FIRST 5 SACRAMENTO

Reduction of African American Child Deaths

Evaluation Report FY 2021-2022

FIRST 5 SACRAMENTO

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Introduction

BACKGROUND AND GOALS

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

In 2011, the Sacramento County Child Death Review Team (CDRT) released a 20-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 preventable disproportionate child death among African American children were:

- Perinatal Conditions
- Infant Sleep-Related (ISR)
- Child Abuse and Neglect (CAN)
- 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. In 2013, the Blue Ribbon Commission released a report with a set of specific goals to be achieved by 2020. As seen below, the goals included an overall reduction in African American child deaths, and specific reductions for each of the leading causes of death, including infant perinatal conditions, infant sleep-related, child abuse/neglect, and third-party homicides.[ii]

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%**

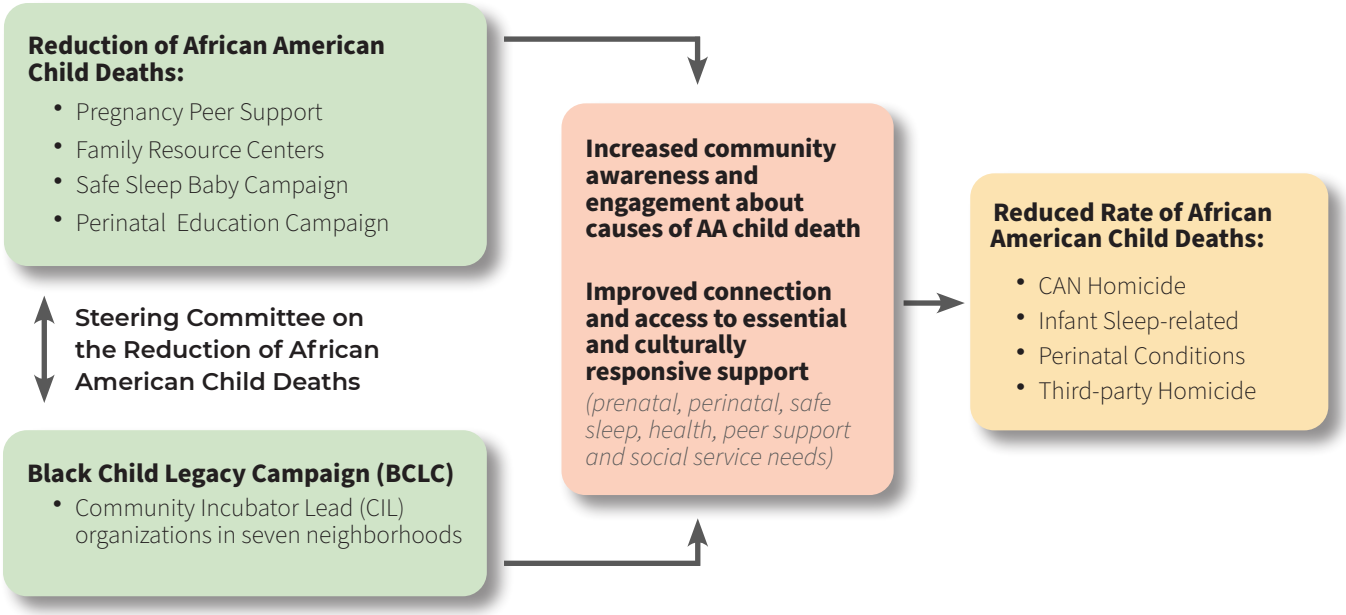
The Blue Ribbon Commission report also called for the establishment of the Steering Committee on Reduction of African American Child Deaths (RAACD). Convened by the Sierra Health Foundation, the RAACD Steering Committee released a Strategic Plan[iii] and Implementation Plan[iv] in 2015. Using a Collective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

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

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

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

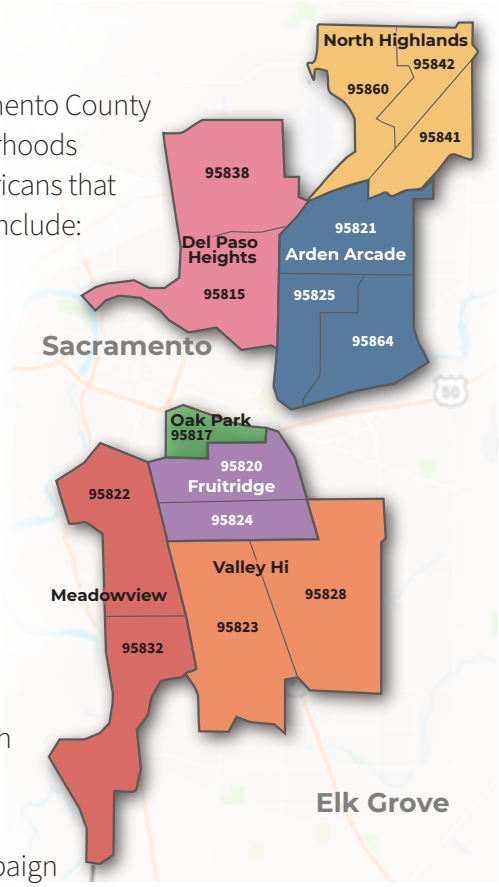
Figure 1 — Sacramento County's Strategic Framework to Reduce African American Child Death.



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, infant, and child (0-5) deaths among African Americans and does not include deaths of all children 0-17.

To meet the Blue Ribbon Commission goals, efforts have focused on the Sacramento County neighborhoods 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 AND CHILD DEATHS

To address the preventable causes of infant death and 0-5 child 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 Perinatal Education Campaign

This report continues the evaluation of First 5 Sacramento's efforts, describing each investment, FY 2021-22 outcomes, and recommendations about areas to strengthen.

PROGRESS TOWARD BLUE RIBBON COMMISSION GOALS

The Blue Ribbon Commission (BRC) identified 2020 as the year by which its initial goals should be met and if applicable, to reconvene and create a new set of goals. Countywide data for 2020 have now become available, so it is time to assess the progress. For this report it is important to understand that the BRC created their goals with the entire 0-17 infant, child and young adult population in mind whereas the RAACD Initiative, funded by First 5 Sacramento, is focused on families with children five and under. Therefore, some of the goals do not align exactly.

This report provides evidence that the RAACD Initiative likely contributed to substantial progress on BRC goals. Three of the four mortality reduction goals were fully met, when looking at changes among the 0-5 population: 1) all-cause child death (given that two-thirds of all-child deaths are under 6 years of age); 2) infant safe sleep, and 3) child abuse and neglect homicide (given that ~80% of CAN deaths are under 6 years of age). The death rate from perinatal conditions declined but did not reach the BRC goal level. Even with these successes, there is still work to be done in each of these areas to reduce disparities and improve the overall well-being of children in Sacramento County.

The figure below outlines the Blue Ribbon Commission goals, the percent change for each goal area from 2012-2014 to 2018-2020, and if the 2020 Blue Ribbon Commission goal was met (based on 0-5 data). This information should be used when revisiting goals and fine-tuning where funding should be focused to continue to promote positive change.

Figure 2 — Progress Made on Blue Ribbon Commission Goals to Reduce African American Child Deaths

Leading Preventable Causes of African American Child Death:	2020 Goal	% Change 2012-2014 to 2018-2020	BRC Goal Status	% Change in Disparity Gap 2012-2014 to 2018-2020
Overall **African American child deaths** (ages 0-17)	**10%** to **20%** reduction	**30%** Reduction (ages 0-5)	Goal Met*	40% Reduction (ages 0-5)
Infant **perinatal conditions** (ages < 1 month)	At least **23%** reduction	**4%** Reduction (ages 0-1)	Goal Unmet	2% Increase (ages 0-1)
Infant sleep related (ISR) deaths (ages 0-1)	At least **33%** reduction	**54%** Reduction (ages 0-1)	Goal Met	60% Reduction (ages 0-5)
Child abuse and neglect (CAN) (ages 0-17)	At least **25%** reduction	**85%** Reduction (ages 0-5)	Goal Met*	93% Reduction (ages 0-5)
Third-party homicide (ages 0-17)	At least **48%** reduction	Not measured in RAACD report – see BCLC report		

* Not intended to be a direct comparison to the BRC goals as these were intended to reflect change among all children ages 0-17 and the values presented here are for children ages 0-5.

Pregnancy Peer Support Program

*For the third consecutive year, there were **zero newborn deaths** among infants born to BMU participants.*

***79%** of infants were born **full term** and had a **healthy birthweight**.*

The Pregnancy Peer Support Program is implemented by Her Health First's Black Mothers United (BMU) program. BMU provides a community-based network of support to empower Black mothers during their pregnancy and the transition into motherhood through culturally relevant outreach, education, and individualized support.

The BMU program includes weekly check-ins with **pregnancy coaches, doula care, lactation support, health resources, and social/ educational gatherings**. The program is open to pregnant women prior to their 30th week of pregnancy who reside in Sacramento County and self-identify as African American.

Pregnancy coaches are African American women from within the community who are trained to provide education, offer information about medical and social service options, and help mothers in preparation for the birth of their child. Coaches provide individualized support through regular check-ins during pregnancy and up to 12 weeks postpartum, as well as peer support through monthly group meetings and quarterly events (e.g., baby showers).

In addition to RAACD funding, Her Health First received a grant from CalMHSA which enables them to provide additional doula and lactation services for BMU clients.

PROFILE OF CLIENTS

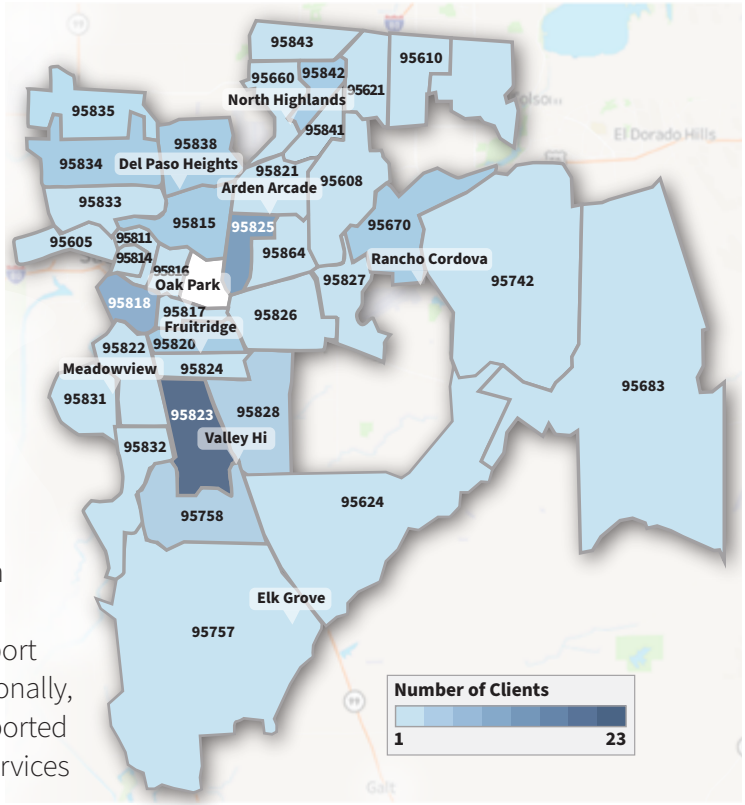
From July 1, 2021, to June 30, 2022, BMU served 162 pregnant African American women – 20 of which entered the program for a subsequent pregnancy (indicating they were previously served by BMU).

Clients were most concentrated in the Valley Hi neighborhood (see map) and two-thirds (66%; 99/151) lived in one of the seven RAACD target neighborhoods of Sacramento County. The proportion of participants in RAACD zip codes increased slightly compared with FY 2020-21 (64%).

Baby supplies, pregnancy information, housing, and counseling were the most common pressing needs of BMU clients at intake.

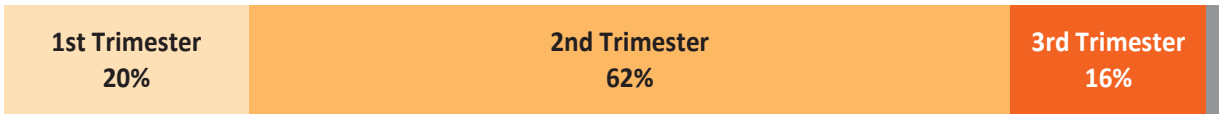
BMU clients reported an average of 2.4 **pressing needs** at intake. Mothers were most commonly in need of baby supplies (76%), pregnancy information and support (61%) and housing (26%). Additionally, one in five participants (21%) reported counseling and mental health services as their most pressing need.

Figure 3 — Location of BMU Participants Served



Clients who enter the program earlier have more time to receive pregnancy education, necessary referrals, and are more likely to receive access to early prenatal care. As seen below, nearly two-thirds of participants (62%) entered during their second trimester of pregnancy. One out of five participants (20%) enrolled in their first trimester and 16% enrolled during their third trimester.[1] Third trimester enrollees comprised a smaller proportion (16%) compared to previous fiscal years (29% in FY 2019-20 and 23% in FY 2020-21) indicating that **BMU is reaching clients earlier in their pregnancies**.

Figure 4 — Number of Mothers Served, by Trimester of Entry

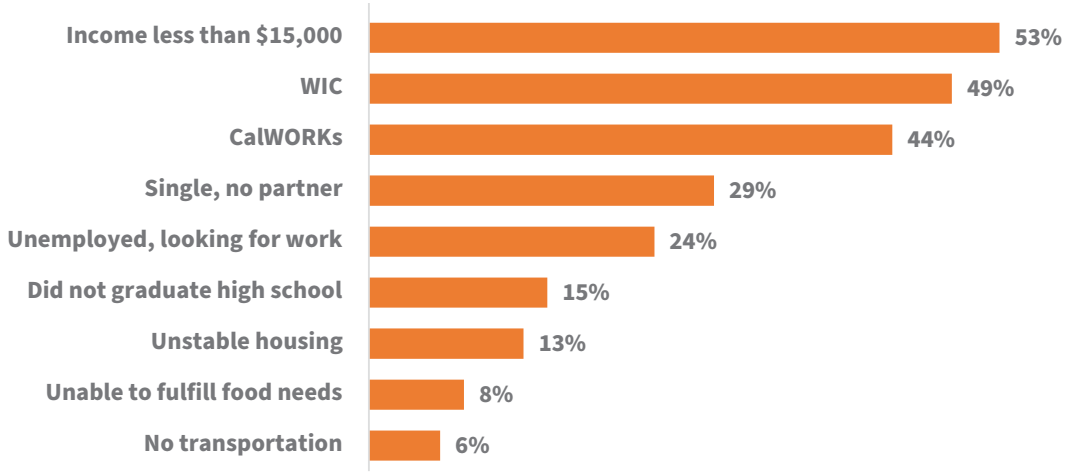


Source: Health Assessment Intake. N=160.

[1] Trimester information was unknown for 1% of mothers participating in the program.

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 well-being of mothers. Oftentimes, the BMU program serves pregnant African American women that are hardest to reach and with substantial needs, including those not receiving regular prenatal care and those most at-risk of adverse pregnancy outcomes. For instance, more than half (53%) of the participants reported a family income less than $15,000, nearly 24% were unemployed and looking for work, and 13% were experiencing unstable housing[2] (see figure below). Because participants were generally low-income, participation in CalWORKs and WIC services are considered a protective factor. About half of the participants (49%) were already enrolled in WIC at intake and 44% were on CalWORKs).

Figure 5 — Socioeconomic Characteristics Reported at Intake



Source: Health Assessment Intake (n = 160) and Family Information Form (n = 133).

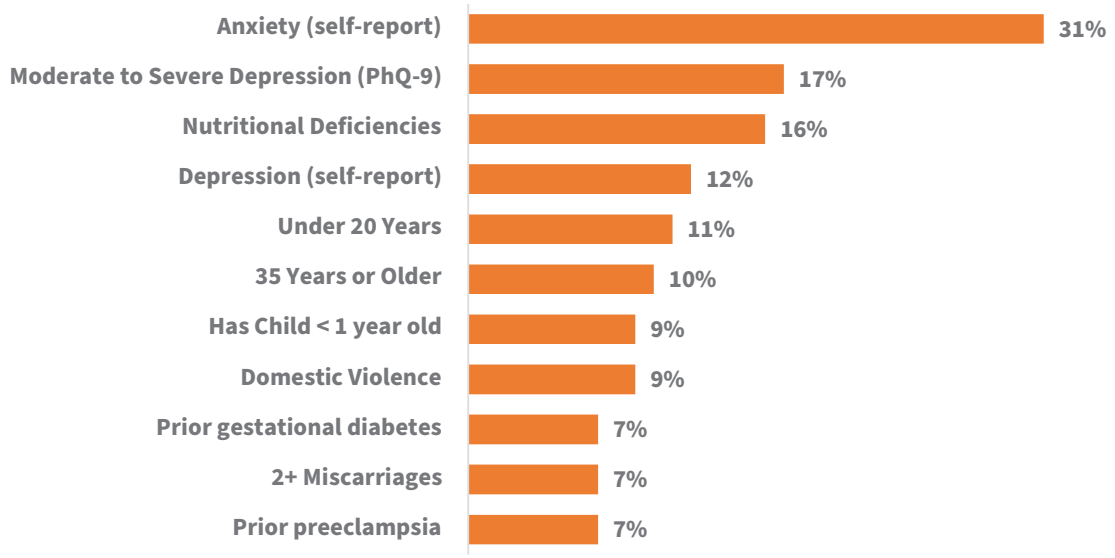
[2] Interestingly, about half as many participants reported unstable housing compared to those who reported housing as a pressing need, which may highlight the range of needs associated with housing circumstances which extend beyond unstable housing conditions.

Almost half *of BMU clients experienced* ***anxiety*** *and/or* ***depression*** *at the time of intake*

Additionally, anxiety was the most common self-reported health challenge (31%),[3] followed by moderate to severe depression (17% per PhQ-9 scores) and nutritional deficiencies (16%). About one in ten participants also self-reported depression (12%), were under the age of 20 (11%), or were 35 or older (10%). When combined,40% of clients entered the BMU program with anxiety or depression (either self-reported or moderate to severe depression score on the PHQ-9).

Compared with FY 2020-21, fewer participants had another child under one year of age (15% to 9%)[4] or reported nutritional deficiencies (22% to 16%). Additionally, participants were less likely to report no regular prenatal care (9% to 3%) or no prenatal vitamins (13% to 4%).

Figure 6 — Most Common Health Factors Reported at Intake



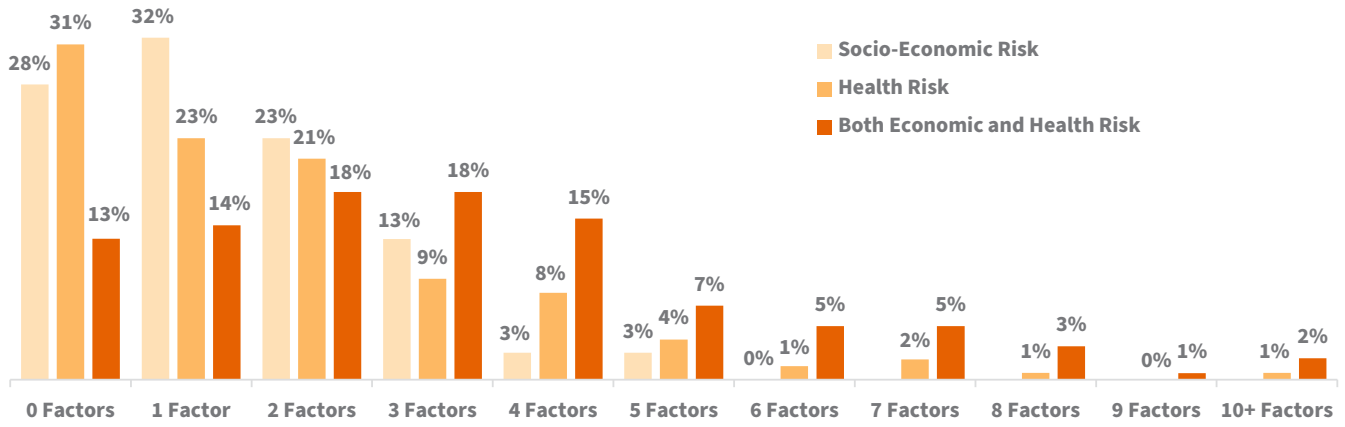
Source: Health Assessment Intake (N = 160) and PhQ-9 Assessment (N = 158) though response rates may vary for each variable. Chart includes most common health factors reported and does not represent all characteristics measured.

[3] Due to changes in data collection in FY 2021-22, count may include clients reporting depression but not anxiety.

[4] Multiple births spaced closely together can increase adverse outcomes for mothers and babies, including low birthweight and premature birth. https://www.mayoclinic.org/healthy-lifestyle/getting-pregnant/in-depth/family-planning/art-20044072.

When combined, **nearly nine out of ten (87%) BMU clients served had at least one health and/or socioeconomic risk factor.** Most participants had at least one socioeconomic risk (72%) and/or health risk (69%). The specific breakdown of risk factors is provided in the figure below.

