

# Reducing Barriers to Breastfeeding in Disadvantaged Communities

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## INTRODUCTION

Breastfeeding positively impacts breast cancer risk, both in the practice of breastfeeding and the duration of time a person breastfeeds, with longer durations associated with increased benefits. However, several racial/ethnic communities with higher rates of breast cancer are also those with lower rates of breastfeeding. One strategy for reducing racial/ethnic inequities in breast cancer rates centers on improving breastfeeding rates, particularly among Asian, Black, and Native Hawaiian and Pacific Islander (NHPI) populations.

To improve rates of breastfeeding, we seek to understand the attitudes toward breastfeeding within these communities, perceived barriers to breastfeeding, and resources that are available to help people effectively breastfeed, as well as recommendations that can positively impact the number of people who choose to breastfeed and the duration of time that they engage in breastfeeding their children.

Specifically, we seek to answer the following research questions, particularly as they apply to the Asian-American, Black and Native Hawaiian and Pacific Islander (NHPI) communities.

- A. *What policy interventions could increase awareness of breastfeeding as a way to reduce breast cancer risk among the public and medical community?*
- B. *What policy interventions could state or local governments adopt to increase support for breastfeeding where women live, work, learn, worship and play?*
- C. *Are there roles for community health clinics and other non-governmental organizations to support new policy interventions or implement existing or potential policies?*

## METHODS

Our approach to this study included three main tasks: (1) Literature and Legislation Review, (2) Recruitment of Advisory Board and Key Informants, and (3) Interviews with Key Informants: providers, community advocates and breastfeeding people.

## LITERATURE AND LEGISLATION REVIEW

We conducted a narrative synthesis review of the recent evidence (2015-2022) on the policy solutions and community-based programs that have impacted rates and duration of breastfeeding among Black, Asian and NHPI, with special attention to California.

Our literature search strategy was based on the methodology used to generate medical effectiveness reviews by the California Health Benefits Review Program (Available at: <http://chbrp.org>). For the peer-reviewed literature, we searched for articles in English published in 2015 to 2022 indexed in PubMed, Cochrane Library, and the Web of Sciences. We examined articles with keyword terms (racial/ethnic terms were included in combination with breastfeeding terms): breastfeeding, breastfeeding & breast cancer, breastfeeding disparities, Black, Asian American, Native Hawaiian, Pacific Islander, breastfeeding interventions, breastfeeding & cancer prevention, breastfeeding barriers, infant feeding. From the set of U.S. based studies, we additionally looked for articles specific to California. Literature management was done using the Endnote 20 software.

For non-peer reviewed material, we examined the LexisNexis Academic database, Google, and Google News Archive for material related to breastfeeding and cancer. Given the small number of articles found in the peer-reviewed literature on breastfeeding barriers in the Asian American, Native Hawaiian, and Pacific Islander communities, we conducted additional searches in the non-peer reviewed literature to find blogs or personal narratives that could also be included. Through this search, we found various

community resources and a link to a conference with additional information, which we describe in our literature synthesis below.

Lastly, we compiled legislation in California that addresses breastfeeding along with major federal policies and actions from 1995 onward. This policy summary provides a foundation for identifying gaps and needs.

## RECRUITMENT OF ADVISORY BOARD AND KEY INFORMANTS

### *Advisory Board*

To ensure we captured diverse voices and perspectives, we invited outside experts with community ties to provide consultation on our study design and interview topics, assist in recruiting participants that reflect diverse communities, and provide professional insights with in-field perspectives on our analysis and recommendations. Advisory board members reviewed field guides, discussed topics that should be included in interviews, and reflected on and helped interpret findings. The authors appreciate the expertise of:

- Monique Sims, DrPH, Health Nutrition Program Coordinator (WIC Director) for the City of Berkeley, California. She is also the CEO of A More Excellent Way Health Organizations, whose mission is to improve the health and wellness of diverse communities.
- Asaiah Harville, Birth Equity Coordinator for Cherished Futures for Black Moms & Babies with the Public Health Alliance of Southern California. She has also worked with hospitals and community groups supporting families on their infant feeding journey.

We used a multi-pronged approach to recruit key informants, including:

- Promotion through social media and flyers by known community groups working on infant and maternal health issues.
- Recommendations sought through a snow-ball sampling method starting with research personal contacts, and referral from study participants.
- Promotion through the Center for Health Policy Research social media accounts.
- Connections through the Advisory Board.

### 1. Interviews with Key Informants

We conducted interviews with mothers who had given birth within the past year, providers (including physicians, doulas, and lactation consultants), and representatives from community groups that work with moms.

The semi-structured interviews covered these major areas:

- Attitudes toward breastfeeding (both the mother's attitude, and their perception of the general attitude toward breastfeeding in the broader community; providers and community representatives' perceptions of breastfeeding in the community)
- Plans regarding breastfeeding (mothers)
- External impacts on their breastfeeding plan
- Knowledge of the benefits of breastfeeding
- Where participants sought and/or received information about breastfeeding

- What participants perceived as the barriers to women breastfeeding and breastfeeding as long as they originally plan
- What recommendations participants had for addressing those barriers
- Their knowledge of public awareness campaigns regarding breastfeeding
- Awareness of the link between breastfeeding and breast cancer risk
- Recommendations for effective public awareness campaigns

All interviews were transcribed and coded. Interview themes were discussed among the study authors, reviewed by the Advisory Board, and compared to the existing literature.

## BREASTFEEDING IN CALIFORNIA

In 2023, an estimated 32,020 women will be diagnosed with breast cancer in California, and approximately 4,680 will die from breast cancer. For birthing women, breastfeeding has been shown to contribute to prevention of the disease.(American Cancer Society, 2022) While breastfeeding is promoted for many reasons benefiting maternal and child health, only 38% of women are aware of this correlation between breastfeeding and decreasing their risk of breast cancer.(Hoyt-Austin et al., 2020)

The impact of breastfeeding on breast-cancer risk was examined in a meta-analysis of 47 studies from 30 countries in which the authors found the relative risk of breast cancer decreased by about 4% for every 12 months of breastfeeding.(Collaborative Group on Hormonal Factors in Breast Cancer, 2002) The protective association between breastfeeding and breast cancer does not vary by geography, age, menopausal status, ethnicity, or age at first birth. Much of the protective impact of breastfeeding comes from the hormonal changes during lactation that delay menstrual periods reduces a person’s lifetime exposure to estrogen, which can promote breast cancer cell growth. A recent article on breastfeeding and breast cancer in the UK estimated that nearly 5% of breast cancer cases in the UK can be attributed to not breastfeeding.(Stordal, 2022) They further estimate that a person with two children who has breastfed each child for 12 months will have reduced their risk of breast cancer by nearly 9%.(Stordal, 2022)

American Academy of Pediatrics (AAP) and the World Health Organization (WHO) recommend exclusive breastfeeding for at least 6 months and continued breastfeeding until at least 12 months (AAP) or 24 months (WHO). In California, about 90% of mothers who had babies in 2019 reported ever breastfeeding (83% in the U.S.) based on responses on breastfeeding in the National Immunization Survey (NIS) (Table 1). The NIS found 62% of these Californian mothers reported any breastfeeding of their babies at 6 months of age and 27% reported exclusive breastfeeding through 6 months of age. By 12 months, only 44% reported any breastfeeding.

**Table 1. Overall breastfeeding in California in 2019, based on the National Immunization Surveys**

	<b>California</b>	<b>U.S.</b>
Ever breastfed	89.9	83.2
Breastfeeding at 6 months	62.3	55.8
Breastfeeding at 12 months	43.6	35.9
Exclusive breastfeeding through 3 months	51.6	45.3

Exclusive breastfeeding through 6 months	27.3	24.9
Breastfed infants receiving formula before 2 days of age	19.0	19.2

Source: 2022 CDC Breastfeeding Report Card; based on National Immunization Surveys (NIS) 2020 and 2021, among children born in 2019. [http://www.cdc.gov/breastfeeding/data/NIS\\_data/index.htm](http://www.cdc.gov/breastfeeding/data/NIS_data/index.htm)

Data collected in-hospital through the Newborn Screening test form corroborates the NIS results with their findings that about 94% of mothers in California reported any breastfeeding in 2019 and 70% reported exclusive breastfeeding (Table 2). Black mothers had one of the lowest reported any breastfeeding rates of about 87% and for Pacific Islander mothers this number was 89% (compared to 94% for all races/ethnicities). Of those who breastfeed, 62% and 64% reported breastfeeding exclusively among Black and Pacific Islander mothers respectively. Interestingly, while 94% of Asian mothers reported any breastfeeding 64% reported exclusive breastfeeding (compared to 70% among all races/ethnicities).

**Table 2. In-hospital breastfeeding in California in 2019**

	Any breastfeeding % (95% CI)	Exclusive breastfeeding % (95% CI)
All	93.7 (93.6-93.8)	70.0 (69.8-70.1)
Latino/Hispanic	93.5 (93.4-93.7)	66.0 (65.7-66.2)
American Indian & Alaska Native	87.3 (86.8-87.8)	76.2 (72.7-79.3)
Asian	93.7 (93.5-93.9)	64.1 (63.7-64.5)
Black	87.3 (86.8-87.8)	61.6 (60.8-62.3)
Multiple Race	92.5 (92.1-92.9)	75.2 (74.5-75.8)
Other	90.5 (89.7-91.2)	65.8 (64.5-67.0)
Pacific Islander	89.1 (86.2-91.5)	64.3 (60.1-68.4)
White	95.5 (95.3-95.6)	81.7 (81.5-82.0)

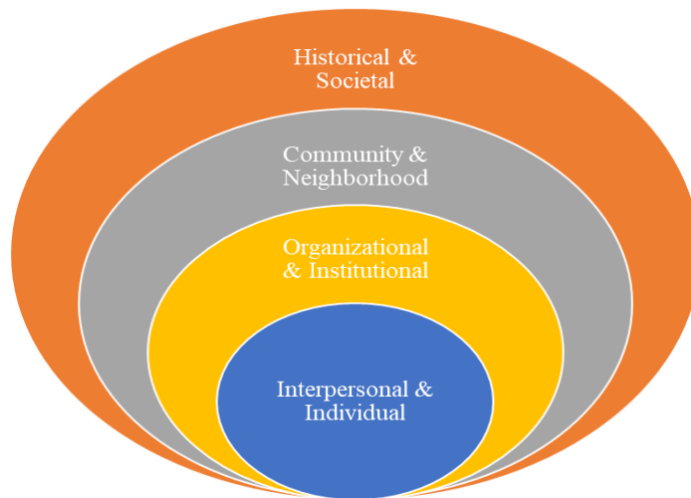
Source: 2019 In-Hospital Breastfeeding Initiation Data; based on California Newborn Screening (NBS) Program among children born in 2019. <https://www.cdph.ca.gov/breastfeedingdata>

## CONCEPTUAL FRAMEWORK

We used the socio-ecological model to organize our themes related to breastfeeding barriers, interventions, and knowledge. Our literature search identified key articles discussing breastfeeding through the lens of the socio-ecological model. (Reeves and Woods-Giscombe, 2015; Segura-Pérez et al., 2021; Shipp et al., 2022; Snyder et al., 2021) The socio-ecological model is a framework used to understand the complex interactions between individuals and their environment that contribute to health and well-being. It posits that health outcomes are affected by multiple levels of influence, including individual characteristics and behaviors, relationships and social networks, organizational and community contexts, and broader societal and policy factors. The model emphasizes the need to consider the interconnectedness of these levels and the importance of addressing multiple levels simultaneously in order to promote health and wellness.

The socio-ecological model can be applied to breastfeeding by considering the various factors that influence a person’s decision to initiate breastfeeding and their ability to continue breastfeeding. Figure 1 shows our adaptation of the socio-ecological model for breastfeeding, which is meant to be used alongside Table 3, which includes examples of the factors impacting breastfeeding at each level. According to the framework, broader historical and societal factors influence more proximal level factors such as the community and neighborhood setting, organizations, and interpersonal and individual factors. For example, at the historical/societal or policy level, laws and regulations that support breastfeeding, such as paid parental leave and workplace breastfeeding accommodations can make it more feasible for breastfeeding and can impact community-level norms. At the community level, cultural norms and attitudes towards breastfeeding can influence a person’s initial decision to breastfeed and continued breastfeeding. At the organizational level, factors such as workplace policies, access to lactation support services and availability of breastfeeding accommodations impact breastfeeding. And, at the individual and interpersonal level, factors such as a person’s knowledge and attitudes towards breastfeeding, as well as their social support network, including partner, family, and friends, all play a role in breastfeeding. By considering all these levels, the socio-ecological model can help to identify the various factors that contribute to breastfeeding and allow for the development of interventions that address multiple levels simultaneously, to increase breastfeeding rates and duration.

**Figure 1. Adapted Socio-Ecological Model for Breastfeeding**



Source: Authors’ adaptation of Socio-Ecological Model (McLeroy et al., 1988) applied to breastfeeding

Table 3 below offers greater detail on the factors that fall into each domain of the socio-ecological model as well as concrete examples of how these factors impact breastfeeding.

