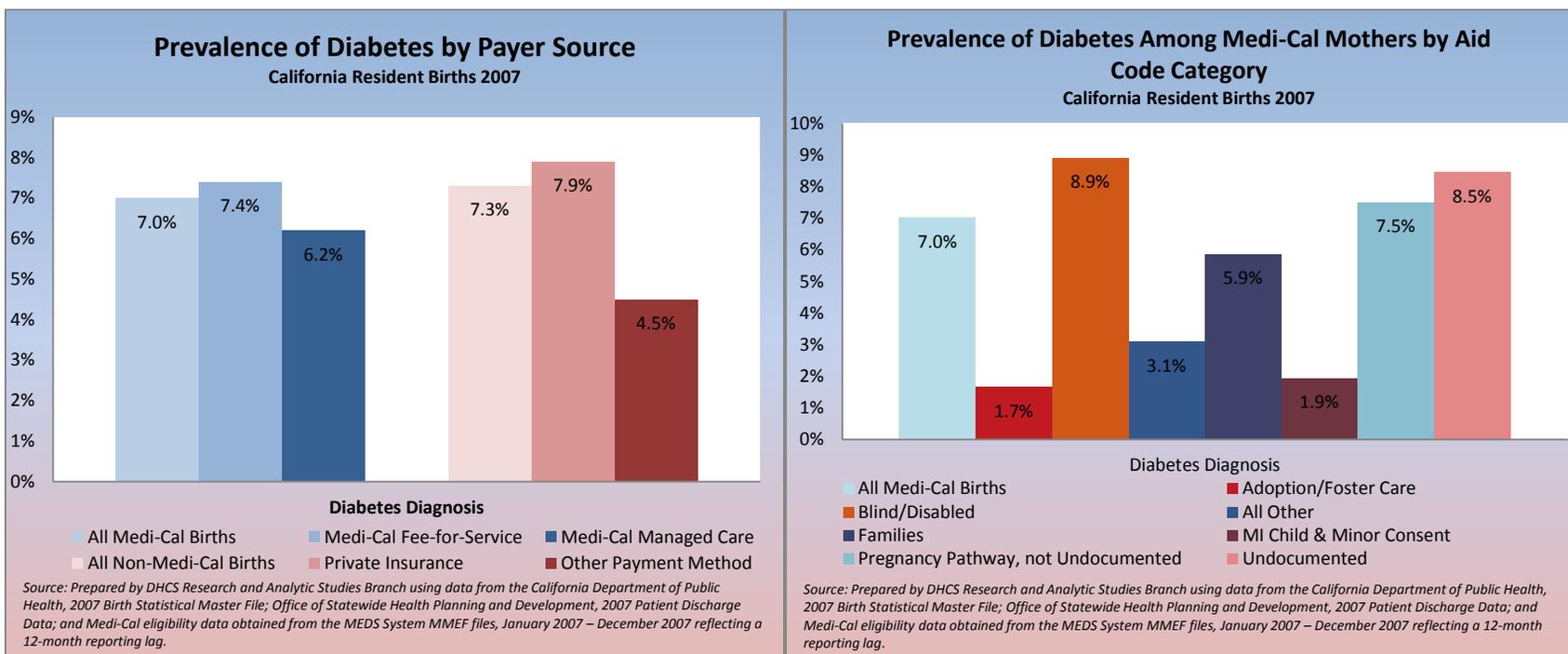
Hypertension: Gestational hypertension is a variation of hypertension that develops as a result of pregnancy and diminishes after childbirth. Whether chronic or gestational, hypertension during pregnancy is dangerous to both the mother and the fetus. Doctors attributed 11.1% of the pregnancy-related maternal deaths in 2006 and 2007 to hypertension.⁴⁸ The adverse birth outcomes linked to hypertension include low birthweight, preterm birth, and placental abruption. Women who are obese prior to pregnancy, under 20 years old or over 40 years old, or have diabetes are at a greater risk for developing hypertension during pregnancy.⁴⁹

The proportion of Medi-Cal and non-Medi-Cal mothers with a hypertension diagnosis (either gestational or chronic hypertension) noted in the hospital record were similar in 2007, with 6.4% of Medi-Cal mothers having a hypertension diagnosis compared with 6.3% of non-Medi-Cal mothers. The most significant deviations were among Medi-Cal managed care mothers at 7.2% and mothers whose deliveries were paid by other funding sources at 4.3% (see Table 3). The highest prevalence of hypertension diagnosed in the hospital record was among Medi-Cal beneficiaries in the Blind/Disabled aid codes at 11.3% (See Table 8a).



Diabetes: Maternal diabetes is associated with several adverse birth outcomes, including large-for-gestational age births, preterm birth, miscarriage, stillbirth, or congenital birth defects.⁵⁰ Because of their larger size, babies born to mothers with diabetes are more likely to be born via cesarean section or to be injured during vaginal delivery. Maternal diabetes can have long-term negative effects on the mother and infant. Children born to mothers with diabetes are more likely to be overweight later in life and develop diabetes themselves, while 35% to 60% of women with gestational diabetes (a temporary disorder brought on by pregnancy) develop Type 2 diabetes within 10 years of delivery.⁵¹

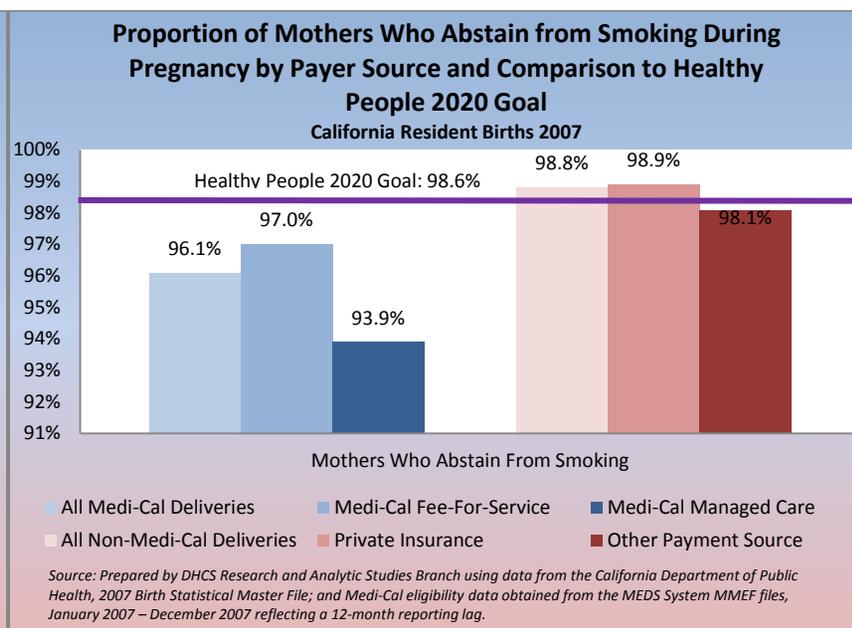
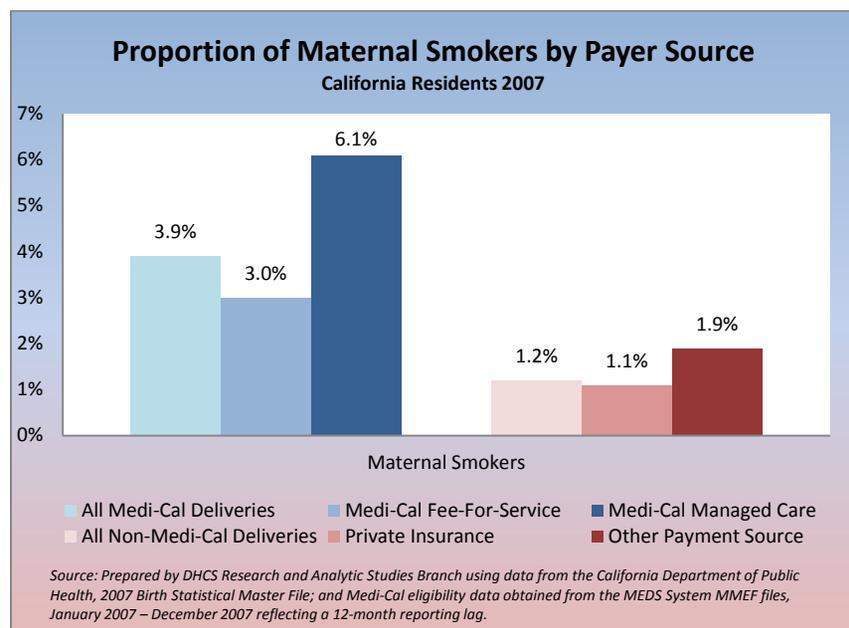
Gestational or pre-pregnancy diabetes occurred at the rate of 7.0% among mothers in the Medi-Cal program and 7.3% among all non-Medi-Cal mothers. Mothers who were privately insured and those in the Medi-Cal FFS program had higher rates of any diabetes diagnosis (7.9% and 7.4%, respectively), than mothers with other coverage (4.5%) (see Table 3). Diabetes was most prevalent among mothers in the Blind/Disabled aid codes (8.9%), among undocumented immigrants (8.5%), and among mothers in the Pregnancy Pathway aid codes (7.5%) (see Table 8a).



Smoking and Substance Use: Smoking during pregnancy is less common in California (2.8% of births in 2007) than in the rest of the U.S., where smoking is a factor in 10.4% of pregnancies.⁵² Despite the relatively low occurrence of this comorbidity in California, smoking during pregnancy is still a serious problem. Smoking during pregnancy is strongly associated with the potential for spontaneous abortion, low birthweight, stillbirth, growth retardation, preterm delivery, lung or brain tissue damage, and a higher occurrence of sudden infant death syndrome (SIDS).⁵³ Women who smoke during pregnancy are more likely to be young mothers, white or African American, low-income earners, and to be enrolled in a Medicaid program or have no insurance.⁵⁴

The California birth certificate recorded maternal smoking behaviors for the first time in 2007. While research suggests that mothers under-report their smoking behavior on the birth certificate,⁵⁵ prevalence of smoking among California mothers delivering in 2007 is presented below with the understanding that this health behavior may be underrepresented in the data.

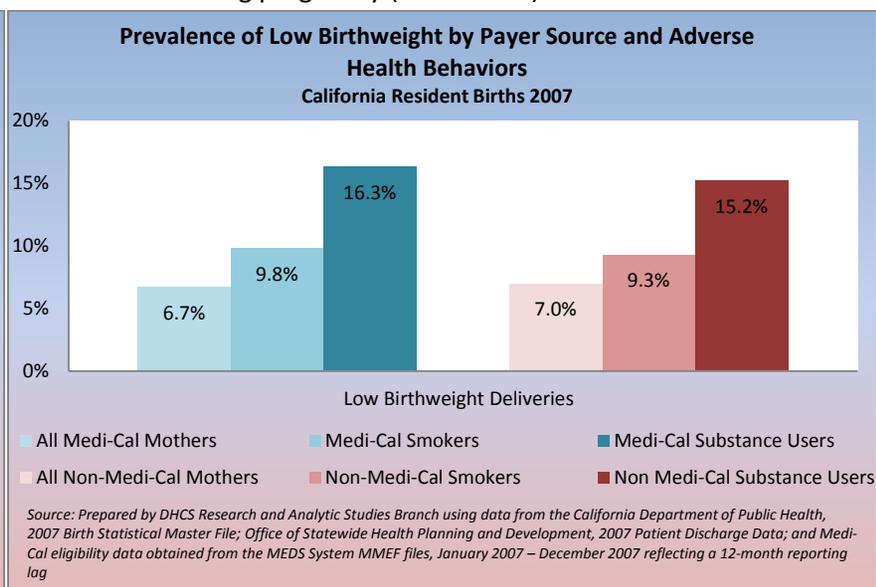
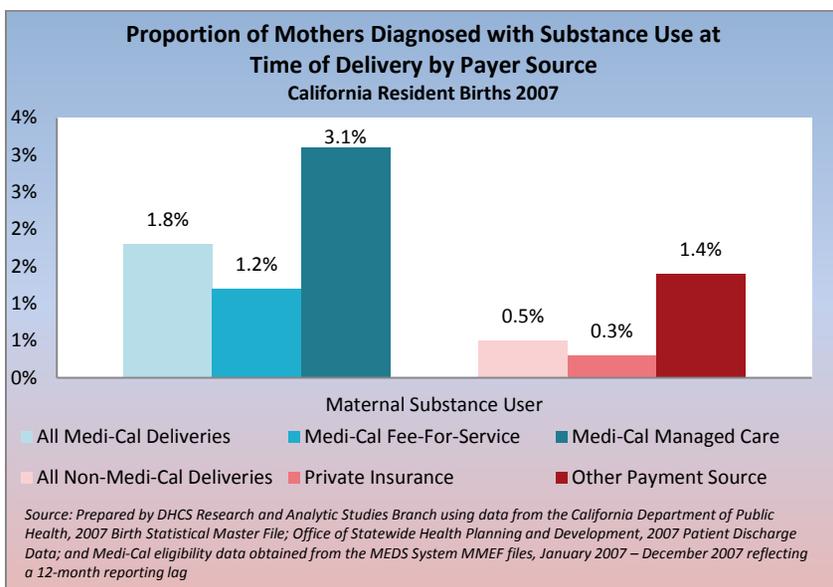
Medi-Cal beneficiaries had higher rates of smoking, particularly among those enrolled in Medi-Cal managed care. Just over 6% of Medi-Cal managed care mothers smoked during pregnancy compared to only 3% among mothers in the Medi-Cal FFS delivery system. Mothers whose deliveries were funded by non-Medi-Cal sources had a smoking prevalence of only 1.2%.



An estimated 4% of pregnant women in the U.S. are substance abusers.⁵⁶ Recent data suggests that while the maternal abuse of alcohol and cocaine has decreased, use of marijuana and methamphetamines has increased dramatically among young mothers.⁵⁷ Researchers have thoroughly documented the relationship between substance abuse and adverse birth outcomes, but the causal link is more difficult to prove; specific relationships to birth outcomes are often difficult to separate from other poor health choices made by the drug user. The following list contains birth outcomes and developmental problems commonly associated with substance abuse during pregnancy: spontaneous miscarriage, low birthweight, preterm birth, stillbirth, fetal withdrawal symptoms, small head size, abnormal facial features, learning disabilities, speech/language delays, and vision/hearing problems.^{58,59}

Substance use was over 3.5 times higher among Medi-Cal mothers than non-Medi-Cal mothers (1.8% compared to 0.5%, respectively), and over 2.5 times more common among mothers in Medi-Cal managed care than mothers in Medi-Cal FFS delivery systems (3.1% compared to 1.2% respectively). Medi-Cal mothers who smoked had a 51% increase in the number of low birthweight deliveries compared to those who did not smoke. An increase of 251% in low birthweight deliveries was observed among Medi-Cal mothers who used substances during their pregnancy (see Table 6b).

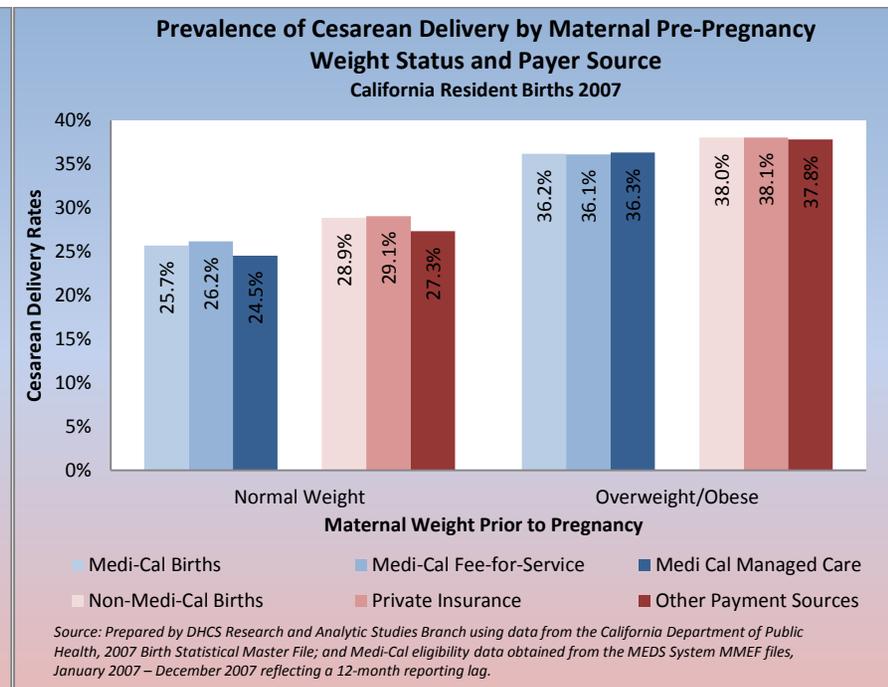
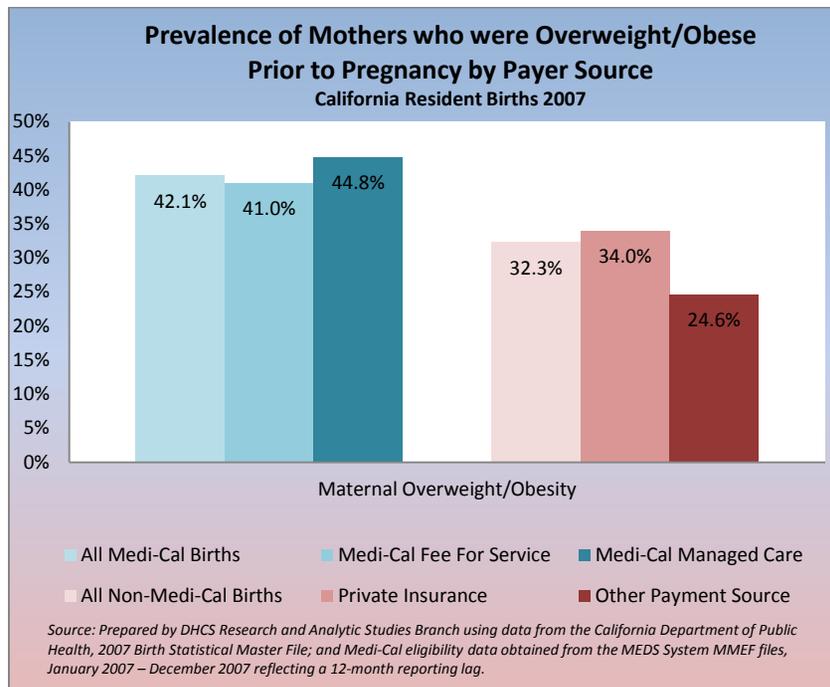
Smoking and substance use were highest among Medi-Cal managed care beneficiaries (6.1% smoked and 3.1% were substance users). Mothers with private insurance had the lowest prevalence of both negative health behaviors, with 1.1% smoking and 0.3% using substances during pregnancy (see Table 3).



Pre-Pregnancy Weight: Body Mass Index (BMI) is defined by the National Heart, Lung, and Blood Institute (NHLBI) as a measurement for gauging weight and obesity. Calculated from height and weight, BMI is an estimate of body fat that helps measure risk of certain diseases and overall health.