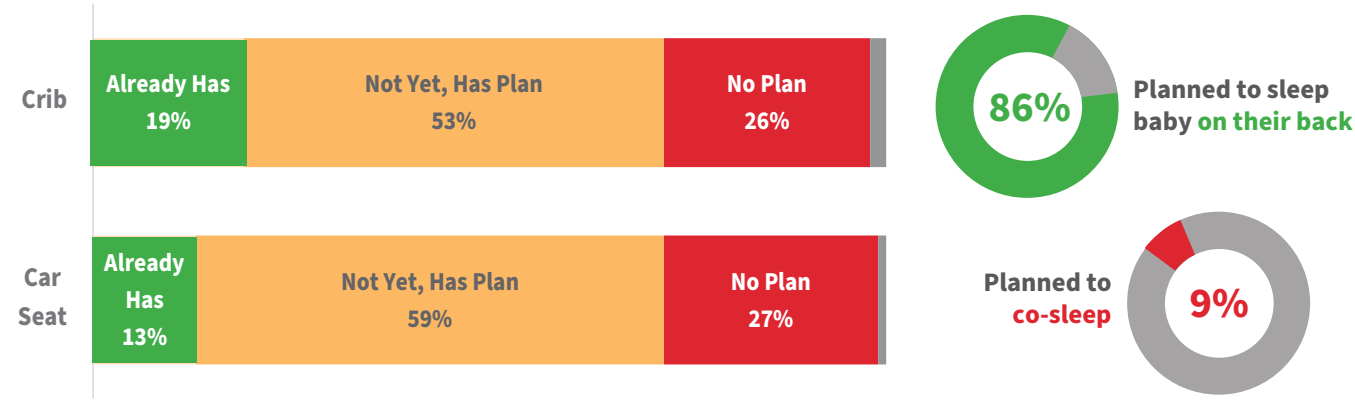
Figure 7 — Percentage of Clients by Number and Type of Risk Factors



Source: Health Assessment Intake (N = 160), Family Information Form (N = 133), and PhQ-9 Assessment (N = 158).

BMU pregnancy coaches also assess clients' preparedness for caring for the safety of their infants and provide support as needed. Most participants did not yet have a crib (79%) or car seat (86%) at the time of intake, and more than one-quarter of all participants did not yet have a plan for a crib (26%) or car seat (27%). Additionally, 9% of participants planned to co-sleep with their child at the time of intake, while 86% reported plans to sleep baby on their back. The proportion of mothers intending to co-sleep decreased substantially compared with FY 2020-21 (20%).

Figure 8 — Plans for Infant Sleeping and Safety Reported at Intake

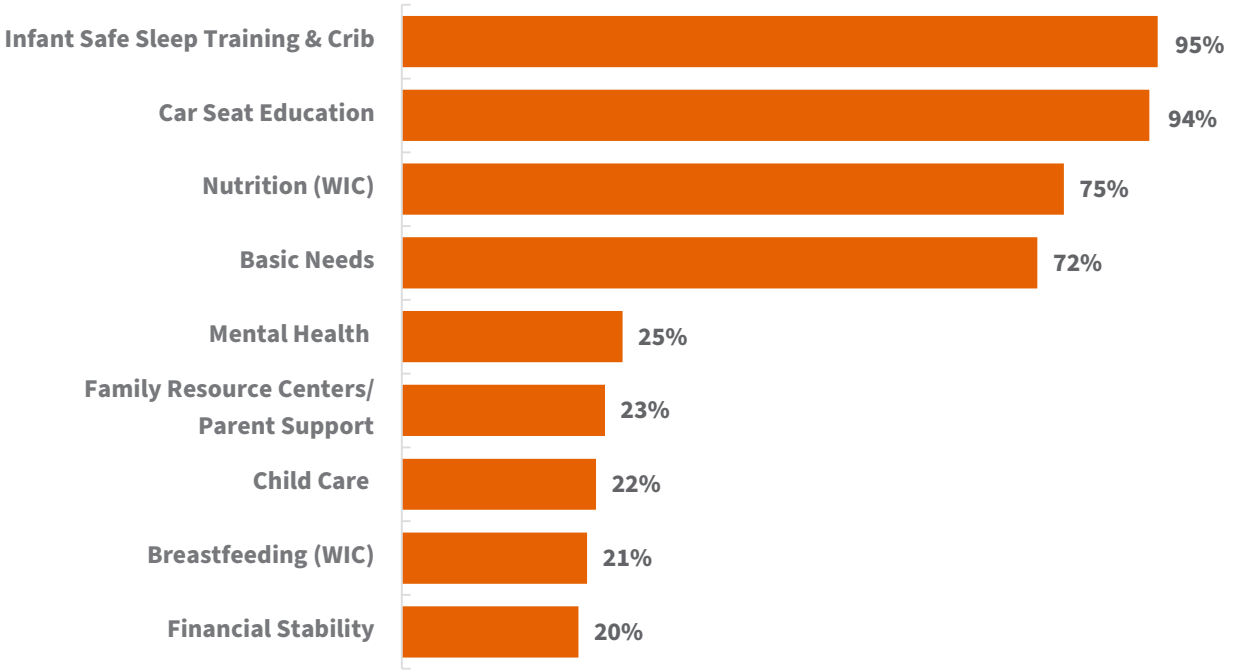


Source: Health Assessment Intake. N = 160

REFERRALS

BMU pregnancy coaches work with clients to identify health and safety challenges or barriers to services. Using this information, coaches provide individualized support and referrals to services to reduce barriers and improve outcomes for both mother and her child(ren). Nearly all participants received a referral for infant safe sleep training and crib (95%, 149/158) and car seat education (94%; 145/158). Additionally, 75% of participants a referral for nutrition support (i.e., WIC) at intake, and 72% received a referral to basic needs support services.

Figure 9 — Most Common Referrals Provided to BMU Clients



Source: BMU Service Referral Log. N = 158. Excludes five clients with no intake referral data, and includes one duplicate participant that entered and exited the BMU program for two separate pregnancies in FY 2021-22 (one delivery and one miscarriage). Percentages reflect total number of participants with valid data minus participants that did not receive a referral because they were already receiving services. Chart includes most common referrals and does not represent all referrals provided.

Because referrals and follow-ups are ongoing, the next section explores the closed-loop referral status for the 91 clients who received one or more referral and exited the program in FY 2021-22.[5] Following a referral, pregnancy coaches connect the client to the referral site. Pregnancy coaches then check-in with clients who made initial contact after the referral to see if they were able to *receive services* from the provider.

[5] As indicated by completion of an Exit Assessment.

For instance, 95% (86/91) of exited clients were referred for infant safe sleep training during their time in the BMU program. Among them, 53% were connected with the program (either the client reached out themselves or a coach set up their workshop with a Safe Sleep Baby educator), and 59% of that group received the infant safe sleep training. **Among all referral types, at least half of the clients that contacted providers were able to receive services**.

The impact of COVID-19 needs to be acknowledged here as well, as many partner services continued to have reduced capacity or limited in-person services throughout FY 2021-22.

Figure 10 — Type of Referrals Provided and Service Connections among Exited Program Participants (N = 91)

Referral Type	Referrals Provided		Referral Contacted		Received Services	
	#	%	#	%	#	%
Infant Safe Sleep Training and Crib	86	95%	46	53%	27	59%
Car Seat Education	85	94%	41	48%	23	56%
Basic Needs	72	80%	54	75%	35	65%
Nutrition (WIC)	52	71%	40	77%	24	60%
Breastfeeding (WIC)	28	31%	18	64%	12	67%
Family Resource Centers/Parent Support	27	30%	12	44%	8	67%
Financial Stability	25	27%	17	68%	12	71%
Child Care	25	27%	19	76%	12	63%
Mental Health	24	26%	14	58%	8	57%
Prenatal Care	6	7%	3	50%	2	67%
Health (Insurance, Medical/Dental Home)	5	6%	3	60%	2	67%
Previous High-Risk Pregnancy	3	3%	2	67%	2	100%
School Readiness	3	3%	2	67%	2	100%
Domestic Violence	2	2%	2	100%	1	50%
Alcohol, Tobacco, Drug	1	1%	0	0%	NA	NA
Help Me Grow	1	1%	0	0%	NA	NA

Source: BMU Service Referral Log. Because referrals are ongoing, service connections are assessed only for clients who have both a referral form and an exit form, therefore counts will not match referrals described above. *Referrals Provided* percentage denominator is exited clients minus clients who were already receiving services (no referral provided). *Referral Contacted* percentage denominator is total number of referrals provided. Received Services denominator is total number who contacted referral.

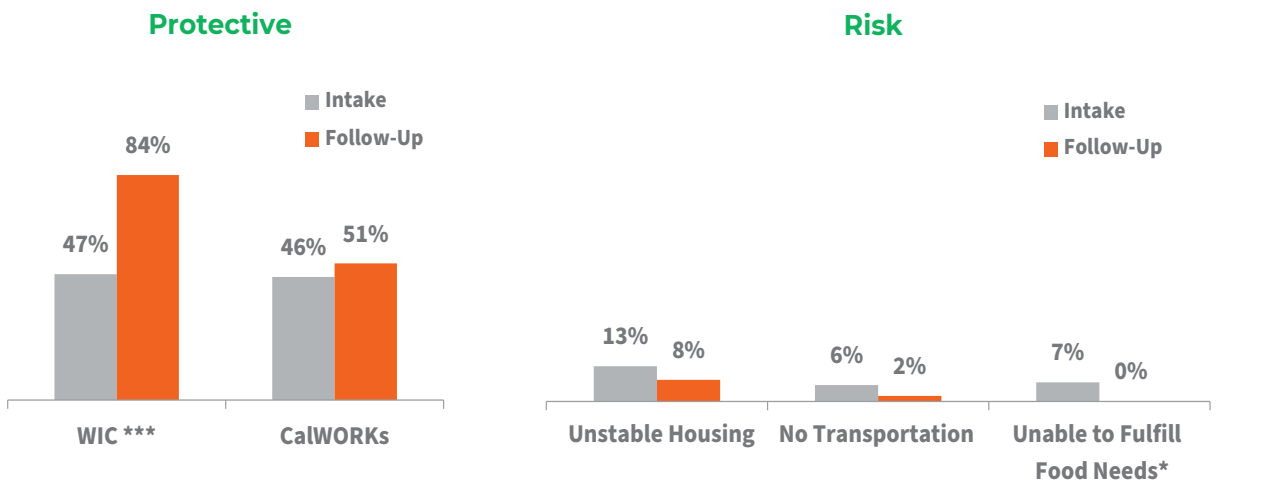
CHANGES IN RISK AND PROTECTIVE FACTORS

During intake and follow-up health assessments, clients are asked to self-report on a variety of factors related to socioeconomic conditions, psychosocial well-being, maternal health, and infant safety.

The following section explores changes in risk and/or protective factors between intake and the post-delivery follow-up (n = 65).[6] Overall, participants' access to **socioeconomic protective** resources (WIC, CalWORKs) increased. WIC enrollment increased 37 percentage points between intake (47%) and follow-up (84%). The proportion of clients receiving CalWORKs financial support also increased from46% at intake to 51% at follow-up.

Participants' access to basic needs also improved, with decreases in the proportion experiencing **socioeconomic risk factors**. At follow-up, fewer participants had unstable housing (8%) or transportation needs (2%), and none of the participants indicated they were unable to fulfill their food needs. These improvements continue to indicate that BMU participants' increased connections with essential services improved their families' stability and basic needs.

Figure 11 — Change in Reported Socioeconomic Factors from Intake to Follow-up Assessment

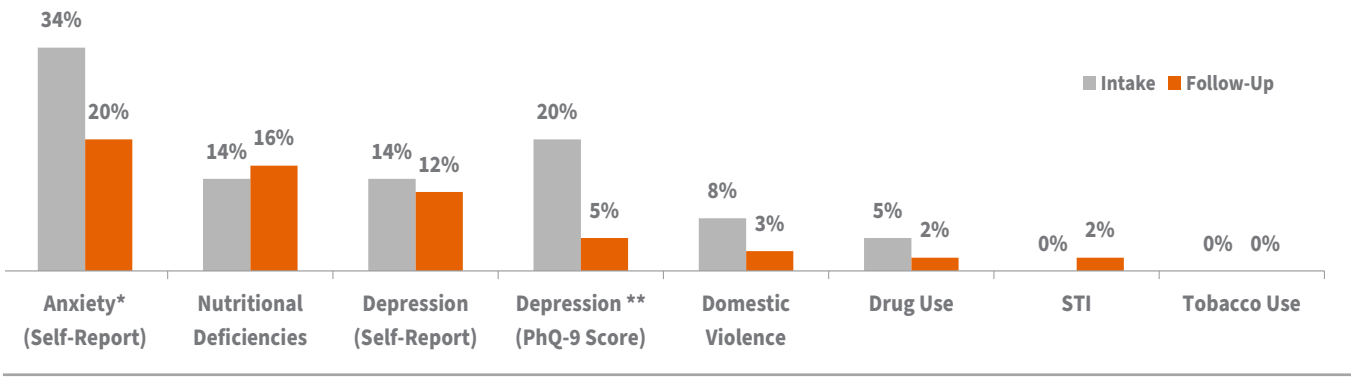


Source: Health Assessment Intake and Follow-up. Matched sets; N = 65. Ns for each item vary based on response rate to item in pre- and post-assessment. Statistically significant change (indicated on column names) reported as $p < .5$, ** $p < .01$, *** $p < .001$.

[6] Counts are lower than previous section as this section is limited to the subset of participants who had a completed intake form and completed a post-delivery health assessment follow-up during FY 2021-22, although ns may vary per question due to missing item data

As for **health factors**, participants with both intake and follow-up assessments were most likely to report anxiety (34%)[7] or depression, as indicated by a moderate to severe PhQ-9 score (20%) or their self-reported experiences (14%). At follow-up, anxiety (20%) and moderate to severe PhQ-9 scores decreased significantly (5%). Interestingly, the proportion of mothers reporting nutritional deficiencies increased slightly between intake (14%) and follow-up (16%), although this may be due to increased access to health monitoring services. Among the individuals who reported nutritional deficiencies at intake (9/66), only two still reported deficiencies at follow-up. On the other hand, eight of the 10 mothers who reported deficiencies at follow-up had reported no nutritional deficiencies at intake, which may include those who were not aware of their nutritional needs until their program engagement.

Figure 12 — Change in Reported Health Factors from Intake to Follow-up Assessment

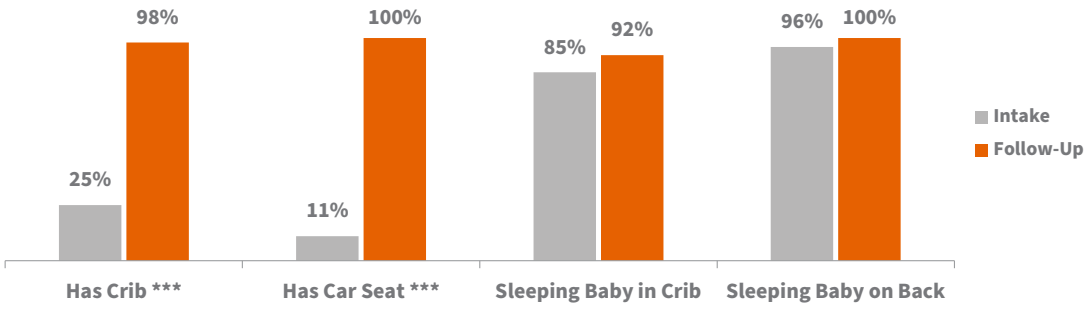


Source: Health Assessment Intake and Follow-up Matched Sets (N = 65) and PhQ-9 Assessment Matched sets (N = 59). Statistically significant change (indicated on column names) reported as * $p < .05$, ** $p < .01$, *** $p < .001$.

Mothers also experienced positive improvements in their **preparedness for infant safety**. At intake, 11% had a car seat and 25% had a crib[8] for their baby, which increased to 100% and 98% (respectively) by the post-delivery follow-up. Additionally, mothers who reported intentions to sleep their baby exclusively in a crib increased from 85% to 92% by follow up, and 100% were sleeping their baby on their back.

*At follow-up, **100%** of mothers were **sleeping** babies **on their back**.*

Figure 13 — Change in Reported Infant Safety Practices from Intake to Post-Delivery Follow-Up



Source: Health Assessment Intake and Follow-up Matched sets; N = 66. Statistically significant change (indicated on column names) reported as * $p < .05$, ** $p < .01$, *** $p < .001$.

[7] Due to a change in data collection after the start of the fiscal year, may include some participants that experienced "depression and/or anxiety"
[8] Excludes participants who (would) sleep their baby in a crib in addition to some other arrangement (i.e., co-sleeping)

BIRTH OUTCOMES

There were 71 live births to mothers served in FY 2021-22,[9] including 65 singletons and three sets of twins (6 infants). For the third consecutive year, there were **zero infant deaths** reported as of the mothers' postpartum follow-ups. However, there was unfortunately one stillborn delivery this fiscal year.

Of the 71 infants, 90% (64/71) were born at a healthy birthweight, 86% (61/71) were born full term, and combined, **79% (56/79) had an overall healthy birth (healthy birthweight *and* full term)**. Among those with less favorable outcomes, seven infants (10%) were born low birthweight and eight (11%) were born preterm.[10] Only four infants (6%) were both low birthweight and preterm. See Appendix 1 for a list of characteristics associated with individual births with at least one adverse outcome.

Additionally, 13 (19%) of the deliveries were C-Sections[11] and eight babies initially stayed in the NICU. At follow-up, 80% of infants born had attended a well-baby visit with a pediatrician. Infants with well-baby visits decreased compared with FY 2020-21 (87%). The proportion of babies exclusively breastfed in the hospital (68%, 48/71) increased slightly compared with FY 2020-21 (65%) and exceeds the state and Sacramento County averages for African Americans.[v] At follow-up, about half (51%, 36/71) of babies were still exclusively breastfed. Overall, **83% of babies born to mothers served in FY 2021-22 received some, or only, breastmilk in the hospital**, and 75% were receiving some, or only, breastmilk at follow-up.

A new addition to the program in FY 2021-22 was the provision of **doula services** to 21 women. While recognizing this is a small sample of women, the initial outcomes are stronger than those for the entire group of BMU-served women and are extremely promising. BMU plans to continue to expand the Doula program.

Longitudinal Outcomes of BMU Participants

Among the 137 children born in 2019, there were **zero infant deaths** in the first year of life compared to a rate of 10.7 per 1,000 births for African American infants countywide (see Appendix 2).

Because countywide death data are current as of 2020, this review included infants born to mothers served in the 2019 calendar year.

[9] Includes infants born to mothers who received service(s) in FY 2021-22, including mothers who joined in FY 2020-21
[10] Gestational weeks at birth was unknown for two infants
[11] Percentage of live birth deliveries (unduplicated) (n = 68). New measure as of FY 2021-22, comparisons to previous years not available

Figure 14 — Birth and Perinatal Outcomes of Pregnancy Peer Support Clients

	All Infants (N = 85)		Twins (N=2)		Singletons (N=83)		Served by Doula (N = 21)	
Live Births	**71**	**99%**	6	100%	65	98%	21	100%
Favorable Outcomes								
Healthy birthweight	**64**	**90%**	6	100%	58	89%	21	100%
Full term birth	**61**	**86%**	6	100%	55	85%	20	95%
Healthy birthweight *and* full term	**56**	**79%**	6	100%	50	77%	20	95%
Unfavorable Outcome								
Low birthweight	**7**	**10%**	0	0%	7	11%	0	0%
Preterm birth[†]	**8**	**11%**	0	0%	8	12%	1	5%
Newborn death	**0**	**0%**	0	0%	0	0%	0	0%
Stillborn[12]	**1**	**1%**	0	0%	1	2%	0	0%

Source: Pregnancy Outcomes Form. Served by Doula section refers to infants born to mothers who received any doula service, some of which may have been prenatal services only, not a doula supported birth. Infants born to mothers served by doula are also represented in the total births. [†] Note, gestational weeks at birth was unknown for two infants.

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).[13] The proportion of mothers enrolled in WIC was higher for those with healthy births (50% enrolled) compared with those with one (44%) or both (25%) unhealthy outcomes. Participants with both unhealthy outcomes (n = 4) had about half the number of weekly visits with a BMU pregnancy coach (4.5), on average, compared with those who had one unhealthy birth outcome (8.6 visits) or no unhealthy birth outcomes (8.7 visits).

Additionally, birth outcomes varied based on self-reported anxiety and depression at intake. For instance, one-third of participants with a healthy birth (34%, 19/56) and/or one of the two unhealthy outcomes (33%, 3/9) reported anxiety at intake, while half (50%, 2/4) of those with both unhealthy outcomes reported anxiety at intake. Similarly, about one in ten participants with a healthy birth (11%, 6/56) or one unhealthy birth outcome (11%, 1/9) self-reported depression at intake, compared with 25% (1/4) of those with both unhealthy outcomes. Although these results are striking, please keep in mind the small number of those born with unhealthy outcomes in total, as compared to those with a healthy birth. This could greatly impact the percentages reported.

