FIRST 5 SACRAMENTO

# Reduction of African American Perinatal and Infant Deaths

January 2020

FIRST 5 SACRAMENTO

ASR

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# Executive Summary

*Communities with the highest rates of African American child deaths were Arden-Arcade, Fruitridge/Stockton Boulevard, Meadowview, Valley Hi, North Sacramento/ Del Paso Heights, North Highlands, and Oak Park*

## BACKGROUND & GOALS

In 2011, the Sacramento County Child Death Review Team (CDRT) released a Twenty Year Report revealing that African American children were dying at twice the rate (102 per 100,000) of any other ethnic group in the county.[i] The four leading causes of death amongst African American children were perinatal conditions, infant sleep-related (ISR), child abuse and neglect (CAN) homicide, and third party homicide. In response to these alarming findings, the Sacramento County Board of Supervisors created the Blue Ribbon Commission on Disproportionate African American Child Deaths, which in 2013 released a report with goals and recommendations to reduce mortality amongst African American children.[ii]

**The Blue Ribbon Commission Goals Included:**

- Reduce the African American child death rate by **10-20%**
- Decrease the number of African American child deaths due to infant perinatal conditions by at least **23%**
- Decrease the number of African American child deaths due to infant safe sleep issues by at least **33%**
- Decrease the number of African American child deaths due to Child Abuse and Neglect by at least **25%**
- Decrease the number of African American child deaths due to third-party homicides by at least **48%**

Several communities were found to have the highest rates of African American child deaths: Arden-Arcade, Fruitridge/Stockton Boulevard, Meadowview, Valley Hi, North Sacramento/Del Paso Heights, North Highlands, and Oak Park. Planning efforts and coalition-building got underway in 2014-2015, resulting in two broad integrated initiatives across Sacramento County, with a particular focus on those neighborhoods most affected:

- **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 coordinate 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 includes three programs that focus on preventing deaths due to perinatal conditions and infant sleep-related (ISR) causes: Pregnancy Peer Support Programs, the Infant Safe Sleep Campaign, and a Public Education Campaign.

This report provides a summary of First 5 Sacramento's efforts to reduce perinatal and infant deaths in FY 2018-19.

# ACHIEVEMENTS OF FIRST 5-FUNDED COMPONENTS

## Pregnancy Peer SUPPORT Program

The Pregnancy Peer Support program, formerly called the Cultural Broker program, is delivered by Her Health First's Black Mothers United (BMU) program. BMU's efforts include outreach to identify pregnant women as early as possible in their pregnancy, assess and understand their health needs, risks and assets, and through weekly contacts, provide education, referrals and any other support needed to address risks to healthy birth.

From July 2018 to June 2019, 216 pregnant African American women were served through the BMU program, and 215 consented to be included in the evaluation. Almost half of them (49%) resided in one of the seven high-risk target neighborhoods of Sacramento County. Most participants (51%) entered the program during their second trimester, followed by 28% who entered in their third trimester. Based on initial assessments, participants faced a variety of challenges, including unstable housing situations (27%) and lack of transportation (20%). Almost half of clients (43%) were on CalWORKs, and 71% used WIC services for nutritional support. Almost one third of mothers were dealing with moderate to high depression (28%) and 11% faced nutritional deficiencies. Most (59%) did not have a plan for a crib to sleep their baby. As a result of referrals and intensive case management, mothers had fewer risk factors by the end of the program. For instance, the percentage of mothers with maternal anxiety and depression decreased from 28% at intake to 15% at follow up, and the percentage of mothers who did not have a crib reduced from 59% at intake to 6% at follow up.

*102 babies were born to mothers in the Pregnancy Peer Support program; **83%** were born at a healthy birth weight and **80%** were delivered full term.*

In FY 2018-19, there was a set of twins who was stillborn at 32 weeks. There were 102 live births in the BMU program, including 92 singletons and 10 twins. Of these, 83% were born at a healthy birth weight, 80% were born full term, and combined, 76% had a healthy birth outcome (birth that is at healthy weight and full term). The percentage of singletons with a healthy birth was 82%. Sadly, there was one infant delivered at 32 weeks who died shortly afterward.

### Figure 1 — Birth and Perinatal Outcomes of BMU Clients

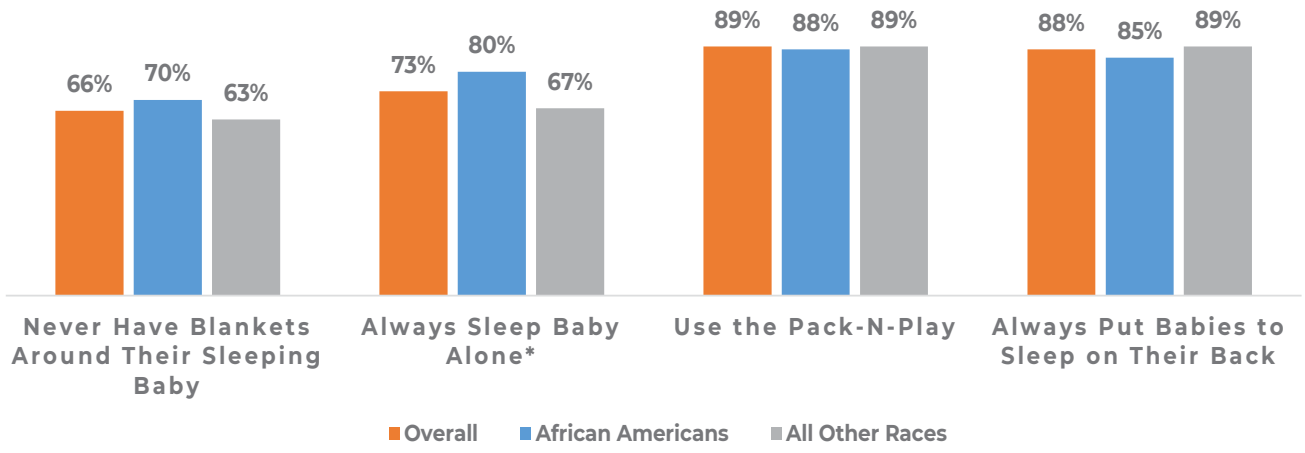
| | All Infants  | Twins  | Singletons  |
|---|---|---|---|
| **Healthy Birth** | 76% | 20% | 82% |
| Healthy Birth Weight | 83% | 30% | 89% |
| Full Term | 80% | 20% | 87% |
| **Preterm Birth** | 20% | 80% | 13% |
| **Low Birth Weight** | 17% | 70% | 11% |

## Safe Sleep Baby

Safe Sleep Baby (SSB) is an educational campaign conducted by the Child Abuse Prevention Council (CAPC) to increase knowledge about infant safe sleeping practices. Specific goals include training and educating pregnant and new parents, health professionals, and social service professionals about infant safe sleep practices. SSB provides education through home visits and hour-long workshops. In addition to education about safe sleep, CAPC provides cribs to pregnant or new mothers who do not have a safe location to sleep their baby.

From July 2018 to June 2019, there were 883 individuals who received Safe Sleep Baby training, 31% of whom were African American, and 44% resided in RAACD's targeted zip codes. Pre and post training data showed a 41% increase in understanding that ***babies should NOT be tightly swaddled when sleeping for the first six weeks, 38% increase in understanding that babies placed on their backs to sleep are NOT more likely to choke on their own spit up, and 35% increase in understanding that breastfeeding helps to reduce the risk of SIDS.*** Within 3-4 weeks of the SSB training, 277 parents were reached with a follow-up call to understand the extent to which they were using infant safe sleep practices. The most commonly reported safe sleep behavior was ***use of the provided Pack-N-Play*** (89%), followed by ***sleeping their baby on their back*** (88%), ***sleeping their baby alone*** (73%), and never having blankets around their sleeping baby (66%). African American respondents were more likely than other respondents to always sleep baby alone and never have blankets around their sleeping baby, but less likely to always put babies to sleep on their back.

### Figure 2 — Percent of SSB Participants Reporting Infant Safe Sleep Behaviors, by Race




Source: CAPC, SSB Follow up Survey. N=277.

In addition to safe sleep education for parents, Safe Sleep Baby Campaign accomplished the following:

- **292** community-based service providers and one medical provider participated in "train-the-trainer" workshops to help them impart safe sleep knowledge to their clients and patients.
- **450** cribs were provided by the Cribs4Kids program to parents and caregivers. Approximately 36% of all cribs distributed were to African American parents.

## Perinatal Education Campaign

The third strategy funded by First 5 Sacramento to reduce African American infant deaths has been a public education campaign. Covering different topics, the purpose of these campaigns is to raise awareness about the disparity in infant deaths among African Americans, and to connect African American mothers to services that can help support pregnancies and infant well-being. This campaign, including print and digital media, as well as community events, has been managed by Runyon Saltzman, Inc. (RSE).

In FY 2018-19, RSE, First 5, and the Sac Healthy Baby Collaborative conducted the Pride & Joy Community Baby Shower, an annual event that provides parents with information and demonstrations related to a healthy pregnancy and safe sleep practices, as well as connections to local resources. Approximately 113 people attended this event, 104 of which were pregnant or new mothers. Over the years of this campaign, community events such as this have been linked to significant increases in traffic on the SacHealthyBaby.com website. This is likely due to media outreach about the events which encourages people to visit the website in order to register for the baby shower. There were 2,170 visits to the SacHealthyBaby website by 1,874 users in FY 2018-2019.

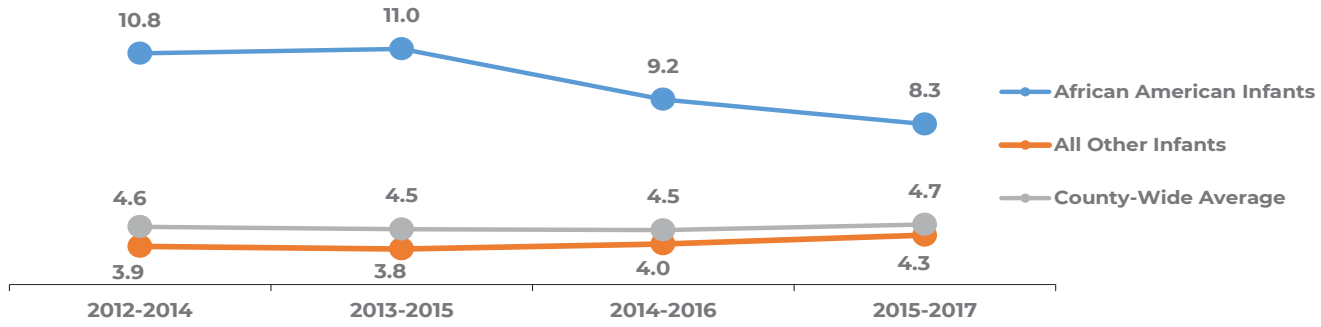

A large part of FY 2018-2019 was devoted to campaign strategy development. In conjunction with Earth Mama Healing, eight formative focus groups were attended by a total of 58 women who resided in the high-risk neighborhoods identified by the Blue Ribbon Commission. The purpose of these focus groups was to gather insights to inform future campaign development. Additionally, RSE worked with Her Health First to conduct two listening sessions in April 2019 with 27 African American community members in order to better understand what mothers, fathers, social support program staff, and stakeholders believe are the causes of infant mortality and what can be done to drive change.

## Countywide Trend Data

In order to measure the impact of RAACD efforts, data from Sacramento County's Department of Public Health and the Child Death Review Team (CDRT) were utilized. Public Health defines infant death as any death that occurs before one year of age. During the baseline period of 2012-2014, African American infants died at a rate of 10.8 per 1,000 births, but this rate reduced by 23% to 8.3 per 1,000 births in 2015-2017. Meanwhile, the rate is slightly increasing amongst other ethnic groups and for the county as a whole. Consequently, these data show a 42% reduction in the disparity between African American infant death and all other races in Sacramento County.

*Since 2012-2014, Sacramento County has seen a **23%** decrease in the rate of infant death amongst African Americans, and a **57%** decrease in infant sleep related deaths amongst African Americans.*

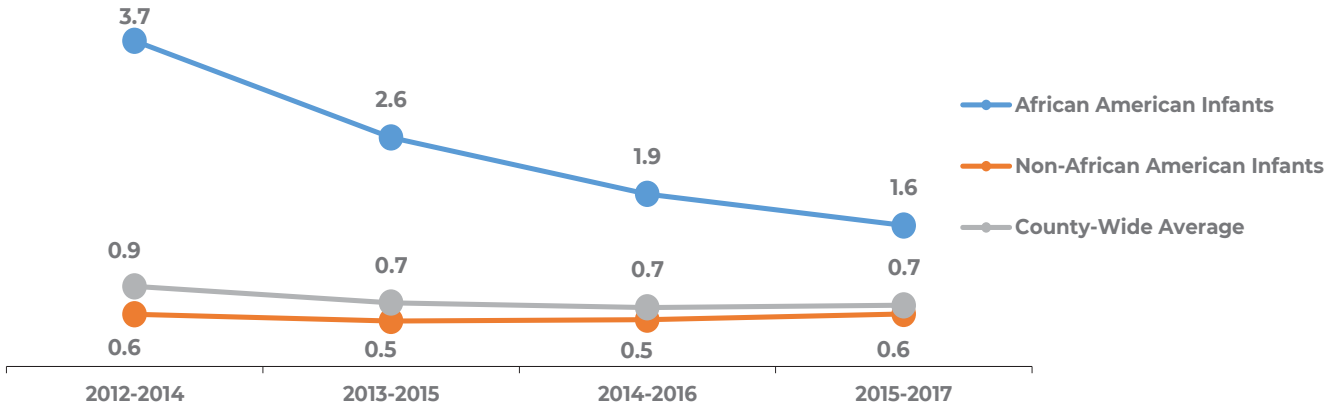
## Figure 3 — Three-Year Rolling Average Rate of Infant Death in Sacramento County




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

From 2012-2014 to 2015-2017, there was a **57%** decrease in the rate African American child deaths due to infant safe sleep issues, exceeding the Blue Ribbon Commission's targeted reduction of **33%** by 2020.