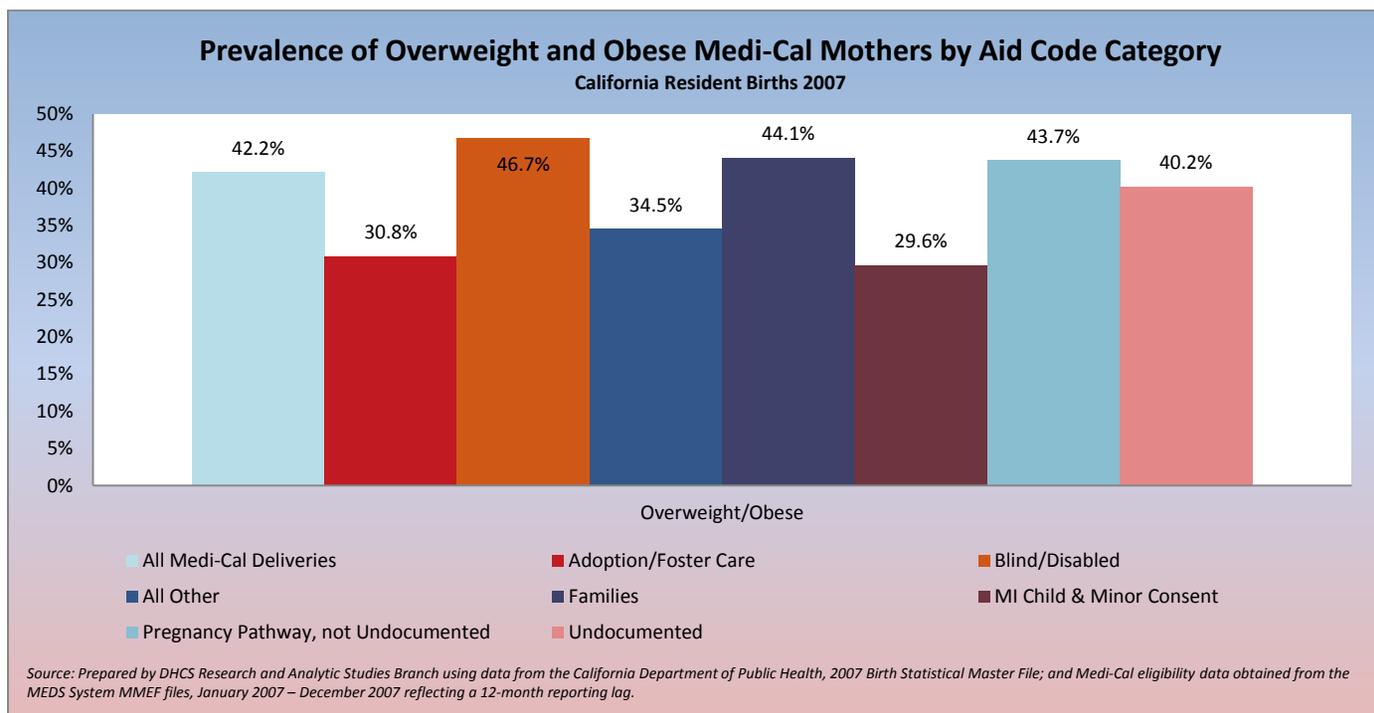
Maternal pre-pregnancy weight ranging outside of normal is associated with many adverse birth outcomes.⁶⁰ Women within normal weight range are less likely to deliver preterm, develop gestational

hypertension or diabetes, or require a cesarean section in comparison to women who are overweight or obese.⁶¹ Maternal obesity is also associated with poor infant outcomes such as large-for-gestational-age (LGA), macrosomia, neural tube defects, stillbirth, neonatal death, and congenital heart defects (the leading cause of infant death when attributed to birth defects). Newborns who are born LGA or affected by macrosomia also have an increased risk of future obesity and diabetes.^{62,63}



A mother’s pre-pregnancy weight can have a tremendous impact on the health of a pregnancy (both mother and child). The California birth certificate captured mother’s height and weight for the first time in 2007, with weight recorded prior to pregnancy as well as at the time of delivery. Though a large proportion of records contained missing or invalid height and/or weight information (N=95,097 or 17% of all observations), pre-pregnancy height and weight were used to calculate a mother’s BMI nonetheless. BMI was then grouped according to criterion from NHLBI into the following categories: Underweight (BMI<18.5), Normal Weight (BMI 18.5-24.9), and Overweight/Obese (BMI 25+). The results of pre-pregnancy weight are reported below.

Among Medi-Cal beneficiaries, 42.1% entered their pregnancy as overweight or obese, compared to only 32.3% of mothers whose births were funded by non-Medi-Cal sources (see Table 3). Among certain Medi-Cal subpopulations, the prevalence of overweight and obese mothers prior to pregnancy was higher yet. Beneficiaries enrolled in Blind/Disabled aid codes had pre-pregnancy overweight/obesity rates as high as 46.7%, and for women enrolled in Families aid codes these rates were 44.1% (see Table 8a).

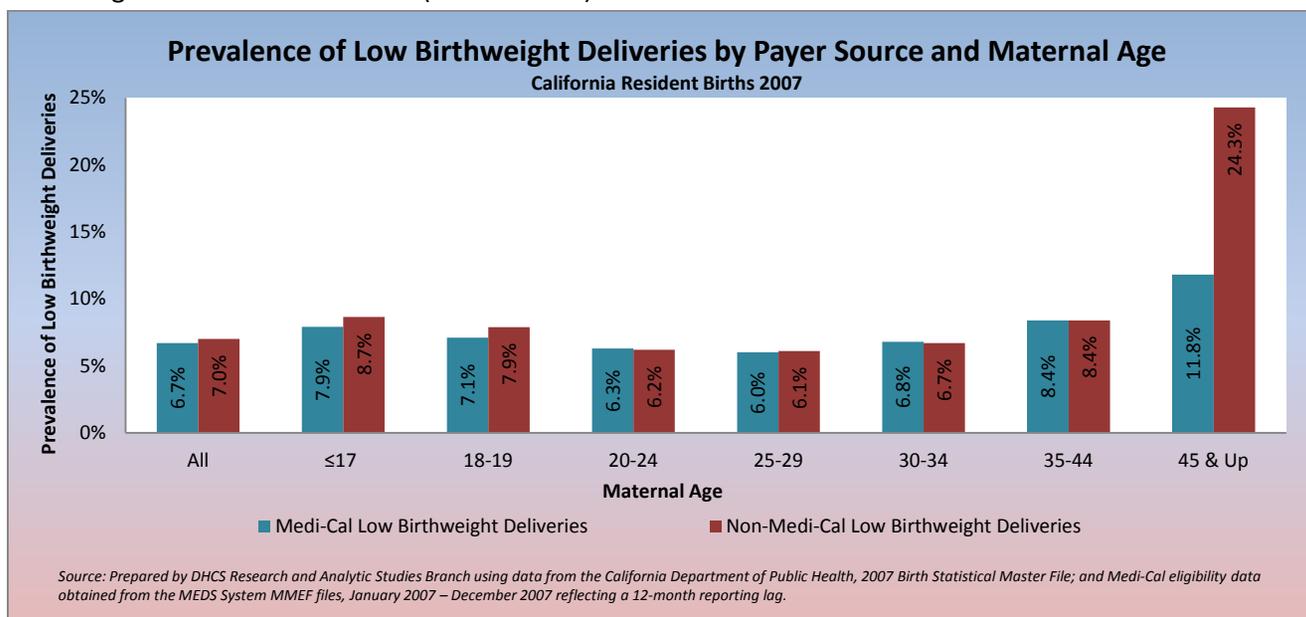


Birth Outcomes

Low Birthweight: Low birthweight is a major contributor to infant mortality. In the U.S., the three leading causes of infant death are congenital defects, low birthweight and sudden infant death (SIDs), all of which account for 44% of infant deaths nationally.⁶⁴ Hospital costs to babies born in the low birthweight (<2500 grams) and very low birthweight ranges (<1500 grams) are substantially higher than for normal birthweight newborns (\geq 2500 grams).⁶⁵ In addition, babies born at low or very low birthweights are at increased risk for life-long and disabling health conditions. The Healthy People 2020 Objective is to reduce the rate of low birthweight deliveries to 7.8% or fewer.

The overall low birthweight rate among Medi-Cal births was 6.7%, compared to 7.0% among all non-Medi-Cal births (see Table 5a). Low

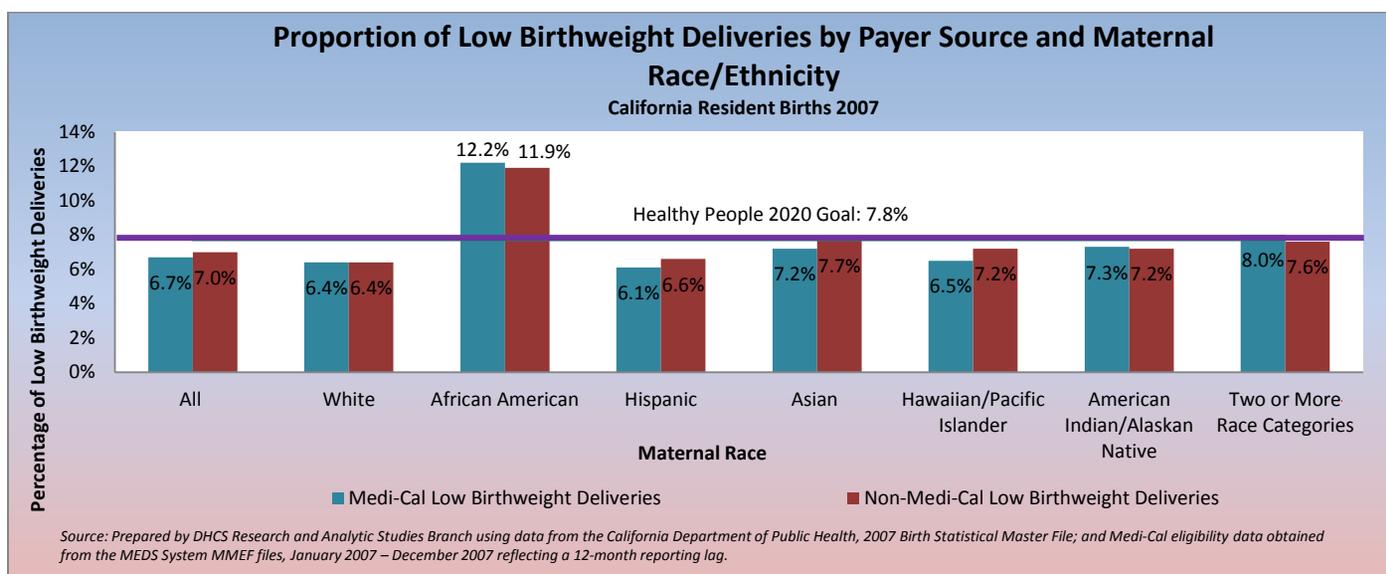
birthweight rates were slightly higher among births to Medi-Cal managed care beneficiaries (7.3%) as compared to FFS beneficiaries (6.4%). Among all Medi-Cal beneficiaries, low birthweight was highest among mothers in the youngest and oldest age groups (Age <15 = 9.8%, Age 45+ = 11.8%), among African American mothers (12.2%) and mothers of multiple race/ethnicity (8.0%), among mothers in Medi-Cal’s Blind/Disabled aid category (12.9%), and among multiple gestation births (57.3%) (see Tables 6a and 8b). Medi-Cal mothers least likely to give birth to a low birthweight newborn were those age 20-30, Hispanic and foreign-born mothers, mothers with a college degree, and those with one previous birth. High rates of low birthweight among older mothers may be due, in part, to the increased prevalence of multiple gestation births among this age group.



When examining all non-Medi-Cal births, low birthweight rates were highest among the youngest and oldest mothers (Age 15-17 = 8.7%, Age 45+ = 24.3%), African American mothers (11.9%), mothers with less than a high school education (7.4%), and those with two or more previous births (7.5%). Non-Medi-Cal mothers had lower rates of low birthweight if they were age 20-30, white, or if they experienced one previous birth (see Table 6c).

The prevalence of low birthweight among Medi-Cal singleton births was 5.5% (see Table 5b). When examining singleton births alone, the lowest rate of low birthweight was among births paid by private insurance (4.8%) and among Medi-Cal FFS births (5.4%). Slightly higher prevalence of low birthweight occurred among beneficiaries of Medi-Cal managed care (6.0%) and among births funded by other public sources (6.0%).

Most comorbidities such as hypertension, diabetes and obesity, and negative health behaviors such as smoking and substance use that were studied showed a strong relationship with deliveries resulting in low birthweight. For example, while the prevalence of low birthweight among Medi-Cal beneficiaries was reported at 6.7%, low birthweight was substantially higher among those with hypertension (21.9%), those diagnosed with substance use at the time of delivery (16.3%), and among smokers (9.8%) (see Table 6b). Among non-Medi-Cal mothers, the prevalence of low birthweight was also elevated for those with hypertension (23.3%), mothers diagnosed with substance use (15.2%), those diagnosed with diabetes (9.8%), and among smokers (9.3%) (see Table 6d).

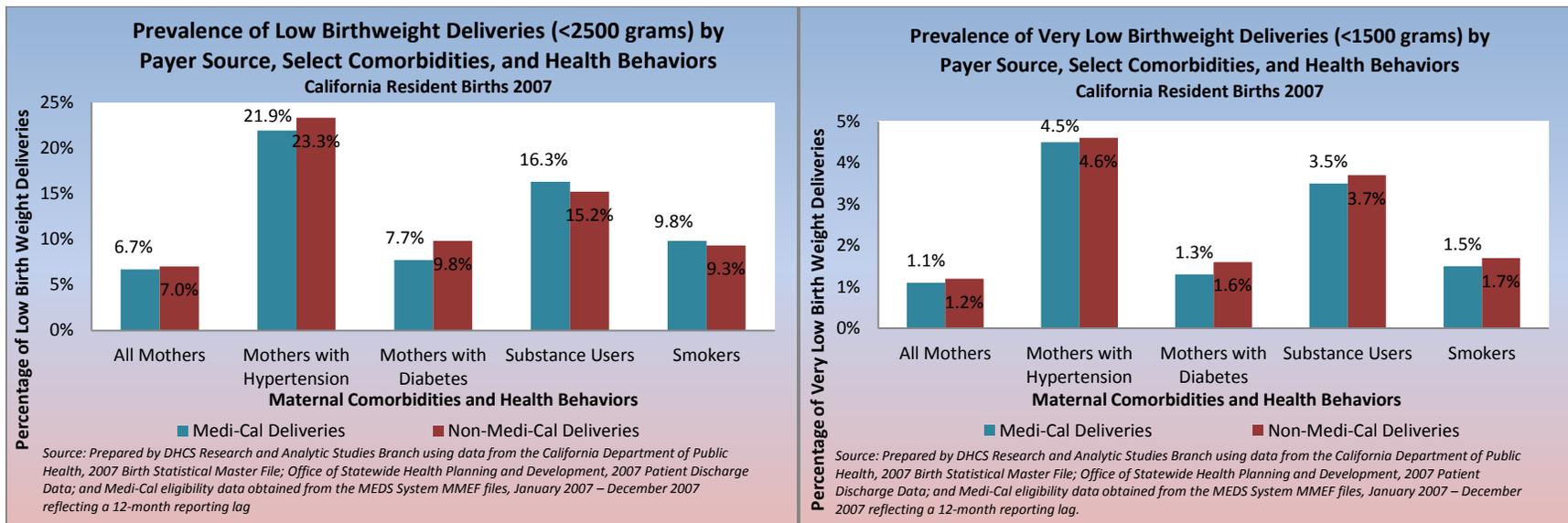


Very Low Birthweight: Babies born at a very low birthweight (<1500 grams) have the lowest chances of survival. Babies born at less than 1500 grams account for over half (54.6%) of all infant deaths in the U.S.^{39,40} Among all births paid by Medi-Cal, the proportion of very low birthweight was 1.1%. The Healthy People 2020 goal is set at 1.4% for very low birthweights.

The very low birthweight rate was similar for births to Medi-Cal managed care beneficiaries (1.2%), Medi-Cal FFS beneficiaries (1.1%), and births paid by private insurance (1.2%). Very low birthweight was twice as prevalent among Medi-Cal mothers who were age 45 and older (2.9%), African American mothers (2.4%), and those receiving Medi-Cal services through the Blind/Disabled aid category (2.6%) (see Tables 6a and 8b). Among non-Medi-Cal births, the proportion of very

low birthweight was highest among mothers age 45 and older (4.8%), and among African American mothers (3.1%) (see Table 6c).

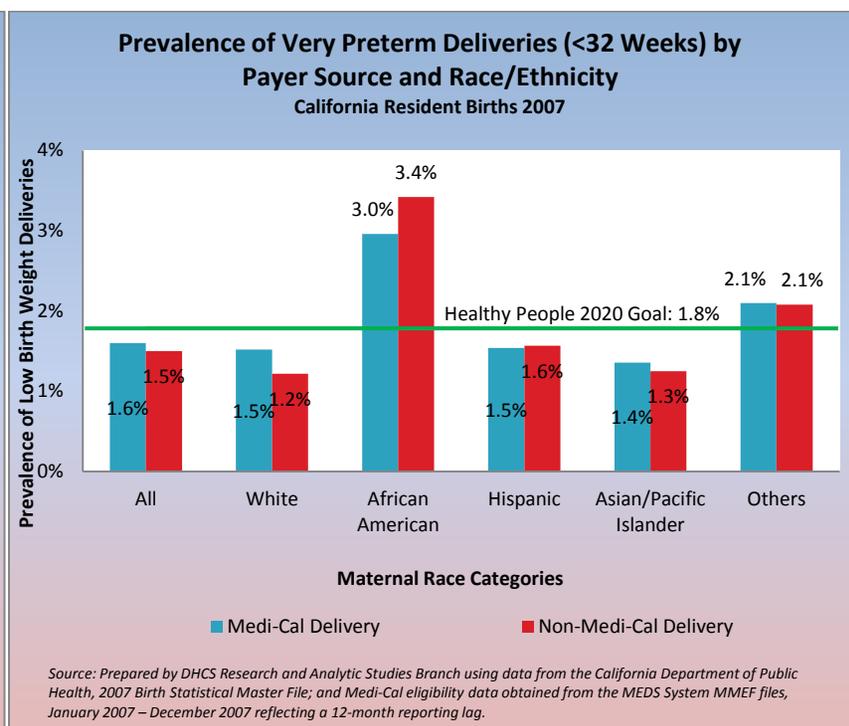
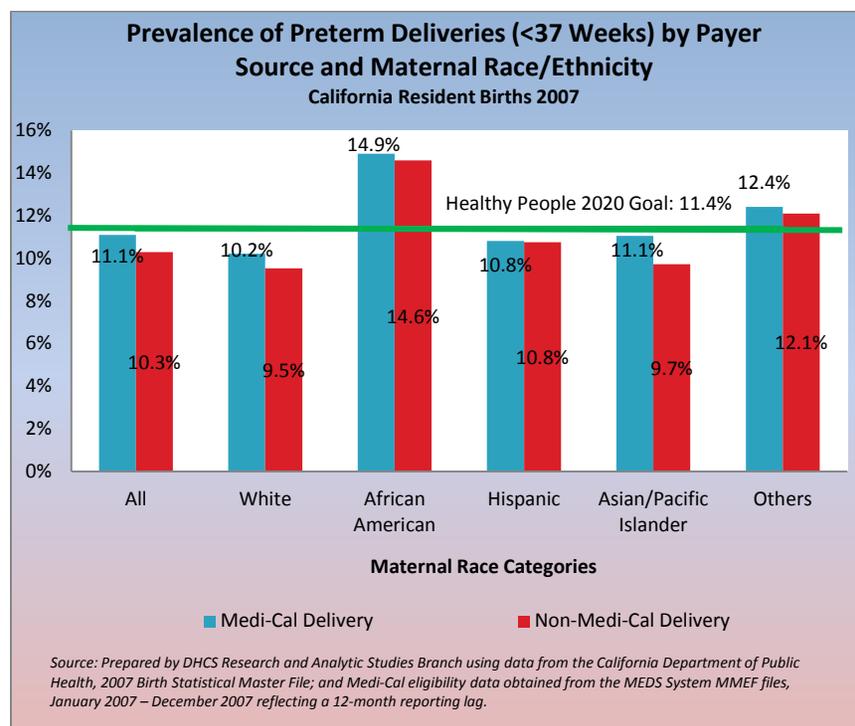
The prevalence of very low birthweight was highest among mothers with negative health behaviors and for those who were diagnosed with select comorbidities. For example, very low birthweight was three times higher for both Medi-Cal and non-Medi-Cal mothers diagnosed with substance use (3.5% and 3.7%, respectively), and four times higher for mothers diagnosed with hypertension (4.5% among Medi-Cal beneficiaries and 4.6% among non-Medi-Cal mothers) (see Tables 6b and 6d). Factors such as smoking and diabetes only modestly elevated the likelihood of a very low birthweight delivery among both Medi-Cal and non-Medi-Cal populations.