[12] Percentages calculated for this indicator include a denominator of 72 to include the stillborn child. All other percentages in table reflect only live births (n = 71).
[13] Interpret comparisons between groups with caution due to large difference in group size.

Figure 15 — Birth Outcomes and Health and Socioeconomic Factors Identified at Intake

Pregnancy Risk and Protective Factors from Intake	Healthy Births (N = 65)		Either LBW *or* Preterm (N = 11)		Both LBW *and* Preterm (N = 8)	
Health Factors	**n**	**%**	**n**	**%**	**n**	**%**
No Regular Prenatal Care	3	5%	1	11%	0	0%
2+ Previous Miscarriages	3	5%	0	0%	0	0%
35 years or older	3	5%	1	11%	0	0%
Under 20 years old	10	18%	1	11%	0	0%
No Prenatal Vitamins	3	5%	0	0%	0	0%
STI	0	0%	0	0%	0	0%
Alcohol Use	0	0%	0	0%	0	0%
Drug Use	3	5%	0	0%	0	0%
Tobacco Use	0	0%	0	0%	0	0%
Anxiety (Self-Report)	19	34%	3	33%	2	50%
Depression (Self-Report)	6	11%	1	11%	1	25%
Moderate to Severe Depression (PhQ-9)	13	23%	0	0%	1	25%
Nutritional Deficiencies	8	14%	2	22%	0	0%
Obesity	4	7%	2	22%	0	0%
Moderate to High Stress Level	14	25%	0	0%	0	0%
Prior Gestational Diabetes	3	5%	2	22%	0	0%
Prior Preeclampsia	3	5%	0	0%	0	0%
Prior Preterm Birth(s)	2	4%	1	11%	1	25%
Prior Stillbirth(s)	2	4%	0	0%	0	0%
Has child under a year old	2	4%	1	11%	3	75%
Socioeconomic Factors	**n**	**%**	**n**	**%**	**n**	**%**
Enrolled in WIC *(Protective Factor)*	28	50%	4	44%	1	25%
Receiving CalWORKs *(Protective Factor)*	28	50%	3	33%	2	50%
Did Not Graduate High School	9	16%	1	11%	0	0%
Unstable Housing	6	11%	1	11%	1	25%
No Transportation	3	5%	0	0%	1	25%
Unable to Fulfill Food Needs	4	7%	0	0%	0	0%
Unemployed, Looking for Work	14	25%	2	22%	1	25%
Single, Unpartnered	19	34%	4	44%	0	0%
Domestic Violence	4	7%	1	11%	0	0%
Program Factors	**M**	**SD**	**M**	**SD**	**M**	**SD**
Gestational Weeks at BMU Intake	20.25	6.97	19.89	10.27	19.75	9.18
Gestational Weeks at First Prenatal Visit[14]	8.22	3.83	8.60	2.97	6.00	1.63
Number of BMU Weekly Check-Ins	18.58	8.72	13.89	8.58	13.25	4.50

Source: Health Assessment Form, Pregnancy Outcomes Form, and Exit Form. Note: Gestational weeks at birth was unknown for two infants, thus outcomes are not reported here (N = 69).

[14] Results should be interpreted with caution – out of the 66 participants reporting having had a prenatal visit, 11 (16%) did not report the number of gestational weeks at which the appointment occurred

FACTORS ASSOCIATED WITH ADVERSE BIRTH OUTCOMES

Next, a series of statistical analyses were conducted to further understand factors associated with **healthy birth outcomes**. Three cohorts of BMU clients (FY 2019-20 through FY 2021-22) were combined to increase statistical power.[15] It is important to note that these analyses identify statistical relationships among characteristics, but do not imply causation. It is likely that other unmeasured factors contribute to the relationship between the characteristics described here.

- A binary outcome of whether the birth was **healthy** (neither LBW nor preterm) (yes/no).
- A numerical, continuous outcome of all reported **birthweights**.
- A numerical, continuous outcome of all reported **gestational ages**.

ASR entered significantly correlated variables into a regression model to determine how each characteristic independently predicted birth outcomes in the larger model. Regressions can discern if a variable can independently predict an outcome variable, over and above the influence of any other covariates. *Variables that were not significantly correlated with birth outcomes were not included in regression models since they did not have a statistical relationship or impact on one another.*[16]

The first regression explored the factors independently predicting the dichotomous measure of whether the birth had both healthy outcomes (yes/no). A higher number of **check-ins with a BMU pregnancy coach**, receiving regular **prenatal care**, not having **pre-eclampsia** at delivery, and having no **prior preterm births** all independently predicted having a healthy birth.

*Having a higher number of **BMU check-ins significantly predicted all three healthy birth outcomes**, demonstrating the strong impact of the BMU program on Black infants in Sacramento County.*

Secondly, results of a linear regression on the continuous birthweight variable highlighted that having a higher number of **weekly BMU check-ins**, not having **pre-eclampsia** at delivery, not using **tobacco**, not having **gestational diabetes**, and not having **anxiety and/or depression** all independently predicted having a higher birthweight.

Lastly, a linear regression was conducted on the continuous outcome of gestational age. Results displayed that having a higher number of **weekly BMU check-ins**, not having **pre-eclampsia** at current delivery or in a prior pregnancy, receiving regular prenatal care, and not having a **sexually transmitted infection** all independently predicted having a higher gestational age.

[15] Combined data sets resulted in a total sample size of 258 live births. Includes duplicate records when clients re-entered BMU for subsequent births and/or had multiple gestations (twins).

[16] See Appendix 4 for additional analytical details, including outcomes of bivariate correlations for inclusion in regression models, as well as the statistical outcomes of the three multivariate regression models

The table below displays the factors that were found to independently predict birth outcomes.

Figure 16 — Factors that Independently Predict Birth Outcomes

Risk Factors at Intake	Healthy Birth Outcome *(Dichotomous; Y/N)*	Birthweight *(Continuous)*	Gestational Age *(Continuous)*
	N = 222	*N = 200*	*N = 210*
Number of BMU Check-Ins	●	●	●
No Pre-Eclampsia at Delivery	●	●	●
Receiving Regular Prenatal Care at Intake	●		●
No Sexually Transmitted Infection at Intake			●
No Prior Preterm Birth	●		
No Tobacco Use at Intake		●	
No Gestational Diabetes		●	
No Anxiety and/or Depression		●	
No Pre-Eclampsia in Prior Deliveries			*M*

Source: Health Assessment Form, Pregnancy Outcomes Form, and Exit Form. A blue dot represents statistical significance of at least $p < .05$. M represents marginal significance at $p < .10$.

Overall, multiple risk factors correlated with having a healthy birth outcome. Importantly, the number of BMU check-ins independently predicted all three outcomes (healthy birth outcome, birthweight, and gestational age).

It is important to note that regression model outcomes exclude the unmeasurable structural level characteristics that may impact birth outcomes (e.g., adverse childhood experiences; the long-term toll of racism and/or socioeconomic conditions on the mother's health). Regardless, these results may provide guidance for program focus and improvements.

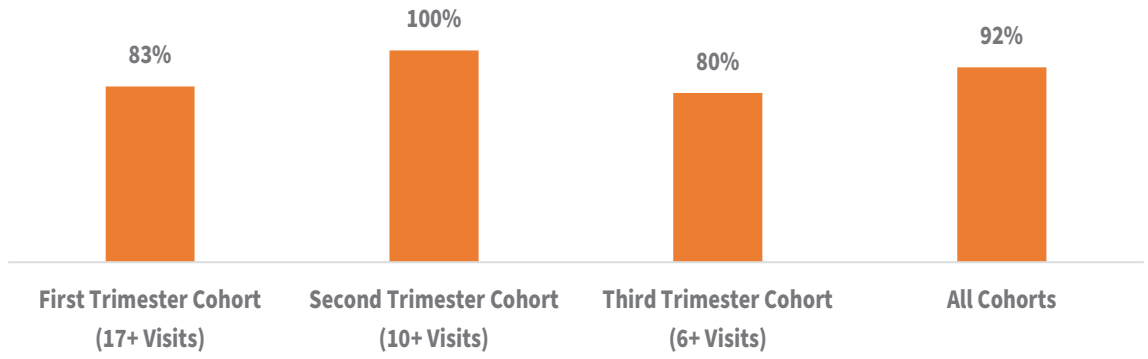
"I have never met such a ***strong support system****. They have helped me through the whole process."* **– BMU Client**

LEVEL OF PROGRAM COMPLETION

The BMU program reaches a high-need population, and retention of this population, which has historically been a challenge, was particularly more so amidst an ongoing global pandemic. Program completion is defined as completing the minimum prenatal service requirements based on the trimester of entry[17] and a postpartum visit with the BMU pregnancy coach. Partial completion is defined as completing one but not both requirements. Participants who exited without completing either requirement are categorized as *not* completing the program.

Fifty-one women delivered *and exited* the program during FY 2021-22.[18] Among them, **92% (47/51) completed the minimum number of prenatal visits with their BMU coach based on their timing of program entry**. All of the second trimester program entries who delivered and exited in FY 2021-22 (29/29) completed the minimum number of prenatal visits. About four out of five women who entered during their first trimester (10/12, 83%) or their third trimester (8/10, 80%) completed the minimum number of prenatal visits. The number of women meeting the minimum number of prenatal visits is substantially higher than women who delivered and exited in FY 2020-21 (67%, 41/61).

Figure 17 — Completion of Prenatal BMU Service Requirements, by Trimester Cohort of Entry



Source: Exit Form. Data are not presented for clients who delivered but did not have an exit form, as the dosage status is unknown. N = 51.

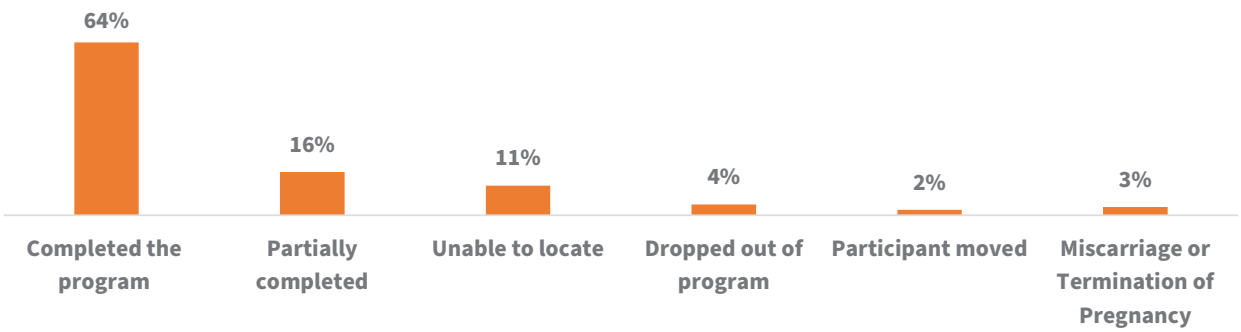
[17] Minimum prenatal service requirements are specified for each trimester at entry as women who enter the program earlier in their pregnancy have more time between program entry and anticipated delivery. The minimum service requirement for women entering during their first trimester is 17 prenatal visits; second trimester entries should complete ten or more prenatal visits; and third trimester entries should have six or more prenatal visits.

[18] Some mothers remain in the program for up to six months postpartum and therefore, some of these mothers joined the BMU program in FY 2020-21. Count includes one mother with a stillborn delivery in FY 21-22

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 offer an opportunity for coaches to learn about the delivery, check in on mom and baby's well-being, complete postpartum paperwork, and provide any additional referrals needed. In FY 2021-22, nearly all participants (98%, 50/51) that delivered and completed an exit form met with their pregnancy coach for at least one postpartum visit.

Among *all participants exiting* the BMU program in FY 2021-22,[19] 64% (61/96) completed both the minimum number of prenatal visits and a postnatal visit with their coach, while 16% (15/96) completed one of the two requirements. The remaining 20% of participants exited in FY 2021-22 were either unable to be located (11%, 11/96), dropped out before program completion/delivery (4%, 4/96), miscarried or terminated the pregnancy (3%, 3/96), or moved out of the BMU service area (2%, 2/96).

Figure 18 — Status at Program Exit



Source: BMU Exit Form. N = 96.

"[My coach] made sure ... all my needs were being met, and the biggest support was helping me get on Cal Works, food stamps, and WIC. She even got my family some wonderful gifts for Christmas. Thanks again... Black Mothers United" **– BMU Client**

[19] Includes participants who exit for reasons other than a delivery

CLIENT SUCCESS STORY

Ms. Skyla[20] is a 16-year-old high school student who heard about BMU from a family member. Ms. Skyla was looking for a program that offered pregnancy information and support. She was a first-time mom who felt she needed a lot of guidance in addition to a crib and other baby supplies. She was also navigating challenges related to her mother's physical disability and experiences of trauma with hospital care. While in the BMU program, Ms. Skyla received pregnancy coaching and doula services, and referrals to WIC, basic needs resources, safe sleep education, and car seat education. Additionally, Ms. Skyla regularly attended Mommy Mingle support groups and appreciated the advice and encouragement. Her doula helped establish an empowering birth plan with her prior trauma and challenges in mind.

Because of the support from her pregnancy coach and doula, Ms. Skyla had a birth plan, necessary supplies for the arrival of baby (including crib and car seat), as well as resources for food, clothes, and transportation to the hospital. When she was scheduled for a C-Section due to breech baby, her doula helped advocate for the birth plan, including ensuring her disabled mother could attend the C-Section surgery. Her doula also transported Ms. Skyla and her mother to the hospital, attended the birth, and provided postpartum support, including managing wheelchair access, and assistance with the restroom, clothing, food, and postpartum infant care. Ms. Skyla delivered a full term, healthy baby boy. She began breastfeeding in combination with formula and has since remained in contact with her pregnancy coach and doula for continuing support as needed.

Ms. Skyla expressed gratitude for the program staff for their much needed and ongoing support:

> "I am glad [my BMU pregnancy coach and doula were] by my side during my pregnancy. [They] always checked in on me to make sure my needs were met including, food, attending my doctor's appointments [and] helped me with a bed, diapers, clothes, and car seat for my baby… [My doula] was there at five in the morning when I delivered my baby son. **These ladies were all amazing and I am glad to have been part of this program**."

[20] Fictitious names used for clients throughout success stories. Client images are stock photos that are posed by models.

OPPORTUNITIES FOR IMPROVEMENT

The BMU program had an exciting year with the implementation of the birthing doulas and lactation support and continued to make significant impacts on Black families in Sacramento County by advocating for safer pregnancies and births for Black mothers and infants. To take the program even further, the BMU program could consider the following:

01 In partnership with First 5 and external evaluator, Applied Survey Research, expand efforts to measure and promote an understanding of structural racism as the root cause of adverse racial disparities impacting African American mothers and babies.

02 Increase support from coaches to assist clients to "close the loop" on referrals, especially to infant safe sleep training and car seat safety programs.

03 Define the mental health peer support model by exploring opportunities for Medi-Cal Peer Support Specialist certification trainings, in tandem with ensuring BMU has licensed referral partners when there is an indicated need.

04 Continue efforts to promote and expand doula and lactation services among clients to increase positive birth and breastfeeding outcomes.

05 Build more intentional relationships with the hospital systems to continue to advocate for doulas to be recognized as a legitimate part of the patient's labor and delivery team.

Family Resource Centers

Birth & Beyond supports a strengths-based approach, with the goal of decreasing child abuse and neglect through prevention and early intervention.

First 5 Sacramento provides funding for Birth & Beyond Family Resource Centers (FRCs)[21] with the goal of decreasing child abuse and neglect through prevention and early intervention. FRCs offer a multitude of services, including social-emotional learning and supports, crisis intervention, parenting education workshops, and home visiting. FRCs are strategically located in neighborhoods characterized by high birth rates, low income, and above average referrals to the child welfare system for child abuse and neglect. The locations of the FRCs tend to coincide with neighborhoods identified by the Blue Ribbon Commission as the focal areas for the RAACD initiative.

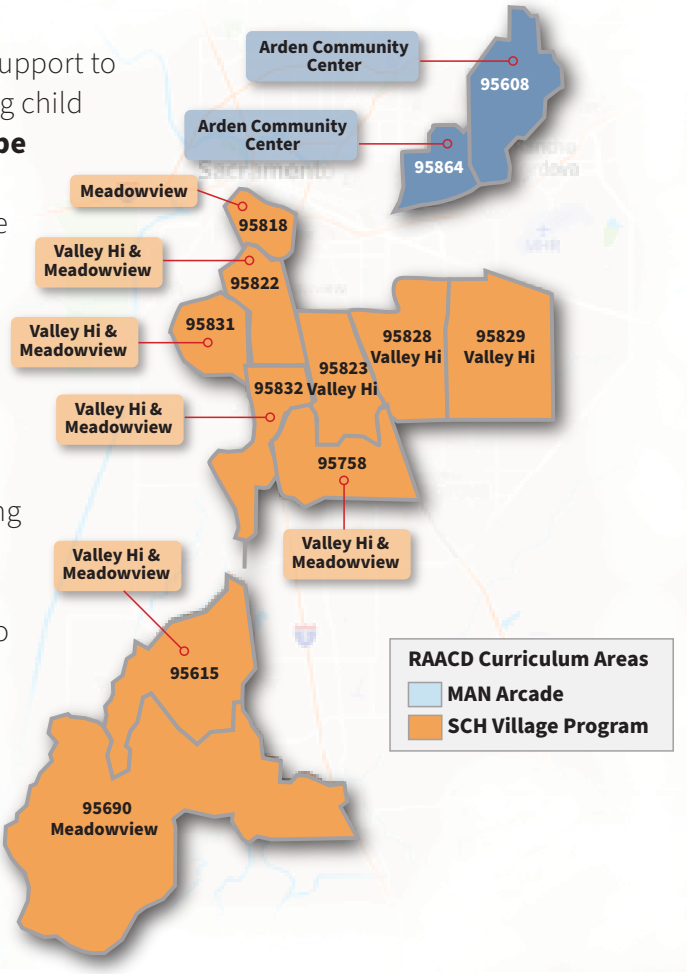
In FY 2013-14, the Commission intentionally funded more equitable prevention and early intervention services for African American families, which led to the expansion of Family Resource Centers in the Arden Arcade and Meadowview/Valley Hi communities.

Beginning in FY 2021-22, First 5 began intentionally tracking these services as part of the larger RAACD initiative to offer a comprehensive look at services targeted by this funding.

[21] FRCs are implemented by seven community-based organizations that aim to prepare staff with the skills and competencies to serve families through home visiting, parenting education workshops, crisis intervention, and social-emotional learning and supports in nine Sacramento County neighborhoods.

While all nine Birth & Beyond FRCs provide crucial support to Sacramento families with the intention of decreasing child abuse and neglect, **the following sections describe efforts from the two FRCs that received RAACD-funding**, Mutual Assistance Network Arcade Community Center (MAN Arcade) and the Sacramento Children's Home Village Program (serving Valley Hi and Meadowview).[22]

In total, **355 adults and 128** children participated in RAACD-funded activities at these locations, including a total of 507 home visits and 215 parenting education workshops. While the majority of participants were from the targeted populations of Black/African American or multiracial Sacramento County residents, a small portion of participants identified as some other race/ethnicity (3%)[23] as no one is turned away from participation in RAACD parenting education classes and light touch activities.



[22] Information about all nine FRCs can be found in the Birth & Beyond Annual Report

[23] May be a slight underestimation as some multiracial participants may not be Black/African American but a more detailed breakdown of racial/ethnic composition of multiracial families are not available

RAACD-funded services are reaching a high need, high risk population. Among those receiving RAACD-funded services, 199 caregivers completed a Family Information Form (FIF) at intake. About half (48%) of the participants reported a family income of $25,000 or less and more than one-third (34%) had accessed food/nutrition services in the six months prior to intake (see figure below).

Figure 19 — RAACD Funded Participants Family Information at Intake (Caregivers)

	FY 2021-22
# Caregivers Completing a FIF at Intake	**199**
MAN Arcade	145
SCH Village Program	54
Support Services Used in Six Months Prior to Intake	
Food/Nutrition (e.g., WIC, CalFresh, Food Bank)	68 (34%)
Parenting Education/Support	14 (7%)
FRC Services	14 (7%)
Home Visits	10 (5%)
Perceptions of Support and Hope: % (n) who agree or strongly agree (at intake)[24]	
I know of safe places for my child to play that are outside of my home	95/103 (92%)
I involve my child in day-to-day tasks for our family	83/103 (81%)
I have people in my life who provide me with support when I need it	79/101 (78%)
I am able to handle the stresses of day-to-day parenting	79/101 (78%)
I know what to expect at each stage of my child's development	78/101 (77%)
I know which program to contact when I need advice on raising my child	71/103 (69%)
I am able to take a break and do something enjoyable at least once a week	70/103 (68%)
I know which program to contact when I need help with basic needs	66/103 (64%)
I attend events in my community with my child	54/101 (53%)
I find myself in stressful situations at least once a week	53/101 (52%)
In the past two weeks I have felt down, depressed, or hopeless	42/92 (46%)
Family Income[25]	
Less than $15,000	45 (35%)
$15,000 - $25,000	16 (13%)
$25,001 - $50,000	16 (13%)
$50,001 - $75,000	4 (3%)
$75,001 - $100,000	2 (2%)
Don't Know/Prefer not to Say	44 (35%)

Source: Birth & Beyond Family Information Form – Caregiver (RAACD funding source only)

[24] Due to large amounts of missing data, percentages are out of those who have responses to each question.
[25] Percentages include participants with valid income data only (n = 127)

Family Information Forms were also completed for 147 children engaging in RAACD-funded activities. Responses showed that **most children were current on their well-child visits and had a strong support network**. For instance, 87% had a well-child visit with a pediatrician in the last 12 months and more than two-thirds had a vision (68%) and/or hearing (67%) screening. Most children (91%) had at least two non-parent adults in their lives who take a genuine interest in them. Additionally, three-quarters of the families shared meals together (75%), played together (74%), and talked together (73%) between five and seven days a week.