## Figure 4 — 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. Rate is per 1000 infants.

# 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 revealing that African American children were dying at twice the rate (102 per 100,000) of any other ethnic group.[iii] 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 by addressing the four main causes of death for which African American children were disproportionately affected.[iv]

The 2013 Blue Ribbon Commission report created outcome targets based on the reduction 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).

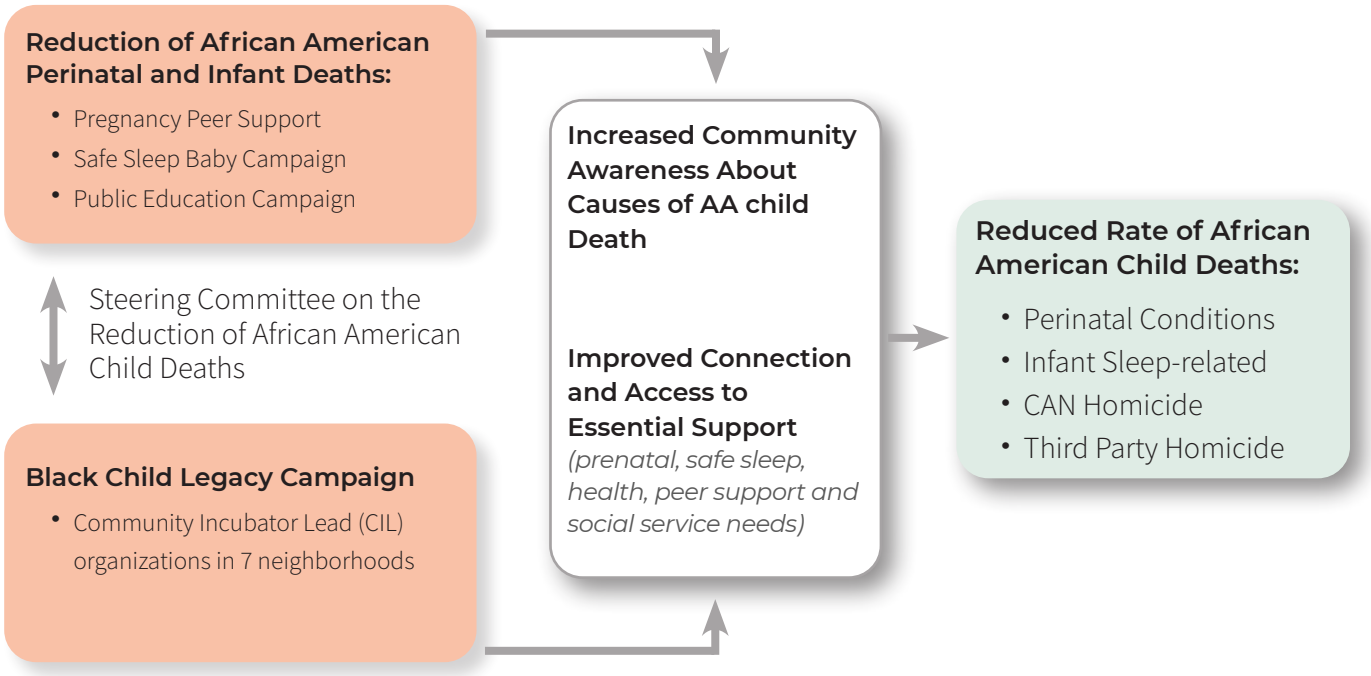
- Reduce the African American child death rate by **10-20%**
- Decrease African American infant death rate due to infant perinatal conditions by at least **23%**
- Decrease African American infant death rate due to infant safe sleep issues by at least **33%**
- Decrease the number of African American child deaths due to Child Abuse and Neglect by at least **25%**
- Decrease the number of African American child deaths due to third-party homicides 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[v] and Implementation Plan[vi] 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 includes three programs that focus on preventing deaths due to Perinatal Conditions and Infant Sleep-Related causes: Pregnancy Peer Support Programs, the Infant Safe Sleep Campaign, and a Public Education Campaign.

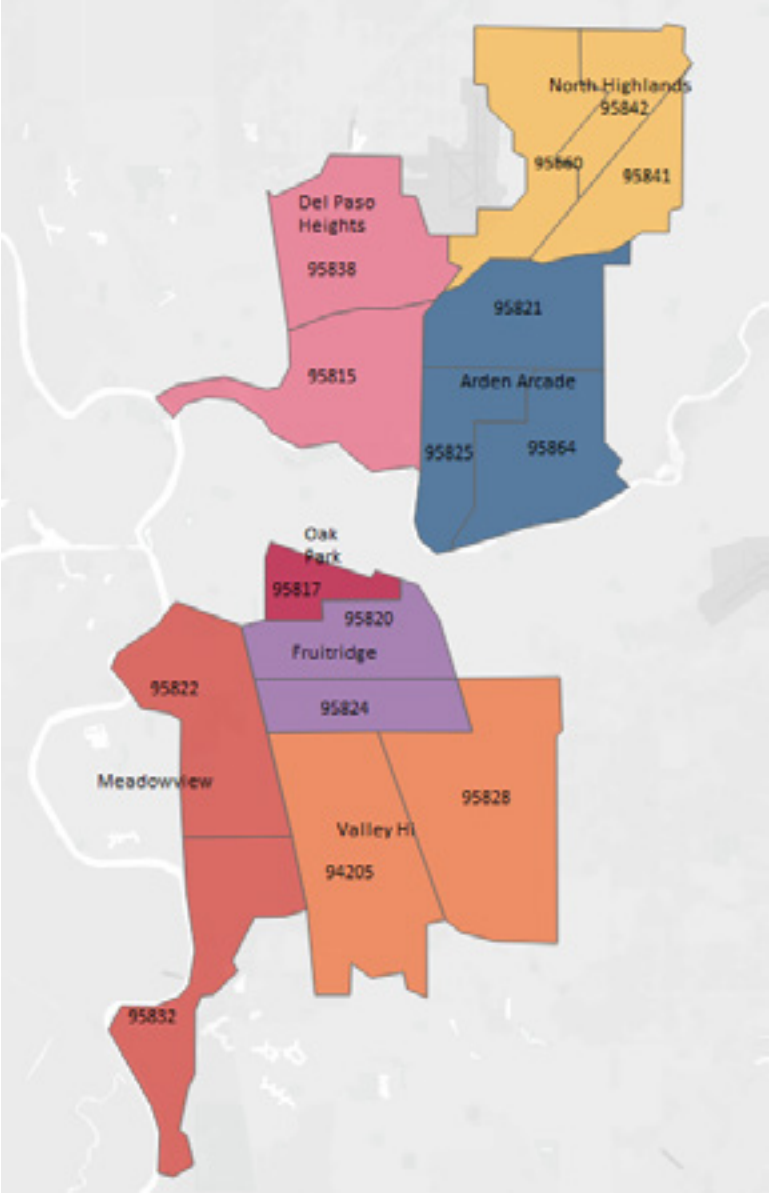
The graphic below presents a strategic framework for how Sacramento County is coordinating efforts to reduce African American child deaths.

## Figure 5 — 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 deaths that occur in the perinatal period and up to age 12 months, not on overall deaths for children 0-17.

To meet the Blue Ribbon Commission goals, efforts have been targeted at 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
- Fruitridge/Stockton Boulevard
- Meadowview
- Valley Hi
- North Sacramento/Del Paso Heights
- North Highlands
- Oak Park

## First 5 Strategies to Reduce African American Infant Deaths

To address the preventable causes of infant death — perinatal or sleep-related — First 5 Sacramento partnered with various community organizations to launch and implement three programs:

- Pregnancy Peer Support Program
- Safe Sleep Baby Education Campaign
- Public Education Campaign

The outcomes of these strategies were summarized in a comprehensive 2015-2018 evaluation by LPC Consulting. This report continues the evaluation of First 5 Sacramento's efforts, describing each investment, FY 2018-19 outcomes, and recommendations about areas to strengthen where applicable.

# Pregnancy Peer Support Program

*102 babies were born to mothers in the Pregnancy Peer Support program; **83%** were born at a healthy birth weight and **80%** were delivered full term.*

The Pregnancy Peer Support program is 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.

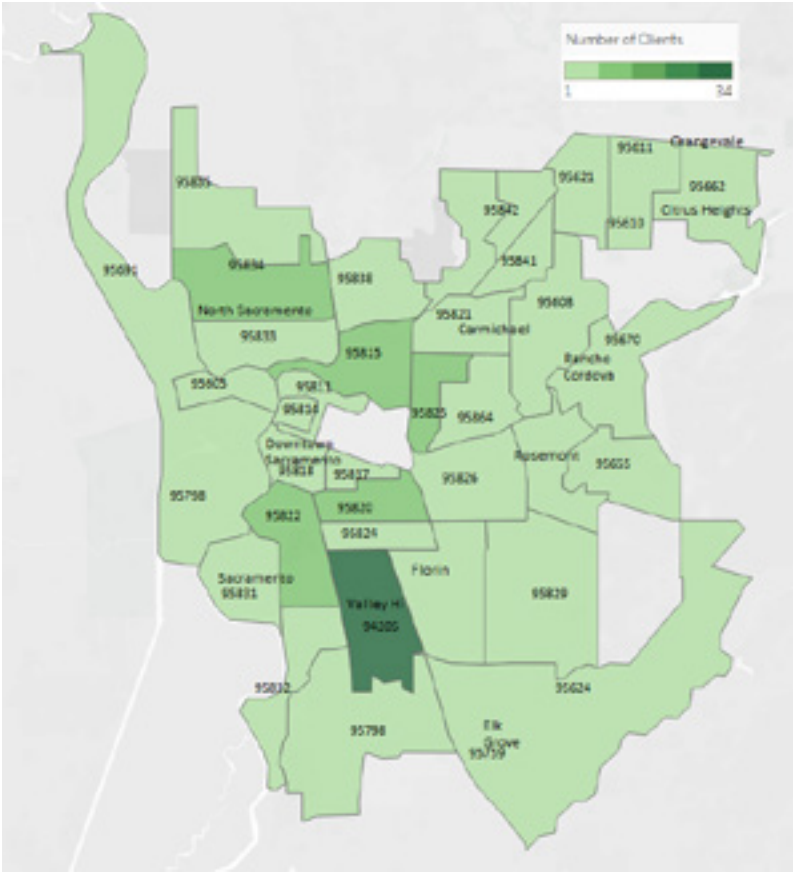
The BMU program is implemented using home visitation conducted by pregnancy coaches. Coaches are African American women who are trained to provide education, offer information about medical and social service options, and assist mothers in preparation for the birth of their child. Coaches conduct outreach 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 4 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

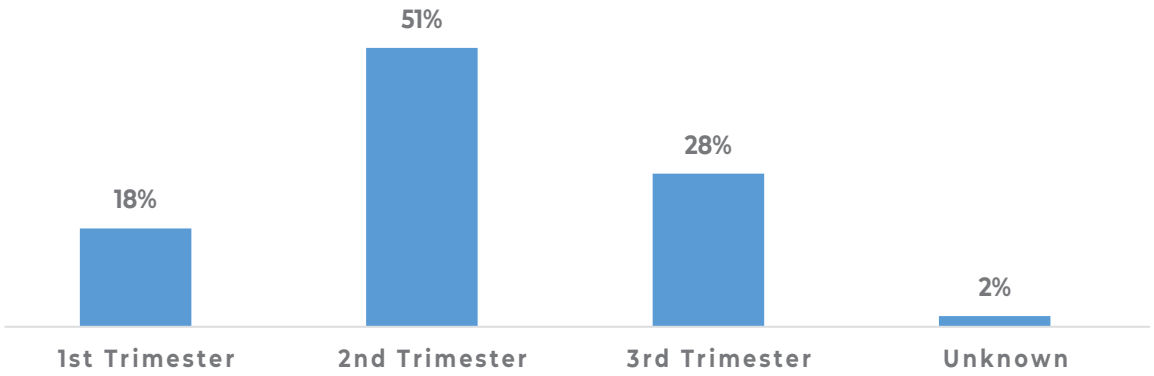
From July 1, 2018 to June 30, 2019, the BMU program served 216 pregnant African American women, including 52 who were enrolled in FY 2017-18. One woman did not consent to participate in the program evaluation and thus, received services but was not included in this evaluation. Therefore, subsequent findings are based on 215 consented participants.

The map displays 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. Almost half of the clients in FY 2018-19 (49%; 106/215) resided in one of the seven high-risk target neighborhoods of Sacramento County.




Upon entry into the BMU program, clients complete a comprehensive health assessment with their coach. As seen below, the majority of participants (51%) entered during their second trimester of pregnancy, while 28% enrolled during 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.

