



# The Role of Law and Policy in Assisting Families to Reach Healthy People's Maternal, Infant, and Child Health Breastfeeding Goals in the United States



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## Table of Contents

<b>Preface</b> .....	<b>9</b>
<b>Introduction</b> .....	<b>11</b>
<b>Background</b> .....	<b>13</b>
<b>Maternity and Pediatric Care Practices</b> .....	<b>16</b>
Maternity Care.....	16
Baby Friendly® Designation.....	18
Surveillance and Reporting.....	19
Quality Improvement.....	21
State Recognition Programs.....	21
State Mandates.....	22
Private-Payer Incentives.....	22
Outpatient Practices.....	23
Provider Training.....	24
Health Insurance Coverage for Breastfeeding.....	25
Implementation of Private Coverage for Non-grandfathered Plans.....	30
Licensure.....	31
Coverage of Lactation Services under Medicaid.....	33
Marketing of Breast Milk Substitutes.....	36
<b>Employment</b> .....	<b>39</b>
Paid Family Leave.....	40
Federal Legislation and Policy.....	41
State Legislation and Policy.....	42
Federal and State Initiatives.....	49
Child Care.....	50
Federal Programs.....	51
State Statutes and Regulations.....	51
Breastfeeding Friendly Child Care Designation.....	52

<b>Workplace Accommodations</b> .....	<b>53</b>
Federal Laws .....	55
Break Time for Nursing Mothers Provision.....	55
Pregnancy Discrimination Act (PDA) .....	57
State Laws .....	58
Breastfeeding Friendly Worksite Designation .....	60
<b>School Accommodations</b> .....	<b>60</b>
Title IX.....	61
State Legislation .....	61
Lactation Accommodations during Licensing Exams.....	62
<b>Federal Funding to Public Health Departments</b> .....	<b>62</b>
Funding for State Physical Activity and Nutrition Programs.....	62
Funding for Racial and Ethnic Approaches to Community Health Program.....	63
CDC Cooperative Agreement with the Association of State and Territorial Health Officials (ASTHO) .....	63
CDC Cooperative Agreement with the National Association of County & City Health Officials (NACCHO).....	64
<b>Integration of Breastfeeding Support into Home Visiting Programs</b> .....	<b>65</b>
<b>Potential Effect of Assistance Program for Women, Infants, and Children (WIC)</b> .....	<b>67</b>
Temporary Assistance for Needy Families (TANF) .....	67
Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).....	67
Healthy Start.....	69
<b>Safe Sleep</b> .....	<b>69</b>
National Action Partnership to Promote Safe Sleep (NAPPPSS).....	69
Safe to Sleep Campaigns.....	70
<b>Integration of Breastfeeding into Other Health Initiatives</b> .....	<b>71</b>
Obesity Prevention .....	71
Common Community Measures for Obesity Prevention .....	71

<b>Breastfeeding in Public Places</b> .....	<b>72</b>
Enforcement .....	72
Lactation Accomodations.....	73
Government Buildings.....	74
Breastfeeding and the Courts .....	74
<b>Emerging Trends</b> .....	<b>74</b>
Breastfeeding Accomodations in Correctional Facilities .....	74
Dietary Guidelines and Recommendations for 0-2 years .....	76
<b>Building the Evidence Base: Areas for Additional Research</b> .....	<b>77</b>
General Data Priorities .....	77
Maternity and Pediatric Care Practices.....	78
Paid Family Leave .....	79
Workplace and Child Care .....	79
Integration with Public Health Strategies .....	80
Accomodation in Public Spaces .....	80
<b>Opportunities to Further Support Breastfeeding</b> .....	<b>81</b>
<b>Conclusion</b> .....	<b>83</b>

### Preface

Legal and policy interventions play an important role in improving health and creating a society in which all individuals live long, healthy lives. However, many people are unaware of the precise effect these tools can have on population health. For almost 40 years, the Healthy People initiative has established comprehensive sets of 10-year national objectives with measurable targets that provide a strategic framework to motivate, guide, and focus action to improve the Nation's health and communicate a vision for achieving health equity. The ability to reach Healthy People targets is vital to our Nation—it means lives saved, illnesses avoided, and injuries averted; it means stronger and more resilient health and health care systems; and it creates alignment across sectors and geographical areas to create and sustain environments where all can achieve their full potential for health and well-being across the lifespan.

This report is part of the Healthy People 2020 Law and Health Policy Project (Project), which seeks to increase awareness about the role law and policy play in improving health. The project includes a series of reports, as well as other products and webinars, related to a diverse set of Healthy People 2020 (HP2020) national health objectives. Most of these will continue to be areas of focus in Healthy People 2030 (HP2030) and demonstrate how such approaches can improve health for individuals, families, and communities. Each report highlights the practical application of law and policy across various settings, and is intended for diverse audiences including community and tribal leaders, government officials, public health professionals, health care providers, lawyers, social service providers, and the public. The Project provides information about the role of evidence-based legal and policy interventions in improving public health and reaching critical public health goals.

The Project is a collaborative effort. Within the U.S. Department of Health and Human Services (HHS), the Office of Disease Prevention and Health Promotion (ODPHP) in the Office of the Assistant Secretary for Health leads the Project's efforts with guidance and support from the Centers for Disease Control and Prevention (CDC). The Project was launched by the CDC Foundation with funding from the Robert Wood Johnson Foundation (RWJF).

The reports in the series discuss legal or policy strategies supported by empirical evidence and research that can help achieve specific HP2020 targets or objectives—in this case supporting breastfeeding. Where possible, the reports focus on state, tribal, and local settings, demonstrating how these approaches can improve health. The reports also feature community examples or “bright spot” case studies that illustrate how communities use law and policy to meet their health improvement goals and achieve Healthy People targets. Up to 4 co-authors work on each report with assistance from a working group of experts from varying disciplines and practice areas relevant to the report; all parties involved are selected based on their background and subject matter expertise. Other groups provide input and support for the reports during their development, including the Healthy People 2020 Federal Interagency Workgroup (the lead entity guiding the HP2020 process), the HP2020 topic area workgroups (for this report, Maternal, Infant and Child Health), and other project partners.

While the reports are written focusing on the HP2020 objectives, the lessons, laws, and policies discussed should be relevant to HP2030 goals and objectives. HP2030 will build on the work of the current decade and focus on creating a society in which all people can achieve their full potential for health and well-being across the lifespan. Law and policy will continue to be important tools to help achieve this vision.

## Introduction

The Healthy People 2020 (HP2020) initiative, which provides a set of science-based national goals for improving public health for the decade, has identified increasing rates of breastfeeding as a key goal for population health. The HP2020 target for increasing the proportion of infants who were ever breastfed is 81.9% (an increase from the baseline of 76.1% in 2008), with lower targets for continued breastfeeding: 60.6% for infants still being breastfed at 6 months (compared to the 2008 baseline of 46.6%); and 34.1% for infants being breastfed at 1 year (compared to the 2008 baseline of 24.6%).<sup>1</sup> Some 4 out of 5 U.S. women begin breastfeeding immediately after birth, but multiple barriers prevent them from meeting their infant-feeding goals. The disruption of breastfeeding is associated with multiple health problems for mothers and children.<sup>2</sup> Public health initiatives, including legal and policy interventions and approaches designed to enable more mothers and infants to breastfeed, have the potential to markedly improve population health.

In human physiology, breastfeeding follows pregnancy. Mother's milk directs development of the infant immune system<sup>3</sup> and provides nutrients and biochemical signals to foster growth and development.<sup>4</sup> Breastfeeding also affects maternal health: the infant mobilizes nutrient stores that the mother has accumulated during pregnancy, resetting maternal physiology.<sup>5</sup> Disruption of this normal physiology is associated with adverse health outcomes for children and their mothers.\*

Among children, not being breastfed is associated with higher rates of otitis media, or ear infections,<sup>6</sup> gastrointestinal infection,<sup>7</sup> and hospitalization for lower respiratory tract infection,<sup>8</sup> as well as childhood obesity,<sup>9</sup> acute lymphocytic leukemia,<sup>10</sup> and inflammatory bowel disease.<sup>11,12</sup> Moreover, not being breastfed is associated with higher rates of sudden infant death syndrome;<sup>13</sup> and for premature infants, serious intestinal illnesses like necrotizing enterocolitis.<sup>14</sup> Among mothers, not breastfeeding is associated with increased rates of ovarian cancer,<sup>15,16</sup> breast cancer,<sup>17,18</sup> diabetes,<sup>19,20</sup> hypertension,<sup>21,22</sup> and myocardial infarction.<sup>23</sup> Based on the multiple health outcomes

\* Also, although we discuss women and breastfeeding, partners of birthing individuals may be of any gender; transgender men and nonbinary-gendered individuals may also give birth, and many may want to breastfeed or feed at the chest (chestfeed). For the purposes of this report, we mainly refer to "mothers" but want to acknowledge that this information is intended to be inclusive of all families.

associated with breastfeeding, all major U.S. medical organizations recommend 6 months of exclusive breastfeeding, followed by continued breastfeeding as complementary foods are introduced through 1 year and beyond, as long as mutually desired by mother and child.<sup>24, 25, 26</sup>

Although breastfeeding is the biological norm, it is not the cultural norm in the United States. Among children born in 2015, 83.2% of mother-infant pairs (dyads) initiate breastfeeding, but that percentage drops to 57.6% at 6 months postpartum, and only 35.9% at 1 year.<sup>27</sup> Moreover, 60% of U.S. women report that they were unable to meet their desired breastfeeding duration.<sup>28</sup> Of note, even with optimal support, not all women are able to meet 100% of their infant's nutritional needs with their own milk due to various medical causes.<sup>29</sup> In addition to the legal and policy supports described in this report, more research is needed to determine biological causes of disrupted lactation and to define appropriate treatment strategies to enable more women to achieve their infant feeding goals. Even for the 95% of women who are able to produce milk,<sup>30</sup> breastfeeding may not be accessible due to a variety of structural and environmental barriers including pervasive marketing of infant formula, lack of clinician support,<sup>31</sup> disruptive maternity care practices, and insufficient workplace and child care policies. This report reviews legal and policy approaches to breastfeeding, including statutes, regulations, and policies that affect the Nation's progress toward reaching and ultimately surpassing the HP2020 breastfeeding objectives.

## Background

Current suboptimal breastfeeding rates are associated with substantial health burdens for women and children. A recent simulation study modeled the effect of these rates across the lifespan of a hypothetical cohort of 100,000 women and their children, compared with outcomes if 90% of women could exclusively breastfeed each infant for 6 months and continue for 1 year.<sup>32</sup> The authors found that suboptimal breastfeeding was associated with 721 excess child deaths and 2,619 excess maternal deaths, as well as \$3.0 billion in medical costs.<sup>33</sup>

Substantial racial and ethnic disparities are found in breastfeeding initiation and duration.<sup>34</sup> Among children born in 2015, 85.9% of Non-Hispanic white infants, 89.3% of Non-Hispanic Asian, 83.0% of Non-Hispanic Hawaiian or other Pacific Islanders, and 82.5% of those of 2 or more races initiated breastfeeding, compared with 69.4% of Non-Hispanic black infants and 76.4% of Non-Hispanic American Indian or Alaska Native infants. At 6 months, 29.5% of Non-Hispanic white infants are exclusively breastfeeding, compared with 17.2% of Non-Hispanic black infants and 19.6% of Non-Hispanic American Indian or Alaska Native infants.<sup>35</sup> These disparities are associated with adverse health outcomes for infants and children of color. In a simulation model, compared with a Non-Hispanic white population, a Non-Hispanic black population had 1.7 times the number of ear infections attributable to suboptimal breastfeeding (95% CI 1.7-1.7); 3.3 times the number of excess cases of necrotizing enterocolitis (a serious intestinal condition that affects premature infants) (95% CI 2.9-3.7); and 2.2 times the number of excess child deaths (95% CI 1.6-2.8).<sup>36</sup>

HP2020 objectives in the Maternal, Infant and Child Health (MICH) topic area identify goals and specific policies and practices that affect breastfeeding, including workplace lactation support and maternity care, as listed in Figure 1.<sup>37</sup>

**Figure 1. Healthy People 2020 Breastfeeding Objectives (percent)**

HP2020 Objective	2020 Baseline (year)	Most recent update (year)	2020 Target
MICH-21.1 Increase the proportion of infants who are ever breastfed	76.1 (2009)	83.8 (2016)	81.9
MICH-21.2 Increase the proportion of infants who are breastfed at 6 months	46.6 (2009)	57.3 (2016)	60.6
MICH-21.3 Increase the proportion of infants who are breastfed at 1 year	24.6 (2009)	36.2 (2016)	34.1
MICH-21.4 Increase the proportion of infants who are breastfed exclusively through 3 months	35.9 (2009)	47.5 (2016)	46.2
MICH-21.5 Increase the proportion of infants who are breastfed exclusively through 6 months	15.6 (2009)	25.4 (2016)	25.5
MICH-22 Increase the proportion of employers that have worksite lactation support programs	25 (2009)	49 (2018)	38
MICH-23 Reduce the proportion of breastfed newborns who receive formula supplementation within the first 2 days of life	23.3 (2009)	16.9 (2016)	14.2
MICH-24 Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies	2.9 (2009)	26.1 (2018)	8.1

**Sources:** National Immunization Survey, CDC/NCIRD; Employee Benefits Survey, Society for Human Resource Management (SHRM); Breastfeeding Report Card, CDC/NCCDPHP

This report reviews laws and policies that can enable women to initiate and sustain breastfeeding successfully through the first year of life.

Relevant federal laws include the following:

- Family and Medical Leave Act (FMLA)
- Patient Protection and Affordable Care Act (Affordable Care Act), which gave rise to most health insurance plans covering breastfeeding support and supplies as preventive services without cost sharing
- The Break Time for Nursing Mothers provision of the Fair Labor Standards Act

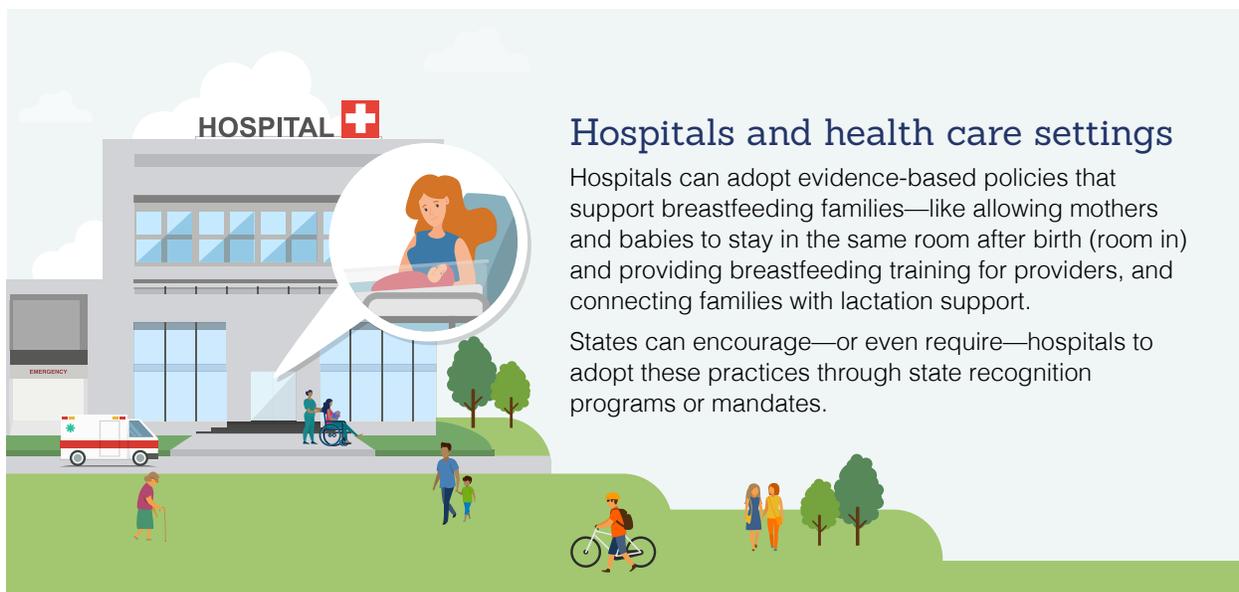
In addition, federally-funded initiatives to support recommended maternity care have accelerated efforts to advance MICH-23 and MICH-24. However, some federal regulations may also undermine breastfeeding: evidence suggests that state requirements for early return to work for mothers receiving Temporary Assistance for Needy Families (TANF) decreased breastfeeding rates.<sup>38</sup>

In 2011, the Surgeon General issued “The Surgeon General’s Call to Action to Support Breastfeeding” (SGCTA).<sup>39</sup> Its purpose was “to set forth the important roles and responsibilities of clinicians, employers, communities, researchers, and government leaders and to urge us all to take on a commitment to enable mothers to meet their personal goals for breastfeeding.”<sup>40</sup> The SGCTA provided 20 key actions to improve support for breastfeeding in 6 main areas: mothers and their families, communities, health care, employment, research and surveillance, and public health infrastructure. Many of these action steps are in line with the lessons provided in this report.

