Breastfeeding experiences of Black or African American women in Ohio

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Prepared for:

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About this report

Purpose and funding

The Ohio Department of Health (ODH) was awarded funding in 2020 from the Association of State and Territorial Health Officials (ASTHO) to identify what strategies may increase breastfeeding duration rates among Black or African American and Appalachian women in Ohio. ODH subcontracted with Professional Data Analysts (PDA) to plan, implement, and analyze the study. PDA is also the contracted external evaluator for Ohio's State Physical Activity and Nutrition Program (SPAN). Extended authority funding from the SPAN grant funded the project (analysis and report writing) from January through March 2021. **This report focuses on the findings with Black or African American women.** Please see the companion report for findings with Appalachian women.

This study took into account a previous breastfeeding study in the state, completed nearly a decade prior. In 2011, ODH funded two focus groups for Black/African American and Appalachian (not Black/African American) WIC participants in Ohio that identified and informed the current strategies in ODH's Title V Maternal and Child Health Block Grant 5-year Workplan. These strategies include increasing access to breastfeeding friendly environments, increasing community awareness to promote and support breastfeeding, and establishing a breastfeeding designation program for childcare providers.

When applying for the 2020 ASTHO funding, ODH was in the fifth and final year of a Title V Maternal and Child Health Block Grant cycle. ODH aimed for the findings of the ASTHO work to be incorporated into the upcoming Title V 5-year Workplan (2021-2025) and build on the findings and strategies from the 2011 focus groups.

Audience

The primary audience for this report is ODH, specifically staff in the Bureau of Maternal, Child & Family Health and specifically those in the Women, Infants & Children (WIC) program. The secondary audiences for this report are breastfeeding partners and stakeholders across the state of Ohio.

Stakeholder involvement

Throughout the project, ODH and PDA prioritized collaborations with breastfeeding stakeholders and local partners across the state. These partners included the Ohio Breastfeeding Alliance (OBA), the Appalachian Breastfeeding Network (ABN), the Cuyahoga County Board of Health (including REACH: Racial and Ethnic Approaches to Community Health staff), and a local public health professional from an Appalachian county in Ohio. Collaboration with stakeholders and partners included facilitated bi-weekly meetings, development and review of the survey and

focus group instruments, development of the recruitment plan and materials, and review of initial findings and dissemination discussions.

Public health frameworks

This study was guided by three major public health frameworks:

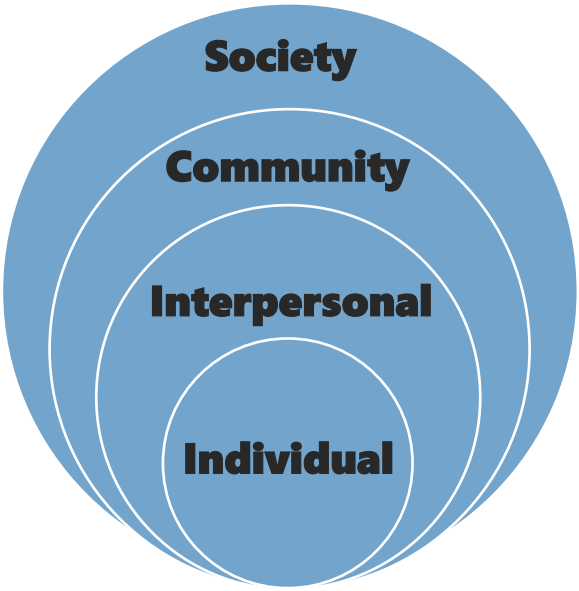
Health equity is the principle that all individuals and populations have the same right to health; therefore, health differences caused by social disadvantage are unjust.[1] The Centers for Disease Control and Prevention (CDC) stated, "Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities."[1, p. 4]

Life course theory highlights key developmental periods across the lifespan that affect one's health.[2] For example, early childhood, puberty, and pregnancy are important developmental periods to target when designing interventions to improve birth outcomes. This theory posits that different populations experience different amounts of risk and protective factors during these periods. These differences are a result of historical context and social stratification by demographics such as race. When individuals experience more risk factors and less protective factors, they accumulate chronic stress which affects their overall health. To promote health equity, populations with worse health outcomes need tailored interventions during key developmental periods.

The social ecological model (SEM) explains that health is influenced by factors across multiple levels.[3,4] Findings in this report are organized by each level of the SEM, including:

- **Individual:** This level focuses on biological and personal history factors that may affect the likelihood of breastfeeding. Individuals, organizations, and interventions that understand a woman's reasons to choose to breastfeed (or not), for example, will be more helpful in supporting that woman.
- **Interpersonal:** This second level examines relationships a woman has that may influence her decision to breastfeed. These include partners, family members, friends, and peers whose opinions about breastfeeding, for example, may affect breastfeeding initiation and/or duration.
- **Community:** This third level explores the characteristics of settings in which women live, work, and play that either promote or hinder breastfeeding. This report focuses on four community settings: worksites, healthcare, WIC, and community organizations.

- **Society:** The fourth and final level takes a broad look at societal factors that support or inhibit breastfeeding. This report focuses on social norms and policies that greatly influence a woman's decision to breastfeed.



Factors in these levels do not exist independently; there is interaction among the levels of influence. When designing public health interventions, we should target multiple levels of influence.

Use and navigation

This report is intended to provide a comprehensive overview of the findings from a breastfeeding survey and focus groups conducted in Fall 2020. The report is organized into sections based on the social ecological framework above. Each section gives an overview of survey and focus group findings. The four community-level sub-sections also include a take-away box with opportunities and possible next steps. **The report's organization was designed to facilitate conversation between the department of health and the different breastfeeding partners and stakeholders working to improve breastfeeding initiation and duration rates in Ohio.**

Introduction

Background information about breastfeeding initiation and durations rates, why breastfeeding is important, cultural factors unique to Black or African American women, and a brief summary of considerations for breastfeeding interventions.

Introduction

Breastfeeding initiation and duration

National and state prevalence

The Healthy People 2020 goals for breastfeeding are to achieve 82% of women having ever breastfed, 61% of women breastfeeding at 6 months, and 34% of women breastfeeding at 12 months.[5] While Ohio has improved breastfeeding initiation rates to be close to the national average, **breastfeeding duration continues to be below that average**.[6] Following the American Academy of Pediatrics' (AAP) recommendation,[7] also endorsed by the CDC[2]. and the World Health Organization (WHO),[8] ODH encourages mothers to exclusively breastfeed for at least 6 months.[9]

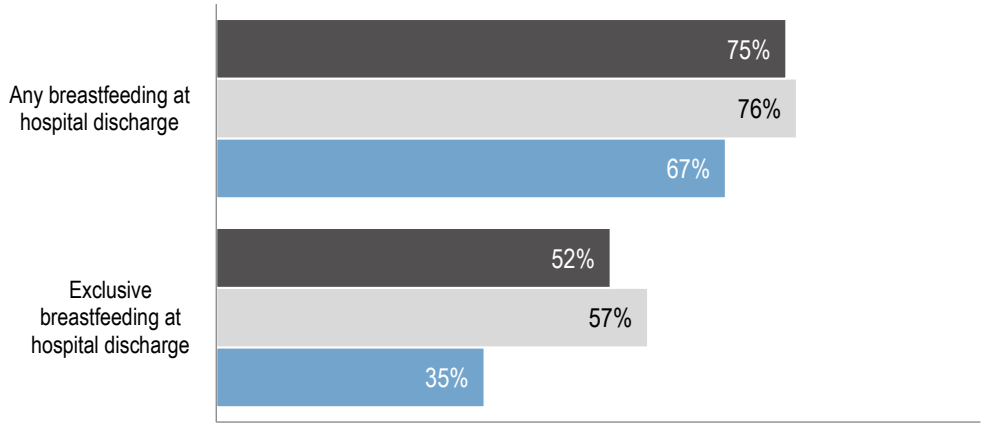
In 2012, the World Health Assembly (WHA) approved the global nutrition target of increasing the rate of exclusive breastfeeding in the first 6 months of age to at least 50% by 2025.[4] The U.S. has slowly made efforts to incorporate this recommendation into the Healthy People 10-year targets, though the new 2030 target (42%) is still below the 50% benchmark (see Table 1, below). The 2018-2019 National Immunization Survey (NIS) shows that the U.S. prevalence of breastfeeding exclusivity at 6 months (26%) rose to meet the 2020 target, but there is still work to be done in order to reach the new target by 2030. Additionally, Ohio falls short of the national prevalence, indicating that there may be further challenges to overcome to continue to advance breastfeeding among Ohio mothers.

Table 1: Breastfeeding Benchmarks

Frequency of Breastfeeding	Indicator	Healthy People 2020 Target[10]	Healthy People 2030 Target[11]	National Immunization Survey (2018-2019)[12]
Any	Proportion of infants who are ever breastfed	82%	N/A	84% (OH: 80%)
	Proportion of infants who are breastfed at 6 months	61%	N/A	58% (OH: 51%)
	Proportion of infants who are breastfed at 1 year	34%	54%	35% (OH: 31%)
Exclusive	Proportion of infants who are breastfed exclusively through age 3 months	46%	N/A	47% (OH: 41%)
	Proportion of infants who are breastfed exclusively through age 6 months	26%	42%	26% (OH: 22%)

In addition to the overall breastfeeding rates not meeting targets, racial, ethnic, and geographic inequities persist and contribute to widening this gap, due to multiple barriers that may be unique for different population groups.[13,14] At the national level, the data show that exclusive breastfeeding is highest among white women as compared to all other racial groups. Black women in particular have the lowest rates of exclusive breastfeeding at both 3 months (38.7%) and 6 months (21.2%), falling well below the rates of white women (52.4% and 28.7% respectively).[15] While this data does not currently exist for women living in Appalachia, 2011 estimates show that the prevalence of *any* breastfeeding among Appalachian mothers (68.3%) is lower than the national prevalence (75.5%).[16] In Ohio, African American and Appalachian women continue to have lower breastfeeding initiation and exclusivity rates compared to the rest of the state. The figures below show 2018 ODH Vital Statistics data, illuminating the racial and geographic disparities.[17] **To implement effective interventions, strategies need to be tailored to the needs of specific populations**.[18]

Black/African American mothers have the lowest prevalence of breastfeeding initiation and exclusivity as compared to white mothers across Ohio and the statewide average.



Importance of breastfeeding

Breastfeeding has numerous health implications for both mother and baby; the implications of breastfeeding duration may influence infant mortality, chronic diseases such as asthma, and Sudden Infant Death Syndrome (SIDS). The research on the health implications are discussed in this subsection.

Ohio has one of the highest infant mortality rates in the nation.[19] In 2019, Ohio's non-Hispanic Black infant mortality rate (14.3 per 1,000 live births) was almost three times as high as the white rate (5.1) despite decreases in recent years.[20] While data is not available for the majority of Appalachian counties across the state due to small sample sizes, 5-year estimates (2013-2017) suggest that 11 of the 24 Appalachian counties reported have infant mortality rates higher than

the overall Ohio average,[21] underscoring the need for targeted interventions in these areas as well. As noted by The Health Policy Institute of Ohio, such interventions may include breastfeeding promotion programs deemed scientifically supported to decrease disparities in infant mortality in addition to increasing breastfeeding rates.[22] Several studies support this suggestion in showing a positive association between breastfeeding promotion and reductions in infant mortality.[23,24,25]

Breastfeeding has numerous health benefits to both mother and baby. These include reduced risk of asthma, obesity, Type I diabetes, and SIDS among infants.[26] Maternal health benefits include decreased postpartum bleeding, earlier return to pre-pregnancy weight, and decreased risk of breast and ovarian cancers.[27] Additionally, research suggests that breastfeeding positively impacts children's brain, cognitive, and socio-emotional development and also reduces stress and improves maternal sensitivity and care among mothers.[28]

Breastfeeding also has positive impacts on society at large, including healthcare cost savings and both economic and environmental benefits. According to the CDC, "low rates of breastfeeding add more than $3 billion a year to medical costs for the mother and child in the United States,"[16, p.1] meaning that increased prevalence would result in huge cost savings. More specifically, recent research suggests that "if 90% of mothers could comply with current medical recommendations about breastfeeding, our economy could save $3.7 billion in direct and indirect pediatric health costs, with $10.1 billion in premature death from pediatric disease."[29, p. 313] Given the link between breastfeeding and child development, an increase in breastfeeding may result in an additional economic gains as breastfed children are more likely to grow up to become productive members society.[30] Lastly, increasing the prevalence of breastfeeding decreases waste and pollution associated with the development, packaging, and distribution of formula, meaning that breastfeeding is crucial to sustainable development.[31,32]

Cultural factors related to breastfeeding

Black/African American women also face external factors that contribute to lower rates of breastfeeding as compared to the general population. Given the long history of bias toward and maltreatment of Black/African American women by health care providers,[33] it is evident that systemic racism may be a fundamental cause of all health inequities faced by this group,[34] including rates of breastfeeding initiation and duration.[35]

As one example of how systemic racism and implicit bias is enacted, biased provider assumptions that Black/African American women would not breastfeed have been shown to limit breastfeeding education and promotion provided by nurses, physicians, and/or WIC counselors.[36,37] Racism in the workplace is also associated with lower odds of breastfeeding among Black/African American women,[38] even in workplaces with policies in place to support breastfeeding.[39] Furthermore, Black/African American women are more likely to return to work

sooner after childbirth than their white counterparts[40] and less likely to have jobs that are accommodating and welcoming to breastfeeding.[41]

Finally, there is a history of targeted formula marketing to Black/African American mothers that has led to community acceptance of and reliance on formula.[42] This may contribute to a lack of breastfeeding support and therefore lower rates. All these factors point to the need for culturally appropriate interventions tailored to Black/African American women to enhance breastfeeding initiation and duration.