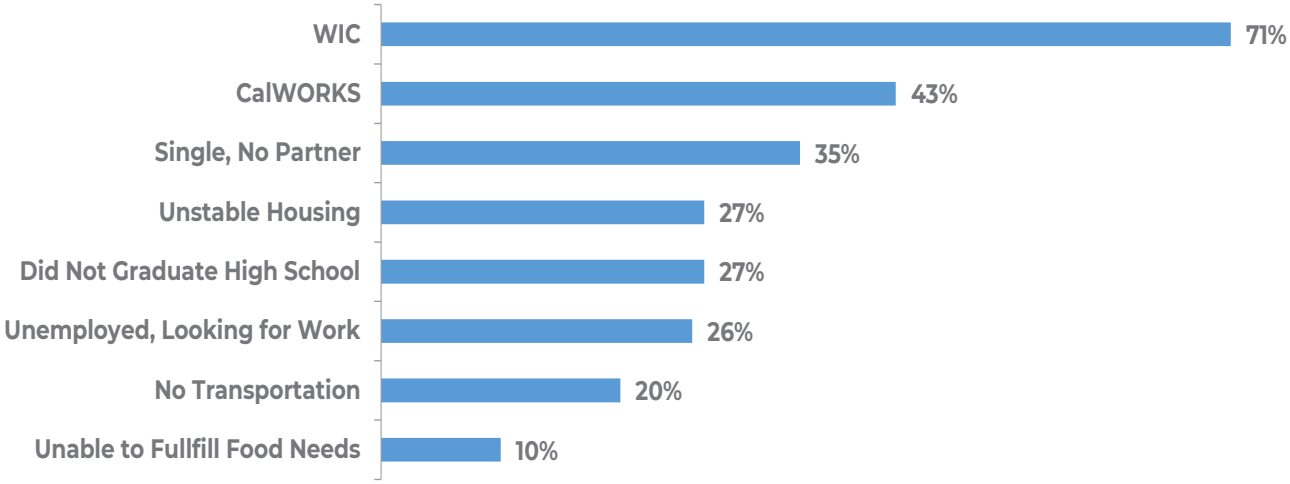
## Figure 6 — Number of Mothers Served, by Trimester of Entry




Source: Health Assessment Intake. N=215.

In terms of the socio-economic realities of participants, about one quarter reported having unstable housing situations (27%; 58/215) and 20% did not have transportation (42/215). Almost half of clients (43%; 92/215) were on CalWORKs, and 71% (152/215) used WIC services for nutritional support. Because of the general low-income of the participants, the utilization of CalWORKs or WIC for additional support was considered to be a protective factor. Just over one quarter of clients (27% ; 55/206) did not graduate high school, 35% (76/215) were single head of household, and 26% (57/203) were unemployed and looking for work.

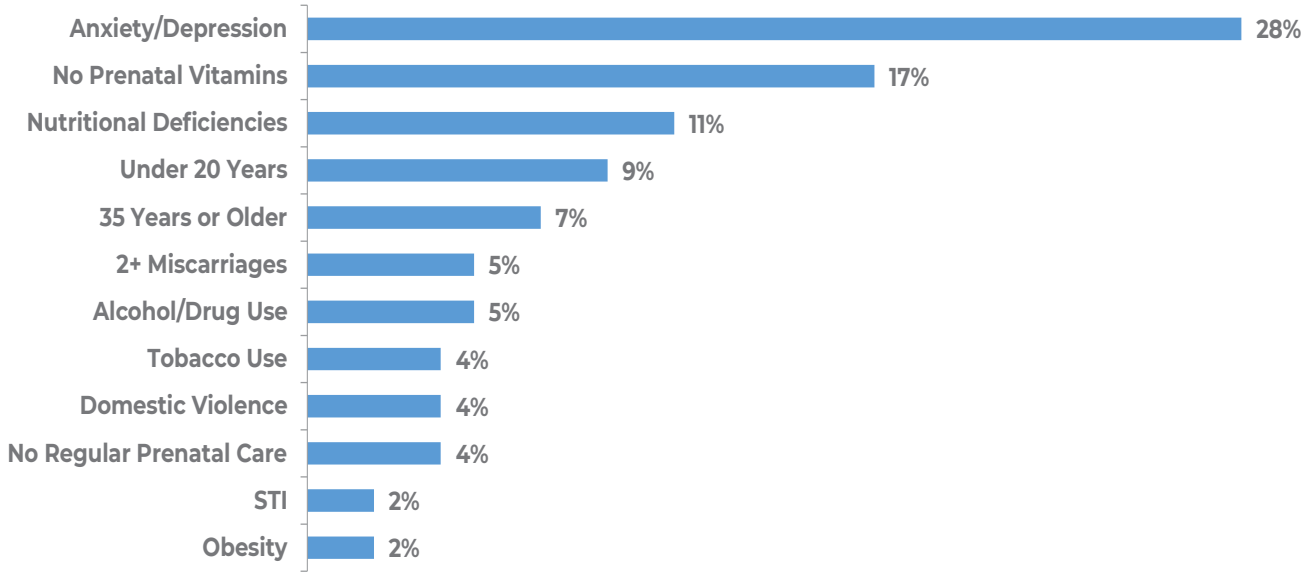
## Figure 7 — Socio-Economic Factors Reported at Intake




Source: Health Assessment (Intake). N=215.

In terms of maternal health, the most prevalent risk factors found amongst the 2018-2019 BMU program participants were moderate to high depression (28%), not taking prenatal vitamins (17%), nutrition deficiencies (i.e., iron deficiency, folate deficiency, Vitamin B12 deficiency; 11%), being under 20 years old (9%), and being over 35 years old (7%).

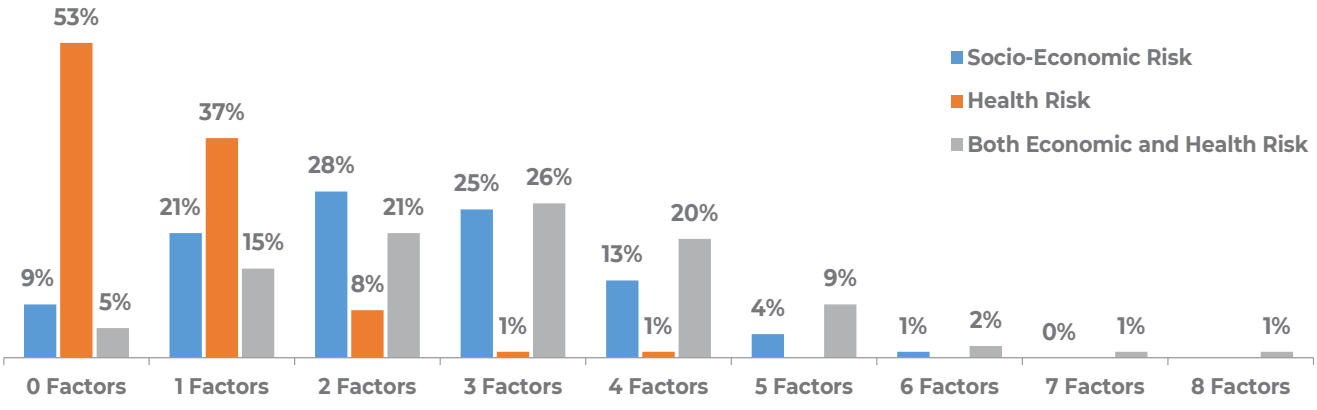
## Figure 8 — Health Factors Reported at Intake




Source: Health Assessment Intake. N=215.

The aggregate number of socio-economic and health risk factors was also calculated (see figure below). It was most common for participants to have no health risk factors (53%) and two socio-economic risk factors (28%). When combined, most participants had three factors (26%).

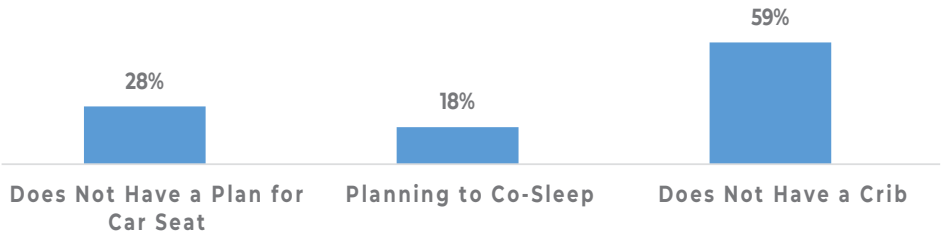
## Figure 9 — Percentage of Clients by Number and Type of Risk Factors




Source: Health Assessment Intake. N=215.

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 half the participants in 2018-19 did not yet have a crib, almost a third did not have a plan for getting a car seat, and almost 20% were planning to co-sleep with their children.

### Figure 10 — Infant Safety Risk Factors Reported at Intake

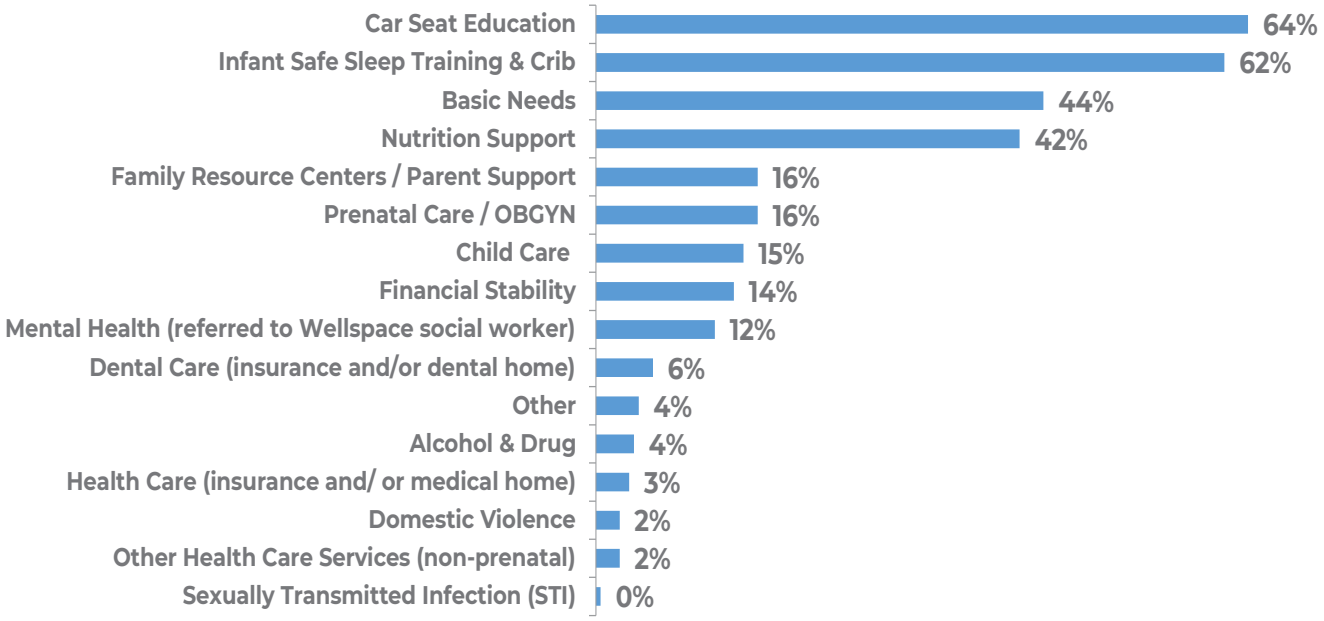



Source: Health Assessment Intake. N=215.

## 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 coach. The majority of referrals were for car seat education and safety (64%), infant safe sleep training and crib (62%), basic needs support (44%), and nutritional support (42%).

### Figure 11 —Percent of Clients Receiving Referrals, by Type




Source: Care Plan and Referral Log. N=213. Includes all clients served in FY 2018-19.

As part of their case management, pregnancy coaches help their clients connect to the services they need, and when clients report contacting requested services, the initial referrals are logged as having been followed up. Because follow up data is not available on every client, the next analysis presents referral information on the 104 clients who had initial referrals and who had an exit form. For instance, 78% of clients were referred for infant safe sleep training, 51% of those referred said they were able to follow up on that referral, and 44% of those referred said they received the infant safe sleep training.

## Figure 12 — 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 | 85 | 82% | 38 | 45% | 30 | 35% |
| Infant Safe Sleep Training and Crib Provided | 81 | 78% | 41 | 51% | 36 | 44% |
| Basic Needs | 66 | 63% | 40 | 61% | 21 | 32% |
| Nutrition Support | 53 | 51% | 32 | 60% | 33 | 63% |
| Child Care | 22 | 21% | 13 | 59% | 8 | 36% |
| Prenatal Care/OBGYN | 20 | 19% | 13 | 65% | 11 | 55% |
| Financial Stability | 18 | 17% | 13 | 72% | 9 | 50% |
| Family Resource Centers/ Parent Support | 15 | 14% | 7 | 47% | 5 | 30% |
| Mental Health | 7 | 7% | 4 | 57% | 4 | 57% |
| Alcohol and Drug | 4 | 4% | 1 | 25% | 0 | 0% |
| Domestic Violence | 3 | 3% | 2 | 67% | 2 | 67% |
| Dental Care | 3 | 3% | 1 | 33% | 1 | 33% |
| Other Health Care Services (Non-Prenatal) | 3 | 3% | 3 | 100% | 3 | 100% |
| Health Care (Insurance or Medical Home) | 2 | 2% | 2 | 100% | 2 | 100% |
| Sexually Transmitted Infection | 1 | 1% | 1 | 1% | 1 | 100% |

Source: Care Plan and Referral Log, 2018-19. Follow up status is assessed amongst those clients who have both a referral form and those with an exit form. N varies depending on the item.

