# 2015-2018 Black Infant Health Program Evaluation

CDPH
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PublicHealth

Contextual Conditions that Supported the Implementation of the Prenatal Group Model

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Public health recognizes that racism,<sup>1</sup> as well as social and economic stressors, plays a major role in poor birth outcomes— e.g., babies born too early and too small—for Black people. The California Black Infant Health (BIH) Program is an evidence-informed group model with complementary one-on-one life planning designed to improve birth outcomes in the Black community by enhancing life skills, improving strategies to reduce stress, and building social support. An evaluation of prenatal program implementation and outcomes was conducted for participants enrolled between July 1, 2015 and June 30, 2018 across 17 sites in 15 local health jurisdictions throughout California. For additional details about the program, the evaluation and other results please visit: <a href="majority-cdph.ca.gov/BIH">cdph.ca.gov/BIH</a>.

When a standardized program like BIH is implemented as intended based on its policies and procedures, then the program is implemented with fidelity. The factors that support a local site's ability to implement a program with fidelity are varied and range from accessibility of services to staff motivation and leadership support.<sup>2</sup>

These types of factors, or the contextual conditions in which a program is implemented, can influence both process and participant outcomes.<sup>2</sup> This brief outlines how well 16 sites\* implemented BIH's prenatal group

model from July 1, 2017, through December 31, 2018, and describes the contextual conditions supportive of greater implementation success (higher fidelity) during this period.

### How well did BIH sites implement the Prenatal Group Model?

Four indicators were examined to understand how well the prenatal group model was implemented (Table 1). There was site-level variability in the ability to implement

<sup>\*</sup>One of the 17 sites that were active during the evaluation period closed in 2018 and could not be included in this analysis.

**Table 1.** Variability in implementation fidelity for four indicators across BIH sites

Indicators	Statewide Percentage	Numerical Range (lowest to highest among all 16 sites)
Meeting Enrollment Targets (% of prenatal group enrollees relative to expected)	64%	22%-107%
Timely Group Initiation (% who attended a prenatal session within 45 days of enrollment)	71%	54%-87%
Minimum Group Size (% of prenatal sessions with at least 5 participants)	61%	26%-85%
Minimum Group Dose (% of enrolled who attended 7+ prenatal sessions)	40%	12%-60%

Data Source: Extracted from BIH State data system on 12/31/18.

the prenatal group model with fidelity. Timely initiation of groups showed the highest statewide fidelity (71% of participants attended a prenatal session within 45 days of enrollment) with site scores ranging between 54%-87%. Retaining participants to complete the full program was more difficult to achieve, and statewide only 40% of participants received the minimum group dose, with site scores ranging between 12%-60%.

# What contextual conditions were present across sites?

Thirty contextual conditions were identified that could affect a local site's ability to implement the prenatal group model as designed. For each condition, an "ideal" hypothesized to positively influence implementation was defined (see text box "Defining Ideal Conditions"). The presence of each of the 30 ideal contextual conditions was explored among 16 sites. The presence of ideal conditions was unique across sites. Some ideal conditions were present in as few as three sites, while others were present in up to 15 sites.

# Which contextual conditions were supportive of higher fidelity?

To explore which ideal conditions, or combinations of conditions, were supportive of higher fidelity for each of the four indicators examined, an exploratory subset/ superset comparative analysis approach<sup>3,4</sup> was used.

Out of the 30 contextual conditions examined, 14 were related to one or more of the four fidelity indicators in various combinations, revealing multiple pathways to higher fidelity depending on the indicator (Table 2). Conditions present across multiple indicators included those related to program leadership, staffing (brief vacancies, cultural competency), participant motivators (gift cards, door-to-door transportation, full meals during group meetings), and community support. BIH staff feedback (see text box) confirmed the importance of many of the conditions identified in the analysis.

### **Defining "Ideal" Conditions**

Ideal conditions for implementing BIH were identified from existing literature, staff expertise, and prior implementation evaluations. For example, having brief staff vacancies in two key positions was identified as an important contextual condition that could affect a site's ability to implement the program. Brief vacancies may reflect low staff turnover or an ability to advertise and refill a position quickly. Sites where key positions were vacant for fewer than three months were recorded as meeting the ideal condition, while those that were vacant for longer did not.

**Table 2.** Contextual conditions supporting higher prenatal group model fidelity, by indicator.

Indicators	Contextual Conditions Supporting Higher Fidelity
Sites with higher fidelity to meeting enrollment targets often had:	<ul> <li>Supplemental funding alone or in combination with strong leadership that values the importance of BIH to address MCAH disparities.</li> <li>Staff without difficulties in finding services to which to refer participants and a Community Advisory Board (CAB) in place.</li> </ul>
Sites with higher fidelity to <b>timely group initiation</b> often had:	<ul> <li>Brief staff vacancies in positions that work directly with participants, door-to-door transportation, and full meals provided at group sessions.</li> <li>Participants without difficulties accessing services they were referred to and use of social media to engage participants.</li> <li>Staff believes the Program has value for participants and has positive perceptions of their work environment.</li> </ul>
Sites with higher fidelity to minimum group size often had:	<ul> <li>Culturally competent staff; groups offered in safe, accessible, and culturally appropriate facilities; full meals and gift cards provided.</li> <li>Site use of social media and a CAB in place.</li> <li>Staff believes the Program has value for participants and has positive perceptions of their work environment.</li> </ul>
Sites with higher fidelity to minimum group dose often had:	<ul> <li>Supplemental funding alone or in combination with strong leadership that values the importance of BIH to address MCAH disparities.</li> <li>Door-to-door transportation and full meals provided at group sessions, alone or in combination with gift cards or brief staff vacancies in positions that work directly with participants.</li> </ul>

### BIH Staff Feedback

During a stakeholder feedback meeting, BIH implementing staff confirmed the importance of many of the conditions identified in the analysis (Table 2). Staff highlighted **short vacancies** and **culturally competent staff**, having a mandate to provide **quality motivators** (i.e., child watch, healthy meals, gift cards, door-to-door transportation), and the **ability to hold groups in safe and culturally responsive locations** with **flexible hours**.

#### **SUMMARY**

- ▶ Sites varied in their abilities to implement the prenatal group model as intended. The contextual conditions sites operated in, as measured by the presence of ideal conditions, also varied. The findings presented in this brief show which contextual conditions were related to more successful program delivery.
- ▶ Several ideal contextual conditions were associated with more than one indicator of program implementation success, highlighting the importance of supporting these conditions:
  - Local Program Leadership that values BIH and provides supplemental local monetary support;
  - Positive staffing practices (e.g., brief vacancies, cultural competency);
  - Provision of participant motivators, such as gift cards, door-to-door transportation, and full meals during group meetings;
  - Presence of a Community Advisory Board; and
  - Staff that believes the Program has value for participants and has positive perceptions of their work environment.
- ▶ Continuous organizational efforts to improve the identified contextual conditions at local sites should lead to improvement in implementation of the BIH prenatal group model.

#### REFERENCES

- 1. Office of Minority Health and Health Equity (OMHHE). Centers for Disease Control and Prevention. April 12, 2021. Accessed May 12, 2021. <a href="https://www.cdc.gov/healthequity/racism-disparities/index.html">https://www.cdc.gov/healthequity/racism-disparities/index.html</a>
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- 4. Fuzzy Set Qualitative Comparative Analysis Software (fsQCA). Accessed May 12, 2021. <a href="http://www.socsci.uci.edu/~cragin/fsQCA/software.shtml">http://www.socsci.uci.edu/~cragin/fsQCA/software.shtml</a>.

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