FIRST 5 SACRAMENTO

Reduction of African American Child Deaths

FY 2019-2020 Evaluation Report

FIRST 5 SACRAMENTO

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Table of Contents

Introduction

The RAACD Strategic Plan outlines strategies to address the top four causes of disproportionate African American child deaths.

BACKGROUND & GOALS

In 2011, the Sacramento County Child Death Review Team (CDRT) released a Twenty-Year Report which revealed that African American children were dying at twice the rate (102 per 100,000) of any other ethnic group.[i] The four main causes of disproportionate child death amongst African American children were:

- Perinatal Conditions
- Infant Sleep-Related (ISR)
- Child Abuse and Neglect (CAN) Homicide
- Third Party Homicide

In response to the alarming findings from the CDRT report, the Sacramento County Board of Supervisors created the Blue Ribbon Commission on Disproportionate African American Child Deaths to formulate a plan of action. In 2013, the Blue Ribbon Commission released its report with a set of recommendations to reduce African American child deaths by 10% to 20% over the next five years. It addressed four causes of death for which African American children were disproportionately affected.[ii]

The 2013 Blue Ribbon Commission report created outcome targets based on the goal of reducing of child deaths that would represent a statistically significant change from the 2007-2011 period to the next five year period. As seen below, the goals included an overall 10-20% reduction in African American child deaths, and specific reductions for each of the leading causes of infant death (infant perinatal conditions, infant sleep-related, child abuse/neglect, and third party homicides).

The Blue Ribbon Commission Goals Included:

- Reduce the African American child death rate by **10-20%**
- Decrease the African American infant death rate due to infant perinatal conditions by at least **23%**
- Decrease the African American infant death rate due to infant safe sleep issues by at least **33%**
- Decrease the African American child death rate due to abuse and neglect by at least **25%**
- Decrease the African American child death rate due to third party homicide by at least **48%**

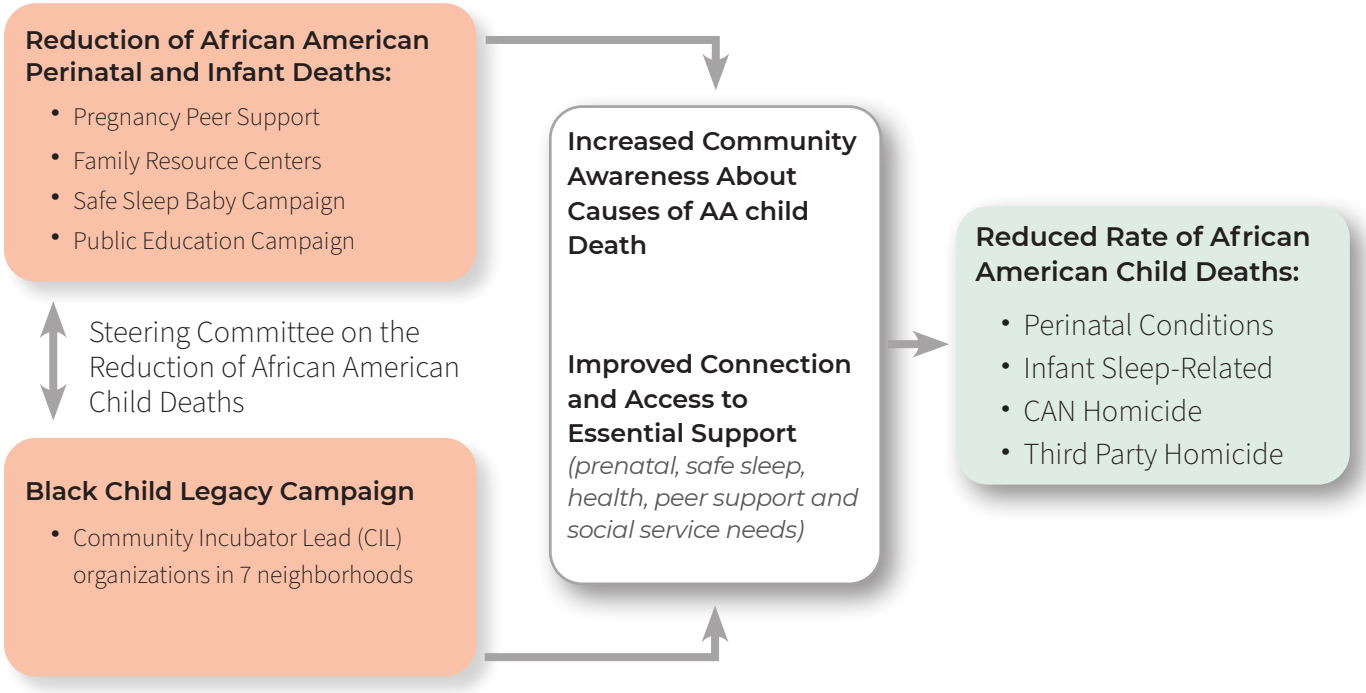
The Blue Ribbon Commission report also called for the establishment of the Steering Committee on Reduction of African American Child Deaths (RAACD). Convened by the Sierra Health Foundation, the RAACD Steering Committee released a Strategic Plan[iii] and Implementation Plan[iv] in 2015. Using a Collective Impact model harnessing the power of multiple county and community stakeholders and sources of funding, the RAACD plans outlined strategies to address the top four causes of disproportionate African American child deaths. Over time, these have coalesced into two interdependent components:

- **The Black Child Legacy Campaign (BCLC):** Led by the Sierra Health Foundation, this strategy involves Community Incubator Lead (CIL) organizations in each of the targeted neighborhoods who lead prevention and intervention efforts to reduce disproportionate African American child deaths.

- **Reduction of African American Perinatal and Infant Deaths:** Led by First 5 Sacramento, this strategy complements and contributes to BCLC, and includes four programs that focus on preventing deaths due to Perinatal Conditions, Child Abuse and Neglect, and Infant Sleep-Related causes: Pregnancy Peer Support Programs, Family Resource Centers, the Infant Safe Sleep Campaign, and a Public Education Campaign.

The graphic below presents a strategic framework for how Sacramento County is coordinating efforts to reduce African American child deaths.

Figure 1 — Sacramento County's Strategic Framework to Reduce African American Child Death.

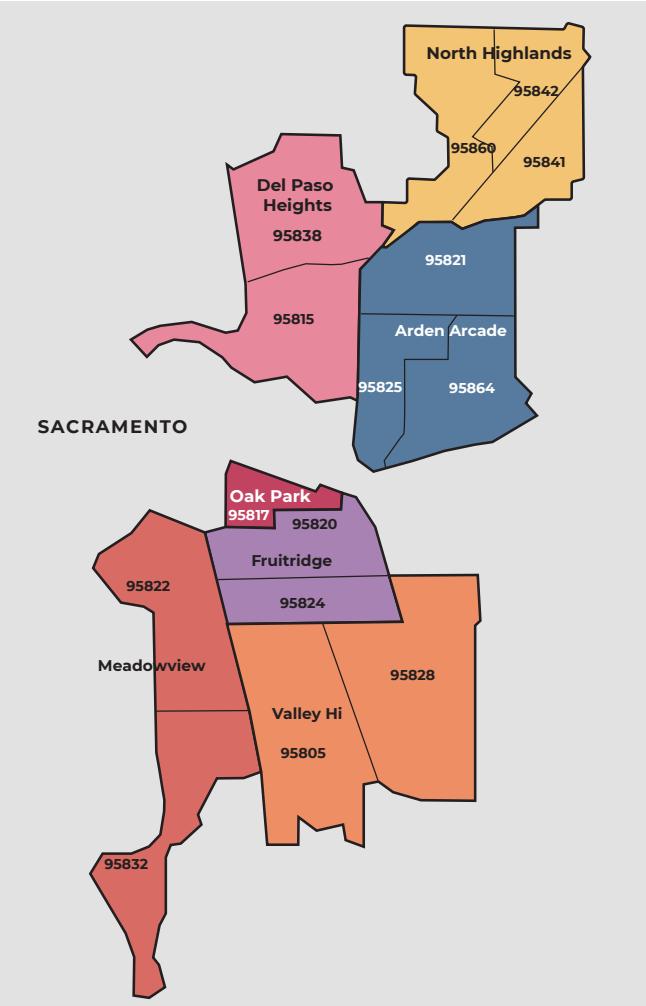


Note: There are many other programs and projects that are also working to decrease the rate of African American child deaths. The current report focuses on perinatal and infant African American death, not deaths of children 0-17.

To meet the Blue Ribbon Commission goals, efforts have been targeted in the neighborhoods in Sacramento County with the highest rates of child death. Not only do these neighborhoods experience high proportions of child death, almost two-thirds of all African Americans that live in Sacramento County reside in these neighborhoods.

These communities include:

- Arden Arcade
- Del Paso Heights
- Meadowview
- North Highlands
- North Sacramento
- Oak Park
- Rancho Cordova
- South Sacramento
- Valley Hi



FIRST 5 STRATEGIES TO REDUCE AFRICAN AMERICAN INFANT DEATHS

To address the preventable causes of infant death, First 5 Sacramento partnered with various community organizations to launch and implement four programs:

- Pregnancy Peer Support Program
- Family Resource Centers
- Safe Sleep Baby Education Campaign
- Public Education Campaign

This report continues the evaluation of First 5 Sacramento's efforts, describing each investment, FY 2019-2020 outcomes, and recommendations about areas to strengthen where applicable.

Pregnancy Peer Support Program

*101 babies were born to mothers in the Pregnancy Peer Support program; 88% were born at a healthy birth weight and 83% were delivered full term. There were **zero** infant perinatal deaths in this cohort.*

The Pregnancy Peer Support Program was implemented by Her Health First's Black Mothers United (BMU) program. The goal of the program is to provide culturally relevant outreach, education, and individualized support to pregnant African American women in areas of Sacramento that are at high-risk for infant death. In order to be eligible for services, women are required to be pregnant, have entered the program no later than their 32nd week of pregnancy, reside in Sacramento County, and self-identify as African American.

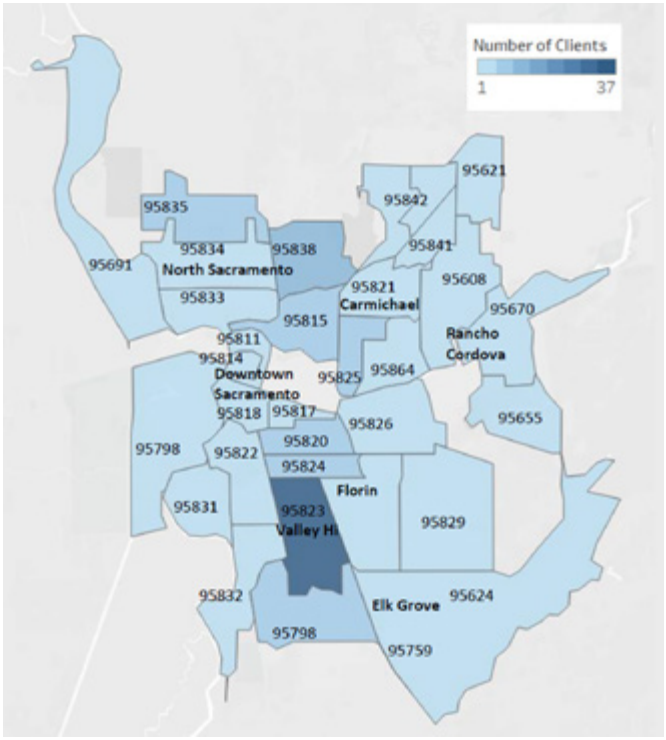
The BMU program includes home visits conducted by pregnancy coaches. Coaches are African American women who are trained to provide education, offer information about medical and social service options, and assist mothers in preparation for the birth of their child. Coaches conduct outreach with partners from community-based organizations and social service agencies to identify and assist the pregnant African American women that are hardest to reach, including those not receiving regular prenatal care and those most at-risk of adverse pregnancy outcomes.

The goal is for pregnancy coaches to connect with clients weekly and meet in person at least every two weeks until delivery and four months postpartum. Upon intake, coaches use a health assessment to understand each client's needs related to pregnancy, psychosocial needs, and postpartum plans, including infant safety. With this information, coaches develop individualized care plans for their clients, including information and referrals related to nutrition, health education services, prenatal care, transportation, and connecting women to various social services. Additionally, coaches provide individual support through regular check-in meetings during pregnancy and postpartum, as well as peer support through monthly group meetings and quarterly baby showers.

PROFILE OF CLIENTS

From July 1, 2019 to June 30, 2020, the BMU program served 180 pregnant African American women.

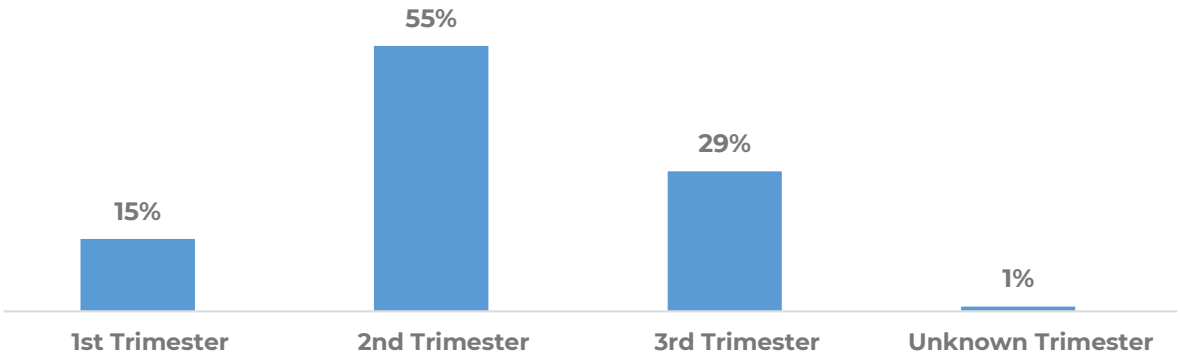
The map represents the number of clients served by zip code. The largest number of clients were congregated in the Valley Hi neighborhood and the lowest concentrations of clients were in Orangevale and Rancho Cordova. Of those with zip code data, almost two-thirds of the clients in FY 2019-2020 (61%; 94/153) resided in one of the seven high-risk target neighborhoods of Sacramento County. This is higher than the proportion served in FY 2018-19 (49%).



Upon entry into the BMU program, clients complete a comprehensive health assessment with their coach. As seen below, the majority of participants (55%) entered during their second trimester of pregnancy, while 29% enrolled during their third trimester and 15% enrolled during their first trimester[1]. These numbers are comparable to the FY 18-19 numbers of enrollees where 51% enrolled in their second trimester, 28% enrolled in their third trimester, and 18% enrolled during their first trimester. Measuring program entry helps to ensure that clients receive access to early prenatal care. Additionally, clients who enter the program earlier have more time to receive pregnancy education and necessary referrals.