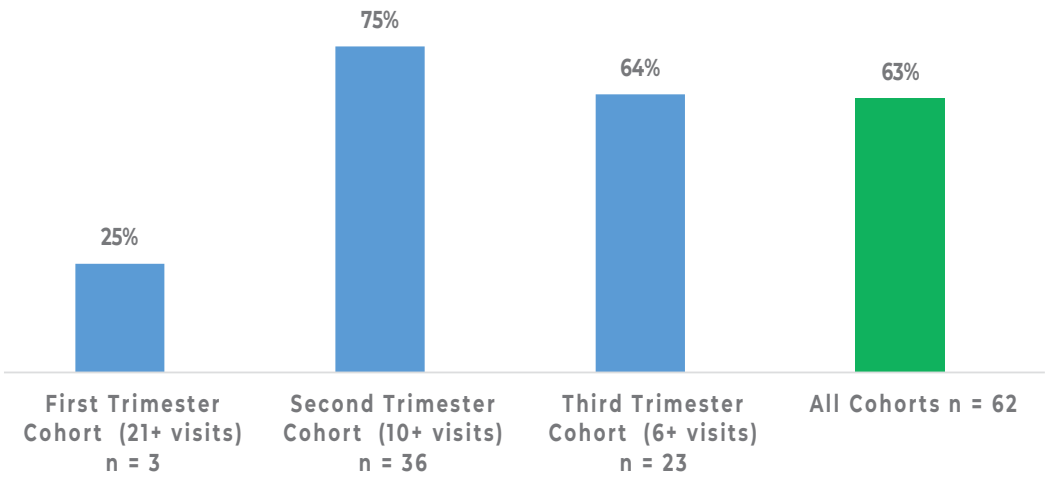
## LEVEL OF PROGRAM COMPLETION

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. Amongst participants who completed the program, Figure 12 illustrates the level of completion per cohort, as well as an average across all cohorts. Out of the 97 women who delivered and exited the program, 63% (62/97) completed the minimum number of prenatal visits.

*"I appreciate the arms you wrapped around me and my family"*

– BMU participant in a text to her pregnancy coach

**Figure 13 — Completion of Prenatal Service Requirements, by Trimester Cohort of Entry and Overall**




Source: Persimmony. Based on 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 occur 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 2018-19, 97% (95/98) of clients met with their pregnancy coach for at least 1 postpartum visit.

## CHANGES IN RISK AND PROTECTIVE FACTORS

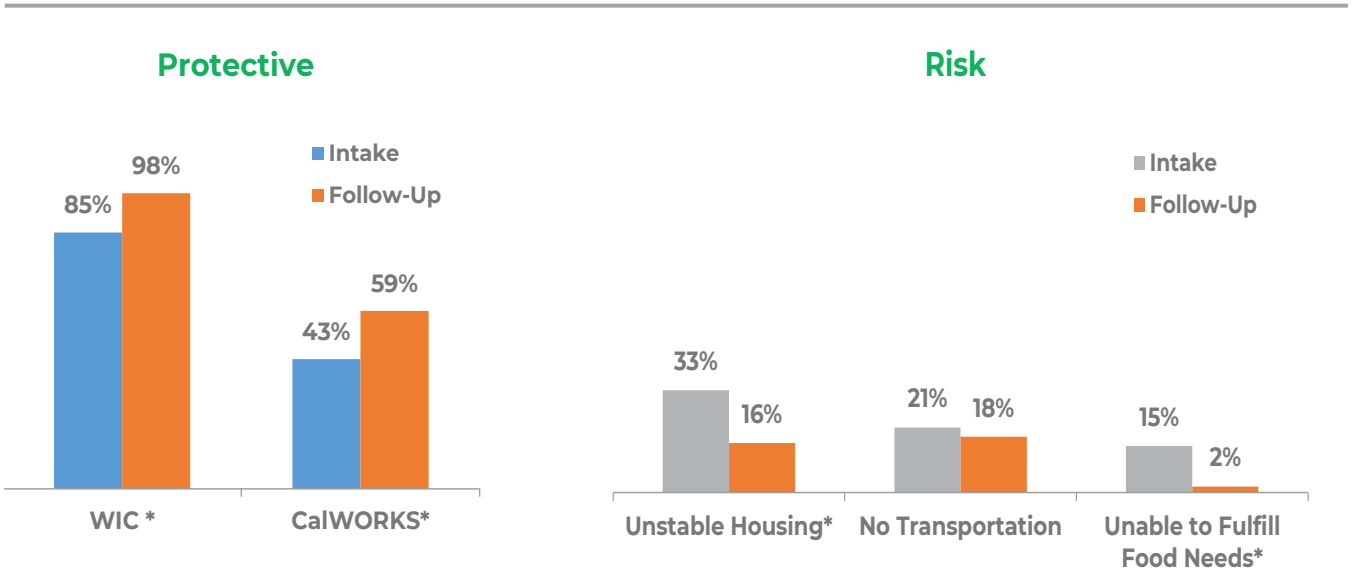
One of the primary objectives of the Pregnancy Peer Support program is to understand factors that pose a direct risk to the health of the baby as well the health and functioning of mothers. In intake and follow-up health assessments, clients are asked to self-report about a variety of factors related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

*"It makes me feel so good I can make a difference in somebody else's life, like I had a difference made in mine."*

– Pregnancy Coach and Former BMU Client

In terms of socio-economic factors, participants increased in their use of protective resources, WIC (73/86 at intake and 84/86 at follow-up) and CalWORKS (38/88 at intake and 52/88 at follow-up). Participants decreased (improved) in all socio-economic risk factors related to resource information provided by the BMU program. Notably, participants reporting unstable housing situations decreased by almost half (27/81 at intake and 13/81 at follow-up) and participants who were unable to fulfill their family's food needs at intake dramatically decreased to 3.4% at follow-up (12/82 at intake and 2/82 at follow-up). These findings indicate that participants gained increased connections to essential services that impact their families' stability.

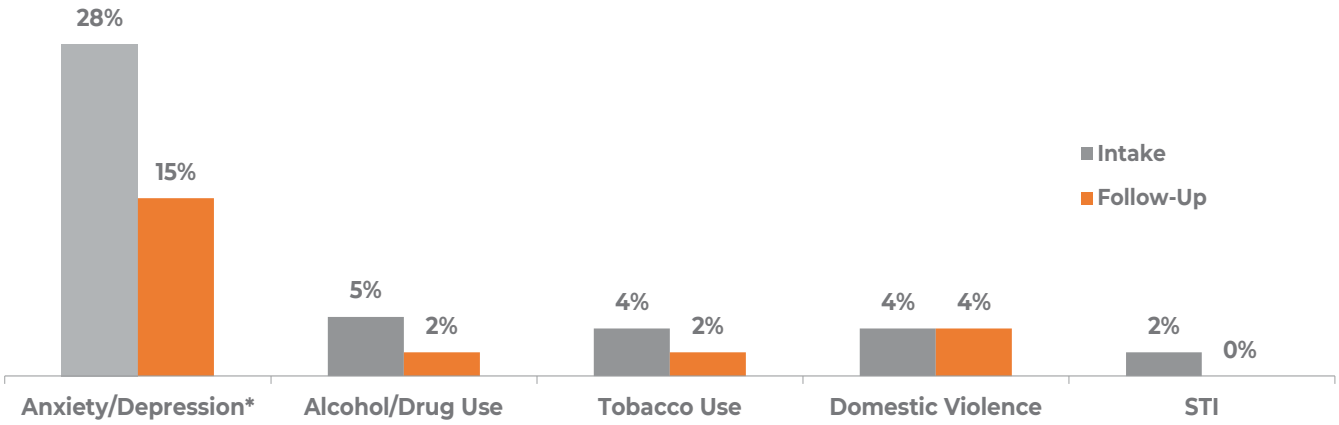
**Figure 14 — Change in Reported Socio-Economic Factors from Intake to Follow-Up Assessment**




Source: Health Assessment Intake and Follow Up. Matched sets; n=88. N's may vary based on item response rate. Column names marked with * represent a statistically significant change.

As for health risk factors, maternal depression or anxiety was rated moderate or high in 28% (24/85) of mothers before entering the program, and after program completion, this percentage had decreased to 15% (13/85). Maternal-reported alcohol and drug use was reported by 5% of mothers at intake (5/85), and this decreased to 2% in the follow up assessment (2/85). At intake, 3 mothers had sexually transmitted infections and by follow-up, this number had decreased to 0.

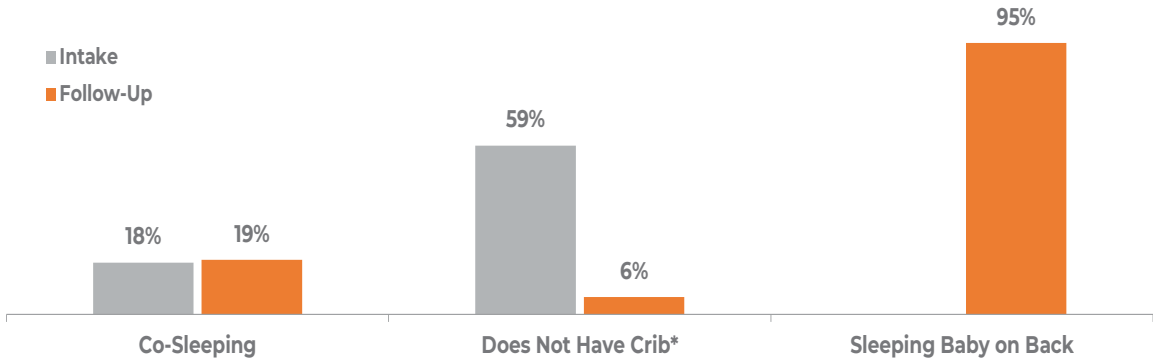
## Figure 15 — Change in Reported Health Factors from Intake to Follow Up Assessment




Source: Health Assessment Intake and Follow Up. Matched sets; n=85. Column names marked with * represent a statistically significant change.

Positive changes were also observed with parents' preparedness for infant safety; at intake, 59% of mothers reported that they did not have a crib to sleep their baby before the program began, and this dropped to just 6% 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 16 — Change in Reported Infant Safety Practices from Intake to Follow-Up Assessment




Source: Health Assessment Intake and Follow Up. Matched sets; n=85. 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 is provided by mothers during their postpartum visit with their Pregnancy Coach. In FY 2018-19, there was a set of twins who were stillborn at 32 weeks. There were a total of 102 infants born, including 92 singletons and five sets of twins (10 infants).

Of the 102 infants, 83% (85/102) were born at a healthy birth weight, 80% (82/102) were born full term, and combined, 76% (76/102) 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 82% (75/92). In terms of perinatal outcomes, at the time the Pregnancy Outcome Form was completed approximately one month postpartum, 56% (57/102) of babies had been taken for their well-baby checks with a pediatrician (the remainder may have been taken to the pediatrician after the postpartum visit occurred; a data collection strategy is being put into place for FY 2019-20 to gather more complete data on this indicator). Breastfeeding rates were favorable as well, with one third (34/102) of babies exclusively breastfed, and 57% (58/102) breastfeeding in combination with formula.

In terms of less favorable outcomes, 17% (17) of the 102 babies were born low birth weight and 20% (20) of infants were born pre-term. Sadly, there was one newborn that was delivered at 32 weeks and then died shortly afterward. See Appendix 1 for a listing of factors associated with individual births that had poor outcomes.

### Figure 17 — Birth and Perinatal Outcomes of Pregnancy Peer Support Clients

| | All Infants (n=102) | | Twins (n=10) | | Singletons (n=92) | |
|---|---|---|---|---|---|---|
| **Favorable Outcome** | **#** | **%** | **#** | **%** | **#** | **%** |
| **Healthy Birth Weight *and* Full Term Birth** | 78 | 76% | 2 | 20% | 75 | 82% |
| Healthy Birth Weight | 85 | 83% | 3 | 30% | 82 | 89% |
| Full Term Birth | 82 | 80% | 2 | 20% | 80 | 87% |
| **Well-baby Visit with Pediatrician** | 57 | 56% | 4 | 40% | 53 | 58% |
| **Exclusive Breastfeeding** | 34 | 33% | 0 | 0% | 34 | 37% |
| **Breastmilk and Formula** | 58 | 57% | 2 | 20% | 56 | 61% |
| **Unfavorable Outcome** | **#** | **%** | **#** | **%** | **#** | **%** |
| **Preterm Birth** | 20 | 20% | 8 | 80% | 12 | 13% |
| **Low Birth Weight** | 17 | 17% | 7 | 70% | 10 | 11% |
| **NICU Stay** | 12 | 12% | 4 | 40% | 8 | 9% |
| **Babies with Jaundice** | 4 | 4% | 1 | 10% | 3 | 3% |
| **Newborn Death** | 1 | 1% | 0 | 0% | 1 | 1% |

Source: Pregnancy Outcomes Form.

In order to discern the association between maternal factors and birth outcomes, the table below presents the prevalence of key risk and protective factors across different profiles of birth outcomes: healthy births (not low birth weight, 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 was substantially different regarding birth outcome (healthy births: 21%, one poor birth outcome: 36%, two poor birth outcomes: 54%).