**Table 3. Factors Impacting Breastfeeding in Each Domain of the Socio-Ecological Model**

Domains	Examples
<b>Historical &amp; Societal</b>	



<b>Domains</b>	<b>Examples</b>
Legacy of trauma, slavery, marginalization	<ul style="list-style-type: none"> <li>• The legacy of slavery has led to wide socioeconomic disparities that impact the ability to breastfeed</li> <li>• Black birthing people were not allowed to breastfeed their own children and were forced to be “wet nurses” to white children</li> </ul>
Marketing of infant formula	<ul style="list-style-type: none"> <li>• Breastfeeding was a marker of low socioeconomic class when infant formula was brought to market and as formula became more widely used</li> <li>• Marginalized communities were seen as key consumers by infant formula manufacturers</li> </ul>
Family leave and other policies that support breastfeeding	<ul style="list-style-type: none"> <li>• Family leave from work supports time with infants to breastfeed or feed expressed breastmilk</li> </ul>
<b>Community</b>	
Racism/Bias	<ul style="list-style-type: none"> <li>• Institutionalized, personal, and internalized racism impacts how care, communication, and support is delivered to individuals from the marginalized communities (multi-level and across domains/disciplines); for example, unfair treatment by providers limits access to support and education on breastfeeding for Black birthing people</li> </ul>
Media, social norms and attitudes towards breastfeeding	<ul style="list-style-type: none"> <li>• Breastfeeding and childbirth classes do not include images of marginalized communities, thus people from these communities do not see themselves in breastfeeding promotions or campaigns</li> </ul>
Community support	<ul style="list-style-type: none"> <li>• Due to historical and structural/institutional factors, marginalized communities do not have the same historical legacy of breastfeeding as other communities and tend to have a lack of role models, lack of family knowledge of breastfeeding passed down generations</li> </ul>
<b>Organizational/Structural/Institutional</b>	
<i>Health Care</i>	
Access to health care in general and maternal care	<ul style="list-style-type: none"> <li>• Marginalized communities do not have equitable access to the social determinants of health that support well-being throughout their lifetimes and do not have equitable access to health and maternal care, which impacts maternal outcomes</li> </ul>
Maternity care practices	<ul style="list-style-type: none"> <li>• Breastfeeding support provided during prenatal, labor and birthing, and postpartum periods is not equitable across communities due to structural and institutional disparities that marginalize communities</li> </ul>
Access to professional lactation support and breastfeeding education	<ul style="list-style-type: none"> <li>• Communities have uneven access to doctors, nurses, or lactation consultants in person, online, in home, in group, etc. Support also includes education regarding use of breast pumps and access to supplies.</li> <li>• Early care and education, which includes prekindergarten (pre-K) programs, Head Start programs, child care centers, and in-home care, can support lactating individuals by having policies on breastfeeding, handling breast milk, and other support. Marginalized communities tend to have less access to early care and education</li> </ul>

<b>Domains</b>	<b>Examples</b>
Access to peer lactation support groups	<ul style="list-style-type: none"> <li>Peer support can be done in various settings (online, in-person, group, etc) and WIC clinics often provide peer support groups or counseling. As it involves the community most relevant to the lactating individual and includes emotional support and education, it has been shown to be an important part in supporting breastfeeding</li> </ul>
Professional education of providers	<ul style="list-style-type: none"> <li>There are limits to knowledge, skills, and attitudes of those working in health care with regards to initiation of breastfeeding, management of lactation, breastfeeding counseling for communities in need of extra support</li> </ul>
<i>Work-Related</i>	
Workforce supply	<ul style="list-style-type: none"> <li>Dearth of International Board Certified Lactation Consultants (IBCLC) who specialize in the clinical management of breastfeeding and lack of diversity in the workforce (e.g. only <a href="#">10% of IBCLCs are Black</a>)</li> </ul>
Workplace support	<ul style="list-style-type: none"> <li>Workplaces support breastfeeding individuals by creating a culture to allow lactating individuals to breastfeed or express milk, flexible scheduling, options for part-time work or teleworking, providing nearby childcare, allowing babies at workplace</li> </ul>
<b>Interpersonal &amp; Individual</b>	
Family support	<ul style="list-style-type: none"> <li>Breastfeeding support from both immediate and extended families impacts breastfeeding initiation and continuation. Due to historical, community, and structural factors listed above, people from marginalized backgrounds may not have community, workplace, and health care support that allows families to support the breastfeeding person and enable them to initiate or commit to breastfeeding</li> </ul>
Health and socioeconomic status	<ul style="list-style-type: none"> <li>A person's health status as well as their socioeconomic status impact the person's ability to breastfeed. Due to the myriad of historical, community, and structural factors listed above, people from marginalized backgrounds have historically had poorer maternal and neonatal health outcomes that impact their ability to breastfeed</li> </ul>
Education/knowledge	<ul style="list-style-type: none"> <li>An individual's level of breastfeeding education and knowledge impacts the person's interest and motivation in breastfeeding, understanding of the often difficult strategies needed to initiate and continue breastfeeding. People from marginalized backgrounds often do not have access to the same level of health education on breastfeeding as those from more non-marginalized backgrounds.</li> </ul>

## LITERATURE REVIEW

Studies have shown that breastfeeding is associated with a reduced risk of breast cancer (Victora et al., 2016), but many people are unaware of this link (Hoyt-Austin et al., 2020; Sly et al., 2020). One study found less than 40% of Black women indicated having knowledge of this association (Sly et al., 2020). In another study, about 36% of people having given birth responded that the knowledge of the link between breastfeeding and cancer affected their decision to breastfeed (Ganju et al., 2018). There are a number of

structural issues that prevent people from accessing breastfeeding education, support, and access to care and further barriers that challenge people to initiate or continue breastfeeding despite having the knowledge of its protective benefit. The purpose of this literature review is to offer a big picture summary of all the barriers that prevent potential breastfeeding people to initiate or continue breastfeeding. As described in the Methods section, we examined the peer reviewed literature and sought to fill in any gaps in the literature through the use of national or state-level reports found in the grey literature on breastfeeding barriers. In total we found 201 articles dating from 2015-2022. In Endnote, we indexed the articles based on key words based on topic areas on breastfeeding, for example we looked at the keyword “work” as it is a key component of the organizational/structural/institutional category of our conceptual framework. Table A1 in Appendix summarizes the keywords found in the articles. Work, education, culture, community, and family were the top 5 keywords in the articles. We also tallied the articles by racialized group – Black, Asian, and Native Hawaiian or Pacific Islander.

We found 75 of the 201 total included Black or African American, 22 of the 201 included Asian, and 7 included Native Hawaiian or Pacific Islander in the title or abstract. (Table A2 in Appendix)

Of the papers on the Black or African American community, nearly half discussed the structural, social, and historical barriers to breastfeeding, including racism and history of slavery as key components. (Anstey et al., 2017; Asiodu et al., 2021; Butler et al., 2021; C. Davis et al., 2021; R. Davis et al., 2021; Duncan et al., 2022; Furman et al., 2022; Green et al., 2021; Grundy et al., 2022; Gyamfi et al., 2021; Hamner et al., 2021; Hemingway et al., 2021; Johnson et al., 2015; Johnson et al., 2021; Lee and Baker, 2021; Petit et al., 2021; Pyles et al., 2021; Robinson et al., 2019; Seiger et al., 2022; Standish and Parker, 2022; Stevens-Watkins et al., 2022; Thomas, 2018; Whitley and Banks, 2022)

Literature on Asian American and Native Hawaiian and Pacific Islander communities focused mostly on cultural feeding practices and beliefs. (Adams et al., 2016; Ayers et al., 2021; Ayers et al., 2022a; Ayers et al., 2022b; Bresnahan et al., 2020; Duh-Leong et al., 2022; Fialkowski et al., 2020; Gibby et al., 2019; Goldbort et al., 2021; Hayes et al., 2020; Kai et al., 2022; Kang et al., 2020; Lau et al., 2021; Lee, 2019; Lee and Brann, 2015; Lee et al., 2018; Mulville et al., 2022; Scott et al., 2019) The belief that formula should be used to supplement breastmilk in order to meet the nutritional demands of a growing child is often cited as a key barrier to breastfeeding among both Asian American and Native Hawaiian and Pacific Islander communities. Among studies on Asian American communities, language barriers was also a focus; for example, a study of a perinatal education program to increase breastfeeding among Chinese Americans found their bilingual program improved exclusive breastfeeding rates among participants. (Lau et al., 2021) As a whole, we found there was a relative dearth of findings for the Native Hawaiian and Pacific Islander community as well as for Asian Americans. To augment the literature for these groups, we searched the grey literature for findings. Through this searching, we found material from the Asian American, Native Hawaiian, and Pacific Islander (AANHPI) Birth Equity [Conference](#) that suggests there is a high degree of variation in breastfeeding across AA and NHPI groups, thus data should be disaggregated for it to be meaningful for communities. There are a number of larger-level barriers that tended to be ignored in the past when health professionals must more weight on individual factors (Standish and Parker, 2022; Whitley and Banks, 2022). The purpose of this literature review is to provide a general overview of the barriers to breastfeeding and where applicable how it applies to the Black, AA and NHPI communities. Our overall literature takeaways are summarized using the broad categories identified in our conceptual framework for breastfeeding (Figure 1 and Table 3).

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## 1. HISTORICAL AND SOCIETAL FACTORS ASSOCIATED WITH BREASTFEEDING

There is a growing body of literature that suggests the act of breastfeeding is influenced by economics, structures, history, communities and other social determinants that make it more than a simple personal choice. For instance, there are a number of underlying historical factors that influence breastfeeding but have tended to be overlooked. These historical factors include the legacy of trauma, slavery, and marginalization of communities which impact the ability to breastfeed. (Duncan et al., 2022; Green et al., 2021; Grundy et al., 2022; Johnson et al., 2021; Kendall-Tackett and Moberg, 2018; Pyles et al., 2021) For example, marginalized communities face a number of barriers that can make it more difficult for them to access the healthcare services they need; these barriers impact the ability to initiate breastfeeding. Some of the barriers that marginalized communities may face include: (1) Socioeconomic disparities: Marginalized communities often have lower incomes and fewer resources, which can make it more difficult for them to afford lactation services. (2) Language barriers: Individuals who are not fluent in English may have a harder time understanding and navigating the healthcare system. (3) Lack of culturally competent providers: Marginalized communities may not have access to healthcare providers who understand and can address their specific cultural needs and beliefs. (4) Discrimination: Marginalized communities may experience discrimination within the healthcare system, which can lead to mistrust of healthcare providers, and reluctance to seek out healthcare services. (5) Geographic barriers: Marginalized communities may live in areas that are underserved by healthcare providers, making it more difficult for them to access lactation services. (6) Lack of health insurance: Marginalized communities are more likely to be uninsured or underinsured, which can make it more difficult for them to access and afford lactation services.

Trauma, such as that experienced by enslaved individuals, has generational impacts on prohibiting the breastfeeding experience. (Duncan et al., 2022; Green et al., 2021; Grundy et al., 2022; Johnson et al., 2021; Kendall-Tackett and Moberg, 2018; Pyles et al., 2021) Slavery resulted in the forced separation of mothers and babies, which disrupted the natural bonding and breastfeeding process among enslaved people and their own children, and forced upon them “wet nursing” of infants of enslavers. (Green et al., 2021; Grundy et al., 2022) These historical traumas are posited to have not only contributed to generations of not being able to breastfeed and thus not have a history or legacy of breastfeeding as well as contributing to negative attitudes towards breastfeeding.

Infant formula marketing targeted towards marginalized communities is another suggested contributing factor to low breastfeeding rates among certain racial/ethnic groups. (Devane-Johnson et al., 2022; Grundy et al., 2022) Commercially produced infant formula became most popular in the 1950s and these products were widely used in hospitals. Decades later in 1991 after the growing concern over the expansive use of formula, the World Health Organization (WHO) released the International Code of Marketing of Breastmilk Substitutes. It became the first major step in recognizing that breastmilk is the ideal form of nutrition and that hospitals should not be used to promote formula. The Baby-Friendly Hospital Initiative was also launched to help provide guidance with regards to breastfeeding initiation practices in hospital (discussed in greater detail below). There are a number of other notable examples of policy or societal action at the federal and state level that have been enacted to support breastfeeding. These are discussed in greater detail in the Policy section of this report.

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## 2. COMMUNITY FACTORS ASSOCIATED WITH BREASTFEEDING

The major community-level factors that impact breastfeeding are interrelated with all other factors in the social-ecological model. For instance, racism and bias, while categorized under this category of community, also has prominent presence under the historical, organizational and structural categories.