[1] 11% of mothers' trimester was unknown

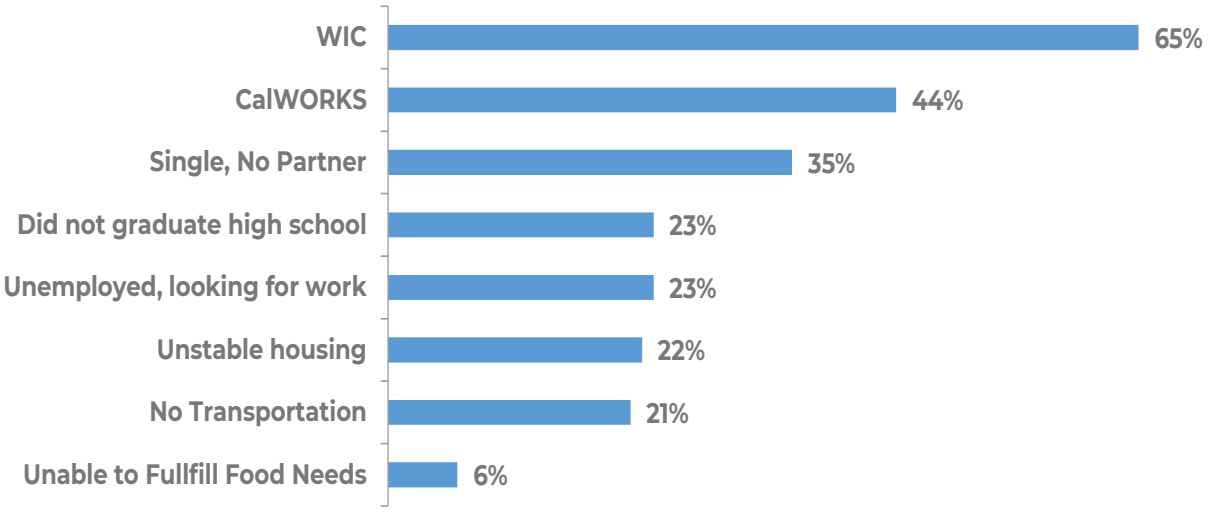
Figure 2 — Number of Mothers Served, by Trimester of Entry



Source: Health Assessment Intake. N=180.

In terms of the socio-economic realities of participants, about one quarter reported having unstable housing situations (22%; 37/170) and 21% did not have transportation (38/177). Almost half of clients (44%; 78/179) were on CalWORKs, and 65% (112/171) used WIC services for nutritional support. Because participants were generally low-income, the utilization of CalWORKs or WIC for additional support is considered a protective factor. About one quarter of clients (23%; 39/169) did not graduate high school, 35% (61/174) were single and head of household, and 23% (41/176) were unemployed and looking for work. As compared to FY 18-19, clients generally came into the BMU program with slightly fewer risk factors (e.g., in FY 19-20, 23% did not graduate high school, compared to 27% in FY 18-19; in FY 19-20, 6% were unable to fulfill food needs at intake, and 10% were unable to fulfill food needs in FY 18-19).

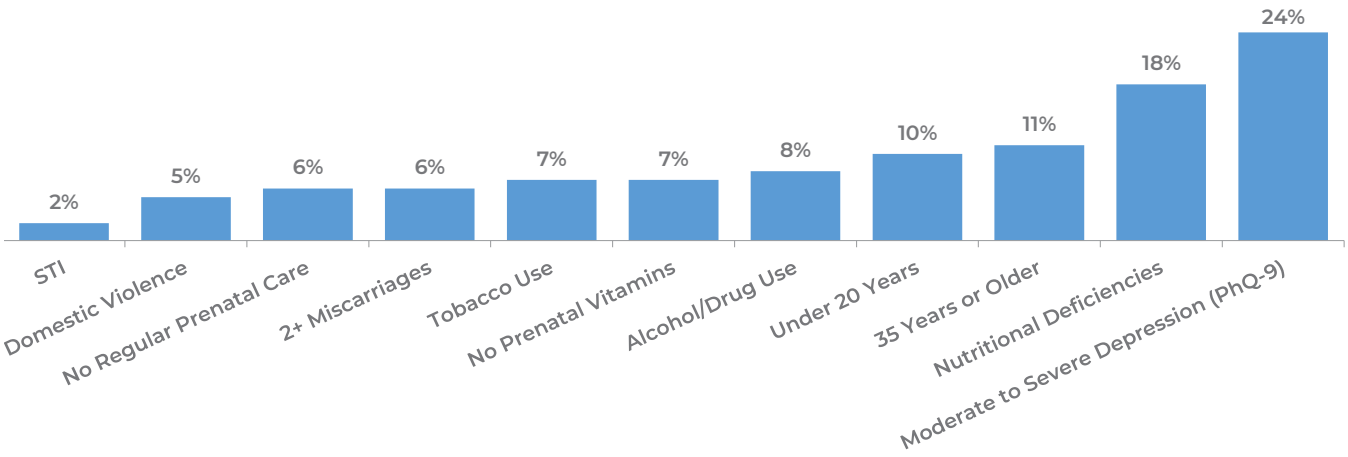
Figure 3 — Socio-Economic Factors Reported at Intake



Source: Health Assessment Intake. N=179.

In terms of maternal health, the most prevalent risk factors found amongst the 2019-2020 BMU program participants were moderate to high-depression indicated by the PhQ-9 (24%; 43/180), failure to take prenatal vitamins (7%; 12/175), nutrition deficiencies (i.e., iron deficiency, folate deficiency, Vitamin B12 deficiency; 18%; 32/178), being under 20 years of age (10%; 18/179), and being over 35-years-old (11%; 19/179). Similar to the pattern with socio-economic factors, clients tended to have lower numbers of health risk factors at intake in FY 19-20, as compared to FY 18-19 (e.g., 7% no prenatal vitamins in FY 19-20, 17% with no prenatal vitamins in FY 18-19).

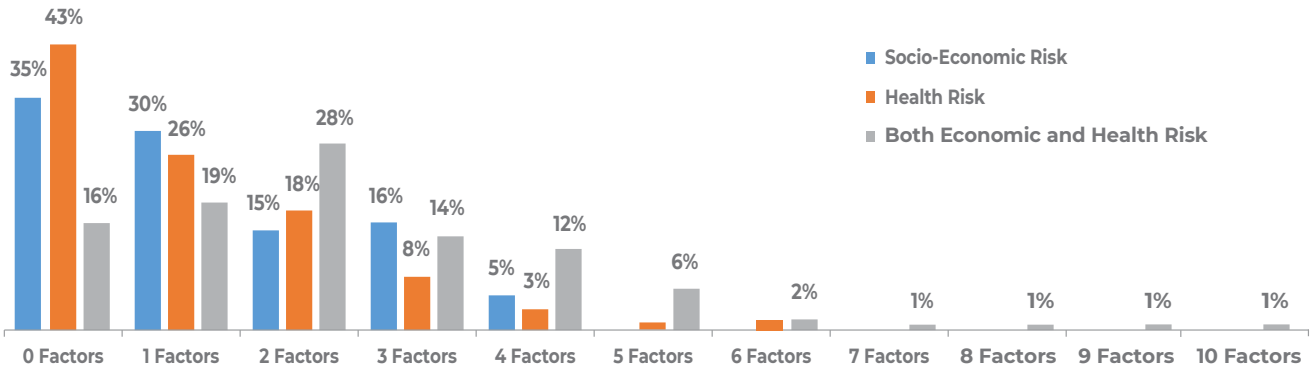
Figure 4 — Health Factors Reported at Intake



Source: Health Assessment Intake. N = 179, though it varies by response rate to each variable.

The aggregate number of socio-economic and health risk factors from the figures above were also calculated (see figure below). Most participants had at least one health risk factor (57%) and at least one socio-economic risk factor (65%). The specific breakdown of risk factors is provided in the figure below.

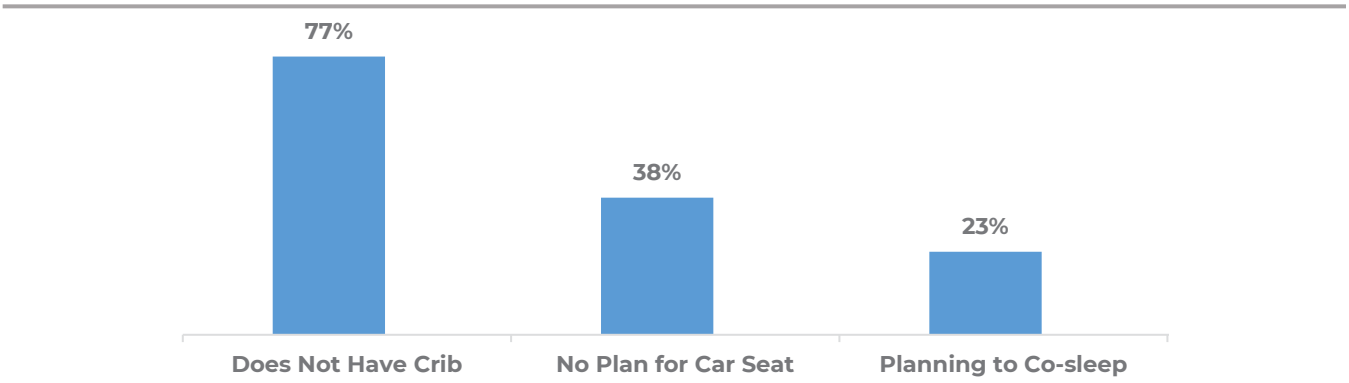
Figure 5 — Percentage of Clients by Number and Type of Risk Factors



Source: Health Assessment Intake. N=179.

The health assessment also gauges mothers' preparedness for caring for the safety of their infants; where needs are identified, coaches provide resources, referrals and education. As seen below, at intake, over three-quarters (77%; 131/171) of the participants in 2019-2020 did not yet have a crib, over a third did not have a plan for getting a car seat (38%; 62/165), and almost one quarter (23%; 36/160) were planning to co-sleep with their children. Contrary to the patterns for socio-economic and health risk factors, mothers reported higher levels of infant safety risk factors than the previous year (in FY 18-19, 59% did not have crib, 28% did not have a plan for a car seat, and 18% were planning to co-sleep).

Figure 6 — Infant Safety Risk Factors Reported at Intake

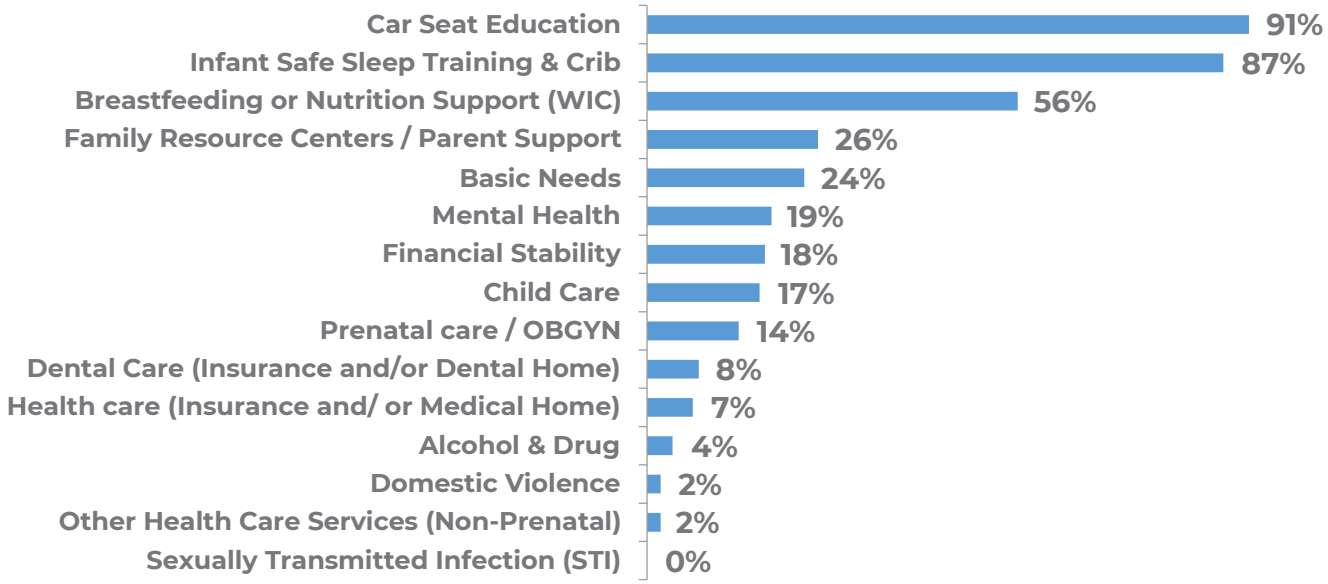


Source: Health Assessment Intake. N=180.

REFERRALS

A key role of BMU's pregnancy coaches is to assess mothers' needs and provide referrals throughout their pregnancy as challenges arise. Referrals were given to women in the program based on their self-reported needs and on the needs observed by their pregnancy coaches. The majority of referrals were for car seat education and safety (91%; 163/180), infant safe sleep training and crib (87%; 157/180), and breastfeeding/ nutritional support (56%; 100/180).

Figure 7 — Percent of Clients Receiving Referrals, by Type



Source: Care Plan and Referral Log. N = 180. Includes all clients served in FY 2019-2020.

As part of case management, pregnancy coaches help their clients connect to the services they need. When clients report contacting requested services, the initial referrals are logged as having been followed up. Because follow up data was not available on every client, the next analysis presents referral information on the 117 clients who had initial referrals and who had an exit form. For instance, 89% of clients were referred for infant safe sleep training, 37% of those referred said they were able to follow up on that referral, and 53% of those referred said they received the infant safe sleep training. The impact of COVID-19 needs to be acknowledged here as well, as many partner services were delayed or ceased for multiple months, and it is possible that mothers were unable to access the service for which the referral was provided. It is also important to note the role of BMU's pregnancy peer mentors also had to shift. Coaches had to further expand their work in assisting their clients with navigating systems that were constantly changing due to the pandemic, and coaches also had to spend more time helping them access basic needs.

