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## Leveraging Resources to Establish Equitable Breastfeeding Support Across Alabama

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breastfeeding; breastfeeding rates; breastfeeding support

### Background

Breastfeeding is the best source of nutrition for infants, and research emphasizes the benefits of breastfeeding for both mother and infant (American Academy of Pediatrics, 2012; Ip et al., 2007). The American Academy of Pediatrics (2012) recommends exclusive breastfeeding for about the first 6 months of life, and continued breastfeeding for 1 year or longer. In the United States, only 24.9% of infants are exclusively breastfed for 6 months and 33.7% receive any human milk at 12 months (Centers for Disease Control and Prevention [CDC], 2017a). Furthermore, there are disparities among rates of initiation and duration: Rates are lowest for infants who are non-Hispanic Black, living in rural areas, or living in the southeastern United States (CDC, 2017a).

Rates of breastfeeding in Alabama, a predominantly rural state, have been historically low. In 2009, Alabama ranked 47th for breastfeeding initiation, with just 57.5% of infants being ever breastfed, compared with 76.1% nationally (CDC, 2017a). At this time, only 9.9% of Alabama infants are exclusively breastfed at 6 months and 14.1% receive any human milk at 12 months (CDC, 2017a). A recent report compared state-specific breastfeeding rates among children born during 2010–2013 and found that rates of breastfeeding in Alabama were lower among Black infants compared with White infants for all measured indicators. Fewer Black infants initiated breastfeeding (52.5% vs. 69.9%) and were breastfeeding at 12 months

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(11.0% vs. 16.1%; both  $p < .05$ ; Anstey, Chen, Elam-Evans, & Perrine, 2017), which is particularly significant because African Americans make up more than 25% of Alabama's state population (U.S. Census Bureau, 2017).

The CDC provides technical assistance and funding to states to implement evidence-based strategies that improve breastfeeding policies and practices in the hospital, community, and work site settings (Grummer-Strawn et al., 2013). This article describes how Alabama used multiple funding opportunities to create strong and diverse partnerships to strengthen support for breastfeeding. As support for breastfeeding improves, efforts may be reflected in improved practices and increased breastfeeding rates. Thus, we report trends in maternity care practices that support breastfeeding in Alabama birth facilities as well as trends in statewide breastfeeding rates.

## Methods

To learn more about how Alabama used CDC technical assistance and funding to create a statewide partnership to support and improve breastfeeding initiation and duration, we held six interviews with two individuals affiliated with the Alabama Department of Public Health and the Alabama Breastfeeding Committee (ABC). We also reviewed two success stories developed by the CDC's Division of Nutrition, Physical Activity, and Obesity, as well as eight final program reports from CDC-funded grants and contracts. Details on these grants and contracts are provided. For this article, we describe findings from the interviews, success stories, and reports, and we describe trends in statewide surveillance data.

### Establishing a Foundation of Statewide Breastfeeding Support

In 2004, the Alabama State Perinatal Program worked with key partners to develop a mission statement and determine short- and long-term goals for increasing breastfeeding rates in the state. Collaborators included the Alabama chapter of the American Academy of Pediatrics, the Alabama chapter of the American Academy of Family Physicians, the Alabama section of the American Congress of Obstetricians and Gynecologists, the Association of Women's Health, Obstetric and Neonatal Nurses, March of Dimes, Medela, Medimmune, and maternal-fetal specialists and neonatologists from the University of Alabama in Birmingham and the University of South Alabama. These partners agreed to further the education, promotion, and support of breastfeeding within their organizations, to report on their successes, and to rely on the partnership for technical assistance and feedback, as needed. These partners agreed that a committee should be formed to carry out activities defined by this group, and the ABC was formed.

The ABC works to ensure that breastfeeding coalitions across the state and stakeholders play a vital role in making quality breastfeeding services an essential component of healthcare for all families. Through coordination and partnerships, the ABC implemented lactation groups in each of the state's perinatal regions to address gaps in breastfeeding support at a grassroots level and provide lactation education to health professionals. These regional lactation groups were able to mirror the ABC's mission, and a coordinated network of breastfeeding efforts across Alabama was developed.

## CDC-Funded Activities

To enhance statewide support and improve breastfeeding, Alabama sought resources and funding through several CDC breastfeeding initiatives.

**Best Fed Beginnings (2011–2015)**—Best Fed Beginnings (BFB) was a nationwide quality improvement initiative funded by the CDC and led by the National Institute for Children’s Health Quality in partnership with Baby-Friendly USA and the United States Breastfeeding Committee. The goal of BFB was to help hospitals improve breastfeeding-supportive maternity care practices and increase the number of Baby-Friendly hospitals in the United States. The Baby-Friendly Hospital Initiative was launched by the World Health Organization (WHO) and the United Nations Children’s Fund (UNICEF) in 1991 and is a global effort to protect, promote, and support breastfeeding (WHO & UNICEF, 2009). For hospitals to achieve the Baby-Friendly designation, they must demonstrate that they have implemented the Ten Steps to Successful Breastfeeding (Ten Steps), which are evidence-based practices that are shown to improve maternity care and breastfeeding outcomes, as well as implemented the *International Code of Marketing of Breast-milk Substitutes* (WHO, 1981; WHO & UNICEF, 2009).