State laws affect breastfeeding through parental leave policies, licensure of lactation consultants, workplace accommodation for breastfeeding, and protection of a mother’s right to breastfeed in public spaces. These laws also enable breastfeeding through multiple mechanisms, including exempting breastfeeding mothers from jury duty, exempting breastfeeding products from sales tax, considering how to support mothers who are in school or incarcerated, and providing for human milk banking.<sup>41</sup> In addition, state public health departments have developed recognition programs for hospitals, workplaces, and child care facilities that implement policies to enable breastfeeding. Collaborations among stakeholders, such as hospitals and health departments, have helped to facilitate quality improvement initiatives that have resulted in systems-level practice change and improved health outcomes.<sup>42,43</sup> Provisions for

paid parental leave for city or county employees in a growing number of jurisdictions have the potential to support more women to breastfeed. Alongside these laws and policies, national guidance from medical and public health organizations supporting continued breastfeeding informs maternity practices, along with child care and workplace policies.

This report aims to provide guidance for public health professionals, educators, and policy makers regarding strategies that can enable more mothers to initiate and sustain breastfeeding. It reviews the effect of health care delivery, insurance coverage, paid parental leave, workplace and child care policies, and legal protections for breastfeeding in public spaces. It also considers integration of breastfeeding into existing public health and assistance programs. The report concludes with a review of emerging trends and research needs informing future efforts to enable breastfeeding, thereby improving health across 2 generations.



## Maternity and Pediatric Care Practices

Health care policies and practices are important determinants of breastfeeding outcomes. In this section, we review how inpatient and outpatient policies and practices help determine the extent to which women are able to meet their breastfeeding goals.

## Maternity Care

Since breastfeeding begins with birth, it is critically important for maternity care practices to encourage every mother to begin breastfeeding as soon as possible and create a foundation for a successful, sustained experience. The need for maternity care practices throughout the United States to be fully supportive of breastfeeding is one of the recommendations of the SGCTA (Action 7).<sup>44</sup> Yet some routine hospital practices disrupt early feeding and undermine this goal. To address this situation, the Baby Friendly Hospital Initiative (BFHI) was established in 1991 by the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO).<sup>45</sup> The BFHI comprises 10 evidence-based practices for breastfeeding success, including hospital policies, health care provider training, family prenatal education, support for breastfeeding at birth and in the first few days of life, and community support after discharge from the hospital or birth center.

Evidence from randomized controlled trials and observational studies show that these practices—called Ten Steps Care—improve breastfeeding outcomes.<sup>46</sup> The largest trial of the Ten Steps, the Promotion of Breastfeeding Intervention Trial (PROBIT), was conducted in Belarus in the 1990s.<sup>47</sup> Sixteen hospitals implemented the Ten Steps, while 15 hospitals continued usual care. Mothers and infants who initiated breastfeeding were enrolled at birth. Mothers birthing in a Ten Steps hospital were more likely to continue breastfeeding through the infant's first birthday: at 12 months postpartum, 19.7% of Ten Steps dyads were breastfeeding, compared with 11.4% of control dyads.<sup>48</sup>

In the United States, implementation of the Ten Steps has been shown to increase initiation and exclusive breastfeeding among women with less education<sup>49</sup> and to reduce racial disparities.<sup>50</sup> Moreover, the more steps a woman experiences in her maternity care, the more likely she is to achieve her own breastfeeding goals. A study of nearly 2,000 U.S. mothers evaluated the effect of 6 of the steps that could be measured by maternal report, including breastfeeding initiation within 1 hour of birth, giving the infant only breast milk, rooming in (allowing the mother and infant to remain together 24 hours per day during the birth hospitalization), breastfeeding on demand, no pacifiers, and availability of breastfeeding support groups.<sup>51</sup> The authors found that among mothers who received 6 of 6 steps, 97% achieved their personal goal of breastfeeding for at least 6 weeks. Among mothers who received 0 of 6 steps, only 70% achieved their personal goals.<sup>52</sup>

The BFHI has been implemented in more than 150 countries; however, in the first 2 decades after the Ten Steps were introduced, implementation lagged in the United States. In 2007, although 75% of U.S. mother-baby dyads initiated breastfeeding,<sup>53</sup> just 2.9% of live births in the U.S. occurred in hospitals designated as Baby Friendly<sup>®</sup> USA.<sup>54</sup> To accelerate implementation of the Ten Steps, HP2020 objective MICH-24 established a goal to increase the proportion of live births occurring in facilities that provide recommended care for lactating mothers and their babies. This goal is indexed by the number of births that occur at maternity centers designated as Baby Friendly<sup>®</sup> USA. Today, considerable progress has been made; as of March 2019, more than a quarter of U.S. births occurred at facilities so designated.<sup>55</sup>

The Ten Steps are now endorsed by the American Academy of Pediatrics (AAP), the American College of Obstetricians and Gynecologists (ACOG), the American Academy of Family Physicians (AAFP), and other maternal and child health authorities.<sup>56</sup> Multiple strategies have been implemented in the past decade to encourage hospitals to implement optimal maternity care practices. In May 2018, WHO/UNICEF revised the Ten Steps. While the topic of each step remained the same, the wording was updated to better align with evidence-based guidelines and global public health policy.<sup>57</sup>

### Baby Friendly<sup>®</sup> Designation

WHO and UNICEF administer the BFHI program internationally to encourage broad-scale implementation of the Ten Steps. They work with the national authority in each country that confers the nation's Baby Friendly<sup>®</sup> designation, which in the United States is conducted by Baby Friendly<sup>®</sup> USA, Inc.<sup>58</sup> To become designated, maternity centers enroll in the 4-D Pathway, a staged implementation that comprises Discovery, Development, Dissemination, and Designation; this culminates with an on-site assessment to assure compliance with Baby Friendly<sup>®</sup> USA Guidelines and Evaluation Criteria. To support technical assistance and external verification with a site visit, hospitals and birth centers in the 4-D Pathway pay phased fees totaling about \$12,000 for hospitals with more than 500 births per year, and about \$9,500 for birth centers and hospitals with fewer than 500 births per year.<sup>59</sup>

## Surveillance and Reporting

To improve maternity practices, hospitals and health care systems need objective measures of their current processes and outcomes. Given the effect of maternity practices on breastfeeding rates, in 2007, CDC initiated the Maternity Practices in Infant Nutrition and Care (mPINC) Survey.<sup>60</sup> Each maternity center in the United States was invited to complete a survey on their levels of implementation on 7 domains of breastfeeding-related maternity care around the Ten Steps. The domains included the following:

- Labor and delivery care
- Feeding of breastfed infants
- Breastfeeding assistance
- Contact between mother and infant
- Facility discharge care
- Staff training and education
- Structural-organizational aspects of care delivery (i.e., having a written policy on breastfeeding-related care, infant feeding documentation policy, lactation care coordination, etc.).

Each center received a detailed report, benchmarking their performance against other centers by state, facility type, facility birth volume, neonatal intensive care unit level, and region.

Using mPINC responses, CDC developed a scoring system for each participating facility and aggregated the data from all facilities in each state and territory. On the first (2007) mPINC survey, the Nation's maternity centers got an average score of 63/100, with state scores ranging from 50 (Mississippi) to 81 (New Hampshire). Similar surveys were conducted every 2 years, and by 2015 the national average improved to 79/100, with state scores ranging from 60 (Mississippi) to 96 (Rhode Island).<sup>61</sup> These improvements reflect, in part, a variety of state- and federal-level programs that assist hospitals with practice changes, as detailed below.

In addition to mPINC surveys, variation in maternity-center practice has been indexed by formula supplementation rates during the maternity stay. Immediately following birth, mothers produce colostrum, a protein-rich substance containing immune factors that prime the infant's gut. This colostrum transitions to milk in the first 72 hours after birth and is

sufficient for most healthy neonates. Unindicated supplementation with formula may disrupt breastfeeding by reducing stimulation of maternal milk production and altering infant gut development. Therefore, avoiding supplementation without a medical indication is one of the Ten Steps.

A 2007 California report published by the California WIC Association and the University of California at Davis Human Lactation Center was the first to compare hospital rates of exclusive breastfeeding, using data from a Newborn Screening Form, which recorded infant feeding at the time of screening.<sup>62</sup> Rates ranged from 97.9% for any breastfeeding and 93.2% for exclusive breastfeeding at the highest-scoring hospital to 94.6% and <1%, respectively, at the lowest-scoring hospital.<sup>63</sup> The report highlighted this disparity as a quality gap. The follow-up report, “Depends on Where You are Born,” tracked improvements in rates and highlighted the role of the Ten Steps in improving breastfeeding outcomes.<sup>64</sup> As part of this improvement effort, the state of California passed legislation in 2007 recommending that hospitals ranking in the lowest 25% for exclusive breastfeeding undergo training to improve exclusivity rates.<sup>65</sup> Data are now reported annually by the California Department of Public Health. Statewide, exclusive in-hospital breastfeeding rates have increased from 56.6% in 2010 to 69% in 2017.<sup>66</sup>

Following California’s successful use of in-hospital exclusive breastfeeding rates as a quality metric, these measures were endorsed by the National Quality Forum in 2008 as a perinatal quality measure, and the Joint Commission selected measure PC-05—Exclusive Breast Milk Feeding—as 1 of 5 perinatal quality measures effective 2010. (The measure also initially included PC-5a—Exclusive Breast Milk Feeding Considering Mother’s Choice, which was retired in 2015 due to difficulty capturing accurate information regarding maternal feeding choice.) Because some families choose not to breastfeed exclusively and some infants require supplementation, the target for the measure PC-05 is not 100%. According to the Joint Commission, 70% is an achievable target for in-hospital exclusive breastfeeding.<sup>67</sup> Concurrent with the Joint Commission’s monitoring of exclusive breastfeeding, national data show a decline in formula supplementation of breastfed infants in the first 2 days of life, from 23.3% in 2009 to 17.2% in 2015.<sup>68</sup> The use of these quality metrics is a step towards the SGCTA recommendation (Action 19) to develop a national monitoring system to improve the tracking of breastfeeding rates as well as the policies and environmental factors that affect breastfeeding.<sup>69</sup>

## Quality Improvement

Benchmarking is necessary, but not sufficient, to change clinical practice. To accelerate implementation of the Ten Steps, CDC funded technical-assistance programs for 3 cohorts of hospitals, designed to help them implement Ten Steps care.

- The first cohort, Best Fed Beginnings, began in October of 2011, enrolling teams from 90 hospitals throughout the country.<sup>70</sup> By April 2016, 72 of 90 hospitals in this cohort had achieved Baby Friendly® USA designation: overall breastfeeding rates increased from 79% to 83% ( $t = 1.93$ ;  $P = .057$ ) and exclusive breastfeeding among breastfed infants increased from 39% to 61% ( $t = 9.72$ ;  $P < .001$ ).<sup>71</sup>
- The second cohort—EMPower Breastfeeding: Enhancing Maternity Practices—comprises 93 hospitals in 24 states.<sup>72</sup> Participating hospitals received multiple site visits from technical assistance coaches, who provided hands-on education, guidance, and leadership to hospital teams. As of December 2018, 68 EMPower hospitals achieved Baby Friendly® USA designation.<sup>73</sup>
- A third cohort, EMPower Training, began competitive enrollment in March 2018. The training is a hospital-based quality improvement initiative focused on improving knowledge and skills in evidence-based maternity practices supportive of optimal infant nutrition.<sup>74</sup> The hospitals receive skills-based competency training and ongoing technical assistance to help related policies and procedures be implemented safely for each mother and infant. Hospitals in the cohort also learn from each other and share lessons in implementing these practices.

## State Recognition Programs

To encourage hospitals and birth centers to improve practices, a number of states have developed less-intensive recognition processes for breastfeeding-friendly maternity care. In a recent survey, 17 of 44 participating states reported having a state recognition program. For example, the North Carolina Department of Public Health established the North Carolina Maternity Center Breastfeeding-Friendly Designation Program.<sup>75,76</sup> In order to support continuing improvement, maternity centers earn a star for every 2 steps implemented, up to a total of 5 stars. Designation is based on a self-reported application, with no fees or site visit required.

States have also offered technical improvement and funding for obtaining Baby Friendly® USA designation. The Connecticut Breastfeeding Initiative selected 10 hospitals for technical assistance and financial support, including consulting time, staff training, and financial support for Baby Friendly® USA designation fees.<sup>77</sup> The project reached 583 staff members across the 10 hospitals, and all hospitals made progress along the 4-D Pathway.

### State Mandates

The only state with a mandate for baby-friendly hospitals is California. By law all perinatal units are required to implement evidence-based policies and practices to support breastfeeding, such as those included in the Baby-Friendly Hospital Initiative, by January 1, 2025.<sup>78</sup> In addition, 17 other states have laws that address some aspect of breastfeeding-friendly maternity care, and 5 states require hospitals to permit rooming in during the postpartum stay (Arkansas, California, Georgia, New Jersey, and New York).<sup>79</sup> Massachusetts hospital licensure regulations require that mothers and infants needing advanced support receive care from an International Board Certified Lactation Consultant (IBCLC), or an individual with equivalent training and experience.<sup>80</sup>

### Private-Payer Incentives

Payers are increasingly recognizing that higher breastfeeding rates reduce infant morbidity, improve maternal health, and lower health care costs. Blue Cross & Blue Shield of Mississippi has made Baby Friendly® USA designation a requirement for hospitals to receive Blue Distinction for maternity care.<sup>81</sup> To assist hospitals in achieving Baby Friendly® USA designation, Blue Cross & Blue Shield of Mississippi hosted regional introductory conferences across the state, as well as several next-level training conferences on its campus with national experts in maternal and infant health throughout 2016. Every delivering hospital in the state was invited and encouraged to participate. As of April 2019, 38 of 42 delivering hospitals in Mississippi are on the 4-D Pathway to a Baby Friendly® USA hospital designation, as described in a previous section. Forrest General Hospital in Hattiesburg, Mississippi, became the first to achieve this designation in December 2015;<sup>82</sup> as of February 2019, there are 11 designated facilities in the state.

In Mississippi, the Communities and Hospitals Advancing Maternity Practices (CHAMPS) initiative—a Boston Medical Center breastfeeding-focused program funded by the W.K. Kellogg Foundation—is an important partner, actively supporting 18 maternity hospitals in their pursuit of the Baby Friendly® USA designation.<sup>83</sup> This work was part of

the CHAMPS South cohort. A recent study of the effect of the CHAMPS program in Mississippi, Louisiana, Tennessee, and Texas between 2014-2017 found that hospitals enrolling in the program and working on implementing the Ten Steps reduced disparities in breastfeeding initiation between African-American and white infants (9.6%), increased breastfeeding initiation and exclusivity for all races, and improved rates overall for African American infants (46-63% for initiation and 19-31% for exclusivity.)<sup>84</sup> The W.K. Kellogg Foundation also funded the CHAMPS initiative to work with Tribal and Alaska Native hospitals and their surrounding communities.<sup>85</sup>

In 2017, the Carolina Global Breastfeeding Institute (CGBI) began a 3-year initiative, focused on helping hospitals and communities in North and South Carolina to better promote and support breastfeeding.<sup>86</sup> The ENRICH Carolinas initiative funded by the Duke Endowment, works with hospitals and Population Health Improvement partners to support maternity care practices, support hospitals pursuing official state recognition or Baby-Friendly designation, and ensure lactation services in their communities. In 2019, the Duke Endowment awarded an additional \$5 million to CGBI with the goal of reaching all maternity hospitals in North and South Carolina.<sup>87</sup>

### Outpatient Practices

Prenatal and postpartum care influence whether mothers achieve their breastfeeding goals. Evidence suggests that breastfeeding-friendly outpatient practices enable women to succeed. In a cluster-randomized trial in Norway, women were more likely to sustain exclusive breastfeeding for 6 months if they were cared for in outpatient clinics that implemented 6 breastfeeding-friendly guidelines.<sup>88</sup> The Academy of Breastfeeding Medicine (ABM) has outlined outpatient practices that can enable breastfeeding success in both prenatal and pediatric settings.<sup>89,90</sup> The protocols are designed for physicians to implement in conjunction with office staff. Recommendations include maintaining an up-to-date list of community-based lactation support resources, and lactation support providers when necessary; and setting an example for the community with a written employee lactation policy. When implemented in a large pediatrics practice using a before-and-after design, the pediatric protocol increased rates of exclusive breastfeeding from birth through 6 months.<sup>91</sup> These results suggest that supporting and recognizing outpatient practices to encourage successful breastfeeding may be an effective strategy. The SGCTA recommends developing systems to

guarantee skilled support for lactation is provided between hospitals and health care settings like these discussed, in the community (SGCTA Action 8).<sup>92</sup>

The California Department of Public Health Nutrition Education and Obesity Prevention Branch (NEOPB), the California WIC Association (CWA), and the California Breastfeeding Coalition worked with 15 community clinics to develop “9 Steps to Breastfeeding Friendly: Guidelines for Community Health Centers and Outpatient Care Settings.” These guidelines outline practices that protect, promote, and support breastfeeding, and provide a framework for a sustainable, community-based approach to breastfeeding support.<sup>93</sup>

### Provider Training

Despite the importance of breastfeeding for population health, many health care providers receive limited training in lactation physiology and management. Including breastfeeding education in medical school, residencies, and continuing medical education training programs has the potential to improve care. In a recent survey, only 53% of physicians were confident that they could help a mother who was having difficulties breastfeeding.<sup>94</sup> Moreover, in a survey of pediatric trainees, 92% reported that their personal experiences with breastfeeding affected their professional counseling.<sup>95</sup> A longitudinal study from 1995 to 2014 found that physicians had become less confident that mothers could breastfeed successfully (70% to 57%,  $p < .05$ ) and were less likely to believe that benefits outweighed the difficulties (70% to 50%,  $p < .05$ ).<sup>96</sup> Of note, the AAP developed a breastfeeding curriculum for trainees that improves provider knowledge and increases breastfeeding rates.<sup>97</sup> These findings suggest the need for more physician training in breastfeeding care and support. The SGCTA recommended more breastfeeding education and training for all health professionals who care for women and children (SGCTA Action 9).<sup>98</sup>

Provider training is also a core component of the Ten Steps.<sup>99</sup> In addition, the ABM has published educational objectives for physician training, and the USBC has developed Core Competencies in Breastfeeding Care and Services for All Health Professionals.<sup>100</sup> These benchmarks provide health professionals with a guideline and framework to integrate evidence-based breastfeeding knowledge, skills, and attitudes into their standard health care delivery practices.