Figure 8 — Type of Referrals Provided and Client Report of Follow-Ups and Service Connections

Referral Type	Number of Referrals Given	Percentage Receiving this Referral	Number of Referrals Followed Up	Percentage of Referrals Followed Up	Number of Services Received	Percentage of Services Received
Car Seat Education	101	86%	35	35%	17	49%
Infant Safe Sleep Training and Crib Provided	104	89%	38	37%	20	53%
Breastfeeding / Nutrition Support (WIC)	65	56%	53	82%	30	57%
Basic Needs	60	51%	31	52%	19	61%
Family Resource Centers/ Parent Support	31	26%	10	32%	3	30%
Mental Health (WellSpace)	27	23%	16	59%	8	50%
Financial Stability	25	21%	16	64%	11	69%
Prenatal Care/OBGYN	20	17%	10	50%	7	70%
Child Care	18	15%	11	61%	8	73%
Dental Care	12	10%	5	42%	5	100%
Health Care (Insurance or Medical Home)	7	6%	4	57%	3	75%
Alcohol and Drug	6	5%	2	33%	1	50%
Domestic Violence	4	3%	4	100%	2	50%
Other Health Care Services (Non-Prenatal)	3	3%	3	100%	1	33%
Sexually Transmitted Infection	0	0%	NA	NA	NA	NA

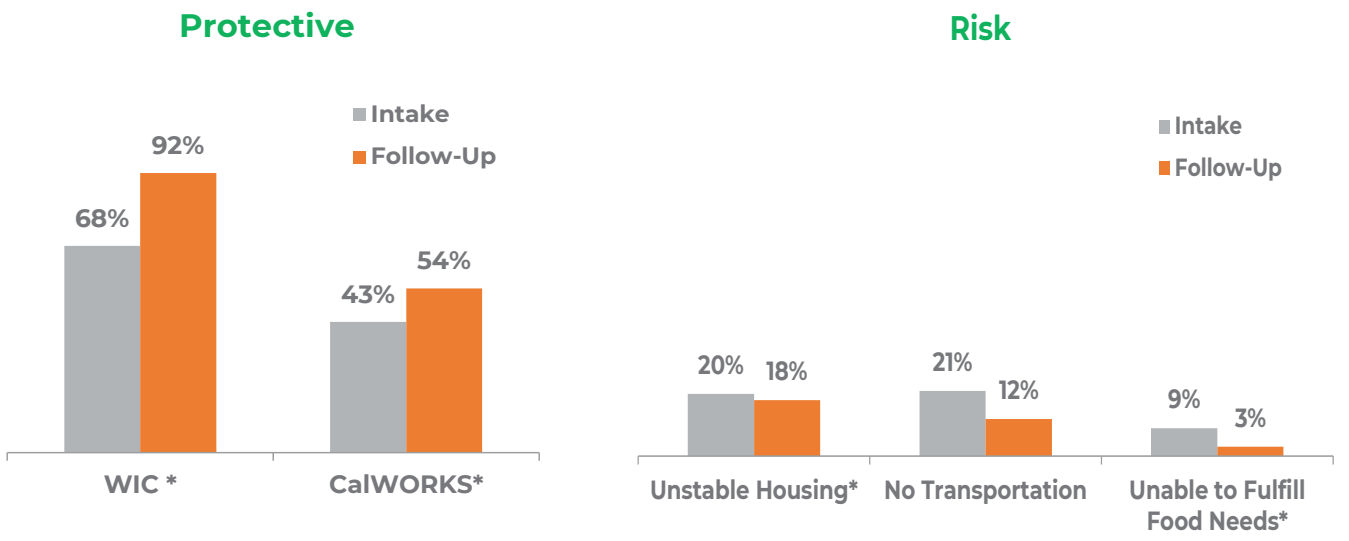
Source: Care Plan and Referral Log, 2019-2020. Follow up status is assessed amongst those clients who have both a referral form and those with an exit form, therefore these numbers are different than in the figure above. N varies by item.

CHANGES IN RISK AND PROTECTIVE FACTORS

One of the primary objectives of the Pregnancy Peer Support program is to understand factors that pose a direct risk to the health of the baby as well the health and successful functionality of mothers. In intake and follow-up health assessments, clients are asked to self-report about a variety of factors related to socio-economic conditions, psychosocial wellbeing, maternal health, and infant safety. The following presents results from a matched set of clients who had both intake and follow up assessment results.

In terms of socio-economic factors, among those with both an intake and follow up assessment, participants increased in their use of protective resources, WIC (44/65 at intake and 60/65 at follow-up) and CalWORKs (30/70 at intake and 38/70 at follow-up). Participants decreased (improved) in all socio-economic risk factors related to resource information provided by the BMU program. Notably, participants who were unable to fulfill their family's food needs at intake decreased to 3.4% at follow-up (6/67 at intake and 2/67 at follow-up). These findings indicate that participants increased connections to essential services that impact their families' stability.

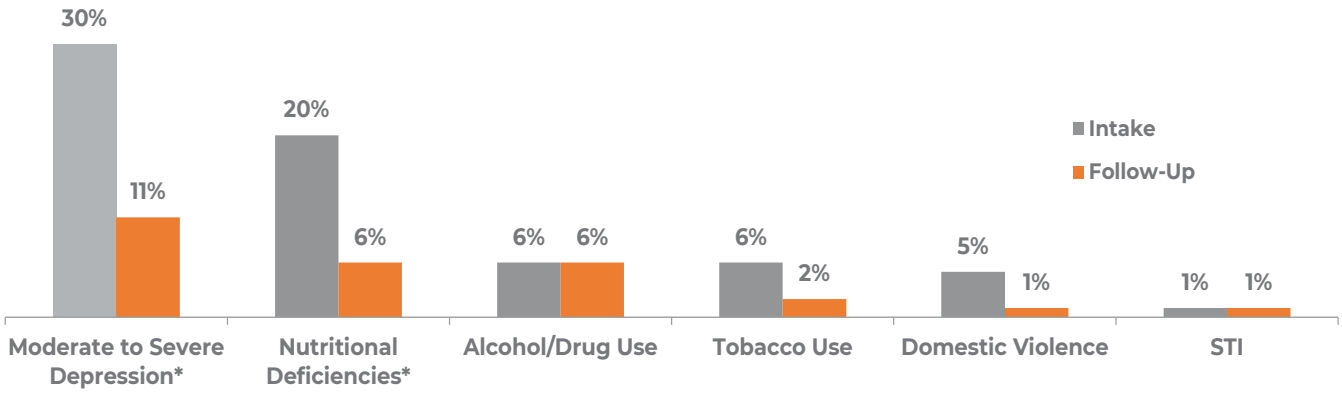
Figure 9 — Change in Reported Socio-Economic Factors from Intake to Follow Up Assessment



Source: Health Assessment Intake and Follow Up. Matched sets; N = 70. N's may vary based on item response rate. Column names marked with * represent a statistically significant change.

As for health risk factors, amongst those with both an intake and follow up assessment, maternal depression as indicated by the PhQ-9 was rated moderate or high in 30% (41/136) of mothers before entering the program. After program completion, this percentage had decreased to 11% (15/136). Reported nutritional deficiencies decreased from 20% (20/97) at intake to 6% (6/97) at follow-up. Additionally, at intake, 6% (6/97) of mothers reported using tobacco, at follow-up this decreased to 2% (2/97).

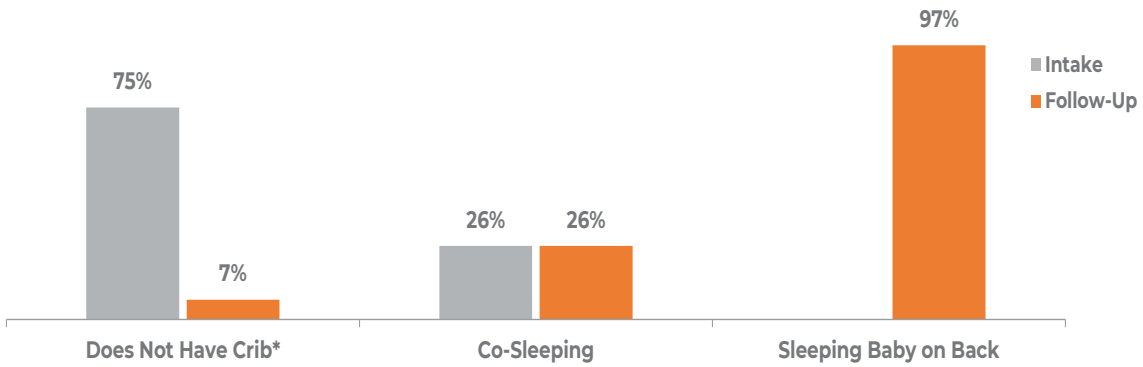
Figure 10 — Change in Reported Health Factors from Intake to Follow Up Assessment



Source : Health Assessment Intake and Follow Up. Matched sets; N = 97 for all categories except depression, where N = 136. Column names marked with * represent a statistically significant change.

Positive changes were also observed with parents' preparedness for infant safety; at intake, 75% of mothers reported that they did not have a crib for their baby before the program began, and this dropped to just 7% by the end of the program. However, changes were not found in terms of parents' intention (intake) and then practice (follow up) of co-sleeping.

Figure 11 — Change in Reported Infant Safety Practices from Intake to Follow-Up Assessment



Source: Health Assessment Intake and Follow Up. Matched sets; N = 97. Column names marked with * represent a statistically significant change. Plans for Sleeping Baby on Back were not asked at intake, so results are only reported for follow-up.

BIRTH OUTCOMES

Birth outcome information was provided by mothers during their postpartum visit with their Pregnancy Coach. There was a total of 101 infants born[2], including 97 singletons and two sets of twins (4 infants). Notably, as of the postpartum follow-ups with each mother, there were zero infant deaths reported.

Of the 101 infants, 88% (88/101) were born at a healthy birth weight, 83% (83/101) were born full term, and combined, 80% (81/101) had a healthy birth outcome, in that they were born at a healthy birth weight and full term. The percentage of singletons with a healthy birth was 84% (81/97). In terms of less favorable outcomes, 12% (12) of the 101 babies were born low birth weight and 17% (17) of infants were born pre-term. Twelve babies stayed in the NICU and 3% were born with jaundice. See Appendix 1 for a list of factors associated with individual births that with outcomes.

In terms of perinatal outcomes, at the time the Pregnancy Outcome Form was completed approximately one month postpartum, 87% (80/101) of babies had been taken for their well-baby checks with a pediatrician). Breastfeeding rates were favorable as well, with about two thirds (63%; 59/94) of babies exclusively breastfed in the hospital, and 16% (16/102) breastfed in combination with formula in the hospital. At follow-up, 63% (29/46) of babies were being exclusively breastfed and 17% (8/46) were being breastfed in combination with formula.

*Of the 101 infants born in BMU's program, there were **zero** fetal OR perinatal deaths!*

Figure 12 — Birth and Perinatal Outcomes of Pregnancy Peer Support Clients

	All Infants (N=101)		Twins (N=4)		Singletons (N=97)	
Favorable Outcome	**#**	**%**	**#**	**%**	**#**	**%**
Live births	101	100%	101	100%	97	100%
Healthy birth weight *and* full term birth	81	80%	0	0%	81	84%
Healthy Birth Weight	88	88%	0	0%	89	92%
Full Term Birth	83	83%	0	0%	84	87%
Unfavorable Outcome	**#**	**%**	**#**	**%**	**#**	**%**
Preterm birth	17	17%	4	100%	8	8%
Low birth weight	12	12%	4	100%	13	13%
Newborn death	0	0%	0	0%	0	0%

Source: Pregnancy Outcomes Form.

In order to discern the association between maternal factors and birth outcomes, the figure below represents the prevalence of key risk and protective factors across different profiles of birth outcomes: healthy births (not low birthweight, not preterm), one poor birth outcome (either low birthweight or preterm), and both poor birth outcomes (low birthweight and preterm). Of note, the prevalence of maternal anxiety/depression at intake was substantially different regarding birth outcome (healthy births: 21%, one poor birth outcome: 36%, two poor birth outcomes: 56%).

[2] Number of infants born is comprised of some mothers who joined the BMU program in both FYs 18-19 and 19-20.

Figure 13 — Birth Outcomes Based Upon Risk and Protective Factors Identified at Intake

Pregnancy Risk and Protective Factors from Intake	Healthy Births (N = 81)		Either LBW or Preterm (N = 11)		Both LBW and Preterm (N = 9)	
Health Factors	**#**	**%**	**#**	**%**	**#**	**%**
No Regular Prenatal Care	2/78	3%	1/11	9%	2/9	22%
2+ Miscarriages	7/80	9%	1/11	9%	0/9	0%
35 years or older	9/80	11%	1/11	9%	2/9	22%
Under 20 years old	11/79	14%	1/11	9%	0/9	0%
No Prenatal Vitamins	6/79	8%	1/11	9%	2/9	22%
STI	0/80	0%	1/11	9%	0/9	0%
Alcohol or Drug Use	2/80	3%	3/11	27%	2/9	22%
Tobacco Use	2/80	3%	3/11	27%	2/9	22%
Anxiety/Depression	17/80	21 %	4/11	36%	5/9	56%
Nutritional Deficiencies	16/80	20%	3/11	27%	1/9	11%
Obesity	5/80	6%	1/11	9%	0/9	0%
Socio-Economic Factors	**#**	**%**	**#**	**%**	**#**	**%**
WIC	53/77	64%	6/11	55%	5/9	56%
CalWORKs	35/80	44%	6/11	55%	6/9	67%
Did Not Graduate High School	18/75	24%	1/11	9%	2/9	22%
Unstable Housing	16/75	21%	3/11	27%	1/9	11%
No Transportation	13/77	17%	4/11	36%	3/9	33%
Unable to Fulfill Food Needs	4/79	5%	2/11	18%	2/8	25%
Unemployed, Looking for Work	24/78	31%	1/11	9%	1/9	11%
Single, Unpartnered	27/77	35%	4/11	36%	3/9	33%
Program Factors	**M**	**SD**	**M**	**SD**	**M**	**SD**
Gestational Weeks at Intake to BMU	22.86	7.69	22.27	8.04	23.22	8.38
Gestational Weeks at First Prenatal Visit	8.52	4.97	7.75	4.65	8.00[2]	2.83
Number of BMU Weekly Check-Ins[3]	11.31	6.72	10.33	5.57	9.63	4.57

Note: M = Mean and SD = Standard Deviation. Source: Health Assessment Form, Pregnancy Outcomes Form, and Exit Form.

[3] There were large amounts of missing data in this category, results should be interpreted cautiously.

[4] Numbers reported here are comprised of the 73 women who delivered and exited the program, as valid check-in counts are only available after exit.

FACTORS THAT ARE ASSOCIATED WITH ADVERSE BIRTH OUTCOMES

In order to understand the factors that are associated with adverse birth outcomes, a series of analyses were conducted. It is important to note that none of the following analyses imply causation. It is likely that other factors played into the relationship between the studied variables. In addition to an adverse birth outcome variable, that was dichotomous (either yes, there was an unhealthy birth outcome or no, it was a healthy birth), two other outcome variables (birthweight and gestational age) were analyzed as separate dependent variables, as it is likely that there are different predictors for each.

- The first outcome variable examined whether there was a healthy or unhealthy birth, as a dichotomous variable
- The second outcome variable examined birth weight as a continuous variable
- The third outcome variable examined gestational age as a continuous variable.