Considerations for community interventions

To increase breastfeeding rates, a multi-pronged approach may be essential. This means employing concurrent and mutually reinforcing interventions at all levels of the SEM to make breastfeeding education and support easily accessible to all women. For Black/African American women in particular, cultural factors must be taken into consideration to develop and implement effective strategies and supports for this unique population. This may include building on guidance from the CDC[43] regarding breastfeeding strategies and tailoring community interventions related to:

- Maternity care practices,
- Professional education for healthcare providers,
- Access to professional support,
- Peer support programs,
- Support for breastfeeding in the workplace
- Support for breastfeeding in early care and education,
- Access to breastfeeding education and information,
- Social marketing, and
- Addressing the marketing of infant formula.

Implementation of the Baby-Friendly Hospital Initiative in health systems serving Black/African American women has been found to decrease racial disparities in breastfeeding,[44] though researchers note that efforts to promote and sustain breastfeeding within this population must work to address barriers both within and outside of the health care system, including systemic racism.[45] Social support is also an important factor in breastfeeding, such that targeted interventions have been shown to improve breastfeeding intent[46] and self-efficacy[47] among Black/African American women.

This may include establishing peer support groups and breastfeeding circles for Black/African American women, whether through hospitals or public health departments, or other community

organizations. Churches and faith-based organizations may also be untapped resources to help increase breastfeeding rates among Black/African American mothers, just as they have engaged in health promotion activities on topics including but not limited to diabetes,[48] HIV,[49] colorectal cancer,[50] and mental health.[51] Public health departments can also help address breastfeeding inequities by supporting Policy, Systems, and Environmental (PSE) change interventions among local partners, which may include promoting co-located social services and breastfeeding-friendly worksites and child care programs.[52]

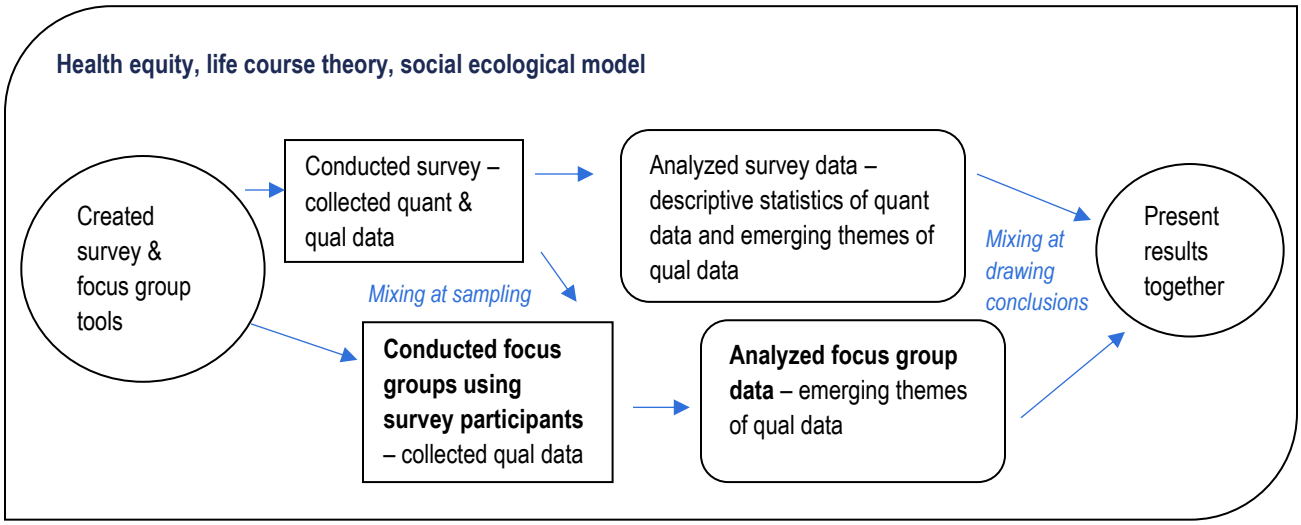
Methods

Information about the mixed methods approach for this project, description of data collection and data analysis, participant demographic tables, important terminology, and limitations.

Methods

Mixed methods approach

The project used a mixed methods approach to data collection and analysis, with analytic emphasis on our qualitative data from the focus groups. A concurrent mixed methods[53] approach was used, informed by the three public health frameworks described previously. The flow of the methods and analysis are visualized below.



First, the survey and focus group tools were created concurrently to align the items at each data collection phase. In the first phase of data collection, we conducted an online survey that included quantitative (close-ended) and qualitative (open-ended) questions. The survey also gathered contact information for eligible focus group participants who were later be invited to participate in a focus group. Mixing at sampling, we invited a subset of survey participants to participate in online focus groups.

In the second phase data collection, we conducted online asynchronous focus groups that collected qualitative data (open text responses to discussion questions). At the analysis stage, the survey and focus group data were first analyzed separately. To analyze survey data, we reviewed descriptive statistics of quantitative information, and grouped qualitative information according to emerging themes. To analyze focus group data, we coded responses according to emerging themes and in consideration of the report's audiences. Then, focus group and survey findings were reviewed together while writing each section of the report or level of the SEM to account for alignment or any contradictory findings.

Data collection

The first phase of data collection was an online survey for Ohioan residents. The survey served two purposes: to collect information about their breastfeeding experiences and then to collect contact information for eligible respondents to invite them to participate in a focus group.

The second phase was asynchronous, online focus groups for each population: two groups of African American mothers and two groups of Appalachian (not Black/African American) mothers. Within each population group, we invited participants to a focus group based on their breastfeeding duration. One focus group included those who had breastfed for less than a year, and another focus group included those who had breastfed for at least a year.

Criteria for **survey** participation was:

- Is ages 18 years old or older
- Lives in Ohio
- Has given birth

Criteria for **focus group** participation was:

- Meets the primary criteria (at least one of the two):
    - Identifies as Black or African American
    - Lives in an Appalachian county
- Is between the ages of 18 – 45 years old
- Lives in Ohio
- Has given birth to one child in the past year (not multiples)
- Identifies as female
- Has breastfed or attempted to initiate breastfeeding while living in Ohio
- Is currently breastfeeding[1] or discontinued breastfeeding before their child reached 6 months
- Has an email address and internet access via a computer, laptop, tablet, or smartphone

Analysis

Survey data was analyzed through descriptive statistics of the close-ended quantitative questions and analysis of the emerging themes identified from the open-ended qualitative responses. PDA used SAS 9.4 to run frequencies of all questions in the surveys, plus crosstabulations to compare certain questions of interest. We subset all responses (n=831) to those who met survey inclusion criteria (n=541), and then included only those who responded to at least five core questions as complete responses (n=492). This report presents data from the Black/African American participants (n=95). (see Table 2 on page 15 for attrition information). We presented initial results to our partners, who then suggested some additional comparisons.

Focus group data was analyzed according to emerging themes using NVivo 11 software. Two evaluators coded focus group exports (see Table 5 on page 18 for participation information). The focus groups for each population of interest were analyzed separately so that findings are specific to each population.

We developed and refined a codebook focusing on participants' positive, negative, and neutral experiences with systems/audiences of interest identified by our partners (worksites, healthcare, community organizations, WIC, and public policy) as well as their ideas for improvement. Within this overarching structure, we identified emerging themes to draw conclusions about common experiences with these systems. Additionally, we coded information about cultural ideas, norms, practices, and attitudes, as enacted by the influence of friends, family, history, and society.

Participants

Of 831 surveys, 656 consented, 492 met our eligibility criteria, and **95 were Black/African American.** From those, 22 were invited to participate in a focus group and 9 participated.

Table 2. Survey attrition

Surveys in dataset	831
Consented	656
18 years or older	570
Lives in OH county	558
1 or more children	556
Female	541
Responded to at least 5 core survey items after screener	**492**
Black/African American	**95**

Table 3: Black/African American survey demographics

Black/African American respondents who meet eligibility and answered core questions	N 95	% 100
Age		
18 to 25	7	7%
26 to 35	52	55%
36 to 45	25	26%
46 or older	11	12%
Race *(multiple select)*		
American Indian or Alaska Native	2	2%
Asian	0	0%
Black or African American	95	100%
Latinx	1	1%
Middle Eastern or Northern African	0	0%
Native Hawaiian or Other Pacific Islander	0	0%
White	5	5%
Other	0	0%
Education		
Less than high school	8	8%
High school/GED	20	21%
Some college, but no degree	23	24%
Associate's degree	13	14%
Bachelor's degree	18	19%
Graduate School or Advanced degree (Masters, PhD, MD, JD, etc.)	13	14%
Health Insurance *(during birth of youngest child)*		
Did not have	1	1
Medicaid	56	61
Private	35	38
WIC Enrollment		
Yes	54	57%
No	40	43%

Table 4: Black/African American survey maternal and breastfeeding characteristics

Black/African American respondents who meet eligibility and answered core questions	N 95	% 100
Total Children		
1	27	28%
2	22	23%
3	19	20%
4	13	14%
5 or more	14	15%
When was youngest child born		
2014 or prior	33	35%
2015 to 2018	30	31%
2019	17	18%
2020	25	16%
Type of breastfeeding support during pregnancy and in six months after birth *(multiple select)*		
Professional help within the healthcare setting	54	57%
Professional help outside of a healthcare setting	18	19%
Social support	51	54%
Before you gave birth – how did you plan to feed		
Both breastmilk and formula	29	31%
Only breastmilk	51	54%
Only formula	14	15%
How long were you planning to breastfeed		
Less than 6 months	10	13%
6 to 12 months	32	40%
More than 12 months	13	16%
For as long as possible	20	25%
I was not sure/did not have a plan	5	6%
How long did you breastfeed		
I am currently breastfeeding	27	28%
Less than 6 months	22	23%
6 to 12 months	17	18%
More than 12 months	16	17%
I did not breastfeed	13	14%

Table 5. Focus group participation

	Invited participants	Created an account	Participants
Breastfed at least 1 year	9	6	6
Breastfed less than 1 year	13	5	3

Three of nine focus group participants mentioned being breastfeeding professionals or advocates: a nurse, a healthcare administration employee, and a peer support group founder.

Terminology

For consistency and differentiation, we refer to those who completed our survey as "respondents" and those who took part in our focus groups as "participants".

In the introduction to the survey, we defined breastfeeding as such: "During this survey when we use the terms breastfeed, breastfed, and breastfeeding, we are using them to include *lactating, chestfeeding, hand expressing, pump feeding, and bottle-feeding breastmilk* experiences."

We recognize that people of many genders breastfeed. For this study, we restricted our sample to individuals who identified as female. Our recruitment materials shared that we were "most interested to hear from Appalachian and Black/African American Ohioan mothers". People of any gender who had given birth were able to submit their online survey, but we only analyzed responses of those who self-identified as female. It is a limitation of our study that we only learned about women's experiences. We hope that future studies will center the experiences and needs of transgender and gender nonconforming mothers and parents.

Limitations

This study is affected by limitations related to participant recruitment, and to a lesser extent, partner moderators, that must be considered when interpreting results. **The information presented in this report is <u>not</u> generalizable to all Black/African American women in Ohio.** The online survey was intended to capture Ohioan mothers who were willing to share their experiences with breastfeeding. The survey was not conducted to gather a representative sample of the population. Since the focus group participants were gathered from the survey participant pool, the same intent applied. We hope this report adds new information for stakeholders and other interested parties. **We encourage programs and organizations to consider collecting information from people who are and are not seeking their services to better understand what barriers and facilitators are contributing to those patterns.**

Participant recruitment

This project, specifically the focus groups, intended to collect information and experiences from women who had breastfed for less than six months and had likely experienced more barriers to continuing breastfeeding. Upon review of the survey data, we found that about nearly 4 in 10 respondents had breastfed for at least six months (12% breastfed for 6 to 12 months and 27% breastfed for more than 12 months) and over a third were breastfeeding or healthcare professionals who were already familiar with support mechanisms (37% reported working in healthcare, and a few additional respondents noted working at WIC to open-ended questions). Additionally, we received many more survey responses from Appalachian (n=181, 37%) than Black/African American participants (n=95, 19%), and nearly half of survey participants were neither Appalachian nor Black/African American (n=216, 44%). When presenting the initial survey findings to the partners and reflecting on the recruitment process, multiple factors were discussed that may have influenced this outcome in sample.

First, partners involved with the recruitment of Black or African American respondents noted that the summer of 2020's protests for racial justice and the legacy of unethical research involving Black/African American individuals were likely influencing the lower numbers of respondents compared to those who identified as Appalachian.

Second, recruitment relied on our partners' networks. Our partners and PDA discussed that since recruitment strategies utilized organizations (WIC), groups, websites, and social media affiliated with breastfeeding support systems, the people seeing the recruitment materials were more likely to have positive or supported breastfeeding experiences. Those who experienced more barriers to start or continue breastfeeding were less likely to encounter our recruitment materials.

Third, our partners discussed that a respondent may be more willing to respond to a survey titled "Breastfeeding Experiences" if they had positive experiences or were pro-breastfeeding, which likely means they had or were breastfeeding for longer durations of time compared to those not familiar with these support groups.