CDC provided funding for AAP to work on a project titled “Physician Engagement and Training Focused on Breastfeeding.” Led by AAP, this USBC-supported collaborative project aims to engage physician groups and other key stakeholders in developing recommendations and strategies to address gaps in breastfeeding training and education. The project also seeks to build the capacity of medical practitioners to optimize breastfeeding practices, especially among disparate populations. Long-term goals are to increase availability and accessibility of breastfeeding medical-provider education and training in prenatal, obstetric, and pediatric settings; and to improve the capacity of medical practitioners to facilitate safe implementation of evidence-based maternity care practices in hospitals and communities. The project’s initial phase involved assessing current medical-practitioner education and training needs, convening medical professional organizations and key stakeholders to develop consensus and align efforts to address gaps, and developing a comprehensive action plan with strategies to address gaps.<sup>101</sup> Participants are currently working on several pieces of the developed action plan, such as a Breastfeeding Residency Curriculum and a Model Policy for Support of Breastfeeding Medical Students, Residents, and Fellows. Key partner organizations are ACOG, AAFP, ABM, the National Medical Association, the National Hispanic Medical Association, the American College of Osteopathic Pediatricians, and the Association of Women’s Health, Obstetric, and Neonatal Nurses. In addition, the Agency for Healthcare Quality and Research concluded that combining healthcare provider education with home visits may improve breastfeeding outcomes more than education alone.<sup>102</sup>

### Health Insurance Coverage for Breastfeeding

Many women benefit from professional support and supplies such as breast pumps to establish and sustain breastfeeding. Before the Affordable Care Act, such breastfeeding support services were generally not covered by insurers, and access was limited to those who could afford to pay out of pocket. Moreover, although breast pumps are necessary to sustain breastfeeding for women who work outside the home, breast pump expenses were not eligible for coverage through flexible spending accounts until 2011, when the Internal Revenue Service revised its policy to include breast pumps.<sup>103</sup>

Insurance coverage research shows that women are more likely than men to forego needed preventive care due to cost.<sup>104</sup> However, many preventive services unique to women have not historically been covered by insurance. Access to breastfeeding support and supplies expanded as a consequence of Section 2713 of the Public Health Service Act, as added by the Affordable Care Act.<sup>105</sup> This section stipulates that non-grandfathered group health plans and individual health insurance coverage cover certain preventive services without cost-sharing.<sup>106</sup> The law addressed gaps in coverage for critical preventive services by requiring plans to cover, without cost-sharing, preventive services derived from 4 sets of expert recommendations:

- Evidence-based items or services that have in effect a rating of A or B in the U.S. Preventive Services Task Force (USPSTF) with respect to the individual involved
- Immunizations for routine use in children, adolescents, and adults that have in effect a recommendation from the Advisory Committee on Immunization Practices of the CDC with respect to the individual involved
- With respect to infants, children, and adolescents, a set of evidence-informed preventive care and screenings provided in comprehensive guidelines supported by the Health Resources and Services Administration (HRSA). These include the Bright Futures guidelines developed by the AAP.
- With respect to women, evidence-informed preventive care and screening provided for in comprehensive guidelines supported by HRSA. These were originally proposed by the Institute of Medicine (IOM) and adopted by HRSA effective August 1, 2012, and updated in December 2016.

Coverage for breastfeeding support as a required benefit derives from expert recommendations by the USPSTF and from recommendations for evidence-based preventive services for women that HRSA has supported as contemplated in section 2713 (a)(3) or (4) of the Affordable Care Act (Figure 2 below):

**Figure 2. Institutional Recommendations for Coverage of Lactation Services as Required Benefits**

Institutional Recommendation	Summary
2011 IOM Report <sup>107</sup>	<p>Recommends comprehensive lactation support and counseling, and costs of renting breastfeeding equipment. A trained provider should provide counseling services to all pregnant women and to those in the postpartum period to ensure the successful initiation and duration of breastfeeding.</p>
USPSTF 2016 <sup>108</sup>	<p>Recommends interventions during pregnancy and after birth to support breastfeeding (Level B; 2016). Interventions may include more than 1 component and be delivered over prenatal, perinatal, and postpartum periods. Interventions include promoting the benefits of breastfeeding, providing practical advice and direct support on how to breastfeed, and psychological support. Interventions can be categorized as professional support, peer support, and formal education, although none of these categories are mutually exclusive, and interventions may be combined within and between categories.</p>
2016 Women’s Preventive Services Initiative (WPSI) <sup>109</sup>	<p>Recommends comprehensive lactation support services (including counseling, education, and breastfeeding equipment and supplies) during the antenatal, perinatal, and postpartum periods to ensure the successful initiation and maintenance of breastfeeding.</p>

Organizations helping to carry out the above recommendations include the Women's Preventive Services Initiative (WPSI), a coalition of health professional organizations along with consumer and patient advocates, all focused on women's preventive healthcare services and working under the auspices of the American College of Obstetrics and Gynecologists with support from HRSA. Topics addressed by the WPSI include timing and duration of services, types of providers, and specification of equipment and supplies. Federal guidance specifies that coverage for breastfeeding support and supplies extends for the duration of breastfeeding.<sup>110</sup> This means that plans cannot impose time limits on when women can obtain lactation counseling and equipment. Timing of support is a priority because evidence suggests interventions are more effective when they include support before, during, and after birth.<sup>111</sup> For example, in a large randomized controlled trial, IBCLCs met with women during 2 prenatal visits, contacted them during their maternity stay, and followed up with weekly phone calls for the first month after birth.<sup>112</sup> The program increased the rate of high intensity breastfeeding at 3 months from 11% to 21% in a socio-demographically diverse population of women in the Bronx, NY. These results underscore the value of support that spans the time from before until after pregnancy.<sup>\*113</sup>

Likewise, the 2016 WPSI guidelines clarify that a lactation-care provider should deliver support and provide services across the time before, during, and after pregnancy to ensure successful preparation, initiation, and continuation of breastfeeding.<sup>114</sup> The clinical recommendations within the guidelines also describe the types of providers who might deliver lactation support, including but not limited to lactation consultants, breastfeeding counselors, certified midwives, certified nurse-midwives, certified professional midwives, nurses, advanced-practice providers (e.g., physician assistants and nurse practitioners), and physicians.

SGCTA Action 11 also recommends increased numbers of racial and ethnic minority IBCLCs to better mirror the U.S. population.<sup>115</sup> Coverage of a full range of providers has been identified as a health equity issue due to limited services in communities of color and also the under-representation of women of color among IBCLCs. In a report on removing barriers to breastfeeding and improving health equity, the Center for Social Inclusion calls for policies inclusive of reimbursement for all

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\* Breastfeeding intensity is defined as the percentage of all feedings in the past 7 days that were breast milk, with article authors categorizing less than 20% as low, 20% to 80% as medium, and greater than 80% as high.

lactation support providers, according to their scope of practice.<sup>116</sup> Ongoing efforts are needed to engage a diverse population of women in the lactation professions and certification.

Lastly, the 2016 WPSI guidelines elaborated on coverage of breastfeeding equipment and supplies in conjunction with each birth. To optimize breastfeeding, WPSI guidelines recommend—but do not require—access to double electric pumps without prior failure of a manual pump. The guidelines also recommend that insurance coverage for equipment and supplies includes pump parts, maintenance, and breast milk storage supplies, and that women be provided with information on pump use and pumping protocols. (Double electric pumps result in greater volume of expressed milk, and are especially important for mothers who are separated from their infants, such as mothers who return to work, mothers with preterm or ill infants, those with low milk supply, and mothers with physical disabilities.)<sup>117</sup>

In addition to USPSTF, IOM, and WPSI guidelines, implementation considerations for lactation support have been addressed in the Implementation FAQs, Sets 12 and 29, of the Affordable Care Act.<sup>118</sup> Stipulations include the following:

- Lactation services and equipment coverage extends for the duration of breastfeeding. Although plans and insurers may use reasonable medical management techniques to determine frequency, method, treatment, or setting for a recommended preventive item or service, they cannot limit or restrict coverage in ways that conflict with federal guidance.
- The requirement to cover rental or purchase of breastfeeding equipment without cost-sharing extends for the duration of breastfeeding, provided the individual remains continuously enrolled in the plan or coverage.
- Plans and issuers must supply a provider directory, which lists lactation service providers if such providers are in their network.<sup>119</sup>
- If there are no in-network lactation service providers, then out-of-network providers must be covered without cost-sharing.

### Implementation of Private Coverage for Non-grandfathered Plans

As discussed above, individual and group health insurance plans offered on the health insurance marketplace, along with all new private insurance plans and self-insured group health plans, must cover the cost of breastfeeding equipment under coverage provided for women's preventive services.<sup>120</sup> However, prior reports in 2015 found that many health insurance plans are not in full compliance with the breastfeeding support requirements of the Affordable Care Act, and women are left without access to adequate breast pumps and supplies, and/or trained lactation counseling. Some insurance companies impose administrative barriers or offer insufficient coverage that prevents women from obtaining timely breastfeeding support and adequate equipment.<sup>121, 122</sup>

For women with healthy full-term infants, a breast pump may not be needed in the first weeks after birth. However, for mothers whose infants are hospitalized or for dyads unable to nurse, a pump may be needed immediately. However, the process of obtaining a pump through a Durable Medical Equipment provider can take 7-10 business days. This can prevent mothers of hospitalized infants from accessing the equipment they need to establish and maintain their milk supply during the critical days following birth.<sup>123</sup> Exploring strategies to ensure that pumps and other supplies are available at time of service, or within 24 hours of notification of need, could help to alleviate these issues.<sup>124</sup>

In May 2015, the National Women's Law Center (NWLC) published a report that detailed health-plan violations of the breastfeeding coverage requirements of the Affordable Care Act.<sup>125</sup> Violations included the following:

- A lack of in-network lactation support professionals
- Limitations on coverage of services
- Administrative barriers or insufficient coverage that undermined the law's intent that women receive timely services and adequate equipment. For example, NWLC heard from women reporting that their insurance plan sought to limit coverage of a breast pump to as little as 48 days after delivery.

Despite WPSI and IOM recommendations for comprehensive lactation support, some insurance companies have not established networks of lactation providers.<sup>126</sup> This results in many women turning to out-of-network providers for needed services. Federal guidance allows women to obtain breastfeeding benefits through out-of-network providers without cost-sharing when the plan does not maintain a network of appropriate providers.<sup>127</sup>

### Licensure

State laws regarding licensure of lactation support providers have the potential to affect access to care for breastfeeding families, while also influencing provider reimbursement. Such efforts need to be considered in light of the spectrum of intended—at times, unintended—consequences for the range, training level, and number of providers in a given state or community. Licensure aims to protect consumers by defining standards of education and training for obtaining and maintaining licensure for a given profession. Licensure should be approached in a way that considers all lactation support providers in a given state or community, with care to provide the greatest support possible to mothers and to determine whether licensure of one provider type harms or limits another. There are many types of lactation-support providers other than IBCLCs, and these providers may also have their own didactic and experiential training models. State licensure boards established by law have the authority to create and enforce regulations governing professional practice and conduct. Boards receive and review complaints and take disciplinary action in accordance with the law. To date, 4 states (Georgia, New Mexico, Oregon, and Rhode Island), have established licensure for lactation consultants, and each is unique in their regulatory approach and definitions.<sup>128,129,130,131</sup> Laws in Georgia, Oregon, and Rhode Island require that licensees be actively certified by the International Board of Lactation Consultant Examiners (IBLCE) or its successor organization. New Mexico requires certification by a program accredited by any nationally or internationally recognized accrediting agency approved by the state licensing board, and that establishes continuing education requirements. Licensure bills are under development in several other states, using various approaches, types of providers, and structures.

In addition to setting standards for licensure, the Georgia law prohibits individuals who were not licensed as IBCLCs from providing lactation care and services, although the law does allow lactation care and services by employees of federal and state programs (such as WIC), and by those acting within the scope of another license (dentistry,

medicine, osteopathy, chiropractic, nursing, physician assistant, or dietetics). Educational providers such as doulas or perinatal and childbirth educators are also allowed to act to the extent of their authority. An exemption was also made for students working under the supervision of licensed lactation consultants. Volunteers are allowed as long as they do not seek reimbursement for their services. A lawsuit was filed in June of 2018 contesting this provision, claiming that it violates the state's constitutional right to equal protection and due process for providers who are not IBCLCs or one of the enumerated classes, and arguing that this law disproportionately affects providers and communities of color, and as such, limits rather than increases access to lactation services.<sup>132</sup> After the Fulton County Superior Court granted the state's motion to dismiss for failure to state a claim, this law is currently being appealed to the Georgia Supreme Court, and it will not be enforced until the final determination of this ongoing lawsuit.

In addition to defining and protecting a given provider credential, licensure may facilitate reimbursement for lactation services performed by the licensed provider type, although licensure is not always a guarantee of insurance coverage. Where there are existing insurance regulations prohibiting credentialing of non-licensed providers, licensure may facilitate such a provider to enroll in insurance panels.

Licensure may not be necessary for reimbursement by private payers; for example, Aetna covers a network of lactation support professionals nationwide, and does not require licensure for reimbursement.<sup>133</sup> However, there can be variation in payment and reimbursement policies across publicly-funded programs, which can be affected by federal and state laws and regulations.

Regarding Medicaid, licensure alone may be neither necessary nor sufficient to ensure reimbursement of lactation support providers. Medicaid offers 2 pathways for payment of lactation services. When referred to by a physician, unlicensed lactation support professionals can be reimbursed in some states through the state waiver process. As an example, some states have used state plan amendments to reimburse community health workers and doulas, an innovation that could potentially be replicated for breastfeeding peer counselors.<sup>134</sup> In a state where lactation support professionals are licensed, state Medicaid programs can reimburse for lactation services without such a waiver; however, federal and state Medicaid agencies would need to authorize licensed lactation providers to enroll in Medicaid as eligible service providers.

Although many licensure legislative efforts are focused on IBCLCs and clinical lactation care, evidence demonstrates that multiple types of lactation support (e.g., educators, peer counselors, community health workers, dietitians, speech therapists, and doulas) are beneficial for increasing breastfeeding initiation, duration, and exclusivity. These practices can therefore support HP2020 goals, encouraging efforts to expand and protect access to such services.

Since 2014, the USBC has convened the Lactation Support Providers (LSP) Constellation,<sup>135</sup> a collaborative group of national lactation training, accreditation, and mentorship organizations, and allied public health partners. The LSP Constellation discusses the overlap and distinctions of lactation support providers, and works to advance equity and center the needs of families. Constellation members have created a training and accreditation directory so that individuals interested in becoming lactation support providers can access the full array of available training pathways and credentials in one place. They collaboratively created an Industry Overview Document to help families, communities, health providers, and aspiring lactation trainees differentiate the provider types. The Constellation is currently working with the Physician Education and Training Constellation lead by AAP to produce materials aiding physicians in referral to lactation service providers. Work to follow will include tools for the breastfeeding field to advance diversity, equity, and inclusion at local and state collaborative tables.

### **Coverage of Lactation Services under Medicaid**

While coverage of lactation support services under Medicaid varies by state under the Affordable Care Act, states that opt to expand their Medicaid programs are required to enroll the “expansion adults” in Alternative Benefit Plans, which are required to offer these services.

<sup>136</sup> In addition, Section 4106 of the Affordable Care Act authorizes a 1% increase in the federal medical assistance percentage for states that cover the USPSTF recommendations of grade “A” or “B,” along with the recommendations of the Advisory Committee on Immunization Practices, without cost-sharing under the Medicaid preventive services benefit.<sup>137</sup> The USPSTF recommends providing interventions during pregnancy and after birth to support breastfeeding, which is a grade “B” recommendation.<sup>138</sup> States that opt to expand Medicaid coverage are required to provide coverage of breastfeeding support and supplies for newly eligible individuals under this expansion.<sup>139</sup>

For non-expansion Medicaid patients, the Centers for Medicare & Medicaid Services (CMS) encourages states to include lactation services as a separately reimbursed pregnancy-related service, though not all states do so.<sup>140</sup> However, states are permitted to reimburse lactation services under the following benefits: inpatient hospital services; early and periodic screening, diagnostic, and treatment services; freestanding birth-center services; and services furnished by a physician, nurse practitioner, or nurse-midwife, so long as the nurse-midwife is legally authorized to perform such services under state law.<sup>141</sup> Through regulatory changes, CMS<sup>142</sup> increased the states' opportunities to cover lactation consultations by enabling reimbursement of preventive services furnished by a non-licensed health professional if recommended by a physician or other licensed practitioner. (Previously, preventive services were covered only if provided by a licensed practitioner.)<sup>143</sup> For example, in 2017 CMS approved state plan amendments for Delaware<sup>144</sup> and Nebraska<sup>145</sup> to reimburse for lactation services under the preventive services benefit; a similar amendment was approved in Vermont in 2018.<sup>146</sup> In a survey conducted in 2015-2016, the 41 states responding reported varying levels of coverage for patients with traditional Medicaid, Medicaid Expansion per the Affordable Care Act, and Pregnancy-Only Medicaid (Figure 3).