First, in order to identify factors that had a significant relationship to the outcomes studied, correlations were conducted on all variables identified in the figure above. Correlations imply a relationship between two variables; significant correlations mean variables are related to one another in some way (though correlations do not mean that variable caused an outcome). Across the outcomes analyzed, significantly correlated variables are shown in the figure below (variables that were not correlated with any birth outcome are not displayed). All of the correlations presented below were in the expected directions (i.e., someone who had anxiety/depression was more likely to have an adverse birth outcome). In order to increase statistical power, two cohorts of BMU clients were included (those from FY 18-19 and 19-20). This increased the sample size to 203.

Figure 14 — Factors that Correlate with Birth Outcomes

Risk Factors at Intake	Analysis 1	Analysis 2	Analysis 3
	Adverse Birth Outcome	Birthweight	Gestational Age
	(Dichotomous; Y/N)	*(Continuous)*	*(Continuous)*
Unable to Fulfill Food Needs	●	●	●
Unemployed, Looking for Work	●	●	●
Anxiety or Depression	●	●	
Domestic Violence	●	●	
Obesity		●	
Tobacco Use	●	●	
Alcohol/Drug Use	●	●	
Number of Check-ins with BMU Pregnancy Coach	●	●	●

Source: Health Assessment Form, Pregnancy Outcomes Form, and Exit Form. A blue dot represents statistical significance at $p < .05$.

Next, regressions were conducted to determine how each of the correlated variables identified (above) independently predicted birth outcomes. Regressions are more sophisticated than correlations and can discern if an independent variable is able to statistically predict an outcome variable, over and above the influence of any other covariates. Variables that were not correlated with birth outcomes were not included in regression models, since they did not have a statistical relationship or impact on one another. It is important to note that although regressions provide more sophisticated analyses than correlations, they do not imply causal relationships. As with the correlational analysis, clients from both the FY 18-19 and FY 19-20 cohorts were included for analysis to increase power of results (N = 203).

First, a logistic regression was conducted on the dichotomous measure of adverse birth outcomes (yes/no). Being **unemployed** and looking for work and experiencing **anxiety/depression** both independently predicted having an adverse birth.

Secondly, a linear regression was conducted on the continuous birthweight variable. Being **unemployed** and looking for work, experiencing **anxiety/depression**, and having a **fewer number of check-ins with the BMU pregnancy coach** independently predicted having an infant with a lower birthweight. Maternal **obesity** was predictive of a child having a higher birthweight, which can also be unhealthy (if extreme).

Being unemployed, experiencing anxiety/depression and having a fewer number of check-ins with the BMU pregnancy coach all predicted having an infant with a lower birthweight.

Lastly, a linear regression was conducted on the continuous outcome of gestational age. Being **unemployed** and looking for work significantly predicted having an infant with lower gestational age. All significant regression outcomes were in the expected directions. The table below displays the factors that were found to independently predict birth outcomes.

Figure 15 — Factors that Correlate with Birth Outcomes

Risk Factors at Intake	Analysis 1	Analysis 2	Analysis 3
	Adverse Birth Outcome	Birthweight	Gestational Age
	(Dichotomous; Y/N)	*(Continuous)*	*(Continuous)*
Unemployed, Looking for Work	●	●	●
Anxiety or Depression	●	● (M)	
Obesity		●	
Number of Check-ins with BMU Pregnancy Coach		● (M)	

Source: Health Assessment Form, Pregnancy Outcomes Form, and Exit Form. A blue dot represents statistical significance at $p < .05$. Those marked with (M) represent marginal significance at $p < .1$.

Overall, many risk factors were correlated with having an adverse birth outcome. The differing outcome variables were further explored to best understand the relationships between variables and outcomes. Interestingly, **experiencing anxiety or depression, being unemployed and looking for work, and having fewer check-ins with BMU pregnancy coach** emerged as significant independent predictors for adverse birth outcome using differing outcome variables. These results can provide guidance for program focus and improvements (i.e., paying special attention to those with anxiety/depression and who are looking for work, and encouraging all clients to have as many check-ins with their pregnancy coach as possible).

LEVEL OF PROGRAM COMPLETION

The BMU program strives to reach pregnant women wherever they are in their pregnancy, and sometimes this is not until later in gestation. In order to evaluate the extent to which participants completed the program, different thresholds for dosage were set based upon mothers' trimester of entry. Women who entered the program during their first trimester have the opportunity to complete at least 21 prenatal visits with their Pregnancy Coach; therefore, the minimum threshold of completion for women in the First Trimester Cohort is 21 prenatal visits. Ideally, women who entered the program in their second trimester would have 10 or more prenatal visits, and women who entered in their third trimester would have 6 or more prenatal visits.

"You need to go with me to all of my appointments!"

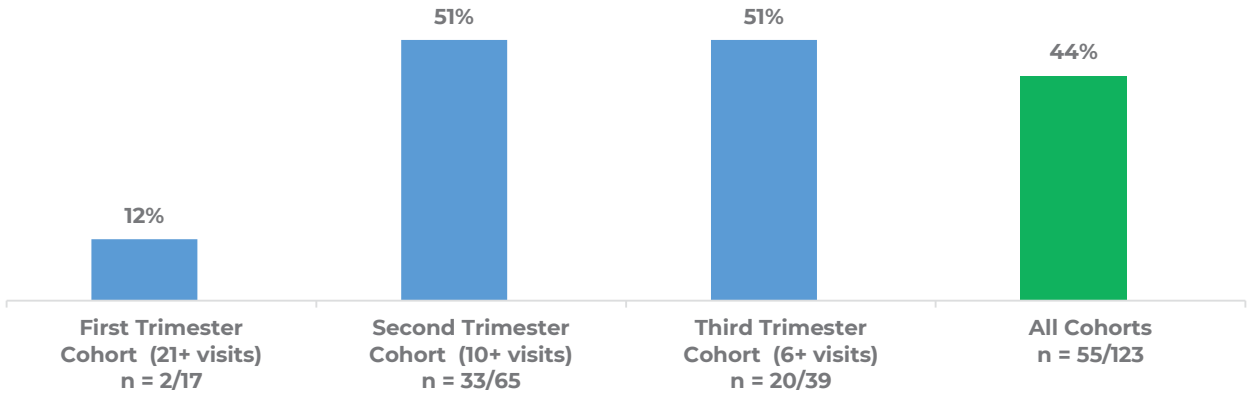
– BMU Client to her Pregnancy Coach

Program completion is defined as completing both the minimum prenatal service requirements, based on the trimester of entry, and a postpartum visit with the BMU pregnancy coach. Partial completion is defined as completing one but not both of these requirements. Participants who exited without completing either requirement are defined as not completing the program. The BMU program reaches a high-need population, and retention of this population has historically been a challenge; this pattern persisted into FY 2019-2020. Amongst participants who completed the program, the figure below illustrates the level of completion per cohort, as well as an average across all cohorts. Out of the 123 women who delivered and *exited*[5] the program in FY 19-20, 44% (55/123) completed the minimum number of prenatal visits. These numbers are lower than the last fiscal year, where 63% of clients in all cohorts completed all of the required visits (25% completion first trimester, 75% completion second trimester, 64% completion third trimester). It is important to note the context of FY 19-20 when interpreting these reports, as COVID-19 impacted the latter half of the fiscal year. One common way that mothers achieved their weekly visits with their coach was during transportation to and from their doctor's appointments. However, BMU did not offer transportation services to their clients for three months during the COVID-19 pandemic. Additionally, the added stress of the pandemic could have impacted BMU clients as well; clients may have been more focused on pressing needs caused by COVID-19 (e.g., lack of childcare, job loss, etc.) than attending their weekly check-ins with their pregnancy coach.

BMU Pregnancy Coaches are adapting to COVID-19 regulations and attending visits virtually, and even talking with mothers on the phone during the birthing process!

[5] Some mothers remain in the program for up to six months postpartum and therefore, some of these mothers joined the BMU program in FY 18-19.

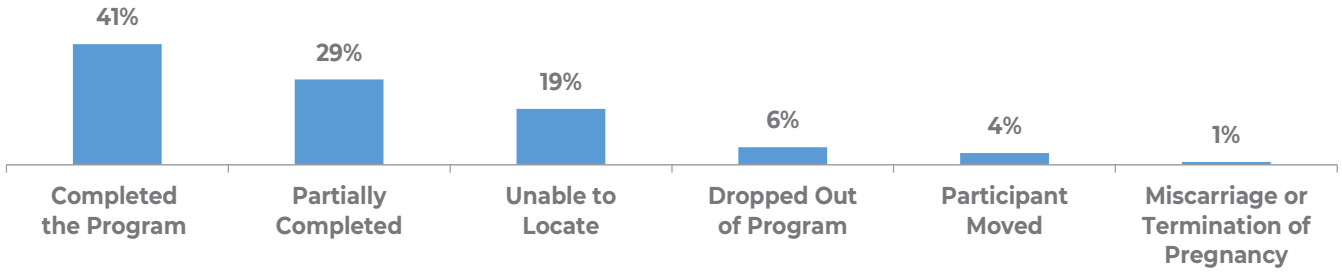
Figure 16 — Completion of Prenatal Service Requirements, by Trimester Cohort of Entry and Overall



Source: Exit Form. Data are not presented for clients who do not have an exit form, as the dosage status is unknown.

Another essential component of the Pregnancy Peer Support model is the postpartum support provided by coaches. These visits typically occurred around 30 days after delivery and provide an opportunity for coaches to learn about the delivery outcome, check in on mom and baby's well-being, complete the postpartum paperwork, and provide referrals to any necessary resources. In FY 2019-2020, 70% (84/123) of clients met with their pregnancy coach for at least 1 postpartum visit. This represents a decrease from the 97% of clients that met with their pregnancy coach for a postpartum visit in FY 2018-19.

Figure 17 — Status at Program Exit



Source: Exit Form. N= 123.

CLIENT SUCCESS STORIES

Pregnancy Coach Toni Johnson was reminded of the importance of coaches' role as service navigators after attending a routine prenatal care appointment with one of her clients. This was the first prenatal appointment that Toni had attended with the client. The client introduced Toni to the medical staff as her pregnancy coach. After waiting in the patient room for a few minutes, medical staff brought the client several informational brochures discussing pregnancy health, resources for breastfeeding, car seat education, parenting, etc. The client had several questions and was relieved to receive the extra information and attention from the provider. After the appointment, the client exclaimed to Toni "You need to go with me to all of my appointments!" The client informed Toni that she had never received the quality of care that she had with Toni in the room that day. She stated that her appointments were generally very brief, and staff had never shared the information or resources they provided with Toni present. Toni brought this story to the BMU team to remind coaches of the critical role they play in ensuring that their clients receive the highest quality of care.

OPPORTUNITIES FOR IMPROVEMENT

Although the BMU program made significant impacts in Sacramento County in FY 2019-20, there are ways to improve the program further. These include:

- Increasing efforts to leverage funding to build more program capacity, thus serving more mothers in Sacramento County.
- Continuing to strive to reach mothers as early in their pregnancy as possible. This may include partnering with OBGYN clinics and other healthcare providers to enroll mothers earlier. Additionally, BMU should focus on retention of their current clients so they remain in the program for the duration of their pregnancy.
- Reviewing referral paperwork to eliminate potential gaps in reporting. Provide refresher trainings to staff as needed.
- Adding questions about referrals to Postpartum Survey to allow clients more time to connect with referred services.
- Encouraging pregnancy coaches to continue to follow-up with their clients after providing a referral and to assist with client follow-up.

Family Resource Centers

The Child Abuse Prevention Council Safe Sleep Baby campaign has consistently shown that the majority of parents trained on safe sleep practices go on to follow those practices with their infants.

Birth & Beyond Family Resource Centers (FRCs) are operated by six organizations and aim to serve families through home visitation, parenting education classes, crisis intervention, and enhanced core.

First 5 Sacramento provides funding for Family Resource Centers with the goal of decreasing child abuse across the entire Sacramento population, with a specific effort to reach African American parents and their young children. Birth & Beyond services are intended to improve the lives of children and their families, especially those from particularly at-risk backgrounds. Birth & Beyond favors a strengths-based approach to case management to maximize the current skills of each participant, as well as to educate and increase skills in areas of need.

Birth & Beyond understands and values the cultural diversity in the population that it serves, and therefore takes great care in developing staffing that mirrors their clients, in terms of demographic characteristics, language, and experience with living or working in the service area. Throughout their tenure at Birth & Beyond, staff receive training, direct supervision, and experience to enhance their own personal and professional development. In 2018-19, all FRCs underwent training with consultant Adele James and each FRC came up with a plan to increase outreach and cultural responsiveness.

In addition to deliberate staffing, Birth & Beyond also strategically locate their Family Resource Centers in neighborhoods that are characterized by high birth rates, low income, and above County averages for referrals to and substantiated reports to Child Protective Services (CPS), the greatest incidence of referrals to the child welfare system for child abuse and neglect. The FRCs are located in the neighborhoods of:

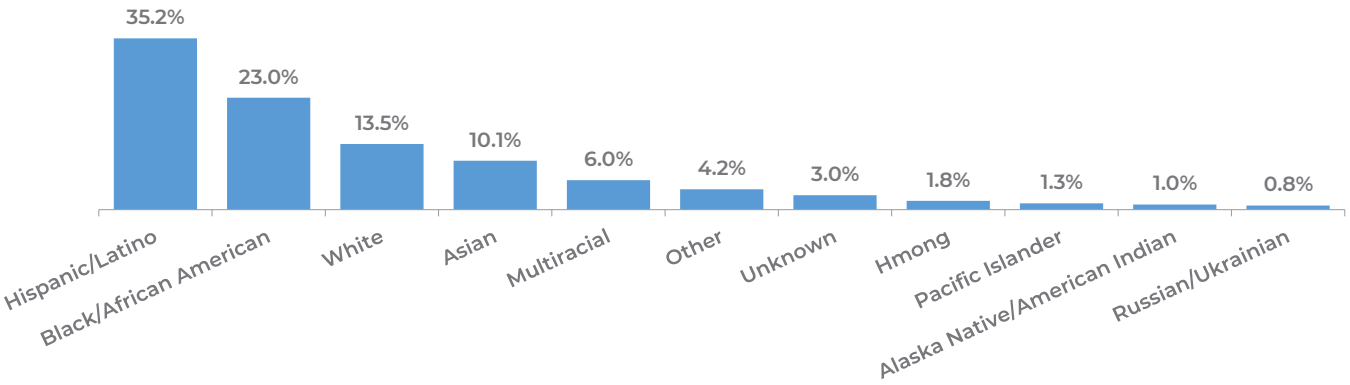
- **Arden Arcade**
- **Del Paso Heights**
- **Meadowview**
- **North Highlands**
- **North Sacramento**
- **Oak Park**
- **Rancho Cordova**
- **South Sacramento**
- **Valley Hi**

The locations of the FRCs coincide with the neighborhoods identified by the Blue Ribbon Commission as the focal areas for the RAACD initiative. Although the focus is reducing child death across all of Sacramento County, two FRCs were expanded (Meadowview, Valley Hi) and one FRC was re-established (Arden Arcade) with First 5 funding with the specific target of serving African Americans and reducing the African American child death rate.