Preterm Delivery: Preterm births are almost twice as high in the U.S. as compared to other developed countries.⁶⁶ Babies born prematurely are at increased risk for death and life-long disabling conditions including hearing and vision loss, respiratory problems, mental retardation and cerebral palsy.⁶⁷ The Healthy People 2020 goal is to reduce the rate of preterm deliveries to less 11.4%, and reduce the rate of very preterm deliveries to less than 1.8%.

In 2007, 10.7% or 59,859 of hospital births to California mothers were premature (<37 complete weeks of gestation). Preterm rates were

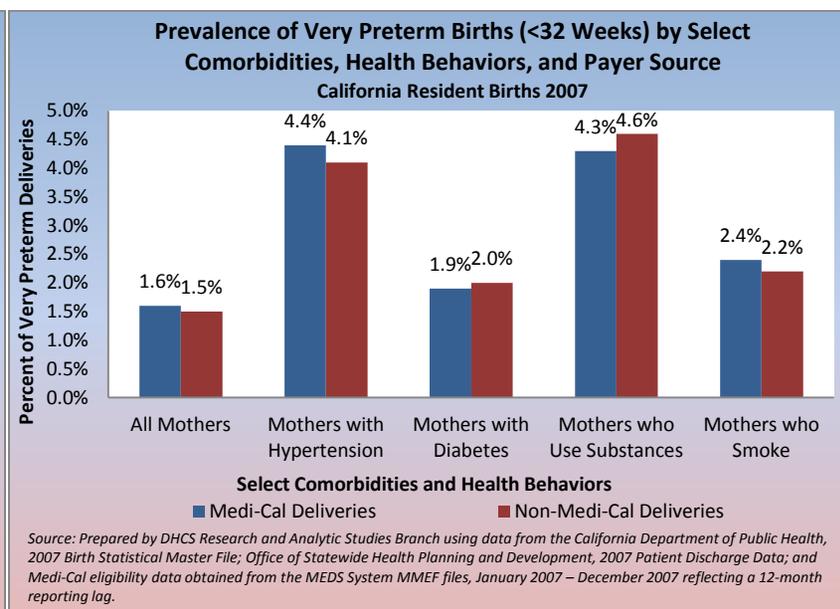
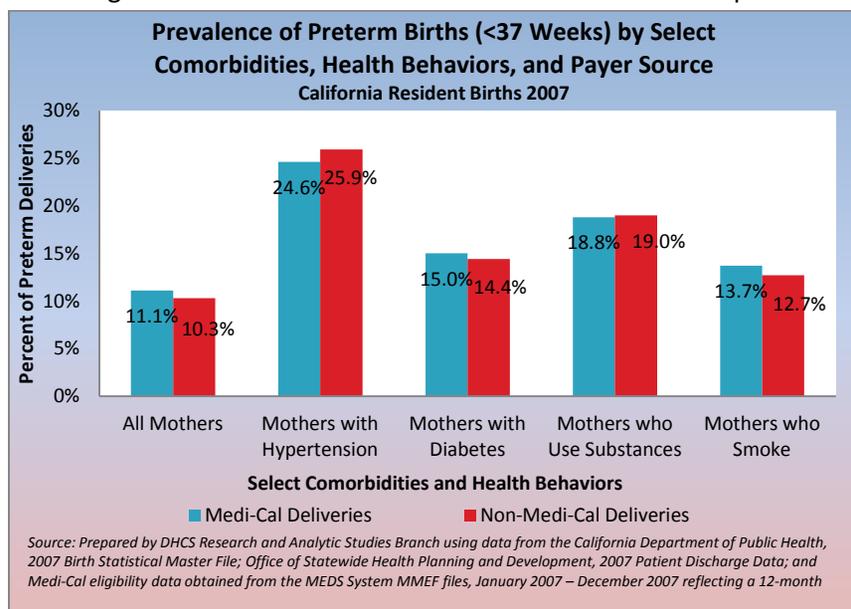
similar among Medi-Cal FFS beneficiaries (10.8%) and births paid by private insurance (10.0%), but more prevalent among Medi-Cal managed care beneficiaries (11.9%) and births paid by other funding sources (11.6%) (see Table 5a). Among Medi-Cal births, preterm rates were highest for younger mothers (Age <15 = 16.5%, Age 15-17 = 12.8%), and mothers in the older age categories (Age 35-44 = 14.3%, Age 45+ = 19.1%), African American mothers (14.9%), mothers who self-identify in more than one race/ethnic category (12.0%), and for mothers with two or more previous births (12.7%) (see Table 7a).



Births not paid by Medi-Cal had preterm rates that mirrored patterns observed for births under the Medi-Cal program, with younger mothers less than age 17, mothers age 35 and older, African American mothers, mothers of lower educational attainment, and those with higher parity levels more likely to experience a preterm delivery. More than half of all Medi-Cal (55.5%) and non-Medi-Cal (57.3%) multiple gestation births were born premature (see Tables 7a and 7c). Medi-Cal mothers with comorbid conditions such as hypertension, diabetes and substance use, and those who smoked during pregnancy had higher rates of preterm deliveries than among all Medi-Cal mothers in general. For example, Medi-Cal mothers with hypertension had over twice the prevalence (24.6%), and those who were diagnosed with a substance use disorder had 1.7 times the prevalence of preterm deliveries (18.8%) as Medi-Cal mothers overall (11.1%). Mothers who were diagnosed with diabetes and those who smoked also experienced

elevated preterm delivery rates at 15.0% and 13.7%, respectively (see Table 7b). Similar trends in preterm delivery rates were observed for mothers whose delivery was funded by non-Medi-Cal sources, with those having hypertension and those diagnosed with substance use experiencing much higher rates of premature births than among all mothers in this funding category overall (25.9% and 19.0%, vs. 10.3%) (see Table 7d).

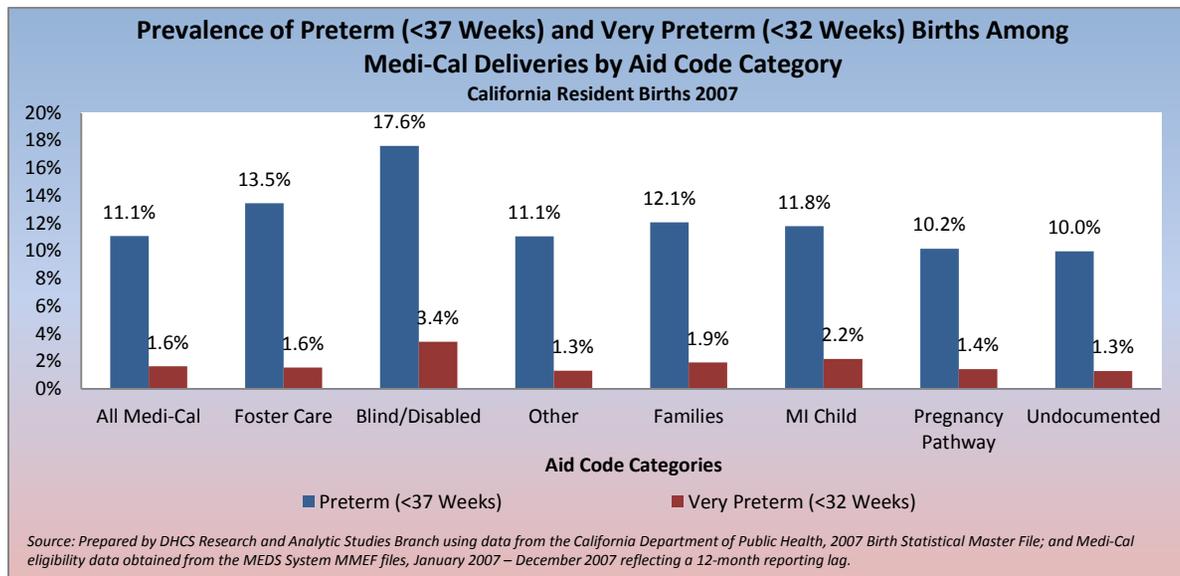
Among singleton births, preterm rates varied between those covered by Medi-Cal and those by non-Medi-Cal funding sources. Preterm rates among singleton births paid by private insurance were 8.0%, compared to 9.8% among the Medi-Cal FFS births, 10.7% among the Medi-Cal managed care births, and 10.2% among births paid by other funding sources (see Table 5b).



Very Preterm Delivery: The proportion of very preterm deliveries (<32 complete weeks of gestation) were nearly the same for Medi-Cal beneficiaries (1.6%) and non-Medi-Cal births (1.5%). Very preterm deliveries were slightly more prevalent among Medi-Cal managed care beneficiaries (1.8%) and births paid for by other funding sources (1.9%) (see Table 5a). Rates of very preterm deliveries were elevated among Medi-Cal mothers in the younger age categories (Age <15 = 2.7%, Age 15-17 = 2.5%), mothers age 35-44 (2.2%) and 45+ (2.9%), African Americans (3.0%) and Hawaiian/Pacific Islanders (2.3%) mothers, and U.S.-born mothers (2.0%) (see Table 7a). Additionally, very preterm deliveries were more than twice as prevalent among mothers receiving services through the Blind/Disabled aid category (3.4%), and 2.7 times higher among those diagnosed with hypertension (4.4%) and substance use (4.3%) (see Tables 7b and 8b).

Very preterm deliveries funded by non-Medi-Cal sources were also high among mothers less than age 15 (4.5%) and African American mothers (3.4%). High rates of very preterm rates among mothers aged 45 and older (4.5%) may be due, in part, to the increased likelihood of multiple gestation births among this age group (see Table 7c).

Among singletons, births paid by private insurance had the lowest rate of very preterm at 1.0%, followed by Medi-Cal FFS births at 1.4%. The highest rates of very preterm among singletons births was among Medi-Cal managed care beneficiaries at 1.5%, and among births paid by other funding sources (1.6%) (see Table 5b).



CONCLUSION

The report above highlights some differences in birth outcomes across the compared health care service providers and within Medi-Cal's service plans. Among singleton births, Medi-Cal beneficiaries had a slightly higher rate of low birthweight but an identical rate of very low birthweight when compared with non-Medi-Cal mothers. Preterm and very preterm rates were higher among Medi-Cal funded births, although the highest overall rate for very preterm births was to mothers receiving health care from other funding sources. For all adverse birth outcomes studied, the lowest occurrences were to mothers who were privately insured, followed closely by those receiving services in the Medi-Cal FFS delivery system.

Differences noted in low birthweight and preterm delivery rates can be accounted for, in part, by the fact that a large proportion of Medi-Cal beneficiaries are from subgroups most vulnerable to adverse birth outcomes. Beneficiaries receiving services under the "Blind/Disabled" aid codes accounted for 1.6% of the Medi-Cal births in 2007, but 12.9% of pregnancies resulting in a low birthweight outcome. As noted previously, Medi-Cal delivered three times as many teen pregnancies, a subgroup at increased risks for low birth weight and preterm delivery, than other payers. Medi-Cal also provided service to a greater proportion of subgroups with higher risks for adverse outcomes, such as African American mothers, mothers with increased parity levels, and mothers with lower educational attainment.

New data also highlights that a greater proportion of Medi-Cal beneficiaries live with comorbidities as compared to non-Medi-Cal mothers. With the exception of diabetes, Medi-Cal beneficiaries show a greater tendency toward the comorbidities and negative health behaviors studied, particularly smoking while pregnant, substance abuse, and mothers with a pre-pregnancy weight that qualifies as obese or extremely obese. Rates of hypertension were uniform between Medi-Cal and non-Medi-Cal births and increased prevalence of low birth weight and preterm deliveries for both groups.

Variation in birth outcomes was most significant for Medi-Cal managed care beneficiaries who had the highest prevalence of several comorbidities and negative health behaviors, including smoking during pregnancy, substance abuse, hypertension, and pre-pregnancy weight qualifying as Obese or Extremely Obese. The Medi-Cal managed care delivery system also provides services to a significant number of the high-risk subgroups mentioned above, including a greater percentage of African American women and mothers under age 19 than does FFS. In addition, protective factors such as being foreign-born and receiving early prenatal care were less prevalent among beneficiaries covered by Medi-Cal managed care. These factors may help explain some of the differences in rates of low birthweight, very low birthweight, preterm and very preterm deliveries that are reported here.

Appendix A – Definitions

- Birthweight:** The birth certificate reports the newborn’s birthweight in grams. Reported birthweights less than 227 grams or greater than 8,650 grams are outside the range of plausible values and were recoded to “missing/out-of-range.”
- Comorbidities:** Select diagnoses recorded on the hospital record in addition to birth and delivery-related conditions were examined in this report as comorbid conditions of pregnancy. These conditions include hypertension, diabetes, and substance use.
- Delivery Diagnosis:** Deliveries were identified in the Medi-Cal FFS claims data using a primary diagnosis code of 650.0 or 640.0 - 676.0 with a 5th digit of ‘1’ or ‘2.’
- Diabetes:** Diabetes was identified using one of several available ICD-9 fields on the hospital record. ICD-9 fields were grouped using the Clinical Classification Software (CCS) available from the Agency for Healthcare Research and Quality. The grouping of 186 was used to identify gestational diabetes, and 49 and 50 identified diabetes not related to pregnancy.
- Extremely Obese:** A mother’s pre-pregnancy weight as self-reported on the birth certificate was used in conjunction with self-reported height to develop a body mass index (BMI). BMI was categorized into 4 groupings as follows: underweight = BMI less than 18.5; normal weight = BMI 18.5 to 24.9; overweight = BMI 25.0 to 29.9; Obese/Extremely Obese = BMI 30.0 and greater.
- Gestational Age:** Gestational age is recorded on the birth certificate, and reflects the number of days between the mother’s last menstrual period and the date of birth. Gestational age less than 119 days or greater than 329 days were considered outside the range of plausible values and were recoded to “missing/out-of-range.”
- Hypertension:** Hypertension was identified using one of several available ICD-9 fields on the hospital record. ICD-9 fields were grouped using the Clinical Classification Software (CCS) available from the Agency for Healthcare Research and Quality. The grouping of 183 was used to identify gestational preeclampsia, eclampsia and hypertension; and 98 and 99 identified hypertension not related to pregnancy.
- Infant Mortality:** Death of an infant within the first year of life.
- Low Birthweight:** A newborn was considered low birthweight if the weight at delivery was <2,500 grams.
- Medi-Cal Aid Grouping:** See attached Aid Code Table (Appendix D).
- Multiple Gestation Birth:** A delivery resulting in a twin or higher order birth.
- Neonatal Mortality:** Death of a newborn within the first 28 days of life.
- Normal Weight:** A mother’s pre-pregnancy weight as self-reported on the birth certificate was used in conjunction with self-reported height to develop a body mass index (BMI). BMI was categorized into four groupings as follows: underweight = BMI less than 18.5; normal weight = BMI 18.5 to 24.9; overweight = BMI 25.0 to 29.9; Obese/Extremely Obese = BMI 30.0 and greater.
- Obese:** A mother’s pre-pregnancy weight as self-reported on the birth certificate was used in conjunction with self-reported height to develop a body mass index (BMI). BMI was categorized into four groupings as follows: underweight = BMI less than 18.5; normal weight = BMI 18.5 to 24.9; overweight = BMI 25.0 to 29.9; Obese/Extremely Obese = BMI 30.0 and greater.

Parity: The number of births to a woman during her reproductive years.

Preterm: Gestational age is recorded on the birth certificate, and reflects the number of days between the mother's last menstrual period and the date of birth. A newborn with a gestational age of <37 weeks was considered to be a preterm delivery.

Reproductive Age: We defined women of reproductive age as those between the ages of 10 and 60, unless otherwise specified. Observations from the birth certificate containing a maternal age of less than 10 or greater than 60 were considered outside the range of plausibility, and were recoded to "unknown" age.

Resident Births: Resident births are defined as births to mothers who report an address on the 2007 birth certificate that is within the state of California.

Substance Use: Identified by CCS codes 660 and 661, substance use is defined as a state of dependence on any drug, including alcohol.

Very Low Birthweight: A newborn was considered very low birthweight if the weight at delivery was <1,500 grams.

Very Preterm: Gestational age is recorded on the birth certificate, and reflects the number of days between the mother's last menstrual period and the date of birth. A newborn with a gestational age of <32 weeks was considered to be a very preterm delivery.

Underweight: A mother's pre-pregnancy weight as self-reported on the birth certificate was used in conjunction with self-reported height to develop a body mass index (BMI). BMI was categorized into four groupings as follows: underweight = BMI < 18.5; normal weight = BMI 18.5 to 24.9; overweight = BMI 25.0 to 29.9; Obese/Extremely Obese = BMI 30.0 and greater.