Institutionalized, personal, and internalized racism impacts how healthcare, communication, and support is delivered to individuals; for example, unfair treatment by providers limits access to support and education on breastfeeding. (Asiodu et al., 2021; Butler et al., 2021; C. Davis et al., 2021; Green et al., 2021; Grundy et al., 2022; Gyamfi et al., 2021; Johnson et al., 2021; Lee and Baker, 2021; Petit et al., 2021; Robinson et al., 2019; Standish and Parker, 2022; Stevens-Watkins et al., 2022)

Due to historical and structural/institutional factors, marginalized communities do not have the same historical legacy of breastfeeding as other communities and tend to have a lack of role models, lack of family knowledge of breastfeeding passed down generations. Community attitudes and beliefs about breastfeeding influence a person's decision to breastfeed and ability to continue breastfeeding. (Deubel et al., 2019; Goldbort et al., 2021; Kim et al., 2017) Additionally, negative community norms regarding breastfeeding make it difficult for people to breastfeed in public, for example. One study found that images of public breastfeeding were viewed less favorably than images of private breastfeeding. (Magnusson et al., 2017) Also, a lack of diversity in images or promotional material showing breastfeeding has been suggested as a barrier to breastfeeding. (Jones et al., 2015)

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### 3. ORGANIZATIONAL, STRUCTURAL, AND INSTITUTIONAL FACTORS ASSOCIATED WITH BREASTFEEDING

Being able to obtain breastfeeding education and having access to systems that support breastfeeding are arguably two of the most important factors under the organizational/structural/institutional category. (Dinour and Bai, 2016; Petit et al., 2021; Snyder et al., 2021; Tomori, 2022; Tomori et al., 2022) Breastfeeding people tend to encounter barriers related to breastfeeding initiation at the healthcare system level where institutions may lack the infrastructure to provide adequate breastfeeding education and access to care. Breastfeeding people tend to run into barriers related to continuation of breastfeeding at the workplace where structures are not in place to accommodate breastfeeding or pumping.

Recognizing the importance of breastfeeding education at the time of birth along with other standards of care for babies and mothers, the Baby-Friendly Hospital Initiative (BFHI) was introduced in the U.S. in 1991 by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF). To become a Baby-Friendly Hospital, a facility must meet certain criteria and pass an on-site evaluation by designated certifying bodies. As of 2021, there are around 600 Baby-Friendly facilities in the U.S. with about 30% of all annual U.S. births occurring in such a facility ([Baby-Friendly USA](#), 2022) Baby-Friendly Hospitals encourages breastfeeding through practices that include:

- Having a written breastfeeding policy that is routinely communicated to all healthcare staff
- Training all healthcare staff in skills necessary to implement this policy
- Showing mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants
- Giving newborn infants no food or drink other than breastmilk, unless medically indicated
- Practicing rooming-in – allowing mothers and infants to remain together 24 hours a day
- Encouraging breastfeeding on demand
- Giving no pacifiers or artificial nipples to breastfeeding infants

Evaluations of Baby Friendly Hospital Initiative (BFHI) shows generally positive results but require more research to show a definitive link between the intervention and effect on breastfeeding rates. (Patterson et al., 2018; Tomori et al., 2022) In studies on how BFHI has impacted disparities and breastfeeding rates among Black/African Americans, results generally suggest the initiative might help breastfeeding initiation but further work on interventions to encourage sustained and exclusive breastfeeding is

needed.(Deubel et al., 2019; Hemingway et al., 2021; Knutson and Butler, 2022) Some suggest the need for greater investment on preparing pregnant people for breastfeeding prior to birth through prenatal education. (Knutson and Butler, 2022)

Prenatal breastfeeding education can help prepare expecting mothers for the breastfeeding experience and increase their likelihood of success.(Ahlers-Schmidt et al., 2020; Green et al., 2018; Martinez et al., 2020; McKinley et al., 2021; Rosen-Carole et al., 2022) Prenatal breastfeeding education is often offered at hospitals or birthing centers as part of their childbirth education program. These classes are often led by lactation consultants or nurses who are knowledgeable about breastfeeding.

Some ways to encourage breastfeeding prenatally include the following: (Lee and Jackson, 2016; Martinez et al., 2020; McKinley et al., 2021; Rosen-Carole et al., 2022)

- Providing pregnant people with accurate and up-to-date information about the benefits of breastfeeding for both the breastfeeding person and the baby
- Offering breastfeeding classes or support groups for pregnant people
- Encouraging pregnant people to seek out breastfeeding resources and support networks before their baby is born
- Addressing concerns or misconceptions about breastfeeding
- Helping pregnant people develop a breastfeeding plan and set realistic goals
- Providing pregnant people the opportunity to observe breastfeeding or practice breastfeeding positions with a breastfeeding model or lactation educator
- Encouraging family members to be involved in the breastfeeding process
- Encouraging parents to start skin-to-skin contact as soon as possible after birth

Health education about breastfeeding can be provided to breastfeeding persons alone or to family members such as parents and partners. It can cover the various health issues related to breastfeeding and how it affects the mother and her child, including the impact breastfeeding has on reducing breast cancer risk. Some of the health professionals who often provide these services include midwives, nurses, physicians and lactation consultants.

### **Lactation Consultants**

International Board Certified Lactation Consultants (IBCLCs), Certified Lactation Counselors (CLCs) and peer counselors through La Leche League or WIC are types of healthcare professionals certified in lactation care. These lactation providers may provide education at home, hospitals and clinics, private practices, or community centers. They offer lactation education and support beyond what clinical providers – such as obstetricians/gynecologists, pediatricians, labor and delivery nurses – can provide. Recent studies show lactation providers face a number of challenges in their work, which impact the ability of breastfeeding people to access their services. These challenges include: an overall shortage of lactation consultants, particularly in less urban areas, lack of racial/ethnic representation in the workforce, and lack of referrals to their services.(Anstey et al., 2018; Bhurosy et al., 2021; R. Davis et al., 2021; Eden et al., 2018; Grubestic and Durbin, 2017; Grubestic and Durbin, 2019; Haase et al., 2019; Reno et al., 2018; Seiger et al., 2022; Thomas, 2018) Telehealth and social media have been identified as having helped improve access to lactation services.(Habibi et al., 2018; Mullen et al., 2017; Schindler-Ruwisch and Phillips, 2021; Uscher-Pines et al., 2022)

The ACA legislation required coverage of preventive health services for women, including “breastfeeding support, supplies, and counseling,” which includes “comprehensive lactation support and counseling, by a

trained provider during pregnancy and/or in the postpartum period, and costs for renting breastfeeding equipment.” These preventive services must be covered in full with no cost-sharing. This means, for example, breast pumps are covered at no cost to the patient. A recent study found the ACA change was associated with increased breastfeeding duration by 10% and increased exclusive breastfeeding by 21%; however, there was no significant impact on breastfeeding initiation.(Gurley-Calvez et al., 2018) It is possible the breast pump coverage offered by the ACA has driven the impact on prolonged breastfeeding and the lack of impact on initiation points to challenges in obtaining lactation services. A recent detailed study of multiple states participating in an all-payer claims database found various impacts of increased breast pump usage post-ACA on breastfeeding rates. They found an increase in breast pump claims led to higher levels of breastfeeding for those in both private and public insurance.(Hawkins et al., 2022) However, families are often unclear about what their insurance should offer and families often face cost barriers to obtaining lactation consultant care when the consultant is not an in-network provider and thus not covered fully by insurance.(Snyder-Drummond et al., 2017)

Additionally, providers and workplace managers may not understand or be aware of requirements under the various breastfeeding laws. California’s lactation accommodation law (SB 142), that was codified in Sections 1030-1032 of the California Labor Code in 2000, requires employers to establish lactation accommodation policies, spaces, and programs for providing adequate breaks. Failure to comply is subject to financial penalties. Employers are also subject to equal employment litigation or harassment, discrimination, or retaliation litigation based on sex and medical conditions related to pregnancy.

## **Doulas**

In California, full-spectrum doula services became an included benefit for all in the state’s Medi-Cal program through state budget funding and Senate Bill 65 (also called the California Momnibus bill) signed in 2021..(California Department of Healthcare Services (DHCS), 2023b) In this program a doula is defined as a birth worker who provides health education, advocacy, and physical, emotional, and nonmedical support for pregnant and postpartum persons before, during, and after childbirth. Full-spectrum doula care includes prenatal and postpartum care by the doulas, continuous presence during labor and delivery, and doula support during miscarriage, stillbirth, or abortion. Unlike lactation consultants, doulas are not trained specifically in breastfeeding practices, though some doulas may have additional lactation training and experience they bring to their jobs. Further, through the California program, lactation support is one of the five areas of the 16 hour training that is covered in the doula education pathway.(California Department of Healthcare Services (DHCS), 2023a) Doulas have an understanding of the basic anatomy and physiology of the childbearing process, which includes breastfeeding and they are to know strategies for supporting breastfeeding, including being able to refer patients to breastfeeding resources.

In its medical effectiveness review of California’s doula legislation, the California Health Benefits Review Program (CHBRP) reviewed the literature on the impact of doulas on clinical outcomes.(California Health Benefits Review Program, 2020) Of the five studies included in this review, they found two did not observe any significant differences in breastfeeding initiation between women who received prenatal and postpartum doula support in addition to labor support and women who received standard labor care (Hans et al., 2018; Nommsen-Rivers et al., 2009) and three studies that found low-income women who received doula or doula-type care were significantly more likely to initiate breastfeeding in the hospital setting as compared with women who received standard labor care.(Campbell DA, 2006; Edwards RC, 2013; Kozhimannil, 2016) Given the mixed evidence, the review concluded there was inconclusive evidence that care impacts breastfeeding initiation. There is even more limited evidence on the impact of doula care on sustained breastfeeding after discharge. They note that

the lack of studies on doulas and outcomes is largely responsible for inconclusive or insufficient evidence. CHBRP did find enough evidence to conclude that doulas may help to increase spontaneous vaginal deliveries and reduce use of pain medications during labor. It is possible these positive impacts may have downstream, longer-term impact on maternal outcomes including breastfeeding as doula care expands along with community-based support.

#### 4. INTERPERSONAL AND INDIVIDUAL FACTORS ASSOCIATED WITH BREASTFEEDING

Family members – from grandmothers to spouses/partners - are key players in breastfeeding as they tend to be the main sources of emotional support and breastfeeding knowledge. Family members can also help make practical arrangements to support the breastfeeding person and enable them to initiate or commit to breastfeeding. There are several examples of breastfeeding interventions that involved family members (Dychtwald et al., 2021; Lundquist et al., 2022; McCarter et al., 2022; Tomori et al., 2022): (1) Lactation support groups: Breastfeeding people can attend support groups with their partners or other family members. (2) Family-centered prenatal education: During prenatal education classes, families can learn about the benefits of breastfeeding, how to get started, and what to expect during the early days of breastfeeding. (3) Grandparents or other family members classes: Classes specifically designed for grandparents or other family members to educate them on the benefits of breastfeeding and how they can support the breastfeeding person. (4) Home visits: Health care providers can make home visits to educate families about breastfeeding and provide hands-on support and advice. (5) Peer counseling programs: Trained peer counselors can provide emotional support and practical advice to family members.

An individual's level of knowledge of breastfeeding is one of the key individual-level factors that influences the person's decision and ability to initiate breastfeeding along with prior experience, level of health (i.e. physical ability to breastfeed), and a person's attitudes or cultural norms.(Lee and Jackson, 2016) Breastfeeding knowledge can be defined as a person's understanding of the process, benefits, and challenges of breastfeeding, as well as their ability to provide practical support and make informed decisions about breastfeeding. Education efforts can improve breastfeeding knowledge by (Ahlers-Schmidt et al., 2020; Balogun et al., 2016; Lee and Jackson, 2016; Sayres and Visentin, 2018):

- Providing evidence-based information: Educators can provide accurate and up-to-date information about the benefits of breastfeeding and how it works, as well as addressing common misconceptions.
- Encouraging hands-on learning: By providing opportunities for hands-on learning, such as observing a breastfeeding mother or practicing breastfeeding positions, individuals can gain a better understanding of the process.
- Fostering open and honest discussions: Educators can create a supportive and non-judgmental environment where individuals feel comfortable asking questions and discussing their concerns.
- Reaching out to a diverse audience: Education efforts should be inclusive and accessible to individuals from diverse backgrounds, cultures, and socioeconomic status.
- Incorporating experiential learning: Using real-life examples and experiences can help individuals understand the practical aspects of breastfeeding and provide a more personalized perspective.

#### **Breast Cancer Education**

With regards to knowledge regarding the benefits of breastfeeding, the National Survey of Family Growth (2015-17) found that 38.5% of women in the U.S. are aware that breastfeeding is associated with a reduced incidence of breast cancer.(Hoyt-Austin et al., 2020) Besides not being aware of the association



at all, women may not know the degree to which breastfeeding is protective. Studies suggest breastfeeding can lower the likelihood of developing breast cancer by 4.3% for every 12 months of breastfeeding, on top of the 7.0% decrease per each birth.(Stordal, 2022) It has been shown to have the most significant impact on the risk of Triple-Negative Breast Cancer (20%) and in women with BRCA1 mutations (22-50%).(Stordal, 2022) For this reason, women with a family history of breast cancer could be a key group on whom to focus education on the protective impact of breastfeeding on breast cancer.(Victora et al., 2016)

Simply having the knowledge of the link between a behavior and cancer is typically not enough to motivate people to change or partake in a new behavior. Historically, discussions surrounding breastfeeding barriers were largely centered around individual-level knowledge, attitudes and norms, and it is only recently that larger structural barriers have been recognized, including how social determinants of health from racism to neighborhood resources impact breastfeeding.(Asiodu et al., 2021; C. Davis et al., 2021; Grundy et al., 2022; Gyamfi et al., 2021; Johnson et al., 2021; Petit et al., 2021; Robinson et al., 2019; Standish and Parker, 2022; Whitley and Banks, 2022) Much of the recent work outlines how society, history, and policies have impacted communities, marginalizing whole populations over generations, and how this impacts an individual’s attitudes, knowledge, and access to support and resources. Inequities in breastfeeding rates between racial/ethnic groups are reflective of a complex intersection of many multi-level barriers.