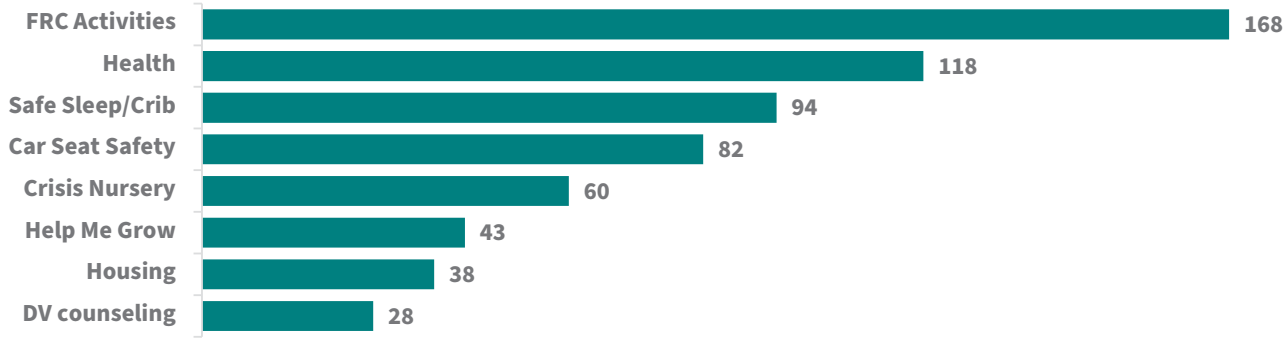
Figure 20 — RAACD-Funded FRC Participants Family Information at Intake (Children)

	FY 2021-22
# Child FIFs Completed at Intake *(Unduplicated)*	**147**
MAN Arcade	61
SCH Village Program	86
Health Services and Supports Used in Six Months Prior to Intake	
Has had a well-child health check-up in the past 12 months	127/146 (87%)
Has had a vision screening in the past year	100/147 (68%)
Has had a hearing screening in the past year	98/147 (67%)
Has had a developmental screening in the past year	75/147 (51%)
Has seen a dentist in the past six months	61/142 (43%)
Family Activities and Social Support (as of intake)	
Child has at least two non-parent adults who take a genuine interest in them	124/136 (91%)
Sat and shared a meal together *(5-7 days per week)*	103/138 (75%)
Played one-on-one with child *(5-7 days per week)*	103/139 (74%)
Talked with child about things that happened during the day *(5-7 days per week)*	101/139 (73%)
Told stories or sang songs together *(5-7 days per week)*	89/138 (64%)
Practiced the same bedtime routine *(5-7 days per week)*	89/139 (64%)
Read together at home for 10+ minutes *(5-7 days per week)*	55/139 (40%)

Source: Birth & Beyond Family Information Form – Child (RAACD funding source only). Percentages are out of those who have responses to each question.

Additionally, families engaging in RAACD-funded activities and curriculum are connected to additional services at FRCs and other community-based support systems based on their specific needs. Participants most often received referrals for other FRC activities/services, health services, safe sleep training/crib, and car seat safety resources.

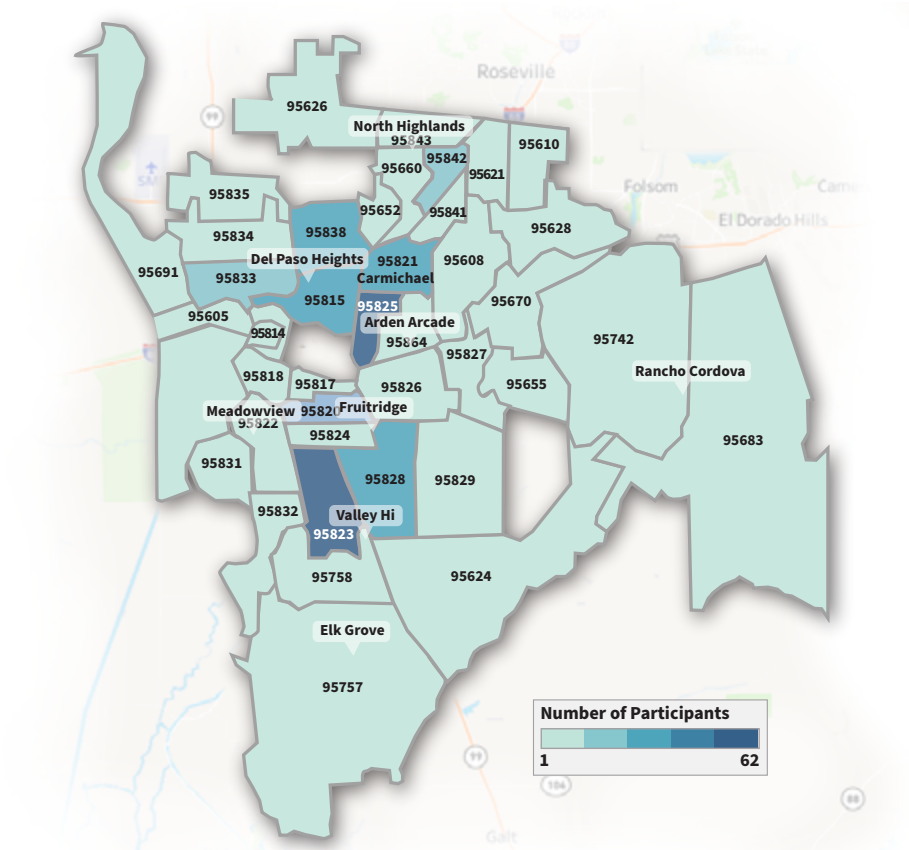
Figure 21 — Top Referrals Provided to Participants in RAACD-funded Services



Source: Service Records, Persimmony. Counts are duplicated as participants may receive more than one referral of each type.

The map shows the number of clients engaged in RAACD-funded FRC activities at MAN Arcade and SCH Village Program in FY 2021-22, by zip code. The largest number of participants were concentrated in the 95825 (Arden Arcade) and 95823 (Valley Hi) zip codes. However, participants had addresses across Sacramento County.

Figure 22 — Location of FRC Participants Served by RAACD Curriculum and/or Activities



Source: Service Records, Persimmony. N = 460. Map excludes participants who did not have an address on file, were unhoused, or were located outside of Sacramento County.

PARENTING EDUCATION

Parent education workshops serve as the primary prevention strategy to reduce risk for child abuse and neglect and enhance parenting skills by building parent efficacy, empathy, and increasing knowledge of child development and safety. Parenting education includes group-based workshops conducted virtually and in-person, using evidence-based curricula specifically designed to be culturally responsive for Black/African American families. Both the MAN Arcade and SCH Village Program utilized the Effective Black Parenting Program (EBPP) as well as the Make Parenting A Pleasure (MPAP) curricula.[26]

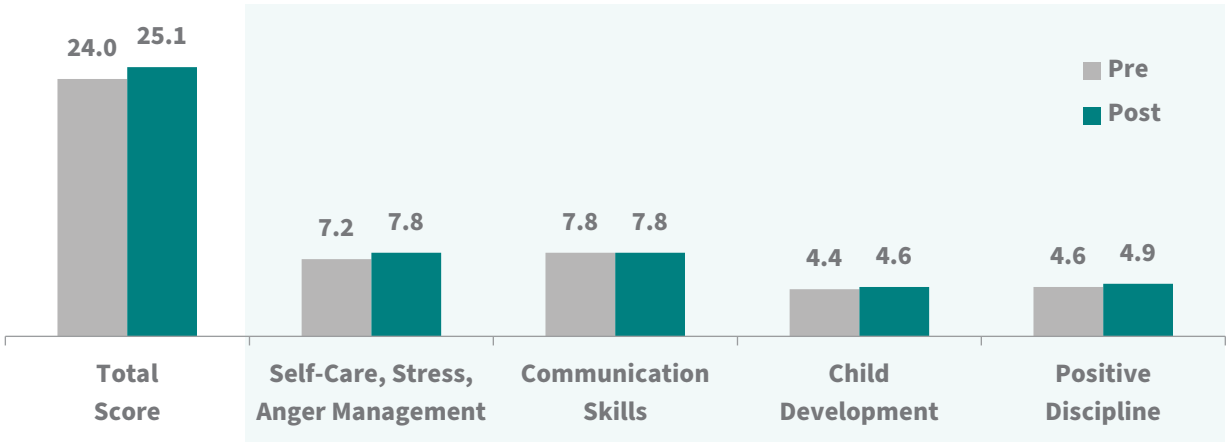
Families who were court-mandated to attend parenting education classes elected to engage in the MPAP curriculum as EBPP is not yet court approved. Additionally, EBPP participation was limited as FRC staff worked to implement this new curriculum during FY 2021-22. However, FRCs developed recordings of all sessions of the EBPP curriculum for release in early FY 2022-23.

Make Parenting A Pleasure (MPAP)

Make Parenting A Pleasure (MPAP) is a research- and evidence-based parenting curriculum targeting highly stressed families to improve the protective factors, increase knowledge of parenting skills, and reduce the risk of child abuse and neglect. MPAP is group-based and discussion-focused and typically consists of 13 modules. This curriculum measures key topics including self-care, stress and anger management, understanding child development, communication skills, and positive discipline.

In FY 2021-22, 21 parents/caregivers participated in a total of 205 MPAP classes at MAN Arcade. Among them 10 participants completed both a pre-test and a post-test upon completion. **Nine out of ten participants improved their scores in at least one domain**. Among the total group, self-care, stress, and anger management had the largest average increase, followed by improved positive discipline strategies.

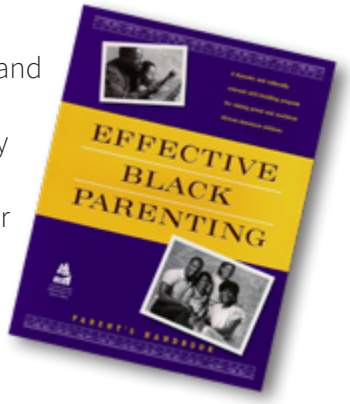
Figure 23 — Average Scores for Make Parenting A Pleasure Curriculum, Pre and Post Tests



Source: MPAP Pre and Post Test Scores. N = 10. Scores for each domain range from 1 (high risk) to 10 (low risk). Total score represents the group average for the sum score for each domain for each participant. Due to small sample sizes, significance levels not calculated.

[26] As of FY 2021-22, the EBPP curriculum was not yet approved for families attending parenting classes to meet court-mandated requirements. MPAP served as a supplement to meet the needs of these families.

Effective Black Parenting Program (EBPP)



The Effective Black Parenting Program (EBPP) is a group-based, culturally sensitive, and culturally specific training program designed to serve Black and African American families. The goals of the program include developing parent skills, promoting family pride and cohesion, and helping families cope with the negative effects of racism. Skills taught include setting family rules, using positive consequences as a reward for respectful and desirable child behavior, and using corrective consequences to address undesirable and disrespectful childhood behavior. EBPP provides activities for families to practice the skills learned in the session as well as information on drug use, single parenting, and child abuse.[vi]

The EBPP program was implemented by the RAACD-funded FRCs during FY 2021-22. **Nine participants engaged in the EBPP curriculum during this fiscal year.** Due to limited data available at the end of FY 2021-22, future reports will include more detailed discussion of EBPP participation and outcomes.

HOME VISITING

In FY 2021-22, 72 African American or multiracial parents received at least one RAACD-funded home visiting service.[27] Families served through the RAACD-funded FRCs participated in the Parents as Teachers (PAT), Effective Black Parenting Program (EBPP), or the Beautiful Beginnings curricula, although some families were still participating in the Nurturing Parenting Program (NPP) curriculum in the first quarter of FY 2021-22. The PAT model was used at MAN Arcade and adapted to address the needs of African American families in a culturally responsive way.

Effective Black Parenting Program (EBPP)

In addition to group-based parenting education curriculum, the EBPP curriculum was utilized in home visiting for Black/African American families served by the RAACD-funded FRCs. In FY 2021-22, EBPP was used in the SCH Village program, although MAN Arcade will transition to this curriculum in FY 2022-23.

In FY 2021-22, 37 parents/caregivers had an intake into the SCH home visiting program. Among them, 25 began case management with their home visitor and completed their first Family Development Matrix (FDM) assessment. The FDM is a comprehensive, strengths-based assessment tool with a focus on providing reliable information from which family workers can understand family strengths and areas of concern. This process helps facilitate family decisions and goal setting, and tracks changes in family status for the duration of their program involvement.

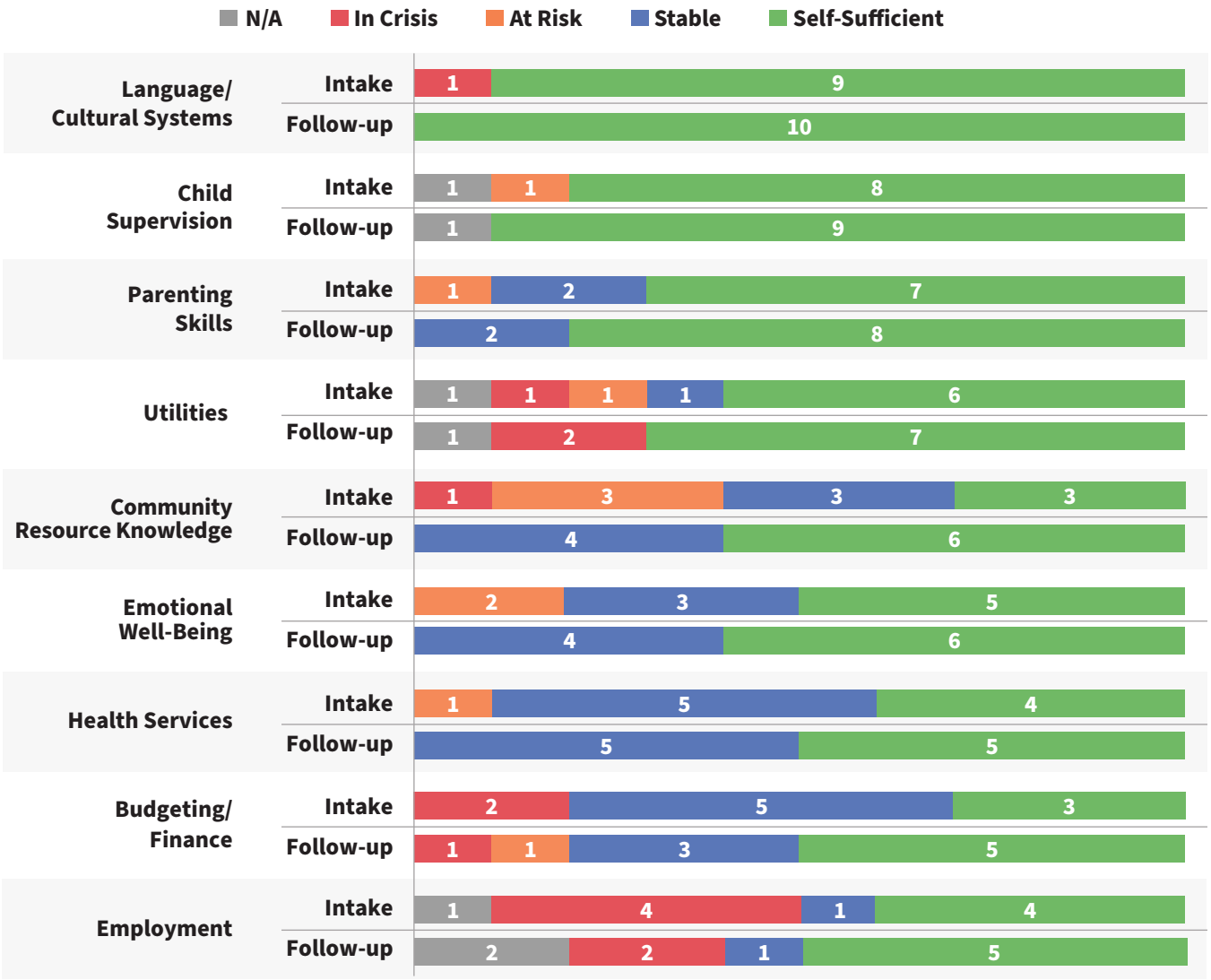
At intake, most participants had no language/cultural barriers to services (92%). Additionally, most children had no risk of emotional or sexual abuse (88%) and had stable supervision by a trusted adult (88%), sufficient nutritious food throughout the day (84%), and adequate/affordable health insurance (80%). On the other hand, 44% of parents/caregivers had little to no knowledge about budgeting or financial resources, and more than one-third (40%) had little to no knowledge of community resources, and/or were unemployed or faced difficulties keeping a job (40%).

[27] FY 2021-22 was largely an implementation year for RAACD-funded home visiting curricula. Families were transitioning or graduating from curriculum, staff were being trained on curriculum, and recruitment efforts were in progress. Families also continued to be impacted by the COVID-19 pandemic.

10 out of 10 participants ***improved*** *in at least one area on the FDM assessment*

Additionally, 10 participants had at least two FDM assessments. Among them, **every participant improved in at least one area** between their first and second assessment. The figure below shows the proportion of participants with low support/high need, moderate, or strong/stable support at intake and follow-up for the FDM measures with the most improvement (see Appendix 5 for complete table). For instance, at intake, 40% of participants' knowledge of community resources were either "in crisis" or "at risk" indicating they had little or no knowledge of or difficulty accessing community resources. Another 30% had moderate knowledge/access ("stable" condition), and 30% knew what resources were in their community and how to use them ("self-sufficient"). At follow-up, 60% had self-sufficient knowledge of the community resources and how to use them, 40% were stable, and zero were categorized as in crisis or at risk. Additionally, five of the eight participants (63%) who were in crisis or at risk at intake improved at least one point by follow-up.

Figure 24 — FDM Categories with Group Improvements Matched Set (N = 10)



Source: FDM Database; RAACD Home Visiting Clients Matched Set (n = 10)

Beautiful Beginnings Curriculum

The Beautiful Beginnings curriculum is designed to reach families with infants and toddlers ages 0-36 months. The curriculum is an activity-based approach which recognizes each child's individuality and is designed to enhance infants and toddlers' development and encourage progress in areas of concern. The curriculum is linked with the Ages & Stages Questionnaires. Key areas addressed include communication, gross motor, fine motor, intellectual, discovery, social, self-help and pretend.[vii] Beautiful Beginnings promotes the collaboration between parents and professionals and provides age-appropriate activities and materials which are oftentimes readily available in most homes.

In FY 2021-22, RAACD-Funded FRCs were still implementing/planning Beautiful Beginnings programming. Future reports will include additional information about the families served.

Parents as Teachers (PAT) Curriculum

The Parents as Teachers (PAT) home visiting curriculum recognizes parents as being the most influential part of their young children's lives and empowers them with information about child development and how to improve parenting practices. In FY 2021-22, MAN Arcade transferred all willing and eligible Black/African American families with children ages 0-5 into the PAT curriculum upon phasing out of the NPP curriculum.

- **36 PAT home visits** were provided to 11 unduplicated families, using the modified curriculum

However, various staffing, training, and documentation challenges led MAN Arcade to decide that the PAT model was not the ideal curriculum for the program in practice. As of the end of FY 2021-22, MAN was transitioning from the PAT curriculum to EBPP as the RAACD-funded home visiting model. As a result, limited data were available to report on this curriculum.

Nurturing Parenting Program (NPP) Curriculum

The Nurturing Parenting Program (NPP) is an evidence-based home visiting curriculum designed to build nurturing parenting skills as an alternative to abusive or neglecting practices. While the use of the NPP curriculum was phased out for First 5 funded families (ages 0-5), a small number of participants still received NPP home visits through December 31, 2021.