Appendix B – Aid Code Groupings Used for This Analysis

Aid Category	Budget Aid Category	Delivery Aid Code
Adoption/Foster Care	All Other	40, 45
	Categorically Needy	42, 4F, 4M 5K
Blind/Disabled	All Other	2E, 6E
	Categorically Needy	20, 60, 66, 6C, 6H, 6N
	Medically Needy	64, 67
All Other	All Other	1, 2, 81, 6J
	Categorically Needy	47, 0P, 6G, 7H, 8E
Families	Categorically Needy	30, 32, 33, 35, 38, 39, 54, 59, 3A, 3C, 3D, 3E, 3G, 3H, 3L, 3M, 3N, 3P, 3R, 3U, 3W, 7J
	Medically Needy	34, 37
MI Child & Minor Consent	All Other	82, 83, 7C, 7M, 7N, 7P, 8T
	Categorically Needy	7A, 8R, 8W
Pregnancy Pathway, not Undocumented	All Other	86, 87
	Categorically Needy	44, 76
Undocumented	All Other	48, 58, 0U, 0V, 3T, 3V, 5F, 5T, 5W, 6U, 7K

Appendix C – Healthy People 2020 Goals – Maternal and Infant Health

Healthy People 2020 Goals – Maternal and Infant Health	
Target Goal	Baseline
Reduce the Rate of Low Birthweight	
Low Birthweight(<2500g)	
7.8%	8.2% (2007)
	5% Improvement
Very Low Birth Weight (1,500g)	
1.4%	1.5% (2007)
	5% Improvement
Reduce the Rate of Preterm Births	
Preterm Births(<36 weeks)	
11.4%	12.7% (2007)
	10% Improvement
Very Preterm Births (32 weeks)	
1.8%	2.0% (2007)
	10% Improvement
Increase the Rate of Prenatal Care	
First Trimester Initiation	
77.9%	70.8% (2007)
	10% Improvement
Increase the Rate of Abstaining From Cigarette Use During Pregnancy	
98.6%	89.6% (2007)*
	10% Improvement
Increase the Rate of Abstaining From Illicit Drug Use During Pregnancy (women ages 15-44 in the last 30 days)	
100%	94.9% (2007-2008)*
	Total Coverage
National Vital Statistics System (NVSS), CDC, NCHS *National Survey on Drug Use and Health (NSDUH), SAMHSA	

Appendix D – End Notes and References

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- ⁴ Being linked as used here means that you meet the nonfinancial eligibility criteria of these programs; it does not mean that you are receiving cash assistance from SSI or CalWORKS.
- ⁵ W&I CODE § 14007.5 : California Code - Section 14007.5
- ⁶ Medi-Cal Eligibility Procedures Manual, 5N-F
- ⁷ Medi-Cal Eligibility Procedures Manual, 5N-F
- ⁸ W&I CODE § 14007.5 : California Code - Section 14007.5
- ⁹ OBRA-1986 provided states the option to extend Medicaid income eligibility to pregnant women up to 100% of FPL, and allowed simplified enrollment processes. OBRA-1987 allowed states the option to extend Medicaid income eligibility to pregnant women to 185% of FPL. OBRA-1989 mandated coverage for pregnant women up to 133% of FPL. OBRA-1990 mandated continuous eligibility for pregnant women through 60-days postpartum.
- ¹⁰ 42 U.S.C. Section 1396r-1; Cal. Welf. & Inst. Code Section 14148.7; ACWDL # 93-78 (Oct. 27, 1993), 95-74 (Nov. 23, 1995); Medi-Cal Eligibility Procedures Manual Article 5M.
- ¹¹ 42 U.S.C. Section 1396r-1(b)(1)(B).

¹² Medi-Cal Eligibility Procedures Manual, 5M-4, 5M-6

¹³ Medi-Cal Eligibility Procedures Manual 5M-4

¹⁴ Medi-Cal Eligibility Procedures Manual 5M-4

¹⁵ 42 U.S.C. Section 1396r-1 (a)

¹⁶ ACWDL # 93-78 (Oct. 27 1993), 94-103 (Dec. 26, 1994); Medi-Cal Medical Services Provider Manual, 200-92-13. The PE program will cover treatment of a septic abortion, a spontaneous abortion (miscarriage), or missed abortion. Medi-Cal Provider Manual, 200-92-11.

¹⁷ Introduced as the 185 percent program under the Omnibus Budget Reconciliation Act (OBRA) of 1987 [Public Law (PL) 100-203], federal funding was provided to states for Medicaid benefits to eligible pregnant women with family incomes not exceeding 185% of the FPL. On June 30, 1993, Senate Bill (SB) 35 provided an income deduction for eligible pregnant women, based on the families' size, by disregarding the income which is the difference between the 185% and 200% FPL [Welfare and Institutions Code (W&I) §14148]. Under this program, assets are disregarded. This extended no SOC Medi-Cal to eligible pregnant women and infants whose income does not exceed 200% of the FPL.

¹⁸ 42 U.S.C. Sections 1396a(a)(10)(A)(i)(IV), (VI), 1396a(l)(1)(A); Cal. Welf. & Inst. Code Section 14148(f); Medi-Cal Eligibility Procedures Manual, Article 5F.

¹⁹ 42 U.S.C. Section 1396o(a)(2)(B); 42 C.F.R. Section 447.53(b)(2).

²⁰ Cal. Welf. & Inst. Code Section 14007.7.

²¹ Medi-Cal Medical Services Provider Manual at 100-31-2

²² Medi-Cal Eligibility Procedures Manual, 5S

²³ Medi-Cal Eligibility Procedures Manual, 5S

²⁴ Medi-Cal Eligibility Procedures Manual, 5S

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Table 1. Comparison of Medi-Cal Births from Other Payer Sources, by Select Maternal Characteristics
California Resident Births, 2007

CHARACTERISTICS OF MOTHER	Medi-Cal Births						Non!Medi-Cal Births					
	Total		Fee-for-Service		Managed Care		Total		Other		Private Insurance	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
AGE OF MOTHER												
Age <15	449	0.2	257	0.1	192	0.3	202	0.1	135	0.3	67	0.0
15-17	12,527	4.7	7,791	4.1	4,736	6.1	4,917	1.7	2,530	4.8	2,387	1.0
18-19	28,233	10.5	17,949	9.4	10,284	13.2	7,300	2.5	3,422	6.5	3,878	1.6
20-24	87,771	32.7	60,523	31.8	27,248	35.0	39,176	13.4	12,472	23.6	26,704	11.1
25-29	70,213	26.2	51,062	26.8	19,151	24.6	78,950	27.0	14,138	26.7	64,812	27.1
30-34	42,946	16.0	33,190	17.4	9,756	12.5	91,161	31.2	12,024	22.7	79,137	33.0
35-44	25,957	9.7	19,519	10.3	6,438	8.3	69,624	23.8	8,021	15.2	61,603	25.7
45 & Up	246	0.1	172	0.1	74	0.1	1,180	0.4	138	0.3	1,042	0.4
Invalid/Out-of-Range	-	-	-	-	-	-	32	0.0	19	0.0	13	0.0
RACE/ETHNICITY OF MOTHER												
1-White	35,314	13.2	21,769	11.4	13,545	17.4	113,045	38.6	12,330	23.3	100,715	42.0
2-African American	18,155	6.8	6,396	3.4	11,759	15.1	10,976	3.8	2,866	5.4	8,110	3.4
3-Hispanic	192,620	71.8	149,027	78.2	43,593	56.0	102,662	35.1	28,155	53.2	74,507	31.1
4-Asian	14,083	5.3	8,511	4.5	5,572	7.2	51,860	17.7	7,075	13.4	44,785	18.7
5-Hawaiian/Pacific Islanders	1,263	0.5	678	0.4	585	0.8	1,327	0.5	339	0.6	988	0.4
6-American Indian/Alaskan Native	1,136	0.4	761	0.4	375	0.5	836	0.3	236	0.5	600	0.3
7-Two or more Race Categories	3,467	1.3	1,800	1.0	1,667	2.1	5,856	2.0	864	1.6	4,992	2.1
8-Others/Unknown	2,304	0.9	1,521	0.8	783	1.0	5,980	2.0	1,034	2.0	4,946	2.1
MOTHER'S NATIVITY												
Foreign Born	146,049	54.4	129,306	67.9	16,743	21.5	112,214	38.4	25,766	48.7	86,448	36.1
US Born	122,142	45.5	61,070	32.1	61,072	78.4	180,112	61.6	27,056	51.2	153,056	63.9
Unknown	151	0.1	87	0.1	64	0.1	216	0.1	77	0.2	139	0.1
MOTHER'S EDUCATION STATUS												
1-<High School	120,841	45.0	94,265	49.5	26,576	34.1	30,170	10.3	15,011	28.4	15,159	6.3
2-High School Graduate	86,855	32.4	55,984	29.4	30,871	39.6	61,241	20.9	14,869	28.1	46,372	19.4
3-Some College or Associate Degree	43,276	16.1	26,944	14.2	16,332	21.0	74,780	25.6	11,001	20.8	63,779	26.6
4-Bachelor's Degree or Higher	8,665	3.2	6,694	3.5	1,971	2.5	116,114	39.7	9,799	18.5	106,315	44.4
5-Unknown	8,705	3.2	6,576	3.5	2,129	2.7	10,237	3.5	2,219	4.2	8,018	3.4
TOTAL BIRTHS¹	268,342	100.0	190,463	100.0	77,879	100.0	292,542	100.0	52,899	100.0	239,643	100.0

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 2. Comparison of Medi-Cal Births to Births from Other Payer Sources, by Select Birth Characteristics
California Resident Births, 2007

CHARACTERISTICS OF BIRTH	Medi-Cal Births						Non!Medi-Cal Births					
	Total		Fee-for-Service		Managed Care		Total		Other		Private Insurance	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
PARITY STATUS												
First Born	96,423	35.9	71,439	37.5	24,984	32.1	122,244	41.8	21,195	40.1	101,049	42.2
One Previous Birth	76,218	28.4	53,631	28.2	22,587	29.0	97,946	33.5	15,550	29.4	82,396	34.4
Two+ Previous Births	95,441	35.6	65,212	34.2	30,229	38.8	71,956	24.6	16,042	30.3	55,914	23.3
Unknown or Unreported	260	0.1	181	0.1	79	0.1	396	0.1	112	0.2	284	0.1
SINGLE/MULTIPLE BIRTH												
Multiple Birth	5,836	2.2	3,798	2.0	2,038	2.6	11,554	4.0	1,545	2.9	10,009	4.2
Singleton	262,506	97.8	186,665	98.0	75,841	97.4	280,988	96.1	51,354	97.1	229,634	95.8
METHOD OF DELIVERY												
Cesarean-Primary	44,306	16.5	31,811	16.7	12,495	16.0	58,965	20.2	9,669	18.3	49,296	20.6
Cesarean-Repeat	39,638	14.8	27,813	14.6	11,825	15.2	37,977	13.0	6,987	13.2	30,990	12.9
Vaginal	182,887	68.2	129,786	68.1	53,101	68.2	193,385	66.1	35,952	68.0	157,433	65.7
Vaginal After Previous Cesarean	1,511	0.6	1,053	0.6	458	0.6	2,215	0.8	291	0.6	1,924	0.8
PRENATAL CARE INITIATION												
1-No Prenatal Care	1,772	0.7	1,176	0.6	596	0.8	1,169	0.4	918	1.7	251	0.1
2-First Trimester	200,140	74.6	143,174	75.2	56,966	73.2	255,701	87.4	41,023	77.6	214,678	89.6
3-Second Trimester	49,594	18.5	34,284	18.0	15,310	19.7	26,456	9.0	7,683	14.5	18,773	7.8
4-Third Trimester	10,430	3.9	7,803	4.1	2,627	3.4	3,895	1.3	1,805	3.4	2,090	0.9
5-Unknown or Unreported	6,406	2.4	4,026	2.1	2,380	3.1	5,321	1.8	1,470	2.8	3,851	1.6
TOTAL BIRTHS¹	268,342	100.0	190,463	100.0	77,879	100.0	292,542	100.0	52,899	100.0	239,643	100.0

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 3. Comparison of Medi-Cal Births to Births from Other Payer Sources, by Select Maternal Comorbidities
California Resident Births, 2007

COMORBIDITIES	Medi-Cal Births						Non-Medi-Cal Births					
	Total		Fee-for-Service		Managed Care		Total		Other		Private Insurance	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
HYPERTENSION*												
1-Yes	17,216	6.4	11,607	6.1	5,609	7.2	18,479	6.3	2,262	4.3	16,217	6.8
2-No	251,126	93.6	178,856	93.9	72,270	92.8	250,855	85.8	34,436	65.1	216,419	90.3
3-Unknown	-	-	-	-	-	-	23,208	7.9	16,201	30.6	7,007	2.9
DIABETES*												
1-Yes	18,842	7.0	14,040	7.4	4,802	6.2	21,249	7.3	2,392	4.5	18,857	7.9
2-No	249,500	93.0	176,423	92.6	73,077	93.8	248,085	84.8	34,306	64.9	213,779	89.2
3-Unknown	-	-	-	-	-	-	23,208	7.9	16,201	30.6	7,007	2.9
SUBSTANCE USE*												
1-Yes	4,737	1.8	2,357	1.2	2,380	3.1	1,470	0.5	718	1.4	752	0.3
2-No	263,605	98.2	188,106	98.8	75,499	96.9	267,864	91.6	35,980	68.0	231,884	96.8
3-Unknown	-	-	-	-	-	-	23,208	7.9	16,201	30.6	7,007	2.9
SMOKING DURING PREGNANCY												
1-Yes	10,504	3.9	5,780	3.0	4,724	6.1	3,573	1.2	1,015	1.9	2,558	1.1
2-No	249,034	92.8	178,004	93.5	71,030	91.2	262,588	89.8	34,542	65.3	228,046	95.2
3-Unknown	8,804	3.3	6,679	3.5	2,125	2.7	26,381	9.0	17,342	32.8	9,039	3.8
PRE-PREGNANCY WEIGHT**												
1-Underweight	9,674	3.6	6,591	3.5	3,083	4.0	10,772	3.7	1,611	3.1	9,161	3.8
2-Normal Weight	103,695	38.6	73,904	38.8	29,791	38.3	134,000	45.8	16,088	30.4	117,912	49.2
3-Overweight	62,573	23.3	45,185	23.7	17,388	22.3	55,844	19.1	7,747	14.6	48,097	20.1
4-Obese/Extremely Obese	50,548	18.8	33,018	17.3	17,530	22.5	38,681	13.2	5,264	10.0	33,417	13.9
5-Out-of-Range/Unknown	41,852	15.6	31,765	16.7	10,087	13.0	53,245	18.2	22,189	42.0	31,056	13.0
TOTAL BIRTHS¹	268,342	100.0	190,463	100.0	77,879	100.0	292,542	100.0	52,899	100.0	239,643	100.0

*Comorbidities such as hypertension, diabetes and substance use have been identified in the hospital discharge data using ICD-9 diagnostic codes in up to 25 separate fields. ICD-9 codes were further grouped into clinically relevant classifications using the Clinical Classification Software (CCS) made available by the Agency for Healthcare Research & Quality (AHRQ).

**Pre-pregnancy weight as reported on the birth certificate has been categorized into 4 weight groupings based on body mass index (BMI) classification set by the National Heart Lung and Blood Institute.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 4a. Comparison of Delivery Methods Among Medi-Cal Births, by Select Maternal Characteristics
California Resident Births, 2007

DEMOGRAPHIC CHARACTERISTICS OF MOTHER	Total	Method of Delivery							
		Cesarean-Primary		Cesarean-Repeat		Vaginal		Vaginal After Previous Cesarean	
	Count	Count	Row %	Count	Row %	Count	Row %	Count	Row %
AGE OF MOTHER									
Age <15	449	90	20.0	-	-	359	80.0	-	-
15-17	12,527	2,382	19.0	184	1.5	9,955	79.5	6	0.1
18-19	28,233	5,437	19.3	1,199	4.3	21,551	76.3	46	0.2
20-24	87,771	14,727	16.8	9,712	11.1	63,008	71.8	324	0.4
25-29	70,213	10,177	14.5	12,324	17.6	47,230	67.3	482	0.7
30-34	42,946	6,584	15.3	9,518	22.2	26,442	61.6	402	0.9
35-44	25,957	4,833	18.6	6,643	25.6	14,231	54.8	250	1.0
45 & Up	246	76	30.9	58	23.6	111	45.1	1	0.4
RACE/ETHNICITY OF MOTHER									
1-White	35,314	6,400	18.1	4,444	12.6	24,313	68.9	157	0.4
2-African American	18,155	3,725	20.5	2,716	15.0	11,580	63.8	134	0.7
3-Hispanic	192,620	30,305	15.7	29,925	15.5	131,339	68.2	1,051	0.6
4-Asian	14,083	2,317	16.5	1,493	10.6	10,167	72.2	106	0.8
5-Hawaiian/Pacific Islanders	1,263	257	20.4	191	15.1	802	63.5	13	1.0
6-American Indian/Alaskan Native	1,136	175	15.4	148	13.0	803	70.7	10	0.9
7-Two or more Race Categories	3,467	693	20.0	406	11.7	2,347	67.7	21	0.6
8-Others/Unknown	2,304	434	18.8	315	13.7	1,536	66.7	19	0.8
MOTHER'S NATIVITY									
Foreign Born	146,049	22,466	15.4	23,884	16.4	98,729	67.6	970	0.7
US Born	122,142	21,809	17.9	15,734	12.9	84,059	68.8	540	0.4
Unknown	151	31	20.5	20	13.3	99	65.6	1	0.7
MOTHER'S EDUCATION STATUS									
1-<High School	120,841	17,877	14.8	19,443	16.1	82,775	68.5	746	0.6
2-High School Graduate	86,855	15,045	17.3	11,967	13.8	59,423	68.4	420	0.5
3-Some College or Associate Degree	43,276	8,168	18.9	5,850	13.5	29,047	67.1	211	0.5
4-Bachelor's Degree or Higher	8,665	1,809	20.9	1,222	14.1	5,579	64.4	55	0.6
5-Unknown	8,705	1,407	16.2	1,156	13.3	6,063	69.7	79	0.9
TOTAL BIRTHS¹	268,342	44,306	16.5	39,638	14.8	182,887	68.2	1,511	0.6

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 4b. Comparison of Delivery Methods Among Non-Medi-Cal Births, by Select Maternal Characteristics
California Resident Births, 2007

DEMOGRAPHIC CHARACTERISTICS OF MOTHER	Total	Method of Delivery							
		Cesarean-Primary		Cesarean-Repeat		Vaginal		Vaginal After Previous Cesarean	
		Count	Row %	Count	Row %	Count	Row %	Count	Row %
AGE OF MOTHER									
Age <15	202	43	21.3	1	0.5	158	78.2	-	-
15-17	4,917	874	17.8	53	1.1	3,985	81.1	5	0.1
18-19	7,300	1,380	18.9	183	2.5	5,725	78.4	12	0.2
20-24	39,176	7,104	18.1	2,641	6.7	29,265	74.7	166	0.4
25-29	78,950	14,900	18.9	8,038	10.2	55,512	70.3	500	0.6
30-34	91,161	17,892	19.6	13,141	14.4	59,325	65.1	803	0.9
35-44	69,624	16,257	23.4	13,644	19.6	39,001	56.0	722	1.0
45 & Up	1,180	509	43.1	271	23.0	394	33.4	6	0.5
Invalid/Out-of-Range	32	6	18.8	5	15.6	20	62.5	1	3.1
RACE/ETHNICITY OF MOTHER									
1-White	113,045	23,899	21.1	14,017	12.4	74,314	65.7	815	0.7
2-African American	10,976	2,640	24.1	1,483	13.5	6,745	61.5	108	1.0
3-Hispanic	102,662	18,553	18.1	14,625	14.3	68,649	66.9	835	0.8
4-Asian	51,860	10,893	21.0	6,150	11.9	34,464	66.5	353	0.7
5-Hawaiian/Pacific Islanders	1,327	240	18.1	174	13.1	895	67.5	18	1.4
6-American Indian/Alaskan Native	836	142	17.0	117	14.0	574	68.7	3	0.4
7-Two or more Race Categories	5,856	1,184	20.2	666	11.4	3,955	67.5	51	0.9
8-Others/Unknown	5,980	1,414	23.7	745	12.5	3,789	63.4	32	0.5
MOTHER'S NATIVITY									
Foreign Born	112,214	22,016	19.6	15,675	14.0	73,595	65.6	928	0.8
US Born	180,112	36,907	20.5	22,279	12.4	119,641	66.4	1,285	0.7
Unknown	216	42	19.4	23	10.7	149	69.0	2	0.9
MOTHER'S EDUCATION STATUS									
1-<High School	30,170	4,667	15.5	4,288	14.2	20,935	69.4	280	0.9
2-High School Graduate	61,241	10,728	17.5	7,948	13.0	42,112	68.8	453	0.7
3-Some College or Associate Degree	74,780	15,032	20.1	9,881	13.2	49,331	66.0	536	0.7
4-Bachelor's Degree or Higher	116,114	26,264	22.6	14,594	12.6	74,382	64.1	874	0.8
5-Unknown	10,237	2,274	22.2	1,266	12.4	6,625	64.7	72	0.7
TOTAL BIRTHS¹	292,542	58,965	20.2	37,977	13.0	193,385	66.1	2,215	0.8