## RESULTS FROM KEY INFORMANT INTERVIEWS ON BREASTFEEDING ATTITUDES, BARRIERS AND RECOMMENDATIONS

In total, we conducted 33 key informant interviews, including 23 with mothers and 10 with providers and community representatives.

### STUDY PARTICIPANTS

#### Mothers

- 23 total
  - Black – 15
  - Asian – 5
  - NHPI - 3
- 4 were first-time mothers
- All had hospital births
- 15 had Lactation Consultants at their most recent birth
- 9 used Doula services at their most recent birth
- 2 received WIC program benefits

#### Providers and Community Representatives

- 10 total
  - 2 Ob/Gyn
  - 1 Family Practice Physician
  - 1 Doula
  - 3 Advocates/Community Group Representative
  - 1 WIC Staff

- 1 Lactation Consultant (LC)
- 1 Breastfeeding Support Service Provider

## SAMPLE CHARACTERISTICS

All mothers gave birth in hospitals but had differing experiences with lactation consultants (some had visits after they left the hospital, some did not; some had doulas and LCs through WIC). We had a mix of respondents who had and did not have family leave through their employer. We had a few respondents report that that they did not work specifically because they did not have family leave through their employers but wanted the time off from work after giving birth.

## CAVEATS AND LIMITATIONS

- All mothers in our study were predisposed to breastfeeding and did so with their most recent child birth. While we did not limit participation to this group, they self-selected into participation.
- The providers and community representatives were able to speak to both mothers who chose to breastfeed (some were mothers themselves), and ones who chose not to, or were unable to breastfeed due to physical barriers.
- The study was promoted by support service organizations; therefore, the sample may represent a more well-connected sample than the general population
- Some participants gave birth during the pandemic shutdowns, impacting their ability to access as well as their perceptions of, some traditional in-person services (ex. prenatal education classes; group classes).
- Mothers who had multiple children often mentioned experiences with previous children compared with their most recent birth. These situations were probed as part of the semi-structured interviews if appropriate.
- Many of the providers and community representatives were also mothers and shared their own experiences as well as how those experiences sometimes impact their work (e.g. A provider who shares her own breastfeeding experiences with clients/patients).

The study results are presented using the socio-ecological framework discussed above. The first section discusses the individual, interpersonal, organizational, and societal influences on breastfeeding attitudes and plans. Section two discusses the organizational and institutional, interpersonal and individual resources and facilitators of breastfeeding highlighted by participants. Section three discusses community commonalities and specific perspectives. Section four discusses barriers to breastfeeding. Section five gives an overview of knowledge of campaigns. Section six gives recommendations from participants.

## INFLUENCES ON BREASTFEEDING ATTITUDES AND DECISIONS

After we ascertained a mother's intention to breastfeed, we asked about the factors that influenced her choice to breastfeed, and the duration of time she did, or plans to, breastfeed. We also asked providers and community representatives their perceptions on what the mother's they worked with reported as influences in their plans. Most respondents provided more than one factor, whether they were providers, community representatives, or mothers. The top factor mentioned was the knowledge of benefits of

breastfeeding. No matter what how they received the information – from family, online, or through educational materials, it drove their decisions. Other factors mentioned were interpersonal influences and accessibility of lactation consultants and doulas.

The study participants shared the belief that there are generally positive attitudes toward breastfeeding among perinatal women. Participants perceived that more moms today want, and have as their goal, to breastfeed, and to meet goals associated with national recommendations. Respondents attributed this trend to an increase in awareness of the benefits of breastfeeding, an increase in breastfeeding in their family and social circles, and an increase in being exposed to breastfeeding (in private, in public, and in the general media).

Some moms initially have concerns about their ability to breastfeed. One doula shared her experiences: “I think almost every family that I work with, when I talk to them about it beforehand, they intend to breastfeed, but it's always caveated with, ‘unless I can't’. There is an assumption that there will be some sort of issue that will come up that will prevent them from being able to breastfeed. And it's a natural fear.” Knowledge was also a barrier to breastfeeding, particularly for first-time mothers.: “(First-time moms) don't know what breastfeeding is like. They don't know that you need a place to refrigerate your milk and that you need this much time every three hours or four hours to pump. And then, so if the patient has an idea about what they'll need, then they can maybe troubleshoot it ahead of time and anticipate something and maybe work it out with their employer ahead of time. If you're doing it, if you're trying to figure it out on the fly, I think you're more likely to just give up.”

## KNOWLEDGE OF THE BENEFITS OF BREASTFEEDING

We asked all mothers what they knew about the benefits of breastfeeding, and the benefits of exclusive breastfeeding as well as what they perceived other mothers knew of the benefits. We also asked providers and community representatives to respond to their perceptions of what their clients knew about the same benefits. Most every respondent provided more than one benefit in response.

Health of baby was overwhelmingly the top response, including the colostrum, antibodies, nutrition for growth and development, and Covid protections. Most mothers who did not breastfeed older children specifically noted that learning about these benefits was the motivating factor. After health of the baby, respondents said bonding with the baby was the key benefit of breastfeeding.

The next benefit mentioned by moms was the health of the mother, though moms were mixed on what that meant, and not always sure it was true. Some said they heard that breastfeeding would help the mother lose weight, and some thought they had heard there were other benefits for the health of the mom but were unable to specify what the benefits were. A few mothers, when speaking of the health benefits to them, were unable to offer any specifics. Only one specifically mentioned the connection between breastfeeding and the reduction in breast cancer risk. Later in the interview, we specifically ask about participants knowledge in the connection, and then a few mothers felt they remembered hearing that information.

Less common were the responses of the cost of breastfeeding being cheaper than formula, and the convenience of breastfeeding over carrying and preparing formula.

We probed about where participants got knowledge about the benefits of breastfeeding, and most either got information from classes they took, materials they were given by providers, or through online searches.

We also asked mothers to share what they felt were the attitudes toward breastfeeding within their communities. Most did not feel their perceptions reflected the larger communities (Asian American, Black or NHPI), but were comfortable sharing what they believed was a more limited perspective within their family, social, and for some, online circles. Most felt the biggest influence on breastfeeding was education in the topic, specifically knowledge of the benefits, preparation for the experience, and an understanding of how to address physical barriers they may encounter.

Key takeaway: Moms put the health of the baby first and was the most important message regardless of where they got their information. The best platforms for message delivery were the classes offered to moms, materials supplied by providers, and online resources. This information was not obtained through public awareness campaigns.

## INTERPERSONAL INFLUENCES: FAMILY AND FRIENDS

The second top-mentioned factor influencing their breastfeeding decisions was the impact of family. Mostly, mothers gave credit to their mother, followed by sister, mother-in-law, or women in the extended family (aunts or cousins). Mothers also noted that the support of their partners was important, but only one said her husband was a strong factor in their decision to breastfeed. A few mothers said they were inspired to consider breastfeeding because of other friends they knew who breastfed. For many, it was a perceived support network, and it was their family and friends leading by example: “Simple answer was my mom. My mom had eight of us and she breastfed until the next one came.”

A provider who worked predominately with Asian American and Black populations noted the impact of families on a women’s intention to choose formula or breastfeeding:

“I have heard some mothers or mother to be saying how their parent’s kind of encourage them to do more formula feeding because that’s just what they were used to when they were, you know, at that age of having babies as well.”

The impact of family and friends did cut both ways. If relatives had problems with milk supply or shared experiences of significant pain, it caused new moms to be anxious about their experience. One provider saw that among many mothers they worked with: “And there’s also the history of family where maybe the families had some hardships and their parents probably had a really difficult time keeping up with their supply. So, they believed that they were not able to produce enough so they would pass on that insecurity to the next generation, which would be the current parents now where now they’re panicking.”

We heard of similar experiences for women who made social connections with other moms both online and in-person, with respondents sharing both positive and negative effects. On one hand, many mothers shared their negative experiences: “for the most part all of them said that the nipple pain was almost just insurmountable.”

But those same communities often also crowd-sourced advice and helped moms find solutions to their challenges. Moms in our study also noted that the connection to other women who shared similar fears and experiences was extremely valuable and often inspired them to try breastfeeding.

Regarding the goals for the duration of time the moms planned to breastfeed, mothers referred to national recommendations, though they were not unanimous as to the amount of time in the recommendation or the organization that made the recommendation. Some said their goal was six-months, one-year or two years, and some were not sure if they were correct about the recommendation they cited.

## PROVIDER PERSPECTIVES OF INFLUENCES ON BREASTFEEDING ATTITUDES AND DECISIONS

Providers and community representatives in our study also shared their perspective that there is an increasing interest in breastfeeding among women. They also felt there was a trend toward more education around breastfeeding and echoed the sentiment that mothers who were not prepared and educated on the benefits were less likely to breastfeed.

Because of their work with multiple women and communities, they also saw more of the impact that family and community traditions had on a woman's decision to breastfeed. They often heard women recount that one or more relatives did not have a good milk supply, and therefore assumed they would not have adequate supply.

Although all mothers participating in our study were currently breastfeeding or had breastfed their most recent child birth, providers were able to offer insight into factors contributing to mothers not breastfeeding. Providers who worked with moms who did not breastfeed reported that it was most often due to physical or practical challenges such as the requirement to return to a workplace that did not provide adequate support for pumping or breastfeeding.

## VALUE OF LACTATION CONSULTANTS (ORGANIZATIONAL AND INSTITUTIONAL)

Having a lactation consultant or doula was also very important for mothers who initially had challenges in breastfeeding: "Overall, they were just encouraging me to keep trying and knowing that the breastfeeding experience in the beginning is supposed to be normally hard."

While doulas were engaged through community groups, most women in the study had lactation consultants through their hospital services. Only two had insurance coverage for those services outside the hospital setting. Lactation consultants can fill several key roles for moms depending on the timing and frequency of the interactions. Most often, they engaged with mothers in the hospital following the birth. Whether or not they have follow-up once a woman has left the facility differs between the hospital programs or if the mother has insurance coverage for services.

Initially, lactation consultants can be instrumental in encouraging breastfeeding practice and teach about techniques. Their counsel is very important if the mother encounters any issues in successfully breastfeeding. They can educate mothers on what to expect (like knowing about weight fluctuations in a newborn), particularly in occasions when a mother's milk supply is delayed, or low, or if they have physical challenges that might cause them to quite breastfeeding.

Beyond the initial technical components, lactation consultants can help a mother prepare for an eventual transition to pumping. They are knowledgeable about the best pumps to use, setting expectations, helping make a plan, and understanding all of the auxiliary things that aide in a successful breastfeeding plan.

After having access to a lactation consultant, one mother pressed the important role they played, especially for first-time mothers in preparing a mom both for breastfeeding and pumping.

## TIMING FOR ENGAGING WITH LACTATION CONSULTANTS

Depending on the hospital or program, there was a difference in experiences as to when a lactation consultant engaged with a mother, and there were differing opinions as to when the best time might be.

Most met a lactation consultant in the hospital very soon after giving birth though it took some mothers longer to see one because of staffing shortages. Moms acknowledged that seeing the lactation consultant once the baby was born was important because they could help with positioning and latching. However, some had experiences in which they felt the timing was not appropriate so close to giving birth, if that is when the consultant was available, given the intimate and hands-on nature of the meeting. One mother expressed being very uncomfortable in that situation: “Some mothers may have been like, oh my gosh, don't touch me. I just gave birth. I feel dirty. Don't do that.”

Overall, new moms especially wanted there to be more consistency in access to resources and services, and wanted to feel more prepared earlier in the pregnancy journey: “I mean, I almost feel like there just needed to be like someone that give me like a pep talk and like kind of walk me through it more, and that would be helpful. Yeah. I mean, I think if the breast pump, like I'm glad that that's provided through a lot of insurance, but I wish that came earlier. I wish some of the education pieces came earlier or I had access to that more.”

### IMPACT OF DOULAS (ORGANIZATIONAL AND INSTITUTIONAL, INTERPERSONAL AND INDIVIDUAL)

A few mothers utilized the services of a doula, and several providers and community representatives had insights into services provided by doulas. All of them said the presence of a doula in the process makes a significant difference in education about breastfeeding and overcoming physical barriers. They noted that doulas can assist in developing a birth plan, execution of birth plan, developing a breastfeeding plan, and addressing challenges breastfeeding. They are also helpful in planning the transition from breastfeeding full time to relying more on pumping and a bottle when a woman returns to work: “And then it could even come down to actually physically helping with positioning and latching baby at any point after they've been born. Sometimes it includes creating a plan. And so the folks that I'm working with are either returning back to work, and so we have to think of a plan on how they can continue feeding once they've gotten beyond their leave time.”

Doulas can also help address other challenges. One doula provided the example of assisting a mom with low milk supply: “I'm a doula and I know other doulas who know families who have an oversupply, so we can get milk from them and give it to families who need it. So, I'll say it's an informal network of support.”