Located throughout Sacramento County in areas of high need, all FRCs provide standard services that are complemented by unique activities and special events that reflect the characteristics of its specific neighborhood. All Birth & Beyond activities, classes, community events, family activities, and direct services are operated out of the FRCs. The core services provided by the FRCs include home visitation, parenting education, crisis intervention services, and enhanced core services. Home visitation clients receive direct case-management and parenting education through the *Nurturing Parenting Program* model in their own homes. Parent education clients attend FRC-based workshops based upon either *Making Parenting a Pleasure* or *Nurturing Parenting Program* models. Crisis intervention clients receive intense, short-term case-management services for emergent situations, such as homelessness, food instability, domestic violence, or substance abuse. Enhanced core clients receive "light touch" services, such as FRC-based classes, events, or activities that are intended to augment other services the client is receiving, or to promote social and community engagement and therefore reduce isolation. All services that FRCs provide contribute to decreasing child abuse and neglect, however **in the current report, the focus was on home visitation and parenting education outcomes**.

In FY 19-20, with funding from First 5 Sacramento, FRCs served 3,902 adults and 2,166 children. Over half of clients served at FRCs identified as either Hispanic/Latino or Black/African American. The ethnicity breakdown for all participants is provided in the figure below. Birth & Beyond serves a population with higher levels of minorities than Sacramento County in general, which contains White (44.2%), Hispanic/Latino (23.4%), Asian (16.9%), African American (10.9%), other (4.5%).[4]

Figure 18 — Ethnicities Served at Family Resource Centers in Sacramento County



Source: Birth & Beyond Demographics Report on Persimmony, FY 19-20.

HOME VISITATION

The Home Visitation program through Birth & Beyond uses the *Nurturing Parenting Program* (NPP), an evidence-based home visitation curriculum provided at least weekly, with a minimum of two months of visitation services. In FY 2019-20, 557 parents received home visitation services funded by First 5 Sacramento. Of the parents served in the home visitation program, 21% (117/557) identified as African American. Of the FRCs, the Del Paso Heights location served the highest proportion of African American home visitation parents (37%; 33/89), with the Valley Hi location serving the second-highest proportion (32%; 41/129).

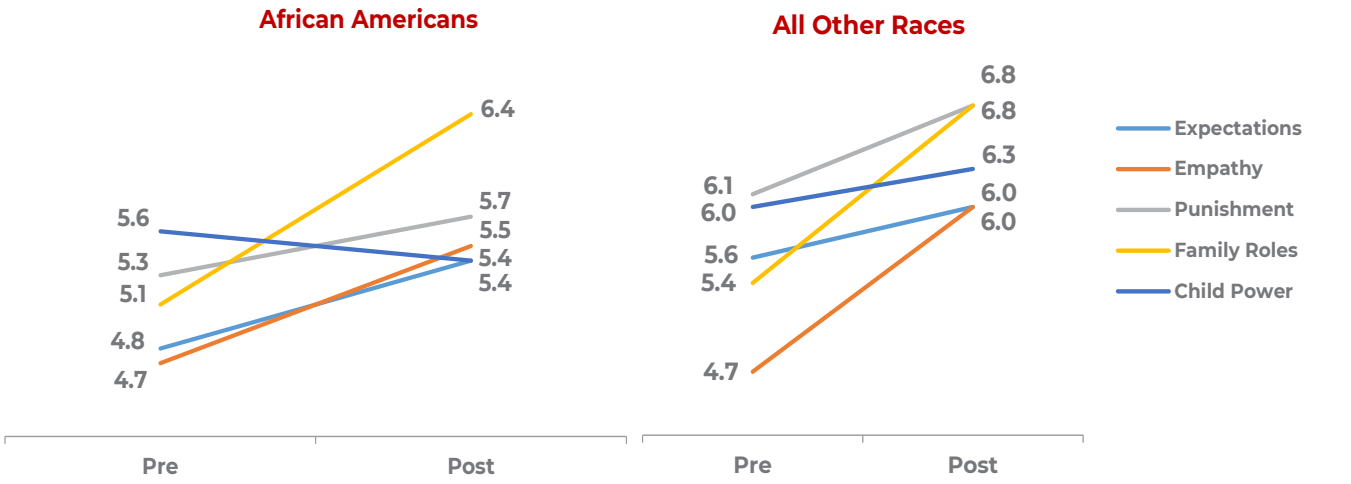
Based on the age of their target child, they were assigned to differing *Nurturing Parenting Program* curriculums: Infants and Toddlers (89%; 495/557), Prenatal (2%; 9/557), School Age (1%; 6/557), Fathers (1%; 4/557)[5].

Participants were screened using the Adult Adolescent Parenting Inventory (AAPI), a tool that measures risk for child maltreatment. It includes five domains: Expectations of Children, Parental Empathy Towards Children's Needs, Use of Corporal Punishment, Parent-Child Role, and Children's Power. Each item is scored on a scale of 1 (high risk) to 10 (low risk).

[6] Source: U.S. Census Bureau, 2019.
[7] 43 cases did not have curriculum assignment data.

Two hundred seventy parents had both a pre- and post- assessment after completing the NPP home visitation program; of these 46 were African American. In the figure below, mean scores on all domains of the AAPI are displayed, separated by African Americans and All Other Races. Overall, African Americans performed similarly to those of other racial backgrounds, and in general scores on the AAPI tended to increase from pre- to post-assessment. However, for African Americans, their AAPI score on Children's Power actually decreased from pre- to post-test (although this change was not statistically significant). This demonstrates an area of potential focus for the home visitation program.

Figure 19 — Change in Mean Scores on AAPI in Pre- and Post-Test for Home Visitation Clients



Source: AAPI pre- and post-assessment scores, Birth & Beyond 2018. Note: African American N = 46. All Other Races N = 223.

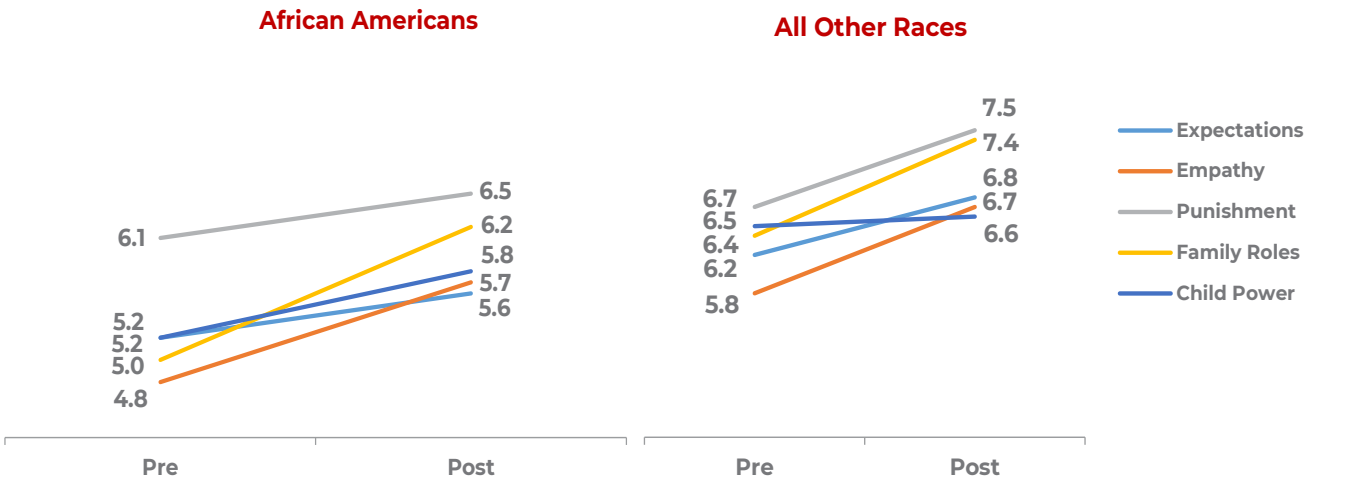
PARENTING EDUCATION

Parenting education classes are group-based classes conducted at Family Resource Centers (FRCs). To support parent attendance, transportation services are provided, as well as Play Care services during class time. In FY 2019-20, there were a total of 603 parents who attended parenting workshops funded by First 5 Sacramento. Of these, 149 (25%) identified as African American. Of the FRCs, the Arden Arcade location served the highest proportion of African American home visitation parents (40%; 22/55), with the Valley Hi location serving the second-highest proportion (39%; 38/97).

Parent beliefs about child-rearing were tested using the Adult-Adolescent Parenting Inventory (AAPI), a tool that measures risk for child maltreatment. It includes five domains: Expectations of Children, Parental Empathy Towards Children's Needs, Use of Corporal Punishment, Parent-Child Role, and Children's Power. Each item is scored on a scale of 1 (high risk) to 10 (low risk). Parents completed the AAPI before beginning the parenting education program and again after completion.

One hundred thirty seven parenting education participants had both a pre- and post- test; of these, 38 were African American. Both groups displayed increases in mean score across all domains of the AAPI. However, African Americans tended to start with lower mean scores on the AAPI (see figure below). This further demonstrates the need for the African American population to be vigorously recruited for participation in services like parenting classes.

Figure 20 —Change in Mean Scores on AAPI in Pre- and Post-Test for Parenting Education Clients



Source: AAPI pre- and post-assessment scores, Birth & Beyond 2019-20. Note: African American N = 38. All Other Races N = 99.

CLIENT SUCCESS STORY

The client was a young single father of a four month old daughter. He had recently separated from his daughter's mother due to domestic violence. This father was self-referred but was encouraged to connect through CPS as he was a victim of domestic violence (DV). He expressed struggling with trauma resulting from the DV, trauma from his childhood, and was struggling financially. Dad was looking to heal and to learn what caused him to stay in an abusive relationship. Additionally, he was hoping to gain parenting skills, so he participated in the Home Visitation program. Dad was connected to FRC supports where he participated in a Department of Human Assistance (DHA) webinar and learned of updated resources and how DHA could support him. Also, he was connected to a low income SMUD program to alleviate financial stress through IS services and supports and thus, this father was able to alleviate some of his financial stress through resources provided. Additionally, he was connected to WEAVE counseling provided at the FRC to begin his healing process. As a result of the FRC-provided resources, this father demonstrated and expressed growth in his parenting skills and communication.

OPPORTUNITIES FOR IMPROVEMENT

Family Resource Centers should consider increasing the integration of other programs into its services. This can include providing a seamless "warm handoff" transition between the perinatal and safe sleep programs and the FRCs.

Safe Sleep Baby

The Child Abuse Prevention Council Safe Sleep Baby campaign has consistently shown that the majority of parents trained on safe sleep practices go on to follow those practices with their infants.

Safe Sleep Baby (SSB) is an education campaign managed by the Child Abuse Prevention Council (CAPC) to increase knowledge about infant safe sleeping practices. The overarching goal is to decrease infant sleep-related deaths in Sacramento County, especially among African American infants. Specific strategies include:

- Safe Sleep Baby public education campaign to share SSB messages
- Safe Sleep Baby direct education for parents, hospital staff, health professionals, and social service professionals
- Cribs4Kids to provide cribs to pregnant or new mothers who do not have a safe location to sleep their baby
- Safe Sleep Baby systems change efforts related to safe sleep education policies and procedures

It is important to review the following results with the knowledge that FY 19-20 was largely impacted by COVID-19 and the subsequent stay-at-home order. Although all of Safe Sleep Baby's results are positive, the fourth quarter was highly impacted by the pandemic and this information should be held in consideration when interpreting data.

SAFE SLEEP BABY PUBLIC EDUCATION CAMPAIGN

Since the beginning of the Campaign, CAPC has sought to ensure that education and messages regarding safe sleep are created and delivered in a culturally relevant and sensitive manner. All SSB materials were created with extensive input from African American community members and distributed within the neighborhoods identified as having the highest rates of African American infant death in Sacramento County.

Additionally, the AmeriCorps Member Parent Health Educators created the SSB Social Media Campaign pages to further communicate safe sleep education and the risk factors that result in infant sleep-related deaths. In the first year, engagement with these outlets was as follows:

- Facebook page that has 85 followers and 77 likes. The Facebook page had 20 posts during the 2019-2020 fiscal year.

SAFE SLEEP BABY DIRECT EDUCATION

SSB Education for Community Service and Health Providers

To reach out to professionals who work with pregnant or new mothers, SSB employed "train-the-trainer" workshops to increase providers' knowledge about infant safe sleep practices and to promote referrals to SSB parent workshops for infant safe sleep education and cribs. Community professionals that were trained were comprised of: Cribs for Kids (C4K) partner representatives, community-based service providers who work with pregnant or new mothers, and medical provider organizations who work with pregnant or new mothers. From July 2019 to June 2020, 334 community-based service providers (up from 292 in FY 18-19) and five medical provider offices received this training (up from 1 in FY 18-19), including:

- Sacramento Clinic
- ARC Child Development
- Lutheran Social Services
- American River College
- Peach Tree Health
- Sacramento County Nurse Family Partnership

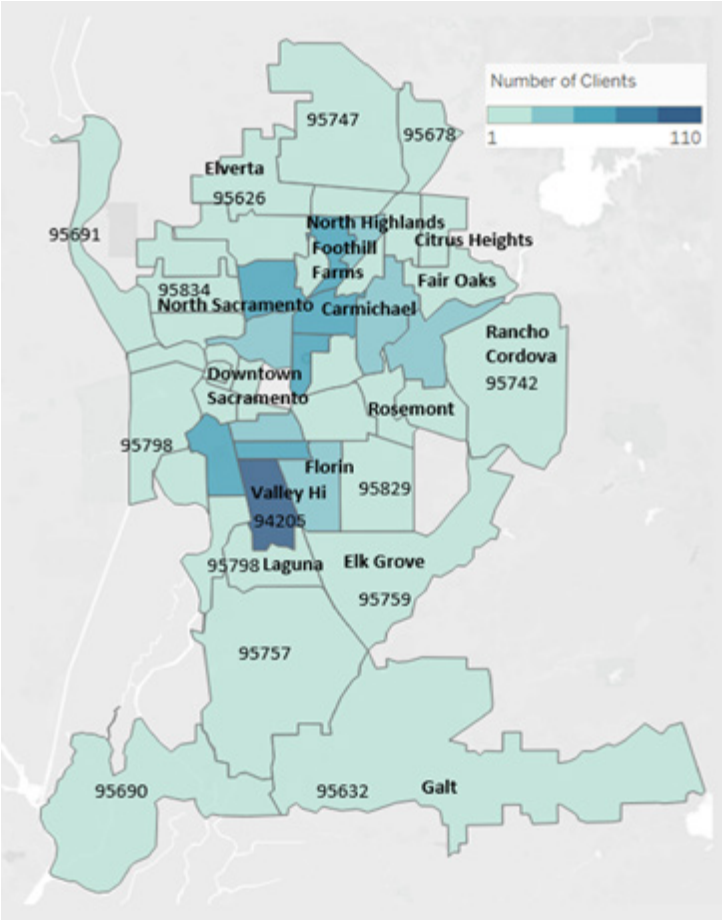
SSB Education for Parents

SSB provides education to families through home visits and hour-long workshops. All families (of any ethnicity) are welcome in the program, but there is a special emphasis on reaching African American families. Home visits are a valuable tool for increasing knowledge about safe sleep practices because parents are able to receive information from a trusted source in a private setting. Additionally, home visitors are able to observe the current or expected sleeping arrangement for each infant, as well as provide ongoing follow-up about infant safe sleep. Each session offers several key pieces of knowledge, including statistics about infant death due to sleep-related causes, the Six Steps to Safe Sleep Your Baby, and an educational video. After successfully completing the training, parents are given a free Pack 'n Play crib if they do not have a safe place to sleep their child.