- **23 NPP home visits** were provided to seven unduplicated families
- Four parents/caregivers completed an **AAPI pre-test** before transitioning to another curriculum.
  - Participants' total scores ranged from 22 to 31[28]
  - Parental empathy had the lowest average score among the four participants (4.7) while the average score for punishment strategies were more likely to lean to valuing alternatives for corporal punishment (5.8 average). *Note: scores range from 1-10 with higher values indicating more positive parenting/childrearing behaviors.*

[28] AAPI measures risk of child maltreatment using 5 domains Expectations of Children, Parental Empathy Towards Children's Needs, Use of Corporal Punishment, Parent-Child Family Roles, and Children's Power. Each item is scored on a scale of 1 to 10 where higher scores indicate more positive parenting and childrearing behaviors (lower risk).

SOCIAL AND EMOTIONAL LEARNING AND SUPPORT (SELS)

First 5 provides RAACD funds for FRC supports for African American families with a focus on building strong, resilient families and increasing positive childhood experiences. These activities facilitate social/community engagement to reduce isolation, child maltreatment, and trauma. Social and Emotional Support and Learning activities include "light touch" child development activities, child safety workshops, resource and referral, stress reduction activities and peer support groups, and more.

*Over **650** SELS services were provided to 350 caregivers and 171 children*

In FY 2021-22, MAN Arcade and the SCH Village Program provided a total of **664 RAACD-funded SELS services**, including but not limited to Sistah to Sistah and Colorful Connections group meetings, distribution of resources (e.g., diapers, backpacks), MRT presentations, anger management courses, and other pop-up activities and outreach. Additionally, eight children received Play Care services at the Juneteenth and/or Baby Shower events, and 27 parents/caregivers received transportation services.

CRISIS INTERVENTION SERVICES (IS)

RAACD-funded FRCs also provide intensive, short-term case management to parents/caregivers who are experiencing an urgent crisis such as homelessness, food insecurity, domestic violence, or substance abuse to mitigate the crisis and help the family stabilize. Once a family's crisis is stabilized, they are connected to the other service strategies offered through the FRC, such as social and emotional supports, parenting classes, and home visiting.

Short-term Intervention Services help families stabilize crises and connect to ongoing supports

In FY 2021-22, MAN Arcade and the SCH Village Program received 159 incoming IS referrals,[29] IS clients were most often referred for services by FRCs (75/159, 47%), self-referral (21/159, 13%), a B&B staff, volunteer, or event (13%), or a home visitor (10%). About 60% of those referred were able to receive IS services, and among those served (n = 95), 87 (92%) completed their services. Only a small number referred during this fiscal year dropped out, declined, or were unable to be located.

In total, the RAACD-funded FRCs provided 216 intervention services to 170 adults during FY 2021-22. Services include the light touch (level 1) and more intensive case management for those with higher needs (level 2). Case management for Level 2 IS participants include assessments using the Family Development Matrix (FDM), however FDM summaries are not provided here as only two FY 2021-22 participants had an FDM case record.

[29] Includes duplicate individuals when referred at different times throughout the fiscal year

CLIENT SUCCESS STORY

Vonessa[30] is a mother of three who has been engaging with The Village program on and off since 2016. When Vonessa gave birth to her third child in 2021, her family was having a hard time due to stressors related to the ongoing COVID-19 pandemic. Knowing what program to contact when she needed help led her to return to the Valley Hi Family Resource Center.

When Vonessa reconnected with The Village program, also completed infant safety education (i.e., Safe Sleep Baby, Shaken Baby Syndrome prevention), and began crisis intervention case management including establishing an Empowerment Plan. Even though the Family Development Matrix (FDM) assessment was unfamiliar to her, she kept an open mind and trusted the program. During the assessment process, she realized that she wanted to invest in her future and become a homeowner.

After working with the Crisis Intervention Specialist, she asked for a referral to Home Visitation for more ongoing support. Vonessa's home visitor continued with the FDM curriculum lesson plan, including information on development, self-care, self-esteem, and creating a safe support network. Her home visitor also provided resources for financial literacy and credit repair services, so Vonessa could work on her goal of home ownership.

During this time, one of Vonessa's children experienced extreme bullying. She was upset that her child was being bullied but viewed this as a time to teach life lessons on how to address adversity. Unfortunately, the bully's family lived in the same complex and the bullying escalated from the schoolyard to the neighborhood. Fortunately, the financial literacy work that Vonessa was doing gave her the opportunity to move her family to another neighborhood.

In addition to finding safer housing in a more resource rich neighborhood, Vonessa graduated from the Effective Black Parenting Home Visitation Program. She shared that her home visitor, and the one-on-one parenting support opportunities, have helped her build her parenting skills and encouraged her to set goals and pursue her dreams.

Knowing what program to contact when she needed help led Vonessa to return to Valley Hi FRC.

Intervention Services and the Effective Black Parenting Program Home Visiting helped Vonessa identify and work toward her goals for her family.

[30] Fictitious names used for clients throughout success stories. Client images are stock photos that are posed by models.

OPPORTUNITIES FOR IMPROVEMENT

Implementing new services, curriculum, or experiencing a change in resource allocation often results in various challenges and insights into opportunities for improvement. FRC staff identified that implementing and adapting new home visiting curriculum has been arduous this fiscal year, but that families were thoroughly enjoying the curriculum and having great experiences with FRC staff. Some ways that MAN Arcade and The Village program can improve RAACD-specific services include:

01 Increase awareness of and participation in home visiting and group parenting classes and continuing efforts to "meet families where they are" in terms of offering effective outreach strategies and offering the curriculum in various formats (in person, virtual, and via recorded videos).

02 Continue work to ensure a successful "closed loop" referral process for families in need of additional support outside of the FRCs.

03 Streamline the services, curriculum, and assessments offered to meet the needs of targeted families most effectively without adding additional burden or complexities for FRC staff.

04 Improve data quality and consistency with a clear shared understanding of the curriculum, tools, and procedures for RAACD-funded efforts in order to accurately identify successes and opportunities for improvement.

- Maintain clear communication between partners and staff including FRCs, First 5, and Applied Survey Research so that evaluation efforts can to meet the needs of the families served, reduce documentation burden, and ensure that any data collected are necessary and able to identify the impact of the curriculum.

Safe Sleep Baby

SSB has likely been a major contributor to the large decrease in African American sleep-related deaths in Sacramento County, which decreased 54% from 2012-2020.

Safe Sleep Baby (SSB) is an education campaign managed by the Child Abuse Prevention Council (CAPC) of Sacramento to increase knowledge and change behaviors 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:

- Perinatal education campaign to share SSB messages
- Direct education for expecting and new parents with a child under twelve months old
- Education for hospital staff, health professionals, and social service professionals
- Cribs4Kids program to provide education and a free crib to expecting or new parents with a child under twelve months old who do not have a safe place to sleep their baby
- Quarterly SSB Collaborative meetings
- Systems change efforts related to safe sleep education policies and procedures at local birthing hospitals

In FY 2021-22, the ongoing and evolving COVID-19 pandemic continued to affect SSB staff and partner organization's efforts to conduct workshops. The SSB team continued to work remotely due to the COVID-19 pandemic and faced challenges enrolling AmeriCorps members as SSB Health Educators. Additionally, the pandemic affected outreach activities and parent/family event attendance. However, despite these challenges, the SSB team continued to be responsive to the community, provided trainings virtually, and adapted the program with a 'crib dash' format to continue to serve families. Parents informed CAPC that they prefer to attend virtual SSB workshops due to COVID exposure during their pregnancy or for their new baby.

SAFE SLEEP BABY PERINATAL 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, including parents engaged in SSB workshops, and distributed through the neighborhoods with the highest rates of African American infant sleep-related death in Sacramento County.

Additionally, AmeriCorps Member Parent Health Educators continued utilizing SSB social media pages to further communicate safe sleep education and factors that result in infant sleep-related deaths. Social media campaigns help to ensure messages reach an intergenerational audience and help mitigate the ongoing impact of the COVID-19 pandemic, as community members were less likely to see flyers, posters, and informational resources in physical, public spaces.

- In FY 2021-22, the SafeSleepBabySacramento Facebook page had 12 posts, which is 100% of the annual target. In total, posts received 106 "likes."
- The Facebook page had a total of 2,218 page followers, a net increase of 32 new followers since FY 2020-21.
- For additional reach, the CAPC SSB team continued to co-promote the SSB program through the Black Infant Health (BIH) social media pages, highlighting SSB's purpose and details on how to schedule a workshop.

SSB education was also included for all BIH Prenatal and Postpartum groups and provided in BIH's safety checklist given to all BIH program participants.

SAFE SLEEP BABY DIRECT EDUCATION

SSB Education for Community Service and Health Providers

SSB conducted "Train-the-Trainer" workshops for professionals who work with pregnant or new mothers to increase providers' knowledge about infant safe sleep practices and promote referrals to SSB parent workshops for infant safe sleep education and cribs. Trained providers included representatives from select community-based organizations, working with families, who became Cribs for Kids (C4K) partners. The C4K partners are trained to provide the one-hour parent workshops, pre- and post-tests, and distribute cribs.

Between July 1, 2021 and June 30, 2022, 131 community-based service providers were trained (compared with 280 trained in FY 2020-21). Additionally, 64 healthcare workers were trained during FY 2021-22, including providers from hospital systems and neighborhood medical offices. Community providers trained include representatives from:

- Capital OBGYN
- Child Protective Services (CPS)
- UC Davis Hospital
- Black Infant Health
- Safe Kid Mercy Medical
- Folsom Dignity Health
- Mercy General
- Augustin Dream Learning Center
- Community Incubator Leads
- HALO
- Her Health First
- Sacramento County CPS Social Workers
- Sacramento County Nurse Family Partnership
- Peach Tree Health
- Sutter General Hospital
- Nine Birth & Beyond Family Resource Centers

SSB trained 79% of the annual target of 165 community providers and 94% of the annual target of 68 hospital providers.[31] The ongoing nature of the COVID-19 pandemic impacted SSB education scheduling.

SSB Education for Parents

SSB provides education to families through home visits and one-hour-long workshops (each held virtually due to the pandemic). While families of all ethnicities participate in the program, there is a special emphasis on reaching African American families. Home visits and workshops are valuable tools to increase knowledge about infant safe sleep practices as parents receive information from a trusted source in a private and welcoming setting. 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 receive a free Pack-N-Play crib if they do not have a safe place to sleep their infant.

> *"It was very informative about things I never knew... Getting the crib was also a huge blessing"*
>
> ***– SSB Participant***

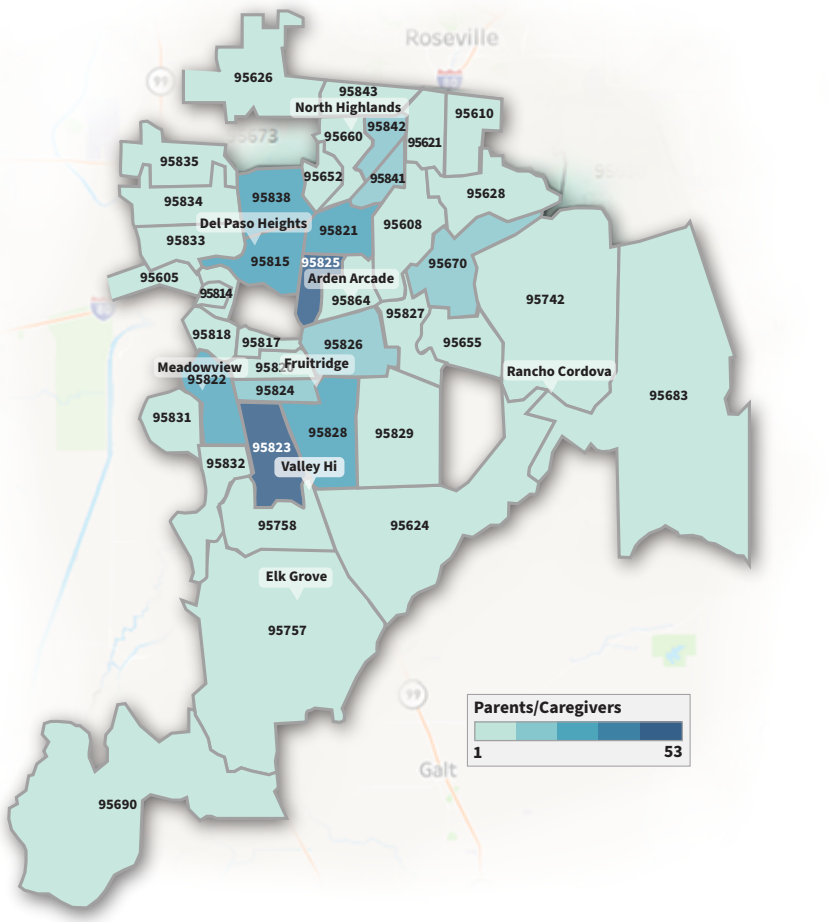
[31] Sum of YTD target of 60 nurses and hospital staff and eight staff from neighborhood medical providers

During the 2021-22 fiscal year, First 5 Sacramento funded SSB trainings for 535 unduplicated parents and caregivers. Among them, nearly one-third (30%) were African American. Additionally, 31 participants took the SSB course more than once,[32] resulting in a total of 566 SSB workshops provided.[33] The following Cribs for Kids partners provided the workshops:

- CAPC
- Her Health First
- Rose Family Partnership
- Nine Birth & Beyond Family Resource Centers

The map displays where SSB parent participants lived.[34] About two-thirds (68%) were located within the RAACD target neighborhoods, with most participants in the Valley Hi neighborhood (zip code 95823). More participants were located in the RAACD neighborhoods, compared with FY 2020-21 (56%).

Figure 25 — Location of Safe Sleep Baby Training Participants



Source: First 5 Sacramento Service Records; Infant Safe Sleep Project SSB Training (N = 443). Map excludes participants who did not have an address on file, were unhoused, or were located outside of Sacramento County

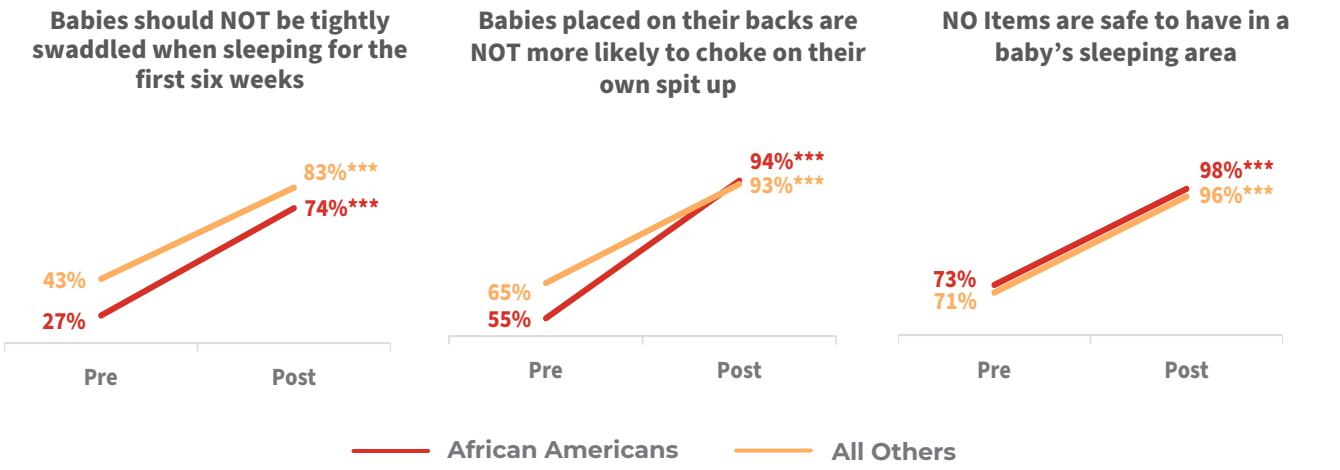
[32] This could include parents/caregivers taking the course for a subsequent baby or to repeat the education. SSB's priority is for parents to understand *and* follow the education in their behavior of safely sleeping their baby no matter how many times they need to receive the information

[33] Count includes First 5 funded only and excludes additional trainings provided using other funding sources.

[34] N = 443; excludes participants who did not provide an address or were unhoused at the time of their program involvement

Program impact is measured using a pre- and post-test assessing changes in **safe sleep knowledge** before and after the SSB training. In total, 542 participants completed both a pre- *and* post-test.[35] Among them, almost one-third (30%; 161/542) identified as African American. The questions in the figure below show the questions with the greatest knowledge improvements across all respondents (all statistically significant changes). Because of SSB's focus on African American infant sleep safety, African American participants' responses are displayed separately from all other races.

Figure 26 — Increases in Correct Answers about Infant Safe Sleep Knowledge in Pre- and Post-Test



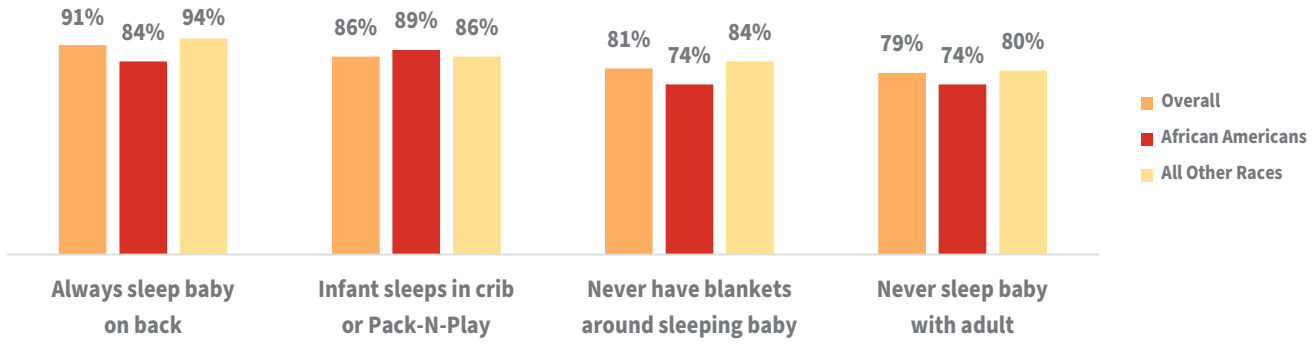
Source: SSB Pre- and Post-Surveys. African American N = 161, All Others = 381.Both groups had statistically significant differences between pre- and post-tests for all three measures at $p < .001$.

Program impact is also measured by assessing participants' **safe sleep intentions and practices**. After completion of the SSB workshop, follow up calls were made to parents/caregivers that received a crib following the SSB training. In total, 70 participants completed a follow-up assessment, including 19 African Americans (27%). At follow-up, most parents/caregivers reported *always sleeping their baby on their back* (91%; 64/70) and *sleeping baby in crib or Pack-N-Play* (86%; 60/70), closely followed by *never having blankets around sleeping baby* (81%; 57/70) and *never sleeping baby with an adult* (79%; 55/70).

[35] Includes duplicate participants who completed the training more than once. Parents/caregivers are able to participate in the training as many times as needed for the information

A larger proportion of African American participants reported sleeping their baby in a crib/Pack-N-Play compared with FY 2020-21 (76%), while fewer families (all groups) reported they never sleep their baby with an adult compared with FY 2020-21 (84% of African Americans, 96% all other race/ethnicities).

Figure 27 — Percent of SSB Participants Practicing Infant Safe Sleep Behaviors at Follow-Up, by Race

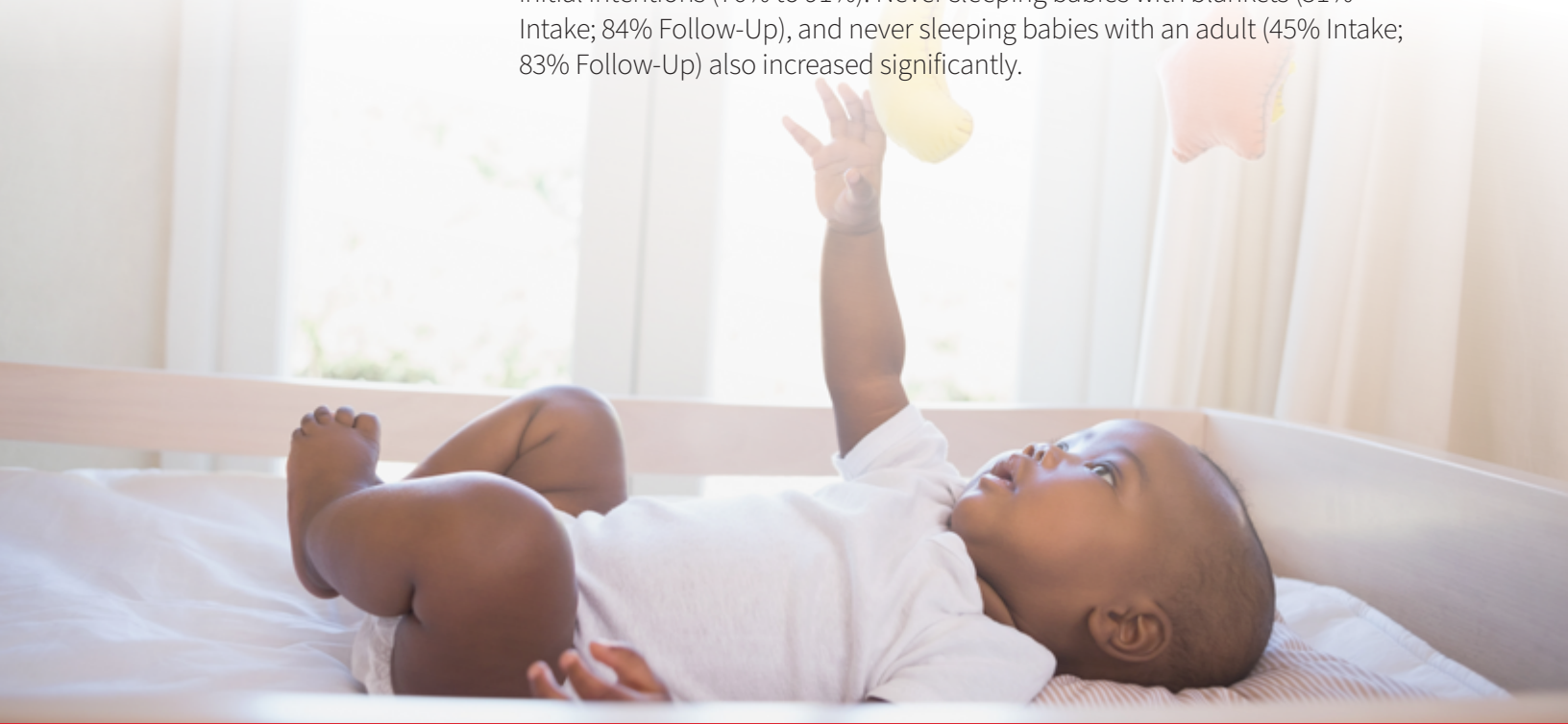


Source: SSB Follow-up Survey. Overall N = 70, not limited to matched sample highlighted above; African American N = 19; All Other Races N = 51.

