## STATE OF CALIFORNIA Budget Change Proposal - Cover Sheet DF-46 (REV 08/17)

Fiscal Year 2019-20	Business Unit 4265	Department California Department of Public Health		Priority No.
Budget Reque 4265-018-BCP		Program 4045-Public and Environmental Health	Subprogram 4045032-Fam	nily Health

**Budget Request Description** 

Black Infant Health Program Expansion

## Budget Request Summary

The California Department of Public Health requests 4 positions and \$7.5 million in General Fund (\$500,000 state operations and \$7 million local assistance) in 2019-20 and annually thereafter to expand the Black Infant Health Program to improve African-American infant and maternal health.

Requires Legislation		Code Section(s) to be Added/Amended/Repealed N/A				
Does this BCP contain information components? Yes X No		Department CIO N/A	Date N/A			
If yes, departmental Chief Informa	ation Officer must sign.					
For IT requests, specify the project S2AA, S3SD, S4PRA), and the ap	ct number, the most rec oproval date.	ent project approval document (FSI	R, SPR, S1BA,			
Project No. N/A Project	ct Approval Document:	N/A Approv	val Date: N/A			
If proposal affects another departments of affected de		tment concur with proposal?	Yes 🗌 No signee.			
Prepared By	Date	Reviewed By	Date			
Department Director	Date	Agency Secretary	Date			
	Department of Fi	nance Use Only				
Additional Review: Capital Out	lay 🗌 ITCU 🗌 FSCU		ept. of Technology			
PPBA Original Signed B Iliana Ramos	y .	Date submitted to the Legislature				

# **BCP Fiscal Detail Sheet**

## BCP Title: Black Infant Health Program Expansion

## BR Name: 4265-018-BCP-2019-GB

Budget Request Summary	FY19						
	CY	BY	BY+1	BY+2	BY+3	BY+4	
Personal Services							
Positions - Permanent	0.0	4.0	4.0	4.0	4.0	4.0	
Total Positions	0.0	4.0	4.0	4.0	4.0	4.0	
Salaries and Wages							
Earnings - Permanent	0	274	274	274	274	274	
Total Salaries and Wages	\$0	\$274	\$274	\$274	\$274	\$274	
Total Staff Benefits	0	<sup>•</sup> 147	147	147	147	147	
Total Personal Services	\$0	\$421	\$421	\$421	\$421	\$421	
Operating Expenses and Equipment							
5301 - General Expense	0	79	79	79	79	79	
54XX - Special Items of Expense	0	7,000	7,000	7,000	7,000	7,000	
Total Operating Expenses and Equipment	\$0	\$7,079	\$7,079	\$7,079	\$7,079	\$7,079	
Total Budget Request	\$0	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	
Fund Summary							
Fund Source - State Operations							
0001 - General Fund	0	500	500	500	500	500	
Total State Operations Expenditures	\$0	\$500	\$500	\$500	\$500	\$500	
Fund Source - Local Assistance 0001 - General Fund	0	7 000	7 000	7 000	7 000	7 000	
Total Local Assistance Expenditures	0	7,000 <b>\$7,000</b>	7,000	7,000	7,000	7,000	
·			\$7,000	\$7,000	\$7,000	\$7,000	
Total All Funds	\$0	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	
Program Summary							
Program Funding							
4045032 - Family Health	0	7,500	7,500	7,500	7,500	7,500	
Total All Programs	\$0	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	

## **Personal Services Details**

	Sa	lary Informatio	n						
Positions	Min	Mid	Max	<u>CY</u>	<u>BY</u>	<u>BY+1</u>	<u>BY+2</u>	<u>BY+3</u>	<u>BY+4</u>
VR00 - Various				0.0	4.0	4.0	4.0	4.0	4.0
Total Positions			-	0.0	4.0	4.0	4.0	4.0	4.0
Salaries and Wages	CY	BY	BY+1	BY	+2	B	(+3	B	<b>(</b> +4
VR00 - Various	0	274	274		274		274		274
Total Salaries and Wages	\$0	\$274	\$274		\$274		\$274		\$274
Staff Benefits									
5150900 - Staff Benefits - Other	0	147	147		147		147		147
Total Staff Benefits	\$0	\$147	\$147		\$147		\$147		\$147
Total Personal Services	\$0	\$421	\$421		\$421		\$421		\$421