**Figure 3. Medicaid Coverage for Lactation Supplies and Services**

Supplies and Services	Traditional Medicaid (n=41)	Medicaid Expansion (n=41)	Pregnancy - Only Medicaid (n=41)	Not covered in any pathway (n=41)
Electric Breast Pump	35	NR*	33	6
Manual Breast Pump	31	NR*	29	10
Breastfeeding Education	27	15	26	14
Individual Lactation Consultation				
Hospital-Based	26	16	25	15
Outpatient Clinic	11	12	15	25

\* While coverage of breast pumps is required for all Affordable Care Act Medicaid expansion enrollees, coverage detail regarding the type of pump covered was not reported (NR) by Arkansas, Iowa, or Nevada.

Adapted from 2017 Kaiser Family Foundation report: <http://files.kff.org/attachment/Report-Medicaid-Coverage-of-Pregnancy-and-Perinatal-Benefits>

Several states have provisions for Medicaid lactation services reimbursement. New York's Medicaid program provides reimbursement for evidence-based breastfeeding education and lactation counseling that conforms to USPSTF recommendations when provided by a physician, nurse practitioner, midwife, physician assistant, or registered nurse who is credentialed as an IBCLC by the IBLCE.<sup>147</sup> Oklahoma covers lactation services provided by a licensed nurse or dietician who is an IBCLC.<sup>148</sup> Michigan's Medicaid program also reimburses for evidence-based lactation support services furnished to postpartum women in an outpatient setting for up to 60 days following delivery when the services are rendered by a Medicaid-enrolled physician, nurse practitioner, physician assistant, or nurse midwife who possesses a valid, current IBLCE certification.<sup>149</sup> In January 2016, Montana began reimbursing for lactation services provided to Medicaid recipients in outpatient hospitals.<sup>150</sup> In January 2017, the District of Columbia issued a notice of final rulemaking allowing for Medicaid reimbursement of lactation consultation, education, and support when provided in a clinic, physician's office, freestanding birth center, or in the home by a certified nurse midwife—licensed pursuant to the District's Health Occupations Revisions Act of 1985 and certified by IBLCE—or by a registered lactation consultant certified by IBLCE.<sup>151</sup> CMS approved a State Plan Amendment for Delaware in August 2017 that allowed lactation counseling as a separately reimbursed service under the preventive services benefit.<sup>152</sup>

### **Marketing of Breast Milk Substitutes**

Infant feeding decisions are influenced by the marketing of breast milk substitutes (BMS), i.e., any food marketed or otherwise presented as a partial or complete replacement for breast milk, such as infant formula. In a randomized controlled trial, women who were uncertain about their infant feeding plans and received a commercial information packet in early pregnancy weaned earlier than women who received non-commercial infant feeding information.<sup>153</sup> Given the adverse effect of formula marketing on breastfeeding rates, the AAP and the ACOG recommend against distributing marketing materials in health care settings. Action 6 of the SGCTA also recommended that marketing of infant formula be conducted in a way to minimize negative effects on exclusive breastfeeding.<sup>154</sup> Nevertheless, distribution of formula-marketing materials is common in health care settings: in the 2015 mPINC survey, 21.3% of maternity centers reported giving commercial

discharge bags containing formula samples to new mothers. This is a considerable improvement from 2007, however, when 72.6% of maternity centers routinely marketed formula to new mothers through this practice.<sup>155</sup>

WHO has led global efforts to standardize marketing of infant formula to the general public. In 1981, WHO's World Health Assembly passed the International Code of Marketing of Breast-milk Substitutes. The Code is a set of recommendations to regulate the marketing of BMS, feeding bottles, and teats as a minimum requirement to protect and promote appropriate infant and young child feeding, specifically addressing the marketing of BMS to the general public.<sup>156</sup> As of 2018, 136 of 194 countries had enacted legislation to implement the Code.<sup>157</sup> Yet commercial pressures to market formula have increased, with global sales of BMS exceeding \$44 billion worldwide, expected to rise to \$70 billion by 2019.<sup>158</sup> In the United States, infant milk formula sales totaled \$1.5 billion in 2015.<sup>159</sup>

Beyond marketing, the Code recommends prohibiting pictures of infants or images that idealize the use of BMS. In addition, the Code stipulates that labels should "explain the benefits of breastfeeding and the costs and dangers associated with the unnecessary or improper use of infant formula and other BMS."<sup>160</sup>

Several recent advocacy efforts have affected formula marketing. After failed attempts in 2005-06 in Massachusetts to prohibit distribution of formula-marketing bags in maternity hospitals,<sup>161</sup> a national organization, Ban the Bags, was spawned, which advocates that hospitals eliminate formula-marketing bags. The organization Public Citizen has also been asking hospital administrators to stop distributing company-sponsored sample bags to parents, which encourages the use of 1 brand of formula in particular and sends a conflicting message about breastfeeding. When doctors or nurses hand out these bags, they are acting as marketing agents on behalf of the formula companies. As of June 2019, 1,121 hospitals and birth centers had registered as Bag Free with Ban the Bags.<sup>162</sup> Rhode Island was the first state to become Bag Free, followed by Massachusetts, Delaware, Maryland, the District of Columbia, and New Hampshire. Public Citizen has also organized to reduce formula marketing in health care, with a petition, a WHO Code anniversary social media campaign, and a pledge for health care providers to remove formula-marketing materials from health care settings.<sup>163</sup> Although these efforts have reduced formula marketing by hospitals, formula companies continue to violate the WHO Code and

discourage breastfeeding through social media campaigns and “mommy blogs,” as well as by mailing formula samples to women’s homes.

In the United States, formula labeling and nutrient requirements are governed by the federal Food, Drug, and Cosmetic Act (21 USC 321 et seq.) and relevant U.S. Food & Drug Administration (FDA) regulations (21 CFR §§ 107.10 – 107.30 and 107.100). The regulations address information on nutrient content and formula preparation. Images and information regarding breastfeeding are not addressed in the Code of Federal Regulations (CFR). In September 2016, the FDA issued nonbinding guidance addressing health and nutrient-content claims in formula labeling.<sup>164</sup> Later that year, the FDA released a nonbinding draft guidance regarding structure/function claims in infant-formula labels.<sup>165</sup> The guidance provides recommendations for evaluating evidence to support structure and function claims\* in infant formula labeling,<sup>166</sup> including the use of direct evidence to establish a cause-and-effect relationship between a specific infant formula (or constituent thereof) and a beneficial effect on the structure or function of an infant’s body. For example, the draft guidance would recommend that an infant formula manufacturer provide the scientific evidence to substantiate claims that a particular formula improves sleep or decreases crying.<sup>167</sup> The draft guidance also recommends a systemic evidence-based review process for evaluating the strength of the evidence to determine ultimately whether the substantiation of the evidence meets the “competent and reliable scientific evidence standard.” Factors are considered such as design, data collection, data analysis, and scientific quality of a study.

Along with the FDA, the Federal Trade Commission (FTC) shares jurisdiction in regulating infant formula. The FTC has sued formula companies for deceptive advertising practices; in 2014, for example, they charged Gerber with advertising false health claims, namely that a particular brand of formula could prevent the development of allergies.<sup>168</sup>

A promising new resource in this area is the U.S. Spotlight Nutrition Index from the Access to Nutrition Foundation.\*\*<sup>169</sup> This resource was created using a rigorous methodology that has been tested and applied globally.

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\* The FDA defines structure/function claims as those that “may describe the role of a nutrient or dietary ingredient intended to affect the normal structure or function of the human body, for example, ‘calcium builds strong bones.’ In addition, they may characterize the means by which a nutrient or dietary ingredient acts to maintain such structure or function, for example, ‘fiber maintains bowel regularity,’ or ‘antioxidants maintain cell integrity.’”

\*\* The Spotlight Nutrition Index is funded by RWJF and assesses the policies, practices, and disclosures of the 10 largest manufacturers in its Corporate Profile.

It was first published in November 2018 and examines the role of major food and beverage manufacturers in the U.S. in increasing consumers' access to nutritious and affordable foods and beverages, including analysis of leading U.S. companies' policies, marketing, nutritional content, and disclosure around BMS. The first Index recommendations were that “alongside other stakeholders such as government, health professionals, and non-profit organizations, each of the BMS manufacturers should intensify its efforts to support breastfeeding rates by curtailing BMS marketing that does not align to the recommendations of The Code, to contribute to improving the health of mothers and babies.”<sup>170</sup> Since these companies are involved in the creation of this resource, it will hopefully help to create buy-in and support from many stakeholders and lead toward improvements over time.

### Home

Laws and policies that give parents time off after birth—including paid and unpaid leave—make it easier for families to breastfeed.

It's also important to connect families with lactation support once they've returned home from the hospital. And workplaces that support telework opportunities so that moms can work at home make it easier to continue breastfeeding.



### Employment

The number of women in the U.S. workforce has increased dramatically over the last century. A major barrier to increasing breastfeeding duration rates to meet HP2020 targets is the social and economic pressure for women to return to paid employment soon after birth. More than half of mothers enter or return to the labor force before their children turn 6 months old,<sup>171</sup> with as many as 1 in 4 employed women returning within 2 weeks of giving birth.<sup>172,173</sup>

Policies and legislation to support time together after birth, as well as to support breastfeeding following the return to work, have a significant effect on the experience of working mothers. This includes unpaid and paid family leave; workplace accommodations such as reasonable

break time and a clean, private space to pump breast milk; and child care practices that support the breastfeeding relationship. Workplace characteristics, including employer-sponsored child care, at-home work options, and flexible scheduling, show promise as effective ways to increase breastfeeding rates among working women.<sup>174</sup>

Women routinely report that postpartum employment plans affect their breastfeeding-related decisions, and that they face challenges combining breastfeeding and employment.<sup>175,176</sup> Working full-time outside the home is related to a shorter duration of breastfeeding;<sup>177</sup> even just the intention to work full-time is associated with lower rates of breastfeeding initiation and shorter duration.<sup>178</sup> Conversely, rates of breastfeeding initiation and duration are higher among women who have longer maternity leave,<sup>179</sup> work part-time rather than full-time,<sup>180</sup> or have breastfeeding support programs in the workplace.<sup>181</sup>

Access to paid family leave and workplace breastfeeding support is inequitable in its distribution across the United States. Low-income mothers are more likely than their higher income counterparts to return to work earlier and to have jobs that make it challenging for them to continue breastfeeding.<sup>182,183</sup> A study of low-income mothers also found that the highest risk of quitting breastfeeding occurred during the first month postpartum, followed by the time period when women returned to work.<sup>184</sup> Because women of color are disproportionately represented in low-income, non-managerial positions, they also face the greatest barriers to breastfeeding success.<sup>185</sup>

### Paid Family Leave

Women with longer maternity leaves are more likely to be able to combine breastfeeding with employment.<sup>186</sup> Research shows a relationship between a woman's decision to start and continue breastfeeding and the length of maternity leave available to her.<sup>187</sup> Mothers who return to work before 6 weeks postpartum are over 3 times more likely to stop breastfeeding than women who did not return to work.<sup>188</sup> Research also shows that mothers who return to full-time employment shortly after giving birth are less likely to breastfeed as long as they had intended.<sup>189,190</sup>

In the absence of a national paid family and medical leave program\*, employers select which paid leave policies will be offered and which employees will be considered eligible. Businesses that employ low income workers are less likely to provide paid leave benefits.<sup>191</sup> Only 15% of workers in the United States have access to paid family leave

through their employers.<sup>192</sup> Among low-wage workers (those in the lowest 25% of wage earners), this number drops to 6%.<sup>193</sup> Furthermore, there are significant disparities in access to paid family leave among racial groups.<sup>194</sup> Black and Hispanic employees are less likely than their white non-Hispanic counterparts to have access to paid parental leave.<sup>195</sup> At the same time, disparities in breastfeeding outcomes among racial groups also persist.

Recognizing the ways that access to paid leave impacts breastfeeding success, Action 13 of SGCTA calls on the Nation to work toward establishing paid maternity leave for all employed mothers. Paid maternity leave is also included as a strategy in “The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies.” In December 2019, the National Defense Authorization Act for Fiscal Year 2020 (S. 1790), was signed and it provides federal civilian employees up to 12 weeks of paid parental leave per year.<sup>196</sup>

### **Federal Legislation and Policy**

The federal Family and Medical Leave Act (FMLA) guarantees eligible employees (those who work for an employer with 50 or more employees and who have been employed for at least 12 months and worked 1,250 hours in the past 12 months) up to 12 weeks of unpaid leave each year to care for a newborn, a newly adopted child, or a seriously ill family member; or to recover from their own serious health conditions, including pregnancy.<sup>197</sup> About 40% of the workforce is not eligible for leave under the FMLA, and it guarantees only unpaid leave, which many cannot afford to use.<sup>198</sup>

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\* Currently, among 173 countries, the United States is 1 of only 4 countries without a national policy requiring paid maternity leave; the others are Swaziland, Liberia, and Papua New Guinea. The Trump Administration in 2019 Congress passed the Federal Employee Paid Leave Act, which allows federal civilian employees up to 12 weeks of paid time for the birth, adoption, or fostering of a new child.” (Heymann J, Earle A, Hayes J. The work, family, and equity index: How does the United States measure up? [Internet]. Montreal, Canada: McGill University, Institute for Health and Social Policy, Project on Global Working Families.2007, cited 2019 Mar 22. Available from: <https://www.worldpolicycenter.org/sites/default/files/Work%20Family%20and%20Equity%20Index-How%20does%20the%20US%20measure%20up-Jan%202007.pdf>

**State Legislation and Policy**

As of December 2019, 9 states and the District of Columbia guarantee paid family and medical leave, and these programs are contributing to improved breastfeeding outcomes. In California, access to paid family leave doubled the median duration of breastfeeding for all new mothers who used it during the first 6 years after the state’s law went into effect in 2004.<sup>199</sup> On a population level, paid leave in California was associated with a 10-20% increase in absolute rates of any breastfeeding at 3, 6, and 9 months postpartum.<sup>200</sup> In a study examining the role of maternity leave and occupational characteristics on breastfeeding among women who were employed full-time in California, researchers found that women with maternity leave of 12 weeks or less were less likely to start breastfeeding and more likely to stop after successfully beginning than women who did not return to work.<sup>201</sup> Women with a short maternity leave who were non-managers or had inflexible jobs had poorer breastfeeding outcomes than their counterparts with more leave.<sup>202</sup> This chart describes the characteristics of paid family leave laws that have been passed in a number of states.