## Figure 18 — Birth Outcomes Based Upon Risk and Protective Factors Identified at Intake

| Pregnancy Risk and Protective Factors from Intake | Healthy Births | | Either LBW or Preterm | | Both LBW and Preterm | |
|---|---|---|---|---|---|---|
| **Health Factors** | **#** | **%** | **#** | **%** | **#** | **%** |
| No Regular Prenatal Care | 1/73 | 1% | 2/11 | 18% | 1/12 | 8% |
| 2+ Miscarriages | 1/78 | 1% | 0/11 | 0% | 2/13 | 15% |
| 35 Years or Older | 5/78 | 6% | 1/11 | 9% | 4/13 | 31% |
| Under 20 Years Old | 2/78 | 3% | 0/11 | 0% | 0/13 | 0% |
| No Prenatal Vitamins | 7/75 | 9% | 1/10 | 10% | 2/13 | 15% |
| STI | 3/77 | 4% | 0/11 | 0% | 0/13 | 0% |
| Alcohol or Drug Use | 2/77 | 3% | 1/11 | 9% | 1/13 | 8% |
| Anxiety/Depression | 16/77 | 21% | 4/11 | 36% | 7/13 | 54% |
| Nutritional Deficiencies | 11/77 | 14% | 2/10 | 20% | 1/13 | 8% |
| Obesity | 2/77 | 3% | 1/11 | 9% | 0/13 | 0% |
| **Socio-Economic Factors** | **#** | **%** | **#** | **%** | **#** | **%** |
| WIC | 63/76 | 83% | 8/11 | 73% | 10/12 | 83% |
| CalWORKS | 37/78 | 47% | 1/11 | 9% | 4/13 | 31% |
| Did Not Graduate High School | 15/73 | 21% | 4/10 | 40% | 3/13 | 23% |
| Unstable Housing | 22/72 | 31% | 2/10 | 20% | 6/13 | 46% |
| No Transportation | 14/77 | 18% | 4/11 | 36% | 1/13 | 8% |
| Unable to Fulfill Food Needs | 8/75 | 11% | 0/10 | 0% | 4/11 | 36% |
| Single, Unpartnered | 33/76 | 43% | 6/10 | 60% | 5/13 | 39% |
| **Program Factors** | **M** | **SD** | **M** | **SD** | **M** | **SD** |
| Gestational Weeks at Intake to BMU | 24.3 | 6.9 | 20.8 | 10.8 | 27.1 | 6.6 |
| Gestational Weeks at First Prenatal Visit | 9.2 | 4.8 | 7.6 | 3.0 | 10 | 7.3 |
| Number of BMU Weekly Check-Ins | 9.5 | 5.7 | 6.1 | 4.9 | 6.4 | 4.7 |

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

## 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 was conducted. It is important to note that none of the following analyses imply causation. It is likely that other factors play into the relationship between the studied variables. Differing outcome variables were chosen to try to surface the most consistent, predictive factors related to birth outcomes.

Two exploratory binary logistic regressions were conducted on two dichotomous birth outcome variables (low birth weight and premature birth). Regressions are able to hypothetically discern statistical predictors of a dependent outcome variable. Both regressions included many covariates to control for many circumstances. Variables included maternal age, maternal anxiety or depression, maternal education, economic hardship, maternal health concerns, previous two or more miscarriages, gestational weeks at intake to BMU program, gestational weeks at first prenatal visit with doctor, and number of weekly check-ins with the BMU advocate. It is important to note that all variables were self-reported by the mother at intake.

In the first regression model, predicting low birth weight, only one variable was a significant predictor. Having a lower number of weekly check-ins with the BMU advocate significantly predicted having the poor birth outcome of low birth weight.

In the second regression model, predicting premature birth, maternal anxiety or depression, lower number of weekly check-ins with the BMU advocate, maternal previous two or more miscarriages, and being further along in pregnancy at their intake to the BMU program all significantly predicted low gestational age.

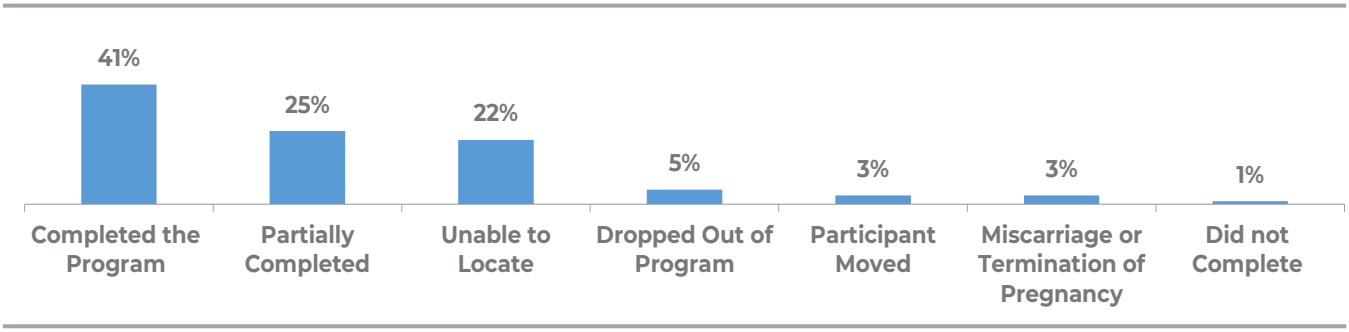
### Figure 19 — Factors that Independently Predict Birth Outcomes

| Maternal Self-Reported Factors at Intake | Logistic Regression Model 1 | Logistic Regression Model 2 |
|---|---|---|
| | Outcome: Low Birth Weight | Outcome: Preterm Birth |
| Over the Age of 35 | | |
| Under the Age of 20 | | |
| Anxiety or Depression | | ● |
| Economic Hardship | | |
| Presence of Health Concerns | | |
| Two or More Previous Miscarriages | | ● |
| Higher Number of Gestational Weeks at Intake to BMU Program | | ● |
| Higher Number of Gestational Weeks at First Prenatal Visit with Doctor | | |
| Lower Number of Weekly Check-Ins with BMU Advocate | ● | ● |

## STATUS AT PROGRAM EXIT

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, and 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 2018-19. Almost half of clients (41%; 60/147) did complete both the minimum prenatal and postpartum service requirements, and another 25% (36/147) partially completed these requirements. However, 22% (33/147) of clients could not be located.

**Figure 20 — Status at Program Exit**




Source: Exit Form. N= 149.

## CLIENT SUCCESS STORIES

BMU staff were asked to share success stories from the 18-19 year. These stories have been edited for clarity and brevity.

One client started the BMU program pregnant and homeless, living in her car with her 12 year old son. Once connected to Black Mothers United, her coach helped her reach out to County Social Services for the Homeless Support Program. She moved into a home the week she had her baby. Although it was a small 1 bedroom, she was happy to have a roof over her head. The client's baby was born at a healthy weight and gestational age. Since then, the client has moved to a bigger home with two bedrooms and she is doing very well. She recently told her coach that she is learning to put her children first and she feels good about it.

Another client was a mother of five who enrolled in the BMU program early in her 2nd trimester. Although she was young, she understood what she needed to do to beat the odds in spite of the obstacles she faced. When she was first enrolled in BMU, she had an open CPS case. When the coach first met the client and learned of her story, it became apparent that the client felt frustrated with how to deal with various aspects of the system. The first challenge was a custody battle between the client and her older children's father and grandmother, who had been granted temporary custody. The client was experiencing challenges in communicating effectively with the social worker assigned to her case. In addition to the custody battle, the lease on the client's home was about to end, threatening to leave her homeless. The coach could sense that the client, even though already four months pregnant, was not going to give up and that she needed

guidance and an advocate to help her navigate the situation. The coach met with the client's CPS worker and a Black Child Legacy Campaign cultural broker to inform them about the client's progress and needs, and make sure that all three were working together with the client's best interest at heart. Once this team was established, the client became more confident in herself and her abilities. She gained employment, found a place to live, and met all the recommendations of the court, which soon led to her regaining custody of her children. The client continued to work up until her delivery date and gave birth to a beautiful and healthy baby girl weighing 7 pounds. The client has remained active in the BMU program through her postpartum period and connects with her coach regularly. She and her family are happy and she plans to return to work soon.

## OPPORTUNITIES FOR IMPROVEMENT

Her Health First met with First 5 Sacramento and Applied Survey Research to discuss the successes and challenges in the FY 2018/19 year and formulated the following areas for program improvement in FY 2019/20:

The Black Mothers United (BMU) team should:

- Continue to case manage and strengthen follow-up with critical referrals. Currently, the team is working to further strengthen current referral partnerships with mental health providers.
- Explore innovative opportunities to provide mental health support to its clients including, but not limited to, support groups facilitated by licensed mental health providers. Because of the significant impact that trauma and adverse childhood experiences have on mental health, in the next fiscal year BMU staff will attend two trauma-informed care trainings and will work to expand their network of trauma-informed care service providers.
- As positive birth outcomes were correlated with and predicted by the number of visits that the mother had with her Pregnancy Coach, BMU should work to develop a mechanism to further support clients to reach the minimum number of visits. Additionally, BMU should continue its efforts to reach mothers early in their pregnancy, so prenatal care and intervention can begin as soon as possible.
- Lastly, as BMU enters the second year of their three-year contract, the leadership team should actively engage stakeholders, work to expand and activate their board of directors, and explore ways to diversify revenue sources to ensure sustainability of this critical program.


**WellSpace Health (WSH)** operated a perinatal program out of two South Sacramento Clinics from July 1, 2015 to December 31, 2018. WSH served women who lived in the areas with the highest levels of African American infant death.

WSH's "Perinatal Support Advisors" used the Nurturing Parenting Program (NPP) for Prenatal Families, which was made up of 18 prenatal visits with a Perinatal Support Advisor. The NPP Prenatal Program provided pregnant women with education on the effects of alcohol, tobacco, nutrition, and stress on the unborn baby, as well as providing information about how to have a healthy baby. Additionally, Perinatal Support Advisors provided two risk factor education sessions and delivered at least one postpartum check-in within a month of delivery. Social workers also provided customized support for pregnant mothers and could assist them in connecting to resources within WellSpace or in the community. Because WSH is a medically-based program, any medical or psychosocial referrals from the BMU pregnancy coaches were given to WSH.

FY 2018-19 was a transitional year for WSH perinatal programming; it focused on closing out this program. From July 1, 2018 through December 31, 2018, WSH's perinatal program served a total of 60 clients. All of these women (100%) identified as African American. By the end of December, 43 of them delivered, 9.3% (4/43) of infants were born preterm and 11.6% (5/43) of infants were born with low birthweight. No infant deaths were reported from this cohort.

Starting January 1, 2019, WSH began phasing in a new approach to provide ultrasounds, psychosocial support, and care coordination to BMU clients. Seven pregnant women were provided with ultrasounds from January to June 2019.

# 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

# 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 new outlets was as follows:

- Instagram page that increased in followers from 83 to 122 (17% African American), with an average of 50 visits per day. The Instagram page had 38 posts from July 2018 to June 2019.
- Facebook page that has 57 followers and 54 likes and has been growing on a weekly basis. The Facebook page had 25 posts during the 2018-2019 fiscal year.
- Twitter page that has 20 followers (26% African American) and posted 9 tweets during the 2018-2019 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 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 2018 to June 2019, **292** community-based service providers and one medical provider received this training, including:

- Valley Hi Family Resource Center
- Rose Family Creative Empowerment Center BCLC
- CPS
- Safetyville USA
- CAPC
- HALO Del Paso

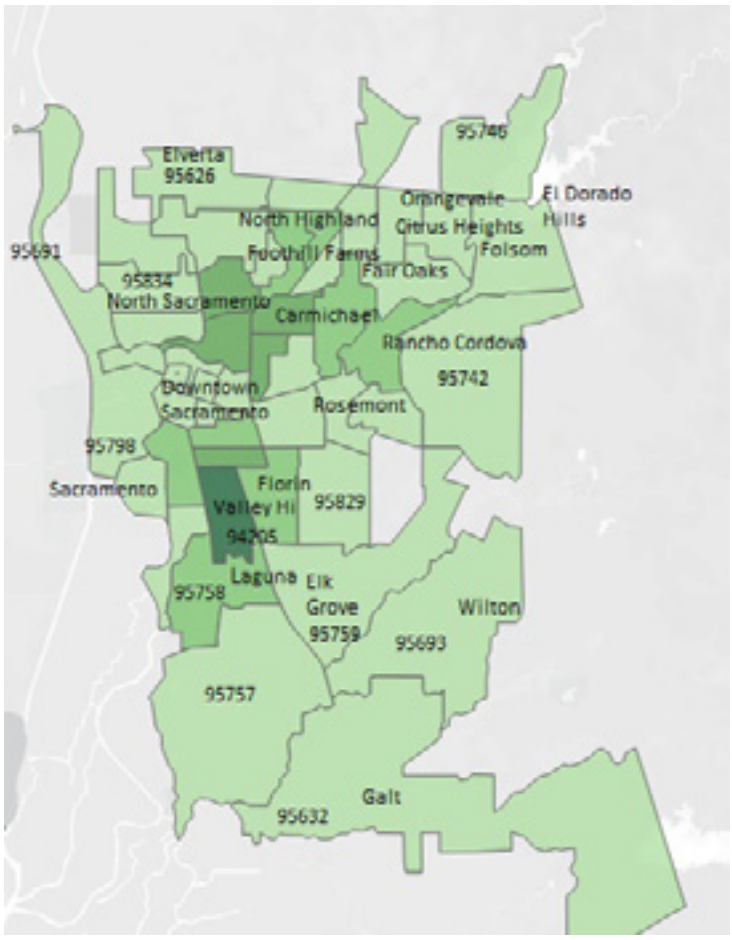
## *SSB Education for Parents*

SSB provides education to families through home visits and hour-long workshops. All families 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 were 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 2018-2019 fiscal year, **883** unduplicated parents received SSB education, **31%** (276) of whom were African American. Parents were trained at or by the following locations:

- CAPC
- MAN Arcade FRC
- Meadowview FRC
- MAN Del Paso FRC
- WellSpace Health FRC
- Valley Hi FRC
- La Familia FRC
- FCCP FRC
- North Sacramento FRC:
- River Oak FRC
- WellSpace Health
- Sutter Teen Programs
- Her Health First
- Liberty Towers

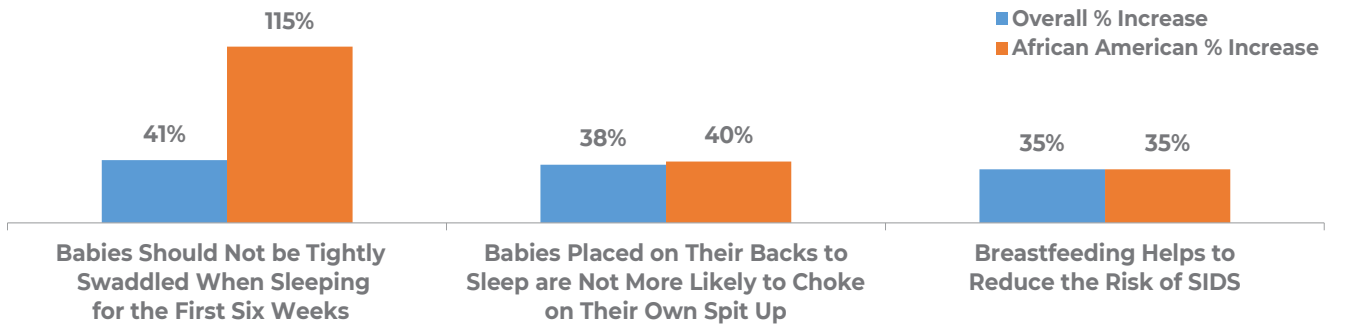
## Figure 21 — Location of Safe Sleep Baby Training Participants




The map displays the geographic location where SSB parent participants resided. The areas with the highest numbers of participants were South Sacramento, North Sacramento, and Carmichael. The areas with the fewest SSB participants were primarily in areas surrounding the perimeter of Sacramento County. Overall, 44% (396/894)of SSB parent participants resided in one of RAACD's seven targeted primary service areas.