Hospitals in 29 states participated in BFB, including three Alabama hospitals. These hospitals partnered with the ABC to work on Step 10 of the Ten Steps, which is to foster the establishment of breastfeeding support groups and refer mothers to them upon discharge from the hospital or birth center (WHO & UNICEF, 2009). The ABC and the three hospitals provided support groups facilitated by trained staff located near the women they served.

The ABC also developed and implemented a plan for training physicians in the community who interact with mothers discharged from Alabama BFB hospitals. Physicians and staff from BFB hospitals, the ABC, and the Alabama Department of Public Health Training Network collaborated to develop a plan that would address this issue statewide. The decision was to provide web-based training to improve access for health professionals throughout the state. The webinar provided continuing medical education credits and met the 3 hours of physician training required by the Baby-Friendly Hospital Initiative. In addition, the ABC provided materials to physicians, including a list of active International Board Certified Lactation Consultants across Alabama who would consult with them free of charge about patients with lactation problems, copies of *Medications and Mother’s Milk* for the first 10 participants to complete the continuing medical education evaluation, and copies of *From the Surgeon General: Selected Actions for Doctors to Support Breastfeeding* (<https://www.surgeongeneral.gov/library/calls/breastfeeding/index.html>).

**Enhancing Maternity Practices Breastfeeding Initiative (2015-Present)**—Using lessons learned from BFB, the CDC launched the Enhancing Maternity Practices (EMPower) breastfeeding initiative in partnership with Abt Associates, Baby-Friendly USA, the Carolina Global Breastfeeding Institute, and Population Health Improvement Partners. EMPower is a hospital-based quality improvement initiative led by Abt Associates to help hospitals improve breastfeeding-supportive maternity care and achieve the Baby-Friendly designation. EMPower provides participating hospitals with technical assistance, staff

training, and quality improvement tools. Hospitals in 24 states are participating in the EMPOWER initiative, including six Alabama hospitals (Abt Associates, 2017).

**National Association of County and City Health Officials (2014-Present)**—The ABC provides breastfeeding support to Alabama communities for projects initiated during the CDC-funded National Association of County and City Health Officials (NACCHO) grant. The project, entitled Reducing Disparities in Breastfeeding Through Peer and Professional Lactation Support, was a grant to increase community support and access to breastfeeding resources. The project increased implementation of evidence-based and innovative peer and professional breastfeeding support programs among predominantly Black and underserved communities by providing awards to community-based organizations and local health departments (NACCHO, 2017). Through funding received by the Birmingham Baby Café, Certified Lactation Counselor training was provided to 25 individuals, including obstetric nurses, medical students, peer counselors, and nutritionists who work with the Special Supplemental Nutrition Program for Women, Infants, and Children, all of whom became certified as lactation consultants. In addition, the grant allowed the ABC to provide breast pumps, taxi vouchers, education materials, and rocking chairs to the Birmingham Baby Café community. Baby Cafés, a free resource for pregnant and breastfeeding moms, are run by trained staff and located throughout the community—for example, in church halls or hospitals—and generally open at least once a week to offer support on all aspects of breastfeeding (Baby Café USA, 2017).

The Baptist Medical Center South in Montgomery, Alabama, was another recipient of a NACCHO grant, creating the Circle of Moms. This group established support groups and a free breast pump loaner program and provided lactation education for healthcare professionals by hosting a Certified Breastfeeding Counselor course. Through continued CDC funding to NACCHO, grantees have made use of the continued technical assistance to sustain their activities.

**Association of State and Territorial Health Officials (2014-Present)**—In addition, the Alabama Department of Public Health obtained support through the CDC-funded Association of State and Territorial Health Officials grant, Building State Health Agency Capacity for Breastfeeding Promotion and Support. The funding was used to develop the Alabama Breastfeeding Initiative, which, in collaboration with the ABC, established a framework to provide guidance and recommendations to hospitals and state and community organizations for increasing the initiation and duration of breastfeeding in Alabama. In particular, it aimed to increase practices supportive of breastfeeding in birthing facilities throughout Alabama. The 26 participating Alabama hospitals were provided evidence-based resources and training that supported implementation of the Ten Steps process and were enabled to engage in a collaboration with a “mentor hospital,” one that had already achieved Baby-Friendly designation. Other activities included a 2-day train-the-trainer event to equip participants with 16 hr of evidence-based breastfeeding education, and training for 30 obstetric nurses statewide to become Certified Lactation Counselors. This funding has helped the Alabama Department of Public Health strengthen its collaboration with partner agencies, health organizations, and hospitals throughout the state.