**Figure 4. State Paid Family Leave Laws**

State, Year Enacted	Length of Leave	Maximum Benefit	Funding Mechanism, Eligible Employees
California <sup>203</sup> 2004	6 weeks to care for a new child (birth, adoption, foster) or family member with a serious health condition  52 weeks to care for the employee’s own disability, including pregnancy	Between 60% and 70% of a worker’s average weekly wage, depending on their income (up to a maximum of \$1,173/week as of January 2018)	Funded by employee contributions  All private sector employers and some public employees

State, Year Enacted	Length of Leave	Maximum Benefit	Funding Mechanism, Eligible Employees
New Jersey <sup>204</sup> 2009	<p>6 weeks to care for a new child (birth, adoption, foster) or family member with serious health condition</p> <p>26 weeks to care for the employee's own disability, including pregnancy</p>	<p>2/3 of a worker's average weekly wage (AWW), up to a maximum of 53% of the statewide average (the January 2018 rate was \$637 per week)</p>	<p>State temporary disability insurance program, financed jointly by employee and employer payroll contributions</p> <p>All employers are covered for family care; all private sector employers but not all public sector employers are covered for their own disability</p>
Rhode Island <sup>205</sup> 2014	<p>4 weeks of paid leave for family care or 30 weeks for the employee's own disability, with no more than 30 weeks total per year for combined own disability and family care</p>	<p>Approximately 60% of a worker's AWW, up to a maximum amount based on statewide average weekly rate (the January 2018 maximum rate was \$833 per week)</p>	<p>The program is funded by employee contributions</p> <p>All private sector employees and some public employees</p>

State, Year Enacted	Length of Leave	Maximum Benefit	Funding Mechanism, Eligible Employees
New York <sup>206</sup> 2018	<p>8 weeks for bonding with a new child (birth, adoption, foster); to care for a family member with a serious health condition; to care for an individual's own disability; or for a qualifying exigency arising out of spouse, domestic partner, child or parent being on active duty</p> <p>When the program is fully phased in, workers will be able to take up to 12 weeks of family leave</p>	<p>The weekly benefit rate for family care will began at 50% of a worker's average AWW, not to exceed 50% of the state AWW increase annually, rising to 67% of the worker's weekly wage up to 67% of the state AWW in 2021</p>	<p>Leave for one's own disability is funded jointly by employee and employer payroll contributions; family care is funded by the employee only</p> <p>Most private sector employers are covered; self-employed individuals and certain public employers (other than the state government) can opt in to family care or own disability</p>

State, Year Enacted	Length of Leave	Maximum Benefit	Funding Mechanism, Eligible Employees
Washington <sup>207</sup> 2019	12 weeks for the birth, adoption, or foster placement of a child of the employee; or to care for a family member facing a serious health condition or an employee's own serious health condition	Benefits will be a percentage of the individual's AWW during the 2 highest quarters in the qualifying period. The maximum weekly benefit amount is \$1,000, adjusted annually to an amount equaling 90% of the state AWW	Employee and employer payroll contributions cover the cost of medical leave, employee contributions cover the full cost of family leave.  All employees
District of Columbia <sup>208</sup> projected implementation date of 2020	8 weeks for the birth, adoption, or fostering of a child; 6 weeks to care for a sick relative; 2 weeks for a personal medical emergency	90% of the employee's full weekly wages, up to a maximum of \$1,000 per week, adjusted annually	The program is funded by employer contributions  All full- and part-time workers in the city

State, Year Enacted	Length of Leave	Maximum Benefit	Funding Mechanism, Eligible Employees
<p>Massachusetts projected implementation date of 2021 for benefits</p>	<p>20 weeks each benefit year for personal health; 12 weeks annually for family leave no more than 26 weeks total/year for combined family and medical leave</p>	<p>Maximum benefit is \$850 a week initially (adjusted annually to 64% of statewide AWW)</p>	<p>Employee payroll contributions cover the cost of family leave; employee and employer payroll contributions cover the full cost of medical leave</p> <p>Employees covered by state unemployment insurance law, except for some public employees; self-employed and state employees not covered can opt in</p>

State, Year Enacted	Length of Leave	Maximum Benefit	Funding Mechanism, Eligible Employees
<p>Connecticut<sup>209</sup> projected implementation date of 2022 for benefits</p>	<p>12 weeks to care for a new child (birth, adoption, foster) or family member with a serious health condition; one's own serious health condition; or for a qualifying exigency arising out of spouse, domestic partner, child or parent being on active duty</p>	<p>95% of a worker's AWW up to an amount equal to 40 times the state minimum wage, and 60% of that worker's base weekly earnings above the amount equal to 40 times the state minimum wage</p>	<p>Funded by employee contributions</p> <p>All private sector employers are covered; self-employed individuals and state or local collective bargaining units can opt in</p>

State, Year Enacted	Length of Leave	Maximum Benefit	Funding Mechanism, Eligible Employees
<p>Oregon<sup>210</sup> projected implementation date of 2022 for contributions and 2023 for benefits</p>	<p>12 weeks to care for a new child (birth, adoption, foster); a family member; one’s own serious health condition; or for safe leave to address medical and nonmedical needs from domestic violence, harassment, sexual assault or stalking.</p> <p>Workers with specific pregnancy/ childbirth-related needs (including lactation) may receive up to 2 additional weeks of leave in a benefit year.</p>	<p>100% of a worker’s AWW up to an amount equal to 65% of statewide AWW, and 50% of AWW above this amount. Maximum benefit equals 120% of statewide AWW</p>	<p>Employees and employers (with ≥ 25 employees) share the costs. Employers can withhold up to 60% of contribution from workers’ wages and employees pay the remainder. Total premium is no more than 1% of wages</p> <p>All employees earning \$1000 in base year except federal or tribal government employees are covered (tribes may opt in)</p>

Sources: A Better Balance, [Chart]. Comparative chart of paid family and medical leave laws in the United States [Internet]. New York City: updated 2020 Jan 9 1, cited 2020 Jan 24. Available from: <https://www.abetterbalance.org/resources/paid-family-leave-laws-chart>.

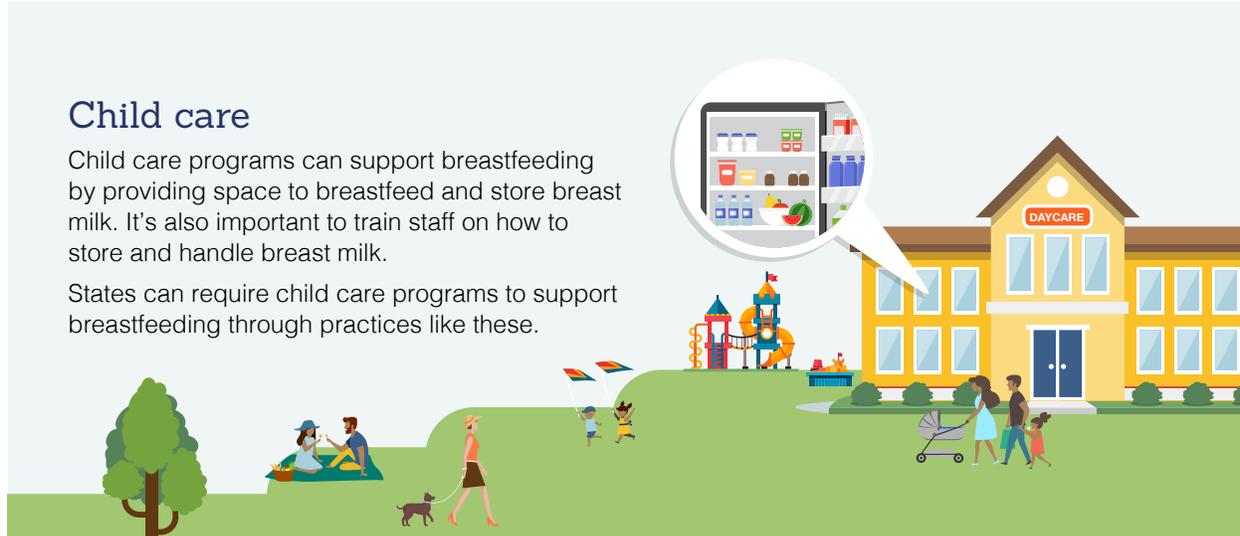
National Partnership of Women and Families, [Chart]. State paid family and medical leave insurance laws [Internet]. Washington (DC): National Partnership for Women and Families; updated 2019 Feb, cited 2019 Apr 4. Available from: <http://www.nationalpartnership.org/our-work/resources/workplace/paid-leave/state-paid-family-leave-laws.pdf>.

In addition, 5 states and Puerto Rico provide partial wage replacement for workers who are unable to work due to non-work-related injuries or illnesses, including pregnancy, through their state temporary disability programs.<sup>211</sup> Many other states have introduced paid family leave bills in state legislatures.<sup>212</sup> Cities and municipalities across the country are also implementing paid family leave programs. The National Partnership for Women & Families tracks paid family leave policies for municipal employees and has identified 73 cities and counties in 24 states and the District of Columbia that have enacted paid leave policies for their employees as of May 2018.<sup>213</sup>

### **Federal and State Initiatives**

The U.S. Department of Labor's Women's Bureau committed more than \$3 million to 17 states and municipalities to support research and analysis on implementing paid family and medical leave programs from 2014-2016. The funds supported feasibility studies to inform the development, implementation, or expansion of paid family and medical leave programs at the state and municipal level. Awards made in 2014 helped fund feasibility studies on paid leave; 2015 awards supported state and county feasibility studies on developing and expanding statewide paid family and medical leave programs; 2016 awards supported the research and analysis needed to develop and implement paid family and medical leave programs in jurisdictions across the country.<sup>214</sup> The studies provided cost estimates for a variety of policy scenarios, including variations in eligibility criteria, benefit levels, and participation requirements.

Results show that implementing a paid family and medical leave program can be affordable for workers and employers.<sup>215</sup> Programs with more universal coverage of workers appear to provide benefits at a lower cost per capita and have the greatest effect on inequality across social groups. Education and awareness are critical to successful paid leave programs. The State-Level Paid Family Leave Policy Project (funded by the HHS Office on Women's Health) is a 3-year data collection project identifying health effects that women associate with state-level paid family leave programs in California, New Jersey, New York, and Rhode Island. In his FY 2020 Budget, President Trump proposed a paid parental leave program for new mothers and fathers; the proposal would allow states to establish such programs in a way consistent with their workforce and economy.<sup>216</sup>



## Child care

Child care programs can support breastfeeding by providing space to breastfeed and store breast milk. It's also important to train staff on how to store and handle breast milk.

States can require child care programs to support breastfeeding through practices like these.

## Child Care

Child care programs play an important role in families' breastfeeding journeys by welcoming breastfeeding mothers and ensuring staff members are trained to handle breast milk and follow mothers' feeding plans, child care programs play an important role in families' breastfeeding journeys. Approximately half of the infants of working mothers are in out-of-home child care.<sup>217</sup> Most lactating mothers who are employed pump or express milk at work for a child care provider to bottle-feed to the infant, so providers are essential in helping employed mothers continue to breastfeed after returning to work.<sup>218</sup> Research shows that breastfeeding at 6 months was significantly associated with support from child care providers to feed expressed breast milk to infants and allow mothers to breastfeed on-site before or after work.<sup>219</sup>

In "The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies," Strategy 6 calls for an increase in access to early childhood education programs that support breastfeeding families.<sup>220</sup> Action 16 of SGCTA<sup>221</sup> calls for ensuring all child care providers accommodate the needs of breastfeeding mothers and infants. AAP and the American Public Health Association published the third edition of "Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs,"<sup>222</sup> which gives national guidelines on how Early Childhood Education programs should accommodate breastfeeding mothers. Suggestions include providing a private place to breastfeed, discussing the infant's usual feeding pattern and family preferences, encouraging families to provide a back-up supply of frozen or refrigerated expressed breast milk, and sharing information about support for breastfeeding in the community.

### Federal Programs

Many national programs that affect child care include breastfeeding support. Early Head Start programs provide child development and family support services to low-income infants and toddlers and their families, and to pregnant women and their families. Early Head Start program performance standards require programs to promote breastfeeding, safely store and handle breast milk, accommodate mothers who wish to breastfeed during program hours, and if necessary, provide referrals to lactation consultants or counselors, and provide breastfeeding information to families.<sup>223</sup>

In 2016, the U.S. Department of Agriculture (USDA) significantly revised the Child and Adult Care Food Program, updating meal patterns for the first time since the program's inception in 1968.<sup>224, 225</sup> The updated nutrition standards encourage breastfeeding by allowing reimbursement to the child care facility when the mother directly breastfeeds her child at the site. This update incentivizes facilities to provide welcoming accommodations for breastfeeding parents. Meals containing breast milk or iron-fortified infant formula were already eligible for reimbursement. The program serves over 3.3 million children and 120,000 adults annually.

Other federal efforts have also encouraged breastfeeding, such as *Let's Move! Child Care*—an initiative launched by former first lady Michelle Obama in 2010 addressing the issue of childhood obesity. *Let's Move! Child Care* was a voluntary initiative which invited child care and early education providers to meet 5 goals, including support for breastfeeding. The work now continues through Healthy Kids, Healthy Futures, an initiative sponsored by the Nemours Foundation.<sup>226</sup>

### State Statutes and Regulations

Every state regulates child care settings and establishes health and safety protections for children receiving non-parental care in some manner. The Public Health Law Center at Mitchell Hamline School of Law, Hamline University, assessed how child care licensing regulations address, among other things, breastfeeding.<sup>227</sup> Researchers found that in 2017, 12 states (Alabama, Arkansas, Delaware, Georgia, Michigan, Mississippi, New York, Ohio, Rhode Island, Tennessee, West Virginia, and Wisconsin) specifically mentioned support for breastfeeding and breastfeeding mothers in their child care regulations for center child care settings. In regulations related to home child care settings, 7 states (Alabama, Arkansas, Delaware, Mississippi, New York, Ohio, and Wisconsin) mentioned support for breastfeeding. These

policies and regulations address breastfeeding in a variety of ways, including accommodation requirements for breastfeeding mothers; training requirements for child care workers on breast milk storage, handling, and preparation; and protection from discrimination.<sup>228</sup> For example, Mississippi law requires licensed child care facilities to provide breastfeeding mothers with a sanitary place to pump breast milk, a refrigerator to store it, and staff education in the proper way to store and handle the milk; facilities also must display breastfeeding promotion materials.<sup>229</sup> Maryland mandates that child care facilities establish training and policies that promote breastfeeding.<sup>230</sup> Louisiana prohibits any child care facility from discriminating against breastfed babies.<sup>231</sup>

### **Breastfeeding Friendly Child Care Designation**

Breastfeeding friendly child care designation is available in many cities and states across the country, although variations exist among programs. These programs recognize child care facilities that have taken steps to promote, protect, and support breastfeeding, such as training staff on feeding and storing expressed breast milk, coordinating feeding times with the baby's usual feeding schedule, and offering written materials on breastfeeding. Designating organizations often provide support, resources, and technical assistance for both designated and non-designated facilities.

The Florida Breastfeeding Coalition and the Florida Department of Health, for example, encourage child care providers to complete a child care center self-assessment. If the center meets the 6 standards in the assessment and has a breastfeeding policy, they may qualify to receive the Breastfeeding Friendly Child Care Facility designation.<sup>232</sup> As of April 2018, there were 340 recognized centers and homes.<sup>233</sup> Similar programs exist in Alabama, Kansas Minnesota, Nevada, New Hampshire, New York, North Carolina and South Carolina.<sup>234</sup>

The Carolina Global Breastfeeding Institute (CGBI) developed the Ten Steps to Breastfeeding-Friendly Child Care, outlining how child care centers can provide support and encouragement for breastfeeding families. In 2013, the Carolina Ten Steps were used to develop the original North Carolina Breastfeeding-Friendly Child Care Designation (NC BFCCD) program administered at the North Carolina Division of Public Health. CGBI remains 1 of 7 collaborative organizations on the NC BFCCD application review committee.



## Workplace

Policies that support breastfeeding after mothers return to work can have a big impact. Laws also require employers to provide adequate break time and space to breastfeed.

Babies-at-work policies that let parents keep their babies with them during the work day help too. Employers can also ensure that the health insurance plans they offer cover supplies families need, like breast pumps, and have a network of lactation-support professionals.

## Workplace Accommodations

To maintain breastfeeding after returning to work, a mother should ideally pump breast milk as often as her baby would usually eat. This will help maintain the mother's milk supply while she is away from her baby, and the expressed milk will be fed to the child during a future work day. Missed sessions could mean insufficient milk for upcoming feedings, may contribute to a low milk supply, or result in painful swelling or infection of the breast.<sup>235</sup> The SGCTA Actions 14 and 15 encourage employers to establish comprehensive, high-quality lactation support programs for their employees and to expand the use of programs that allow lactating mothers direct access to their babies.<sup>236</sup>

Federal legislation requires employers to provide many employees with break time and a private space to express breast milk during the work day,<sup>237</sup> yet women often face inflexibility in their work hours and locations, a lack of privacy for breastfeeding or pumping milk, and no place to properly store expressed milk; in addition, they are fearful about job insecurity.<sup>238, 239</sup> When mothers do not have a place to breastfeed or pump breast milk, they may resort to using the restroom, an unhygienic approach associated with premature weaning.<sup>240</sup> Many mothers encounter pressure from coworkers and supervisors not to take breaks to pump breast milk, and existing breaks often do not allow sufficient time for expression.<sup>241</sup> Hourly workers face greater barriers to breastfeeding compared with salaried workers as they have less control in their schedules and may face possible pay reductions if they take breaks to breastfeed or express breast milk.<sup>242</sup>

Research shows that support for lactation at work benefits employers. Women who receive support to pump milk at work are more productive and loyal to the company. Employers also benefit from an enhanced public image, as well as decreased absenteeism, health care costs, and employee turnover.<sup>243,244,245</sup>

Despite these benefits, the Society for Human Resource Management (SHRM) reported that in 2018 only 49% of companies surveyed had an on-site lactation/mother's room, 11% offered lactation support services, and 3% had babies-at-work programs in which parents can keep infants with them during the work day.<sup>246</sup> In 2017, SHRM began including a survey question on whether employers covered the cost of shipping pumped breast milk back to the employee's home while she is on business travel as an employee benefit; this service was offered by 2% of surveyed organizations.<sup>247</sup>

Small businesses with fewer than 100 employees are the least likely to have lactation programs, and whether the workplace is large or small, infants are usually not allowed on-site.<sup>248</sup> Low-income women and single mothers are significantly less likely to have access to either break time or private space to express breast milk at work, mirroring socioeconomic disparities in breastfeeding.<sup>249</sup> Only 40% of women who work have access to both break time and a private space.<sup>250</sup>

Legal protections for breastfeeding employees have a significant effect on continued breastfeeding after return to employment, and are associated with increased breastfeeding rates. The strongest laws cover all breastfeeding employees, requiring break time during the work day to pump milk or breastfeed, and a clean, private space to do so. Such laws allow for additional accommodations, such as permitting variations in required employee uniforms, and have an enforcement mechanism to ensure that employers comply with the requirements of the law.<sup>251</sup> A study published in 2014 to assess the relationship between breastfeeding initiation and duration with state laws supportive of breastfeeding found that higher rates of breastfeeding initiation and exclusive breastfeeding at 6 months were observed in states with enforcement of pumping laws. States with workplace breastfeeding laws that included enforcement provisions had an initiation rate of 75.7%, compared with 59.8% in states without these provisions. States with laws requiring break time from work had an initiation rate of 64.7% compared with 60.7% in states without these policies.<sup>252</sup>

It's important to note, however, that the effect of workplace breastfeeding legislation may differ by demographic group. A study published in 2014 examining breastfeeding practices in areas with and without breastfeeding laws found that the laws' effect varied by race and ethnicity.<sup>253</sup> An analysis of 8 breastfeeding laws before and after enactment found that relative to white infants, Mexican-Americans infants were more likely to breastfeed for at least 6 months in areas with laws protecting break time from work to pump, and with provisions around enforcing pumping laws. Five laws intended to increase breastfeeding duration were found to be less helpful for African-American women relative to white women regarding break time, private areas to pump, exemption from jury duty, awareness education campaigns, and provisions around enforcing pumping laws.<sup>254</sup> These differences highlight the need to examine the effectiveness of laws regarding their intended consequences—in this case, supporting breastfeeding and achieving the HP2020 goals.