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 5a. Comparison of Select Birth Outcomes, Medi-Cal vs. Births from Other Payer Sources
California Resident Births, 2007

BIRTH OUTCOMES	Medi-Cal Births						Non-Medi-Cal Births					
	Total		Fee-for-Service		Managed Care		Total		Other		Private Insurance	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
BIRTHWEIGHT												
Low Birthweight	17,885	6.7	12,176	6.4	5,709	7.3	20,516	7.0	4,001	7.6	16,515	6.9
Normal Birthweight	250,440	93.3	178,273	93.6	72,167	92.7	271,984	93.0	48,885	92.4	223,099	93.1
Out-of-Range	17	0.0	14	0.0	3	0.0	42	0.0	13	0.0	29	0.0
VERY LOW BIRTHWEIGHT STATUS												
1-Very Low Birthweight-NO	265,305	98.9	188,343	98.9	76,962	98.8	288,899	98.8	52,081	98.5	236,818	98.8
2-Very Low Birthweight-YES	3,020	1.1	2,106	1.1	914	1.2	3,605	1.2	806	1.5	2,799	1.2
3-Out-of-Range	17	0.0	14	0.0	3	0.0	38	0.0	12	0.0	26	0.0
GESTATION*												
1-Preterm Delivery (<37 Weeks)	29,719	11.1	20,474	10.8	9,245	11.9	30,140	10.3	6,145	11.6	23,995	10.0
2-Normal Range	227,112	84.6	162,939	85.6	64,173	82.4	251,472	86.0	44,229	83.6	207,243	86.5
3-Out-of-Range/Missing	11,511	4.3	7,050	3.7	4,461	5.7	10,930	3.7	2,525	4.8	8,405	3.5
VERY PRETERM STATUS*												
1-Very Preterm Delivery-Yes (<32 Weeks)	4,391	1.6	2,995	1.6	1,396	1.8	4,287	1.5	1,027	1.9	3,260	1.4
2-Very Preterm Delivery-No	252,440	94.1	180,418	94.7	72,022	92.5	277,325	94.8	49,347	93.3	227,978	95.1
3-Out-of-Range/Missing	11,511	4.3	7,050	3.7	4,461	5.7	10,930	3.7	2,525	4.8	8,405	3.5
TOTAL BIRTHS¹	268,342	100.0	190,463	100.0	77,879	100.0	292,542	100.0	52,899	100.0	239,643	100.0

*Gestational age and preterm status of newborn are estimated using the date of last menses from the birth certificate. A large number of birth certificates (N=22,441) are missing this data element.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 5b. Comparison of Select Birth Outcomes Among Singleton Births, Medi-Cal vs. Births from Other Payer Sources
California Resident Births, 2007

BIRTH OUTCOMES	Medi-Cal Births						Non-Medi-Cal Births					
	Total		Fee-for-Service		Managed Care		Total		Other		Private Insurance	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
BIRTHWEIGHT												
Low Birthweight	14,543	5.5	9,987	5.4	4,556	6.0	14,005	5.0	3,092	6.0	10,913	4.8
Normal Birthweight	247,948	94.5	176,665	94.6	71,283	94.0	266,951	95.0	48,249	94.0	218,702	95.2
Out-of-Range	15	0.0	13	0.0	2	0.0	32	0.0	13	0.0	19	0.0
VERY LOW BIRTHWEIGHT STATUS												
1-Very Low Birthweight-NO	260,078	99.1	184,919	99.1	75,159	99.1	278,527	99.1	50,736	98.8	227,791	99.2
2-Very Low Birthweight-YES	2,413	0.9	1,733	0.9	680	0.9	2,432	0.9	606	1.2	1,826	0.8
3-Out-of-Range	15	0.0	13	0.0	2	0.0	29	0.0	12	0.0	17	0.0
GESTATION*												
1-Preterm Delivery (<37 Weeks)	26,483	10.1	18,361	9.8	8,122	10.7	23,520	8.4	5,247	10.2	18,273	8.0
2-Normal Range	224,747	85.6	161,398	86.5	63,349	83.5	247,061	87.9	43,659	85.0	203,402	88.6
3-Out-of-Range/Missing	11,276	4.3	6,906	3.7	4,370	5.8	10,407	3.7	2,448	4.8	7,959	3.5
VERY PRETERM STATUS*												
1-Very Preterm Delivery-Yes (<32 Weeks)	3,746	1.4	2,588	1.4	1,158	1.5	3,067	1.1	812	1.6	2,255	1.0
2-Very Preterm Delivery-No	247,484	94.3	177,171	94.9	70,313	92.7	267,514	95.2	48,094	93.7	219,420	95.6
3-Out-of-Range/Missing	11,276	4.3	6,906	3.7	4,370	5.8	10,407	3.7	2,448	4.8	7,959	3.5
TOTAL BIRTHS¹	262,506	100.0	186,665	100.0	75,841	100.0	280,988	100.0	51,354	100.0	229,634	100.0

*Gestational age and preterm status of newborn are estimated using the date of last menses from the birth certificate. A large number of birth certificates (N=21,683) are missing this data element.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 6a. Comparison of Birthweight Among Medi-Cal Births, by Select Maternal and Birth Characteristics
California Resident Births, 2007

MATERNAL AND BIRTH CHARACTERISTICS	Total	Birthweight						Very Low Birthweight Status					
		Low Birthweight		Normal Birthweight		Out-of-Range		1-Very Low Birthweight-NO		2-Very Low Birthweight-YES		3-Out-of-Range	
		Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
AGE OF MOTHER													
Age <15	449	44	9.8	405	90.2	-	-	443	98.7	6	1.3	-	-
15-17	12,527	983	7.9	11,544	92.2	-	-	12,371	98.8	156	1.3	-	-
18-19	28,233	2,000	7.1	26,229	92.9	4	0.0	27,903	98.8	326	1.2	4	0.0
20-24	87,771	5,483	6.3	82,282	93.8	6	0.0	86,902	99.0	863	1.0	6	0.0
25-29	70,213	4,240	6.0	65,968	94.0	5	0.0	69,503	99.0	705	1.0	5	0.0
30-34	42,946	2,931	6.8	40,014	93.2	1	0.0	42,400	98.7	545	1.3	1	0.0
35-44	25,957	2,175	8.4	23,781	91.6	1	0.0	25,544	98.4	412	1.6	1	0.0
45 & Up	246	29	11.8	217	88.2	-	-	239	97.2	7	2.9	-	-
RACE/ETHNICITY OF MOTHER													
1-White	35,314	2,250	6.4	33,061	93.6	3	0.0	34,949	99.0	362	1.0	3	0.0
2-African American	18,155	2,219	12.2	15,934	87.8	2	0.0	17,721	97.6	432	2.4	2	0.0
3-Hispanic	192,620	11,745	6.1	180,863	93.9	12	0.0	190,632	99.0	1,976	1.0	12	0.0
4-Asian	14,083	1,007	7.2	13,076	92.9	-	-	13,959	99.1	124	0.9	-	-
5-Hawaiian/Pacific Islanders	1,263	82	6.5	1,181	93.5	-	-	1,242	98.3	21	1.7	-	-
6-American Indian/Alaskan Native	1,136	83	7.3	1,053	92.7	-	-	1,128	99.3	8	0.7	-	-
7-Two or more Race Categories	3,467	278	8.0	3,189	92.0	-	-	3,422	98.7	45	1.3	-	-
8-Others/Unknown	2,304	221	9.6	2,083	90.4	-	-	2,252	97.7	52	2.3	-	-
MOTHER'S NATIVITY													
Foreign Born	146,049	8,485	5.8	137,555	94.2	9	0.0	144,656	99.1	1,384	1.0	9	0.0
US Born	122,142	9,385	7.7	112,750	92.3	7	0.0	120,506	98.7	1,629	1.3	7	0.0
Unknown	151	15	9.9	135	89.4	1	0.7	143	94.7	7	4.6	1	0.7
MOTHER'S EDUCATION STATUS													
1-<High School	120,841	7,626	6.3	113,212	93.7	3	0.0	119,604	99.0	1,234	1.0	3	0.0
2-High School Graduate	86,855	5,889	6.8	80,956	93.2	10	0.0	85,828	98.8	1,017	1.2	10	0.0
3-Some College or Associate Degree	43,276	3,161	7.3	40,113	92.7	2	0.0	42,719	98.7	555	1.3	2	0.0
4-Bachelor's Degree or Higher	8,665	564	6.5	8,101	93.5	-	-	8,593	99.2	72	0.8	-	-
5-Unknown	8,705	645	7.4	8,058	92.6	2	0.0	8,561	98.4	142	1.6	2	0.0
PARITY STATUS													
First Born	96,423	6,830	7.1	89,587	92.9	6	0.0	95,259	98.8	1,158	1.2	6	0.0
One Previous Birth	76,218	4,393	5.8	71,817	94.2	8	0.0	75,479	99.0	731	1.0	8	0.0
Two+ Previous Births	95,441	6,624	6.9	88,814	93.1	3	0.0	94,320	98.8	1,118	1.2	3	0.0
Unknown or Unreported	260	38	14.6	222	85.4	-	-	247	95.0	13	5.0	-	-
SINGLE/MULTI BIRTH													
Multiple Birth	5,836	3,342	57.3	2,492	42.7	2	0.0	5,227	89.6	607	10.4	2	0.0
Singleton	262,506	14,543	5.5	247,948	94.5	15	0.0	260,078	99.1	2,413	0.9	15	0.0
TOTAL BIRTHS¹	268,342	17,885	6.7	250,440	93.3	17	0.0	265,305	98.9	3,020	1.1	17	0.0

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 6b. Comparison of Birthweight Among Medi-Cal Births, by Select Comorbidities
California Resident Births, 2007

COMORBIDITIES	Total	Birthweight						Very Low Birthweight Status					
		Low Birthweight		Normal Birthweight		Out-of-Range		1-Very Low Birthweight-NO		2-Very Low Birthweight-YES		3-Out-of-Range	
	Count	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
HYPERTENSION*													
1-Yes	17,216	3,762	21.9	13,453	78.1	1	0.0	16,439	95.5	776	4.5	1	0.0
2-No	251,126	14,123	5.6	236,987	94.4	16	0.0	248,866	99.1	2,244	0.9	16	0.0
DIABETES*													
1-Yes	18,842	1,444	7.7	17,398	92.3	-	-	18,603	98.7	239	1.3	-	-
2-No	249,500	16,441	6.6	233,042	93.4	17	0.0	246,702	98.9	2,781	1.1	17	0.0
SUBSTANCE USE*													
1-Yes	4,737	773	16.3	3,963	83.7	1	0.0	4,570	96.5	166	3.5	1	0.0
2-No	263,605	17,112	6.5	246,477	93.5	16	0.0	260,735	98.9	2,854	1.1	16	0.0
SMOKING DURING PREGNANCY													
1-Yes	10,504	1,031	9.8	9,472	90.2	1	0.0	10,341	98.4	162	1.5	1	0.0
2-No	249,034	16,243	6.5	232,777	93.5	14	0.0	246,268	98.9	2,752	1.1	14	0.0
3-Unknown	8,804	611	6.9	8,191	93.0	2	0.0	8,696	98.8	106	1.2	2	0.0
PRE-PREGNANCY WEIGHT**													
1-Underweight	9,674	887	9.2	8,787	3.5	-	-	9,563	98.9	111	1.1	-	-
2-Normal Weight	103,695	6,471	6.2	97,221	93.8	3	0.0	102,773	99.1	919	0.9	3	0.0
3-Overweight	62,573	3,419	5.5	59,153	94.5	1	0.0	61,993	99.1	579	0.9	1	0.0
4-Obese/Extremely Obese	50,548	2,893	5.7	47,653	94.3	2	0.0	49,971	98.9	575	1.1	2	0.0
5-Out-of-Range/Unknown	41,852	4,215	10.1	37,626	89.9	11	0.0	41,005	98.0	836	2.0	11	0.0
TOTAL BIRTHS¹	268,342	17,885	6.7	250,440	93.3	17	0.0	265,305	98.9	3,020	1.1	17	0.0

*Comorbidities such as hypertension, diabetes and substance use have been identified in the hospital discharge data using ICD-9 diagnostic codes in up to 25 separate fields. ICD-9 codes were further grouped into clinically relevant classifications using the Clinical Classification Software (CCS) made available by the Agency for Healthcare Research & Quality (AHRQ).

**Pre-pregnancy weight as reported on the birth certificate has been categorized into 4 weight groupings based on body mass index (BMI) classification set by the National Heart Lung and Blood Institute.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 6c. Comparison of Birthweight Among Non-Medi-Cal Births, by Select Comorbidities
California Resident Births, 2007

MATERNAL AND BIRTH CHARACTERISTICS	Total	Birthweight						Very Low Birthweight Status					
		Low Birthweight		Normal Birthweight		Out-of-Range		1-Very Low Birthweight-NO		2-Very Low Birthweight-YES		3-Out-of-Range	
	Count	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
AGE OF MOTHER													
Age <15	202	15	7.4	187	92.6	-	-	199	98.5	3	1.5	-	-
15-17	4,917	428	8.7	4,489	91.3	-	-	4,833	98.3	84	1.7	-	-
18-19	7,300	575	7.9	6,724	92.1	1	0.0	7,181	98.4	118	1.6	1	0.0
20-24	39,176	2,446	6.2	36,725	93.7	5	0.0	38,697	98.8	475	1.2	4	0.0
25-29	78,950	4,822	6.1	74,112	93.9	16	0.0	78,117	98.9	819	1.0	14	0.0
30-34	91,161	6,090	6.7	85,057	93.3	14	0.0	90,121	98.9	1,026	1.1	14	0.0
35-44	69,624	5,846	8.4	63,772	91.6	6	0.0	68,598	98.5	1,021	1.5	5	0.0
45 & Up	1,180	287	24.3	893	75.7	-	-	1,123	95.2	57	4.8	-	-
Invalid/Out-of-Range	32	7	21.9	25	78.1	-	-	30	93.8	2	6.3	-	-
RACE/ETHNICITY OF MOTHER													
1-White	113,045	7,212	6.4	105,823	93.6	10	0.0	111,853	99.0	1,182	1.1	10	0.0
2-African American	10,976	1,307	11.9	9,663	88.0	6	0.1	10,627	96.8	344	3.1	5	0.1
3-Hispanic	102,662	6,768	6.6	95,881	93.4	13	0.0	101,383	98.8	1,268	1.2	11	0.0
4-Asian	51,860	4,008	7.7	47,846	92.3	6	0.0	51,277	98.9	578	1.1	5	0.0
5-Hawaiian/Pacific Islanders	1,327	96	7.2	1,231	92.8	-	-	1,309	98.6	18	1.4	-	-
6-American Indian/Alaskan Native	836	60	7.2	774	92.6	2	0.2	826	98.8	8	1.0	2	0.2
7-Two or more Race Categories	5,856	445	7.6	5,410	92.4	1	0.0	5,777	98.7	78	1.3	1	0.0
8-Others/Unknown	5,980	620	10.4	5,356	89.6	4	0.1	5,847	97.8	129	2.2	4	0.1
MOTHER'S NATIVITY													
Foreign Born	112,214	7,897	7.0	104,302	93.0	15	0.0	110,905	98.8	1,296	1.2	13	0.0
US Born	180,112	12,588	7.0	167,499	93.0	25	0.0	177,789	98.7	2,300	1.3	23	0.0
Unknown	216	31	14.4	183	84.7	2	0.9	205	94.9	9	4.2	2	0.9
MOTHER'S EDUCATION'S STATUS													
1-<High School	30,170	2,236	7.4	27,929	92.6	5	0.0	29,729	98.5	437	1.5	4	0.0
2-High School Graduate	61,241	4,035	6.6	57,199	93.4	7	0.0	60,464	98.7	770	1.3	7	0.0
3-Some College or Associate Degree	74,780	5,071	6.8	69,697	93.2	12	0.0	73,843	98.8	927	1.2	10	0.0
4-Bachelor's Degree or Higher	116,114	8,203	7.1	107,899	92.9	12	0.0	114,825	98.9	1,278	1.1	11	0.0
5-Unknown	10,237	971	9.5	9,260	90.5	6	0.1	10,038	98.1	193	1.9	6	0.1
PARITY STATUS													
First Born	122,244	8,959	7.3	113,261	92.7	24	0.0	120,623	98.7	1,598	1.3	23	0.0
One Previous Birth	97,946	6,155	6.3	91,782	93.7	9	0.0	96,910	98.9	1,030	1.1	6	0.0
Two+ Previous Births	71,956	5,362	7.5	66,586	92.5	8	0.0	70,981	98.7	967	1.3	8	0.0
Unknown or Unreported	396	40	10.1	355	89.7	1	0.3	385	97.2	10	2.5	1	0.3
SINGLE/MULTI BIRTH													
Multiple Birth	11,554	6,511	56.4	5,033	43.6	10	0.1	10,372	89.8	1,173	10.2	9	0.1
Singleton	280,988	14,005	5.0	266,951	95.0	32	0.0	278,527	99.1	2,432	0.9	29	0.0
TOTAL BIRTHS¹	292,542	20,516	7.0	271,984	93.0	42	0.0	288,899	98.8	3,605	1.2	38	0.0

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 6d. Comparison of Birthweight Among Non-Medi-Cal Births, by Select Comorbidities
California Resident Births, 2007

COMORBIDITIES	Total	Birthweight						Very Low Birthweight Status					
		Low Birthweight		Normal Birthweight		Out-of-Range		1-Very Low Birthweight-NO		2-Very Low Birthweight-YES		3-Out-of-Range	
	Count	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
HYPERTENSION*													
1-Yes	18,479	4,313	23.3	14,163	76.6	3	7.1	17,627	95.4	849	4.6	3	0.0
2-No	250,855	13,800	5.5	237,035	94.5	20	0.0	248,675	99.1	2,163	0.9	17	0.0
3-Unknown	23,208	2,403	10.4	20,786	89.6	19	0.1	22,597	97.4	593	2.6	18	0.1
DIABETES*													
1-Yes	21,249	2,093	9.8	19,154	90.1	2	0.0	20,899	98.4	349	1.6	1	0.0
2-No	248,085	16,020	6.5	232,044	93.5	21	0.0	245,403	98.9	2,663	1.1	19	0.0
3-Unknown	23,208	2,403	10.4	20,786	89.6	19	0.1	22,597	97.4	593	2.6	18	0.1
SUBSTANCE USE*													
1-Yes	1,470	223	15.2	1,245	84.7	2	0.1	1,414	96.2	54	3.7	2	0.1
2-No	267,864	17,890	6.7	249,953	93.3	21	0.0	264,888	98.9	2,958	1.1	18	0.0
3-Unknown	23,208	2,403	10.4	20,786	89.6	19	0.1	22,597	97.4	593	2.6	18	0.1
SMOKING DURING PREGNANCY													
1-Yes	3,573	333	9.3	3,239	90.7	1	0.0	3,510	98.2	62	1.7	1	0.0
2-No	262,588	17,504	6.7	245,065	93.3	19	0.0	259,678	98.9	2,894	1.1	16	0.0
3-Unknown	26,381	2,679	10.2	23,680	89.8	22	0.1	25,711	97.5	649	2.5	21	0.1
PRE-PREGNANCY WEIGHT**													
1-Underweight	10,772	881	8.2	9,891	91.8	-	-	10,683	99.2	89	0.8	-	-
2-Normal Weight	134,000	7,280	5.4	126,717	94.6	3	0.0	132,997	99.3	1,001	0.7	2	0.0
3-Overweight	55,844	2,938	5.3	52,905	94.7	1	0.0	55,315	99.1	528	0.9	1	0.0
4-Obese/Extremely Obese	38,681	2,244	5.8	36,427	94.2	10	0.0	38,166	98.7	507	1.3	8	0.0
5-Out-of-Range/Unknown	53,245	7,173	13.5	46,044	86.5	28	0.1	51,738	97.2	1,480	2.8	27	0.1
TOTAL BIRTHS¹	292,542	20,516	7.0	271,984	93.0	42	0.0	288,899	98.8	3,605	1.2	38	0.0

*Comorbidities such as hypertension, diabetes and substance use have been identified in the hospital discharge data using ICD-9 diagnostic codes in up to 25 separate fields. ICD-9 codes were further grouped into clinically relevant classifications using the Clinical Classification Software (CCS) made available by the Agency for Healthcare Research & Quality (AHRQ).