In reflecting on the recruitment strategies, PDA and partners discussed that future studies could focus on reaching a broader span of respondents and experiences. Studies could utilize an intercept survey and/or recruit at sites not associated with breastfeeding promotion.

Partner moderators

PDA planned to partner with women from the communities we were engaging to co-moderate the focus groups. This would ensure sufficient information was probed and culturally relevant information was not missed from responses. Our partners recommended three potential focus group partner moderators: who live in Appalachian Ohio and one who is Black/African American

and lives in Ohio. We contacted all three, and ultimately only one moderator was available to moderate one group: Appalachian women who had breastfed for less than one year.

Implications of COVID-19

Due to the COVID-19 pandemic, data collection for this project was restricted to virtual formats (online survey and online focus groups). PDA acknowledges that the virtual format impacted those able to respond to the survey and participate in the focus groups. Additionally, in-person focus groups may have led to different findings or more/less detailed responses.

Several focus group participants described the impact of COVID-19 on their breastfeeding. Two were able to continue breastfeeding while working from home due to COVID-19, and four continued to breastfeed in order to support their baby's immune system due to the risk of COVID-19.

Results

Survey and focus group findings for Black or African American women are presented in sections based on the Social Ecological Model. The four community sections include summary boxes that highlight potential next steps for each intervention audience.

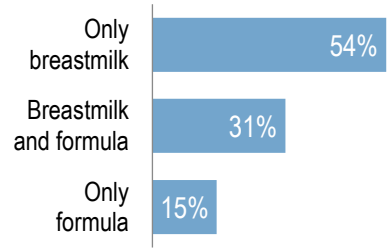
Individual Results

This level focuses on biological and personal history factors that may affect the likelihood of breastfeeding. Individuals, organizations, and interventions that understand a woman's reasons to choose to breastfeed (or not), for example, will be more helpful in supporting women.

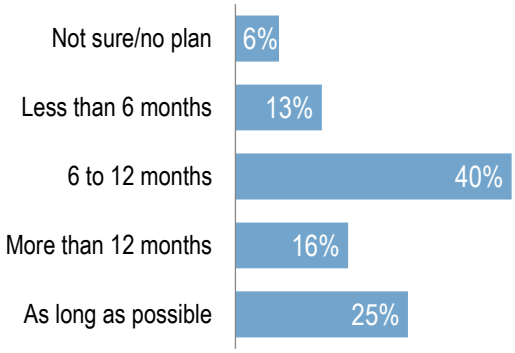
Reasons for breastfeeding

Understanding a woman's reasons to choose to breastfeed (or not) can help individuals and organizations better support that woman. Each woman will have her own history, experiences, attitudes and beliefs around breastfeeding. The WHO recommends that breastfeeding counseling be empowering while respecting women's choices.[54] Although each woman has her own personal reasons, there are broader, common reasons with which stakeholders should be familiar.

Before birth, about half of Black/African American survey respondents planned to breastfeed their baby only breastmilk.



Before birth, about half of Black/African American survey respondents planned to breastfeed their baby for 6 or more months.



Survey respondents had varying plans for breastfeeding and duration. Most respondents (85%) planned to breastfeed their baby breastmilk, in combination or alone. About half (56%) planned to breastfeed their baby for at least 6 months, and a quarter planned to breastfeed their baby for as long as possible.

Health benefits was the most common reason for breastfeeding

Health benefits, for both the baby and mother, was the most common reason shared by focus group participants and survey respondents alike. Several focus group participants and many survey respondents felt that breastfeeding is what is "healthy" or "best" for the baby. Focus group participants appreciated that breastfeeding is protective against chronic conditions like allergies as well as concerns like SIDS. The immunity conferred during breastmilk for the child is

a benefit as well. One added, "I don't even enjoy breastfeeding [to be honest], but I know that what's made for the baby is best…"

Focus group participants and survey respondents appreciated that it was healthy for them as well. Participants mentioned weight loss and uterine shrinkage, and protection against chronic conditions like heart disease and breast cancer. One survey respondent mentioned the health benefits of not breastfeeding - ideally she wanted the baby to have breastmilk, but she needed to take medications for her own health that would threaten the safety of her breastmilk.

Some felt that breastfeeding is natural or normal

A few focus group participants and a couple survey respondents chose to breastfeed because it is natural or normal. One focus group participant considered breastfeeding in the context of other mammals, that "every mammal feeds its offspring its own milk or milk of its own kind." One participant credited her natural instinct to breastfeed as her impetus. Similarly, another participant wrote about her internal conviction to breastfeed: "I just felt like it is how I'm supposed to feed my baby. I grew up around both formula and breast-fed babies. And I always knew breastfeeding was for me, if I would be blessed with the ability to latch or exclusively pump."

Some appreciated that breastmilk is free

A few participants appreciated that breastmilk is free, especially since children are so expensive overall. Several survey respondents also mentioned cost savings from not buying formula as a convincing factor. One respondent shared that she cannot afford formula while supporting her family of five.

Some sought out research to make their feeding decisions

A few focus group participants decided to breastfeed after researching information about the benefits of breastmilk. One shared it's helpful to learn the more practical considerations too, such as the mechanisms of pumping and the logistics of working while feeding. A focus group participant used the WHO's breastfeeding recommendations. Research was more commonly shared by survey respondents as informing their feeding plans. Respondents mentioned books, articles, videos, and other online resources. A few survey respondents shared that their professional healthcare training as nurses educated them that this was the healthiest choice, and a few survey respondents shared that their healthcare provider recommended breastfeeding.

Some felt breastfeeding is easier than formula

A couple focus group participants and one survey respondent mentioned that breastfeeding is easier in that there is no formula to prepare or bottles to warm and does not necessarily requires tools to bring on outings.

Some were guided by their past experiences with feeding

A couple focus group participants chose to breastfeed their youngest child because of their experience feeding their older children. They expressed that what they learned from experience helped them with subsequent children. Experience was mentioned more frequently by survey respondents. A couple respondents wanted to breastfeed because they had not tried or been successful in the past, but most wanted to breastfeed because they had done so with their other children and had learned what worked well for them. One survey respondent wrote that experience with her first child was the resource she found the most helpful when breastfeeding.

Some let the baby's behaviors lead

One focus group participant did not intend to breastfeed but started and continued to after her baby immediately latched when placed on her chest after birth. Several survey respondents described following their baby's cues, which involved using formula and breastmilk.

General comments about decisions to breastfeed

A few survey respondents planned to feed their baby breastmilk, alone or in combination with formula, but without specific reasons and with a more casual approach to take it "one day at a time."

Several survey respondents felt a conviction to breastfeed, sharing that they "always wanted to breastfeed" or "decided the moment [they] found out [they were] pregnant."

A couple focus group participants appreciated that breastfeeding "helps with the maternal bond". One shared that breastfeeding was a special and private time of being alone with her baby.

Some chose to use formula exclusively

Of the 15% of survey respondents who planned to feed their baby only formula, their reasons were as follows: unsuccessful experience breastfeeding older children, their baby did not like their nipple, formula took less time and was more convenient, support from their family to use formula or make their own choice, difficulty or an inability to produce milk, protecting their baby from their substance use, breast lumps that prohibited breastfeeding, no desire to breastfeed, and wanting their child's father to have equal feeding abilities.

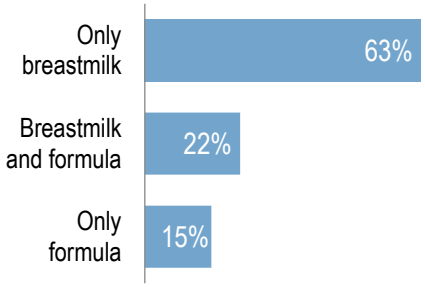
Experience

The first two weeks

We asked focus group participants to describe breastfeeding during the first two weeks after birthing their youngest baby, as well as during the first six months. In the first couple of weeks after birth participants were exclusively or mostly breastfeeding, at the breast or in a bottle. Only one participant mentioned initially using formula in tandem with breastmilk and then transitioning to breastmilk only, and one participant used the "bait and switch" method of adding a small amount of formula to the nipple to help her baby latch.

More than half (63%) of survey respondents were feeding their baby only breastmilk after leaving the hospital, and more than three-quarters were feeding their baby breastmilk, alone or in combination with formula.

When leaving the hospital after giving birth, most Black/African American survey respondents were feeding their baby only breastmilk.



When asked about feeding in the first couple weeks, many focus group participants brought up support they received from healthcare. Many participants were helped by a lactation consultant (LC) for needs such as establishing a latch, getting a prescription for all purpose nipple ointment, noticing a tongue tie, and general support. A few participants received help from a nurse and one received help from their pediatrician. As one would expect, the first couple weeks focused on establishing a strong latch with adequate milk supply.

The first few months

For the first few months, several participants described adding bottle feeding into their routine, while a couple remained exclusively feeding at the breast. Participants shared how the experience of returning to work impacted their feeding schedule and ability. See the Worksite section for more information about that transition.

At six or more months

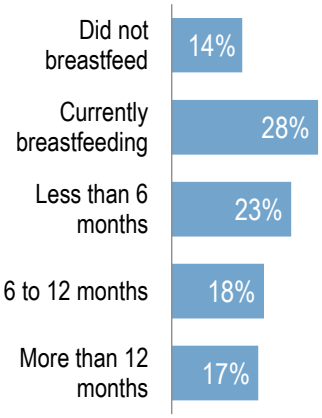
At six or more months, focus group participants mentioned feeding at the breast and/or via bottles and introducing solids. None described stopping before or around six months.

Stopped breastfeeding

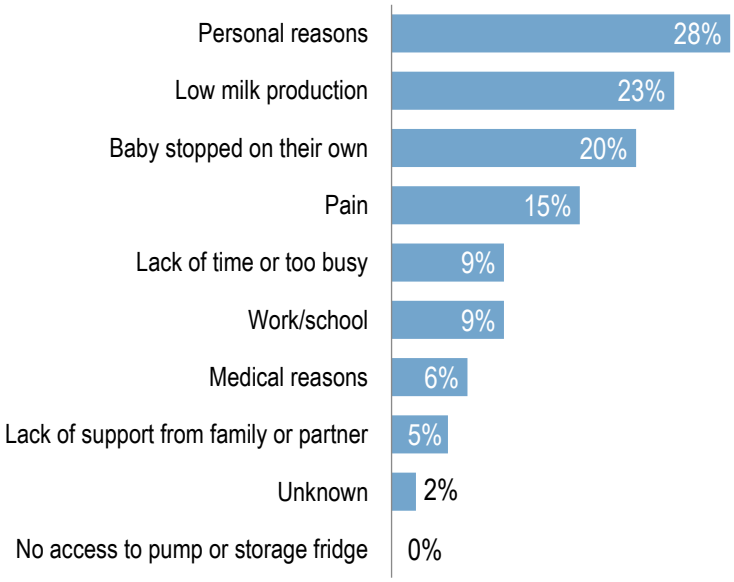
Only one focus group participant had stopped breastfeeding; she stopped at 14 months because the baby did not want to sit still for feedings and she did not have time to pump. All other participants were still feeding, with their baby's age ranging from 9 months to 17 months.

COVID-19 served as a motivating factor because they wanted to support their baby's immunity as much as possible. They discussed plans to stop when the baby was ready, when the baby is 2 years old, and when the participant is ready for her next child.

At the time of the survey, Black/African American survey respondents reported a range of breastfeeding durations for their youngest child, from never to more than 12 months, to currently.



Among Black/African American survey respondents who were not currently breastfeeding (n=65), personal reasons, low milk production, and the baby stopped on their own were the most common reasons for stopping breastfeeding.



Survey respondents offer more insights into common reasons why they stopped breastfeeding, since more than half reported stopping breastfeeding at the time of the survey. The most common reasons to stop were personal reasons, low milk production, or because the baby stopped on their own.

Interpersonal Results

This second SEM level examines relationships a woman has that may influence her decision to breastfeed. These include partners, family members, friends, and peers whose opinions about breastfeeding, for example, may affect breastfeeding initiation and/or duration.

Friends

Friends can be important supports

Some survey respondents and focus group participants wrote about friends being generally supportive of them breastfeeding. Almost a fourth of survey respondents who answered who supported them while they breastfed or tried to breastfeed named friends. Some participants' decision to breastfeed was influenced by their friends who had breastfed or were breastfeeding. One focus group participant shared that hearing her friends' success stories was persuasive. Most didn't share specifics on how friends were supportive, but one participant shared, "I have several friends who also breastfeed so of course they are encouraging. The ones who don't breastfeed always ask if I need anything when I am feeding or if they can get me anything." Another shared that even her friends that don't breastfeed still had "positive ideas about breastfeeding." Finally, one participant shared the following while writing about the support she's received and the support she's offered to other new moms, "Support is a huge factor in successfully breastfeeding. I think that the attitudes are changing and moving to a more positive outlook."

Rarely, some friends advised the mother to stop breastfeeding

Two focus group participants shared how their friends were unsupportive of them feeding their babies past twelve months. Both expressed that these comments or unsolicited opinions did not dissuade them from continuing to breastfeed.

Family

Partners are an important source of support

Some survey respondents and a few focus group participants wrote about the support they received from their partners. Almost half of the survey respondents who provided an answer as to who supported them named their partner, husband, child's father, or spouse as who was supportive of them while breastfeeding or trying to breastfeed. One focus group participant wrote, "Most helpful, first and foremost goes to my partner. Without him I wouldn't have made it this far!" Another shared, "My boyfriend has been the most supportive since day one. Never asked me to cover up. Stayed up with me during night feedings. Let me nap when tired. Never pressured putting the baby on formula."