Of the 883 individuals who received the Safe Sleep Baby training, nearly 100% (882/883) of participants completed a pre- and post-test to measure changes in knowledge before and after the training. Almost one-third (32% or 270) of training participants who completed both pre- and post-tests identified as African American. Overall, across all respondents, the following three questions show the highest increases in knowledge, and particularly amongst African Americans.

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

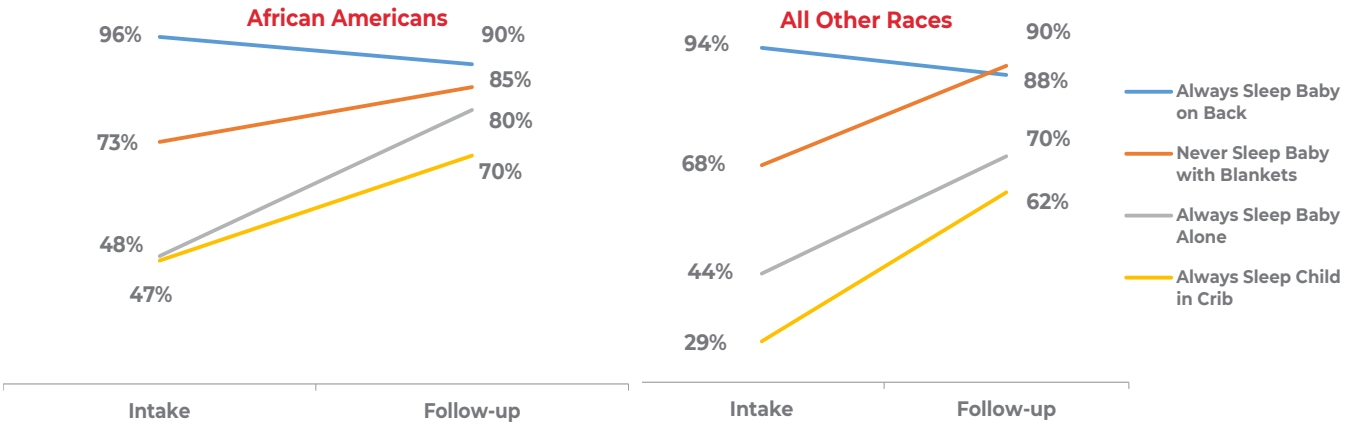



Source: SSB Pre- and Post-Surveys. All above questions represent a statistically significant difference between pre- to post-infant safe sleep knowledge.

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, 277 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 (70%, 171/246 Intake; 88% 217/246 Follow-Up), to never sleep their baby with blankets (37%, 90/245 Intake; 65%, 159/245 Follow-Up), and to sleep their baby alone (46%, 112/246 Intake; 74%, 182/246 Follow-Up) but were less likely to always sleep their child in a crib, bassinet, or Pack-N-Play (95%, 208/219 Intake; 89%, 194/219 Follow-Up). The figure below demonstrates the differences in intention and follow-up between African Americans and all other races.

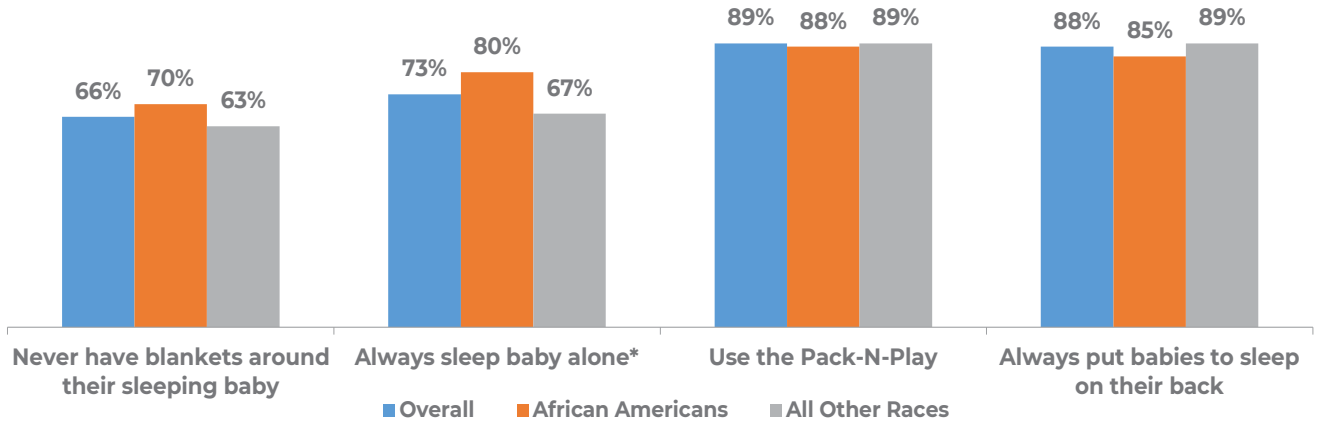
## Figure 23 — Change Between Intentions and Behaviors in Infant Safe Sleep Practices




Source: CAPC, SSB Intake and Follow-Up Surveys, N's vary based on question response (matched sets) All changes from Intake to Follow-Up were statistically significant.

In the follow-up survey, the most commonly reported safe sleep behavior was ***use of the provided Pack-N-Play (***89%; 235/265), followed by ***always sleeping their baby on their back*** (88%; 239/273), ***always sleeping their baby alone*** (73%; 196/270), and ***never having blankets around their sleeping baby*** (66%;177/270). Interestingly, African American respondents were more likely than other respondents to always sleep their baby alone and to ensure blankets were not near their sleeping babies, but slightly less likely than other parents to always put their baby to sleep on their back (see figure below).

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




Source: CAPC, SSB Follow up Survey. N=277.
* represents a statistically significant difference 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 the question, "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 a SSB informational video during their hospital stay and videos were also broadcasted to pediatric and OBGYN waiting rooms. From July 1, 2018 to June 30, 2019, crib distribution partners included:

**Hospitals:**

- Mercy General Hospital
- Mercy San Juan Medical Center
- Mercy Hospital of Folsom
- Methodist Hospital of Sacramento
- Kaiser Permanente South Sacramento Medical Center
- Kaiser Roseville Women and Children's Hospital (Sacramento residents only)
- UC Davis Medical Center

**Community Organizations/Agencies:**

- CAPC
- 9 Birth and Beyond Family Resource Centers
- Her Health First, Black Mothers United Pregnancy Peer Support Program
- Liberty Towers Community Incubator Lead for the Black Child Legacy Campaign
- Sutter Teen Program
- WellSpace Health Pregnancy Peer Support Program
- WellSpace North Highlands

From July 2018 to June 2019, a total of 450 cribs were provided to parents and caregivers in need. Of these, 126 cribs from hospital referrals were distributed to parents. Below is a breakdown of crib distribution by hospital referral:

- Mercy San Juan Medical Center: 29 cribs
- Sutter (provided to Sutter patients through in-home workshops by CAPC): 25
- UC Davis: 25 cribs
- Methodist General: 16 cribs
- Kaiser South Sacramento: 15 cribs
- Mercy General: 9 cribs
- Kaiser Roseville (Sacramento County resident only): 7 cribs

Of the 450 total cribs distributed, 126 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 adoption of SSB policies and education. SSB education is being implemented in all four main hospital systems of Sacramento:

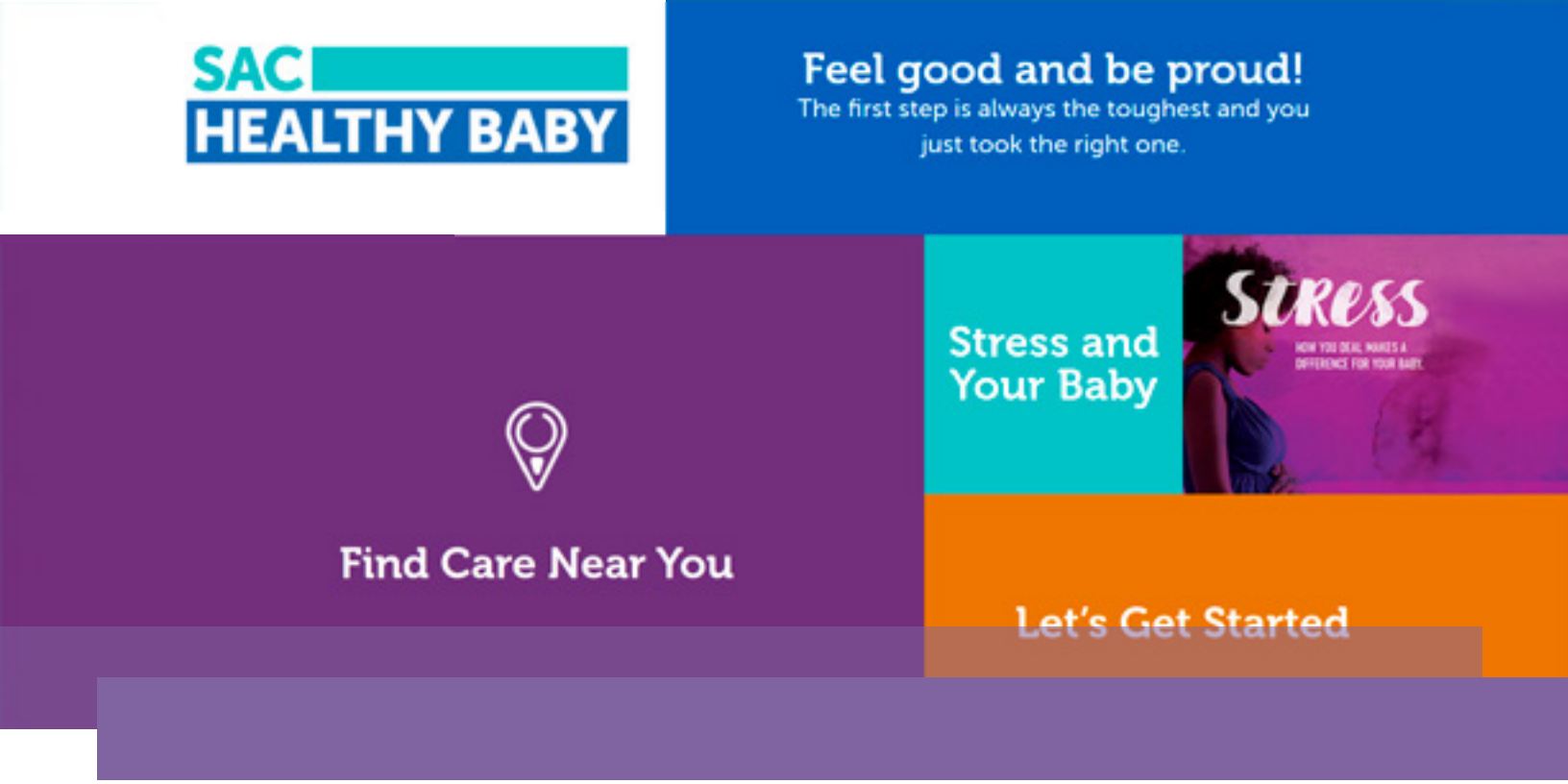
- UC Davis
- Sutter
- Dignity Health
- Kaiser

In 2018/2019, a total of eight hospitals and three medical providers had successfully implemented SSB education policies.

## OPPORTUNITIES FOR IMPROVEMENT

The Child Abuse Prevention Council met with First 5 Sacramento and Applied Survey Research to discuss the successes and challenges in the FY 2018/19 year and formulated the following areas for program improvement in FY 2019/20:

- It is important for the SSB program to continue to increase its reach into the seven high-risk neighborhoods for African American infant sleep related death.
- As an important component of the SSB program model, SSB should maintain hospital partnerships with all 8 Sacramento County birthing hospitals and expand their reach to medical providers and clinics so more pregnant women can receive SSB education.
- SSB should novate strategies that are adaptable as these barriers change.




# Public Education Campaign

*There were 2,170 visits to the SacHealthyBaby website by 1,874 users in FY 2018-2019.*

The third strategy funded by First 5 was a public education campaign aimed to raise awareness about the disparity in rates of infant deaths among African Americans and all other races, and to connect African American mothers to services that can help support pregnancies and infant well-being. Runyon Saltzman, Inc. (RSE) managed this comprehensive campaign that included print and digital media, as well as community events. These initiatives were targeted toward low-income African American women in their childbearing years (ages 18-34) who live in the areas of Sacramento with the highest reported levels of African American child deaths.