## A. Budget Request Summary

The California Department of Public Health (Public Health) requests 4 positions and \$7.5 million in General Fund (\$500,000 in state operations and \$7 million in local Assistance) in 2019-20 and annually thereafter to expand the Black Infant Health (BIH) Program to improve African-American infant and maternal health.

#### B. Background/History

#### **Disparity in Outcomes**

While California has made progress in reducing both infant and maternal mortality, the disparity in outcomes between African-American women and children and other races is stark and persistent. In 2015, the infant mortality rate (number of deaths per 1000 live births) for African-American infants was 9.3—compared to 4.5 for Hispanic infants and 3.5 for White infants. A closer look at causes of infant deaths in the category of "Sudden and Unexpected Infant" Deaths shows that African-American infants died at rates that are nearly over three times those of Hispanic or White infants. While California has one of the lowest rates of maternal deaths in the nation, African-American women continue to experience three-to-four-fold higher risk of a pregnancy-related death. (California Birth Cohort File, 2015)

From an international perspective, the infant mortality rate in the United States is high relative to other developed countries at 5.8 deaths per 1000 live births compared to Canada (4.5), United Kingdom (4.3), or Germany (3.4) (CIA World Factbook, estimates for 2017). For Black infants, the numbers are devastatingly high. In 2016, the White infant mortality rate in the United States was 4.9 per 1000 live births—resembling other economically advanced nations. In contrast, the Black infant mortality rate in the US was 11.4 per 1000 live births—a rate closer to that of lower income nations like Libya, Albania, and Tonga.

(https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm)

Common public perception as to the causes of racial disparities is not consistent with the facts. Socioeconomic status certainly contributes to the health burden of many African-American families but studies on maternal morbidity and mortality demonstrate that insured, educated, or employed Black women with high levels of economic security continue to have higher rates of death or complications in pregnancy compared to matched women in other races. Risky health behaviors occur in all groups but Black mothers who do not smoke, a major risk for prematurity, have worse perinatal outcomes than White women who do smoke. Finally, prenatal care, while important, is not sufficient to narrow the disparity; the disparity persists even though over 90 percent of pregnant women in California get access to adequate prenatal care.

More and more public health, medical, and social scientists are examining the connection of social experience, particularly traumatic or chronic stress experiences, to poor health outcomes through known neuroendocrine pathways that contribute to risk, disease, and death. A direct association between socioeconomic status and health has been established. Studies on Adverse Childhood Experiences reveal long-term negative health sequelae associated with childhood exposure to specific traumatic events (e.g., divorce, death of a parent, or witnessing domestic violence). California data a from the Maternal and Infant Health Assessment survey, using a standardized instrument, reveals that women who report higher rates of experiences of racism are also at higher risk of preterm birth. The common thread may be a heightened state of arousal, hypervigilance and chronic stimulation of the fight or flight pathways leading to pathophysiology in many organ systems, including the reproductive health system.

## BIH Program Background and Activities

California has been a leader in advancing perinatal health equity. In 1989, Chapter 93, Statutes of 1988 (SB 165) established the BIH Program. As a result, California began to more aggressively address the challenge of improving the health of African-American women, infants, and children by promoting health and health care during the prenatal and postpartum periods, and providing services in a supportive and culturally competent manner. When BIH was started, its primary focus was to get African-American women into prenatal care.