Most of the women in our study who used a doula were able to do so at no cost and would highly recommend the service to others. A few women in our study pursued becoming Doulas based on their experiences.

In summary, lactation consultants and doulas have an important impact on a woman's success in her goals to breastfeed.

### ORGANIZATIONAL AND INSTITUTIONAL, INTERPERSONAL AND INDIVIDUAL RESOURCES FOR BREASTFEEDING

We asked all respondents about breastfeeding resources, including whether mothers received, sought, found, or could not find information. For providers and community representatives, we asked about the resource they used in their work and directed clients to. We also asked participants to suggest resources they believed should be made available.

One mother confessed she had not breastfed her older children, who were now 12- and 9-years-old, but chose to breastfeed after her recent birth because she had more education, more resources, and more support.

Hospitals and connections to support services made a significant difference for some. One of the mothers in the study gave birth in different hospitals for each child and noted a marked difference between the support and encouragement from the different hospitals (did not breastfeed first child, did with second once she had a doula as well, black woman). Example: physician worked at Kaiser, and they provided pumps and lactation consultants. She changed hospital systems, and the other only provided classes.

All mothers recalled having received printed materials from their providers associated with the hospital, though several admitted not reading them thoroughly. Some mothers had prenatal classes through their hospital that they attended and recalled that breastfeeding was mentioned but was not a major topic. “We had to do like workshops before giving birth, that the hospital required. And it didn't really talk about breastfeeding. It just talked about like a feeding schedule and reading baby cues.”

One mom specifically who did participate in classes said the information was only moderately helpful since she did not yet have her baby because it's very different to imagine breastfeeding versus trying with an actual infant.

A doula echoed the direction of the conversation prior to birth: “So on the doula side of things, we do talk about it briefly, but because there is no baby, it's a little hard to get into the nitty gritty.”

Many mothers reported seeking information online through internet search engines and social media and connected with support groups online and in-person. Some were also connected to maternal and child health groups through friends or family members.

Some of the specific resources, programs and groups that women connected with included:

- Black Infant Health
- Healthy Beginnings
- Long Beach Breastfeeding Facebook
- Mommy and Me
- Project Joy
- Sister Web
- What to Expect app
- Welcome Baby

Several of the mothers in our study were enrolled in WIC, and reported receiving written resources, opportunities for classes and support groups, and access to lactation consultants and doulas through the program.

Study participants shared that the majority of the resources they received were generic, not culturally tailored for any population. Only in specific programs such as Long Beach Breastfeeding Group or Black Infant Health was the information culturally designed.

In addition to seeking general information on breastfeeding, women reported the primary use of online searches was to connect with other breastfeeding women, either in real time or through their stories, to learn from shared experiences. In addition to wanting to be educated in what to expect on their

breastfeeding journey, mothers reported receiving significant support in knowing there were others who shared their concerns, fears and challenges, and learned a lot from women who had similar experiences. This was especially true for a mom when she was pregnant with twins, she really wanted information specific to breastfeeding twins.

**Key takeaways:** Resources are improving and play a key role in increasing breastfeeding rates. Organizations that provide resources also help facilitate opportunities for mothers to share and learn from one another, which is a valuable resource. However, participants noted a lack of culturally appropriate resources for different populations.

## COMMUNITY COMMONALITIES AND SPECIFIC PERSPECTIVES

While the themes discussed thus far crossed all our groups of interest, there were some additional themes that were community-specific from their perspective.

Providers and community representatives had a broader view of the community having worked with many different women. Overall, participants mentioned few differences among different cultures (Asian American, Black and NHPI). Below we describe community specific perspectives, but also highlight that there are some notable commonalities:

- The elders in the community are a key influence.
- Generational status impacted some communities depending on the country and culture of origin. For example, in some Asian American and NHPI subgroups, the ability to afford formula was seen as a status symbol with breastfeeding being relegated to ‘poor’ families. Other families were also influenced by scarcity of food and encouraged breastfeeding as an important part of their culture.

## ASIAN AMERICAN COMMUNITIES

The Asian American participants in our study represented (mothers) and worked with (providers and community representatives) differing sub-populations and noted that there were differences among the cultures that make up the Asian American community. One mother relayed that in some Asian cultures there was a significant focus on the mother resting and focusing on nutrition immediately following birth to aid in recovery and milk production.

“My mom and my dad are always telling me, you should eat this for more breastmilk. You should eat that and let me help you with this. Let me make you this so you can make more milk.”

Another Asian American mother expressed gratitude that her mom did not react like other moms in the culture: “My mom never shamed me in it. These days I see moms do that.”

Some providers saw the other side of generational influence in some Asian communities. One noted: “I know a lot of Asian communities, there's a lot of rice water that can be given to baby or even in some families, like a rice cereal that is put into bottles and things like that and it's from a time when food was scarce, I think. A fat baby was a sign of health and wealth. And so I think those kinds of things linger.”

Another provider offered: “we all know that previous generations are pretty pushy at trying to raise kids. There are very many instances of that. So then they would probably try to push solids earlier, whatever their opinion is, whether they say, ‘Oh, the baby should start having solids,’ or even just in the Asian community would be like watered down rice, like, oh, like something plain to get them started, whether is



at five months or at four months or like even scarier, some at two and one months. Or the other one where there's so much doubt in the quality of the milk that they're producing that women would pump.”

Communities also influenced concerns on milk supply: “I don't know if this is like an Asian American, like if this is at all related, but I have also heard like things about milk supply being really difficult and so a lot of people can't (breastfeed). And I don't know if this is like pertaining to my community in general or just a number of people.”

## BLACK COMMUNITIES

A few mothers relayed that they felt there was not a long history of Black women breastfeeding, and therefore elders did lead by example for the current generation. One Black doula explained the challenge she faced: “We don't have elders in our community who can show us what breastfeeding looks like. We typically haven't had people in our community who are currently breastfeeding. And so it can be kind of difficult to accomplish something that you've never seen before. But I think that a lot of the women that I've worked with have been able to successfully breastfeed because they've connected with other Black women peers like I mentioned who can kind of troubleshoot with them as well.”

Many noted the societal disapproval of breastfeeding that many women are subjected to, acknowledging that the criticism comes both from within the Black community as well as the broader society. One Black mom's share her experience: “I have heard everything under the book. ‘That's nasty. Why are you breastfeeding in public? Cover yourself up!’ I've heard that you should have more respect for yourself, breastfeeding at a restaurant. Even in 2022, I have heard these things.”

Some attributed the issues with breastfeeding to historical and systemic issues that affect the Black community. Doula: “I think being able to feed your child from your body, should you choose to want to, is a birthright that has been stripped from generations of Black women.”

One community represented said she saw an outsized marketing effort from formula makers targeting Black mothers.

A Black mother summed up major barriers within the community: “I mean, particularly in the Black community? I think just lack of access to information, to good medical care, to jobs that allow you to take enough time or the time that you need for your baby.”

## NHPI COMMUNITY

One mom felt a growing change in attitudes toward breastfeeding: “In the NHPI community, at least to what I know, or the older generations, it's kind of just not normal to breastfeed. But I know with the younger generations, like my generation...now we want to go back to being natural so that breastfeeding is that number one choice and it's also way cheaper for everyone instead of formula.”

**Key takeaways:** There is a positive trend in attitudes toward breastfeeding among recent and breastfeeding moms, though historical ties in some communities still have an impact. There is still room for improvement, but women have ideas on how to make the process better.

## REPORTED BARRIERS (ALL CATEGORIES)

We asked all study participants to relay the barriers that they personally experienced in their efforts to breastfeed, or to accomplish their personal goals for duration of breastfeeding, or in their awareness of the

barriers faced by the mothers they interacted with through their respective organizations. The top barriers were

1. Employer accommodation, or lack thereof (Organizational and Institutional, Interpersonal and Individual)
2. Insurance coverage for lactation consultants, pumps (Organizational and Institutional)
3. A lack of education or knowledge about breastfeeding (especially prenatal) (Organizational and Institutional, Interpersonal and Individual)
4. Costs associated with breastfeeding and pumping, including access to an effective pump, costs associated with nutritional eating to support milk supply (individual)
5. Societal perceptions, including the influence of family, friends, and providers (interpersonal)

#### EMPLOYMENT-RELATED BARRIERS – ORGANIZATIONAL/NEIGHBORHOOD

For moms who are physically able to breastfeed, the biggest barriers were experienced in a return to the workplace. This started with the availability of family leave, which not all study participants had as an employment benefit. Some reported specifically being between jobs in order to have adequate time with their baby since they did not have access to the benefit. Among those that did report having maternity leave, the amount of time they were able to take varied. Most still felt it was inadequate.

For moms who returned to work with the intention of pumping breastmilk, their experiences were varied and complicated by their employers' accommodations, but all noted that it impacted their breastfeeding goals.

Some reported being provided with adequate time to pump and an appropriately private place in which to do so. Some reported that their employers provided adequate time but did not provide an appropriate space. Many noted that the workplace situation forced them to have to supplement with formula or to have to stop breastfeeding altogether. One respondent relayed her experience in that she was given time, but the room that was provided for her private accommodation was a significant distance from her work space and getting to and from the room used most of the time allotted. Another mom returning to work in retail found her workplace completely unaccommodating and gave up. Yet another mom returned to a job with company policies that offered sufficient time and space for pumping, but she was out in the field for her job most often and found the idea of returning to the office to pump in private completely unrealistic because, she noted "It will be a lot of back and forth because pumping is every two hours."

Two of the mothers in the study noted that they had to educate the management or human resources departments in their companies as to the rights they had as breastfeeding people. Providers in the study who were aware of clients who also had to advocate for right in their workplaces pondered about the women at those same companies who may be unaware of the law and their rights or may not feel confident enough to speak up for themselves. They specifically noted immigrant workers might be impacted by this.

A mother who had not yet returned to work did not have high expectations for the accommodation of a location to pump: "They'll abide by the standards that there has to be a fairly private room for me to pump and access to a sink and running water. Whether or not those areas are hygienic are a completely different issue."

One provider in the study relayed her own experience in returning to the workplace after giving birth. She was told she could take the breaks that she needed to accommodate her pumping needs, but she still had to see the same number of patients in a day as was required for all physicians.

### *Family Leave Policies*

Study participants had a mix of status when it came to maternity leave – some had paid leave, some had a mix of paid and unpaid leave, and some were unemployed by choice because they wanted the time with their children.

Moms expressed frustration that their place of employment was the deciding factor as to whether or not they qualified for paid maternity leave. “It was a small business that I worked for, so they didn't get or they couldn't offer any paid time off.”

When it came to family leave law, most moms were unclear as to the legal rights for them or their partners. Even a mother who was aware of the rights for family leave was not fully aware of all details. “We were looking at options for disability or getting paid family leave for PFL. I didn't read up too much about it. But I did read up on it and it did say the 12 weeks, but it said up to eight paid. So I'm a little confused about that.”

Everyone in the study pointed to the return to work as the barrier to achieving long-term breastfeeding plans. One doula noted: “I'll also say that I think a lot of the times there are work barriers and so people cannot see breastfeeding their children or even feeding them pumped milk beyond the time that they're able to spend at home, which a lot of the people that I work with have six weeks and so it's hard to continue after that six week period because of what they perceive to be pumping restraints.”

Mothers overall were very concerned about the practical impact of trying to schedule pumping activities into a work schedule. One mother who had not yet returned to work expressed worry about the transition to pumping. “Nothing expresses a breast better than an actual baby and so once we stop that who knows how long my supply is going to last?”

A provider agreed with that concern: “The milk also started going down cause of that, so the greatest barrier of going back, the job what it brings about monthly, you are stressed. So, stress leads to you not eating a lot or maybe you don't get a lot of nutrients and you don't get a lot of breast milk for it. I think going back to job reduces the hours that you breastfeed the baby, and you find that the women will wean off the baby earlier than six months because they have to go back to job.”

### *Unpaid Leave*

Several mothers in the study cited financial concerns as the need to return to work, ultimately impacting their breastfeeding goals. “I didn't really want to work for as long as I could during his first year, but at three months postpartum, like my family needed money for rent, so I kind of just went to work and that was the only thing. Yeah, I wanted to stay home and breastfeed, but making money halted that for me.”

Family leave is complicated, and paternity leave is even less clear. One mom whose husband wanted to take off time to support her was struggling to figure out if his job allowed leave, and if it would be paid. “But that's the problem. If he stays back, then that cuts both of our incomes. And so that's a little what we're struggling with now.”

### *Legal Rights in the Workplace*

When mothers do return to the workplace with the intention of pumping to continue to provide milk to the child, the legal confusions followed. As one doula noted, the policies are supposed to afford moms time and space for their needs: “It's one thing for pumping time to be protected or to have a space to pump, which isn't always the case, but it's another thing to work with your management team in order to allow for that time.”

Moms amplified that sentiment: “I still don't know if I'm like, I don't know where that would be at my workplace or like what the options are, what resources I have there. Is there a California law about, like women being able to have certain breaks or have a designated location? Is that required of every employer? That's not really well talked about or known, I feel like. And that would be helpful if that was like, these are your rights. Also, yeah, like I don't know women know their rights are and what their options are. Or like I feel like that's something you have to hunt down rather than that's like openly given to you easily.”