During the 2019-2020 fiscal year, 984 unduplicated parents received SSB education (up from 883 who received the education in FY 18-19), 28% (247) of whom were African American. Additionally, 19 parents took the SSB course more than once, for a total of 1003 SSB workshops provided. Parents were trained at or by the following locations:

- CAPC
- FCCP FRC MAN Arcade FRC
- Help Me Grow
- Her Health First
- La Familia FRC
- MAN Del Paso FRC
- Meadowview FRC Valley Hi FRC
- North Sacramento FRC
- Rose Family Community Center
- River Oak FRC
- Sutter Teen Programs
- WellSpace Health CBP
- WellSpace Health FRC

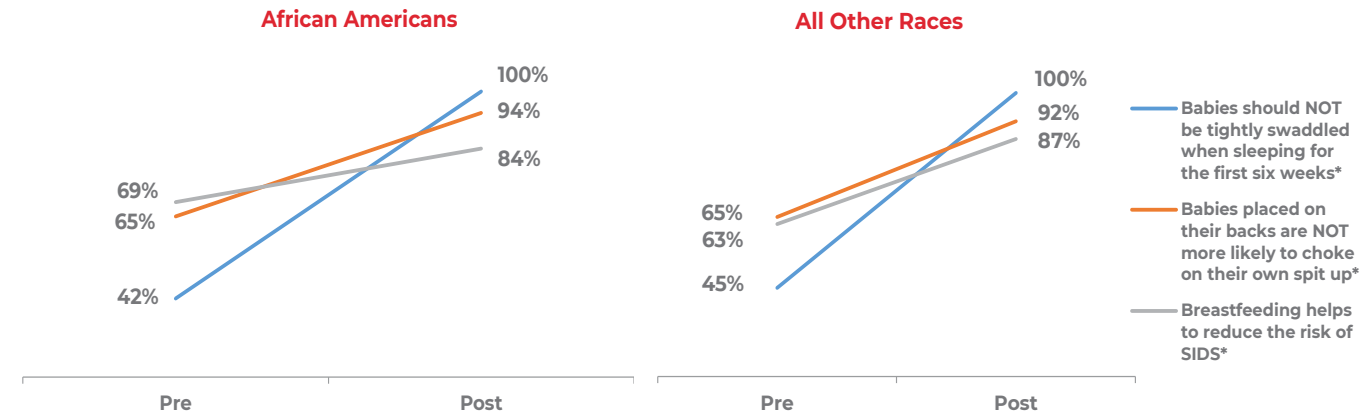
Figure 21 — Location of Safe Sleep Baby Training Participants



The map displays the geographic location where SSB parent participants resided. The area with the highest numbers of participants was the Valley Hi neighborhood. The areas with the fewest SSB participants were primarily in areas surrounding the perimeter of Sacramento County. Of those with zip code data, 54% (505/942) of SSB parent participants resided in one of RAACD's seven targeted primary service areas. This represents a positive increase in the reach of SSB; 32% of parent participants resided in one of the seven targeted neighborhoods in FY 18-19.

Of the 984 individuals who received the Safe Sleep Baby training, nearly 100% (963/984) of participants completed a pre- and post-test to measure changes in knowledge before and after the training. Almost one-third (28%; 270/984) of training participants who completed both pre- and post-tests identified as African American. Overall, across all respondents, the questions in the figure below show the highest increases in knowledge (all statistically significant changes). Because of Safe Sleep Baby's focus on African American infant sleep safety, African American participants' responses are displayed separately from all other races:

Figure 22 — Increases in Correct Answers about Infant Safe Sleep Knowledge in Pre- and Post-Test

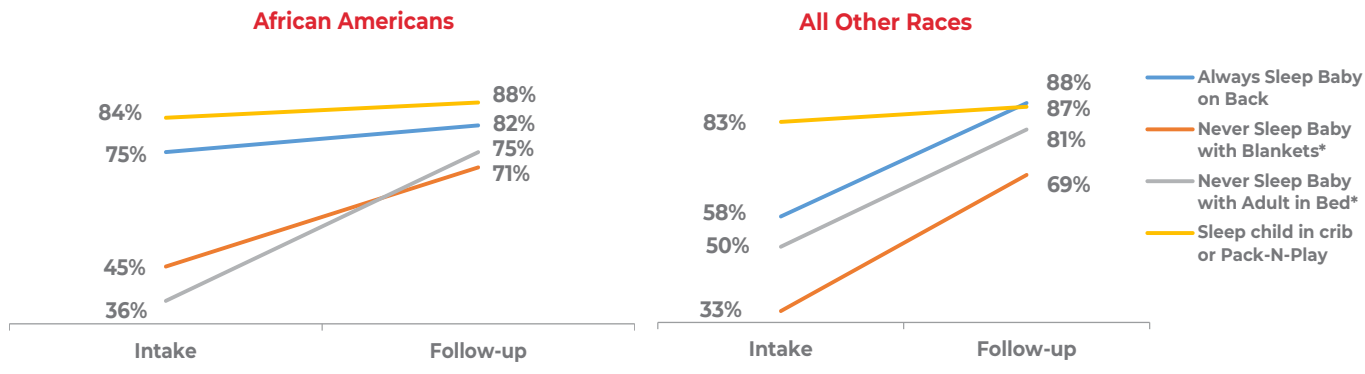


Source: SSB Pre- and Post-Surveys. Note: *indicates a statistically significant difference at p < .001. Overall N = 963; African American N = 270.

Additionally, participants completed an intake survey, where they described their intentions for infant safety practices (i.e., How often does (or will) your baby have stuffed animals or pillows on or around him/her when sleeping?). Within 3-4 weeks of the SSB training, 180 parents were reached with a follow-up call to understand the extent to which they were using infant safe sleep practices.

In order to further measure the impact of the SSB program, participants' intentions for infant safety practices (from the Intake Survey) were compared with their actual safety practices following the birth of their child (from the Follow-Up Survey). After participating in the program, parents were more likely to always sleep their baby on their back (64%, 107/168 Intake; 86%, 145/168 Follow-Up), to never sleep their baby with blankets (37%, 62/168 Intake; 70%, 117/168 Follow-Up), and to sleep their baby without an adult in the bed (45%, 76/168 Intake; 80%, 134/168 Follow-Up). All of these changes were statistically significant. The figure below demonstrates the differences in intention and follow-up between African Americans and all other races.

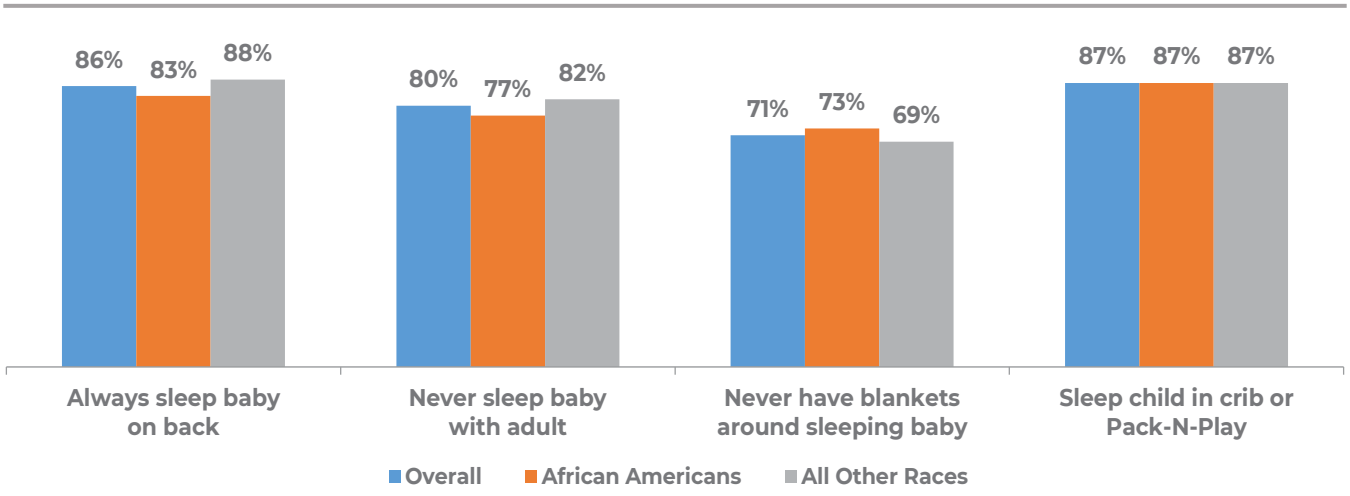
Figure 23 — Differences Between Intentions and Behaviors in Infant Safe Sleep Practices



Source: CAPC, SSB Intake and Follow-Up Surveys. Note: *indicates a statistically significant difference at p < .001. African American N = 56; All Other Races N = 112.

In the follow-up survey, the most commonly reported safe sleep behavior was *sleeping child in crib or Pack-N-Play* (87%; 156/180) followed by *always sleeping their baby on their back* (86%; 155/180), *never sleep baby with an adult* (80%; 144/180), and *never having blankets around their sleeping baby* (71%; 127/180).

Figure 24 —Percent of SSB Participants Practicing Infant Safe Sleep Behaviors, by Race



Source: CAPC, SSB Follow up Survey. Overall N=180; African American N = 60; All Other Races N = 120. There were no statistically significant differences between African Americans and All Other Races.

CRIBS FOR KIDS (C4K) PROGRAM

CAPC also manages the Cribs for Kids (C4K) Program, which partners with community hospitals and organizations to provide pregnant or new parents with safe infant sleep information and Pack 'n Play cribs, funded by First 5 Sacramento. Nurses were trained to ask expectant or new mothers, "Where will you sleep your baby when you return home?" This wording offers the opportunity to begin a non-judgmental conversation about infant safe sleep practices and the risk of infant sleep-related death. Pregnant or new mothers who reportedly did not have a safe location to sleep their infant were able to receive a free crib after completing an SSB workshop. Additionally, new mothers viewed an SSB informational video during their hospital stay and videos were also broadcast in pediatric and OBGYN waiting rooms. From July 1, 2019 to June 30, 2020, crib distribution partners included:

- 9 Birth and Beyond Family Resource Centers
- CAPC
- Chicks in Crisis
- Her Health First, Black Mothers United Pregnancy Peer Support Program
- Impact Sac Community Incubator Lead for the Black Child Legacy Campaign
- Rose Family Creative Empowerment Center Community Incubator Lead for the Black Child Legacy Campaign
- Sacramento Foodbank
- SCOE Help Me Grow
- Sutter Teen Program
- WellSpace Health Pregnancy Peer Support Program
- WellSpace North Highlands

From July 2019 to June 2020, a total of 485 cribs were provided to parents and caregivers in need. Of these, 73 cribs from hospital referrals were distributed to parents. Below is a breakdown of crib distribution by hospital referral:

- Dignity Health: 35 cribs
  - Mercy San Juan Medical Center: 29 cribs
  - Methodist General: 4 cribs
  - Mercy General: 2 cribs
- UC Davis: 29 cribs
- Kaiser South Sacramento: 7 cribs
- Sutter: 2 cribs

Of the 485 total cribs distributed, 175 cribs were provided to African American parents, representing 36% of all cribs distributed.

SAFE SLEEP BABY EDUCATION POLICIES AND PROCEDURES

Another goal of SSB is to increase sustainability of the program by partnering with hospitals and medical providers to encourage the adoption of SSB policies and education. SSB education is being implemented in all four main hospital systems of Sacramento:

- Dignity Health
- UC Davis
- Kaiser
- Sutter

In 2019/2020, **all** eight birthing hospitals in Sacramento had successfully implemented SSB education policies.

OPPORTUNITIES FOR IMPROVEMENT

The Safe Sleep Baby Campaign had great success in FY 19-20, including its quick programmatic shift in response to COVID-19, however there are always opportunities for further growth of the program. These include:

- Continuing to increase reach into the seven RAACD high-risk neighborhoods
- Increasing social media presence and tracking SSB posts on other social media pages (e.g., CAPC website, My Black Pregnancy, My Black Pregnancy Meet Up)
- Continuing to increase reach into medical providers offices, doctors, and OBGYN clinics (UC Davis)
  - Partnership with UC Davis for OBGYN outpatient clinics to refer patients to SSB workshops and crib distribution.

Public Education Campaign

Paid social media advertisements ran across Facebook and Instagram from February 17, 2020 – June 30, 2020 and across the two platforms, there were 3,115,570 impressions and 30,304 clicks to the link provided.

The fourth strategy funded by First 5 was a public education campaign. In a groundbreaking partnership with Sacramento County Public Health Department, the purpose of the campaign was to raise public awareness about the fact that institutionalized racism is the root cause of the racial disparities in safe births for both infant and mother. Runyon Saltzman, Inc. (RSE) managed this comprehensive media campaign, titled the Unequal Birth Campaign, that launched in February 2020 and included radio advertisements, social media advertisements, LED billboards around the county, and the creation of a new website (UnequalBirths.com).

CAMPAIGN DEVELOPMENT

The first two quarters of the fiscal year concentrated on developing strategy for the new campaign. RSE first prepared nine different campaign concepts, ultimately narrowing it down to three concepts for further focus group research. Then, RSE partnered with GroupWorks and Earth Mama Healing to moderate listening sessions with a wide selection of participants. The participants of these focus groups represented a sample that reflected the diversity of the Sacramento County population (49% African American, 50% in the 30-40 age range, 67% with an annual household income below $40,000). A total of 46 people participated in campaign focus groups and ultimately the Unequal Birth campaign was chosen. RSE then worked with local photographers to complete a photo shoot with real Sacramento families (mothers, fathers, infants, and grandparents). These photographs were then utilized in digital advertising, social media advertising, and on billboards.