However, over time, the data showed that access to prenatal care, while necessary, was not sufficient to narrow the disparity gap. Therefore, Public Health continued to look at ways to improve BIH with the ultimate goal of improving the health of African-American women, infants and children. In the fall of 2012, Public Health and the Maternal, Child and Adolescent Health (MCAH) Division developed an intensive single core model for BIH that addressed health promotion, social support, empowerment, and health education throughout a woman's pregnancy in order to help healthy women have healthy babies. The model was developed based on extensive review of the scientific literature and in consultation with experts in the field that suggested that on-going chronic stress due to social and historical constructs were likely contributing to worse health outcomes for African-American women and babies.

Based on some success with a group intervention approach, known as "Centering Pregnancy," the BIH intervention features 20 weekly group sessions held in culturally affirming environments. There are 10 sessions during pregnancy and 10 sessions postpartum, which are integrated with client-centered case management. Eligible participants are African-American women who are 18 years or older and up to 30 weeks pregnant at the time of enrollment. Participants learn proven strategies to reduce stress and develop life skills. This is accomplished through a group-based approach with complementary case management, including home visiting. Weekly group sessions help women build social support, access their strengths, make positive choices, and set health-promoting goals. Intermediary measures related to self-efficacy, social support, and empowerment are monitored in order to evaluate impact of the intervention.

BIH has been implemented in 15 local health jurisdictions (LHJs) which account for over 90 percent of all African-American births in California: Alameda, Contra Costa, Fresno, Kern, Los Angeles, Riverside, Sacramento, San Bernardino, San Diego, San Francisco, San Joaquin, Santa Clara and Solano counties and the cities of Long Beach and Pasadena.

## **BIH Program Funding**

By the mid-2000s BIH Program funding reached over \$8 million dollars, including General Fund and federal funding from the Maternal and Child Health Services Block Grant (Title V) and Title XIX (Medicaid). In addition, LHJs were able to use local funding to leverage Title XIX (Medicaid) funding. However, in 2009-10, as the new group intervention approach was being implemented, all General Fund (and therefore matching Title XIX funds) was eliminated. Limited Title V funds became the only remaining funding source. This reduced staffing and lead to the closure of two large programs in high-risk communities, Riverside and San Bernardino counties. In 2014-15, \$2 million General Fund was invested in the BIH Program.

The investment of General Fund in 2014-15 allowed LHJs to work toward the program as designed and Public Health/MCAH to provide the technical assistance needed to promote program fidelity and collect reliable data to measure intermediary outcomes. Participant recruitment and retention efforts were augmented and critical positions were re-established.

## Analysis of Problem

In addition, the 2018 Budget Act included \$8 million General Fund ongoing for the Perinatal Equity Initiative, which provides funds for up to 15 county health departments to improve black infant birth outcomes and reduce the incidence of black infant mortality. This effort is currently in the planning and development stage.

Program Budget	2013-14	2014-15	2015-16	2016-17	2017-18		
Authorized Expenditures	\$4,176	\$8,176	\$8,176	\$8,776	\$8,176		
Actual Expenditures (Federal Fund)	\$4,176	\$4,176	\$4,176	\$4,776	\$4,176		
Actual Expenditures (General Fund)	\$0	\$4,000	\$4,000	\$4,000	\$4,000		
Actual Expenditures (Total)	\$4,176	\$8,176	\$8,176	\$8,776	\$8,176		
Authorized Positions	10.4	10.4	10.4	10.4	10.4		
Filled Positions	5	6.2	6.2	7.8	9.2		
Vacancies	5.4	4.2	4.2	2.6	1.2		

# Resource History\*

\* Resource History Chart does not include Title XIX (Medicaid) Reimbursements.

#### Workload History

Workload Measure	2013-14	2014-15	2015-16	2016-17	2017-18
Participants Enrolled	568	784	948	1,200	1,462
Technical Assistance Contacts Provided	2,184	2,688	4,968	4,320	3,240
Number of Site Visits	3	1	17	17	15

## C. State Level Considerations

This proposal supports Public Health's Strategic Map Priority of achieving targeted improvements in health outcomes and strengthen statewide infrastructure to improve health outcomes. This proposal also supports the Administration's policies to: (1) promote healthy lifestyles for individuals and families; (2) ensure access to underserved pregnant women and their infants; and (3) reduce or eliminate health disparities while promoting health equity.