Despite the laws in place, women still report not being provided the correct accommodation: “My first child, the employment status really affected me...I wasn't given break time. I didn't have space to feed my child and I almost lost my job.”

Another mother recounted her similar experience with previous children that directly lead to her ending her feeding plans with breastmilk: “I wasn't really comfortable with pumping my last babies because I didn't know where to do it. Where I was working, they didn't have pumping rooms, they didn't have mother rooms. So why would I pump if I have nowhere to do it, or I had no time to do it, or I felt like I had no time?”

One mother shared her experience having to advocate for herself to get sufficient time in the workplace: “I have said that I wanted to breastfeed, they said, okay, well, you have 15 minutes to breastfeed on your break. That's it. I emailed HR and they told me that I do get ten minutes walking time (to reach the designated private room). So, ten minutes to get there, sign in, do whatever I got to do, sit down and then start pumping on my break. I have my 15 minutes and then I get that extra ten minutes to go back. So that just like, that could have created a big barrier in someone that probably didn't want to advocate for themselves or say anything about it.”

One community representative shared that when she gave birth she was employed by a foreign-owned business. She had to educate her managers as to the California laws governing her rights to pump in the workplace. She added workplace advocacy to her work following her own experience with managers unaware of the rules.

#### INFORMATION BARRIERS ABOUT BREASTFEEDING (INDIVIDUAL)

One mother advocated for both prenatal and perinatal education when it comes to breastfeeding. “And so I think that is very important for these moms to continuously to get certain education after a certain point, at least up to the first four months that the baby is born. By the fourth month, I think that they've already kind of done their first second growth spurt. They've gotten the hang of things, and I think that within the first three to four months, if they receive the education that they need, there's a possibility that they'll go on for a whole year.”

Mom: “That may be kind of another reason a woman may not choose to breastfeed just because it's so kind of chaotic when you don't really have the education or knowledge about what to expect.”

There was a connection between the impact of mental stress and lacking knowledge about both the technical aspects of breastfeeding (how to) and the benefits to mom and baby. One mom shared: “I feel as though a lot of the ability to breastfeed is kind of tied into your knowledge of it and the people around you.”

### MENTAL STRESS (INDIVIDUAL)

In addition to the stress that all of the previously mentioned barriers can carry, moms also reported for themselves and for other moms they knew that the issue of mental stress was not adequately addressed as part of maternal health. They shared that the experience of childbirth and child rearing have unique emotional concerns that aren't always acknowledged or addressed. “I think at one point it was just, for me, like mentally and emotionally. I kind of shut down at one point because of how much he needed me so much. So that took a toll on my mental health and postpartum. Yeah, that's the only thing that like I ever hesitated with. Like, kind of just accepting, or it just felt like my body really didn't fully belong to me.”

Moms were aware of others who had mental health challenges that impacted their ability to breastfeed: “And so you have these feelings of not providing for your children, feeling like you're failing. There's a lot of stress behind it. And then if you're more stressed, milk does eventually go away.”

One mom thought mental and emotional stress was most acute for first-time moms: “It feels like a mystery to me. So that also feels like a learning curve to how to do it. So yeah, it just feels like another thing to have to figure out if you are going to have to learn how to be a first-time parent and also navigate that. So that feels like a barrier just mentally, I think.”

### INSURANCE COVERAGE FOR LACTATION CONSULTANTS, PUMPS AND OTHER COSTS (ORGANIZATIONAL/STRUCTURAL)

Several of the moms in our study initially experienced physical challenges to breastfeeding, ranging from nipple pain to mastitis to delayed onset of milk supply. A few of the moms credited a lactation consultant or a doula for assisting them in understanding and overcoming the issue. But moms who faced challenges but left the hospital without access to that support were left to search online or seek information in support groups to try to find solutions. One mom reported she tried to stay in the hospital as long as she was covered because she wanted access to the lactation consultants, which she would lose once she went home: “I stayed in the hospital the most days I could, which was three days. And thinking back, I feel like that's not enough for people....but I think women need a lot more time, especially first time mothers to have help from lactation nurses.”

Another first-time mom shared that concern about losing access to the consultants: “But the lack of follow up or support thereafter leaving the hospital, kind of leaving mom to do it up to herself. It was confusing and hard.”

One mom noted that the lack of uniformity in coverage left many other moms she talked to confused: “I feel like women aren't aware if they can get breast pumps to the insurance so that all of this stuff, and though it's available, no one is aware of it, and then they're left with, oh, I have to purchase all these items, or I have to, and that can become another financial barrier where they think, oh, the formulas are just, it's easier.”

Mom: “And then I've also asked about, oh, does my insurance cover like a breast pump?” and she was told to call the insurer for clarification. “So I called the number and they told me that they wouldn't like send it to me until after I delivered, which also felt like just that didn't feel helpful.”

Confusion over insurance coverage was a common theme among frustrated moms seeking support: “I think I've heard that that is something that's provided, but I don't know if my insurance is to cover that. Even like the option of like a midwife or a doula, that's something that no one is...able to tell me unless I like go hunt down my insurance company and get more information on that. And not even like resources for a doula or like outside, like private support in that way.”

Insurance coverage was directly related to the expenses incurred while breastfeeding. While some women saw breastfeeding as ‘free’ compared to purchasing formula, one doula noted that there are many associated costs that add up: “I think breastfeeding is actually quite expensive. And so if you're looking at the cost of pumps, the pump bags, how to travel with milk that you've pumped for the day, breastfeeding bras, I think it's also very expensive to breastfeed despite people comparing it to the cost of formula. And it's also very time intensive.”

Lastly, language access was also an issue. Providers and community representatives in the study said they saw very few resources printed in languages other than English. They were not aware of any in-language support groups.

#### *Individual Costs*

One mom even noted that making sure they had access to proper nutrition to support strong milk supply was costly, and it wasn't something many moms might budget for: “I mean, I think what's hard is like a lot of things cost money. And I think that if you're like pregnant and you're like trying to like prepare for that, you're not thinking about wanting to spend a ton of money.”

#### *Societal Norms and Perceptions (Family, Friends, Providers) - Interpersonal*

Study participants noted for themselves and for others major concerns about breastfeeding in public. There was a mix of responses on women not personally feeling comfortable breastfeeding in front of others, as well as feeling a stigma when they did. Some mothers even reported being confronted about breastfeeding in front of others, even in a semi-private setting. One Black mother revealed that she had Black family and friends who admonished her for breastfeeding in front of them, and for breastfeeding a child that was more than a few months old. Another Black mom echoed that experience: “I constantly hear, ‘When are you going to stop breastfeeding? When are you going to stop breastfeeding? She has teeth. She can eat food.’”

One mom and doula explained the frustration of the unwanted attention Black mothers often receive: “So it's almost, I think particularly women of color are on the receiving end of a lot of unsolicited advice because people don't think we know how to do anything.”

A Black mother called out specific issues she feels mom's in her community face: “I do believe that women of color, we have certain things with our bodies like, I don't want to say that we're the only ones that have bigger boobs or bigger nipples or huger areolas, but there are some things that are different that people are not used to seeing or don't particularly like to see. And so I do believe that there are some discriminations when it comes to that. However, I do believe that overall, all women are subject to the type of treatment saying that it's nasty, saying, hey why are you breastfeeding in public?”

Another had similar experiences: “Because when people see you doing that in public, they feel like you're not civilized, which is to the wrong. They're not just accepting what you're doing, they feel like it's not the best. So at that point, as a mother, you feel embarrassed and a whole lot of these is in that lots of women to stop breastfeeding, which is really not good.”

Study participants also pointed out that it is not just breastfeeding that needs to be normalized, but pumping as well. One mother hoped it would help workplaces become more accommodating. “I think that there needs to be more for women that are trying to keep their breast production, their milk production up and their breastfeeding up. And it needs to be normalized.”

#### *Other Barriers*

##### *Health Workforce Issues and Trust in Medical System (organizational)*

In addition to having access to lactation consultants and doulas, some women pointed out the need to increase and diversify the workforce. Both women and providers in the study noted that many women feel more comfortable with someone who looks like them, especially in body type. And in general, there needs to be adequate availability. One mom had lactation issues and was referred to the clinic associated with her hospital and could not get an appointment for six weeks.

One lactation consultant in our study reported going into the profession because when she gave birth there were no Black lactation consultants and she felt impacted by the lack of representation. She also reported that she did not meet another Black lactation consultant until she had been in the field for 5 years. They met at a statewide conference, and they were the only two Black women there.

One Black mom felt like a culturally appropriate group made a big difference for her: “luckily, I found the Black Infant Health crew, I think learning about like breastfeeding through them has been really helpful. And they check on me maybe like once a week or every couple of weeks, even like after I gave birth, like, ‘Hey, how's it going? How's everything? Like, how's your baby doing?’ So that's amazing to have that support.”

Related, one community representative pointed to historical issues in some communities that affected trust in the medical system and therefore their willingness to listen to advice: “When the mothers, they feel their culture of breastfeeding is not being respected, they grow distrust toward medical providers. And it also affect their abilities or their desire to seek help when they encounter barriers with breastfeeding.”

##### *Provider not discussing breastfeeding (organizational)*

Study participants reported differences in their experiences with providers on the topic of breastfeeding. One mother noted that her pregnancy care team asked her if she was planning to breastfeed and when she initially said no, they did not broach the subject again. When she was paired with a midwife and she said no, the midwife tried to encourage her and educate her to the benefits, and ultimately, she chose to breastfeed.

One doula hypothesized that lactation education was inconsistent among providers: “a lot of the time we find that pediatricians or midwives are obviously well educated and well very capable of taking care of a child or a pregnant person, but they aren't particularly experts in lactation.”

One mom felt like she got shuffled around when asking providers for lactation resources: “I had a doctor that was like, my doctor's like, ‘Okay, the nurse will give you information on breastfeeding.’ So then when I go to talk to the nurse, the nurse is like, I feel like I have to ask a lot of questions and I'm not given any information really. There is like a class, I think, I can take over Zoom, but I can't take it until I'm like a month prior to my delivery date, which also scares me because I have twins, so I could deliver like well before that class.”

## REPORTED KNOWLEDGE OF PUBLIC AWARENESS CAMPAIGNS

We asked all study participants if they could recall any public awareness campaigns. About half of the participants recalled seeing materials with the message ‘Breast is Best.’ Most mothers believed they had seen something at the hospitals where they gave birth but could not recall the messaging.

A portion of our interviews were conducted during or just after the month of August, which is National Breastfeeding Awareness Month. There are weeks specifically for Black and Asian Pacific Islander Breastfeeding Awareness. Several of the mothers, providers and community representatives who affiliated with those communities recalled seeing announcements about the month and/or weeks online but could not recall specific messaging.

When probed about the breastfeeding campaigns they did see, most moms said they perceived the messaging was about the benefits to the baby – thought, again, they could not recall any specifics. No respondents recalled any promotional materials that included messaging on the link between breastfeeding and breast cancer risk.

## RECOMMENDATIONS FROM PARTICIPANTS

We have divided the recommendations mentioned by participants into the following sections: recommendations addressing barriers to breastfeeding, recommendations for resources, and recommendations for public awareness campaigns.

### RECOMMENDATIONS TO ADDRESS BARRIERS TO BREASTFEEDING

We asked all participants in the study what recommendations they had for addressing the barriers they had shared. Recommendations are categorized as Employment-Based, Provider-Related, Finance-Based, Resource-Related and other recommendations.

Recommendations call for policy (creation or enforcement), program, and societal changes.

Recommendations that were made were not specific to Asian American, Black, or NHPI communities. Every community would benefit from each of these recommendations. However, participants did mention the need to diversify representation in public campaigns and in the provider workforce.

#### *Employment-Related*

- Improve Family Leave policies

Every study participant was adamant about this recommendation: make it longer, make it cover both parents, and make it paid. “I was given two months off and two months are not enough. You cannot leave a two-month-old baby.”

One doula noted that leave policies do not align with medical recommendations for breastfeeding: “if I could ask for anything at all, it would be paid maternity leave for the first, however long we want them to breastfeed. So the new recommendation had been up to a year, it's now two years. I understand it's asking for a lot, but if there could be paid maternity leave for up to a year for parents, I think that would be the biggest get.”

- Enforce current policies on public and workplace breastfeeding

Nearly all study participants called for improved enforcement of employer responsibilities under the law including adequate and appropriate space and time to pump during the work day, and the rights of women to breastfeed in public. Many study participants called for increasing the knowledge of laws that protect



mothers during this time, and the audience included both mothers and workplace managers. Similar with other aspects of breastfeeding, there was a sincere hope that having the conversation about accommodations in the workplace could be normalized: “Most of the time you just go back to work, nobody's going to be asking you if breastfeed.”

One doula expressed the frustration many of her clients had, and also hinted that some of the challenges could be addressed by expanded family leave: “I think that a manager can make or break somebody's experience at a company, right? And so even though we have laws to protect breastfeeding folks, there isn't always like the will or the energy to pursue legal action should their rights not be respected. I won't say that I know of any kind of like law that would help to extend breastfeeding besides allowing them to be with their baby longer.”