## COMMUNITY CAMPAIGN EVENTS

The Sac Healthy Baby Collaborative is a joint effort among First 5 Sacramento and other service providers with the goal of helping support healthy pregnancies. RSE, First 5 Sacramento, and the Sac Healthy Baby Collaborative worked together to develop and advertise community events to reach African American pregnant women or mothers with young children.


In February 2019, the Pride & Joy Community Baby Shower was convened by the Fruitridge Community Collaborative. This was the fourth annual baby shower event conducted, and it provided parents with information and demonstrations related to a healthy pregnancy and safe sleep practices, as well as connections to local resources (especially the Sac Healthy Baby campaign).

Approximately 113 people attended this event, 104 of which were pregnant or new mothers. Many perinatal service providers, including First 5 funded partners, attended these events and provided valuable information to the guests in attendance, as well as providing referrals to their specific outreach programs. RSE connected with local companies, churches, and community partners to secure donations for the event. This resulted in significant giveaways at the baby shower such as baby clothing, diapers, wipes, books, bibs, and gift baskets.

Unique to the 2019 Baby Shower was the partnership with the Sacramento Kings NBA basketball team. The King's mascot, fast break dancers attended the event, with the intent to attract fathers and engage families. Additionally, the 2019 Baby Shower offered participants the opportunity to have professional maternity and family photos taken, free of charge.

The following includes a list of partners who supported the 2019 Pride and Joy event:

- Black Child Legacy Campaign (BCLC)
- Child Abuse Prevention Center (CAPC)
- Child Action, Inc.
- Focus on Family
- Family Resource Centers
- Her Health First's Black Mothers United Program
- My Sister's House
- River City Medical Group
- River Oak Center for Children (Birth & Beyond)
- Sacramento County Department of Child Support Services
- Sacramento County Human Assistance Department
- Sacramento County Office of Education's Help Me Grow
- Sacramento Covered
- Sacramento Food Bank and Family Services
- Sacramento County Oral Health Program
- Sacramento Native American Health Center, Inc.
- Safe Kids/ Dignity Health
- Teen Success, Inc.
- Community Resource Project WIC Program

Over the years of this campaign, community events have been linked to significant increases in traffic on the SacHealthyBaby.com website. This is likely due to media outreach about the events which encourages people to visit the website in order to register for the baby shower. There were 2,170 visits to the SacHealthyBaby website by 1,874 users in FY 2018-2019. Additionally, the Pride & Joy Baby Shower was covered by three television news outlets as well as the Sacramento Observer.

## MATERIALS

To help promote the overall public education campaign, RSE created handouts and items that would provide useful information to attendees of the program and events, as well as highlight the website SacHealthyBaby.com.

***Baby Bump Cards —*** Developed during 2016-2017 and distributed from 2017-2019, RSE and Sac Healthy Baby Collaborative partners worked together to create a set of Baby Bump Cards, which encouraged women to document their pregnancy and share on social media. These cards included information pertinent to each trimester of pregnancy (0-12 weeks, 13-24 weeks, 25-40 weeks) and post-delivery.

***Sac Healthy Baby Tote Bag —*** RSE developed a Sac Healthy Baby tote bag to distribute to attendees at events. This bag was useful to gather informational material and giveaway items, as well as serving for further promotion of the SacHealthyBaby.com website.

## CAMPAIGN STRATEGY DEVELOPMENT

A large part of FY2018-2019 was devoted to campaign strategy development. In conjunction with Earth Mama Healing, eight formative focus groups were attended by a total of 58 women who resided in the high-risk neighborhoods identified by the Blue Ribbon Commission. The purpose of these focus groups was to gather insights to inform future campaign development. Additionally, RSE worked with Her Health First to conduct two listening sessions in April 2019 with 27 African American community members in order to better understand what mothers, fathers, social support program staff, and stakeholders believe are the causes of infant mortality and what can be done to drive change.

Following the formative discussion groups and community learning sessions, RSE held a series of strategic planning discussions with First 5 Sacramento and Sacramento County Division of Health Services staff that ultimately resulted in a shifting of target audiences. In June 2019, RSE presented an updated campaign strategy that focuses on the development of a public awareness campaign targeting adults in Sacramento County in order to broadly raise awareness of the disproportional number of African American infant and child deaths. Due to community feedback, rather than running the previously created “Stress” campaign in FY 2018-19, media campaign funds were strategically reprioritized to be used toward the launch of a new campaign in Spring 2020.

## OPPORTUNITIES FOR IMPROVEMENT

Due to a delay in approval of contract revisions and the emphasis on campaign strategy development, RSE was not as active in 2018/2019 as in previous years. Although there were successes (the baby shower and in-community dialogues), there were no significant media campaigns this fiscal year. RSE plans to increase these campaigns and create a new public education campaign in partnership with both First 5 and Sacramento County Public Health in FY 2019-20.

# Countywide Trend Data

*Since 2012-2014, Sacramento County has seen a **23%** decrease in the rate of infant death amongst African Americans, and a **42%** decrease in disparity between the rates of African Americans and other ethnic groups.*

The overall goal of the three programs funded by First 5 Sacramento (Pregnancy Peer Support Program, Safe Sleep Baby Initiative, and Perinatal Education Campaign) is to help reduce the rate of African American perinatal and sleep-related deaths in Sacramento County by 2020. This section of the report presents population-level data about infant deaths and their causes. 2012 data 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 related to this initiative include:

- Reduce the African American child death rate by **10-20%**
- Decrease African American infant death rate due to infant perinatal conditions by at least **23%**
- Decrease African American infant death rate due to infant safe sleep issues by at least **33%**
- Decrease the number of African American child deaths due to Child Abuse and Neglect by at least **25%**
- Decrease the number of African American child deaths due to third-party homicides 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:

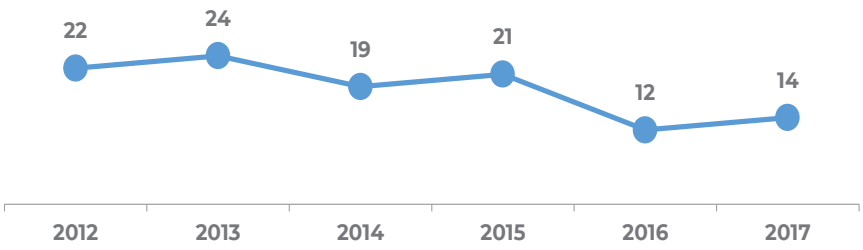
- Infant deaths due to perinatal conditions
- Infant deaths due to sleep-related conditions (ISR)

Other technical details related to these data can be found in Appendix 2.

## OVERALL INFANT MORTALITY

Infant death is defined as any death that occurs before one year of age. It does not include stillbirths or miscarriages. In 2012 (the baseline year), there were a total of 22 African American infant deaths. This number increased in 2013 but since, has been decreasing each year compared to the baseline year. However, as seen below, the number of deaths amongst African American babies increased from 12 in 2016 to 14 in 2017.

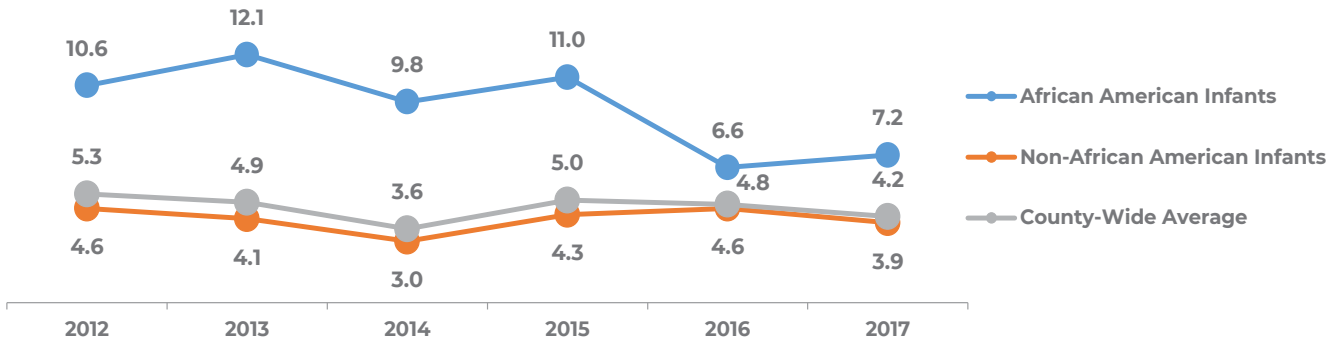
**Figure 25 — Number of African American Infant Deaths in Sacramento County**




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

The figure below compares the annual rate of infant death in Sacramento County by race. Because of the comparatively small population size, even two additional infant deaths amongst African Americans resulted in a slight uptick in their annual death rate per 1,000 live births.

## Figure 26 — Annual Rate of Infant Death in Sacramento County



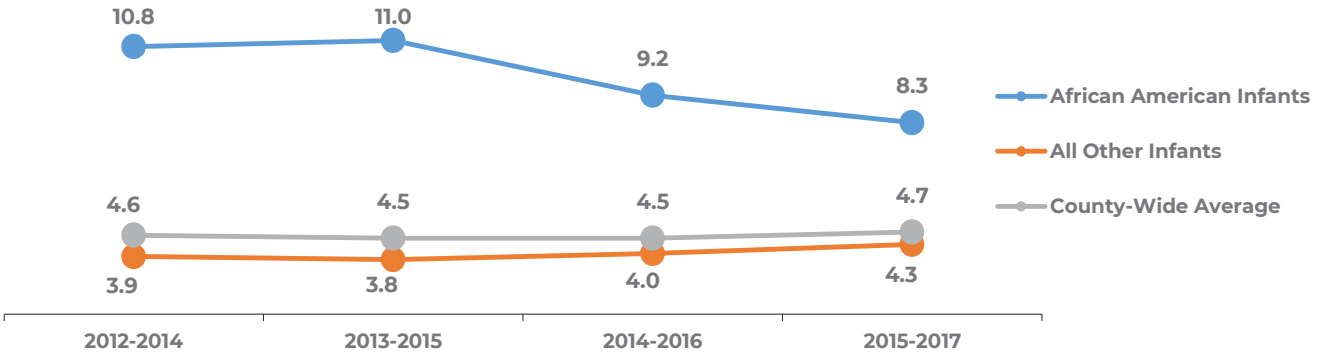

Source: Sacramento County, Department of Health Services, Public Health Division, Epidemiology Program, Birth Statistical Master Files. Rate is per 1,000 infants.

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, multiplied by 1,000).

During the baseline period of 2012-2014, African American infants died at a rate of 10.8 per 1,000 births. During 2015-2017, African American infants died at a rate of 8.3 per 1,000 births, a 23% reduction from the baseline period of 2012-2014. This analysis shows a steady downward trend of infant deaths amongst African Americans, while the rate is marginally increasing amongst other ethnic groups and for the county as a whole.

Secondly, these data show a 42% 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 2015-2017, the gap was 4.0. This represents a 42% decrease in disparity between these rolling averages.

## Figure 27 — Three-Year Rolling Average Rate of Infant Death in Sacramento County

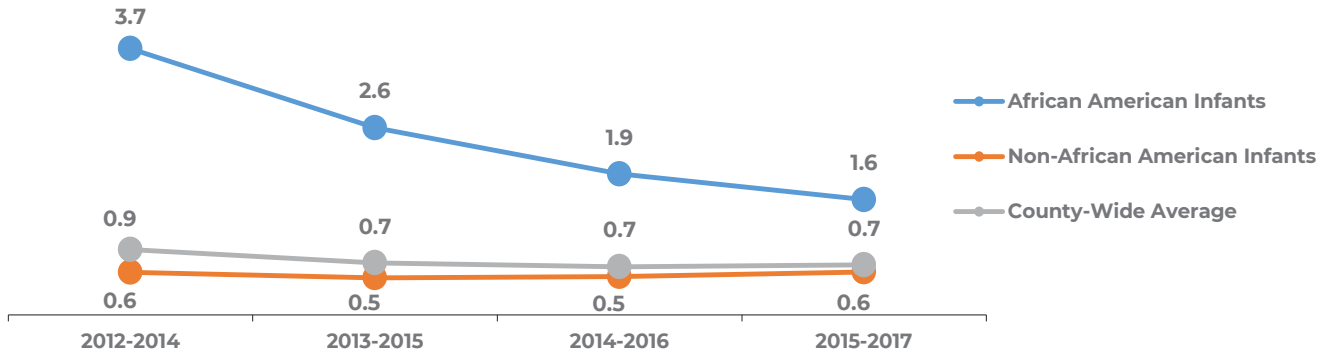



Source: Sacramento County, Department of Health Services, Public Health Division, Epidemiology Program, Birth Statistical Master Files. Rate is per 1,000 infants.

## 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 1.6 in 2015-2017), representing a 57% decrease. One contributor to these large decreases is very likely the Safe Sleep Baby campaign.