RADIO ADVERTISEMENTS

From February 17, 2020 – June 30, 2020 a total of 861 advertisements ran on a number of local top radio stations (KSFM, KRXQ, KUDL), as well as digital streaming advertisements through Pandora, which garnered 1,250,803 impressions. The script for the radio advertisement can be found below (emphasis added):

> *"What does it mean to be pregnant and black in Sacramento County? It means that I am **four times more likely to die during pregnancy**. It means my baby is **twice as likely to die** too. It means that regardless of my education, my income, or how diligent I am about staying healthy during my pregnancy, I still won't receive the same quality of care or support that other women do. **The color of our skin should not equate to life or death during pregnancy**.* Visit UnequalBirth.com to learn more."

SOCIAL MEDIA ADVERTISEMENTS

Paid social media advertisements ran across Facebook and Instagram from February 17, 2020 – June 30, 2020 and across the two platforms, there were 3,115,570 impressions and 30,304 clicks to the link provided. Ads were video, still photos, and pictures in carousal form, meaning that there were multiple pictures that users could scroll through (see picture below). As for actions that users took involving the deployed ads, there were 587 post reactions to the video, 259 reactions to the static maternal mortality advertisement, and 59 post reactions to the picture carousel.

LED BILLBOARDS

Billboards were created and strategically placed along seven high-traffic freeway areas with digital geofencing to retarget users with digital ads. Geofencing creates a virtual radius around a specific billboard, using the mobile device global positioning system. Therefore, those who are inside geo-fenced areas can receive ads digitally (e.g., on their phone or computer) that complement the ad that they are likely to view on the billboard. This reinforcement is intended to allow consumers to hear the same message repeatedly and increase their chance of retaining the information. Due to COVID-19, there were fewer cars on the highways than were expected when creating and launching the campaign. However, RSE negotiated with its vendors to deliver 14.62% over the original value of spots, so that the billboard viewership would ultimately exceed the initial impression goals set before COVID-19. In total, there were 478,526 impressions from the LED billboards. The digital retargeting due to the geofencing led to an additional 21,691,691 impressions

MICROSITE

To complement the public awareness campaign, RSE launched UnequalBirth.com, where the target audience could learn more about the disparities in birth and maternal outcomes between African American and all other races and that racial bias and discrimination is the cause. The site also encouraged users to take action in their community and provided actionable steps to make change. UnequalBirth.com describes the problem of racial disparities in health outcomes for African American mothers and babies, provides links to research articles that back up these claims, offers ideas of how to make a change, and encourages support for local organizations that are working to address these issues. Beginning in February 2020, 21,621 unique users visited the website. Overall, there have been 33,010 visits to the site.

OPPORTUNITIES FOR IMPROVEMENT

The UnequalBirth campaign was very impactful in Sacramento County in FY 19-20 and strives for further growth in the future. Lessons learned include:

- Providing higher value gift card incentives for campaign testing to help prevent no-shows.
- Having pre-drafted responses for negative social media comments
- Increasing the use of short video content for paid social media posts to increase engagement
- Providing text or call options, instead of solely a website, for those who do not have access to internet

Countywide Trend Data

Since 2012-2014, Sacramento County has seen a 19% decrease in the rate of infant death amongst African Americans, and a 33% decrease in disparity between the rates of African Americans and other ethnic groups.

The overall goal of the four programs funded by First 5 Sacramento (Pregnancy Peer Support Program, Safe Sleep Baby Initiative, Family Resource Centers, and Perinatal Education Campaign) is to help reduce the rate of African American perinatal, child abuse and neglect, and sleep-related deaths in Sacramento County. This section of the report presents population-level data about infant deaths and their causes. 2012 is considered to be the baseline year, in that the efforts of RAACD, First 5 and other partners got underway after the Blue Ribbon Commission Report in 2013.

Starting with the baseline year of 2012 and target date of 2020, the Blue Ribbon Commission Goals include related to this initiative include:

- Reduce the African American child death rate by **10-20%**
- Decrease the African American infant death rate due to infant perinatal conditions by at least **23%**
- Decrease the African American infant death rate due to infant safe sleep issues by at least **33%**
- Decrease the African American child death rate due to abuse and neglect by at least **25%**
- Decrease the African American child death rate due to third party homicide by at least **48%**

To measure progress toward these goals, population data has been gathered from the Public Health Department regarding:

- All infant deaths (with race categories defined)
- Preterm births
- Low birthweight infants

Additionally, the Child Death Review Team (CDRT) provided data regarding:

- Infant deaths due to perinatal conditions
- Infant deaths due to sleep-related conditions (ISR)
- Child abuse and neglect homicides

It is important to note that available countywide data lag behind the data from initiatives reported earlier. The most current countywide data is from 2018, while the data from the initiatives above are from FY 19-20. Other technical details related to these data can be found in Appendix 2. To account for the effect of small population size, three year rolling or overlapping average death rates were calculated (annual number of infant deaths for each target year, divided by the total number of infant births for those years).

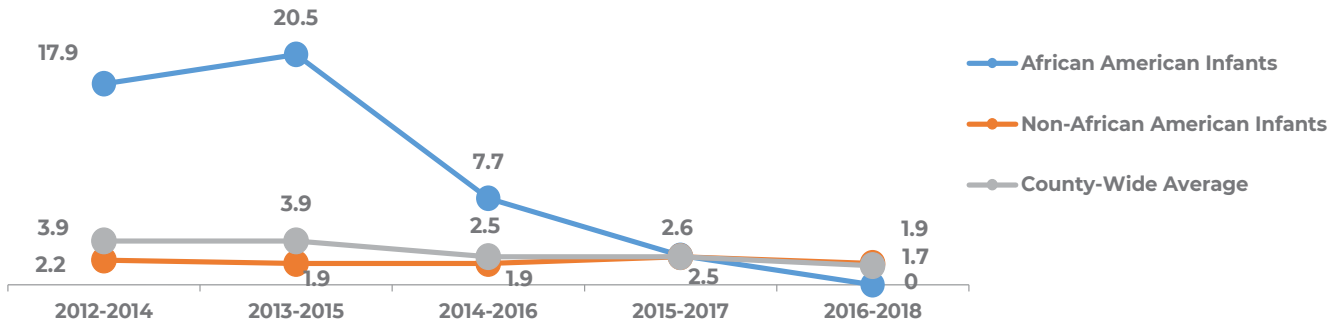
DEATHS DUE TO CHILD ABUSE AND NEGLECT

All child deaths in Sacramento County are reviewed by the Sacramento Child Death Review Team and given a determination as to cause of death. During the baseline period of 2012-2014, African American infants aged 0-1 died from Child Abuse and Neglect at a rate of .4 per 1,000 children. Due in part to the efforts of the Family Resource Centers, this number has declined significantly to a rate of zero per 1,000 children (with zero African American infant deaths due to child abuse and neglect in 2016, 2017, and 2018).

Since 2012-2014, Sacramento County has seen an 100% decrease in the rate of child death due to CAN homicide amongst African Americans, and over a 100% decrease in disparity between the rates of African Americans and other ethnic groups.

During the baseline period of 2012-2014, African American children aged 0-5 died from Child Abuse and Neglect at a rate of 17.9 per 100,000 children. Due in part to the efforts of the Family Resource Centers, this rate has drastically declined to 0 in 2016-2018. This represents a 100% decrease and over a 100% decrease in disparities compared to the baseline year.

Figure 25 —Three-Year Rolling Average Rates of Child (0-5) Death due to Child Abuse and Neglect in Sacramento County



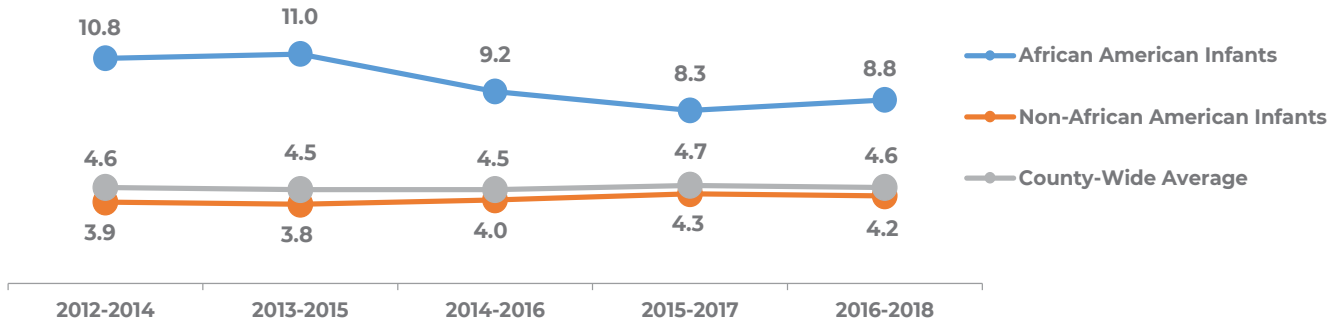
Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017, 2018. Rate is per 100,000 children.

OVERALL INFANT MORTALITY

During the baseline period of 2012-2014, African American infants died at a rate of 10.8 per 1,000 births. During 2016-2018, African American infants died at a rate of 8.8 per 1,000 births, a 19% reduction from the baseline period. Although there was a slight increase from 2015-2017 to 2016-2018, the overall trend is decreasing from the beginning of the initiative.

Secondly, these data show a 33% reduction in the disparity between African American infant death and all other races. In years 2012-2014, the gap in disparity between rolling average rates was 6.9 and in 2016-2018, the gap was 4.2.

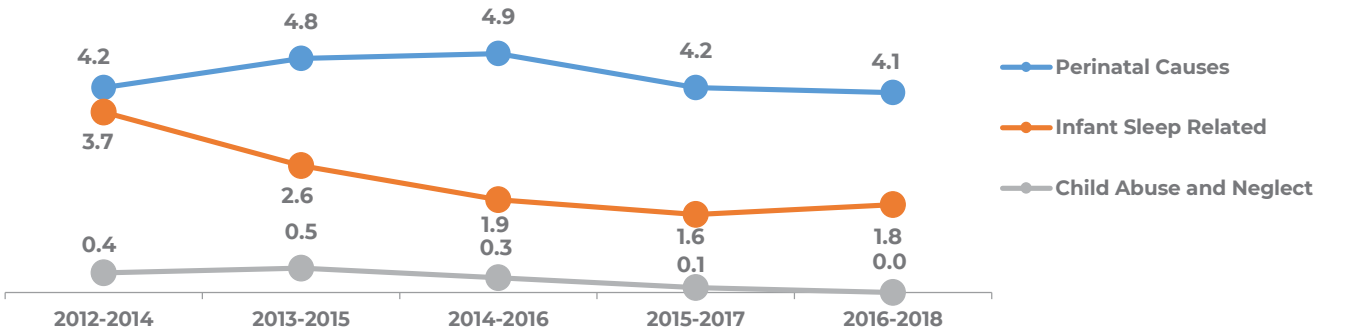
Figure 26 —Three-Year Rolling Average Rate of Infant Death in Sacramento County



Source: Sacramento County, Department of Health Services, Public Health Division, Epidemiology Program, Birth Statistical Master Files. Rate is per 1,000 infants.

Because of the RAACD initiative's goal of reducing African American infant death, the figure below displays the changes in rates for the three causes of focus for First 5 Sacramento. Strikingly, all causes have declined from the baseline of 2012-2014 and demonstrate the success of the initiative. All causes are presented separately further below this figure, with countywide comparisons.

Figure 27 —Three-Year Rolling Average Rates of African American Infant Death: Sleep Related, Perinatal Causes, and Child Abuse and Neglect



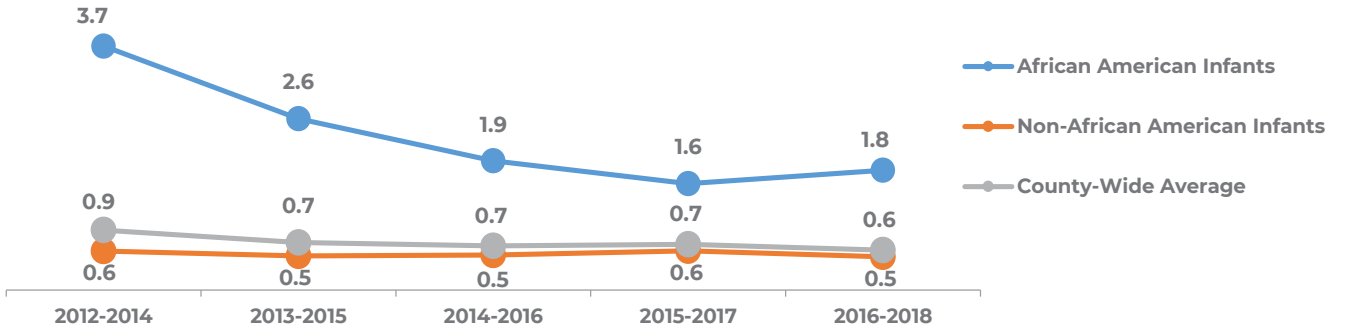
Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017, 2018. Rate is per 1,000 infants..

INFANT SLEEP RELATED DEATHS

The term "Infant Sleep Related Deaths" (ISR) refers to any infant death that occurs in the sleep environment, including Sudden Infant Death Syndrome, Sudden Unexpected Infant Death Syndrome, and Undetermined Manner/Undetermined Natural Death. These rolling rates demonstrate a dramatic decrease in African American ISR deaths (3.7 in 2012-2014 and 1.8 in 2016-2018), representing a 51% decrease. One contributor to these large decreases is very likely the Safe Sleep Baby campaign. There was one additional African American ISR death in 2018 (4, as compared to 3 in 2015, 2016, and 2017). This accounts for the small uptick in ISR cases. In regard to decreases in disparities, the gap in ISR death rates among African American infants decreased by 58%.

Since 2012-2014, Sacramento County has seen a 51% decrease in the rate of infant sleep related death amongst African Americans, and a 58% decrease in disparity between the rates of African Americans and other ethnic groups.