This proposal is consistent with the following priorities of Public Health's Strategic Map, including:

- C2: Develop and Use Evidence-Based Public Health Interventions.
- C3: Optimize the Use of Science and Technology to Improve Health.
- D: Expand and Strengthen Collaborations and Partnerships.
- E: Make Continuous Quality Improvement a Way of Life in the Department.
- F: Achieve Health Equity through Public Health Policies and Programs

In addition, the proposal is consistent with the goals of the statewide plan developed by the Public Health Office of Health Equity titled "Portrait of Promise." Public Health/MCAH has identified very clear and persistent health disparities linked to social and historical inequities. The BIH Program is one part of a multipronged public health effort to achieve health equity for all.

## D. Justification

Public Health/MCAH requests funding to support the expansion of the BIH model, including adding strategies to support participant access and engagement and further expansion of sites and participants. There is no specific intervention model known to reduce perinatal disparities. BIH Program was designed based on the most current research regarding causation. Public Health/MCAH is conducting an evaluation of both process and outcome measures, anticipating that modifications will be required.

## BIH Program Gains and Growth Areas

The current BIH Program group model is near the end of a comprehensive evaluation for the years between 2015 and 2018 anticipated to be released in late 2019. There are gains and areas that will need attention as the program goes forward:

- <u>Gains in achieving intermediary outcomes</u>: Early evaluation results indicate that women
  participating in the BIH Program have shown a number of positive short-term improvements. For
  example, women completing the BIH Program group model are 25 percent more likely to report
  high levels of social support; high social support is associated with a 5-fold decrease in depressive
  symptoms and a 6.7-fold decrease in tobacco use relative to women with low social support.
- <u>Continued improvements in regards to participant recruitment and retention</u>: Current BIH Program data reveals that once women attend one session, they report very positive experiences and ability to achieve intermediate goals. The gap between referral and participation has narrowed but remains. Local BIH programs have also been successful in addressing participant barriers to retention (e.g., transportation), and providing support such as maternity self-care (e.g., journals, pregnancy books, water bottles) and preparation for infant care (e.g., breastfeeding support items, infant care books). However, more support for retention efforts is needed.

## Proposal Investments

Additional funding will support critical elements that are necessary to support an ongoing program that collects and analyzes all appropriate data, and learns and makes improvements based on a system of accountability. Examples of vital program support needed for the BIH Program are as follows:

- Complete an implementation evaluation to examine the contextual challenges to implementing the BIH Program in LHJs using existing reports and conducting key informant interviews; assess impact of quality improvement efforts.
- Improve data collection measures to capture key outcomes such as stress or baseline depression. The BIH Program uses the Efforts to Outcomes data system. To double the technical capacity of the current system it would cost approximately \$150,000.
  - Implement technical upgrades to the BIH data system in order to analyze:
    - Additional data not previously reported (e.g., depression, food insecurity, experiences of racism)
    - Participant satisfaction data
    - o Outcomes as a function of group size and dosage of intervention
    - Associations between participation and birth outcomes
    - Comparison of outcome with other strategies such as home visiting, preconception counseling, fatherhood engagement
- Convene a state advisory group with representation of experts in health disparities and shared learning with other efforts, and with specific inclusion through authentic community engagement so that no decisions about Black family health be done without inclusion of Black families and community leaders.
- Assess alternative direct service models such as those outlined in the Perinatal Equity Initiative.

## Analysis of Problem

- Synthesize available information on BIH Program implementation and outcomes, make recommendations, identify areas to refine program goals and design, and consolidate findings from parallel programs and efforts to develop a summative report on achieving perinatal health equity in California.
- Expand BIH in existing counties according to numbers of African-American births.
- Support a version of intervention scaled for support to other counties where there may be fewer African-American births, but where pockets of need still exist.