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

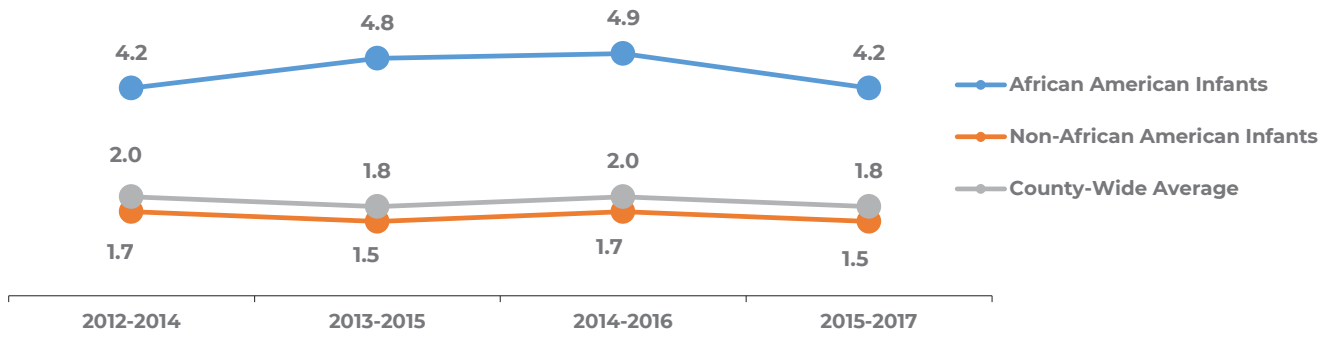



Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017. Rate is per 1,000 infants.

## DEATHS DUE TO PERINATAL CAUSES

The data presented here relating to perinatal causes are comprised of deaths due to prematurity, low birthweight, placental abruption, and congenital infections and include deaths from the second trimester of pregnancy through one month post-birth. The rolling average rates did not change from 2012-2014 to 2015-2017. However, there was an increase in both 2013-2015 and 2014-2016, so it is promising that the numbers seem to be decreasing. Future data is needed to discern if this decrease is the beginning of a trend.

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

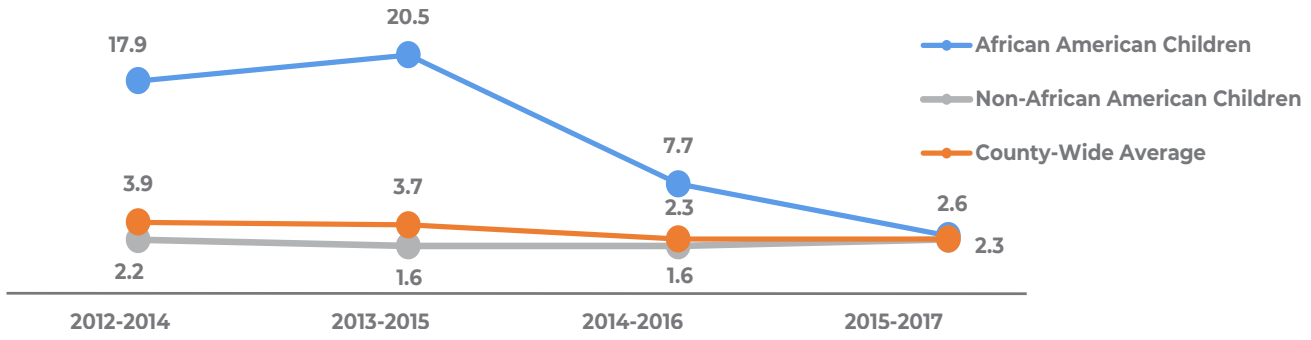



Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017. Rate is per 1,000 infants.

## DEATHS DUE TO CHILD ABUSE AND NEGLECT (CAN) HOMICIDES

African American child deaths (ages 0-5) due to abuse and neglect have displayed an 85% reduction between 2012-2014 and 2015-2017, in spite of the fact that there was an increase in the rate from 2012-2014 to 2013-2015 (17.9 to 20.5, respectively). The decrease in African American CAN homicides resulted in a 98% reduction in disparity between racial groups between 2012-2014 and 2015-2017.

### Figure 30 — Rate of Child Deaths (0-5) Due to CAN Homicides

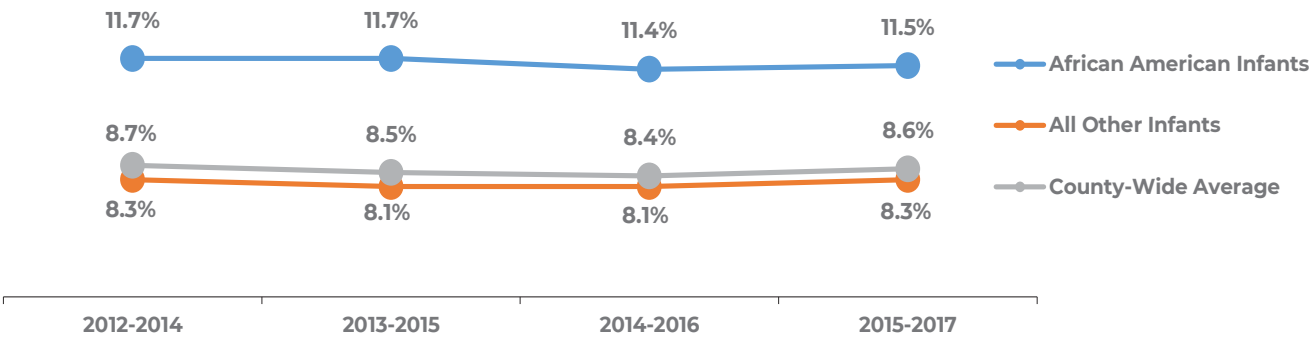



Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017. Rate is per 100,000 children

## PRETERM BIRTHS

Infants born before 37 weeks of gestation are considered to be preterm. In Sacramento County, 11.5% of African American babies were born preterm during the years 2015-2017. This displays a decrease in the number of African American preterm births from 2012-2014 (11.7%), but a slight increase from years 2014-2016 (11.4%). It is important to note that preterm births among infants of all other races (besides African American) also displayed an increase from 2014-2016 to 2015-2017, 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 31 — Three-Year Rolling Average Percentage of Preterm Infants Born in Sacramento County

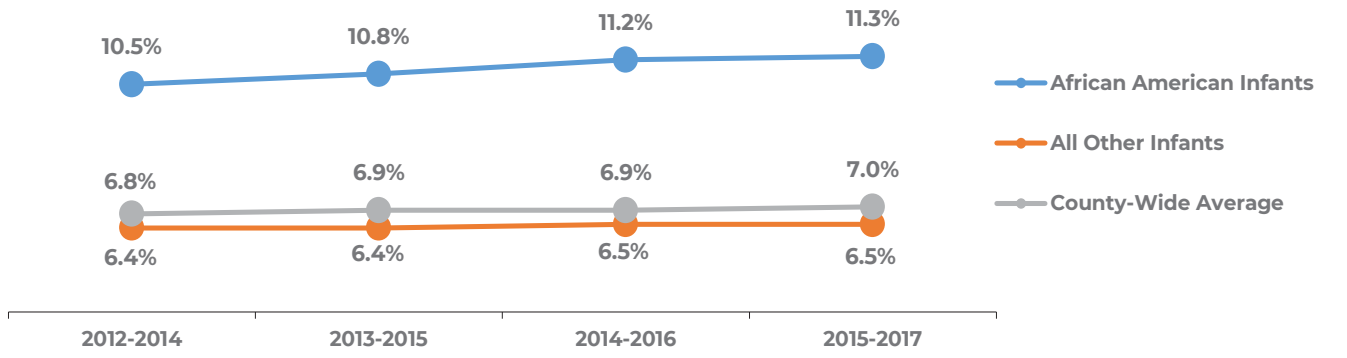



Source: Sacramento County, Department of Health Services, Public Health Division, Epidemiology Program, Birth Statistical Master Files.

## 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 with low birthweight (LBW) from baseline (2012-2014) to 2015-2017 compared to infants of all other races. The percentage of African American babies born with LBW during 2015-2017 marginally increased compared to baseline (10.5% in 2012-2014, 11.3% in 2015-2017). The overall rate of LBW infants also slightly increased county-wide during the years measured. More effort needs to be focused in this area to continue efforts to decrease infants born with LBW in the African American community and the Sacramento County population as a whole.

**Figure 32 — 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.

# Appendix 1 — Factors Associated with Poor Birth Outcomes

| Case | # of weeks at program entry | Still-birth | Infant death | Twin | Birth-weight (lb,oz) | Low birth-weight | Gesta-tional age | Pre-term | # 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 | 30 | N | N | Y | 5 | Y | 36 | Y | 7 | N | 5 | | | 2+ Miscarriages, mother over 35 years old, diabetes |
| 2 | | | | | 4.12 | | | | | | | | | |
| 3 | 30 | N | Y | N | 3.56 | Y | 32 | Y | | Y | 4 | | Maternal anxiety and depression, alcohol and drug use, domestic violence | |
| 4 | 28 | N | N | N | 5 | Y | 35 | Y | 24 | Y | 6 | No transportation, unstable housing | Maternal anxiety and depression | Congestive heart failure |
| 5 | 32 | N | N | N | 3.7 | Y | 33 | Y | | N | 6 | Unstable housing | Maternal anxiety and depression | |
| 6 | 30 | N | N | N | 4.14 | Y | 32 | Y | | N | 3 | Unstable housing | Maternal anxiety and depression, domestic violence | |
| 7 | 27 | N | N | Y | 3.6 | Y | 35 | Y | | N | 15 | | Maternal anxiety and depression, domestic violence | Mother over 35 years old, nutritional deficiencies |
| 8 | | | N | | 4.11 | | | | | | | | | |
| 9 | 7 | N | N | N | 3.4 | Y | 31 | Y | | N | 4 | | | Mother over 35 years old |
| 10 | 32 | N | N | Y | 3.6 | Y | 33 | Y | 7 | N | 2 | | | |
| 11 | | | N | | 3.9 | | | | | | | | | |
| 12 | 31 | N | N | N | 4.12 | Y | 36 | Y | 16 | N | 13 | Unstable housing | | |
| 13 | 32 | N | N | Y | 5.11 | N | 37 | Y | 4 | N | 3 | | | |
| 14 | | | N | | 5.3 | Y | | | | | | | | |
| 15 | 32 | N | N | N | 5.6 | Y | 39 | N | 12 | N | 8 | Unstable housing | Maternal alcohol and drug use, tobacco use | Maternal diabetes, high blood pressure |
| 16 | 32 | N | N | N | 5.7 | Y | 39 | N | 6 | N | 4 | No transportation | | |
| 17 | 30 | N | N | N | 4.8 | Y | 38 | N | 8 | N | 8 | | | Severe nausea |
| 18 | 13 | N | N | N | 5.4 | Y | 40 | N | 13 | N | 1 | | | |
| 19 | 23 | N | N | N | 6.11 | N | 37 | Y | 4 | N | 9 | Unstable housing | Maternal anxiety and depression | Scoliosis |
| 20 | 21 | N | N | N | 5.11 | N | 37 | Y | 7 | N | 18 | No transportation | Maternal anxiety and depression | |
| 21 | 8 | N | N | N | 6.13 | N | 37 | Y | 8 | N | 1 | | | |
| 22 | 6 | N | N | N | 8 | N | 37 | Y | 6 | N | 2 | No transportation | Maternal mental illness | |
| 23 | 26 | N | N | N | 6.15 | N | 37 | Y | 8 | N | 7 | | | |
| 24 | | N | N | N | 8.1 | N | 35 | Y | | N | 6 | No transportation | | Nutritional deficiencies, mother under 20 years old, obesity |
| 25 | 20 | Y | N | Y | Na | N | 30 | Y | 4 | N | 5 | | Client has child under one year of age | |
| 26 | | | | | | | | | | | | No transportation | | |

# 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

BMU Maternal Factors Reported at Intake Related to Adverse Birth Outcome Regression Results.

### Figure 33 — Logistic Regression Predicting Dichotomous Healthy Birth Outcome (yes/no).

| | *B* | S.E. | df | *p* | OR |
|---|---|---|---|---|---|
| **Number of Weekly Check-ins** | **-.13** | **.06** | **1** | **.02*** | **.87** |
| **No Regular Prenatal Care** | **-3.54** | **1.85** | **1** | **.055†** | **34.58** |
| 35 Years or Older | -.96 | .75 | 1 | .20 | 2.60 |
| Anxiety or Depression | -.86 | .56 | 1 | .13 | 2.36 |
| Constant | .52 | .56 | 1 | .36 | .60 |

*p < .05, † = marginal significance

### Figure 34 — Linear Regression Predicting Continuous Birth Outcome Factors (0, 1, 2)

| | *B* | S.E. | *t* | *p* |
|---|---|---|---|---|
| **Number of Weekly Check-ins** | **-.03** | **.01** | **-2.01** | **.04*** |
| **No Regular Prenatal Care** | **.73** | **.33** | **2.21** | **.03*** |
| 35 Years or Older | .15 | .26 | .57 | .57 |
| Anxiety or Depression | .23 | .17 | 1.34 | .19 |
| **2+ Miscarriages** | **1.01** | **.41** | **2.45** | **.02** |
| Constant | .43 | .15 | 2.88 | .01* |

*p < .05

### Figure 35 — Linear Regression Predicting Continuous Birth Weight

| | *B* | S.E. | *t* | *p* |
|---|---|---|---|---|
| **Number of Weekly Check-ins** | **-.03** | **.01** | **-2.01** | **.04*** |
| **No Regular Prenatal Care** | **.73** | **.33** | **2.21** | **.03*** |
| 35 Years or Older | .15 | .26 | .57 | .57 |
| Anxiety or Depression | .23 | .17 | 1.34 | .19 |
| **2+ Miscarriages** | **1.01** | **.41** | **2.45** | **.02*** |
| Constant | .43 | .15 | 2.88 | .01* |

*$p \leq .05$

# 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] 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

[iv] 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

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

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

# Photo Credits

All photographs in this report are from iStockPhoto. They 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
Child Abuse and Prevention Council
(916) 244-1900

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

WellSpace Health
(916) 737-5555

Black Child Legacy Campaign
(916) 993-7701

FIRST 5 SACRAMENTO

ASR