#### *Provider-Related*

- Availability of lactation consultants outside of hospital settings

The mothers who only had access to lactation consultants during their time in the hospital strongly recommended changing that arrangement: “I really do think it's follow-up when you leave the hospital. One thing that I noted with my second child was that they had me schedule a lactation specialist appointment before I left. So I knew for a fact that two weeks after I have left the hospital, I'm going to go back and reconnect with somebody. And that was already a plan in place versus having me try to figure out a follow up appointment myself after I left when I'm healing myself, when I'm on lack of sleep trying to feed a baby.”

One provider suggested: “If they had the addresses for these women, they could do a monthly check on every home, and if they do their monthly check and maybe check on the baby and ask the mother is she having enough breast milk and everything, especially in those first six months.”

- Increase diversity of the workforce (lactation consultants, doulas)

A Black doula felt it really made a difference when she worked with Black clients: “So what I mean by peer is, I mean other Black and Brown people lactating people who can talk about their experiences, share their experiences and refer them to other Black and Brown birth professionals.”

Another doula agreed: “Like a culturally congruent provider is probably, I think would be my biggest recommendation. So increasing the number of lactation professionals who look like (women of color) and also making sure that people are referring and respectful of those folks.”

- Education programs and resources should include the whole family.

One provider specifically called out the importance of including fathers: “I think that's one of the biggest things because a lot of, specifically men, a lot of men are not knowledgeable with how breastfeeding works. And sadly, it's the stereotype where they don't research the information, so they just go with whatever they've heard and just kind of have doubts or not know how to support their partner.”

Others agreed that including the whole family would make a significant difference: “I think that there should be family support groups or counselors that can come and talk to families that have a breastfeeding mother and not only tell that breastfeeding mother the benefits, but everyone, including her mom, whoever's involved in her life, invite anybody and everybody.”

#### *Finance-Based*

- Improve insurance coverage for pumps and services

Not only did women recommend that there be coverage for breast pumps, but for electronic as opposed to manual pumps, as it makes a difference in the quality of life for the mother.

One mom shared the significant difference between the pumps: “Previously I had a breast pump that was the kind that you plug into the wall and then you sat there and you were at this pump for 30 minutes at a time. The one I currently have is one that allows you to be mobile. I put on the pump and I can go do whatever I need to do. I look kind of weird with huge things on my breast, but I can still like move about and do my daily chores and do whatever I have to do. So that has made it a lot easier. Prior to these more mobile breast pumps, it was essentially, you can't really do anything,”

- Make doulas and lactation consultants available and free, and not just at the hospital

Moms that had access to doulas through community programs felt they made a significant impact on their birthing and breastfeeding experiences: “Community groups and even at free access to doulas, right? Because my doula really helped me understand what it looks like to like advocate for yourself in that space and things like that.”

#### *Other Recommendations*

- Normalize breastfeeding

Mothers expressed frustration that breastfeeding in public was not normalized because they understand that it is not something that can be scheduled. A mother accurately noted: “When they're hungry, they're hungry. You can't tell a baby, ‘Okay, you have to wait. Wait till we get home, or can you just hold it until we get somewhere that's more private?’”

Another Black mother believes there encouraging signs of progress, but that more is needed: “I have seen more people speaking about it and I have seen it on more on social media posts. It is talked about more. I have been able to personally post more on social media about my own breastfeeding journey to help other mothers and other people that are also experiencing this. And I think that's important. I think that we need more of that. We need to see it more. We need to see more people breastfeeding in public.”

There is evidence that breastfeeding is becoming more normalized. One mother noticed the change: “Like, for example, my kids and I, we always go to Kid Space, and Kid Space now has this little booth that's, it says for breastfeeding moms. Or randomly, when we went to the SoFi Stadium, they have the booth, the same kind of booth and it says, for breastfeeding moms. I feel like with my first kid, those type of things weren't around.”

- Address Mental Health

Providers and community representatives advocated that maternal care include provisions that address mental health: “So you have to check on these women, checking on the women is more important in the baby monthly check-ups, would be very important to them.”

Moms said the connection to other mothers and learning about their experiences really helped with the mental and emotional stress related to breastfeeding. “So yes, absolutely with the resources and then just knowing that we're not alone in this, that it wasn't just, that I'm not the only one facing this difficulty with my breastfeeding journey, that there are other women out there, that it is very common.”

## RECOMMENDATIONS FOR RESOURCES

We asked all study participants to make recommendations for the types of resources that should be available for women to improve rates of breastfeeding. A theme that spread across most of the recommendations was loud and clear – Normalize Breastfeeding!

While all acknowledged changing larger societal norms will take time, they said starting with this generation of mothers can have a big impact. They offered recommendations such as expanding the messaging promoting breastfeeding beyond the lactation consultant or doula. One of the providers in the study noted that her hospital had a designation regarding breastfeeding promotion (she did not recall the official name). She knew everyone associated with the labor and delivery center had been trained to promote breastfeeding with patients. The facility also had weekly lactation support groups.

There were also strong recommendations that community and hospital programs should facilitate connections among mothers for peer-to-peer learning opportunities, either online or in-person: “That Facebook group, I’ve only posted once kind of about my difficulty with breastfeeding this past month. They offer emotional support and there’s a lot of other moms that just share their experiences so that I didn’t feel as lonely.”

Providers also felt strongly that the connections between women impacted success feeding goals: “So postpartum groups, and so that’s any group of people getting together to kind of discuss what they’re going through after baby arrives, I think those dramatically increase the success within those communities.”

Study participants also felt resources should be representative and culturally tailored. They also hoped for more disaggregation among population groups: “I mean, Asian is broad, like a spectrum, but if we can do it (provide resources) within the actual communities themselves, I think that would be helpful for connection.”

It would also be helpful if there were support groups that women could join with members of their own community. “So I definitely think like it would influence, or positively influence other mothers to be. And yeah, because just relating to other women that are like you and come from the same background, and also able to tell stories from their ancestors, or our ancestors, that help. There’s like stories and stuff that just mean a lot to our cultures. So I feel like that has a lot of meaning and significance to help people like bond that to breastfeed.”

Moms, providers and community representatives all also encouraged an increase in the resources informing women of their legal rights in the workplace, and for insurance coverage and mandates.

## RECOMMENDATIONS FOR PUBLIC AWARENESS CAMPAIGNS

We asked all study respondents if they had recommendations for public awareness campaign messaging and elements that they believed would be effective. We asked about the message, the delivery mechanism, and a spokesperson that they would recommend.

A commonly used term voiced in women’s hope for breastfeeding was “normalize.” Across all study participants, there is a belief that this would be an extremely powerful change in rates of breastfeeding. There was a feeling that if the act of breastfeeding was “normalized” then women would not face familial or social pressures to not breastfeed, they would not face public challenges to breastfeeding, and they would not have the issues in the workplace.

In fact, some women were so compelled to be a part of the solution, they were very deliberate toward normalizing the practice of breastfeeding among their families and peer circles. They were unapologetic

about breastfeeding in front of family, friends, and in public, and wanted to communicate a message of the natural aspect of the act to their other children.

A community representative felt that most current campaigns fell short by focusing on 'awareness' rather than benefits: "move beyond awareness to explain benefits. Why is breastfeeding important? Why are we trying to promote it? Versus like, hey, this is breastfeeding awareness month, but why? Why should women do it? Right? So apart from the awareness, I don't think it maybe tells us much more than that."

In messaging, while many study participants thought that communicating the health benefits of breastfeeding to baby and mother would be very compelling, they also felt other messages would be extremely important. They noted that some women have fears that they will be unsuccessful, and messaging encouraging everyone to try would be beneficial.

A community representative cautioned that the language to promote breastfeeding has to be flexible: "It has to connote flexibility because I can understand that breastfeeding may not be the right choice for every mom. I just feel like you get better compliance when your targeted audience is, I guess, able to make that personal choice for themselves as opposed to this is the best way and do whatever you need to do to meet these standards, otherwise you're selling your baby short because there's already enough mom guilt and just mom shaming."

Most recommended the messaging be positive and encouraging: "...make them feel that they have achieved something, which is really, I'd make them feel that they have been congratulated and feel treasured. I'd make them feel treasured and that it's something precious that they have."

For the delivery, most study participants felt that both social media and health care settings would be best. And while some participants felt it would be great if more celebrities/known personalities would promote breastfeeding, most felt the best messenger would be health care providers: "Women are most likely to listen to healthcare workers and other women who they can relate to."

They also felt the messaging might best be delivered by women: "Not anyone who has not done, because experience I think is the best teacher in this case."

All communities did think there would be a significant benefit in representation of their racial/ethnic communities in the depictions of women breastfeeding. Some also noted it would be good if visual images included a variety of body types, and babies of different ages as opposed to just newborns. This could be particularly important in communities of color. One woman shared her recommended messaging for the Asian American community: "Well just because the Asian American community we're just, I guess the older Asian generations are very notorious for body shaming that they try to deliver, or I guess embrace messages of just body inclusivity like either all breasts look different on different people or feeding a baby looks different."

A Black mother suggested it would be beneficial to have messaging to combat some of the stigma experienced by that community: "It's okay to be Black and breast feed also. It's not shameful because, mostly people think that breastfeeding is not for Black women. They need to understand that they are also mothers and they are bringing up children, so they need to know that it's okay to breast feed and it's right, and it's what is right."

As with resources, study participants urged public campaigns to be made in different languages. Finally, most respondents thought messaging that spoke to family support and public acceptance of breastfeeding would also be very impactful.

## RECOMMENDATIONS FOR PUBLIC AWARENESS CAMPAIGNS ON BREAST CANCER CONNECTION

We further asked study participants if they were aware of a link between breastfeeding and breast cancer research, and if they had recommendations for that message in a public campaign.

Women who were aware of the link between breastfeeding and breast cancer risk learned of it online or through a class, not a public awareness campaign. The message is most compelling to women with family history. “My mom has had breast cancer. So yeah, I think that that is an effective message to share because it hits a lot of people closely.”

Most women thought the messaging would be best delivered by healthcare providers (with broad definition), but they were also significantly impacted by interacting with other women that they could relate to. There is an important impact of people seeing others that look like themselves – elders, others in the community – to promote and encourage breastfeeding.

But participants did not think that a message of the connection between breastfeeding and a lower risk of breast cancer would be motivating unless the woman had a family history of breast cancer.

“I think you'll mention it as a provider, but as a young mom, you're not going to be like, I'm going to breastfeed my child so that in 30 years my risk of breast cancer is lower. That's just not on their radar. And I don't think they would even, unless maybe you have like a family history of breast cancer or you're especially sensitive to it.”

“I think for better or worse, parents are self-sacrificing and so it might not be, the benefits to themselves might not be front of mind when they're thinking about extending breastfeeding.”

## REVIEW OF FEDERAL AND STATE BREASTFEEDING POLICIES

The below lists the major policy actions that have laid the foundation for breastfeeding support in the U.S. Laws can help to create a more supportive environment for breastfeeding mothers by protecting their rights to take time off work and breastfeed or pump in the workplace and providing education and resources to support and promote breastfeeding.

### FEDERAL LAWS SUPPORTING BREASTFEEDING

- The Family and Medical Leave Act (FMLA): This law requires certain employers to provide eligible employees with up to 12 weeks of unpaid, job-protected leave per year for certain family and medical reasons, including the birth of a child and the care of a newborn child within one year of birth. Employers are also required to provide breastfeeding mothers with reasonable break time to express milk for their nursing child for one year after the child's birth. The Family and Medical Leave Act (FMLA) was passed in 1993 by the U.S. Congress and signed into law by President Bill Clinton. The law applies to employers with 50 or more employees within 75 miles of the worksite.
- The Women, Infants, and Children (WIC) program: In 2000, the Women, Infants, and Children (WIC) Reauthorization Act was passed. This federal program provides nutrition education, breastfeeding support, and healthy food to low-income pregnant and breastfeeding people, as well as infants and children under the age of five.
- The Affordable Care Act (ACA): Passed in 2010, the ACA requires employers to provide reasonable break time and a private place, other than a bathroom, for an employee to express milk during the workday for one year after the birth of a child. The ACA legislation also requires coverage of preventive health services for women, including “breastfeeding support, supplies, and counseling,” which includes “comprehensive lactation support and counseling, by a trained provider during

pregnancy and/or in the postpartum period, and costs for renting breastfeeding equipment.” These preventive services must be covered in full with no cost-sharing.

- While not a policy change, it is important to note that in 2011 the Federal government released the “National Breastfeeding Promotion and Support Act of 2011,” which requires the Surgeon General to establish a national public awareness campaign to promote breastfeeding.
- The Child and Adult Care Food Program (CACFP): In 2014, the CACFP updated their meal pattern requirements to include breastfeeding support and education to mothers and caregivers. This federal program provides reimbursement for meals and snacks served to children in non-residential care settings, including breastfeeding support and education to mothers and caregivers.
- The Breastfeeding Promotion Act also known as the “Pump Act” passed in December of 2022. The Act aimed to improve breastfeeding in the U.S. by amending the Fair Labor Standards Act (FLSA) to require employers to provide reasonable break time and a private place, other than a bathroom, for an employee to express breast milk during the workday. The bill also requires employers to provide this accommodation until the child’s first birthday. Under the PUMP Act, employees are allowed to sue their employers for lack of compliance, even if they have not filed a complaint with the Department of Labor. A lawsuit can be filed in the following circumstances: (1) For violations of the break time requirement (2) If the employer has indicated it has no intention of providing private space for pumping (3) If an employee has been fired for requesting break time or space.