Family members can provide direct support

Some survey respondents and focus group participants also shared that their family, some focus group participants were specific that it was their immediate family, was supportive and helpful while they were trying to breastfeed. Almost two-thirds of survey respondents who wrote an answer to who was supportive named their family for who supported them while breastfeeding or trying to breastfeed. One focus group participant shared that her family helped with feeding bottles while at work, while a few shared that felt their family was supportive in that they didn't say any negative comments.

Family members can normalize breastfeeding

A few focus group participants wrote about how breastfeeding was normal and expected in their families. These participants discussed their family members' experience with breastfeeding as being a reason they chose or decided to breastfeed. One focus group participant shared, "My mother breastfed and strongly advocated for the practice among family, friends, and strangers [Moderator prompted for more specificity] So, it was understood that I would nurse. She didn't discuss any of the scientific benefits, it was simply understood that breastfeeding was the ideal and most practical was to feed." A few survey respondents also shared that they were breastfed and they learned from their mother. One respondent wrote that her mom instilled the value of breastfeeding in her: "I was raised by a mother who promoted breastfeeding as the only option to feed your baby. I was raised knowing that breastfeeding was the only way that I would nourish my babies body."

Some family members advised the mother to stop breastfeeding

As with friends, some focus group participants shared that they've received negative comments or questions about when they'll stop as they'd been breastfeeding for 10 months or longer. One participant wrote the following about the support she's received from her family: "A few judgmental comments from in laws have been made such as "why isn't he off the boob yet" just always asking how long I will continue. I just say when we are ready we will stop. For the most part I've been very lucky with my experience."

Some family members did not support breastfeeding

Finally, some focus group participants wrote about their families being unsupportive of them breastfeeding. A few participants discussed this in the context of them being the first in their family to breastfeed: "As a black woman, I was the first and only mom to nurse. My own mother was not supportive of my journey." Another participant shared, "There is less familial support for [breastfeeding] because of the above factors. Family support for breastfeeding is very important, which is why those Facebook communities for black breastfeeding moms are vitally important."

Community Results

This third SEM level explores the characteristics of settings in which women live, work, and play that either promote or hinder breastfeeding. This section focuses on four community settings: worksites, healthcare, WIC, and community organizations.

Worksites

Breastfeeding moms need accommodations at work

Under federal law, employers are required to provide break time and a private space that is not a bathroom to pump for all employees covered by the Fair Labor Standards Act.[55] Three focus group participants discussed the helpful accommodations they received from their employers. They were paid for pump breaks, given a pumping room, and/or allowed to bring a fridge to store milk. One focus group participant named their coworkers when asked about information and people that were most helpful in supporting their breastfeeding journey. Some survey respondents named work as a helpful support, sometimes specifying their coworkers and other times specifying their job/employer, adding that they were given a room and time to pump. Two survey respondents shared that workplace accommodations factored into their plans; one was uncertain if they would have time to pump at work and other planned to have flexible working arrangements so that she could prioritize breastfeeding.

However, other focus group participants described ways in which their employer was lacking. For example, a participant shared they were allowed to pump but the time was unpaid. Furthermore, they were not given space to pump and needed to pump in their car. In an extremely offensive example of a "very negative" employer, one participant wrote, "they hung a picture of a cow on an old coat closet for me to pump in."

One focus group participant shared that some employers "know that by law they have to have breaks to pump but their job will make it hard for them or have them work longer or they have been looked over on promotions because of needing 'special' treatment." Overlooking employees for promotions is an equity issue. Sharing another equity issue, a participant wrote that breastfeeding "is less common in poorer communities, teen moms and older moms," partially because individuals in those populations may be of lower socioeconomic status and need to prioritize working over breastfeeding. They may not have the time and accommodations at work to pump and so they may need to feed with formula.

Moms need paid maternity leave

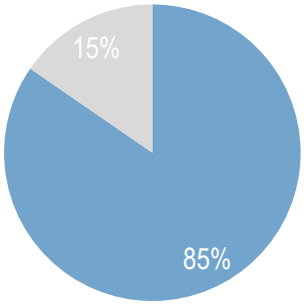
A few focus group participants described the importance of paid maternity leave to promote breastfeeding. When asked about contributing factors to the lower prevalence of breastfeeding

among Ohio women who are African American/Black, one participant wrote, "many Black women are thrust back into the workplace earlier than their nonBlack counterparts. It takes 6 weeks to establish milk, and even after being at the breast as much as possible is optimal. Going back to work at 3, 4, 5, 6 weeks interrupts that natural process. So, there's also a socioeconomic piece there." When asked about resources that would have supported their breastfeeding journey, a couple participants shared that they personally would have benefitted from more maternity leave.

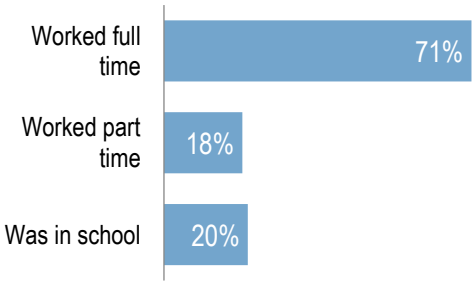
Transitioning back to work from leave presents challenges

A few focus group participants and survey respondents shared that it's generally hard to pump while at work, with some adding that people will sometimes stop breastfeeding altogether after effectually being forced to choose between working and pumping. Five focus group participants described feeding their baby on their breast while on their parental leave, then feeding the baby with pumped milk via a bottle when they returned to work. One focus group participant shared that she was able to stay home for a year and that not having to rush back to work helped her have a positive breastfeeding experience. Another added that she "ended up leaving [her] job after each baby" to avoid feeling rushed and not being able to enjoy the experience. COVID-19 had differential effects on focus group participants – three described being able to return to feeding at the breast while working from home during COVID-19, and another described weaning their child off breastmilk altogether while working from home and homeschooling their older child during COVID-19.

85% of Black/African American survey respondents returned to or began work or school within the first year of giving birth to their youngest child.



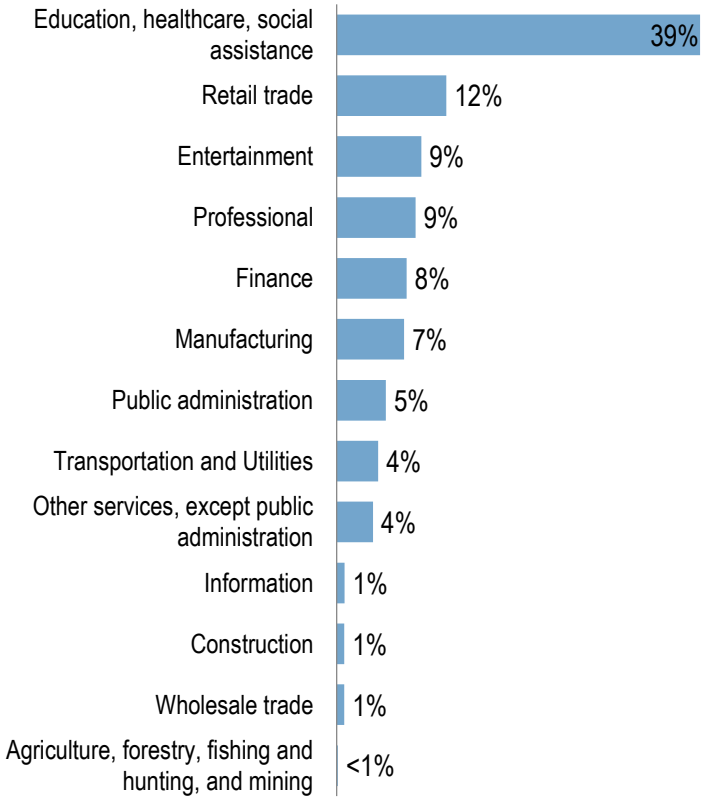
Most Black/African American survey respondents who returned to or began work or school within the first year of giving birth to their youngest child worked full time.



As shown in the charts above, the majority of survey respondents began or returned to work or school within one year after giving birth. Most worked full time.

Ohio Census data[56] shows that 39% of Black/African American adult female workers work in education, healthcare, and social assistance (subset to Ohio residents who are employed civilians, age 18 years or older, who identified as Black/African American (alone or in combination), and are female). Since the Census survey uses a representative sample, partners can use the Census data to target industry outreach to support Black/African American women's ability to breastfeed at work.

Census data shows that nearly a third of Black/African American female Ohioan adults work in education, healthcare, and social assistance.



How can worksites continue to support breastfeeding among Black/African American women?

To support breastfeeding, worksites can **provide critical breastfeeding accommodations: paid time to pump, a clean and private room to pump, and a fridge to store expressed milk.** Additionally, worksites can **provide paid maternity leave** to support the often difficult transition back to work.

ODH and its partners can target industries in which Black/African American female Ohioans are frequently employed: education, healthcare, social assistance, and retail. They may need support with understanding their legal obligations as well as creating a supportive environment. Some employers may also appreciate the potential cost savings and health benefits of breastfeeding for their employees.

Research supports these suggestions in showing that Black/African American women benefit from workplace breastfeeding support.[18,57]

Healthcare

Lactation consultants provide critical support

Five focus group participants received support from LCs. LCs were a common response among survey respondents when asked about their most helpful breastfeeding supports. Focus group participants described that LCs helped them with noticing a tongue tie, helping the baby achieve a strong latch, monitoring the baby's weight gain, and providing general support and advice. One participant wrote, "My lactation consultant was very helpful and understood my goal of wanting to exclusively breastfeed." This was in contrast to her experience with a pediatrician who immediately offered formula. Overall, these participants appreciated that their LCs were knowledgeable and supportive.

Healthcare was the most common point of connection with LCs. Four focus group participants were connected with an LC through their delivery hospital, one of whom was connected with an additional LC through their pediatrician. Two focus group participants were glad to meet Black LCs through peer support groups, and one survey respondent suggested that more Black LCs are needed.

LCs can be important supports beyond immediately postpartum, as well. A couple focus group participants mentioned how helpful it was to stay in touch with their LC beyond the newborn phase. The longest duration was one participant who still texts with her LC 11 months after birth.

Focus group participants shared ideas for how to better integrate LCs into women's breastfeeding journeys. Participants felt that having more access to LCs would directly support breastfeeding moms and broadly normalize breastfeeding among Black women. They suggested: providers including LCs in prenatal visits, LCs calling patients post-discharge from giving birth, providers including LCs in post-birth visits, pediatricians creating linkages with LCs, and LCs offering home visits post-birth. A survey respondent shared that there is a need for more Black LCs.

One focus group participant could not find an LC covered by her insurance who was close to her. Since she could not afford to pay for an LC out of pocket, she wrote, "I wish that I had better access to a LC. I think one visited me the day after I gave birth while in the hospital and that was it. I think that if mom's have access to an LC during the first 6-8 weeks after birth [then] more moms might continue to nurse."

Prenatal care could better provide breastfeeding information

A focus group participant noticed that obstetricians (OBs) promoted formula more than breastmilk. When asked what she would change to offer more support to moms who want to breastfeed, she replied, "Honestly, I believe it starts at the OBs office. You notice sample cans of

formula [in] the offices but no pamphlets or info provided on breastfeeding and the benefits of that. [Moderator replied that formula has been mentioned several times.] [Formula is] everywhere. Easily accessible from the OB to the pediatricians."

A couple focus group participants felt there are opportunities for prenatal care providers to better counsel pregnant people about breastfeeding. They wrote that breastfeeding should be discussed starting in prenatal care. One wrote, "I think that if the health professionals promoted and taught the many benefits of breastfeeding early during pregnancy then more people might do it." Only one focus group participant shared that her OB was supportive of her breastfeeding.

For postnatal care, one focus group participant shared: "My primary care physician had very little medically accurate assistance to offer. My OB's office also had very little to offer." She offered examples of her OB not knowing what All Purpose Nipple Ointment was or how to prescribe it and two doctors suggesting feeding schedules that did not align with recommendations.

Pediatricians can better support breastfeeding

Only one focus group participant received encouragement from their pediatrician to breastfeed. She shared, "The pediatrician still asks at every visit if we are still breastfeeding and if there is anything we need. He also told me to look into WIC. And always offers me the room to feed after our appointments."

In contrast, two focus group participants and two survey respondents described a lack of encouragement for breastfeeding. A survey respondent shared that her pediatrician did not encourage breastfeeding. She wrote, "My pediatrician never once counseled me that breastmilk was best for my baby nor encouraged me to exclusively breastfeed to at least 6 months. Perhaps he assumed I already knew this but I didn't get that sense."

One survey respondent felt the pediatrician's focus on normal weight gain inadvertently discouraged breastfeeding. She wrote, "I feel like my son's doctor supported breastfeeding, but also supports a child falling in what they consider to be "normal" for weight and height. He didn't suggest that I supplement with my own milk. I was immediately offered formula. I don't think he meant any harm. But I also feel not all healthcare providers are knowledgeable when it comes to breastfeeding."