*"It was very helpful. I took the workshop and received the crib after co-sleeping for a little [while], so it was **eye opening**."*

– SSB Participant

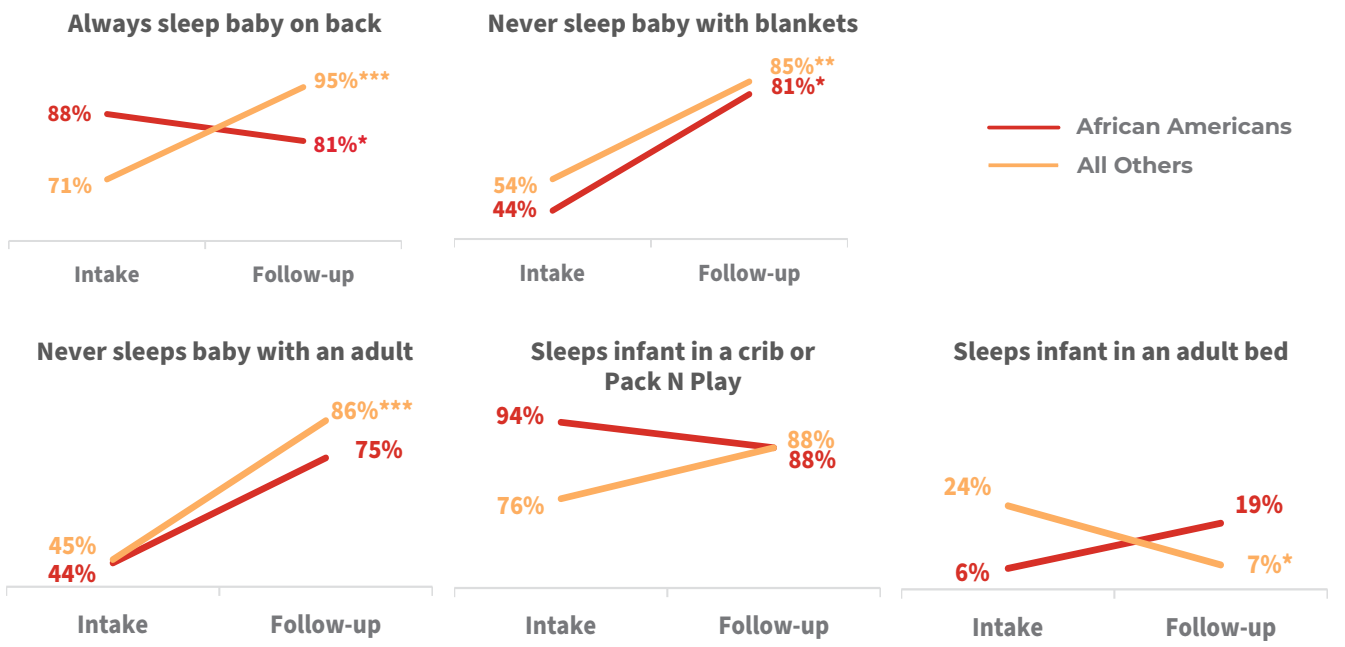
Among the 70 participants who completed a follow-up assessment, 63 also described their safe sleep intentions before the start of the SSB workshop. Intentions for infant safety practices (Intake) were compared with their practices after the SSB workshop (Follow-Up) to further identify the impact of the SSB program. Among all participants (with both assessments), parents always sleeping babies on their back significantly increased compared with initial intentions (76% to 91%). Never sleeping babies with blankets (51% Intake; 84% Follow-Up), and never sleeping babies with an adult (45% Intake; 83% Follow-Up) also increased significantly.



The figure below demonstrates the differences in intention and follow-up between African Americans and all other races. African American particpants with intake and follow up data were more likely to report that they (would) never sleep their baby with blankets at follow up (81%) compared to intake (44%), and that they never sleep their baby with an adult (75%) compared to intake (44%). Unfortunately, African American participants were more likely to sleep their infant in an adult bed (19%) than intended at intake (6%), and were less likely to report always sleeping the baby on their back (81%) or always sleeping their baby in a crib or Pack-N-Play (88%).

Anecdotal evidence suggests that these unfortunate shifts among African American participants may be related to increases in unstable housing (e.g., homelessness, couch surfing) which may make it more difficult for families to adhere to their intended safe sleep strategies. Similarly, some parents/caregivers have had challenges utilizing the Pack-N-Plays provided noting that they are too large for the space available in the rooms in which the child sleeps. Safe Sleep Baby staff have been working on updating trainings based on these data and incorporating insights from focus groups to mitigate these challenges.

Figure 28 — Differences Between Intentions at Intake and Behaviors at Follow-Up in Infant Safe Sleep Practices (Matched Pairs)



Source: CAPC, SSB Intake and Exit Surveys. Note: * indicates a statistically significant difference at $p < .05$ **indicates a statistically significant difference at $p < .01$. *** indicates a statistically significant difference at $p < .001$. African American N = 16; All Other Races N = 42.

CRIBS FOR KIDS (C4K) PROGRAM

CAPC also manages the Cribs for Kids (C4K) Program, which partners with community hospitals and local organizations to provide expectant or new parents with infant safe sleep information and Pack-N-Play cribs, funded by First 5 Sacramento and Sacramento County Department of Child Family and Adult Services (DCFAS). Participants who did not have a safe location to sleep their infant were able to receive a free crib after completing a one-hour SSB workshop with CAPC or other C4K partners.

From July 1, 2021 to June 30, 2022, crib distribution partners included:

- Nine Birth & Beyond Family Resource Centers
- CAPC
- Her Health First, Black Mothers United
- Mercy San Juan Medical Group
- Nurse Family Partnership
- River Oak Center for Children
- Rose Family Creative Empowerment Center for Independent Living
- Sutter Medical Center
- UC Davis Medical Center
- Mercy Folsom Medical Center
- UC Davis Medical Center NICU and Labor and Delivery
- Mercy General Hospital
- Methodist Hospital
- International Rescue Committee

From July 2021 to June 2022, **C4K partners provided a total of 358 cribs to parents and caregivers** in need. One-third of the cribs (33%, 117/358) were provided to African American parents and caregivers. The proportion of cribs distributed to African American parents and caregivers was relatively consistent with FY 2020-21 (35% of total).

"I really needed the crib for my baby. Glad this program is here."
– SSB Participant

SAFE SLEEP BABY EDUCATION POLICIES AND PROCEDURES

SSB also works to ensure the program's sustainability by encouraging the adoption of SSB policies and education with hospitals and medical providers. SSB education is being implemented in **all four main hospital systems** of Sacramento:

- Dignity Health
- Kaiser
- UC Davis
- Sutter

Prior to the implementation of the SSB campaign in 2015, hospitals did not uniformly provide infant safe sleep education. In FY 2021-22, **all eight birthing hospitals** in Sacramento continued to successfully implement SSB education policies.

Additionally, SSB informational videos were broadcasted in labor and delivery hospitals, as well as pediatric and OBGYN waiting rooms. Nurses provide a unique opportunity to engage parents in an infant safe sleep conversation, asking expectant or new parents the SSB question: ***"Where will you sleep your baby when you return home?"*** This wording offers the chance to begin a non-judgmental conversation about infant safe sleep practices and the risk of infant sleep-related death. In hospital settings, parents receive information and a referral to CAPC for follow-up.

CLIENT SUCCESS STORY: SAFE SLEEP BABY WORKSHOP

Deja[36] is a mother of six and pregnant with her seventh child. She was receiving services from the CAPC Black Infant Health (BIH) program, which focuses on supporting and empowering Black moms in Sacramento County.

During a BIH life planning session, Deja was asked what matters most to her as she brings her new baby into the world. She responded that it is most important that her "baby feels loved and is safe and healthy." She shared with her BIH Family Health Advocate that she was previously unhoused, lived in a shelter then transitional housing, and now has her own place with her children, but did not have a lot. When Deja's BIH Family Health Advocate asked where she planned to sleep her newborn when they come home from the hospital, Deja responded, "I like to keep all my babies right next to me when they sleep. Plus, I don't have money to buy a crib."

All BIH participants are referred to SSB and invited to attend an SSB workshop. Deja had never taken an SSB workshop while pregnant with her other children and was willing to participate. After the workshop, Deja told her Family Health Advocate how happy she was that she took the workshop and learned about the dangers of unsafe sleep.

Deja stated, "I had no idea about any of this. I want to be the best mom I can, and it doesn't matter how many kids I have, I am still learning and growing as a mother. One thing is for sure, keeping my baby safe is the priority and this workshop has taught me how to do just that". Following the workshop, Deja now has a crib for her newborn and feels more prepared to keep her baby safe and healthy.

> "… It doesn't matter how many kids I have, I am still learning and growing as a mother.
>
> … keeping my baby safe is the priority and this workshop has taught me how to do just that."
>
> – Deja, SSB Participant

[36] Fictitious names used for clients throughout success stories. Client images are stock photos that are posed by models.

OPPORTUNITIES FOR IMPROVEMENT

01 Develop and implement a "closed loop referral" practice for hospital systems and community-based medical clinics to promptly receive a referral disposition update from the CAPC SSB team indicating whether or not the referred parent/caregiver received SSB education. This closed loop process can further build relationships between CAPC and the referring system and encourage future referrals.

02 Explore opportunities to integrate SSB education into other community-based programs for new and expectant parents/caregivers.

- For example, participants in Sacramento County's refugee support program (implemented in FY 2022-23) may benefit from SSB education.

03 Research smaller, more portable crib options to address the emerging challenges of unhoused expectant or new parents/caregivers who need a crib to safely sleep their baby and lack sufficient space for a C4K Pack-N-Play.

Black mothers and babies deserve to live and prosper. Systemic racism impacts maternal health outcomes. It's time to change this.

Perinatal Education Campaign (PEC)

FY 2021-22, the PEC project team implemented two paid and one organic media campaigns on Facebook and Instagram. The campaigns generated over 1.6 million impressions.

The fourth strategy funded by First 5 are public education campaigns on perinatal causes of death. In this new funding cycle, Her Health First (HHF) was selected to review, enhance/update, and manage the two education campaigns: Sac Healthy Baby and Unequal Birth.

Sac Healthy Baby is focused on reaching African American expecting and new parents and families to provide them with information and to connect them to local resources. In FY 2021-22, blogs and learning modules were added to the Sac Healthy Baby site, in addition to a refreshed logo and design.

The **Unequal Birth** campaign is a groundbreaking partnership with Sacramento County Public Health, which aims to raise public awareness of institutionalized racism as the root cause of the racial disparities in safe births for both infant and mother. Unequal Birth initially launched in February 2020 to provide education and advocacy opportunities.

In FY 2021-22 HHF and project partners convened for monthly meetings to identify the perinatal education campaign (PEC) team's goals for the new phase of the Unequal Birth campaign and refresh of the Sac Healthy Baby campaign, continued building the PEC Advisory Committee, prepped media content ahead of the new website launches, and gained community feedback through listening sessions and a survey.

In developing the next iteration of campaign efforts, the team recognized that critical to the campaign's success would be the integration of community voice and Black representation within the content creation team. To further center community voice, an Advisory Team was created and comprised a diverse group of Black and non-Black pregnant and parenting families, caregivers, and community partners to provide ongoing insights, feedback, and message testing, to improve and enhance the campaign.

FY 2021-22 involved auditing and refreshing both the Sac Healthy Baby and Unequal Births websites. The new Sac Healthy Baby website went live in the final quarter of FY 2021-22. Although the updated Unequal Births website did not go live during the fiscal year, the team made significant strides in incorporating community voice and feedback into the campaign. Through focus groups and surveys with community members and partners, the team solicited feedback encouraging balance between the sobering realities of the disparities with solutions and inspiring calls to action. The team also focused on developing campaign imagery that highlights Black families and their beauty, strength, and resiliency.

JUNETEENTH PHOTO GALLERY

The PEC project team promoted the Unequal Birth campaign at the 2022 Juneteenth event which welcomed approximately 300-500 community members. Attendees of the Juneteenth event were racially and ethnically diverse and comprised a variety of community members, advocates, health care providers, and politicians, including the mayor of Sacramento.

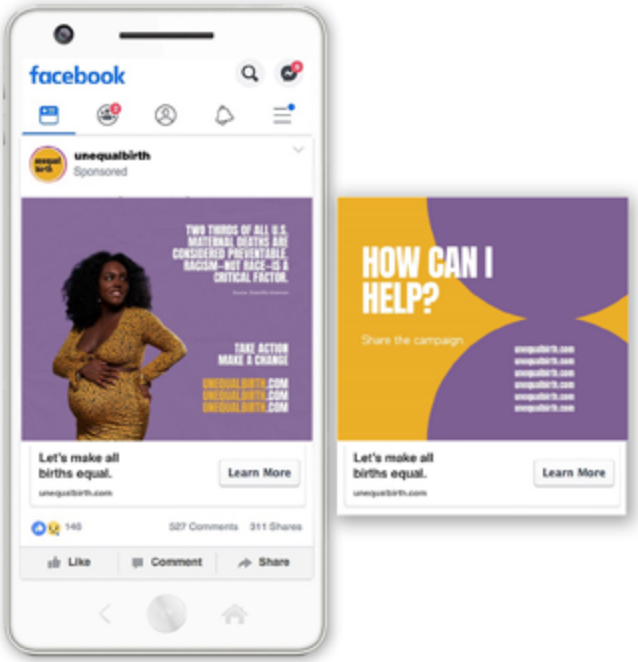
This innovative pop-up gallery emphasized the importance of holding space and consisted of a 10x20 event booth with multiple entry points that gave the feeling of an art gallery. The gallery included 14 banners and three yard-signs, each featuring Black moms from the Sacramento community in addition to statistics and information about maternal health disparities and a QR code linked to the UnequalBirth.com website. The team purposefully created a juxtaposition between strikingly beautiful photos and the harsh realities of maternal and infant health disparities. This sparked a lot of dialogue where team members were able to discuss racism at the core of unequal birth in real-time with event attendees. Additionally, 100 magnets were distributed to further promote awareness and engagement with the campaign.

The photo gallery received positive feedback from attendees, with a particular emphasis on the beautiful photos featuring real women in their pregnancy as well as the importance of highlighting Black women in this way. Feedback from various attendees and other vendors described the photo gallery as "the thing to see" at this event.

Although the PEC team recognizes the importance of technology and social media as important drivers of knowledge change, the success of the Juneteenth event really underscores the importance of grassroots efforts and the power of in-person conversations resulting from viewing these images and facts.

SOCIAL MEDIA CAMPAIGNS

In the final quarter of FY 2021-22, the PEC project team implemented two paid and one organic media campaigns on Facebook and Instagram. The first paid campaign aimed to reach African American men and women between the ages of 18 and 65, directing them to resources on the new Sac Healthy Baby website. The second paid campaign targeted the general Sacramento County population (ages 18 or older) with messaging provided by Her Health First. The organic campaign included five posts on Facebook and five posts on Instagram with various Unequal Births messages.



The organic[37] social media campaigns reached a total of 579,908 Facebook users and 303,982 Instagram users. The Unequal Birth Instagram page had 506 profile views and gained 10 new followers as a result of these campaigns. Facebook posts engaged 12,589 viewers and received 205 "likes." Additional website and social media metrics are described in the figure below.

Figure 29 — Website and Social Media Campaign Impressions and Reach

Sac Healthy Baby	May 30 - June 30, 2022	3,315,638 Impressions	7,110 link clicks (0.21% CTR)		
unequal birth	June 14 - June 30, 2022	1,008,614 Impressions	11,760 link clicks (1.17% CTR)	7,385 website users for 9,889 sessions	*(Sponsored campaign)*
unequal birth	April - June 2022	1,009,260 Facebook Impressions	621,998 Instagram Impressions		*(Organic campaign)*

Source: Her Health First Perinatal Education Campaign Quarterly Performance Reports; Note: CTR = Click Through Rate, or the number of clicks divided by the number of times the ad is shown. FB = Facebook; IG = Instagram.

[37] Organic social media are the free content (e.g., posts, stories) that all users share on their feeds.

OPPORTUNITIES FOR IMPROVEMENT

Social media and web content are increasingly utilized for information and the development of social bonds and identity. During FY 2021-22, the transition of contractors and revitalization of the public perinatal education campaign resulted in a number of insights and opportunities for improvements for future campaigns.

01 Implement insights from community members about social media and website messages, including a more simplified format/theme, increasing the number of resources for fathers/other caregivers, increasing representation of diverse family types (e.g., same sex couples, non-binary parents), and adding more positive/ hopeful messages and images.

02 Further strengthen the relationships between PEC Team partners, including Her Health First, RSE, XTG Media, First 5 Sacramento, and Sacramento County Public Health, and continued efforts to build an effective PEC Advisory Committee.

03 Incorporate additional social media strategies to target an intergenerational audience. This may include participating in media trends (e.g., using audio with a viral reach on Instagram reels), building strategies across the spectrum of options (e.g., 15-second stories, long-form Live videos).

04 Continue to bridge social media and website messaging with in-person events following the success of the photo gallery at the 2022 Juneteenth community event.

05 Expand “Call to Action” opportunities to invigorate community members, encourage link clicks, and create meaningful ways that community members can get involved with the causes associated with the Unequal Birth Campaign.

06 Explore opportunities to partner with other programs and campaigns to cross-promote. For example, the PEC campaign can partner with Safe Sleep Baby, Black Infant Health, or the Sacramento Maternal Mental Health Collaborative to promote each other’s messages, joint post, or link to one other on each other’s websites.

Countywide Trends

*Since 2012-2014, Sacramento County has seen a **6% decrease** in the rate of infant death among African Americans, and a **19% decrease** in disparity between the rates of African Americans and other ethnic groups.*

The four programs funded by First 5 Sacramento (Pregnancy Peer Support Program, Safe Sleep Baby Initiative, Family Resource Centers, and Public Perinatal Education Campaign) aim to help reduce the rate of African American perinatal, child abuse and neglect, and infant sleep-related deaths in Sacramento County.

This section presents population-level data about infant deaths and their causes, with 2012 as the baseline year, as the RAACD efforts by First 5 and other partners began after the publication of the Blue Ribbon Commission Report in 2013.

The Blue Ribbon Commission identified several goals to reduce African American child deaths by 2020.

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%

To measure progress toward these goals, population data from Sacramento County Public Health include:

- All infant deaths (by race)
- Preterm births
- Low birthweight infants

Additionally, data from the Child Death Review Team (CDRT) include:

- Infant deaths due to perinatal conditions
- Infant deaths due to sleep-related conditions (ISR)
- Child abuse and neglect homicides (infants and children ages 0-5)

It is important to note that countywide data lag behind data for the First 5 funded initiatives reported earlier. Countywide data is current as of 2020, while data from First 5 funded initiatives represent FY 2021-22. Technical details related to these data can be found in Appendix 3. To account for the effect of small population size, death rate data represent three-year rolling (overlapping) rates (total number of infant deaths in the three year period divided by the total number of infant births on those three years).

Additionally, during the 2018-2020 three-year period, there were 55,979 births in Sacramento County, compared with 58,871 during 2012-2014. The number of births in 2020 were particularly lower than prior years (17,978 in 2020 compared with 18,993 in 2018 and 19,008 in 2019). Fewer births impact all rates of infant death reported below as each additional death has a larger impact on the total rate due to a smaller denominator (total births). Please review the trends over time with these decreases in mind.