## Additional Efforts to Support Breastfeeding in Alabama

Alabama has promoted breastfeeding in innovative ways throughout the state, in addition to initiatives funded by the CDC. The Mothers' Milk Bank of Alabama collects, processes, and facilitates the distribution of mothers' excess milk to infants whose own mothers are unable to provide milk. The Mothers' Milk Bank of Alabama prioritizes giving pasteurized donor human milk to infants who are in hospital neonatal intensive care units but will also provide pasteurized donor human milk, when available, to well-baby units and outpatient infants in the community. The idea for the Mothers' Milk Bank of Alabama was conceived in 2014 by the Central Alabama Food Bank, and since 2015, the Mothers' Milk Bank of Alabama has been pasteurizing milk donations for use in Alabama. There are eight collection depots throughout the state that process and provide human milk to eight maternity hospitals.

Other ongoing efforts include the ABC's partnership with the Alabama Department of Education to ensure that students who are breastfeeding are allowed to pump their milk while in school. In addition, a pilot project was implemented in which school nurses were taught to encourage and support breastfeeding at least three times during the student's pregnancy. The ABC is also revamping their breastfeeding-friendly daycare awards program and their business case for a breastfeeding program as well as developing a hospital recognition program. Finally, the committee is partnering with the Alabama Prison Project to provide pumps and supplies for mothers to pump their milk while in prison and ship frozen milk to their infant's caregiver.

## Key Findings

The various collaborations and initiatives that have taken place in Alabama during the past several years have strengthened support for breastfeeding across the state. We looked at the number of Baby-Friendly Hospital Initiative designations, the CDC's national survey of Maternity Practices in Infant Nutrition and Care (mPINC), and the CDC's National Immunization Survey to identify progress made parallel to statewide efforts for improving breastfeeding support in Alabama.

**Baby-Friendly Hospital Designations**—In 2011, after several years of preparation, the Northeast Alabama Regional Medical Center in Anniston, Alabama, received designation as the first Baby-Friendly hospital in Alabama. Since then, five additional Alabama hospitals have achieved the Baby-Friendly designation, two of which participated in BFB (East Alabama Medical Center, Opelika, 2015, and University of Alabama Birmingham Hospital, Birmingham, 2015) and three of which participated in EMPower (Madison Hospital, Madison, 2016; Monroe County Hospital, Monroeville, 2017; and North Baldwin Infirmary, Bay Minette, 2017). Before 2011, no births in Alabama occurred in Baby-Friendly hospitals, and in 2017, 15.8% of all births in Alabama occurred in a Baby-Friendly hospital (CDC, 2017b).

**Maternity Practices in Infant Nutrition and Care**—Since 2007, the CDC's mPINC survey has been conducted biennially; to date, five surveys have been conducted. All hospitals and birth centers in the United States and its territories with registered maternity beds are invited to participate; the CDC has received response rates of 82% to 83% for each

survey cycle. The mPINC survey monitors breastfeeding-supportive maternity care practices, and the CDC calculates scores on a scale from 0 to 100, with higher scores denoting better maternity care practices and policies (CDC, 2017c). The CDC uses aggregate mPINC data to calculate a total score for each state. Since 2007, Alabama has markedly increased its mPINC scores from 55 in 2007 to 72 in 2015, an increase of 17 points (see Figure 1). During this same period, the national average score increased from 63 to 79 (CDC, 2017b).

**National Immunization Survey**—The National Immunization Survey is a national survey that is conducted annually by using random-digit dialing to survey households with children ages 19 to 35 months. Although the survey is primarily intended to estimate vaccine coverage rates for the United States, questions on breastfeeding are used for national breastfeeding surveillance (CDC, 2017d). Data from the most recent National Immunization Survey indicate an increase in breastfeeding rates in Alabama for all measured indicators (see Figure 2). During 2009–2014, the percentage of infants ever breastfed in Alabama rose from 57.5% to 66.6%, an increase of 9.1 percentage points; the percentage of infants exclusively breastfed at 6 months rose from 9.9% to 13.0%, an increase of 3.1 percentage points; and the percentage of infants receiving any human milk at 12 months rose from 14.1% to 21.0%, an increase of 6.9 percentage points. Although these rates fall below national averages, Alabama experienced a higher increase in the percentage of infants ever breastfed compared with the United States as a whole, which experienced a 6.4 percentage point increase (from 76.1% to 82.5%). Rates of breastfeeding are historically lower in southern states, and despite overall lower rates, tracking with or exceeding national progress is an achievement.