## CALIFORNIA LAWS SUPPORTING BREASTFEEDING

California has its own Family Rights Act (CFRA), passed in 1991, which provides eligible employees with up to 12 weeks of unpaid, job-protected leave per year for certain family and medical reasons, including the birth of a child and the care of a newborn child within one year of birth, similar to the FMLA. The CFRA applies to employers with 5 or more employees.

In addition to this, California has also passed the lactation accommodation laws in 1998 which requires employers to provide a reasonable amount of break time and a private place, other than a bathroom, for an employee to express milk.

California also extended the Paid Family Leave (PFL) program in 2002, which provides eligible employees with up to 8 weeks of partial pay during the first 12 months of bonding with a new child. The PFL is funded by employee payroll contributions and is in addition to the unpaid leave provided by the CFRA.

California has also passed the New Parent Leave Act in 2020, which requires certain employers to provide new parents with up to 12 weeks of job-protected leave to bond with a new child. This leave can be taken within the first year after the child’s birth, adoption, or foster care placement. Like other family leave acts, the NPLA does not specifically mention breastfeeding, but it does provide new parents with the necessary time off work to bond with their new child and care for them, which can include breastfeeding. This law provides more flexibility for new parents and allows them to take time off to establish breastfeeding and continue breastfeeding after returning to work.

**Table 4. Timeline of Major California Breastfeeding or Maternal Care Policies and Legislative Action**

Year	Legislative/Policy Action
1995 Hospital Breastfeeding Consultation or Information (AB 977)	<a href="#">Cal. Health &amp; Safety Code §123360</a> The State Department of Public Health must include in its public service campaign the promotion of breastfeeding.

	<a href="#">Cal. Health &amp; Safety Code § 123365</a> requires hospitals providing maternity care to make available a breastfeeding consultant or provide information on where to receive breastfeeding information.
1997 Right to Breastfeed in Public (AB 157)	<a href="#">Cal. Civil Code § 43.3</a> allows breastfeeding in any location, public or private.
1998 Breastfeeding at Work (Assembly Concurrent Resolution No. 155)	<a href="#">California Assembly Concurrent Resolution 155</a> encourages state and employers to support and encourage breastfeeding by accommodating to the needs of employees, and ensuring that employees are provided with adequate facilities for breastfeeding and expressing milk.
1999 Human Milk (AB 532)	<a href="#">Cal. Health and Safety Code § 1647</a> declares the procurement, processing, distribution or use of human milk for consumption a rendition of a service rather than a sale.
2000 Jury Duty – Breastfeeding Mothers (AB 1814)	<a href="#">Cal. Code of Civil Procedure § 210.5</a> (2000) requires Judicial Court include a specific reference to the rules for breastfeeding people. <a href="#">AB 1814</a> created the law and directs the Judicial Council to adopt a rule of court to allow the breastfeeding person to postpone jury duty.
2002 Lactation Accommodation (AB 1025)	<a href="#">Cal. Labor Code § 1030-1033</a> employers need to allow a break and provide a room expressing milk in private.
2006 Human Milk (SB 246)	<a href="#">Cal. Health and Safety Code § 1648</a> hospitals must comply with the standards for collection, processing, storage or distribution of human milk by the Human Milk Banking Association of North America unless the department of health approves alternate standards. No screening tests are required to be performed on human milk collected from persons breastfeeding exclusively for their own children.
2007 Breastfeeding Education and Support (SB 22)	<p><a href="#">Cal. Health and Safety Code § 123360</a> requires the Department of Public Health to include the promotion of breastfeeding in public service campaigns; and requires the department to develop a training course and to promote exclusive breastfeeding and specify hospital staff for whom the training is appropriate.</p> <p><a href="#">Cal. Health and Safety Code § 123361</a> Starting 2008, the Department of Public Health to expand breastfeeding peer counseling program at local agency California Special Supplemental Food Program for Women, Infants, and Children (WIC) sites.</p> <p><a href="#">Cal. Health and Safety Code § 1257.9</a> the Department of Public Health recommends a minimum eight-hour training to appropriate staff in general acute care hospitals that provide maternity care and have exclusive patient breastfeeding rates in the lowest 25 percent of the state.</p> <p><a href="#">Cal. Welfare and Institutions Code § 14134.55</a> Existing Medi-Cal program procedures streamlined to improve access to lactation supports and breast pumps among Medi-Cal recipients.</p>

2011 Hospital Infant Feeding Act (SB 502)	<a href="#">Cal. Health and Safety Code § 12366</a> All acute care and specialty hospitals that have perinatal units required to have a clearly posted infant feeding policy.
2012 Unlawful Discrimination (AB 2386)	<a href="#">Cal. Government Code Section 12926</a> Breastfeeding included in definition of sex with regards to discrimination. And, in pregnancy regulations, lactation included as a medical condition of pregnancy.
2013 CalWORKS: Welfare-to-Work Requirements (SB 252)	<a href="#">Cal. Welfare and Institutions Code § 11218</a> an applicant or recipient of aid is entitled to breastfeed in a county office.
2013 Breastfeeding: Baby-Friendly Hospitals (SB 402)	<a href="#">Cal. Health and Safety Code § 123366</a> and <a href="#">§ 123367</a> “Baby-Friendly Hospital Initiative” recognizes hospitals offer an optimal level of care. Establishes the “Hospital Infant Feeding Act” and requires all acute care and special hospitals that have a perinatal unit to adopt “Ten Steps to Successful Breastfeeding.”
Various Breastfeeding Rooms & Accommodation Policies 2015-19	Requires various places, institutions to have accommodations for breastfeeding: <a href="#">Cal. Education Code § 222</a> (2015) – California public schools <a href="#">Cal. Section 1030-34 of the Labor Code (AB 1976)</a> , 2018 and <a href="#">(SB 142)</a> 2019– every employer in California <a href="#">Cal. Penal Code § 4002.5</a> (AB 2507, 2018 - county jails, prisons <a href="#">Cal. Education Code § 66271.9</a> (AB 2785), 2018)- community colleges and state universities <a href="#">Cal. Public Utilities Code § 99176</a> (AB 752), 2019 - multimodal transit stations that begin construction or a renovation on or after January 1, 2021, must include a lactation room
Breastfeeding Warnings and Notifications 2017-2019	<a href="#">Cal. Business and Professions Code § 26120</a> (2017) includes breastfeeding in the warning of a government warning label for cannabis products. <a href="#">Cal. Business and Professions Code § 26211</a> (2018) includes the potential harms of using cannabis while pregnant or breastfeeding in a public awareness campaign. <a href="#">Cal. Business and Professions Code §§ 4052.02</a> and <a href="#">4052.03</a> (2019) require a pharmacist to provide counseling to the patient on the use of preexposure and postexposure prophylaxis which includes education on its safety during breastfeeding.
2019 California Dignity in Pregnancy and Childbirth Act (SB 464)	<a href="#">Cal. Health and Safety Code 123630</a> . Requires hospitals and birth centers that provides perinatal care to implement an evidence-based implicit bias program for all health care providers involved in perinatal care of patients



<p>2021 California Maternal Care and Services, Momnibus (SB 65)</p>	<p><a href="#">Cal. Health and Safety Code and Welfare and Institutions Code.</a> Requires Medi-Cal to provide full-spectrum doula care to all pregnant and postpartum people on Medi-Cal who would like one; monthly stipend to low-income pregnant and postpartum people; Expands Medi-Cal postpartum coverage from 60 days to one year; Builds the midwifery workforce by providing funding to primary care medical residency and other training programs that prioritize underrepresented groups and underserved communities</p>
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### **Enforcement of lactation accommodation laws in California**

In California, the Department of Fair Employment and Housing (DFEH) is responsible for enforcing lactation accommodation laws. The DFEH is the state agency that investigates and enforces discrimination laws, including lactation accommodation laws. Employers found in violation of lactation accommodation laws can face penalties and fines.

Employees who believe that their employer has violated lactation accommodation laws can file a complaint with the DFEH. The complaint will then be investigated by the DFEH and if the employer is found to be in violation, the DFEH may take action against the employer. The DFEH can also provide mediation services to help resolve disputes between employees and employers.

Employees also have the right to file a private lawsuit against an employer for violating lactation accommodation laws and can seek relief including but not limited to lost wages, emotional distress, and attorney's fees.

It is important to note that all employers regardless of size are required to comply with lactation accommodation laws in California, including providing a reasonable amount of break time and a private place, other than a bathroom, for an employee to express milk. Employers are also required to make a reasonable effort to provide a location close to the employee's work area, so the employee can express milk in privacy.

## **POLICY RECOMMENDATIONS**

This report includes voices from providers, community-based organizations, and importantly, Black, Asian, and NHPI mothers on the barriers and facilitators of breastfeeding. Findings suggest that there are multi-level barriers that influence breastfeeding practices and attitudes, but that there are significant opportunities and concrete steps in California to meet the needs of mothers.

Based on a policy and literature review, and key informant interviews, we make a number of recommendations:

1. Align family leave policies with recommendations for breastfeeding practices and duration and enforce workplaces to ensure that existing policies are followed. While there are California Labor Codes that requires employers to provide a reasonable amount of break time and a private place, other than a bathroom, for an employee to express milk, there is no comprehensive state guidance on lactation accommodation, which can make it difficult for employers to understand their legal obligations and for employees to know their rights.

2. Ensure new parents are aware of family leave, workplace support, and other employer obligations that support breastfeeding. For example, a "know your rights" campaign might help inform people of what rights they legally have and how to demand these rights and employers might be required to post this information in workplaces in English and other languages that employees speak.

Strengthen adherence and promote standards in coverage of breastfeeding supports and supplies. While the Affordable Care Act (ACA) mandated coverage of breastfeeding supports and supplies as a preventive benefit without cost-sharing, there is variation in access to these supports by insurance given there is currently no formal enforcement of the law nor standardization with regards to what is covered (for example, type of breastfeeding pump covered, when the pump can be obtained) and by whom (for example, whether out-of-network providers of lactation education are covered when no in-network providers exist).
3. Address the lactation workforce shortage, including increasing the diversity of the breastfeeding and maternity care workforce (lactation consultants, doulas), training providers on the benefits of breastfeeding, and covering lactation consultant services outside the hospital setting.
4. Improve coverage and access to mental health supports for perinatal people . Improving coverage and access to mental health support might include mandating complete coverage beyond only Medi-Cal (e.g. employer-sponsored insurance) of group mental health support care, doulas, and home health nursing care.
5. Normalize breastfeeding through public health campaigns and ensure trusted sources of information and culturally-congruent campaigns to educate the public on the links between breastfeeding and reductions in breast cancer rates.
6. Improve support for breastfeeding people in marginalized communities. While California has several programs in place to support breastfeeding, such as the WIC program, these programs may not reach marginalized communities that may face additional barriers to breastfeeding, such as lack of access to lactation support, lack of knowledge and education, and lack of access to healthy food.

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## APPENDIX

Table A1. Words Mentioned in Articles on Breastfeeding Barriers Published Jan 2015-Oct 2022 in PubMed & Web of Science (N=195) and national or California state reports on breastfeeding (N=6) , non-exclusive category results

Abstract word or keyword (non-exclusive categories)	# of articles
Work	65
Education	54
Culture	45
Community	39
Family	38
Policy	37
Prenatal	33
Norms or Attitude	35
Hospital	34
Knowledge	32
Women, Infant, Children (WIC)	29
Services	29
Formula	28
Geography	27
Resources	27
Partner or Spouse	25
Media	23

Racism	21
Structural	21
Peers	21
Plan	20
Financial or Cost	17
Equity	16
Workplace	15
Promotion	15
Lactation consultant	14
Baby-friendly	13
Pump	12
Cancer	11
Doctor or physician	9
Time off or leave	9
Training	9
Support group	8
Class	7
Doula or midwife	7
Healthcare team	7
Generational	6
Insurance	6
Medicaid/Medi-Cal	6
Neighborhood	6
Referral	5
Certification	4
Social media	4
Social determinant	4
Workforce	3
Transportation	2
Housing	2

Community health worker	1
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Table A2. Racial and Ethnic Groups in Articles on Breastfeeding Barriers Published 2015-2022 in PubMed & Web of Science (N=201), Black and African American, Native Hawaiian and Pacific Islander, Asian groups

Group	# of articles
Black or African American	75
Native Hawaiian and Pacific Islander	7
Marshallese	4
Asian	22
Chinese	7
Filipino	4
Korean	3
Japanese	2

Note: Categories with no entries include Native Hawaiian alone, Chamorro, Samoan, Tongan, Fijian, Indian (Asian), Bangladeshi, Bhutanese, Burmese, Cambodian, Filipino, Hmong, Indonesian, Malaysian, Mongolian, Nepalese, Pakistani, Sri Lankan, Thai, Vietnamese; Asian category includes all papers with the keyword Asian in title or abstract; non-exclusive categories