Please also note that it is standard for child death rates to be presented as deaths per 100,000 children and infant death rates to be reported as deaths per 1,000 live births. Rates are noted in the source located below each figure.

OVERALL INFANT MORTALITY

During the three-year baseline period (2012-2014), African American infants died at a rate of 10.8 per 1,000 births (all infant deaths, including preventable and unpreventable). During 2018-2020, the African American infant death rate was 10.2 per 1,000 births. The current three-year rolling rate is only slightly lower (6%) than the baseline and rates have increased for all groups since 2018.

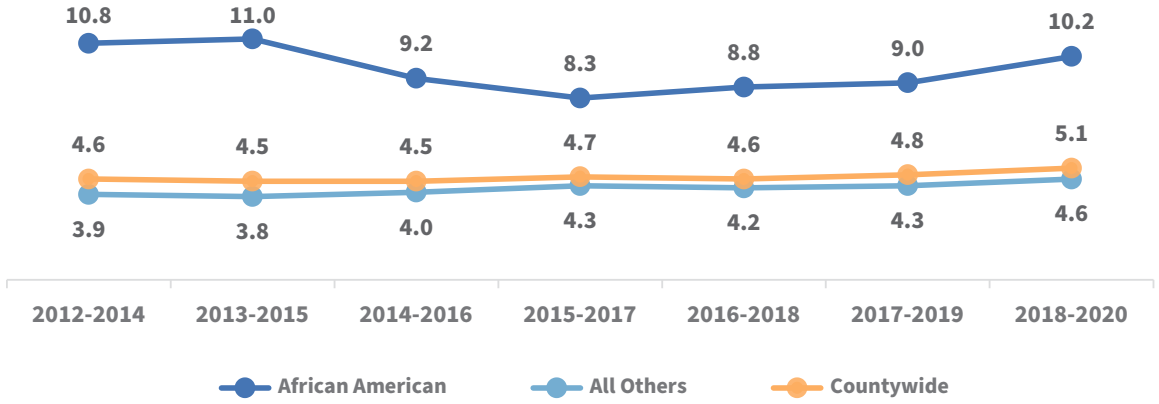
However, multiple factors influence this increase. First, three-year rolling rates continue to be impacted by a markedly higher number of African American infant deaths in the 2018 calendar year.[38] This spike in 2018 impacts the three-year rolling rates for 2016-2018 through 2018-2020. Second, while the number of African American infant deaths in 2020 (18) increased compared with 2019 (13), the rate of death appears even higher due to fewer births reported in 2019 and 2020 compared with previous years (see Appendix 2 for additional details). In 2020, there were 115 fewer African American infants born in Sacramento County compared with 2019 births. Similarly, the total number of births for all groups in 2020 decreased by more than 1,000 between 2019 and 2020 – likely due, in part, to COVID-19 shelter-in-place orders, as well as economic and health concerns permeating the nation through this pandemic.[39, viii]

In 2018-2020, despite a 19% reduction in the disparity gap since 2012-2014, **African American infants remained two times as likely to die compared to all other race/ethnic groups combined**.

[38] 12 African American (AA) infant deaths in 2016 (6.6 per 1,000 births), 14 AA infant deaths in 2017 (7.2 per 1,000), 23 AA infant deaths in 2018 (12.7 per 1,000), 13 AA infant deaths in 2019 (7.2 per 1,000), and 18 AA infant deaths in 2020 (10.7 per 1,000 births).

[39] While birth rates have been declining nationwide, COVID-related fertility declines may relate to reduced access to partners or intentional delays in childbearing (among those with the means and resources to do so). While the proportion of births to younger people with fewer resources increased, this population was also more vulnerable to COVID-19 which also had impacts on birth outcomes including increased chances of preterm births and infants being in NICU after birth (Frueh, 2022).

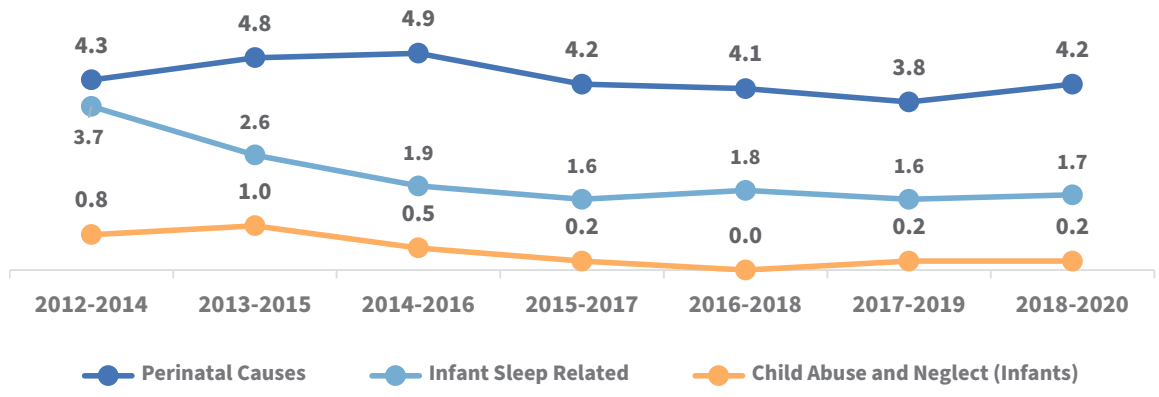
Figure 30 — Three-Year Rolling Rate of Infant Death in Sacramento County, by Race



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

The figure below displays changes in infant death rates for the three focal areas of the First 5 Sacramento RAACD initiative's goal of reducing African American infant death. Infant sleep related (ISR) deaths decreased 54% between the 2012-2014 baseline and the most current available data. Additionally, the ISR disparity gap between African Americans and all other races decreased 60% since baseline. The African American infant rate of Child Abuse and Neglect (CAN) deaths decreased 77% since 2012-2014. There have consistently been zero African American infant CAN deaths since 2015, apart from one during 2019. The rate of deaths due to perinatal causes among African American infants increased slightly in the most recent three year period. However, this increase reflects global patterns in worsening maternal, fetal, and neonatal outcomes during the COVID-19 pandemic.[ix] There have also been fewer births in Sacramento County overall (55,979) and among African Americans (5,294) during 2018-2020, compared with 2012-2014 (58,871 and 5,998 respectively) which also may affect rates.

Figure 31 — Three-Year Rolling 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, 2019, and 2020. Rate is per 1,000 infants. Historical rates for Infant Child Abuse and Neglect updated to reflect accurate calculations.

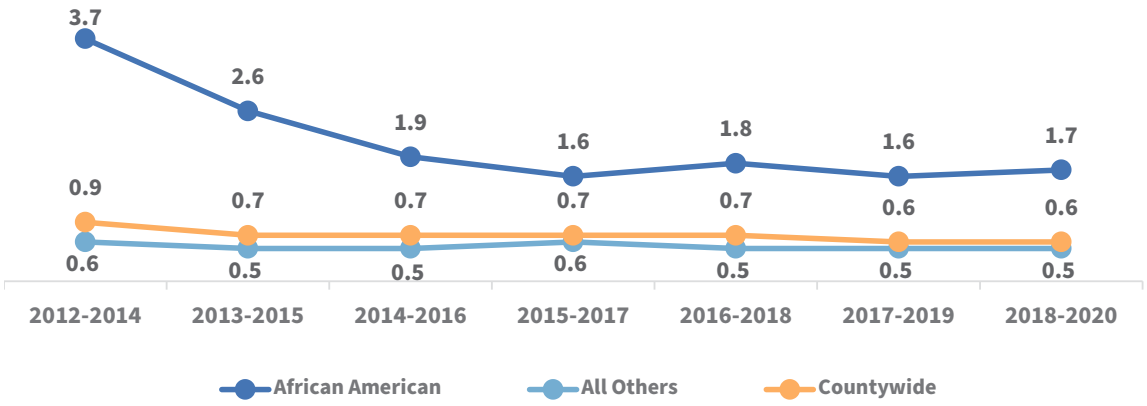
The sections below discuss each of the three causes (infant sleep-related, perinatal, child abuse and neglect) separately, including comparisons to countywide estimates.

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. Rolling rates demonstrate a significant long-term decrease in African American ISR deaths (-54%) between 2012-2014 (3.7 per 1,000) and 2018-2020 (1.7 per 1,000). The disparity gap between African American ISR deaths and all other ethnic groups has also decreased 60% since the 2012-2014 rolling rate. The Safe Sleep Baby campaign is very likely a significant contributor to these large decreases.

Since 2012-2014, Sacramento County had a 54% decrease in the rate of infant sleep-related death among African Americans, and a 60% decrease in the disparity gap between African Americans and other ethnic groups.

Figure 32 — Three-Year Rolling Rates of Infant Sleep Related Deaths in Sacramento County

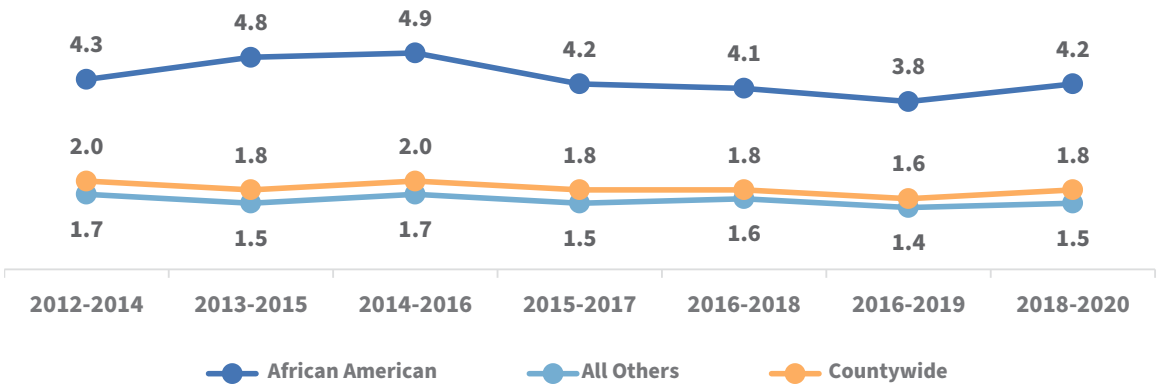


Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, and 2020.
Rate is per 1,000 infants.

INFANT DEATHS DUE TO PERINATAL CAUSES

Perinatal causes include deaths due to prematurity, low birthweight, placental abruption, and congenital infections and include deaths through one-month post-birth. During the 2012-2014 baseline period, African American infants died from perinatal causes at a rate of 4.2 per 1,000 births. Although there were steady declines in three-year rates since 2014-2016, the 2018-2020 rolling rate increased and is approaching the baseline level. This increase is primarily due to a high number of African American perinatal deaths in 2018 (11), as there were a comparatively lower number of African American perinatal deaths in 2019 (4). However, an increase in 2020 (7) also contributed to the rolling rate increase.

Figure 33 — Three-Year Rolling 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, 2019, and 2020.
Rate is per 1,000 infants.

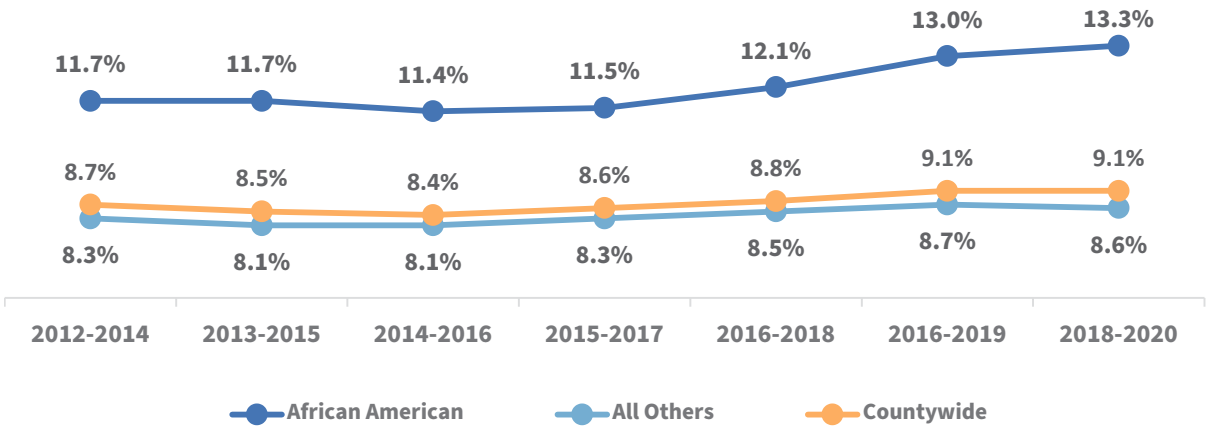
PRETERM BIRTHS

Preterm births include infants born before 37-weeks of gestation. In Sacramento County, 13% of all African American babies born during 2018-2020 were preterm. The number of preterm births in 2018-2020 were 14% higher than the 2012-2014 baseline (11.7%). It is important to note that the proportion of preterm births among infants of all other races also increased since 2012-2014. Rates of preterm births have also increased across Sacramento County, the State of California, and nationally. Healthy People 2030 reports describe the national status of preterm births as "getting worse."[x] In 2020, the national rate was 10.1% of live births.

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 Sacramento County as a whole. The Healthy People goal is to reach 9.4% by 2030. However, it is also important to note that COVID-19 infections have been linked to significantly increased likelihood of adverse birth outcomes, including preterm births. Additionally, the COVID-19 pandemic has had a disproportionate impact on communities of color, including increased exposure and health disparities (e.g., structural racism, homelessness, low wage jobs, hazardous environments, less access to health care/COVID-19 testing, and underlying health conditions).[xi]

Additionally, within Sacramento County the proportion of preterm African American infants was 1.5 times the rate of all other races in 2018-2020. In addition to potential COVID-related barriers, this substantial gap reflects national discrepancies and may be linked to structural barriers as well as racism-related stress,[xii] highlighting the need for more structural and systems approaches to address the root causes of racial disparities in preterm births and the associated long-term conditions

Figure 34 — Three-Year Rolling Total Percentage of Preterm Infants Born in Sacramento County

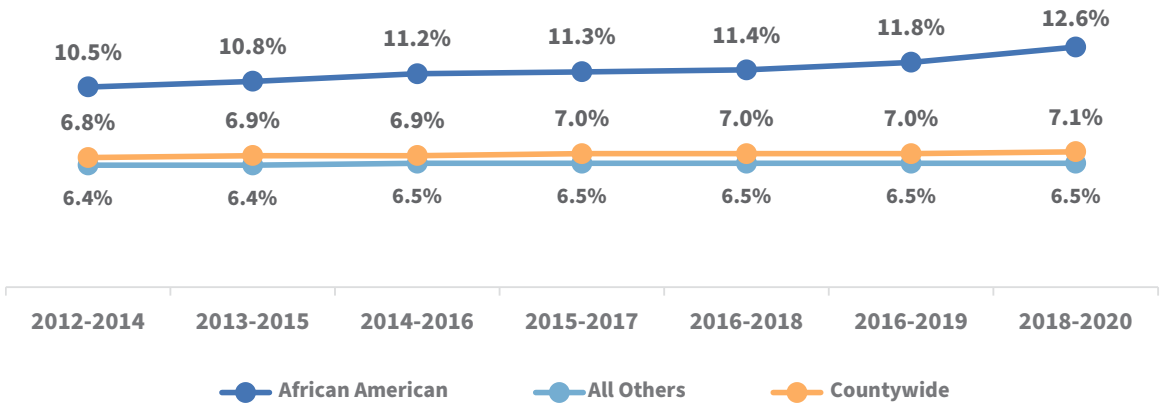


Source: Sacramento County, Department of Health Services, Public Health Division, Epidemiology Program, Birth Statistical Master Files.

LOW BIRTHWEIGHT

Low birthweight newborns are those weighing less than 2,500 grams (5 lbs., 8 oz.). The figure below displays the percentage of African American infants born low birthweight (LBW) between the 2012-2014 baseline and 2018-2020 (rolling total percentages) compared to infants of all other races. The percentage of African American babies born LBW during 2018-2020 is 19% higher than the baseline rolling rate (10.5% in 2012-2014, 12.6% in 2018-2020).

Figure 35 — Three-Year Rolling Total Percentage of Low Birthweight Births in Sacramento County



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

While increasing trends are concerning, nationwide estimates also show larger proportions of newborns born at a low birthweight in recent years. National Vital Statistics (2022) indicates that LBW levels rose 4% between 2014 and 2019. However, national rates of LBW declined 1% between 2019 (8.3%) and 2020 (8.2%) – the first decline since 2012.[xiii] Countywide rates remain lower than these national estimates while rates among Sacramento County African Americans continue to increase.

COVID-19[xiv] as well as persisting racial disparities and the chronic stresses of discrimination and racism are known contributors to health/birth inequities. For instance, research on the negative impacts of racism on mothers and babies indicate that exposure to racial discrimination and segregation during childhood have more negative health consequences than other common contributors (e.g., diet, exercise, smoking, poverty). Similarly, studies commonly found a negative effect of interpersonal discrimination and chronic worry about racial discrimination on preterm birth and birth weight.[xv]

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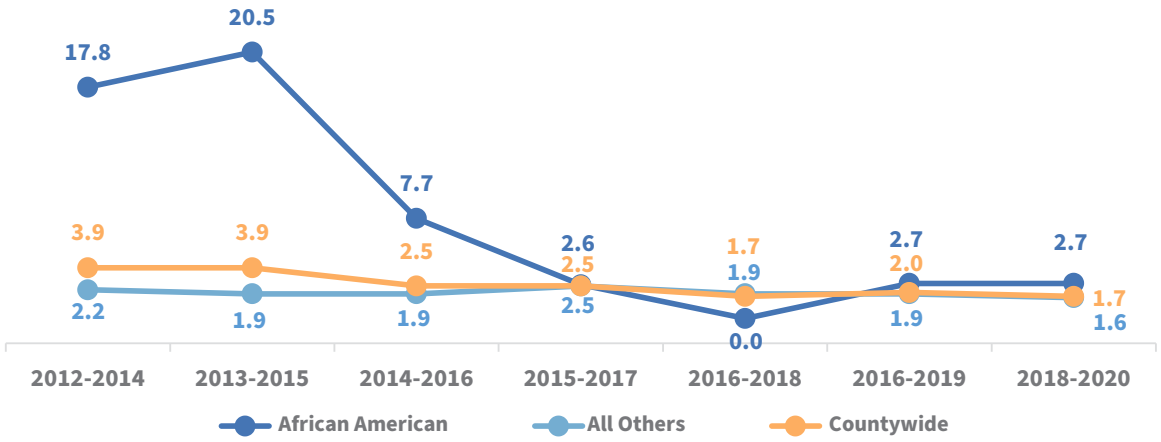
DEATHS DUE TO CHILD ABUSE AND NEGLECT (0-5)

Among all **children ages 0-5**, African American children died from child abuse and neglect at a rate of 17.8 per 100,000 children during the 2012-2014 baseline period. Due in large part to the broad RAACD initiative efforts throughout Sacramento County (including the Birth & Beyond Family Resource Centers and the cultural broker program through the Department of Child, Family, and Adult Services (DCFAS)), this rate has since drastically declined. The 2018-2020 rate of African American CAN homicides remained consistent with the 2017-2019 rate (2.7). In 2020, there were zero African American child deaths among children ages 0-5 indicating that the stable rate is due to one CAN death in 2019.

Since 2012-2014, Sacramento County has seen an 85% decrease in 0-5-year-old child deaths due to CAN homicide among African Americans, and a 93% decrease in the disparity gap between African Americans and all other ethnic groups.

Figure 36 — Three-Year Rolling 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, 2019, 2020.
Rate is per 100,000 children ages 0-5.

Summary and Conclusions

Although infant deaths due to perinatal causes decreased, preterm and low birthweight births are increasing across Sacramento County, and as a larger national trend.

FY 2021-22 marked the start of a new strategic planning cycle for First 5 Sacramento, including the start of new contracts with funded partners. As a result, many of the RAACD initiatives were being updated, revitalized, and implemented along with continued adjustments to the "new normal" of the ongoing and evolving COVID-19 pandemic.

BLACK MOTHERS UNITED:

Despite many shifts, RAACD program efforts continue to show many promising practices. For instance, more check-ins with Black Mothers United (BMU) coaches continued to be a significant predictor of healthy birth outcomes (including healthy birthweights and gestational age), and BMU clients showed significant improvements in their protective factors and reduced barriers to healthy birth outcomes. Importantly, among the 137 children born in 2019 whose mother participated in the BMU program, there were **zero infant deaths** up to a year post- birth!

FAMILY RESOURCE CENTERS:

The MAN Arcade and SCH Village Family Resource Centers (FRC) implemented light touch activities and new case management and home visiting curriculum targeting communities of color to reduce rates of child abuse and maltreatment and support families in need of resources and crisis intervention. Initial data using the Family Development Matrix assessment shows promising insights into increased self-sufficiency following the Effective Black Parenting Program home visiting. Similarly, participants in the Make Parenting a Pleasure parenting education curriculum had improvements overall, and particularly for self-care, stress, and anger management.