**Pre-pregnancy weight as reported on the birth certificate has been categorized into 4 weight groupings based on body mass index (BMI) classification set by the National Heart Lung and Blood Institute.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 7a. Comparison of Gestational Age Among Medi-Cal Births, by Select Maternal and Birth Characteristics
California Resident Births, 2007

MATERNAL AND BIRTH CHARACTERISTIC	Total	Gestation*						Very Preterm Status (<32 wks gestation)*					
		1-Preterm Delivery (<37 Weeks)		2-Normal Range		3-Out-of-Range/Missing		1-Very Preterm Delivery-Yes (<32 Weeks)		2-Very Preterm Delivery-No		3-Out-of-Range/Missing	
		Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
AGE OF MOTHER													
Age <15	449	74	16.5	332	73.9	43	9.6	12	2.7	394	87.8	43	9.6
15-17	12,527	1,603	12.8	10,302	82.2	622	5.0	316	2.5	11,589	92.5	622	5.0
18-19	28,233	3,082	10.9	23,844	84.5	1,307	4.6	517	1.8	26,409	93.5	1,307	4.6
20-24	87,771	9,070	10.3	74,612	85.0	4,089	4.7	1,281	1.5	82,401	93.9	4,089	4.7
25-29	70,213	7,112	10.1	60,194	85.7	2,907	4.1	964	1.4	66,342	94.5	2,907	4.1
30-34	42,946	5,027	11.7	36,287	84.5	1,632	3.8	732	1.7	40,582	94.5	1,632	3.8
35-44	25,957	3,704	14.3	21,355	82.3	898	3.5	562	2.2	24,497	94.4	898	3.5
45 & Up	246	47	19.1	186	75.6	13	5.3	7	2.9	226	91.9	13	5.3
RACE/ETHNICITY OF MOTHER													
1-White	35,314	3,614	10.2	29,735	84.2	1,965	5.6	536	1.5	32,813	92.9	1,965	5.6
2-African American	18,155	2,709	14.9	14,450	79.6	996	5.5	537	3.0	16,622	91.6	996	5.5
3-Hispanic	192,620	20,841	10.8	164,150	85.2	7,629	4.0	2,964	1.5	182,027	94.5	7,629	4.0
4-Asian	14,083	1,551	11.0	12,095	85.9	437	3.1	180	1.3	13,466	95.6	437	3.1
5-Hawaiian/Pacific Islanders	1,263	146	11.6	1,054	83.5	63	5.0	29	2.3	1,171	92.7	63	5.0
6-American Indian/Alaskan Native	1,136	135	11.9	927	81.6	74	6.5	17	1.5	1,045	92.0	74	6.5
7-Two or more Race Categories	3,467	415	12.0	2,863	82.6	189	5.5	71	2.1	3,207	92.5	189	5.5
8-Others/Unknown	2,304	308	13.4	1,838	79.8	158	6.9	57	2.5	2,089	90.7	158	6.9
MOTHER'S NATIVITY													
Foreign Born	146,049	15,139	10.4	126,319	86.5	4,591	3.1	1,984	1.4	139,474	95.5	4,591	3.1
US Born	122,142	14,563	11.9	100,687	82.4	6,892	5.6	2,402	2.0	112,848	92.4	6,892	5.6
Unknown	151	17	11.3	106	70.2	28	18.5	5	3.3	118	78.2	28	18.5
MOTHER'S EDUCATION STATUS													
1-<High School	120,841	13,531	11.2	102,513	84.8	4,797	4.0	1,951	1.6	114,093	94.4	4,797	4.0
2-High School Graduate	86,855	9,584	11.0	73,210	84.3	4,061	4.7	1,479	1.7	81,315	93.6	4,061	4.7
3-Some College or Associate Degree	43,276	4,791	11.1	36,675	84.8	1,810	4.2	715	1.7	40,751	94.2	1,810	4.2
4-Bachelor's Degree or Higher	8,665	832	9.6	7,644	88.2	189	2.2	95	1.1	8,381	96.7	189	2.2
5-Unknown	8,705	981	11.3	7,070	81.2	654	7.5	151	1.7	7,900	90.8	654	7.5
PARITY STATUS													
First Born	96,423	9,623	10.0	83,048	86.1	3,752	3.9	1,588	1.7	91,083	94.5	3,752	3.9
One Previous Birth	76,218	7,943	10.4	65,069	85.4	3,206	4.2	1,100	1.4	71,912	94.4	3,206	4.2
Two+ Previous Births	95,441	12,128	12.7	78,869	82.6	4,444	4.7	1,698	1.8	89,299	93.6	4,444	4.7
Unknown or Unreported	260	25	9.6	126	48.5	109	41.9	5	1.9	146	56.2	109	41.9
SINGLE/MULTI BIRTH													
Multiple Birth	5,836	3,236	55.5	2,365	40.5	235	4.0	645	11.1	4,956	84.9	235	4.0
Singleton	262,506	26,483	10.1	224,747	85.6	11,276	4.3	3,746	1.4	247,484	94.3	11,276	4.3
TOTAL BIRTHS¹	268,342	29,719	11.1	227,112	84.6	11,511	4.3	4,391	1.6	252,440	94.1	11,511	4.3

*Gestational age and preterm status of newborn are estimated using the date of last menses from the birth certificate. A large number of birth certificates (N=11,511) are missing this data element.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 7b. Comparison of Gestational Age Among Medi-Cal Births, by Select Comorbidities
California Resident Births, 2007

COMORBIDITIES	Total	Gestation*						Very Preterm Status (<32 wks gestation)*					
		1-Preterm Delivery (<37 Weeks)		2-Normal Range		3-Out-of-Range/Missing		1-Very Preterm Delivery-Yes (<32 Weeks)		2-Very Preterm Delivery-No		3-Out-of-Range/Missing	
	Count	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
HYPERTENSION**													
1-Yes	17,216	4,231	24.6	12,188	70.8	797	4.6	757	4.4	15,662	91.0	797	4.6
2-No	251,126	25,488	10.1	214,924	85.6	10,714	4.3	3,634	1.4	236,778	94.3	10,714	4.3
DIABETES**													
1-Yes	18,842	2,835	15.0	15,290	81.1	717	3.8	349	1.9	17,776	94.3	717	3.8
2-No	249,500	26,884	10.8	211,822	84.9	10,794	4.3	4,042	1.6	234,664	94.1	10,794	4.3
SUBSTANCE USE**													
1-Yes	4,737	889	18.8	3,377	71.3	471	9.9	204	4.3	4,062	85.8	471	9.9
2-No	263,605	28,830	10.9	223,735	84.9	11,040	4.2	4,187	1.6	248,378	94.2	11,040	4.2
SMOKING DURING PREGNANCY													
1-Yes	10,504	1,435	13.7	8,362	79.6	707	6.7	256	2.4	9,541	90.8	707	6.7
2-No	249,034	27,202	10.9	211,831	85.1	10,001	4.0	3,991	1.6	235,042	94.4	10,001	4.0
3-Unknown	8,804	1,082	12.3	6,919	78.6	803	9.1	144	1.6	7,857	89.2	803	9.1
PRE-PREGNANCY WEIGHT***													
1-Underweight	9,674	1,139	11.8	8,155	84.3	380	3.9	175	1.8	9,119	94.3	380	3.9
2-Normal Weight	103,695	10,735	10.4	89,538	86.3	3,422	3.3	1,506	1.5	98,767	95.2	3,422	3.3
3-Overweight	62,573	6,425	10.3	54,046	86.4	2,102	3.4	902	1.4	59,569	95.2	2,102	3.4
4-Obese/Extremely Obese	50,548	5,502	10.9	43,101	85.3	1,945	3.8	847	1.7	47,756	94.5	1,945	3.8
5-Out-of-Range/Unknown	41,852	5,918	14.1	32,272	77.1	3,662	8.7	961	2.3	37,229	89.0	3,662	8.7
TOTAL BIRTHS¹	268,342	29,719	11.1	227,112	84.6	11,511	4.3	4,391	1.6	252,440	94.1	11,511	4.3

*Gestational age and preterm status of newborn are estimated using the date of last menses from the birth certificate. A large number of birth certificates (N=11,511) are missing this data element.

**Comorbidities such as hypertension, diabetes and substance use have been identified in the hospital discharge data using ICD-9 diagnostic codes in up to 25 separate fields. ICD-9 codes were further grouped into clinically relevant classifications using the Clinical Classification Software (CCS) made available by the Agency for Healthcare Research & Quality (AHRQ).

***Pre-pregnancy weight as reported on the birth certificate has been categorized into 4 weight groupings based on body mass index (BMI) classification set by the National Heart Lung and Blood Institute.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 7c. Comparison of Gestational Age Among Non-Medi-Cal Births, by Select Maternal and Birth Characteristics
California Resident Births, 2007

MATERNAL AND BIRTH CHARACTERISTICS	Total	Gestation*						Very Preterm Status (<32 wks gestation)*					
		1-Preterm Delivery (<37 Weeks)		2-Normal Range		3-Out-of-Range/Missing		1-Very Preterm Delivery-Yes (<32 Weeks)		2-Very Preterm Delivery-No		3-Out-of-Range/Missing	
		Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
AGE OF MOTHER													
Age <15	202	35	17.3	152	75.3	15	7.4	9	4.5	178	88.1	15	7.4
15-17	4,917	668	13.6	3,945	80.2	304	6.2	134	2.7	4,479	91.1	304	6.2
18-19	7,300	836	11.5	6,058	83.0	406	5.6	151	2.1	6,743	92.4	406	5.6
20-24	39,176	3,746	9.6	33,504	85.5	1,926	4.9	576	1.5	36,674	93.6	1,926	4.9
25-29	78,950	7,286	9.2	68,672	87.0	2,992	3.8	1,012	1.3	74,946	94.9	2,992	3.8
30-34	91,161	8,921	9.8	79,274	87.0	2,966	3.3	1,197	1.3	86,998	95.4	2,966	3.3
35-44	69,624	8,337	12.0	59,069	84.8	2,218	3.2	1,155	1.7	66,251	95.2	2,218	3.2
45 & Up	1,180	308	26.1	784	66.4	88	7.5	53	4.5	1,039	88.1	88	7.5
Invalid/Out-of-Range	32	3	9.4	14	43.8	15	46.9	-	-	17	53.1	15	46.9
RACE/ETHNICITY OF MOTHER													
1-White	113,045	10,786	9.5	98,202	86.9	4,057	3.6	1,374	1.2	107,614	95.2	4,057	3.6
2-African American	10,976	1,603	14.6	8,834	80.5	539	4.9	375	3.4	10,062	91.7	539	4.9
3-Hispanic	102,662	11,043	10.8	87,113	84.9	4,506	4.4	1,608	1.6	96,548	94.0	4,506	4.4
4-Asian	51,860	5,011	9.7	45,700	88.1	1,149	2.2	635	1.2	50,076	96.6	1,149	2.2
5-Hawaiian/Pacific Islanders	1,327	163	12.3	1,116	84.1	48	3.6	31	2.3	1,248	94.1	48	3.6
6-American Indian/Alaskan Native	836	98	11.7	703	84.1	35	4.2	19	2.3	782	93.5	35	4.2
7-Two or more Race Categories	5,856	651	11.1	4,972	84.9	233	4.0	91	1.6	5,532	94.5	233	4.0
8-Others/Unknown	5,980	785	13.1	4,832	80.8	363	6.1	154	2.6	5,463	91.4	363	6.1
MOTHER'S NATIVITY													
Foreign Born	112,214	11,311	10.1	97,313	86.7	3,590	3.2	1,497	1.3	107,127	95.5	3,590	3.2
US Born	180,112	18,802	10.4	154,015	85.5	7,295	4.1	2,781	1.5	170,036	94.4	7,295	4.1
Unknown	216	27	12.5	144	66.7	45	20.8	9	4.2	162	75.0	45	20.8
MOTHER'S EDUCATION STATUS													
1-<High School	30,170	3,750	12.4	24,941	82.7	1,479	4.9	613	2.0	28,078	93.1	1,479	4.9
2-High School Graduate	61,241	6,359	10.4	51,991	84.9	2,891	4.7	950	1.6	57,400	93.7	2,891	4.7
3-Some College or Associate Degree	74,780	7,811	10.5	64,149	85.8	2,820	3.8	1,132	1.5	70,828	94.7	2,820	3.8
4-Bachelor's Degree or Higher	116,114	11,025	9.5	102,136	88.0	2,953	2.5	1,379	1.2	111,782	96.3	2,953	2.5
5-Unknown	10,237	1,195	11.7	8,255	80.6	787	7.7	213	2.1	9,237	90.2	787	7.7
PARITY STATUS													
First Born	122,244	11,410	9.3	106,999	87.5	3,835	3.1	1,776	1.5	116,633	95.4	3,835	3.1
One Previous Birth	97,946	9,696	9.9	84,724	86.5	3,526	3.6	1,251	1.3	93,169	95.1	3,526	3.6
Two+ Previous Births	71,956	9,012	12.5	59,591	82.8	3,353	4.7	1,257	1.8	67,346	93.6	3,353	4.7
Unknown or Unreported	396	22	5.6	158	39.9	216	54.6	3	0.8	177	44.7	216	54.6
SINGLE/MULTI BIRTH													
Multiple Birth	11,554	6,620	57.3	4,411	38.2	523	4.5	1,220	10.6	9,811	84.9	523	4.5
Singleton	280,988	23,520	8.4	247,061	87.9	10,407	3.7	3,067	1.1	267,514	95.2	10,407	3.7
TOTAL BIRTHS¹	292,542	30,140	10.3	251,472	86.0	10,930	3.7	4,287	1.5	277,325	94.8	10,930	3.7

*Gestational age and preterm status of newborn are estimated using the date of last menses from the birth certificate. A large number of birth certificates (N=10,930) are missing this data element.

1) Total Births = Births in Hospital Only. RAS...

Table 7d. Comparison of Gestational Age Among Non-Medi-Cal Births, by Select Comorbidities
California Resident Births, 2007

COMORBIDITIES	Total	Gestation*						Very Preterm Status (<32 wks gestation)*					
		1-Preterm Delivery (<37 Weeks)		2-Normal Range		3-Out-of-Range/Missing		1-Very Preterm Delivery-Yes (<32 Weeks)		2-Very Preterm Delivery-No		3-Out-of-Range/Missing	
		Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
HYPERTENSION**													
1-Yes	18,479	4,788	25.9	12,998	70.3	693	3.8	757	4.1	17,029	92.2	693	3.8
2-No	250,855	22,077	8.8	219,646	87.6	9,132	3.6	2,862	1.1	238,861	95.2	9,132	3.6
3-Unknown	23,208	3,275	14.1	18,828	81.1	1,105	4.8	668	2.9	21,435	92.4	1,105	4.8
DIABETES**													
1-Yes	21,249	3,058	14.4	17,394	81.9	797	3.8	415	2.0	20,037	94.3	797	3.8
2-No	248,085	23,807	9.6	215,250	86.8	9,028	3.6	3,204	1.3	235,853	95.1	9,028	3.6
3-Unknown	23,208	3,275	14.1	18,828	81.1	1,105	4.8	668	2.9	21,435	92.4	1,105	4.8
SUBSTANCE USE**													
1-Yes	1,470	279	19.0	1,011	68.8	180	12.2	68	4.6	1,222	83.1	180	12.2
2-No	267,864	26,586	9.9	231,633	86.5	9,645	3.6	3,551	1.3	254,668	95.1	9,645	3.6
3-Unknown	23,208	3,275	14.1	18,828	81.1	1,105	4.8	668	2.9	21,435	92.4	1,105	4.8
SMOKING DURING PREGNANCY													
1-Yes	3,573	452	12.7	2,896	81.1	225	6.3	79	2.2	3,269	91.5	225	6.3
2-No	262,588	26,044	9.9	227,459	86.6	9,085	3.5	3,480	1.3	250,023	95.2	9,085	3.5
3-Unknown	26,381	3,644	13.8	21,117	80.0	1,620	6.1	728	2.8	24,033	91.1	1,620	6.1
PRE-PREGNANCY WEIGHT***													
1-Underweight	10,772	1,019	9.5	9,442	87.7	311	2.9	110	1.0	10,351	96.1	311	2.9
2-Normal Weight	134,000	11,389	8.5	119,046	88.8	3,565	2.7	1,255	0.9	129,180	96.4	3,565	2.7
3-Overweight	55,844	5,028	9.0	49,111	87.9	1,705	3.1	712	1.3	53,427	95.7	1,705	3.1
4-Obese/Extremely Obese	38,681	3,952	10.2	33,309	86.1	1,420	3.7	611	1.6	36,650	94.7	1,420	3.7
5-Out-of-Range/Unknown	53,245	8,752	16.4	40,564	76.2	3,929	7.4	1,599	3.0	47,717	89.6	3,929	7.4
TOTAL BIRTHS¹	292,542	30,140	10.3	251,472	86.0	10,930	3.7	4,287	1.5	277,325	94.8	10,930	3.7

*Gestational age and preterm status of newborn are estimated using the date of last menses from the birth certificate. A large number of birth certificates (N=10,930) are missing this data element.