With the requested resources to mature and expand the BIH Program, Public Health will be able to:

- Help address health disparities in the African-American community, while simultaneously determining best options for future implementation;
- Re-engage stakeholders, implementing agencies, subject matter experts, and BIH alumni at various steps in the process;
- And test model refinements to promote ongoing quality improvement and progress toward the ultimate population goal.

This will strengthen the ability of local programs to implement with fidelity and to achieve desired intermediary outcomes hypothesized to help Black women achieve better health for themselves and their infants.

The requested resources will support the development of a statewide media campaign to inform African-American women of the risks, produce educational materials, and linkages to the BIH Program. The campaign include information on the significant disparities in birth outcomes, risks of maternal deaths, preterm births, and infant mortality. The campaign will help provide more effective public health messaging about the health risks that African-American families face and to increase BIH Program participation and retention.

Effective July 1, 2019, 4 positions will be established, and Local Assistance dollars will be allocated to LHJs to focus on increasing the number of participants in the BIH Program while bolstering fidelity to the group model. The 4 positions will consist of 2 Research Data Analyst IIs and 2 Associate Governmental Program Analysts.

## E. Outcomes and Accountability

BIH Program sites will develop and report on performance measures and enter into routine reporting and "turn the curve" discussions to foster quality improvement for all aspects of program implementation. Short and intermediate outcomes will be measured once implementation fidelity standards (dosage, adherence, quality of delivery, and participant responsiveness) have been met by sites and data quality standards have been maintained for at least 12 consecutive months.

riojected outcomes						
Workload Measure	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Number of Additional Women Enrolled	0	750	1,000	1,250	1,500	1,500
Technical Assistance and Training Contracts	0	576	480	384	384	384
Number of Site Visits	0	8	8	8	8	8

#### **Projected Outcomes**

## F. Analysis of All Feasible Alternatives

<u>Alternative 1:</u> Approve 4 positions and \$7.5 million in General Fund (\$500,000 state operations and \$7 million local assistance).

#### Pros:

- Supports Public Health's vision to promote healthy individuals and families in healthful communities and its mission to optimize the health and well-being of the people in California.
- Provide BIH services to more at risk women in California.
- Help address health disparities in the African-American community, while simultaneously determining best options for future implementation.
- Additional General Fund will allow for drawdown of Title XIX reimbursements.

#### Cons:

- · Requires an increase in General Fund.
- Expands workforce in state government.

<u>Alternative 2:</u> Approve 2 positions and \$3.5 million in General Fund (\$300,000 state operations and \$3.2 million local assistance).

#### Pros:

- Supports Public Health's vision to promote healthy individuals and families in healthful communities and its mission to optimize the health and well-being of the people in California.
- Provide BIH services to at risk women in California.
- Help address health disparities in the African-American community, while simultaneously determining best options for future implementation.
- Additional General Fund will allow for drawdown of Title XIX reimbursements.

#### Cons:

- Expanded services would be at a smaller scale, limiting the number of at risk women receiving BIH services.
- Reduced staffing will impact Public Health's ability to provide essential technical assistance and evaluation.
- Increases the General Fund.
- Expands workforce in state government.

Alternative 3: Do not approve this proposal.

#### Pros:

- No increase in General Fund.
- No expansion of state government.

## Cons:

- At risk women will not receive BIH services.
- Does not allow sufficient resources for translating review findings into action and change in practice and policy.
- Does not take advantage of opportunity to leverage General Fund with Title XIX reimbursements for both state and LHJs.

## G. Implementation Plan

Effective July 1, 2019, Public Health will establish 4 positions and allocate local assistance dollars to LHJs to focus on increasing the number of participants in the program.