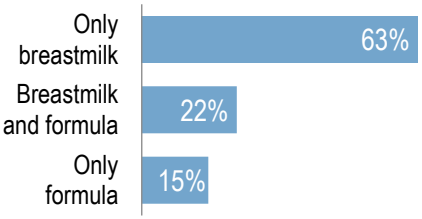
Another focus group participant received pressure from their pediatricians to use formula. She was annoyed that her pediatrician continually asked about plans to stop feeding and encouraged using formula. She wrote, "My son's ped[iatrician] is weirdly always asking when I plan to stop [breastfeeding]. He's getting on my nerves and will likely get cancelled soon." She later shared, "The [doctor's] offices have samples for a reason (I work in Healthcare administration) and it's not always for the staunchly formula feeding mother. Oh, your baby isn't gaining as fast... let's not refer you to an LC, try this sample of [Similac]. Oh, your baby has

eczema, let's not talk about dairy in your diet, here's this cream prescription and a formula sample. Personally, it's happened too many times and I finally had to let him know... [...my child] will be fine. If I have concerns I'll ASK you."

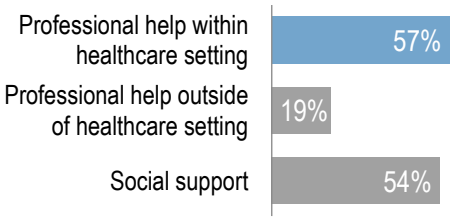
The two focus group participants who felt pressured to use formula suggested that doctors could benefit from more education about the benefits of breastfeeding, more education about breastfeeding to support infant weight gain, and more partnership with LCs. They recommend that doctors encourage breastmilk and offer formula only when "absolutely necessary". One participant wrote that doctors should "...know the ins and outs of breastfeeding as to how it related to weight gain, etc. Encouraging moms to supplement with their own milk rather than formula. Know their patients and why they want to succeed in breastfeeding."

A survey respondent experienced discrimination from her doctor about the size of her breasts: "...I found [that I] struggled with the medical community's apathy toward some of my issues. I almost felt discriminated against for being large breasted. My doctor made comments like "you are going to smother that kid" I almost didn't breast feed because of it".

When leaving the hospital after giving birth, most Black/African American survey respondents were feeding their baby only breastmilk.



Before birth, only about 1 in 5 Black/African American survey respondents received professional help outside of a healthcare setting.



As seen in the charts above, the majority (57%) of Black/African American survey respondents received professional breastfeeding help within the healthcare setting. Still, 43% of respondents did not. This shows an area of opportunity to better reach those who did not receive professional breastfeeding help from their healthcare providers. Similarly, the majority (63%) of Black/African American survey respondents were feeding their baby only breastmilk when leaving the hospital after giving birth. Yet 36% were feeding a combination of breastmilk and formula or only formula. Encouraging exclusive breastfeeding at discharge is another area of opportunity for healthcare providers and providing more breastfeeding support is one way to reach this goal.

Other healthcare supports

Beyond pediatricians and prenatal care providers, other healthcare roles were referenced. A couple survey respondents named nurses as helpful supports, and one focus group participant

mentioned that she received a little breastfeeding information from her nurse. A few others mentioned their doctor, dentist, chiropractor, craniosacral therapist, primary care physician, midwife, hospital, and healthcare workers generally. A focus group participant wrote that information promoting breastfeeding among Black women could be shared in doctor's offices, hospitals, schools, and social programs like WIC.

Healthcare classes were also mentioned. A few survey respondents named hospital and/or OBGYN breastfeeding classes and groups, including the Moms2Be program. One focus group participant participated in a breastfeeding course along with her husband and named this as a reason for deciding to breastfeed. Additionally, one focus group participant appreciated that her health insurance paid for their breast pump.

How can healthcare staff and organizations continue to support breastfeeding among Black/African American women?

To promote breastfeeding, **healthcare organizations can employ more LCs**, especially LCs of color. **Health insurers can expand their network of LCs and continue to cover breast pumps**. Participants suggested utilizing LCs in all phases of pregnancy and postnatal support, including prenatal visits, post-discharge check-in calls, and post-birth visits. **Healthcare providers can create stronger partnerships with LCs** by including them in their visits and frequently referring their patients to LCs.

Healthcare providers can better **integrate breastfeeding education and coaching into prenatal and postnatal care.** Healthcare providers can also **examine their processes for offering formula samples, monitoring the baby's weight gain, and asking mothers about their plans to stop or continue breastfeeding** while soliciting feedback from patients about the effects of these practices.

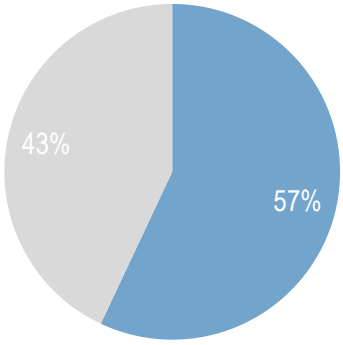
Additionally, research suggests that these interventions may be more effective for Black/African American women in particular when a cultural lens is applied and efforts to address systemic racism in healthcare are amplified.[58]

WIC

WIC is an important support

Survey respondents frequently mentioned WIC as a breastfeeding resource or support they found most helpful, naming WIC in general, their WIC support team, and their WIC LC. One focus group participant noted their WIC breastfeeding Peer Helper was a helpful information source, including referring them to an online peer group.

57% of Black/African American survey respondents were enrolled at WIC in any time during their pregnancy or within the first year after the birth of their youngest child.

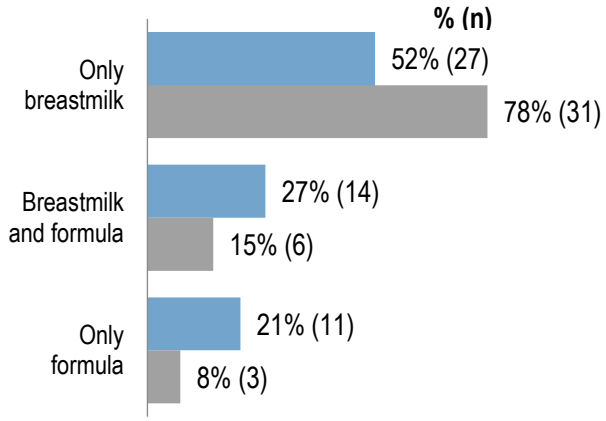


WIC promotes formula

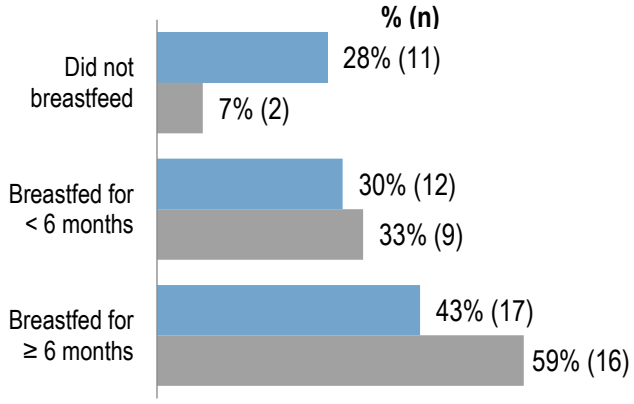
A couple focus group participants mentioned that WIC offering formula is perceived as pushing formula on Black low-income communities specifically. When asked about contributing factors to lower rates of breastfeeding in Black/African American communities, one participant noted that "Many families in the black community go with formula because if you qualify for WIC it is free. I feel like because of that society pushes formula." Another agreed with this participant and shared that "They push it on us in one way or another... making formula free but not having LCs available through those same programs." They continued that WIC should offer LCs to augment their offerings because "THEY LOVE GIVING THOSE BABIES FORMULA!" A survey respondent wrote a similar experience: "WIC didn't help me with my last two, I didn't even know I could get a pump through them. They only pushed formula."

As shown in the charts below, WIC participant survey respondents were less likely (52%) to feed their baby only breastmilk and were less likely (43%) to breastfeed for at least 6 months than non-WIC participants. The findings could support the experiences of the focus group participants about WIC promoting formula. They might also reflect that women who planned to use formula sought out WIC's services, knowing that formula would be offered. Ultimately, we cannot determine which came first – women's plans or women's experiences with WIC.

When leaving the hospital after giving birth, Black/African American WIC participants were about less likely to feed their baby only breastmilk than non-WIC participants.



Of Black/African American survey respondents who were not currently breastfeeding (n=67), WIC participants were more likely to never breastfeed than non-WIC participants



How can WIC continue to support breastfeeding among Black/African American women?

To promote breastfeeding, WIC could **consider their process of offering formula** to ensure it is offered as merely an option, with equal or more emphasis giving to breastfeeding options. Although likely not intentional, WIC's formula practices are coming across as paternalistic. **WIC's LCs could benefit from more promotion**, as one focus group participant suggested offering them. Another participant suggested **WIC as a dissemination option for a breastfeeding campaign** with pamphlets and other materials that depict Black women breastfeeding.

Research supports these suggested interventions in highlighting the potential for WIC to increase breastfeeding among black women. WIC may also benefit from more peer counselors of color to help support community acceptance of breastfeeding for long lasting positive impacts.[59]

Community organizations

A list of programs and community organizations in Ohio is available in Appendix 2.

Peer groups are a major source of support

Eight of nine focus group participants shared praise for peer support groups, mostly online. Survey respondents also commonly named breastfeeding peer groups as supportive. Both focus group and survey respondents described giving and receiving advice through Facebook groups and pages (Black Lactation Circle, aka BLaC, an Ohio specific group; Breastfeeding Center's Mama Chat, another Ohio group; Breastfeeding Mama Talk; Black Women Do Breastfeed; Milky Mommas; Breastfeeding Support Group for Black Moms; as well as other unspecified groups for Black moms), plus local support and social groups. They appreciated that peers had many suggestions to share with troubleshooting issues such as low milk supply.

Beyond advice, the groups offer crucial social support. One focus group participant wrote that "Family support for breastfeeding is very important, which is why those Facebook communities for black breastfeeding moms are vitally important," suggesting that the members play a familial role for each other. Another participant shared a similar sentiment: "I found a group on Facebook for black moms who breastfeed and it was a great support system. No judgement and lot of encouragement and advice when I needed it." Another participant shared the groups are especially important for Black women since breastfeeding is "not that normalized". A participant who leads a peer support group articulated the need for peer support among Black women: "Moms in our group tend to express the same issues I see from moms on the national level. Poor support from medical professionals. Lack of knowledgeable or enthusiastic support from their families and intimate friends. Many of our moms are the first person to breastfeed in their family system for two or three generations. [Our group] functions as their village of knowledge to make sure they can competently and confidently meet their goals."

Two focus group participants mentioned that online groups with LCs as administrators are particularly important. They can provide evidence-based information without speaking in overly medical terms, or "talk of galactaphages [galactophagist is defined as one who drinks milk]", as one participant wrote. Another appreciated that her group removes members who violate rules by posting "information not rooted in science", such as promoting supplements.

Focus group participants shared a few ideas about peer support. One shared it would have helped her to talk with "a mom who was successful with nursing" during the prenatal period. Another is involved with an in-person support group now and wished that had been available to her when she had her first child. Another participant who is active in Facebook groups shared that "many moms need in person support", showing that both settings are important. Finally, a couple participants offered that partners and family members need targeted support groups, too. One wrote, "There is a lot of information and support geared towards the mother but I think

it would be beneficial to have something that teaches support people how they can help breastfeeding mothers." Another wrote more specifically, "Men need breastfeeding support groups. Some get real jealous and can't deal with it. … Thing is, men need to lead men, women can't do it. Recipe for mansplaining and disaster."

Websites are a key source of information

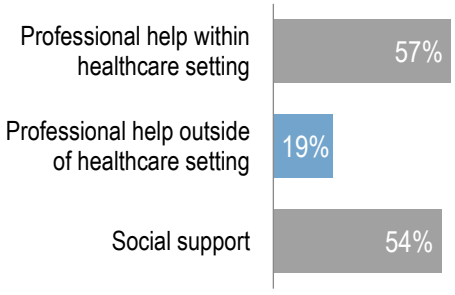
Focus group participants named several specific websites as trusted information sources: KellyMom, an informational website written by an IBCLC aimed at promoting evidence-based information; La Leche League, an international peer support and education network; Medela, a breast pump brand; LactMed, the drugs and lactation database about the effects of substances on breastmilk; and Stanford Medicine's breastfeeding resources. Survey respondents also generally named research, blogs, videos, and other online source as helpful supports.

Public health campaigns could help normalize breastfeeding

Several focus group participants thought their communities could benefit from seeing breastfeeding in public health campaigns. A participant summarized: "I think seeing is believing. I don't recall ever seeing a black mother nurse. It wasn't the norm for me. I think we need to promote more black women nursing. Pamphlets, brochures, informational videos, billboards. Throw it in our face!" One participant thought medical and dental clinics, high schools and colleges, and WIC and other government programs could share information about breastfeeding via pamphlets and other reading materials. They believe that breastfeeding information and support for Black women is "not as readily available as our counterparts." Another suggested podcasts as an information channel.

Community organization campaigns could also increase utilization of their services. As shown in the chart to the right, only 19% of Black/African American survey respondents received professional help outside of a healthcare setting (our role examples were LC, peer helper, doula, or home visitor) during pregnancy and in the six months after birth. This was about a third of the respondents who received professional help within the healthcare setting or received social support, suggesting that professional support outside of healthcare may be underutilized.

Before birth, only about 1 in 5 Black/African American survey respondents received professional help outside of a healthcare setting.



How can community organizations continue to support breastfeeding among Black/African American women?