**Comorbidities such as hypertension, diabetes and substance use have been identified in the hospital discharge data using ICD-9 diagnostic codes in up to 25 separate fields. ICD-9 codes were further grouped into clinically relevant classifications using the Clinical Classification Software (CCS) made available by the Agency for Healthcare Research & Quality (AHRQ).

***Pre-pregnancy weight as reported on the birth certificate has been categorized into 4 weight groupings based on body mass index (BMI) classification set by the National Heart Lung and Blood Institute.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 8a. Medi-Cal Births by Aid Category and Select Comorbidities
California Resident Births, 2007

COMORBIDITIES	Total		Medi-Cal Aid Category													
			Adoption/Foster Care		Blind/Disabled		All Other*		Families		MI Child & Minor Consent		Pregnancy Pathway, not Undocumented		Undocumented	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
HYPERTENSION**																
1-Yes	17,216	6.4	73	8.1	475	11.3	8	3.5	8,289	7.3	574	7.9	2,564	7.0	5,233	5.0
2-No	251,126	93.6	826	91.9	3,727	88.7	218	96.5	105,759	92.7	6,655	92.1	34,014	93.0	99,927	95.0
DIABETES**																
1-Yes	18,842	7.0	15	1.7	374	8.9	7	3.1	6,681	5.9	140	1.9	2,742	7.5	8,883	8.5
2-No	249,500	93.0	884	98.3	3,828	91.1	219	96.9	107,367	94.1	7,089	98.1	33,836	92.5	96,277	91.6
SUBSTANCE USE**																
1-Yes	4,737	1.8	42	4.7	325	7.7	3	1.3	3,695	3.2	78	1.1	384	1.1	210	0.2
2-No	263,605	98.2	857	95.3	3,877	92.3	223	98.7	110,353	96.8	7,151	98.9	36,194	99.0	104,950	99.8
SMOKING DURING PREGNANCY																
1-Yes	10,504	3.9	53	5.9	590	14.0	6	2.7	8,159	7.2	158	2.2	1,206	3.3	332	0.3
2-No	249,034	92.8	807	89.8	3,426	81.5	215	95.1	102,652	90.0	6,844	94.7	34,271	93.7	100,819	95.9
3-Unknown	8,804	3.3	39	4.3	186	4.4	5	2.2	3,237	2.8	227	3.1	1,101	3.0	4,009	3.8
PRE-PREGNANCY WEIGHT***																
1-Underweight	9,674	3.6	49	5.5	176	4.2	10	4.4	4,570	4.0	438	6.1	1,426	3.9	3,005	2.9
2-Normal Weight	103,695	38.6	469	52.2	1,416	33.7	107	47.4	44,041	38.6	3,764	52.1	14,701	40.2	39,197	37.3
3-Overweight	62,573	23.3	174	19.4	849	20.2	45	19.9	25,334	22.2	1,401	19.4	8,414	23.0	26,356	25.1
4-Obese/Extremely Obese	50,548	18.8	103	11.5	1,113	26.5	33	14.6	25,013	21.9	740	10.2	7,578	20.7	15,968	15.2
5-Out-of-Range/Unknown	41,852	15.6	104	11.6	648	15.4	31	13.7	15,090	13.2	886	12.3	4,459	12.2	20,634	19.6
TOTAL BIRTHS¹	268,342	100.0	899	100.0	4,202	100.0	226	100.0	114,048	100.0	7,229	100.0	36,578	100.0	105,160	100.0

*Of the 226 births contained in the "All Other" category, 108 had multiple Client Identification Numbers (CINs) and could not be definitively linked to an aid code grouping.

**Comorbidities such as hypertension, diabetes and substance use have been identified in the hospital discharge data using ICD-9 diagnostic codes in up to 25 separate fields. ICD-9 codes were further grouped into clinically relevant classifications using the Clinical Classification Software (CCS) made available by the Agency for Healthcare Research & Quality (AHRQ).

***Pre-pregnancy weight as reported on the birth certificate has been categorized into 4 weight groupings based on body mass index (BMI) classification set by the National Heart Lung and Blood Institute.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 8b. Medi-Cal Births by Aid Category and Select Birth Characteristics
California Resident Births, 2007

BIRTH CHARACTERISTICS	Total		Medi-Cal Aid Category														
			Adoption/Foster Care		Blind/Disabled		All Other*		Families		MI Child & Minor Consent		Pregnancy Pathway, not Undocumented		Undocumented		
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
METHOD OF DELIVERY																	
Cesarean-Primary	44,306	16.5	189	21.0	933	22.2	44	19.5	19,018	16.7	1,491	20.6	6,799	18.6	15,832	15.1	
Cesarean-Repeat	39,638	14.8	24	2.7	741	17.6	18	8.0	16,474	14.4	127	1.8	4,455	12.2	17,799	16.9	
Vaginal	182,887	68.2	685	76.2	2,504	59.6	163	72.1	77,941	68.3	5,608	77.6	25,131	68.7	70,855	67.4	
Vaginal After Previous Cesarean	1,511	0.6	1	0.1	24	0.6	1	0.4	615	0.5	3	0.0	193	0.5	674	0.6	
PRENATAL CARE INITIATION																	
1-No Prenatal Care	1,772	0.7	7	0.8	66	1.6	-	-	1,181	1.0	47	0.7	150	0.4	321	0.3	
2-First Trimester	200,140	74.6	599	66.6	3,029	72.1	154	68.1	80,914	71.0	4,889	67.6	27,980	76.5	82,575	78.5	
3-Second Trimester	49,594	18.5	219	24.4	745	17.7	54	23.9	23,684	20.8	1,771	24.5	6,502	17.8	16,619	15.8	
4-Third Trimester	10,430	3.9	45	5.0	182	4.3	11	4.9	4,999	4.4	361	5.0	1,144	3.1	3,688	3.5	
5-Unknown or Unreported	6,406	2.4	29	3.2	180	4.3	7	3.1	3,270	2.9	161	2.2	802	2.2	1,957	1.9	
BIRTHWEIGHT																	
Low Birth, eight	17,885	6.7	89	9.9	543	12.9	17	7.5	8,597	7.5	499	6.9	2,364	6.5	5,776	5.5	
Normal Birth, eight	250,440	93.3	810	90.1	3,659	87.1	209	92.5	105,442	92.5	6,729	93.1	34,212	93.5	99,379	94.5	
Out-of-Range	17	0.0	-	-	-	-	-	-	9	0.0	1	0.0	2	0.0	5	0.0	
VERY LOW BIRTHWEIGHT STATUS																	
1-Very Low Birthweight-NO	265,305	98.9	887	98.7	4,093	97.4	221	97.8	112,585	98.7	7,118	98.5	36,161	98.9	104,240	99.1	
2-Very Low Birthweight-YES	3,020	1.1	12	1.3	109	2.6	5	2.2	1,454	1.3	110	1.5	415	1.1	915	0.9	
3-Out-of-Range	17	0.0	-	-	-	-	-	-	9	0.0	1	0.0	2	0.0	5	0.0	
GESTATION*																	
1-Preterm Delivery (<37 Weeks)	29,719	11.1	121	13.5	740	17.6	25	11.1	13,774	12.1	853	11.8	3,717	10.2	10,489	10.0	
2-Normal Range	227,112	84.6	722	80.3	3,109	74.0	193	85.4	94,094	82.5	6,063	83.9	31,391	85.8	91,540	87.1	
3-Out-of-Range/Missing	11,511	4.3	56	6.2	353	8.4	8	3.5	6,180	5.4	313	4.3	1,470	4.0	3,131	3.0	
VERY PRETERM STATUS*																	
1-Very Preterm Delivery-Yes (<32 Weeks)	4,391	1.6	14	1.6	144	3.4	3	1.3	2,185	1.9	157	2.2	525	1.4	1,363	1.3	
2-Very Preterm Delivery-No	252,440	94.1	829	92.2	3,705	88.2	215	95.1	105,683	92.7	6,759	93.5	34,583	94.6	100,666	95.7	
3-Out-of-Range/Missing	11,511	4.3	56	6.2	353	8.4	8	3.5	6,180	5.4	313	4.3	1,470	4.0	3,131	3.0	
TOTAL BIRTHS¹	268,342	100.0	899	100.0	4,202	100.0	226	100.0	114,048	100.0	7,229	100.0	36,578	100.0	105,160	100.0	

*Of the 226 births contained in the "All Other" category, 108 had multiple Client Identification Numbers (CINs) and could not be definitively linked to an aid code grouping.

**Gestational age and preterm status of newborn are estimated using the date of last menses from the birth certificate. A large number of birth certificates (N=11,511) are missing this data element.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 8c. Medi-Cal Births by Aid Category and Select Comorbidities
California Resident Births, 2007

COMORBIDITIES	Total		Medi-Cal Budgetary Grouping					
			Categorically Needy		Medically Needy		All Other	
	Count	%	Count	%	Count	%	Count	%
HYPERTENSION*								
1-Yes	17,216	6.4	10,764	7.3	547	9.0	5,905	5.2
2-No	251,126	93.6	137,452	92.7	5,511	91.0	108,163	94.8
DIABETES*								
1-Yes	18,842	7.0	9,377	6.3	313	5.2	9,152	8.0
2-No	249,500	93.0	138,839	93.7	5,745	94.8	104,916	92.0
SUBSTANCE USE*								
1-Yes	4,737	1.8	4,264	2.9	118	2.0	355	0.3
2-No	263,605	98.2	143,952	97.1	5,940	98.1	113,713	99.7
SMOKING DURING PREGNANCY								
1-Yes	10,504	3.9	9,613	6.5	258	4.3	633	0.6
2-No	249,034	92.8	134,308	90.6	5,601	92.5	109,125	95.7
3-Unknown	8,804	3.3	4,295	2.9	199	3.3	4,310	3.8
PRE-PREGNANCY WEIGHT**								
1-Underweight	9,674	3.6	5,905	4.0	277	4.6	3,492	3.1
2-Normal Weight	103,695	38.6	57,490	38.8	2,682	44.3	43,523	38.2
3-Overweight	62,573	23.3	33,097	22.3	1,288	21.3	28,188	24.7
4-Obese/Extremely Obese	50,548	18.8	32,429	21.9	1,007	16.6	17,112	15.0
5-Out-of-Range/Unknown	41,852	15.6	19,295	13.0	804	13.3	21,753	19.1
TOTAL BIRTHS¹	268,342	100.0	148,216	100.0	6,058	100.0	114,068	100.0

*Comorbidities such as hypertension, diabetes and substance use have been identified in the hospital discharge data using ICD-9 diagnostic codes in up to 25 separate fields. ICD-9 codes were further grouped into clinically relevant classifications using the Clinical Classification Software (CCS) made available by the Agency for Healthcare Research & Quality (AHRQ).

**Pre-pregnancy weight as reported on the birth certificate has been categorized into 4 weight groupings based on body mass index (BMI) classification set by the National Heart Lung and Blood Institute.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 8d. Medi-Cal Births by Aid Category and Select Birth Characteristics
California Resident Births, 2007

BIRTH CHARACTERISTICS	Total		Medi-Cal Budgetary Grouping					
			Categorically Needy		Medically Needy		All Other	
	Count	%	Count	%	Count	%	Count	%
METHOD OF DELIVERY								
Cesarean-Primary	44,306	16.5	25,444	17.2	1,285	21.2	17,577	15.4
Cesarean-Repeat	39,638	14.8	20,981	14.2	426	7.0	18,231	16.0
Vaginal	182,887	68.2	100,980	68.1	4,335	71.6	77,572	68.0
Vaginal After Previous Cesarean	1,511	0.6	811	0.6	12	0.2	688	0.6
PRENATAL CARE INITIATION								
1-No Prenatal Care	1,772	0.7	1,348	0.9	46	0.8	378	0.3
2-First Trimester	200,140	74.6	106,953	72.2	4,440	73.3	88,747	77.8
3-Second Trimester	49,594	18.5	29,719	20.1	1,177	19.4	18,698	16.4
4-Third Trimester	10,430	3.9	6,117	4.1	221	3.7	4,092	3.6
5-Unknown or Unreported	6,406	2.4	4,079	2.8	174	2.9	2,153	1.9
BIRTHWEIGHT								
Low Birth ₈ weight	17,885	6.7	10,932	7.4	558	9.2	6,395	5.6
Normal Birth ₈ weight	250,440	93.3	137,276	92.6	5,497	90.7	107,667	94.4
Out-of-Range	17	0.0	8	0.0	3	0.1	6	0.0
VERY LOW BIRTHWEIGHT STATUS								
1-Very Low Birthweight-NO	265,305	98.9	113,020	99.1	146,374	98.8	5,911	97.6
2-Very Low Birthweight-YES	3,020	1.1	1,042	0.9	1,834	1.2	144	2.4
3-Out-of-Range	17	0.0	6	0.0	8	0.0	3	0.1
GESTATION*								
1-Preterm Delivery (<37 Weeks)	29,719	11.1	17,385	11.7	803	13.3	11,531	10.1
2-Normal Range	227,112	84.6	123,187	83.1	4,948	81.7	98,977	86.8
3-Out-of-Range/Missing	11,511	4.3	7,644	5.2	307	5.1	3,560	3.1
VERY PRETERM STATUS*								
1-Very Preterm Delivery-Yes (<32 Weeks)	4,391	1.6	2,671	1.8	183	3.0	1,537	1.4
2-Very Preterm Delivery-No	252,440	94.1	137,901	93.0	5,568	91.9	108,971	95.5
3-Out-of-Range/Missing	11,511	4.3	7,644	5.2	307	5.1	3,560	3.1
TOTAL BIRTHS¹	268,342	100.0	148,216	100.0	6,058	100.0	114,068	100.0

*Gestational age and preterm status of newborn are estimated using the date of last menses from the birth certificate. A large number of birth certificates (N=11,511) are missing this data element.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 9a. Medi-Cal Births by Beneficiary County and Maternal Race/Ethnicity
California Resident Births, 2007

BENEFICIARY COUNTY	Total	Race/Ethnicity of Mother															
		1-White		2-African American		3-Hispanic		4-Asian		5-Hawaiian/ Pacific Islanders		6-American Indian/Alaskan Native		7-Two or more Race Categories		8- Others/Unknown	
		Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
Alameda	7,515	786	10.5	1,578	21.0	3,907	52.0	909	12.1	109	1.5	30	0.4	128	1.7	68	0.9
Alpine	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amador	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butte	1,463	870	59.5	31	2.1	343	23.4	115	7.9	5	0.3	35	2.4	63	4.3	1	0.1
Calaveras	177	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colusa	244	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contra Costa	4,375	638	14.6	599	13.7	2,740	62.6	221	5.1	41	0.9	8	0.2	105	2.4	23	0.5
Del Norte	243	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado	638	356	55.8	3	0.5	242	37.9	16	2.5	1	0.2	7	1.1	13	2.0	-	-
Fresno	10,647	1,326	12.5	685	6.4	7,392	69.4	1,031	9.7	7	0.1	77	0.7	100	0.9	29	0.3
Glenn	275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Humboldt	935	575	61.5	16	1.7	145	15.5	35	3.7	6	0.6	92	9.8	61	6.5	5	0.5
Imperial	1,826	111	6.1	22	1.2	1,665	91.2	9	0.5	3	0.2	1	0.1	5	0.3	10	0.6
Inyo	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kern	9,259	1,564	16.9	547	5.9	6,840	73.9	132	1.4	7	0.1	43	0.5	93	1.0	33	0.4
Kings	1,389	220	15.8	58	4.2	1,066	76.8	14	1.0	1	0.1	3	0.2	24	1.7	3	0.2
Lake	465	273	58.7	11	2.4	146	31.4	4	0.9	-	-	9	1.9	21	4.5	1	0.2
Lassen	153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Los Angeles	82,113	4,672	5.7	6,887	8.4	65,782	80.1	3,657	4.5	251	0.3	102	0.1	553	0.7	209	0.3
Madera	1,801	236	13.1	28	1.6	1,502	83.4	12	0.7	-	-	13	0.7	7	0.4	3	0.2
Marin	783	122	15.6	29	3.7	594	75.9	27	3.5	2	0.3	1	0.1	8	1.0	-	-
Mariposa	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mendocino	783	347	44.3	1	0.1	341	43.6	5	0.6	1	0.1	50	6.4	23	2.9	15	1.9
Merced	3,103	473	15.2	101	3.3	2,248	72.5	231	7.4	13	0.4	9	0.3	21	0.7	7	0.2
Modoc	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mono	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monterey	4,274	222	5.2	52	1.2	3,874	90.6	60	1.4	15	0.4	9	0.2	35	0.8	7	0.2
Napa	677	117	17.3	6	0.9	532	78.6	14	2.1	1	0.2	2	0.3	4	0.6	1	0.2
Nevada	322	220	68.3	1	0.3	84	26.1	5	1.6	-	-	1	0.3	9	2.8	2	0.6
Orange	18,515	1,577	8.5	183	1.0	15,163	81.9	1,344	7.3	89	0.5	18	0.1	104	0.6	37	0.2
Placer	991	494	49.9	14	1.4	427	43.1	27	2.7	2	0.2	3	0.3	24	2.4	-	-
Plumas	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Riverside	17,009	2,479	14.6	939	5.5	12,829	75.4	309	1.8	51	0.3	62	0.4	231	1.4	109	0.6
Sacramento	10,402	2,637	25.4	1,530	14.7	4,307	41.4	1,267	12.2	148	1.4	69	0.7	420	4.0	24	0.2
San Benito	485	37	7.6	4	0.8	436	89.9	1	0.2	1	0.2	1	0.2	4	0.8	1	0.2
San Bernardino	17,578	2,775	15.8	1,716	9.8	12,370	70.4	352	2.0	71	0.4	44	0.3	231	1.3	19	0.1
San Diego	15,670	2,003	12.8	953	6.1	10,496	67.0	570	3.6	109	0.7	62	0.4	271	1.7	1,206	7.7
San Francisco	2,823	257	9.1	411	14.6	1,288	45.6	754	26.7	47	1.7	5	0.2	54	1.9	7	0.3
San Joaquin	6,303	972	15.4	532	8.4	3,896	61.8	695	11.0	20	0.3	18	0.3	159	2.5	11	0.2
San Luis Obispo	1,345	544	40.5	8	0.6	737	54.8	12	0.9	1	0.1	1	0.1	36	2.7	6	0.5
San Mateo	2,850	234	8.2	82	2.9	2,000	70.2	236	8.3	114	4.0	5	0.2	27	1.0	152	5.3
Santa Barbara	3,527	336	9.5	41	1.2	3,045	86.3	45	1.3	3	0.1	9	0.3	40	1.1	8	0.2
Santa Clara	8,456	638	7.5	258	3.1	6,278	74.2	979	11.6	59	0.7	17	0.2	77	0.9	150	1.8
Santa Cruz	1,759	265	15.1	7	0.4	1,426	81.1	22	1.3	1	0.1	2	0.1	15	0.9	21	1.2
Shasta	1,259	924	73.4	26	2.1	173	13.7	41	3.3	-	-	56	4.5	33	2.6	6	0.5
Sierra	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	296	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solano	2,253	425	18.9	419	18.6	1,098	48.7	155	6.9	23	1.0	7	0.3	106	4.7	20	0.9
Sonoma	2,418	553	22.9	36	1.5	1,661	68.7	54	2.2	5	0.2	35	1.5	43	1.8	31	1.3
Stanislaus	5,062	1,234	24.4	119	2.4	3,349	66.2	179	3.5	22	0.4	10	0.2	120	2.4	29	0.6
Sutter	622	253	40.7	11	1.8	251	40.4	93	15.0	-	-	2	0.3	12	1.9	-	-
Tehama	556	299	53.8	3	0.5	219	39.4	4	0.7	2	0.4	17	3.1	11	2.0	1	0.2
Trinity	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tulare	6,213	862	13.9	84	1.4	4,991	80.3	179	2.9	6	0.1	47	0.8	41	0.7	3	0.1
Tuolumne	242	186	76.9	1	0.4	45	18.6	-	-	2	0.8	3	1.2	5	2.1	-	-
Ventura	5,803	532	9.2	48	0.8	5,032	86.7	104	1.8	13	0.2	13	0.2	33	0.6	28	0.5
Yolo	1,014	294	29.0	30	3.0	600	59.2	59	5.8	6	0.6	7	0.7	12	1.2	6	0.6
Yuba	570	301	52.8	13	2.3	169	29.7	53	9.3	2	0.4	14	2.5	17	3.0	1	0.2
Invalid County Code	255	34	13.3	15	5.9	185	72.6	12	4.7	2	0.8	-	-	4	1.6	3	1.2
TOTAL BIRTHS¹	268,342	35,314	13.2	18,155	6.8	192,620	71.8	14,083	5.3	1,263	0.5	1,136	0.4	3,467	1.3	2,304	0.9