### Federal Laws

Federal legislation can enable women to meet their infant feeding goals by establishing legal protections for them in the workplace. Certain federal laws protect the rights of breastfeeding employees by requiring lactation accommodations; through antidiscrimination legislation, they also protect employees affected by pregnancy, childbirth, and related conditions. Complaints have been brought to the Equal Employment Opportunity Commission (EEOC) and to the courts alleging that employers across a range of industries including air travel,<sup>255</sup> law enforcement,<sup>256</sup> and food service,<sup>257</sup> failed to meet the minimum standards under federal law.<sup>258,259</sup>

### Break Time for Nursing Mothers Provision

The Affordable Care Act provided the first nationwide approach toward supporting breastfeeding in the workplace.<sup>260</sup> Section 4207 of the law amended the Fair Labor Standards Act (FLSA) to include what is known as the Break Time for Nursing Mothers provision.<sup>261</sup> The amendment requires employers to provide reasonable break time and a private, non-bathroom location for most hourly wage-earning—and some salaried employees (nonexempt workers covered by the FLSA)—to express breast milk during the workday, for 1 year after the child's birth. The new requirements became effective when the Affordable Care Act was signed into law on March 23, 2010. Of note, this provision does not cover “exempt” employees (those who are exempt from overtime protections), although legislation has been introduced to expand coverage to salaried

employees under the FLSA.<sup>262</sup> The law also does not protect break time after the infant's first birthday, even though 1 out of 3 infants born in 2014 were still breastfeeding at that age.

Where violations of this provision are found, the U.S. Department of Labor, charged with enforcement of the law, may recommend changes in employment practices to bring an employer into compliance.<sup>263</sup>

A study examining access to workplace accommodations for breastfeeding—as required by the Affordable Care Act, and its associations with breastfeeding initiation and duration—found that women with both adequate break time and private space were 2.3 times as likely to be breastfeeding exclusively at 6 months, and 1.5 times as likely to continue breastfeeding exclusively with each passing month compared with women without access to these accommodations.<sup>264</sup>

In 2009, the SHRM Employee Benefit Survey reported that 25% of employers reported providing an onsite lactation/mother's room in 2009. This number increased to 28% in 2011, the year after the Break Time for Nursing Mothers provision was passed into law. Similarly, in 2009, 46.6% of children were breastfed exclusively at 6 months, increasing to 49.4% in 2011. By 2018, as previously mentioned, 49% of employers surveyed offered onsite lactation rooms, an increase from the 28% of employers who offered lactation rooms in 2014. Additionally, up to 11% of surveyed organizations now also offer lactation support services.<sup>265</sup>

Ensuring workplaces comply with requirements for lactation accommodations remains a challenge. In June 2015, the U.S. District Court for the Eastern District of New York decided a case against TD Bank related to the employer's failure to comply with the federal Break Time for Nursing Mothers provision. In *Lico v. TD Bank*, the court held that violations of the break time requirements are privately enforceable in cases where women have lost wages as a result of the employer's failure to comply with its obligations under the Act.<sup>266</sup> Specifically, the court held that the statute “explicitly provides a private right of action for all violations of Section Seven” (the Break Time for Nursing Mothers provision), but that it “limits the remedies available for violations ... in that it only permits recovery of lost wages and overtime, liquidated damages, attorneys' fees, and costs.”<sup>267</sup> The court noted that in most cases, such damages won't be present because employers are not required to pay their employees for the breaks mandated by the law. This means that filing a lawsuit will only result in employees receiving monetary compensation in very limited circumstances.

### Pregnancy Discrimination Act (PDA)

In 1978, the PDA amended Title VII of the Civil Rights Act of 1964 to prohibit sex discrimination on the basis of pregnancy, childbirth, and related medical conditions.<sup>268</sup> Much later, in 2015, EEOC updated their “Enforcement Guidance: Pregnancy Discrimination and Related Issues,” which for the first time, identified lactation as a pregnancy-related medical condition.<sup>269</sup> The guidance states that various circumstances exist in which discrimination against a lactating or breastfeeding employee can implicate Title VII, and also states that less-favorable treatment of such employees may raise an inference of unlawful discrimination. It also states that an employee must have the same freedom to address lactation-related needs that all employees would have to address other similarly limiting medical conditions.

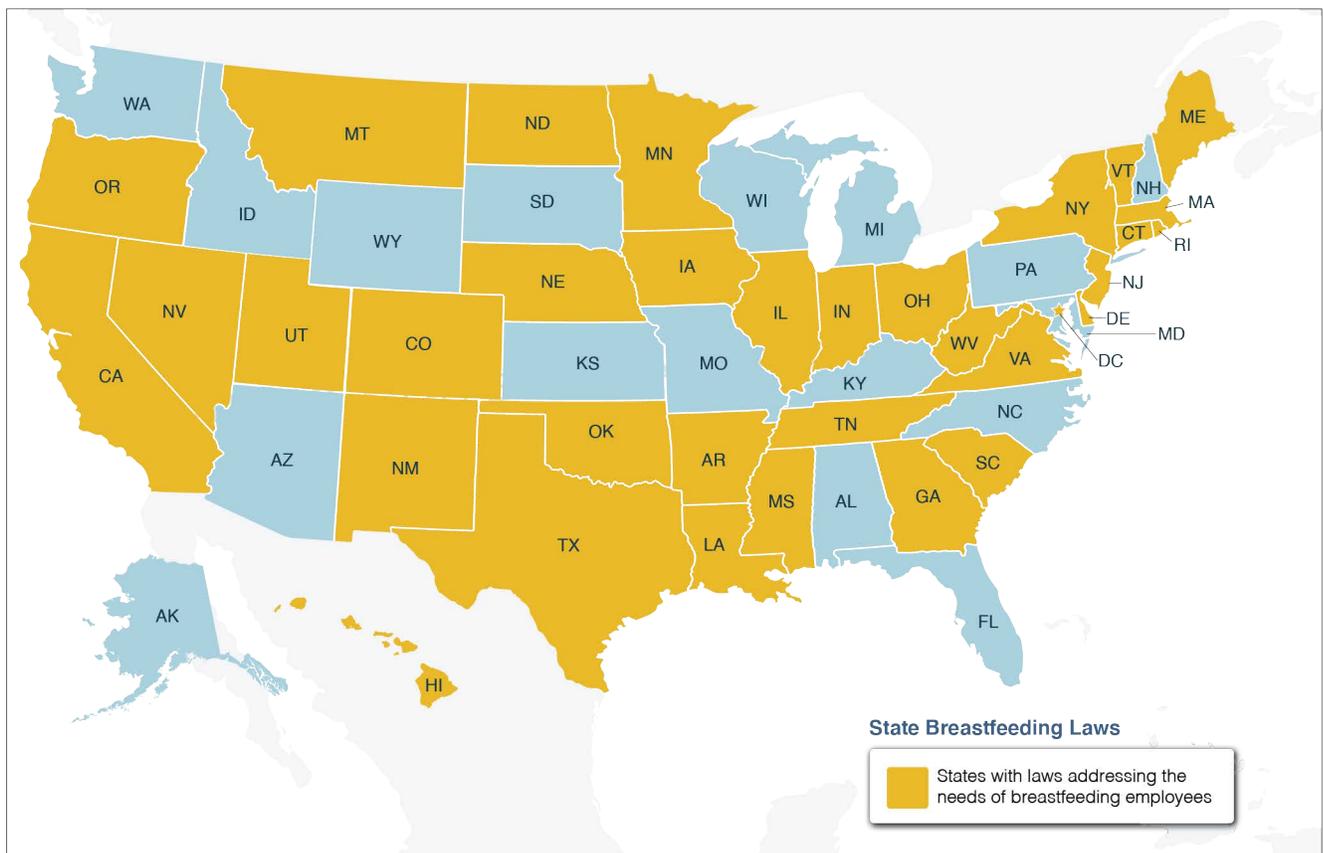
Court rulings related to the PDA necessitated the 2015 update of the EEOC’s guidance. In *EEOC v. Houston Funding II, Ltd.*,<sup>270</sup> the U.S. Court of Appeals for the Fifth Circuit held unanimously that firing a woman because she is lactating or expressing milk is unlawful sex discrimination under Title VII of the Civil Rights Act of 1964 (as amended by the PDA). This ruling affirmed that lactation is a pregnancy-related medical condition. In 2014, the U.S. Supreme Court heard arguments in *Peggy Young v. United Parcel Service*.<sup>271</sup> This case raised, for the first time, the question of whether the PDA requires an employer to give light duty to a pregnant worker if she needs it, since the employer provides light duty to workers with similar limitations stemming from disability or on-the-job injury. The Supreme Court held that “a plaintiff can create a genuine issue of material fact as to whether a significant burden exists by providing evidence that the employer accommodates a large percentage of non-pregnant workers while failing to accommodate a large percentage of pregnant workers”.<sup>272</sup> EEOC updated their Enforcement Guidance sections on Disparate Treatment and Light Duty in response to the *Young v UPS* ruling, providing that discrimination on the basis of pregnancy, childbirth, and related medical conditions includes failure to treat women affected by pregnancy “the same for all employment related purposes ... as other persons not so affected but similar in their ability or inability to work.”<sup>273</sup> Since lactation is considered a pregnancy-related medical condition, the ruling also applies to accommodations for employees who breastfeed or pump breast milk. Since then, additional court cases have affirmed lactation as a pregnancy-related medical condition protected under Title VII of the Civil Rights Act. One such case, *Hicks v. Tuscaloosa*, involved a breastfeeding police officer who was denied accommodations and subsequently fired.<sup>274</sup>

### State Laws

State laws create a patchwork of protections for breastfeeding employees, but the specific provisions vary widely from state to state. Employees are protected under laws that address breastfeeding, as well as laws that address pregnancy, childbirth, and related medical conditions, since these laws (like the PDA) have increasingly been interpreted in courts and in state regulations to include breastfeeding. Many states explicitly require employers to provide accommodations such as break time and/or a private space to express breast milk during the work day, with many additional states prohibiting discrimination on the basis of lactation or pregnancy, childbirth, and related medical conditions. Nonetheless, the proportion of women protected by comprehensive breastfeeding policies varies widely between states.<sup>275, 276</sup> Nationwide, even taking state laws into account, 27.6 million women workers of childbearing age are left without break time, space, and a clear right to receive other reasonable accommodations for breastfeeding.<sup>277</sup>

The USBC developed a series of guides to help employers understand their obligations and employees to understand their rights under federal and state law.<sup>278</sup> In 1998, Minnesota created the first state-level protections for breastfeeding workers by requiring employers to provide accommodations to facilitate pumping.<sup>279</sup> In addition, that same year, California's legislature passed a joint resolution that encouraged private employers and the Governor to ensure that employees had access to adequate facilities to pump breast milk or to breastfeed.<sup>280</sup> Currently, 32 states, the District of Columbia, Guam, Puerto Rico, and the U.S. Virgin Islands have laws related to breastfeeding in the workplace.

**Figure 5. States with Laws Addressing the Needs of Breastfeeding Employees**



**Source:** U.S. Breastfeeding Committee. What if your state already has a law? (<http://www.usbreastfeeding.org/workplace-guide>)

The strongest protections for breastfeeding employees are provided through laws that cover all employees, require employers to provide break time and a private space for breastfeeding or pumping, to notify employees of their rights, prohibit discrimination, and include an enforcement provision. Few state laws meet these standards. Some state laws encourage but do not require accommodations. Other state laws create voluntary “infant-friendly” or “mother-friendly” employer designation programs in which employers can apply or be nominated for a special designation recognizing their breastfeeding-friendly employment policies.<sup>281,282</sup>

These laws have been upheld in the courts. In January 2016, a ruling from the Supreme Court of Puerto Rico, in *Siaca v. Bahía Beach Resort & Golf Club, LLC*,<sup>283</sup> found that an employer’s failure to provide a safe, private, and hygienic space for employees to breastfeed or express milk was a breach of the employer’s obligations under the territory’s breastfeeding in the workplace law, which could also result in a violation of the employee’s privacy rights.<sup>284</sup>

### Breastfeeding Friendly Worksite Designation

Breastfeeding Friendly Worksite designation programs exist in cities and states across the country. These programs recognize employers that have taken steps to promote, protect, and support breastfeeding for their employees.<sup>285</sup> Designating organizations often provide support, resources, and technical assistance for employers. More than half of states have a designation program, typically coordinated by the state breastfeeding coalition or health department. The Texas Mother-Friendly Worksite initiative, for example, provides designation to employers that have a written employee worksite lactation-support policy that addresses the following:

- Flexible work schedules, including scheduling breaks and work patterns to provide time for milk expression
- Access to a private location(s) that is not a bathroom, for the purpose of milk expression
- Access to a nearby clean and safe water source and a sink for washing hands and rinsing out any breast-pump equipment
- Access to hygienic storage options for mothers to safely store breast milk.<sup>286,287</sup>

### School Accommodations

Similar to breastfeeding workers, breastfeeding students also need time to breastfeed or express milk, a clean and private pumping space, and other reasonable accommodations to continue breastfeeding while pursuing their education. In addition to the policies described below, breastfeeding students may be protected by laws related to public accommodations, breastfeeding in public, child care, and workplace (for those who work on campus). These protections are described elsewhere in this report.

The student-parent population has grown significantly in recent years. More than 1 in 4 undergraduate students are also parents of dependent children, and half of these students have children ages 5 or younger.<sup>288</sup> Research is needed to explore the specific needs of students; the differences among students in high school versus higher education; the access to lactation support during the school day; and the effect of legislation, policy, and existing innovative campus programs on student breastfeeding success.

### Title IX

Title IX of the Education Amendments of 1972 prohibits discrimination based on sex in educational programs and activities that receive federal financial assistance. The U.S. Department of Education regulation implementing Title IX specifically prohibits discrimination against a student based on pregnancy, childbirth, false pregnancy, termination of pregnancy, or recovery from any of these conditions.<sup>289</sup> A student cannot be penalized for missing class time in order to pump (including time missed during a long final exam), and a professor must let a student make up the work missed by being out of class pumping.<sup>290</sup>

The Department encourages—but does not require—schools to designate a private room for mothers to breastfeed, pump milk, or address other needs related to breastfeeding during the school day.<sup>291</sup> The law is unclear on specific requirements of what must be provided to nursing parents; however, Title IX may be violated if a student's ability to get an education is limited because there is no suitable space to pump. Additionally, if other students are given access to private space, refrigerators, or electrical outlets to address non-pregnancy/childbirth-related medical conditions, breastfeeding students should be given the same special services to address lactation-related needs.

### State Legislation

California, Illinois, Nebraska, and Virginia have laws addressing the needs of breastfeeding students, including requiring schools to provide a private, non-restroom location and/or break time for its employees or students to express breast milk, breastfeed an infant, or address other needs related to breastfeeding.<sup>291,292,293,294,295,296</sup> In California and Illinois, specified schools are required to offer reasonable accommodations to a lactating student on a school campus to express milk, breastfeed an infant, or address other needs related to breastfeeding. In Nebraska, schools are required to have a written policy related to accommodating breastfeeding students in schools with private, hygienic spaces to express breast milk during the school day. Virginia law directs each local school board to adopt a policy for each school in the school division to dedicate a non-restroom location shielded from public view. This is designated as an area where any mother employed by the local school board or enrolled as a student may take reasonable breaks to express milk to feed her child until the child reaches the age of 1.

## Lactation Accommodations during Licensing Exams

Legal and policy protections for breastfeeding students vary by state and program. Title IX of the Education Amendments of 1972 (20 U.S.C. §1681 et seq.) provides that educational programs for schools receiving federal funds cannot discriminate against students based on sex. Therefore, they should not use admission tests that single out students based on sex. This means that administrators for the Graduate Record Examination, Law School Admission Test, and Medical College Admission Test must treat breastfeeding parents the same as other students with temporary medical conditions. However, Bar Examiners and the Medical Board do not receive federal funds so are not bound by Title IX. In some states, public accommodation laws likely require testing agencies to provide pumping accommodations, as was found by the Supreme Court in at least 1 state. In 2012, the Massachusetts Supreme Judicial Court in *Currier v. National Board of Medical Examiners*<sup>297</sup> ruled that the National Board of Medical Examiners (NBME) had to allow test takers breaks for pumping milk under the state's public accommodations law. The NBME has since modified its policies to allow lactating examinees to request additional break time to express milk during licensing exams.<sup>298</sup> The U.S. Medical Licensing Examination has published a form for examinees to request lactation accommodations.<sup>299</sup>

## Federal Funding to Public Health Departments

The SGCTA acknowledged the important role of all levels of government in providing guidance, leadership, and funding. Action 20 encouraged “improving national leadership on the promotion and support of breastfeeding.”<sup>300</sup> Public health departments at the state and local level boost breastfeeding rates through increasing access to breastfeeding support at both the individual and population levels, and play a role in improving breastfeeding support systems in hospitals, workplaces, and the community.