To promote breastfeeding, community organizations (specifically Black-led organizations) can harness the power of peer education (online and in person) by **creating peer education groups and/or connecting with existing local groups**. These groups are a critical means of sharing information and support while building community among Black women, especially within peer support groups created by and for women of color.[60]

Additionally, community organizations can continue **sharing information online**. A couple focus group participant mentioned that more online support would be helpful, including one person who shared that lactation support services are easier to access online than in-person. Ensure that organization websites are up to date. Organizations could consider publicizing on the specific websites named and/or linking to those sites on their own pages to further build credibility. Social media may also be an untapped resource for community organizations to utilize for breastfeeding promotion.[61]

Community organizations can also consider **creating public health campaigns showing Black women breastfeeding**. These could include written materials, videos, billboards, and podcasts shared at healthcare sites, schools, and breastfeeding programs.

Research also suggests that community organizations can help to increase breastfeeding among Black/African women by promoting PSE changes, rather than focusing solely on individual behavior.[52] This may help to address larger, systemic barriers this population faces.

Societal Results

The fourth and final SEM level takes a broad look at societal factors that support or inhibit breastfeeding. This section focuses on social norms and policies that greatly influence a woman's decision to breastfeed.

History

The legacy of enslaved wet nurses impacts women's choices today

During slavery in America, Black enslaved mothers were often required to wean their own children early at around 6 months and feed their white master's children for about 2 years.[62] Authors West and Knight wrote, "…white women used wet-nursing as a tool to manipulate enslaved women's motherhood for slaveholders' own ends.[59, p. 37] The impact of enslaved wet nursing has lasting effects today on Black/African American women's choice to breastfeed, in addition to the impact of historic and current abuse from the medical field.[63] Authors Green, Killings, and Clare explained, "The tradition of wet nursing for African American women is inherently linked to white supremacy, slavery, medical racism, and the physical, emotional, and mental abuse that enslaved African American women endured. Thus, the decision to breastfeed and the act of breastfeeding may remain deeply affected by the generational trauma of wet nursing during slavery."[60, p. 118]

Two focus group participants illustrated this connection in their own lives. For one participant, this legacy strengthened her conviction to breastfeed: "…Once I learned about the history of AA women being wet nurses for white babies it made my decision to breastfeed my baby even more concrete." For another participant, she did breastfeed, but she had planned not to, based on her family's history and attitudes about breastfeeding. She explained, "I actually had very negative feelings about it. Growing up with black women, it was always viewed as a bad thing. I was the first in my family to breastfeed. [Moderator prompted for more specificity] Historically, slaves were made to breastfeed their master's children and not their own, resulting in a higher death rate among black infants. This has caused a lot of negative feelings being passed down through generations of black women. My great grandma said that when she gave birth they gave her medicine to dry up her milk so she couldn't breastfeed and could immediately return to work, so she never educated or encouraged her daughter and so on."

Social norms

Believing that breastfeeding is natural helped women comfortably feed in public

Most focus group participants reported feeling comfortable breastfeeding or pumping in public, and most of them did not want to cover up. They described pumping at grocery stores, restaurants, events, and in cars. Their convictions that breastfeeding is a natural function helped

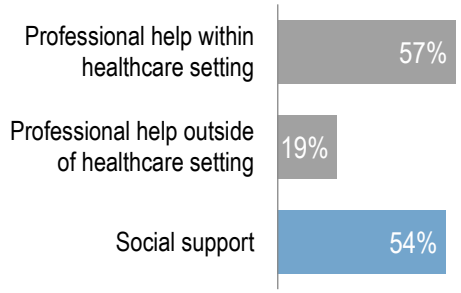
them feel empowered to feed in public. One participant wrote, "It doesn't bother me. If my baby needs to be fed, that's what's going to happen. … You do what you have to do for your baby. Whether that means pumping or feeding. Baby eats just like everyone else gets to." Similarly, another participant shared, "…my thought process is that I'm feeding my child and using my breast for what they were intended to do." Continuing the thought of a breast's function, a participant shared that breasts are not primarily sexual organs. She wrote, "A breast is made to feed a child, not a primary tool for sexual gratification for some man (or woman). I will easily [breastfeed] a child if they are hungry."

Supportive networks help women breastfeed

A focus group participant expressed gratitude for her strong support system. Another participant found it helpful that her social circle, including her pastor, affirmed her choice to feed in public. One survey respondent shared that everyone supported their decision to breastfeed. In these instances, social circle or support system was understood by the study team as being broader than just family and friends.

In contrast, seven of nine focus group participants expressed a lack of societal support for themselves and other breastfeeding mothers. They described that moms need support from all angles – work, family, healthcare, and friends. One participant did not know anyone who breastfed, so she received all her information online. Another participant received comments like "breastfeeding is overrated". One participant wrote, "Prior to my own experience I only saw breast feeding within my family. I felt it was not truly encouraged in the community. I saw friends give up after one difficult latch and not having the support system to help them get through it." Several focus group participants and survey respondents mentioned shame and stigma around breastfeeding for Black women specifically. One wrote that "…black women aren't usually encouraged to breastfeed…" A handful of survey respondents wrote that no one or not many people supported their breastfeeding. Half of survey respondents reported received social support, which is encouraging but still leaves many who did not.

Before birth, about half of Black/African American survey respondents received social support.



Normalizing breastfeeding supports mothers' choices

Three focus group participants described an increasing normalization of breastfeeding among Black/African American women. One shared, "This time around it has been great. I have met several black lactation consultants, and even joined groups. The current culture in AA breastfeeding is great and I think it will continue to get better. With so much information available I believe that more AA/black women will see the benefits of breastfeeding and will want to do their part to help the next generation of black breastfeeding mothers." Another agreed, "I think more black women are becoming interested in breastfeeding. It's up to us with experience to share and hopefully increase the number of black babies being breastfed."

One focus group participant shared that having more "people around you who see [breastfeeding as normal]" helps encourage women to breastfeed. Another focus group participant felt that more education will help others feel more comfortable feeding in public, as well.

To normalize breastfeeding, we will need to address the sexualization of the breast. Two focus group participants mentioned this sexualization as a barrier to promoting breastfeeding, which can lead to negative comments and cultural attitudes around breastfeeding. One participant asked: "Why is it okay for a woman to wear a string bikini but not for a woman to nurse in public uncovered?"

More education is critical

Five focus group participants described lack of education as a major reason why breastfeeding is less common among Black/African American women. Educating Black/African American women about the benefits of breastfeeding could make a large impact. Specifically, they said there is a need for education about how often to feed, how to pump, how to return to work, the varied benefits for mother and child, the advantages of breastmilk over formula, and the many applications of breastmilk. However, one participant noted that education alone will not close the racial gap. She wrote, "…a simple lack of knowledge about how milk works, how it benefits baby and mom and long term effects is present. But even with more education, not removing the existing factors like having to go to work early or having no support … a mom may not be that successful."

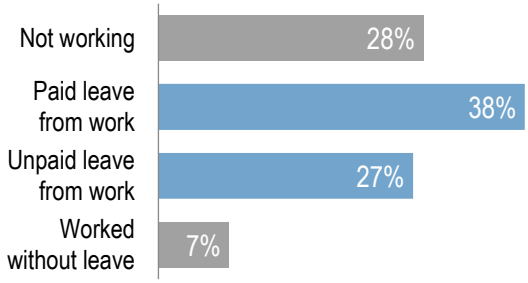
Policy

A major policy consideration for supporting breastfeeding is paid parental leave. A review of studies across countries about paid parental leave concluded that "The overall trend in research on the health consequences of parental leave is that parental leave supports two precursors to improved child health—breastfeeding and immunizations—and potentially reduces maternal stress and depression. In light of the challenges that new parents face, it is perhaps not surprising that a plurality of studies find that access to paid parental leave strongly associates

with lower rates of mortality throughout infancy and childhood."[64, p. 11] Yet the majority of American women do not receive paid maternity leave, and for those who do, the average paid leave is 3 weeks.[65] Furthermore, access to paid leave is unequal; women who are older, more educated, have private insurance, have a partner, and have higher income receive longer paid maternity leave at a greater proportion of their salary.[61] The American Academy of Pediatrics supports paid parental leave, paid family leave, and paid medical or sick leave as health equity initiatives.[66]

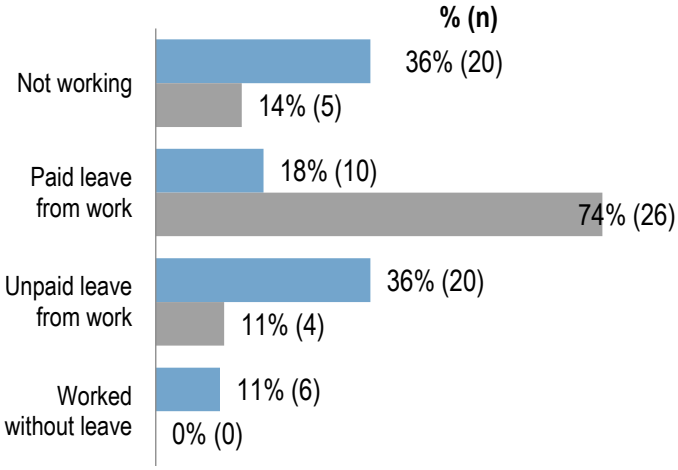
From our survey respondents, most took a leave from work following birth, though only 38% took paid leave. The average (median) time from giving birth to returning to or beginning work and/or school was 67 days (about 2 months), with a range of 7 to 720 days (about 1 week to 2 years).

Most Black/African American survey respondents received a leave from work following birth, though only 38% received paid leave.

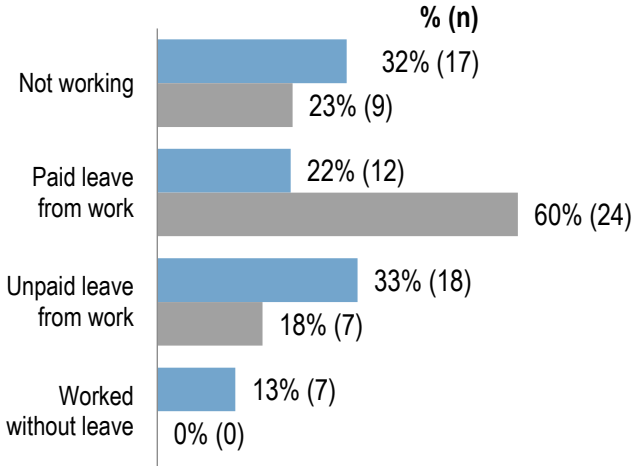


We did not ask about income in our survey, but we did ask about health insurance status and WIC participation, which could be markers for income. We found that those likely to have lower incomes (those with Medicaid and those who participate in WIC) were less likely (18% for those with Medicaid and 22% for those in WIC) to have paid leave from work than their likely higher incomes counterparts. Those who need paid maternity leave the most have the lowest rates of receipt.

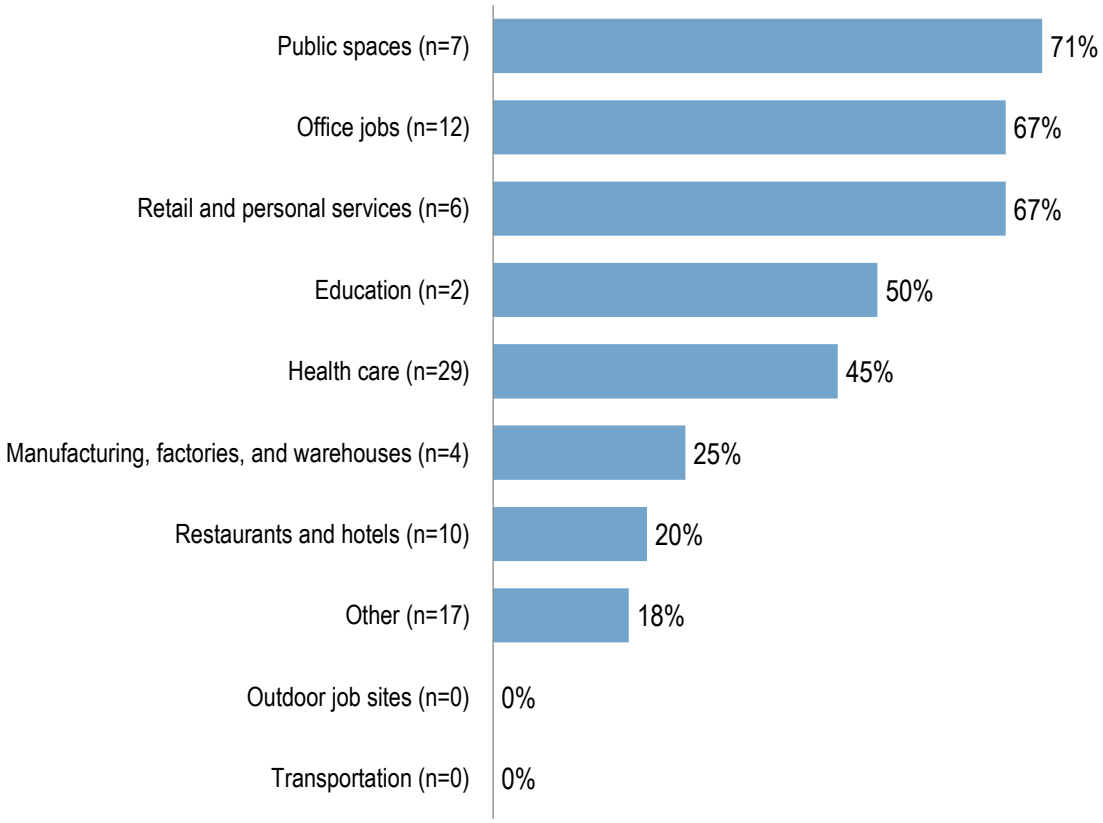
Black/African American survey respondents with Medicaid (n=56) were much less likely to have paid leave from work than those with private insurance (n=35).