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 9b. Medi-Cal Births by Beneficiary County and Maternal Age
California Resident Births, 2007

BENEFICIARY COUNTY	Total	Age of Mother															
		Age <15		15-17		18-19		20-24		25-29		30-34		35-44		45 & Up	
		Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
Alameda	7,515	10	0.1	285	3.8	714	9.5	2,340	31.1	2,097	27.9	1,292	17.2	769	10.2	8	0.1
Alpine	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amador	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butte	1,463	-	-	60	4.1	156	10.7	579	39.6	386	26.4	187	12.8	94	6.4	1	0.1
Calaveras	177	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colusa	244	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contra Costa	4,375	6	0.1	169	3.9	431	9.9	1,459	33.4	1,212	27.7	704	16.1	390	8.9	4	0.1
Del Norte	243	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado	638	-	-	23	3.6	65	10.2	228	35.7	168	26.3	91	14.3	63	9.9	-	-
Fresno	10,647	25	0.2	603	5.7	1,257	11.8	3,644	34.2	2,715	25.5	1,464	13.8	930	8.7	9	0.1
Glenn	275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Humboldt	935	1	0.1	26	2.8	104	11.1	339	36.3	286	30.6	120	12.8	57	6.1	2	0.2
Imperial	1,826	1	0.1	127	7.0	222	12.2	674	36.9	456	25.0	215	11.8	131	7.2	-	-
Inyo	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kern	9,259	17	0.2	572	6.2	1,188	12.8	3,287	35.5	2,162	23.4	1,264	13.7	767	8.3	2	0.0
Kings	1,389	2	0.1	84	6.1	174	12.5	538	38.7	335	24.1	162	11.7	94	6.8	-	-
Lake	465	1	0.2	20	4.3	63	13.6	156	33.6	117	25.2	74	15.9	33	7.1	1	0.2
Lassen	153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Los Angeles	82,113	134	0.2	3,588	4.4	7,906	9.6	25,158	30.6	21,682	26.4	14,505	17.7	9,046	11.0	94	0.1
Madera	1,801	3	0.2	91	5.1	224	12.4	611	33.9	430	23.9	279	15.5	163	9.1	-	-
Marin	783	1	0.1	16	2.0	64	8.2	231	29.5	235	30.0	151	19.3	85	10.9	-	-
Mariposa	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mendocino	783	1	0.1	41	5.2	70	8.9	281	35.9	230	29.4	107	13.7	53	6.8	-	-
Merced	3,103	6	0.2	163	5.3	360	11.6	1,104	35.6	770	24.8	436	14.1	263	8.5	1	0.0
Modoc	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mono	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monterey	4,274	7	0.2	255	6.0	473	11.1	1,464	34.3	1,092	25.6	642	15.0	336	7.9	5	0.1
Napa	677	1	0.2	18	2.7	54	8.0	232	34.3	199	29.4	110	16.3	62	9.2	1	0.2
Nevada	322	-	-	17	5.3	38	11.8	113	35.1	94	29.2	38	11.8	22	6.8	-	-
Orange	18,515	25	0.1	682	3.7	1,680	9.1	5,587	30.2	5,024	27.1	3,337	18.0	2,169	11.7	11	0.1
Placer	991	-	-	35	3.5	95	9.6	367	37.0	273	27.6	130	13.1	88	8.9	3	0.3
Plumas	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Riverside	17,009	28	0.2	826	4.9	2,062	12.1	5,886	34.6	4,335	25.5	2,468	14.5	1,390	8.2	14	0.1
Sacramento	10,402	21	0.2	474	4.6	1,196	11.5	3,583	34.5	2,740	26.3	1,477	14.2	896	8.6	15	0.1
San Benito	485	-	-	39	8.0	48	9.9	180	37.1	125	25.8	64	13.2	28	5.8	1	0.2
San Bernardino	17,578	38	0.2	920	5.2	2,064	11.7	6,114	34.8	4,424	25.2	2,567	14.6	1,439	8.2	12	0.1
San Diego	15,670	35	0.2	777	5.0	1,694	10.8	5,139	32.8	4,078	26.0	2,437	15.6	1,494	9.5	16	0.1
San Francisco	2,823	3	0.1	86	3.1	197	7.0	679	24.1	847	30.0	588	20.8	418	14.8	5	0.2
San Joaquin	6,303	14	0.2	325	5.2	747	11.9	2,198	34.9	1,602	25.4	925	14.7	487	7.7	5	0.1
San Luis Obispo	1,345	2	0.2	63	4.7	147	10.9	485	36.1	343	25.5	194	14.4	109	8.1	2	0.2
San Mateo	2,850	2	0.1	91	3.2	254	8.9	866	30.4	779	27.3	532	18.7	324	11.4	2	0.1
Santa Barbara	3,527	7	0.2	207	5.9	412	11.7	1,131	32.1	923	26.2	546	15.5	299	8.5	2	0.1
Santa Clara	8,456	8	0.1	321	3.8	744	8.8	2,692	31.8	2,272	26.9	1,441	17.0	974	11.5	4	0.1
Santa Cruz	1,759	5	0.3	85	4.8	158	9.0	579	32.9	478	27.2	291	16.5	161	9.2	2	0.1
Shasta	1,259	1	0.1	72	5.7	155	12.3	507	40.3	317	25.2	147	11.7	60	4.8	-	-
Sierra	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	296	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solano	2,253	3	0.1	88	3.9	226	10.0	802	35.6	596	26.5	330	14.7	206	9.1	2	0.1
Sonoma	2,418	5	0.2	93	3.9	220	9.1	797	33.0	670	27.7	420	17.4	213	8.8	-	-
Stanislaus	5,062	5	0.1	276	5.5	611	12.1	1,744	34.5	1,344	26.6	716	14.1	361	7.1	5	0.1
Sutter	622	-	-	24	3.9	68	10.9	207	33.3	186	29.9	88	14.2	48	7.7	1	0.2
Tehama	556	-	-	25	4.5	68	12.2	219	39.4	144	25.9	59	10.6	41	7.4	-	-
Trinity	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tulare	6,213	13	0.2	335	5.4	699	11.3	2,223	35.8	1,537	24.7	853	13.7	549	8.8	4	0.1
Tuolumne	242	-	-	6	2.5	42	17.4	89	36.8	54	22.3	40	16.5	11	4.6	-	-
Ventura	5,803	13	0.2	333	5.7	596	10.3	1,876	32.3	1,480	25.5	949	16.4	547	9.4	9	0.2
Yolo	1,014	-	-	36	3.6	107	10.6	312	30.8	286	28.2	162	16.0	111	11.0	-	-
Yuba	570	-	-	30	5.3	74	13.0	250	43.9	114	20.0	67	11.8	35	6.1	-	-
Invalid County Code	255	-	-	36	14.1	64	25.1	74	29.0	39	15.3	23	9.0	18	7.1	1	0.4
TOTAL BIRTHS¹	268,342	449	0.2	12,527	4.7	28,233	10.5	87,771	32.7	70,213	26.2	42,946	16.0	25,957	9.7	246	0.1

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 9c. Medi-Cal Births by Beneficiary County and Aid Category
California Resident Births, 2007

BENEFICIARY COUNTY	Total	Medi-Cal Aid Category*													
		Adoption/Foster Care		Blind/Disabled		All Other		Families		MI Child & Minor Consent		Pregnancy Pathway, not Undocumented		Undocumented	
		Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
Alameda	7,515	29	0.4	189	2.5	2	0.0	3,516	46.8	144	1.9	728	9.7	2,907	38.7
Alpine	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amador	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butte	1,463	7	0.5	77	5.3	-	-	901	61.6	44	3.0	317	21.7	117	8.0
Calaveras	177	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colusa	244	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contra Costa	4,375	19	0.4	99	2.3	3	0.1	1,772	40.5	74	1.7	528	12.1	1,880	43.0
Del Norte	243	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado	638	2	0.3	12	1.9	1	0.2	284	44.5	28	4.4	159	24.9	152	23.8
Fresno	10,647	26	0.2	217	2.0	3	0.0	6,447	60.6	177	1.7	1,218	11.4	2,559	24.0
Glenn	275	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Humboldt	935	5	0.5	31	3.3	-	-	571	61.1	27	2.9	241	25.8	60	6.4
Imperial	1,826	7	0.4	23	1.3	-	-	1,265	69.3	53	2.9	275	15.1	203	11.1
Inyo	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kern	9,259	31	0.3	236	2.6	7	0.1	4,627	50.0	379	4.1	1,314	14.2	2,665	28.8
Kings	1,389	4	0.3	31	2.2	1	0.1	745	53.6	83	6.0	202	14.5	323	23.3
Lake	465	4	0.9	20	4.3	1	0.2	257	55.3	22	4.7	99	21.3	62	13.3
Lassen	153	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Los Angeles	82,113	338	0.4	991	1.2	34	0.0	33,158	40.4	1,924	2.3	7,629	9.3	38,039	46.3
Madera	1,801	3	0.2	16	0.9	1	0.1	686	38.1	63	3.5	257	14.3	775	43.0
Marin	783	-	-	5	0.6	-	-	169	21.6	13	1.7	67	8.6	529	67.6
Mariposa	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mendocino	783	2	0.3	19	2.4	-	-	417	53.3	24	3.1	138	17.6	183	23.4
Merced	3,103	9	0.3	65	2.1	-	-	1,558	50.2	79	2.6	466	15.0	926	29.8
Modoc	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mono	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monterey	4,274	4	0.1	40	0.9	1	0.0	1,093	25.6	202	4.7	554	13.0	2,380	55.7
Napa	677	4	0.6	12	1.8	1	0.2	172	25.4	29	4.3	128	18.9	331	48.9
Nevada	322	1	0.3	4	1.2	1	0.3	151	46.9	11	3.4	101	31.4	53	16.5
Orange	18,515	25	0.1	99	0.5	4	0.0	4,561	24.6	668	3.6	2,447	13.2	10,711	57.9
Placer	991	4	0.4	22	2.2	-	-	469	47.3	31	3.1	203	20.5	262	26.4
Plumas	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Riverside	17,009	46	0.3	232	1.4	7	0.0	6,361	37.4	518	3.1	3,928	23.1	5,917	34.8
Sacramento	10,402	67	0.6	310	3.0	1	0.0	6,210	59.7	138	1.3	1,333	12.8	2,343	22.5
San Benito	485	-	-	2	0.4	-	-	166	34.2	48	9.9	84	17.3	185	38.1
San Bernardino	17,578	48	0.3	355	2.0	13	0.1	8,652	49.2	581	3.3	2,592	14.8	5,337	30.4
San Diego	15,670	50	0.3	196	1.3	14	0.1	5,747	36.7	510	3.3	3,501	22.3	5,652	36.1
San Francisco	2,823	33	1.2	47	1.7	-	-	1,209	42.8	47	1.7	504	17.9	983	34.8
San Joaquin	6,303	13	0.2	154	2.4	3	0.1	3,217	51.0	179	2.8	868	13.8	1,869	29.7
San Luis Obispo	1,345	6	0.5	24	1.8	-	-	556	41.3	43	3.2	287	21.3	429	31.9
San Mateo	2,850	6	0.2	32	1.1	1	0.0	723	25.4	100	3.5	337	11.8	1,651	57.9
Santa Barbara	3,527	7	0.2	45	1.3	1	0.0	1,099	31.2	92	2.6	477	13.5	1,806	51.2
Santa Clara	8,456	30	0.4	82	1.0	3	0.0	3,146	37.2	134	1.6	949	11.2	4,112	48.6
Santa Cruz	1,759	-	-	16	0.9	-	-	612	34.8	69	3.9	281	16.0	781	44.4
Shasta	1,259	4	0.3	62	4.9	-	-	870	69.1	31	2.5	235	18.7	57	4.5
Sierra	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	296	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solano	2,253	1	0.0	59	2.6	1	0.0	1,332	59.1	27	1.2	214	9.5	619	27.5
Sonoma	2,418	6	0.3	29	1.2	5	0.2	707	29.2	59	2.4	418	17.3	1,194	49.4
Stanislaus	5,062	15	0.3	100	2.0	1	0.0	2,585	51.1	92	1.8	803	15.9	1,466	29.0
Sutter	622	1	0.2	11	1.8	-	-	384	61.7	12	1.9	187	30.1	27	4.3
Tehama	556	3	0.5	18	3.2	-	-	264	47.5	24	4.3	145	26.1	102	18.4
Trinity	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tulare	6,213	10	0.2	77	1.2	1	0.0	3,227	51.9	150	2.4	735	11.8	2,013	32.4
Tuolumne	242	2	0.8	7	2.9	-	-	120	49.6	21	8.7	81	33.5	11	4.6
Ventura	5,803	8	0.1	45	0.8	3	0.1	2,002	34.5	161	2.8	759	13.1	2,825	48.7
Yolo	1,014	2	0.2	17	1.7	2	0.2	483	47.6	19	1.9	198	19.5	293	28.9
Yuba	570	3	0.5	18	3.2	1	0.2	407	71.4	15	2.6	101	17.7	25	4.4
Invalid County Code	255	-	-	-	-	106	41.6	114	44.7	13	5.1	11	4.3	11	4.3
TOTAL BIRTHS¹	268,342	899	0.3	4,202	1.6	226	0.1	114,048	42.5	7,229	2.7	36,578	13.6	105,160	39.2

*Of the 226 births contained in the "All Other" category, 108 had multiple Client Identification Numbers (CINs) and could not be definitively linked to an aid code grouping.

1) Total Births = Births in Hospital Only. RASB identified a total of 560,884 births to California mothers in 2007 occurring in a hospital setting.

Table 9d. Medi-Cal Births by Beneficiary County and Aid Category
California Resident Births, 2007

BENEFICIARY COUNTY	Total	Medi-Cal Budgetary Grouping					
		Categorically Needy		Medically Needy		All Other	
		Count	Row %	Count	Row %	Count	Row %
Alameda	7,515	4,258	56.7	180	2.4	3,077	40.9
Alpine	7	-	-	-	-	-	-
Amador	125	-	-	-	-	-	-
Butte	1,463	1,205	82.4	54	3.7	204	13.9
Calaveras	177	-	-	-	-	-	-
Colusa	244	-	-	-	-	-	-
Contra Costa	4,375	2,320	53.0	81	1.9	1,974	45.1
Del Norte	243	-	-	-	-	-	-
El Dorado	638	419	65.7	21	3.3	198	31.0
Fresno	10,647	7,559	71.0	289	2.7	2,799	26.3
Glenn	275	-	-	-	-	-	-
Humboldt	935	788	84.3	47	5.0	100	10.7
Imperial	1,826	1,464	80.2	98	5.4	264	14.5
Inyo	120	-	-	-	-	-	-
Kern	9,259	5,730	61.9	336	3.6	3,193	34.5
Kings	1,389	919	66.2	46	3.3	424	30.5
Lake	465	353	75.9	15	3.2	97	20.9
Lassen	153	-	-	-	-	-	-
Los Angeles	82,113	39,789	48.5	1,898	2.3	40,426	49.2
Madera	1,801	872	48.4	51	2.8	878	48.8
Marin	783	219	28.0	12	1.5	552	70.5
Mariposa	59	-	-	-	-	-	-
Mendocino	783	537	68.6	30	3.8	216	27.6
Merced	3,103	2,023	65.2	47	1.5	1,033	33.3
Modoc	25	-	-	-	-	-	-
Mono	90	-	-	-	-	-	-
Monterey	4,274	1,552	36.3	92	2.2	2,630	61.5
Napa	677	286	42.3	16	2.4	375	55.4
Nevada	322	242	75.2	11	3.4	69	21.4
Orange	18,515	6,831	36.9	239	1.3	11,445	61.8
Placer	991	671	67.7	24	2.4	296	29.9
Plumas	92	-	-	-	-	-	-
Riverside	17,009	10,182	59.9	378	2.2	6,449	37.9
Sacramento	10,402	7,636	73.4	221	2.1	2,545	24.5
San Benito	485	233	48.0	11	2.3	241	49.7
San Bernardino	17,578	11,290	64.2	269	1.5	6,019	34.2
San Diego	15,670	9,202	58.7	335	2.1	6,133	39.1
San Francisco	2,823	1,723	61.0	50	1.8	1,050	37.2
San Joaquin	6,303	3,980	63.1	195	3.1	2,128	33.8
San Luis Obispo	1,345	822	61.1	38	2.8	485	36.1
San Mateo	2,850	1,045	36.7	46	1.6	1,759	61.7
Santa Barbara	3,527	1,551	44.0	59	1.7	1,917	54.4
Santa Clara	8,456	4,007	47.4	173	2.1	4,276	50.6
Santa Cruz	1,759	873	49.6	34	1.9	852	48.4
Shasta	1,259	1,119	88.9	43	3.4	97	7.7
Sierra	7	-	-	-	-	-	-
Siskiyou	296	-	-	-	-	-	-
Solano	2,253	1,531	68.0	67	3.0	655	29.1
Sonoma	2,418	1,122	46.4	37	1.5	1,259	52.1
Stanislaus	5,062	3,387	66.9	84	1.7	1,591	31.4
Sutter	622	539	86.7	32	5.1	51	8.2
Tehama	556	400	71.9	22	4.0	134	24.1
Trinity	81	-	-	-	-	-	-
Tulare	6,213	3,893	62.7	151	2.4	2,169	34.9
Tuolumne	242	203	83.9	2	0.8	37	15.3
Ventura	5,803	2,689	46.3	108	1.9	3,006	51.8
Yolo	1,014	676	66.7	30	3.0	308	30.4
Yuba	570	487	85.4	19	3.3	64	11.2
Invalid County Code	255	126	49.4	2	0.8	127	49.8
TOTAL BIRTHS¹	268,342	148,216	55.2	6,058	2.3	114,068	42.5

1) Total Births = Medi-Cal Births in Hospital Only. RASB identified a total of 268,342 births to California mothers in 2007 occurring in a hospital setting.