## Funding for State Physical Activity and Nutrition Programs

Since 2008, CDC has funded public health departments to implement population-based strategies and interventions to improve healthful eating and physical activity that prevents and controls obesity and other chronic diseases.<sup>301</sup> In 2018, CDC awarded funding to 16 states through the State Physical Activity and Nutrition (CDC-RFA-DP18-1807) 5-year cooperative agreement.<sup>302</sup> This agreement implemented multiple

breastfeeding, nutrition, and physical activity strategies. Funded states are required to implement interventions that support breastfeeding by addressing one or more of the following: maternity care practices in birthing facilities, continuity of care or community support, and workplace compliance with the federal lactation accommodation law. Ten states will implement interventions related to maternity practices in birthing facilities, 13 states will implement interventions related to continuity of care and community support, and 9 states will implement interventions related to workplace compliance with the federal lactation accommodation law. Most of the states chose to implement more than one of the breastfeeding strategies.

### Funding for Racial and Ethnic Approaches to Community Health Program

Racial and Ethnic Approaches to Community Health (REACH) is a national program administered by CDC to reduce racial and ethnic health disparities. Through REACH, awardee partners plan and carry out local, culturally appropriate programs to address a wide range of health issues among African Americans, American Indians, Hispanics/Latinos, Asian Americans, Alaska Natives, and Pacific Islanders. In 2018, CDC funded 31 recipients, including state and local government agencies, non-profits, and community coalitions through REACH's 5-year cooperative agreement (CDC-RFA-DP18-1813).<sup>303</sup> These recipients work to reduce health disparities among racial and ethnic populations having the highest burden of chronic disease through culturally-tailored interventions addressing preventable risk behaviors, i.e., tobacco use, poor nutrition, and physical inactivity. The recipients also work to increase continuity of care and community support for breastfeeding by incorporating services into existing community support services; establishing accessible and culturally appropriate lactation support services for the priority population; and providing breastfeeding support training to health care providers, community health workers, peer support providers, and others who work with mothers and babies.

### CDC Cooperative Agreement with the Association of State and Territorial Health Officials (ASTHO)

In 2014, CDC funded a 4-year cooperative agreement with the Association of State and Territorial Health Officials (ASTHO) to work with health agencies from 18 states and the District of Columbia to increase efforts to support breastfeeding, using a virtual learning community.<sup>304</sup> Each grantee selected 1 of the 3 CDC priority areas of

hospital, workplace, or community. These state teams collaborated across maternal child health, chronic disease, and Special Supplemental Nutrition Programs for Women, Infants and Children (WIC) programs at the state agency level, and with state breastfeeding coalitions. Together they implemented best practices and evidence-based policies aimed at improving breastfeeding promotion and support. To facilitate learning across states, ASTHO is leveraging the breastfeeding learning-community network to connect state partners in similar roles and share successful examples of breastfeeding promotion and support.<sup>305</sup> In 2018, CDC funded ASTHO through the previously discussed State Physical Activity and Nutrition Program to implement and to build on lessons from the learning communities in 16 states. ASTHO will provide the states with training, technical assistance, and mentoring, as well as opportunities to implement innovative strategies. In addition, resources developed during this project will be made publicly available.

### **CDC Cooperative Agreement with the National Association of County & City Health Officials (NACCHO)**

In 2014, CDC also funded a 4-year cooperative agreement with the National Association of County & City Health Officials (NACCHO) to increase support for breastfeeding.<sup>306</sup> NACCHO awarded funding to 69 local health departments and community-based organizations to provide peer and professional lactation support to African-American and other underserved women and infants. This project aims to encourage evidence-based and innovative community-level breastfeeding programs, practices, and services that reduce disparities in breastfeeding. In addition they develop and maintain public health partnerships critical to building community support for breastfeeding.<sup>307</sup> In September 2018, CDC provided additional funding to NACCHO for the Reducing Breastfeeding Disparities through Continuity of Care project, focused on increasing access to breastfeeding support and breastfeeding friendly environments. During this 5-year grant period, NACCHO will provide technical assistance to CDC's 31 REACH cooperative agreement recipients by establishing a community of practice, and providing targeted technical assistance to each recipient. In collaboration with national partners, NACCHO will work to develop a blueprint for a breastfeeding continuity of care and community support model through a funding program at 3 to 6 community health centers.

## Integration of Breastfeeding Support into Home Visiting Programs

Home visiting programs such as HRSA's Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program provide ongoing support for families after childbirth.<sup>308</sup> The number of children and parents served by the MIECHV program and the number of home visits provided has increased dramatically since 2012. More than 3.3 million home visits have been provided over the past 5 years.<sup>309</sup> Grantees are able to select from a variety of proven service delivery models, including Early Head Start—Home-Based Option, MIECHV program; and Early Intervention Program for Adolescent Mothers; Nurse-Family Partnership; and Healthy Beginnings. These programs have been shown to produce measurable results in maternal and child health outcomes, including breastfeeding rates. An HRSA report to Congress found that 64% of MIECHV state grantees saw breastfeeding initiation or duration improvements.<sup>310</sup> In addition, CMS covers home visiting services under a variety of Medicaid state plan benefits or other Medicaid authorities, at state option.<sup>311</sup>

Integration of breastfeeding into these programs has the potential to improve outcomes by leveraging existing resources and community connections.<sup>312</sup> For example, the Family Connects model provides a home visit for all families residing in Durham County, North Carolina.<sup>313</sup> Trained nurses evaluate multiple domains, including support for health care, a safe home, caring for the infant, and for parents. The nursing director is an IBCLC, and all home-visit nurses have completed basic breastfeeding training. Mothers experiencing challenges are referred to the program's IBCLC as needed.

The national organization HealthConnectOne has developed a community-based doula model that provides peer support during pregnancy, birth, and early parenting.<sup>314</sup> Doulas are recruited from the target community and trained in an experiential curriculum to promote breastfeeding, provide pregnancy and birthing support, and prevent infant mortality. To evaluate the model, a national Promotion and Support of Community-Based Doula Programs Expert Panel focused on data collected from 8 community-based doula programs from around the country, 6 of which received HRSA funding. The results showed longer breastfeeding duration and exclusivity among Hispanic and Black/African American mothers who were Community-Based Doula participants.<sup>315</sup>

Figure 6

## Programs that Address Barriers to Breastfeeding

Law and policy at all levels can improve breastfeeding outcomes by reducing the harmful impact of poverty and supporting families who want to breastfeed. This includes federal policies and programs that are implemented by states, public health departments, and other local organizations.

Federal funding also provides state and local public health departments and other local partners with funding for programs to provide lactation support to underserved women and infants, create culturally appropriate lactation services, and more.

Program	Description
<p>Temporary Assistance for Needy Families (TANF)</p> 	<p>TANF is a federal program that gives states block grants to assist low-income families through services like cash assistance and job training. States set their own policies about when mothers need to return to work to keep getting TANF—and many states only exempt mothers from work requirements if their child is 6 months old or younger. But research shows that in states without strict return-to-work requirements, mothers are more likely to continue breastfeeding.</p>
<p>The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)</p> 	<p>WIC is a federal program that provides food, nutrition counseling, and health services to low-income pregnant, postpartum, or breastfeeding women, infants, and children. Thanks to a final federal agency rule on breastfeeding, state and local WIC agencies also provide counseling and education services, peer support, and breastfeeding aids (like breast pumps). Some programs also provide breastfeeding moms with a bigger food package or allow them to participate in the program for a longer time—which research shows increases exclusive breastfeeding rates.</p>
<p>Healthy Start</p> 	<p>Healthy Start is a federal program that uses community-based systems approaches to target communities with infant mortality rates that are at least 1.5 times the national average. For example, Healthy Start uses community health workers to provide breastfeeding education for men, women, and lactating mothers.</p>

For more information: <https://www.healthypeople.gov/2020/law-and-health-policy>

## Potential Effect of Assistance Programs on Breastfeeding

Public policies and programs play an important role in reducing harmful effects of poverty, and supporting families in social-emotional, physical, and economic well-being. Programs that coordinate addressing needs of the child with adult family members have potential to improve breastfeeding outcomes.<sup>316</sup> Several such programs are discussed below.

### Temporary Assistance for Needy Families (TANF)

Return to work requirements for Temporary Assistance for Needy Families (TANF) recipients are associated with differences in breastfeeding rates.<sup>317</sup> Prior to passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) in 1996,<sup>318</sup> mothers with a child younger than 36 months were exempted from work requirements. However, by 2000, exceptions in 40% of states were only for children under 6 months.<sup>319</sup> Using a difference-in-difference approach, Haider et al. analyzed the effect of work requirements on breastfeeding continuation at 6 months.<sup>320</sup> Return-to-work requirements were associated with lower breastfeeding continuation rates. The authors estimated that PRWORA policies lowered national breastfeeding rates at 6 months by 5.5%, with an absolute reduction in breastfeeding rates of 1.2%. In a simulation model, a 1.2% absolute reduction in national breastfeeding rates would be expected to cause 24,468 additional ear infections and 56,658 additional episodes of gastrointestinal illness, resulting in \$10.6 million in medical costs and \$19.5 million in non-medical costs.<sup>321</sup> These findings illustrate the importance of decision makers considering possible adverse effect on breastfeeding of policies that affect childbearing women and their children.

### Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) serves to safeguard the health of low-income pregnant, post-partum, or breastfeeding women, infants, and children up to 5 years of age who are at nutrition risk. The program provides nutritious foods to supplement diets, information on healthy eating including breastfeeding promotion and support, and referrals to health care. The USDA issued a final rule in 2014 emphasizing that the program's intent was to encourage "women to exclusively breastfeed their infants and to choose the fully breastfeeding food package without infant formula."<sup>322</sup>

The SGCTA also supported strengthening programs that provide mother-to-mother support and peer counseling, such as WIC (Action 3).<sup>323</sup> WIC recipients are known to face numerous barriers to breastfeeding, including returning to work, lack of support (e.g., prenatal, professional, and social), lack of access to breast pumps, perception of insufficient milk, and other social and cultural barriers.<sup>324</sup> Nonetheless, WIC policies for breastfeeding promotion and support address these barriers,<sup>325</sup> which are carried out by state and local WIC agencies and include the following:

- Providing guidance, counseling, and breastfeeding educational materials
- Providing a greater quantity and variety of food to the breastfeeding mother/infant dyad receiving the full breastfeeding food package (e.g., mothers who are exclusively breastfeeding receive additional monthly allowances for certain items such as milk and eggs, and are permitted allowances for canned fish and cheese)<sup>326</sup>
- Participation in the WIC Program for up to 1 year postpartum, a longer time period than non-breastfeeding mothers
- Providing breastfeeding aids, such as breast pumps
- Training staff to support breastfeeding mothers<sup>327</sup>

In a study of 180,000 infants in Southern California, implementation of the new WIC food package was associated with a marked increase exclusive breastfeeding rates.<sup>328</sup>

In addition, the Agency for Healthcare Research and Quality (AHRQ) determined WIC interventions incorporating peer support are effective strategies in promoting breastfeeding.<sup>329</sup> Many recipients have access to WIC breastfeeding peer counselors; WIC agencies operating a peer counseling program also have access to a WIC-designated breastfeeding expert who can address more complex breastfeeding issues outside the scope of a peer counselor's practice. Such experts may have IBCLC credentials. For example, to better improve breastfeeding duration and exclusivity, Michigan WIC required that by October 1, 2017, local WIC agencies appoint an IBCLC as the lead breastfeeding technical support expert.<sup>330</sup> For agencies without IBCLC on staff, a plan must be submitted for state approval showing how equivalent on-site technical support will be furnished. While WIC provides coverage for infant formula, including specialized formulas for medical indications,<sup>331</sup> banked or donor breast milk is not considered as WIC-eligible formula.<sup>332</sup>

### Healthy Start

In line with SGCTA Action 4 (using community-based organizations to promote and support breastfeeding),<sup>333</sup> HRSA's Healthy Start program uses a community-based systems approach to improve the health of women, men, and children in underserved communities.<sup>334</sup> The program targets communities with infant mortality rates that are at least 1.5 times the national average; and aims to reduce negative birth outcomes along with addressing poverty, education, access to care, and other socioeconomic factors.

Each year since 1991, the federal budget has included Healthy Start discretionary funding; as of 2018, the program had grown from 15 sites to 100 federally-funded Healthy Start Projects operated in 37 states, the District of Columbia, and Puerto Rico.<sup>335</sup> One way local Healthy Start projects support breastfeeding is through breastfeeding education for men, women, and lactating mothers, often using community health workers.<sup>336</sup> For example, since 1999, Mariposa Community Health Center Healthy Start Program staff has provided breastfeeding education to postpartum women at the Holy Cross Hospital located at the United States-Mexico border in Nogales, Arizona.<sup>337</sup>

### Safe Sleep

Babies who breastfeed or are fed breast milk are at lower risk for Sudden Infant Death Syndrome (SIDS) than babies who were never breastfed; longer duration of exclusive breastfeeding is also associated with lower SIDS risk. In addition, significant racial disparities exist in Sudden Unexpected Infant Death (SUID) and overall SIDS rates.<sup>338</sup> While many issues contribute to infant mortality in the United States, experts agree that adoption of healthy behaviors, including breastfeeding, could have a preventive effect on the 14% of infant mortality cases classified as sleep-related deaths.<sup>339</sup> Several programs are working to address this issue.

### National Action Partnership to Promote Safe Sleep (NAPPSS)

The National Action Partnership to Promote Safe Sleep (NAPPSS)<sup>340</sup> engages a coalition of over 70 advocacy organizations, professional associations, faith communities, and business groups with the active involvement of federal partners to develop and implement the National Action Plan to Increase Safe Infant Sleep;<sup>341</sup> and to support breastfeeding among infant caregivers. The coalition works by activating and coordinating systems, supports, and services aimed at making safe

infant sleep and breastfeeding a national norm. NAPPSS was funded from 2014-2017 through a 3-year cooperative agreement from HRSA's Maternal and Child Health Bureau (MCHB). The funding supported the development of a series of learning modules called "Building On Campaigns With Conversations: An Individualized Approach to Helping Families Embrace Safe Sleep & Breastfeeding."<sup>342</sup> The series is designed for a range of health professionals, human service providers, community health workers, home visitors, and peer supporters who interact with families on topics of safe sleep and breastfeeding, and follows current recommendations from AAP for safe sleep and optimal breastfeeding for healthy infants. Using the Conversations Approach, the modules help people gain the necessary knowledge and skills to promote breastfeeding and safe sleep practices.