Black/African American WIC participants (n=54) were much less likely to have paid leave from work than non-WIC participants (n=40).



The receipt of paid maternity leave among Black/African American survey respondents varied by industry, with public spaces, office jobs, and retail and personal services having the greatest proportions of respondents with paid leave.



Conclusions

As described in the methods section of this report, this study has limitations regarding participant recruitment and partner moderator that should be considered when interpreting these findings and conclusions below. These limitations impacted our sample of survey respondents and focus group participants; therefore, the following conclusions are not representative of all Black or African American women in Ohio and should not be generalized.

What have we learned?

Through survey responses and focus group participants' written discussion, this study has identified supports and barriers to breastfeeding at the different levels of the social ecological model. Some findings were expected, such as respondents and participants naming family, friends or social support as being an important or promotional factor during their breastfeeding experience. Additionally, participants provided descriptions of their worksite experiences, which demonstrate the need for comprehensive worksite accommodations for breastfeeding women and ample paid time off for maternity leave. Finally, many survey respondents and focus group participants wrote about the help and support received from LCs, demonstrating the value and impact LCs have on women's breastfeeding experiences.

Other findings were more specific to Black or African American respondents and participants. These included some focus group participants writing about how their friends or families' experience breastfeeding influenced their decision to breastfeed and dictated whether friends or family were supportive of their experience. Some Black or African American participants specifically wrote about the historic and generational impact of wet nurses in relationship to familial attitudes towards breastfeeding. Another finding from focus group participants was that multiple women shared receiving minimal support or information about breastfeeding during their prenatal care. Multiple women also shared experiences of their pediatricians being unsupportive or discouraging them continuing to breastfeed because of concern about their child's weight gain. Some participants shared how they found WIC helpful and others shared that WIC seems to push formula, especially for Black or African American mothers. Focus group participants also wrote largely about the importance of supportive online resources and support groups, especially Black women-led groups. Finally, some participants wrote generally about the impact of generational trauma of enslaved wet nurses and the historic mistreatment and abuse from the medical field on Black or African American women's decision to and experience breastfeeding.

What it means

These findings indicate potential areas for improving interventions for increasing breastfeeding rates and duration among Black or African American women. The following list outlines potential

opportunities for expanding and strengthening current initiatives to assist Black or African American women in their breastfeeding journeys:

- Provide funding for, promote and support Black or African American women-led interventions including community organizations and peer groups (online or in-person).
- Provide training and education about breastfeeding for healthcare professionals, specifically for prenatal care providers and pediatricians.
- Evaluate WIC peer support programs and formula provision to better understand who is utilizing these supports, who is receiving formula, and why. This could generate information that could be used to better tailor WIC supports to Black or African American women in Ohio.
- Design and implement public health campaigns or messaging that center the voices of Black or African American mothers and their experiences. Include Black or African American representation in handouts, pamphlets, and other resources. Acknowledge the historic, generational trauma from wet nursing and abuse from the medical/research fields in interventions.

What next?

Beyond these intervention opportunities, PDA recommends the additional data collection considerations and evaluations for a more comprehensive understanding of how to improve breastfeeding rates and duration among Black or African American women. These include:

Prioritize partnering with facilitators or moderators from communities of interest: PDA would recommend continuing to make every effort to involve and engage with community facilitators or moderators during the design, data collection, and analysis/interpretation phase of future studies. This can ensure sufficient information is collected and culturally relevant information is not missed or misinterpreted.

Focus group or interviews with healthcare providers or WIC staff: Collecting data from those providing interventions or support to breastfeeding women could allow for an assessment of what they're already doing and their knowledge about breastfeeding. This could inform areas to focus on for training and education.

Intercept study at healthcare offices or WIC sites: An intercept study could consist of on-site, brief questionnaires with patients or clients. This could address this study's limitation of having a sample with many strong advocates for breastfeeding and those with experience of breastfeeding for long periods of time.

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References

[1] US Centers for Disease Control and Prevention. (2013). *A practitioner's guide for advancing health equity: Community strategies for preventing chronic disease*. US Department of Health and Human Services. https://www.cdc.gov/nccdphp/dnpao/state-local-programs/health-equity-guide/pdf/HealthEquityGuide.pdf

[2] Lu, M. C., & Halfon, N. (2003). Racial and ethnic disparities in birth outcomes: A life-course perspective. *Maternal and child health journal, 7*(1), 13–30. https://doi.org/10.1023/a:1022537516969

[3] McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health education quarterly, 15*(4), 351–377. https://doi.org/10.1177/109019818801500401

[4] US Centers for Disease Control and Prevention. (2020). *The social-ecological model: A framework for prevention.* https://www.cdc.gov/violenceprevention/publichealthissue/social-ecologicalmodel.html

[5] US Preventative Services Task Force. (2016). *Primary care interventions to support breastfeeding*. JAMA, 316(16), 1688. https://doi:10.1001/jama.2016.14697

[6] US Centers for Disease Control and Prevention. (2020). *Breastfeeding Report Card United States, 2020.* Retrieved from https://www.cdc.gov/breastfeeding/pdf/2020-Breastfeeding-Report-Card-H.pdf

[7] American Academy of Pediatrics Section on Breastfeeding (2012). Breastfeeding and the use of human milk. *Pediatrics, 129*(3), e827–e841. https://doi.org/10.1542/peds.2011-3552

[8] World Health Organization. (2014). *Global Nutrition Targets 2025: Breastfeeding Policy Brief.* Retrieved from: https://apps.who.int/iris/bitstream/handle/10665/149022/WHO_NMH_NHD_14.7_eng.pdf?ua=1

[9] Ohio Department of Health (n.d.). *Breastfeeding.* https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/Breastfeeding/welcome

[10] US Dept. of Health and Human Services, Office of Disease Prevention and Health Promotion. (n.d.) *Healthy People 2020 Topics & Objectives: Maternal, Infant, and Child Health.* Retrieved from: https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives

[11] US Dept. of Health and Human Services, Office of Disease Prevention and Health Promotion. (n.d.) *Healthy People 2030 Objectives: Infants.* Retrieved from: https://health.gov/healthypeople/objectives-and-data/browse-objectives/infants

[12] US Centers for Disease Control. (2017). *Rates of Any and Exclusive Breastfeeding by State Amount Children Born in 2017.* Retrieved from: https://www.cdc.gov/breastfeeding/data/nis_data/rates-any-exclusive-bf-by-state-2017.htm

[13] Jones, K. M., Power, M. L., Queenan, J. T., & Schulkin, J. (2015). Racial and ethnic disparities in breastfeeding. *Breastfeeding medicine: the official journal of the Academy of Breastfeeding Medicine, 10*(4), 186–196. https://doi.org/10.1089/bfm.2014.0152

[14] Carroll, S. (2018). *Barriers to Nourishing Babies in Appalachia*. Appalachian Breastfeeding Network. http://breastfeedingandfeminism.org/wp-content/uploads/2018/03/Carroll_Handout.pdf

[15] US Centers for Disease Control (n.d.). Rates of Any and Exclusive Breastfeeding by Sociodemographics Among Children Born in 2017 (Percentage +/- half 95% Confidence Interval). Retrieved from: https://www.cdc.gov/breastfeeding/data/nis_data/rates-any-exclusive-bf-socio-dem-2017.html

[16] Wiener, R. C. and Wiener, M. A. (2011). Breastfeeding prevalence and distribution in the USA and the Appalachia by rural and urban setting. *Rural and Remote Health, 11(2): 1713.* Retrieved from: https://www.rrh.org.au/journal/article/1713

[17] Ohio Department of Health, Vital Statistics. *Breastfeeding at Discharge, Ohio 2015-2018*. Retrieved from https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/Breastfeeding/Data/

[18] Johnson, A., Kirk, R., Rosenblum, K. L., & Muzik, M. (2015). Enhancing breastfeeding rates among African American women: A systematic review of current psychosocial interventions. *Breastfeeding medicine: the official journal of the Academy of Breastfeeding Medicine, 10*(1), 45–62. https://doi.org/10.1089/bfm.2014.0023

[19] US Centers for Disease Control. (n.d.) *Infant Mortality Rates by State*. Retrieved from: https://www.cdc.gov/nchs/pressroom/sosmap/infant_mortality_rates/infant_mortality.htm

[20] Ohio Department of Health. *2019 Ohio Infant Mortality Data: General Findings.* Retrieved from: https://odh.ohio.gov/wps/wcm/connect/gov/e30e2521-b6ae-4d75-a5fa-09c4241feb42/Infant+Mortality+Report+2019+FINAL.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-e30e2521-b6ae-4d75-a5fa-09c4241feb42-npOcdC5#:~:text=The%20infant%20mortality%20rate%20is,Table%201%2C%20Figure%202

[21] Ohio Department of Health. *2017 Ohio Infant Mortality Data: General Findings.* Retrieved from: https://odh.ohio.gov/wps/wcm/connect/gov/5b43b42b-0733-42cd-8a01-063f831ec53f/2017+Ohio+Infant+Mortality+Report.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-5b43b42b-0733-42cd-8a01-063f831ec53f-mLmEAnU

[22] Health Policy Institute of Ohio. (2017). A new approach to reduce infant mortality and achieve equity: Policy recommendations to improve housing, transportation, education and employment. Retrieved from: https://www.healthpolicyohio.org/wp-content/uploads/2018/01/SDOIM_FinalCombined_posted-1.pdf

[23] Ware, J. L., Chen, A., Morrow, A. L., and Kmet, J. (2019). Associations Between Breastfeeding Initiation and Infant Mortality in an Urban Population. *Breastfeeding Medicine, 14(7):* 465-474. https://doi.org/10.1089/bfm.2019.0067

[24] Adams, J. M. (2017). Breastfeeding and Infant Mortality in Indiana: Changing the Culture and Saving Lives: A Model for Other States. *Breastfeeding Medicine, 12(8):* 456-468. https://dx.doi.org/10.1089%2Fbfm.2017.0108

[25] Chen, A. and Rogan, W. J. (2004). Breastfeeding and the Risk of Postneonatal Death in the United States. *Pediatrics, 113(5):* e435-e-439. https://doi.org/10.1542/peds.113.5.e435

[26] US Centers for Disease Control. (2019). *CDC's Work to Support & Promote Breastfeeding in Hospitals, Worksites, & Communities.* Retrieved from: https://www.cdc.gov/breastfeeding/pdf/breastfeeding-cdcs-work-508.pdf

[27] American Academy of Pediatrics. (2012). Breastfeeding and the Use of Human Milk. Pediatrics, 129(3): e827-e841. https://doi.org/10.1542/peds.2011-3552

[28] Krol, K. M. and Grossmann, T. (2018). Psychological effects of breastfeeding on children and mothers. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz. 2018; 61(8):* 977–985. https://doi.org/10.1007/s00103-018-2769-0

[29] Bartick, M. (2011). Breastfeeding and the U.S. economy. *Breastfeeding medicine: the official journal of the Academy of Breastfeeding Medicine, 6(5*): 313-318. https://doi.org/10.1089/bfm.2011.0057

[30] Walters, D. D., Phan, L. T. H., and Mathisen, R. (2019). The cost of not breastfeeding: global results from a new tool. *Health Policy and Planning, 34(6):* 407-417. https://doi.org/10.1093/heapol/czz050

[31] World Alliance for Breastfeeding Action. (2016). *WABA World Breastfeeding Week: Breastfeeding, A Key to Sustainable Development.* Retrieved from: https://worldbreastfeedingweek.org/2016/images/wbw2016-af-i.jpg

[32] Davidove, M. E. and Dorsey, J. W. (2019). Breastfeeding: A Cornerstone of Healthy Sustainable Diets. *Sustainability, 11(18):* 4958. https://doi.org/10.3390/su11184958

[33] Prather, C., Fuller, T. R., Jeffries, W. L., Marshall, K. J., Vyann Howell, A., Belyue-Umole, A., and King, W. (2018). Racism, African American Women, and Their Sexual and Reproductive Health: A Review of Historical and Contemporary Evidence and Implications for Health Equity. *Health Equity, 2(1):* 249-259. https://dx.doi.org/10.1089%2Fheq.2017.0045

[34] Phelan, J. C. and Link, B. G. (2015). Is Racism a Fundamental Cause of Inequalities in Health? *Annual Review of Sociology, 41:* 311-330. https://doi.org/10.1146/annurev-soc-073014-112305

[35] Robinson, K., Fial, A., and Hanson, L. (2019). Racism, Bias, and Discrimination as Modifiable Barriers to Breastfeeding for African American Women: A Scoping Review of the Literature. *Journal of Midwifery & Women's Health, 64(6):* 734-742. https://doi.org/10.1111/jmwh.13058

[36] Cricco-Lizza, R. (2006). Black non-Hispanic mothers' perceptions about the promotion of infant-feeding methods by nurses and physicians. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 35(20):* 173-180. https://doi.org/10.1111/j.1552-6909.2006.00033.x

[37] Beal, A. C., Kuhlthau, K., and Perrin, J. M. (2003). Breastfeeding advice given to African American and white women by physicians and WIC counselors. *Public health reports (Washington, D.C.: 1974), 118(4),* 368–376. https://doi.org/10.1093/phr/118.4.368

[38] Griswold, M. K., Crawford, S. L., Perry, D. J., Person, S. D., Rosenberg, L., Cozier, Y. C., and Palmer, J. R. (2018). Experiences of Racism and Breastfeeding Initiation and Duration Among First-Time Mothers of the Black Women's Health Study. *Journal of Racial & Ethnic Health Disparities, 5(6):* 1180-1191. https://doi.org/10.1007/s40615-018-0465-2.