SAFE SLEEP BABY:

Safe Sleep Baby (SSB) workshops continued to have significant impacts on providers and caregivers, with significant improvements in knowledge about infant safe sleep and increased safe sleep practices and decreases in sleep-related deaths. However, in some instances, fewer participants engaged in safe sleep practices compared to their intention prior to the workshop, particularly among African American participants. Initial insights led program staff to identify unstable housing and/or small, shared living spaces as a contributor to not always using the crib/Pack-N-Play. SSB staff are working to adjust messaging and identify more opportunities to "meet families where they are" while still maintaining safe sleep practices. SSB has likely been a major contributor to the large decrease in African American sleep-related deaths in Sacramento County, which decreased 85% from 2012-2020.

PERINATAL EDUCATION CAMPAIGN:

The Perinatal Education Campaign (PEC) went through a major revitalization in FY 2021-22. In addition to updating the Sac Healthy Baby and Unequal Birth online media, the PEC initiative had a major success reaching community members at the annual Juneteenth event utilizing a photo gallery booth which juxtaposed beautiful images of Black families/pregnant women with the unsettling facts and statistics about racism as a root cause of disparities in maternal and infant health outcomes.

COUNTYWIDE TRENDS:

Overall, countywide rates continue to show reductions in African American child deaths, likely in large part due to the RAACD initiative. However, some trends are moving in undesired directions across the county, likely due, in part, to economic and public health shifts related to the COVID-19 pandemic, as well as ongoing structural, systemic, and institutional racial discrimination. The RAACD programs are appropriately positioned to explore the larger patterns in these trends and "scale up" efforts to address them at a county level and reach even more Sacramento families. Because of especially alarming trends for African American infants born preterm and low birth weight, it might be prudent to organize a committee including those involved in related fields (e.g., medical teams, OBGYNs, community-based organizations) to create a call to action to reverse these alarming trends.

In addition to direct services and public education, policy/systems change are also needed to effect real and lasting change. 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. Additionally, now that the Blue Ribbon Commission's target year of 2020 has passed, it is important to revisit the long term goals and re-commit to the reduction of African American child deaths, utilizing the insights gained since the last goals were set.

Appendix 1 — Factors Associated with Poor Birth Outcomes

Case	Weeks Pregnant at Entry	Twin	Birthweight (lb., oz)	Low Birthweight	Gestational Age	Preterm	# Weeks Prenatal Care Began	No (or Late) Prenatal Care	# of Weekly Check-ins	Socioeconomic Barriers	Psycho-social Factors During Pregnancy	Mother's Health Conditions
1	24	N	5 lb 0 oz	Y	35	Y	8	N	13	No transportation	Anxiety and/or Depression	Has child < 1 year; Pre-eclampsia in pregnancy
2	21	N	7 lb 3 oz	N	35	Y	9	N	16	Pressing Need: Housing		Prior LBW; Prior Preterm; Nutritional deficiencies;
3	6	N	4 lb 10 oz	Y	35	Y	6	N	19		Anxiety and/or Depression	Pre-eclampsia in pregnancy
4	24	N	4 lb 0 oz	Y	33	Y	4	N	8			Has child < 1 year; Kidney Disease/UTI; Pre-eclampsia in pregnancy
5	5	N	5 lb 5 oz	Y	40	N		Y	22	Single, no partner; Pressing Needs: Transportation, Food		Pre-eclampsia in pregnancy
6	20	N	Stillborn - Not Provided		44	N	6	N	18	Pressing Needs: Transportation, Food	Anxiety and/or Depression	Nutritional deficiencies; 35+ years of age; Obesity; High Blood Pressure;
7	10	N	5 lb 4 oz	Y	40	N	10	N	27	Single, no partner; Pressing Need: Housing		
8	29	N	5 lb 13 oz	N	38	N	-	Y	9	Single, no partner; Unemployed, looking for work; No stable housing; Pressing Needs: Prenatal Care, Housing, Counseling	Anxiety; Depression;	Has child < 1 year;
9	10	N	5 lb 5 oz	Y	39	N	Unknown	Unknown	22	Single, no partner; Unemployed, looking for work; No high school diploma; Pressing Needs: Transportation, Housing	Anxiety and/or Depression; Domestic Violence	Under 20 years of age;
10	14	N	7 lb 0 oz	N	36	Y	12	Unknown	15			Prior gestational Diabetes; Diabetes (Type I or II); Obesity; Pre-eclampsia in pregnancy
11	30	N	5 lb 15 oz	N	38	N	4	N	5		Anxiety and/or Depression	35+ years of age; Obesity
12	30	N	5 lb 15 oz	N	34	Y	8	N	5			Prior gestational Diabetes; Nutritional deficiencies;
13	25	N	4 lb 0 oz	Y	36	Y	6	N	13	Unemployed, looking for work; No stable housing Pressing Need: Food	Depression	Prior Preterm Has child < 1 year; Other Health Condition
14	30	N	5 lb 11 oz	N	36	Y	1st Trimester	N	4	Pressing Need: Counseling		Other Health Condition

Appendix 2 — Countywide African American Births and Infant Deaths 2012-2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number AA Births	2,078	1,979	1,941	1,901	1,826	1,947	1,817	1,796	1,681
Number AA Infant Deaths	22	24	19	21	12	14	23	13	18
AA Infant Mortality Rate *(per 1,000 births)*	10.6	12.1	9.8	11.0	6.6	7.2	12.7	7.2	10.7
Three-Year Rolling Rate *(Period end year)*	-	-	10.8	11.0	9.2	8.3	8.8	9.0	10.2

Appendix 3 — Technical Notes Related to County Trend Data

Since 2019, representatives from First 5 Sacramento, Sierra Health Foundation, and Sacramento County Public Health have met annually to discuss and agree upon core parameters for gathering and sharing RAACD data. The following presents the highlights of these discussions as of Fall 2022.

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, rolling three-year periods relative to that baseline.

CODING OF RACE

Birth data is based on birth certificate information and includes individuals who identify as African American only. Individuals whose race is listed as "Multiracial" are not included in the Sacramento County Public Health's (SCPH) category of African American. Death data is gathered by the SCPH 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 Sacramento County Public Health as the source of overall infant death rates, low birthweight, and preterm births and to use CDRT data to track infant deaths by cause. It was also agreed to show trends per 1,000 population (births), and not 100,000 population, with the exception of 0-5 child abuse and neglect deaths, which remain per 100,000 population.

Measure	Data Source		Measured as:
	Numerator	Denominator	
Low birthweight infants	SCPH	SCPH (total births)	Percentage of Births
Preterm infants	SCPH	SCPH (total births)	Percentage of Births
All Infant Deaths (<1 year)	SCPH	SCPH (total births)	Rate per 1,000 births
Infant Sleep-related Deaths (<1 year)	CDRT	SCPH (total births)	Rate per 1,000 births
Infant Perinatal Condition Deaths (<1 year)	CDRT	SCPH (total births)	Rate per 1,000 births
Infant Child Abuse and Neglect Deaths (<1 year)	CDRT	SCPH (total births)	Rate per 1,000 births
0-5 Child Abuse and Neglect Deaths (< 6 years)	CDRT	County Population (0-5)	Rate per 100,000 children

Three-year rates are calculated as the sum of the totals for each year for the topic of interest (e.g., number of infant deaths) divided by the sum of the total population measure for the three years (e.g., number of births) which is then multiplied by the rate measurement, when applicable. For instance, the rolling rate for infant mortality calculation is:

((# infant deaths Year 1 + # infant deaths Year 2 + # infant deaths Year 3) /

*(# births Year 1 + # births Year 2 + # births Year 3))*1000*

Disparity gaps described in this report reflect the difference between the group with the highest rate divided by the group with the lowest rate. For instance, the disparity gap between infant mortality rates are calculated as:

(African American Mortality Rate / All Others Mortality Rate)

Changes in total rates between single year or three-year rolling rates are calculated as follows:

(New value-Previous or Baseline value)/Previous or Baseline value

Calculations for changes in disparity rates between groups are as follows:

((New AA rate – New All Others Rate)-(Previous AA rate – Previous All Others Rate)/

(Previous AA rate – Previous All Others Rate))

Appendix 4 — BMU Correlation, Chi Square, and Regression Details

First, correlational analyses[40] were conducted to identify significant relationships between the factors listed in the table above and the birth outcomes above. Significant correlations mean variables are related to one another, though correlations do not mean that one variable caused an outcome. The characteristics that were significantly correlated to birth outcomes are shown in the figure below (variables that were not significantly correlated are not displayed).

Figure 37 — Factors that Correlate with Birth Outcomes[41]

Risk factors at intake	Healthy Birth Outcome (Dichotomous; Y/N)	Birthweight (Continuous)	Gestational Age (Continuous)
Number of check-ins with BMU pregnancy coach	.23**	.21**	.28***
No regular prenatal care	11.50**	-.12†	-.16*
Pre-eclampsia at Delivery (current)	15.92**	-.16**	-.18**
Prior Preterm Birth(s)	6.09*		-.12†
Unemployed, looking for work		.12†	.16*
Prior Gestational Diabetes			-.13*
Prior Pre-eclampsia			-.12†
Gestational Diabetes (current)		.12†	
Received Doula Service(s) (FY 2021-22 only)	4.34*		
Single, no partner		-.14*	
Domestic Violence			
Sexually Transmitted Infection(s)			-.14*
Tobacco Use		-.15*	
Anxiety and/or depression		-.14*	
Unable to fulfill food needs			-.13*

Source: Health Assessment Form, Pregnancy Outcomes Form, and Exit Form. * = $p < .05$; ** = $p < .01$; *** = $p = .001$; † = $p < .10$. Sample sizes for each correlation vary due to missing data and some variables only being implemented in one of the fiscal years, but overall N = 257.

All dichotomous variables included in the regressions were coded based on how they are presented in the tables (e.g., for the variable "no regular prenatal care," 1 = did not have regular prenatal care and 0 = did not have regular prenatal care).

[40] Includes Chi-Square test of independence, Point-Biserial Correlation, and Pearson Correlation Coefficient tests.

[41] All dichotomous variables included in the regressions were coded based on how they are presented in the tables (e.g., for the variable "no regular prenatal care," 1 = did not have regular prenatal care and 0 = did have regular prenatal care). Most correlations were in the expected directions (e.g., more visits with a BMU pregnancy coach were associated with being more likely to have a healthy birth). However, significant correlations between both gestational age and birthweight and being unemployed and looking for work were not in the expected direction. All significant associations were in expected directions for regression results

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

	B	S.E.	*t*	*p*	OR
BMU Service Count	**.13**	**.03**	**1**	**.000**	**1.14**
No Regular Prenatal Care	**-1.60**	**.58**	**1**	**.006**	**.20**
Pre-Eclampsia at Delivery	**-2.31**	**.63**	**1**	**.000**	**.10**
Prior Preterm Birth	**-1.67**	**.66**	**1**	**.01**	**.19**
Constant	**.83**	**.37**	**1**	**.03**	**2.29**

Note: bolded variables are statistically significant at $p < .05$; N = 222. Received Doula Services was excluded from this analysis, due to its low incidence rate (only offered for FY 21-22, so N = 21).

Linear Regression Predicting Continuous Birthweight

	B	S.E.	*t*	*p*
Constant	**6.66**	**.17**	**38.85**	**.000**
Pre-Eclampsia at Delivery	**-1.11**	**.33**	**-3.38**	**.001**
BMU Service Count	**.04**	**.01**	**3.17**	**.002**
Tobacco Use	**-.93**	**.41**	**-2.24**	**.03**
Gestational Diabetes	**.90**	**.36**	**2.52**	**.01**
Anxiety and/or Depression	**-.33**	**.18**	**-1.82**	**.07**
No Regular Prenatal Care	-.09		-1.30	.19
Unemployed, Looking for Work	.03		.39	.70
Single, No Partner	-.08		-1.12	.26

Note: bolded variables are statistically significant at $p < .10$, N = 200.

Linear Regression Predicting Continuous Gestational Age

	B	S.E.	*t*	p
Constant	**38.01**	**.29**	**131.55**	**.000**
BMU Service Count	**.08**	**.02**	**4.22**	**.000**
Pre-Eclampsia at Delivery	**-1.70**	**.55**	**-3.08**	**.002**
No Regular Prenatal Care	**-1.35**	**.53**	**-2.53**	**.01**
Sexually Transmitted Infection	**-1.72**	**.81**	**-2.13**	**.03**
Prior Pre-Eclampsia	**-1.31**	**.72**	**-1.82**	**.07**
Prior Preterm Birth	-.09		-1.38	.17
Unemployed, Looking for Work	.05		.74	.46
Prior Gestational Diabetes	-.07		-1.06	.29
Unable to Fulfill Food Needs	-.05	.	-.05	.42

Note: bolded variables are statistically significant at $p < .10$, N = 210.

Appendix 5 – Home Visiting Participants' Family Development Matrix (FDM)

		In Crisis	At Risk	Stable	Self-Sufficient	#/% with Improvement
Access to Services/Community						
Access to transportation	Intake	0 (0%)	0 (0%)	0 (0%)	2 (20%)	**1/3 (33%)**
	Follow-Up	**0 (0%)**	**0 (0%)**	**1 (10%)**	**1 (10%)**	
Child Health Insurance	Intake	2 (20%)	0 (0%)	0 (0%)	0 (0%)	**2/2 (100%)**
	Follow-Up	**0 (0%)**	**0 (0%)**	**0 (0%)**	**0 (0%)**	
Community Resources Knowledge	Intake	0 (0%)	1 (10%)	3 (30%)	3 (30%)	**5/8 (63%)**
	Follow-Up	**0 (0%)**	**0 (0%)**	**0 (0%)**	**4 (40%)**	
Health Services	Intake	0 (0%)	0 (0%)	1 (10%)	5 (50%)	**2/6 (33%)**
	Follow-Up	**0 (0%)**	**0 (0%)**	**0 (0%)**	**5 (50%)**	
Access to Quality Child Care	Intake	6 (60%)	0 (0%)	0 (0%)	0 (0%)	**1/4 (25%)**
	Follow-Up	**6 (60%)**	**0 (0%)**	**0 (0%)**	**2 (20%)**	
Language/cultural systems	Intake	0 (0%)	1 (10%)	0 (0%)	0 (0%)	**1/1 (100%)**
	Follow-Up	**0 (0%)**	**0 (0%)**	**0 (0%)**	**0 (0%)**	
Basic Needs and Shelter						
Budgeting Skills/ Financial Resources	Intake	0 (0%)	2 (20%)	0 (0%)	5 (50%)	**4/8 (50%)**
	Follow-Up	**0 (0%)**	**1 (10%)**	**1 (10%)**	**3 (30%)**	
Adequacy of Clothing	Intake	0 (0%)	0 (0%)	3 (30%)	1 (10%)	**1/5 (20%)**
	Follow-Up	**0 (0%)**	**0 (0%)**	**3 (30%)**	**1 (10%)**	
Quality of Employment Status	Intake	1 (10%)	4 (40%)	0 (0%)	1 (10%)	**2/6 (33%)**
	Follow-Up	**2 (20%)**	**2 (20%)**	**0 (0%)**	**1 (10%)**	
Status of Utilities	Intake	1 (10%)	1 (10%)	1 (10%)	1 (10%)	**3/5 (60%)**
	Follow-Up	**1 (10%)**	**2 (20%)**	**0 (0%)**	**0 (0%)**	
Stability of Home or Shelter	Intake	0 (0%)	2 (20%)	0 (0%)	0 (0%)	**1/2 (50%)**
	Follow-Up	**1 (10%)**	**0 (0%)**	**1 (10%)**	**0 (0%)**	
Immigration Status	Intake	3 (30%)	0 (0%)	0 (0%)	0 (0%)	**1/1 (100%)**
	Follow-Up	**2 (20%)**	**0 (0%)**	**0 (0%)**	**0 (0%)**	

		In Crisis	At Risk	Stable	Self-Sufficient	#/% with Improvement
Child Health and Child Safety						
Risk of Emotional or Sexual Abuse	Intake	1 (10%)	1 (10%)	0 (0%)	0 (0%)	**1/1 (100%)**
	Follow-Up	**1 (10%)**	**0 (0%)**	**1 (10%)**	**0 (0%)**	
Supervision by the Family	Intake	1 (10%)	0 (0%)	1 (10%)	0 (0%)	**1/1 (100%)**
	Follow-Up	**1 (10%)**	**0 (0%)**	**0 (0%)**	**0 (0%)**	
Presence/Degree of Substance Abuse	Intake	0 (0%)	0 (0%)	0 (0%)	4 (40%)	**0/4 (0%)**
	Follow-Up	**1 (10%)**	**0 (0%)**	**0 (0%)**	**4 (40%)**	
Age-Appropriate Development	Intake	2 (20%)	0 (0%)	0 (0%)	1 (10%)	**2/4 (50%)**
	Follow-Up	**1 (10%)**	**0 (0%)**	**1 (10%)**	**1 (10%)**	
Resources for Nutritious Food	Intake	1 (10%)	0 (0%)	0 (0%)	0 (0%)	**0/1 (0%)**
	Follow-Up	**1 (10%)**	**0 (0%)**	**0 (0%)**	**1 (10%)**	
Parent-Child Relationships						
Confidence in Parenting Skills	Intake	0 (0%)	0 (0%)	1 (10%)	2 (20%)	**2/4 (50%)**
	Follow-Up	**0 (0%)**	**0 (0%)**	**0 (0%)**	**2 (20%)**	
Nurturing	Intake	1 (10%)	0 (0%)	0 (0%)	1 (10%)	**0/3 (0%)**
	Follow-Up	**1 (10%)**	**0 (0%)**	**1 (10%)**	**2 (20%)**	
Social/Emotional Wellbeing						
Emotional Wellbeing/ Sense of Life Value	Intake	0 (0%)	0 (0%)	2 (20%)	3 (30%)	**3/6 (50%)**
	Follow-Up	**0 (0%)**	**0 (0%)**	**0 (0%)**	**4 (40%)**	
Quality of Social Support System	Intake	0 (0%)	0 (0%)	0 (0%)	5 (50%)	**1/6 (17%)**
	Follow-Up	**0 (0%)**	**0 (0%)**	**2 (20%)**	**3 (30%)**	

Source: FDM Database. Matched set with intake and follow up (n = 10). Percentages may not equal 100% due to portions of participants indicating "Not Applicable" (not reported here). The number/percent with improvement excludes participants who had "not applicable" and/or "self-sufficient" status at intake AND follow-up.

Appendix 6 — 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

[v] California Department of Public Health. 2019. California In-Hospital Breastfeeding as Indicated on the Newborn Screening Test Form Statewide and Maternal County of Residence by Race/Ethnicity: 2019.

[vi] Title IV-E Prevention Services. 2022. "Effective black parenting program." June 2022 https://preventionservices.acf.hhs.gov/programs/402/show

[vii] Raikes, H. H. & J. M. Whitmer. (2006). Beautiful Beginnings: A Developmental Curriculum for Infants and Toddlers. Paul H. Brookes Publishing Company.

[viii] Frueh, S. 2022. "The pandemic 'baby bust' and rebound." National Academies. June 17, 2022. https://www.nationalacademies.org/news/2022/06/the-pandemic-baby-bust-and-rebound

[ix] Chmielswska, Barbara. Et. al. 2021. Effects of the COVID-19 pandemic on maternal and perinatal outcomes: a systematic review and meta-analysis. The Lancet Global Health, 9, 6. Pp. E759-E772. https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(21)00079-6/fulltext

[x] US Department of Health and Human Services. Healthy People 2030. Reduce preterm births – MICH-07. https://health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth/reduce-preterm-births-mich-07/data

[xi] Reyes, M. V. 2020. "The disproportional impact of COVID-19 on African Americans." Health and Human Rights, 2020 Dec, 22(2): 299-307.

[xii] Scommegna, Paola (2021, January 21). "High Premature Birth Rates Among U.S. Black Women May Reflect the Stress of Racism and Health and Economic Factors." https://www.prb.org/resources/high-premature-birth-rates-among-u-s-black-women-may-reflect-the-stress-of-racism-and-health-and-economic-factors/

[xiii] Osterman, M.J.K, et. al., 2022. Births: Final Data for 2020. National Vital Statistics Report, Volume 70, Number 17. https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-17.pdf

xiv Wei, S.Q., et. al., 2021. "The impact of COVID-19 on pregnancy outcomes: a systematic review and meta-analysis." CMAJ 2021. April 19, 193, E540-548. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8084555/pdf/193e540.pdf

[xv] Hernandez-Cancio, S. & V. Gray. 2021. "Racism hurts mom and babies." National Partnership for Women & Families, National Birth Equity Collaborative, June 2021. https://www.nationalpartnership.org/our-work/health/moms-and-babies/racism-hurts-moms-and-babies.html

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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 and Public Education Campaign
Her Health First
(916) 558-4812

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

Black Child Legacy Campaign
(916) 993-7701