## Discussion

We illustrate how efforts across a state can be coordinated to improve breastfeeding rates. Since 2004, the ABC has been the leading organization working to improve the landscape of breastfeeding support and rates in Alabama. The coalition is a statewide body of healthcare professionals, educators, state health department representatives, and individuals representing various communities across the state. Because of their multifaceted nature, the ABC is able to form partnerships among various sectors. For example, the ABC works with the Alabama Department of Public Health, universities, birthing facilities, and Baby Cafés to successfully implement programs funded by the CDC. Over time, the ABC has evolved, and its identity has solidified by becoming a 501(c)(3), nonprofit organization. With this status, Alabama is positioned to obtain funding, leverage additional partnerships, and more effectively implement breastfeeding support programs statewide.

The ABC is an example of how the coordination of the activities of multiple partners, projects, and funding streams increases impact and can result in success. The work implemented by the ABC would not have been possible without a supportive and functional executive board. Although the ABC is composed solely of volunteers, the ABC and other state committees or coalitions could benefit by having at least a part-time, paid director to provide consistent leadership dedicated to running the coalition.

Our analysis shows that improvements in both mPINC and National Immunization Survey data occurred parallel to the implementation of BFB, EMPOWER, and other efforts. Although improvements in mPINC scores and National Immunization Survey breastfeeding rates may be attributed to various factors, they are likely partially attributable to BFB, EMPOWER, and other statewide efforts to improve breastfeeding in Alabama.

## Conclusion

Through a strong foundation in collaboration, grassroots efforts, and dedicated individuals, Alabama has increased support for breastfeeding at the state and local levels. Technical assistance and funding from the CDC and its partners have supported the ABC and the Alabama Department of Public Health to strengthen the continuity of care for breastfeeding mothers by establishing breastfeeding support groups, improving the knowledge and skills of providers through facilitation of provider breastfeeding education, and supporting certification or licensing of lactation care providers helping Alabama mothers start and continue breastfeeding. Like Alabama, each state has a health department and coalition that can serve as independent entities that make connections and improve the reach of statewide and local programs. Findings from Alabama's efforts can guide future state planning on approaches to improve breastfeeding networks and practices through state health departments, coalitions, and identified organizations.

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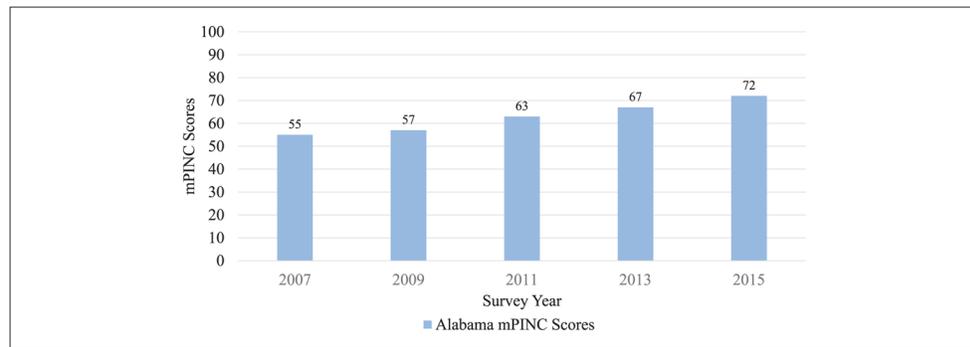
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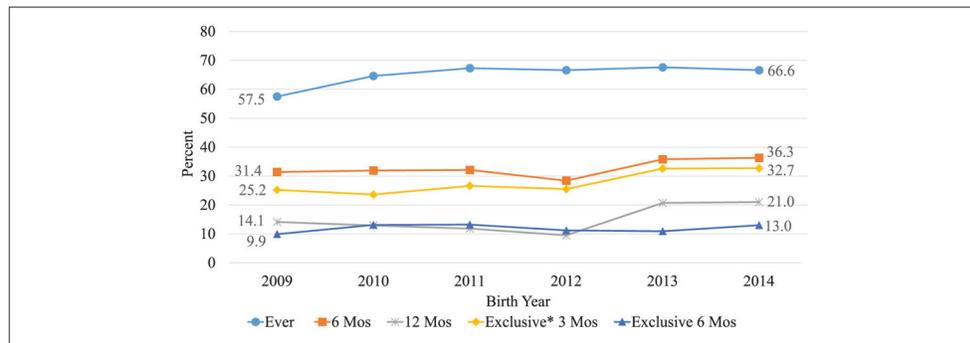
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**Figure 1.** Trends in Alabama Maternity Practices in Infant Nutrition and Care (mPINC) scores, 2007–2015. Adapted from Centers for Disease Control and Prevention (2017c).



**Figure 2.** Alabama breastfeeding rates, National Immunization Survey, 2009–2014. Adapted from Centers for Disease Control and Prevention (2017b). \*Exclusive breastfeeding is defined as only human milk—no solids, no water, and no other liquids.