[39] Smith-Gagen, J., Hollen, R., Walker, M., Cook, D. M., and Yang, W. (2014). Breastfeeding laws and breastfeeding practices by race and ethnicity. *Women's Health Issues: official publication of the Jacobs Institute of Women's Health, 24(1):* e11–e19. https://doi.org/10.1016/j.whi.2013.11.001

[40] Ogbuanu, C., Glover, S., Probst, J., Liu, J., and Hussey, J. (2011). The Effect of Maternity Leave Length and Time of Return to Work on Breastfeeding. *Pediatrics, 127(6):* e1414-e1427. https://dx.doi.org/10.1542%2Fpeds.2010-0459

[41] Jones, K. M., Power, M. L., Queenan, J. T., & Schulkin, J. (2015). Racial and ethnic disparities in breastfeeding. *Breastfeeding medicine: the official journal of the Academy of Breastfeeding Medicine, 10*(4), 186–196. https://doi.org/10.1089/bfm.2014.0152

[42] Freeman, A. (2018). Unmothering Black Women: Formula Feeding as an Incident of Slavery. *Hastings Law Journal, 69:* 1545-1606. Retrieved from: https://hastingslawjournal.org/wp-content/uploads/Freeman-69.6.pdf

[43] Centers for Disease Control and Prevention. Strategies to Prevent Obesity and Other Chronic Diseases: The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies. Atlanta: U.S. Department of Health and Human Services; 2013. Retrieved from: https://www.cdc.gov/breastfeeding/pdf/bf-guide-508.pdf

[44] Merewood, A., Bugg, K., Burnham. L., Krane, K., Nickel, N., Broom, S., Edwards, R., and Feldman-Winter, L. (2019). Addressing Racial Inequities in Breastfeeding in the Southern United States. *Pediatrics, 143(2):* e20181897. https://doi.org/10.1542/peds.2018-1897

[45] Hemingway, S., Forson-Dare, Z., Ebeling, M., and Taylor, S. N. (2021). Racial Disparities in Sustaining Breastfeeding in a Baby-Friendly Designated Southeastern United States Hospital: An Opportunity to Investigate Systemic Racism. *Breastfeeding Medicine, 16(2):* 150-155. https://doi.org/10.1089/bfm.2020.0306

[46] Persad, M. and Mensinger, J. L. (2007). Maternal Breastfeeding Attitudes: Association with Breastfeeding Intent and Socio-demographics Among Urban Primaparas. *Journal of Community Health, 33:* 53-60. https://doi.org/10.1007/s10900-007-9068-2

[47] McCarter-Spaulding, D. and Gore, R. (2012). Social Support Improves Breastfeeding Self-Efficacy in a Sample of Black Women. *Clinical Lactation, 3(3):* 114-117. https://doi.org/10.1891/215805312807022923

[48] Sattin, R. W., Williams, L. B., Dias, J., Garvin, J. T., Marion, L., Joshua, T. V., Kriska, A., Kramer, M. K., & Narayan, K. M. (2016). Community Trial of a Faith-Based Lifestyle Intervention to Prevent Diabetes Among African-Americans. *Journal of community health, 41(1):* 87–96. https://doi.org/10.1007/s10900-015-0071-8

[49] Palar, K., Mendel, P. & Derose, K.P. (2013). The Organization of HIV and Other Health Activities within Urban Religious Congregations. *Journal of Urban Health, 90:* 922–933. https://doi.org/10.1007/s11524-012-9783-6

[50] Holt, C. L., Litaker, M. S., Scarinci, I. C., Debnam, K. J., McDavid, C., McNeal, S. F., Eloubeidi, M. A., Crowther, M., Bolland, J., & Martin, M. Y. (2013). Spiritually based intervention to increase colorectal cancer screening among African Americans: screening and theory-based outcomes from a randomized trial. *Health education & behavior: the official publication of the Society for Public Health Education, 40(4):* 458–468. https://doi.org/10.1177/1090198112459651

[51] Allen, A., J., Davey, M. P., and Davey, A. (2010). Being Examples to the Flock: The Role of Church Leaders and African American Families Seeking Mental Health Care Services. *Contemporary Family Therapy, 32:* 117-134. https://doi.org/10.1007/s10591-009-9108-4

[52] Reis-Rilley, H., Fuller-Sankofa, N., and Tibbs, C. (2018). Breastfeeding in the Community: Addressing Disparities Through Policy, Systems, and Environmental Changes Interventions. *Journal of Human Lactation, 34(2):* 267-271. https://doi.org/10.1177/0890334418759055

[53] Creswell, J. W., Klassen, A. C., Clark, V. L. P., and Smith, K.C. (2016). Best Practices for Mixed Methods Research in the Health Sciences. Retrieved from: https://obssr.od.nih.gov/wp-content/uploads/2016/02/Best_Practices_for_Mixed_Methods_Research.pdf

[54] World Health Organization (WHO). (2018). *Guideline: Counselling of women to improve breastfeeding practices.* Retrieved from https://apps.who.int/iris/bitstream/handle/10665/280133/9789241550468-eng.pdf

[55] Ohio Department of Health (ODH). (2020). *Breastfeeding: Worksites.* Retrieved from https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/Breastfeeding/Worksites

[56] US Census Bureau. (2020). *2019 American Community Survey 1-Year Estimates Public Use Microdata Sample, Ohio* [Data set]. Retrieved from https://www.census.gov/programs-surveys/acs/microdata/access.html

[57] Johnson, A. M., Kirk, R., and Muzik, M. (2015). Overcoming Workplace Barriers: A Focus Group Study Exploring African American Mothers' Needs for Workplace Breastfeeding Support. *Journal of Human Lactation, 31(3):* 425-433. https://doi.org/10.1177/0890334415573001

[58] Johnson, A. M., Kirk, R., Rooks, A. J., and Muzik. M. (2016). Enhancing Breastfeeding Through Healthcare Support: Results from a Focus Group Study of African American Mothers. *Maternal and Child Health Journal, 20:* 92-102. https://doi.org/10.1007/s10995-016-2085-y

[59] Gross, T. T., Powell, R., Anderson, A. K., Hall, J., Davis, M., and Hilyard, K. (2015). WIC Peer Counselors' Perceptions of Breastfeeding in African American Women with Lower Incomes. *Journal of Human Lactation, 31(1):* 99-110. https://doi.org/10.1177/0890334414561061

[60] Pyles, T. E. H., Umi, S. A., Madubuonwu, S., Stiles, A., Devane-Johnson, S., Scott, H., Rhoads, S., and Russell, J. H. (2021). Breastfeeding Sisters That Are Receiving Support: Community-Based Peer Support Program Created for and by Women of Color. *Breastfeeding Medicine, 16(2):* 165-170. https://doi.org/10.1089/bfm.2020.0313

[61] Asiodu, I. V., Waters, C. M., Dailey, D. W, Lee, K. A., and Lyndon, A. (2015). Breastfeeding and the Use of Social Media Among First-Time African American Mothers. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 44(2):* 268-278. https://doi.org/10.1111/1552-6909.12552

[62] West, E., & Knight, R. J. (2017). Mothers' milk: Slavery, wet-nursing, and Black and White women in the antebellum south. *Journal of Southern History, 83*(1), 37-68. https://doi.org/10.1353/soh.2017.0001

[63] Green, V. L., Killings, N. L., & Clare, C. A. (2021). The historical, psychosocial, and cultural context of breastfeeding in the African American community. *Breastfeeding Medicine, 16*(2), 116-120. https://doi.org/10.1089/bfm.2020.0316

[64] Burtle, A., & Bezruchka, S. (2016). Population Health and Paid Parental Leave: What the United States Can Learn from Two Decades of Research. *Healthcare (Basel, Switzerland), 4*(2), 30. https://doi.org/10.3390/healthcare4020030

[65] Shepherd-Banigan, M., & Bell, J. F. (2014). Paid leave benefits among a national sample of working mothers with infants in the United States. *Maternal and child health journal, 18*(1), 286–295. https://doi.org/10.1007/s10995-013-1264-3

[66] Montez, K., Thomson, S., & Shabo, V. (2020). An opportunity to promote health equity: National paid family and medical leave. *Pediatrics, 146*(3). https://doi.org/10.1542/peds.2020-1122

Appendix

Appendix 1. Survey Instrument and Focus Group Protocol

The survey instrument and focus group protocol were developed with the assistance of Ohio breastfeeding partners and stakeholders. The instrument and protocol are available from the Ohio Department of Health at request.

Appendix 2. Ohio Breastfeeding Programs

Many programs in Ohio are working to support breastfeeding mothers, including at organizations that are explicitly focused on breastfeeding and at organizations for which breastfeeding is one of many priorities. Below is a list of some key programs and organizations, with study partners highlighted. Some focus on serving specific populations and others have a broader mission. This is not intended to be a complete list of all organizations supporting breastfeeding work. We recognize that many more initiatives are happening beyond this list, such as classes and trainings happening at many health systems across Ohio. A wealth of partners collaborating from diverse fields are critical to continuing to promote breastfeeding and advance racial and regional equity.

- **AMEN (All Moms Empowered to Nurse)**: breastfeeding peer support
- **Appalachian Breastfeeding Network (ABN)**: a network of breastfeeding supporters who seek to improve education and access to care through educating hospitals, administering the Appalachian hotline, posting on social media, hosting a conference, and speaking at other events
- **Black Lactation Circle of Central Ohio (BlaC)**: a breastfeeding peer support group for Black women in Central Ohio
- **Breastfeeding Medicine of Northeast Ohio**: a medical and lactation support service organization
- **Breastfeeding Friendly Child Care Designation**: a designation awarded by ODH, OBA, and the Ohio Child Care Resource and Referral Association to early childhood education (ECE) programs that implement a breastfeeding policy that meets minimum requirements to support breastfeeding mothers and their infants
- **Creating Healthy Communities**: a statewide chronic disease prevention program that promotes healthy food and physical activity, as well as breastfeeding
- **Centering Pregnancy**: a national model of group prenatal care
- **Cradle Cincinnati**: a collaboration of parents, caregivers, healthcare professionals, and community members working to reduce infant mortality in Cincinnati, with a focus on supporting equity for Black women

- **Early Head Start**: a national program that supports development for infants and toddlers through home visits, classroom education, and child care
- **First Year Cleveland**: a collaboration of parents, community leaders, philanthropic organizations, government and business entities, healthcare providers, educational institutions, nonprofits, and faith-based organizations working to reduce infant mortality in Cuyahoga County, with a focus on supporting equity for Black women
- **Head Start**: a national program that supports development for preschoolers through home visits, classroom education, and childcare
- **Help Me Grow**: a parent support program that includes home visiting, early intervention, and parental education
- **La Leche League of Ohio**: a local affiliate of the international organization that provides breastfeeding peer education and support
- **Maternal and Child Health grant, aka Title V**: a federal grant that funds a variety of programs to improve women and children's (infants, children, and adolescents) healthcare, health, survival, and community experiences
- **Moms and Babies First: Ohio's Black Infant Vitality Program**: a county government initiative to reduce low birthweight babies, infant deaths, and sickness among Black women in Montgomery County through home visits, parental education, and father engagement
- **Neighborhood Family Practice**: a Federally Qualified Health Center (FQHC) in Cleveland partnering with REACH to integrate midwifery and breastfeeding support
- **Ohio Breastfeeding Alliance (OBA)**: a group of breastfeeding professionals who promote breastfeeding through partnerships, campaigns, workgroups, and a resources database
- **Ohio Collaborative to Prevent Infant Mortality**: a statewide collaborative that performs community engagement, exchange of best practices, data management, and advocacy to reduce infant mortality
- **Ohio Department of Health (ODH)**: state health department
- **Ohio First Steps for Healthy Babies, aka First Steps:** a designation awarded by ODH and the Ohio Hospital Association to hospitals that promote breastfeeding
- **Ohio Lactation Consultant Association (OCLA)**: a local affiliate of the US Lactation Consultant Association that hosts an annual Breastfest conference and other educational opportunities for LCs and other breastfeeding advocates

- **Ohio Perinatal Quality Collaborative**: a statewide consortium of perinatal clinicians, hospitals, and policy makers and governmental entities that uses improvement science to reduce preterm births and improve maternal and birth outcomes
- **REACH (Racial and Ethnic Approaches to Community Health)**: a CDC-funded grant administered by Health Improvement Partnership (HIP) Cuyahoga that funds healthy eating, active living, and clinical and community linkages in African American communities
- **Restoring Our Own Through Transformation (ROOTT)**: a reproductive justice organization in Columbus that supports Black women and women of color through doula services and training, research, education, and consultation
- **WIC (the Special Supplemental Nutrition Program Women, Infants, & Children)**: a national program that provides nutrition education, breastfeeding education and support, supplemental nutritious foods and formula, and referral to healthcare and support services to income-eligible women