Figure 28 —Three-Year Rolling Average Rates of Infant Sleep Related Deaths in Sacramento County

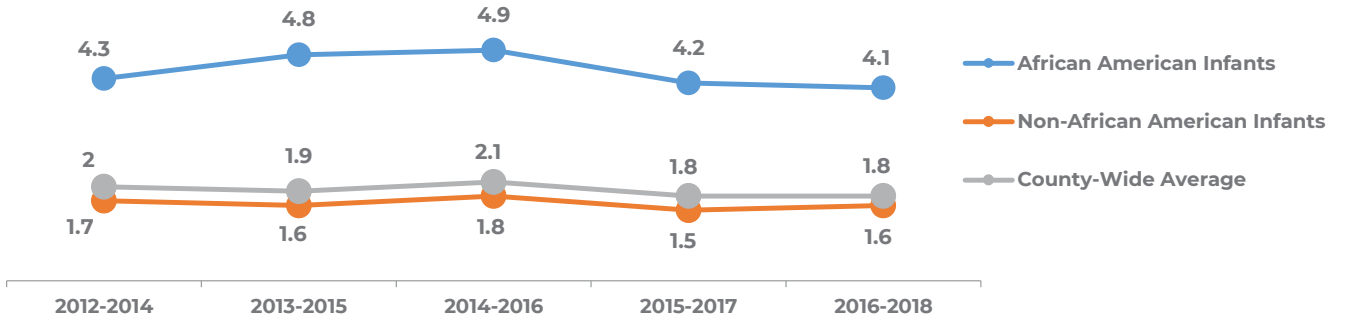


Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017, 2018. Rate is per 1,000 infants.

DEATHS DUE TO PERINATAL CAUSES

The data presented here relating to perinatal causes are comprised of deaths due to prematurity, low birth weight, placental abruption, and congenital infections and include deaths through one month post-birth. During the baseline period of 2012-2014, African American infants died from perinatal causes at a rate of 4.2 per 1,000 births. Unfortunately, there was a small increase in the rate of death in the time periods of 2013-2015 and 2014-2016. However, the rates decreased in both 2015-2017 and 2016-2018, now below the original baseline rate (a 7% decrease). This represents a promising downward trend and needs to be further tracked.

Figure 29 —Three-Year Rolling Average Rates of Infant Death Due to Perinatal Causes in Sacramento County

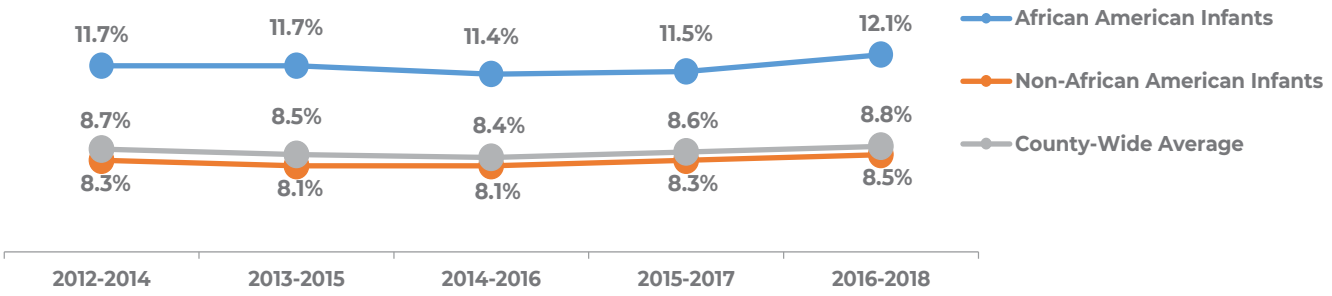


Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017, 2018. Rate is per 1,000 infants.

PRETERM BIRTHS

Infants born before 37 weeks of gestation are considered to be preterm. In Sacramento County, 12.1% of African American babies were born preterm during the years 2016-2018. Unfortunately, this displays an increase in the number of African American preterm births from 2012-2014 (11.7%). It is important to note that preterm births among infants of all other races also displayed an increase from 2014-2016 to 2016-2018, so there may be a trend developing for all races. More focused work needs to be targeted in this area to decrease the number of preterm births in the African American community, as well as the Sacramento County as a whole.

Figure 30 —Three-Year Rolling Average Percentage of Preterm Infants Born in Sacramento County

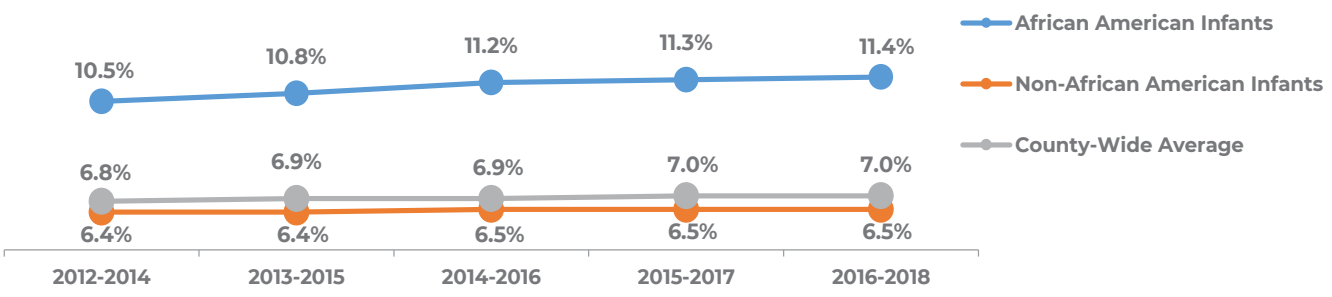


Source: Sacramento County, Department of Health Services, Public Health Division, Epidemiology Program, Birth Statistical Master Files.

LOW BIRTHWEIGHT

Low birthweight is defined as newborns weighing less than 2,500 grams. The figure below displays the percentage of African American infants born low birthweight (LBW) from baseline 2012-2014 to 2016-2018 compared to infants of all other races. The percentage of African American babies born with LBW during 2016-2018 marginally increased compared to baseline (10.5% in 2012-2014, 11.4% in 2016-2018). More effort needs to be focused in this area for a continued decrease in infants born with LBW in the African American community and the Sacramento County population as a whole.

Figure 31 — Three-Year Rolling Average Percentage of Low Birth Weight Babies Born in Sacramento County



Source: Sacramento County, Department of Health Services, Public Health Division, Epidemiology Program, Birth Statistical Master Files.

Summary and Conclusions

Racism is the Root Cause of Racial Disparities in Birth Outcomes.

The Reduction of African American Child Deaths initiative had an extremely impactful year in FY 2019-20. Four programs were funded that each focused on a different cause of death and employed very different modalities to promote change. The Pregnancy Peer Support Program paired pregnant African American mothers from areas of high-risk with pregnancy coaches to provide one-on-one education, resources, and support. Family Resource Centers, located in high-risk areas of Sacramento County, employed multiple strategies with the goal of reducing child abuse and improving parent and child outcomes. The Safe Sleep Baby project provided one-hour education workshops and cribs to new parents and providers. The Public Education Campaign utilized social media advertisements and LED billboards to educate the general population of Sacramento County about the fact that racism is the root cause of racial disparities in birth outcomes.

It is important to note that in addition to direct service, parenting education, and public education campaigns, in order to effect real and lasting change, policy must change as well. It is prudent for First 5 Sacramento to continue to advocate for policy and systems change across Sacramento County and the state of California as a whole.

Countywide rates showed positive results, likely due in part to the RAACD initiative. Although infant deaths due to perinatal causes decreased, overall preterm and low birthweight births are increasing. The positive outcomes depicted across RAACD programs, this may be an indication of the need to provide additional funding so that these programs can "scale up" and reach even more Sacramento families.

Appendix 1 — Factors Associated with Poor Birth Outcomes

Case	# of weeks at program entry	Twin	Birthweight (lb)	Low Birthweight	Gestational Age	Preterm	# weeks prenatal care began	Lack of or late to prenatal care	# of weekly check-ins	Socio-economic barriers	Psycho-social factors during pregnancy	Mother's health conditions
1	7	N	6.6	N	37	Y	7	N	--	Single, no partner; No stable housing; Unable to fulfill food needs; No transportation	Anxiety/depression	Pre-eclampsia
2	20	N	6.1	N	37	Y	8	N	10	No transportation		
3	26	N	5.6	Y	40	N	1st Trimester	N	12	Single, no partner; Unemployed, looking for work		
4	18	N	9.0	N	37.5	Y	3	N	16	No stable housing	Domestic violence	Prior still birth; Nutritional deficiencies; STI; Alcohol/drug use; Diabetes; Obesity; High blood pressure; 35+ years of age
5	29	N	6.2	N	35	Y	5	N	4	No transportation		
6	32	N	7.9	N	37	Y	28	Y	7			Teen
7	17	N	5.1	Y	37	Y	17	Y	--	No transportation; Unable to fulfill food needs;	Anxiety/depression	Teen; Alcohol/drug use; Tobacco use; STI
8	23	N	4.4	Y	40	N	4	N	15		Anxiety/depression	Nutritional deficiencies; Alcohol/drug use; Pre-eclampsia
9	13	N	6.8	N	37	Y	6	N	19	No stable housing; No transportation		2+ miscarriages; 35+ years of age
10	31	N	6.1	N	36	Y	12	Y	3	Single, no partner;		Prior gestational Diabetes; Prior pre-term delivery
11	29	N	5.7	Y	38	N	1st Trimester	N	7	Single, no partner	Anxiety/depression	Nutritional deficiencies; Tobacco use
12	27	N	5.1	Y	37	Y	6	N	--	Unemployed, looking for work; No stable housing; Unable to fulfill food needs	Anxiety/depression	Nutritional deficiencies
13	13	N	5.1	Y	37	Y	10	N	8			
14	10	N	4.0	Y	32	Y	1st Trimester	N	17	No transportation; Unable to fulfill food needs	Anxiety/depression; Domestic violence	Pre-eclampsia; Prior stillbirth; Prior pre-term delivery;
15	15	N	5.2	Y	36	Y	--	N	5	Single, no partner	Anxiety/depression	Pre-eclampsia; Prior pre-term delivery
16	24	N	1.11	Y	25	Y	--	N	3		Anxiety/depression; Domestic violence	
17	28	Y	5.0	Y	36	Y	--	Y	9	Single, no partner; Did not graduate high school; No Transportation	Anxiety/depression; Domestic violence	35+ years of age; Alcohol/drug use; Tobacco use
			3.0	Y		Y						
18	32	Y	4.6	Y	36	Y	3rd Trimester	Y	13		Domestic violence	Prior stillbirth
			5.1	Y		Y						

Appendix 2 — Technical Notes Related to County Trend Data

In Spring 2019, representatives from First 5 Sacramento, Sierra Health Foundation, and the Public Health Department met to discuss and agree upon core parameters for gathering and sharing RAACD data. The following presents the highlights of this discussion.

BASELINE YEAR

The Blue Ribbon Commission report cited data from 2007-2011, and set goals based on the change desired after that period. 2012 is being used as the starting period for RAACD partners, although implementation began to get underway in 2014 and 2015. Because of the instability of one-year estimates, this report uses the three year period of 2012-2014 as the baseline period, and tracks change in subsequent three periods relative to that baseline period.

CODING OF RACE

Birth data is based on birth certificate information and includes individuals who identify as African American only. Mixed race individuals are not included in the PHD's category of African American.

Death data is gathered by the PHD from the coroner's office and is based on the race of the deceased on the death certificate. The race listed on the birth certificate and death certificate may not always match.

DATA SOURCES AND RATES

Partners agreed to use data from the Sacramento County Public Health Department for the source for tracking RAACD trends. It was also agreed to show trends per 1,000 population, and not 100,000 population.

Data	Numerator Data Source	Denominator Data Source	Measured as:
Low-birthweight infants	PH	PH births	Rate per 1,000 births
Preterm infants	PH	PH births	Rate per 1,000 births
All Infant Death (<1 year)	PH	PH births	Rate per 1,000 births
Infant Sleep-related Death (<1 year)	CDRT	PH births	Rate per 1,000 births
Infant Perinatal Condition Death (<1 year)	CDRT	PH births	Rate per 1,000 births

Appendix 3 — Analysis Details

Figure 1 — Logistic Regression Predicting Dichotomous Healthy Birth Outcome (yes/no).

	B	S.E.	df	*p*	OR
Unemployed, looking for work	**-1.40**	**.62**	**1**	**.03**	**4.04**
Anxiety/Depression	**-1.18**	**.47**	**1**	**.01**	**3.24**
Unable to fulfill food needs	.76	.63	1	.23	2.14
Alcohol/drug use	1.31	.88	1	.14	3.70
Tobacco use	1.28	.97	1	.19	3.60
Domestic Violence	1.26	1.09	1	.25	3.51
BMU Service Count	-.04	.04	1	.31	.96
Constant	-.80	1.22	1	.51	.45

Note: Bolded variables are statistically significant at $p < .05e$

Figure 2 — Linear Regression Predicting Continuous Birth Weight

	B	S.E.	*t*	*p*
Unemployed, looking for work	**-.58**	**.23**	**-2.49**	**.01**
Obesity	**1.42**	**.54**	**2.63**	**.01**
BMU Service Count	**.03**	**.02**	**1.83**	**.07**
Anxiety/Depression	**-.43**	**.25**	**-1.73**	**.09**
Unable to fulfill food needs	-.40	.34	-1.20	.23
Alcohol/drug use	-.55	.51	-1.07	.29
Tobacco use	-.48	.52	-.91	.36
Domestic Violence	-.77	.54	-1.43	.15
Constant	7.01	.29	23.97	.00

Note: Bolded variables are statistically significant at $p < .10$

Figure 3 — Linear Regression Predicting Continuous Gestational Age

	B	S.E.	*t*	*p*
Unemployed, looking for work	**-.73**	**.42**	**-1.75**	**.08**
BMU Service Count	.05	.03	1.60	.11
Unable to fulfill food needs	-.88	.58	-1.50	.14
Constant	38.69	.50	78.01	.00

Note: Bolded variables are statistically significant at $p < .10$

Appendix 4 — References & Endnotes

[i] Sacramento County Child Death Review Team: A Twenty Year Analysis of Child Death Data 1990 – 2009. http://www.thecapcenter.org/admin/upload/final%2020%20year%20cdrt%20report%202012_1%2026%2012.pdf

[ii] Blue Ribbon Commission Report on African-American Child Deaths, 2013. http://www.philserna.net/wp-content/uploads/2013/05/Blue-Ribbon-Commission-Report-2013.pdf

[iii] RAACD Strategic Plan, March 2015. https://www.shfcenter.org/assets/RAACD/RAACD_Strategic_Plan_Report_March_2015.pdf

[iv] RAACD Implementation Plan, September 2015. https://www.shfcenter.org/assets/RAACD/RAACD_Implementation_Plan_2015.pdf

Photo Credits

All photographs in this report are stock photos that are posed by models.

RAACD Resources

If you would like to learn more about the Reduction of African American Child Deaths initiative, please contact one of the following partners:

First 5 Sacramento
(916) 876-5865

Black Mothers United
Her Health First
(916) 558-4812

Safe Sleep Baby and Birth & Beyond
Child Abuse and Prevention Council
(916) 244-1900

Public Education Campaign
Runyon Saltzman, Inc.
(916) 446-9900

Black Child Legacy Campaign
(916) 993-7701