<u>Year 1</u>: Given the model is scheduled to be updated in 2019, the first year of implementation will focus on final analysis of evaluation data and collaborative work between LHJs and Public Health/MCAH to make necessary updates and revisions of the intervention with appropriate modification of all process and procedural guidance. In Year 1 the following activities will also occur: expansion of the BIH database and information system, and development of all performance measures. Local Assistance dollars in Year 1 will target existing sites ready for increased participation or increased funding of basic case management services. Year 1 funding will also expand strategies for participant recruitment and retention, and will explore development of a perinatal disparities public awareness campaign for LHJs to better inform their African-American communities about this public health threat.

<u>Year 2</u>: Model revision will be complete; training and technical assistance to local sites for updated model will begin and continued support for active recruitment and engagement of participants will continue. A competitive Request for Application (RFA) will allow expansion of BIH to targeted vulnerable communities throughout the state.

<u>Year 3 and subsequent years</u>: Model fidelity will be honed, data on performance measures will be collected and analyzed for continuous quality improvement, and cycles of data reporting, analysis, and change will continue thereafter. Participation levels and progress on program outcomes will be reported on a regular basis.

#### H. Supplemental Information

Attachment A: Position Workload Analysis Attachment B: Current Organizational Chart Attachment C: Proposed Organizational Chart

## I. Recommendation

**Approve Alternative 1**: Approve 4 positions and \$7.5 million in General Fund (\$500,000 state operations and \$7 million local assistance) to expand the BIH to improve African-American infant and maternal health.

## Center for Family Health Maternal, Child and Adolescent Health Blank Infant Health Program Expansion

# Associate Governmental Program Analyst – MCAH (2.0 FTE)

Activity	Number of Items	Average Hours per Item	Total Annual Hours
Serve as the BIH liaison to ensure ongoing communication and coordination with the Health Equity Section, Perinatal Equity Initiative and MCAH Division.	20	50	1000
Research and assist in the development of a bid process to allocate fund to BIH programs to integrate additional interventions.	20	20	400
Work collaboratively with a multidisciplinary team to research and standardize service interventions with most promise for reducing African-American preterm births and infant mortality.	20	20	400
Assist in developing program guidelines, (scope of work), evaluation criteria, and the budget award formula for administering funds to LHJs.	20	20	400
Assist in developing the RFA evaluation process including the scoring and evaluation.	20	10	200
Assist the LHJs to provide public awareness around birth outcome inequities and the importance of preconception health, group prenatal care, intervention to prevent preterm births, and social support during pregnancy, and promote the role of fathers and partners as support during pregnancy.	20	20	400
Coordinate with the Health Equity Specialist on the development and implementation of specific performance metrics aimed at reducing health disparities in LHJs	10	10	200
Provide ongoing oversight, monitoring, program consultation, training and technical assistance to LHJs	20	. 20	400
Work closely with all MCAH-funded programs to ensure new efforts are broadly integrated in statewide activities when appropriate.	10	20	200
Total hours for workload projected for this classification			3,600
1,800 hours = 1 PY			
Actual number of PYs requested			2.0

## Center for Family Health Maternal, Child and Adolescent Health Blank Infant Health Program Expansion

## Research Data Analyst II – MCAH (2.0 FTE)

Activity	Number of Items	Average Hours per Item	Total Annual Hours
Staff the BIH Data Help telephone line to provide data system technical assistance to state and local BIH staff.	180	5	900
Monitor BIH data system user accounts to ensure all users have 24-hour access to the system, are compliant with data system training and information security requirements.	48	10	480
Draft written evaluation and progress reports across stakeholder groups within the CDPH, other state departments, county agency and local organizations.	48	10	480
Provide online and in-person training to state and local BIH staff on the BIH data system.	12	30	360
Generate and distribute monthly, quarterly, and annual monitoring reports for local BIH agencies to inform data quality, program reach, implementation quality and model fidelity.	30	25	750
Track and prepare written responses to data requests for information from the BIH data system.	42	15	630
Total hours for workload projected for this classification			3,600
1,800 hours = 1 PY			
Actual number of PYs requested			2.0