Building on this work, in 2017 MCHB funded the NAPPSS Improvement and Innovation Network (NAPPSS-IIN), a 5-year initiative to make infant safe sleep and breastfeeding the national norm. NAPPSS-IIN tested safety bundles in multiple care settings to improve the likelihood that infant caregivers and families receive consistent, evidence-based instruction about safe sleep and breastfeeding.<sup>343</sup>

### Safe to Sleep Campaigns

In 2016, the Eunice Kennedy Shriver National Institute of Child Health and Human Development at the U.S. National Institutes of Health (NIH) launched an updated Safe to Sleep<sup>®</sup> campaign. Formerly known as Back to Sleep, the campaign<sup>344</sup> began in 1994 as a partnership with public and private partners to bring public attention to SIDS and to educate caregivers on ways to reduce its risk. The updated campaign encourages breastfeeding babies to reduce the risk of SIDS. It also embraces a harm-reduction approach recognizing parents may fall asleep while feeding, especially breastfeeding.<sup>345</sup> In 2016, AAP issued guidance for its members to help reduce the risk of SIDS and sleep-related suffocation, asphyxia, and entrapment among infants in the general population. The guidance identified ways to reduce the risk of SIDS in the event of bed-sharing, such as removing pillows or bedding that could obstruct infant breathing.<sup>346</sup>

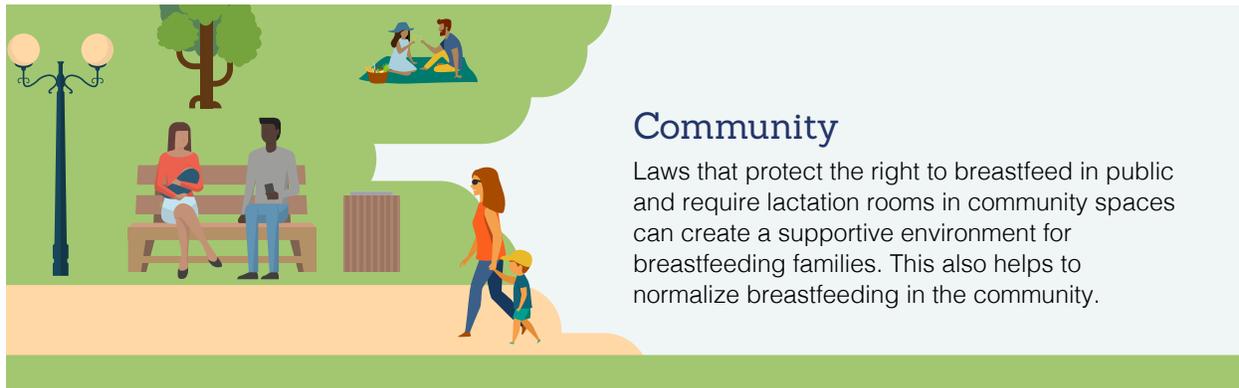
## Integration of Breastfeeding into Other Health Initiatives

### Obesity Prevention

Obesity and being overweight are an increasingly important issue in the U.S. population. Obesity affects almost 40% of adults in the Nation and contributes to the rising costs of many chronic diseases, including heart disease, stroke, type 2 diabetes and certain types of cancer.<sup>347</sup> Research shows that breastfeeding could be a protective factor. Studies conducted by AHRQ report an association between being breastfed and a reduced risk of being overweight or obese in adolescence and adult life.<sup>348</sup> Exclusive breastfeeding appears to have an even stronger correlation than combining breastfeeding with formula feeding. The incidence of childhood overweight and obesity was lower among infants exclusively breastfed for the first 6 months of life.<sup>349</sup> Studies that quantified breastfeeding exclusivity and duration showed a stronger protective association against childhood obesity. Based on these data, breastfeeding support is increasingly included in federal initiatives to address the obesity epidemic. States have also identified breastfeeding as an important initial step in preventing early childhood obesity, and encouraged steps to promote breastfeeding, such as working with WIC programs to provide information and resources and supporting breastfeeding in workplaces and communities.<sup>350, 351</sup>

### Common Community Measures for Obesity Prevention

In 2009, CDC released a set of 24 recommended strategies and associated measures aimed at reducing the prevalence of obesity.<sup>352</sup> Communities and local governments can use these measures, known as the Common Community Measures for Obesity Prevention, to plan and monitor environmental and policy-level changes for obesity prevention. An expert panel identified the 24 recommended strategies, including encouraging breastfeeding.



## Breastfeeding in Public Places

Various legal protections are provided for lactating mothers to protect their right to breastfeed in public places. At the federal level, women are permitted to breastfeed at any location in a federal building or on federal property, so long as the woman and child are otherwise allowed to be present in the location.<sup>353</sup> At the state level, protections vary. All 50 states, the District of Columbia, the Virgin Islands, and Puerto Rico have laws permitting women to breastfeed in public locations, and for most states, also in private locations.<sup>354,355</sup> In 30 states, plus the District of Columbia, the Virgin Islands, and Puerto Rico, breastfeeding is exempt from public indecency laws.<sup>356</sup> For example, Kentucky state law specifies that breastfeeding should not be considered “an act of public indecency ... [or] indecent exposure, sexual conduct, lewd touching, or obscenity.”<sup>357</sup>

### Enforcement

While state laws support a woman’s right to breastfeed in public places, many of these laws lack enforcement provisions. As of 2016, just 10 states (Connecticut, Hawaii, Illinois, Massachusetts, Michigan, New Jersey, Rhode Island, Vermont, Washington, and Wisconsin) along with the District of Columbia and Puerto Rico permitted breastfeeding mothers to bring legal action against persons or organizations that have interfered with their right to breastfeed in public.<sup>358,359</sup> In Louisiana, New Hampshire, and Vermont, women whose rights to breastfeed in public have been violated may file claims with the state’s human rights commission.<sup>360,361,362</sup> In New Jersey, a local health board may fine an owner, manager, or other person in control of a public accommodation that has violated the state’s law permitting breastfeeding in public.<sup>363</sup> The fine under New Jersey state law is \$25 for the first offense, a maximum of \$100 for the second offense, and a maximum of \$200 for each subsequent offense.

A Kentucky bill proposed in January 2017 and pre-filed for 2019 (since it failed to pass previously) would add an enforcement provision to the state's public breastfeeding law.<sup>364</sup> Under that proposed legislation, breastfeeding mothers could report violations to local, independent, or county health departments. In turn, the health departments would be required to conduct an investigation, including fining the violator \$500 for a first offense and \$1,000 for each subsequent offense.

### Lactation Accommodations

As described above, some states have laws that support expressing breast milk in certain locations, such as schools, child care facilities, and places of employment. Other laws require airports, correctional facilities, and government buildings to accommodate breastfeeding families.

Air travel can pose specific challenges for breastfeeding mothers, because most airports lack proper facilities for expressing milk. In 2014, a phone survey of customer service representatives at 100 U.S. airports found only 8% provided a private lactation room.<sup>365</sup> Two states (Illinois and California) require airports to have at least 1 lactation facility at each terminal behind the airport security screening area.<sup>366</sup> In 2018, the 5-year reauthorization of the Federal Aviation Administration (FAA) included language requiring airports to provide lactation rooms accessible to the public. The provisions came from the bipartisan Friendly Airports for Mothers (FAM) Act.<sup>367</sup> As a result, all large- and medium-sized airports are now required to provide a clean, private, non-bathroom space in each terminal for the expression of breast milk. The space must be accessible to persons with disabilities, available in each terminal building after the security checkpoint, and include a place to sit, a table or other flat surface, and an electrical outlet. The FAA Reauthorization also required airports to provide a baby changing table in 1 men's and 1 women's restroom in each passenger terminal building.

Federal legislation also addresses issues of expressed breast milk being transported through airports through the provisions of the Bottles and Breastfeeding Equipment Screening Act (BABES Act), signed into law in 2016.<sup>368</sup> This law requires the Transportation Safety Administration (TSA) to provide "training to ensure its officers consistently enforce TSA Special Procedures related to breast milk, formula, and infant feeding equipment across all airport security checkpoints."<sup>369</sup>

### Government Buildings

Government buildings and correctional facilities may provide some opportunities for lactation support. Louisiana law required rooms for lactation, other than a toilet stall, be built in 20 state buildings on or before July 1, 2016.<sup>370</sup> As mentioned previously, mothers may breastfeed at any location in a federal building or on federal property if the woman and child are otherwise legally authorized to be present.<sup>371</sup> In February 2019, U.S. Representative Eleanor Holmes Norton (DC-At large) introduced H.R. 866: Fairness for Breastfeeding Mothers Act of 2019, which would require certain public buildings to include a lactation room.<sup>372</sup>

### Breastfeeding and the Courts

Furthermore, 19 states and Puerto Rico either exempt breastfeeding mothers from jury duty or permit mothers to postpone such service.<sup>373</sup> A few states limit the exemption for a specific time (e.g., California limits the exemption for 1 year, but allows for further exemption upon request).<sup>374,375</sup> Other states permit the exemption for women with babies under a certain age (e.g., South Dakota permits the exemption for mothers nursing a baby under age 1)<sup>376</sup> or permit the exemption until the mother is no longer breastfeeding (e.g., Kansas).<sup>377</sup>

## Emerging Trends

### Breastfeeding Accommodations in Correctional Facilities

The number of women incarcerated or involved with the criminal justice system in the U.S. has increased 750% from 1980 to 2017.<sup>378</sup> In addition, approximately 4% of women who enter prisons and jails are pregnant.<sup>379</sup> Given the unique needs of this population, states have been exploring ways to ensure that women who are incarcerated can continue breastfeeding or pumping. At least 11 states and the U.S. Federal Bureau of Prisons operate nursery programs that allow infants and young children to remain with their mothers for a period of time ranging from 30 days to up to 6 years.<sup>380</sup> This may facilitate breastfeeding: researchers who compared experiences of women in a prison nursery program in Indiana with experiences of women who gave birth in the same prison before the program was established found that 60% of women in the prison nursery program breastfed, while only 33% of the previous group did.<sup>381</sup>

In addition to prison nursery programs, explicit legal protections and policies in correctional institutions enable incarcerated women to breastfeed their children. In 2017, a district court judge in New Mexico determined that an incarcerated woman has a constitutional right to breastfeed, and that a correctional facility could not unreasonably prevent her from doing so.<sup>382</sup> While that case is still on-going, in 2019, New Mexico passed a law that requires women's correctional facilities to "develop and implement a breastfeeding and lactation policy for lactating female inmates that is based on current accepted best practices."<sup>383</sup> The law requires each policy to include provisions for:

- Pumping milk, including access to electric breast pumps, storage for expressed milk, and means to transport or dispose of expressed milk
- Continuing medication-assisted addiction treatment
- Breastfeeding in any facility that accommodates skin-to-skin contact visits, as well as in all facilities operated jointly by the corrections department and children, youth and families department
- Offering medically appropriate care related to cessation of lactation or weaning at the preference of the lactating woman<sup>384</sup>

Washington State also passed a law in 2018, which allows, but does not require, correctional facilities to "make reasonable accommodations for the provision of available midwifery or doula services."<sup>385</sup> These services may include breastfeeding assistance.<sup>386</sup>

Even in the absence of state laws or requirements, correctional facilities can also develop institutional policies and provide resources to accommodate lactating inmates. For example, prior to the passage of New Mexico's law, Bernalillo County Metropolitan Detention Center had already approved an inmate breastfeeding policy.<sup>387</sup> Taking a similar approach, the Alabama Prison Birth Project (APBP) coordinates the Mother's Milk Initiative. New mothers inside Alabama's Julia Tutwiler Prison for Women, if they wish and are healthy, may express breast milk for their infants once they return to prison after giving birth.<sup>388</sup> The prison established a lactation room where breastfeeding mothers can pump breast milk, and APBP then coordinates delivery of the milk to the infant's caregiver.<sup>389</sup>

## Dietary Guidelines and Recommendations for 0-2 years

Every 5 years, the Dietary Guidelines for Americans (DGA) is released jointly by the USDA and HHS.<sup>390</sup> The guidelines provide nutrition and food-based recommendations for health promotion and disease prevention for individuals 2 years and older; however, comparable guidance is not provided for pregnant women, or infants and toddlers under 2 years of age. The DGA contain nutritional and dietary information for the general public; is promoted by each federal agency carrying out federal food, nutrition, or health programs (WIC, SNAP, School Lunch, etc.); and forms the basis for many federal, state, and local nutrition policies.

In 2012, the USDA and HHS initiated a project referred to as the “B-24 project.” HHS’s ODPHP and USDA’s Center for Nutrition Policy and Promotion (CNPP) partnered with NIH to explore research gaps, data needs, and potential systematic review questions for future dietary guidance for the birth-to-24-month age population. Dietary intake during gestation and from birth through 2 years affects health outcomes throughout the lifespan. Therefore, the 2014 U.S. Farm Bill mandated that beginning with the 2020-2025 edition the DGA include for the first time guidance for infants and toddlers (from birth to age 24 months), and pregnant or lactating women.<sup>391</sup> In response, USDA and HHS adjusted the purpose, timeline, and scope of the B-24 project (and renaming it the “Pregnancy and Birth to 24 Months project,” or “P/B-24 project”). This project was a joint initiative led by USDA and HHS in collaboration with a panel of experts brought together by the National Academies of Science, Engineering and Medicine.<sup>392</sup> The goal of P/B-24 project was to conduct systematic reviews on diet and health of public health importance for the priority population.

In support of the P/B-24 project, a team of scientists comprising the Nutrition Evidence Systematic Review<sup>393</sup> of USDA’s Center for Nutrition Policy and Promotion (CNPP) conducted and published systematic reviews. The reviews were conducted on specific topics related to dietary intake before and during pregnancy, infant milk feeding practices, complementary feeding, flavor exposures, and infant/toddler feeding practices. The project was completed in 2018, and the systematic reviews were published in the American Journal of Clinical Nutrition.

Throughout the reviews, relationships were observed between P/B-24 diet exposures and a variety of outcomes of public health importance.<sup>394</sup> Evidence showed links to health outcomes involving dietary intake before and during pregnancy, during the period of human milk or infant formula feeding, and after introduction of complementary foods and beverages.

Additionally, the reviews on flavor exposure and infant/toddler feeding practices highlight the importance of maternal diet during pregnancy and lactation, along with caregiver feeding strategies and practices. The next iteration of the DGA, expected to be released in 2020, will be informed by these systematic reviews. Recommendations of the Dietary Guidelines affect policy, since they influence the direction of critical government programs and services at all levels. The inclusion of pregnant women and infants and children from birth to 24 months for the first time may result in new opportunities to consider how laws and policies can help this cohort meet the new dietary guidelines.

## Building the Evidence Base: Areas for Additional Research

This report highlights many evidence-based approaches to promote and support breastfeeding. The SGCTA proposed in Action 17 and 18 the need to increase funding for high-quality research, as well as to strengthen capacity for conducting such research.<sup>395</sup> However, research gaps make it difficult to systematically assess the effectiveness of legal and policy approaches to promote breastfeeding. For example, AHRQ noted the absence of studies assessing the benefit of workplace or school-based interventions that fit their Comparative Effectiveness Report's inclusion criteria.<sup>396</sup> Multiple opportunities to build and improve the evidence-base are identified below.

### General Data Priorities

- Standardize collection of population-level infant feeding data, such as within electronic medical records or via an administrative code at pediatric well-child visits. Such data would enable analysis of population-level effects of policy and practice changes on infant feeding outcomes; and should include information on race, ethnicity, and socioeconomic status to allow analysis of disparities. Outcomes of interest include initiation of breastfeeding, exclusive in-hospital breastfeeding, exclusive breastfeeding through 6 months of life, and any breastfeeding through 2 years of life.
- Another area of interest would be population-level data on maternal experience of breastfeeding and satisfaction with support.

## Maternity and Pediatric Care Practices

- Quantify the extent to which implementation of the Ten Steps affects the following:
  - Disparities in breastfeeding continuation
  - Population-level breastfeeding rates
  - Incidence of infant ear infections and gastrointestinal illness, between infants born at facilities implementing the Ten Steps vs. those who were not
  
- Quantify the extent to which state designations and/or BFHI designations for maternity centers are associated with improved breastfeeding outcomes in the population served
- Test the extent to which breastfeeding-friendly clinic programs improve outcomes and determine best practices for disseminating effective programs.
- Compare the effectiveness of different types of training for physicians, midwives, nurses, and other health professionals throughout the continuity of care on breastfeeding outcomes.
- Assess processes for accessing breastfeeding supplies (such as breast pumps) in a timely fashion, determine the extent to which barriers to access derail breastfeeding, and determine best practices for provision of such supplies.
- Conduct comparative-effectiveness studies to determine which types of lactation-support providers are effective in different clinical contexts. Comparisons of interest might include the following:
  - Peer counselors vs. IBCLCs
  - IBCLC with Registered Nurses vs. IBCLC with Registered Dietitians vs. IBCLC alone
  - Clinical effectiveness of lactation support from IBCLCs, Certified Lactation Counselors, Certified Lactation Educators, WIC peer counselors, and other lactation professionals, both isolated and in a smooth triage/referral team context
  
- Evaluate the effect of licensure on non-licensed, community-based providers, and the communities they serve.
- Quantify the effect of licensure of lactation-support professionals on uptake of lactation services and breastfeeding outcomes.

- Quantify the extent to which changes in access to lactation support and supplies are associated with improved breastfeeding outcomes among populations served. Access would include coverage of these services as a preventive service via the Affordable Care Act and state waiver programs to provide coverage through Medicaid.
- Quantify the extent to which removing formula marketing from health care settings improves breastfeeding outcomes.

### Paid Family Leave

- Evaluate the effect of implementing paid-leave programs on overall breastfeeding rates, as well as disparities.

### Workplace and Child Care

- Evaluate the effect of breastfeeding-friendly child care practices on outcomes, such as the following:
  - Duration of providing mother's milk to infants in the child care facility
  - Continuation of breastfeeding at 3, 6, and 12 months postpartum
- Evaluate the extent to which babies-at-work programs are associated with improved breastfeeding rates and greater employee retention and productivity, compared with traditional child care models.
- Improve national surveillance efforts; consider developing a national monitoring system to better assess workplace policies and practices that affect breastfeeding employees; and improve the tracking of lactation support at workplace and child care.
- Evaluate the effect of state workplace accommodation laws on population-level breastfeeding rates, including:
  - Using a difference-in-difference analysis, measure the extent to which enactment of workplace accommodation laws is associated with increased breastfeeding intensity and duration.
  - Partner with large employer human resources departments to collect employee longitudinal data on breastfeeding outcomes, and measure the effect of employer support on breastfeeding outcomes.

- Qualitatively review EEOC complaints that have been filed related to lactation workplace discrimination to understand common themes and barriers, along with areas needing additional implementation support.
- Examine the landscape for lactation accommodation in school settings, for students and faculty, to identify common barriers and best practices.
- Further research the effects of breastfeeding law and policies on people with different race, ethnicity, geographic, and socio-demographic characteristics. Research inequities in these laws and policies, their implementation, and effect on breastfeeding rates with an aim toward narrowing disparities.

### Integration with Public Health Strategies

- Characterize breastfeeding training and integration in Title V Maternal and Child Health federal block grant programs as a potential food justice issue, including quantifying program personnel knowledge, attitudes, and beliefs. Determine the extent to which breastfeeding integration is associated with outcomes among Title V program participants. Title V is a key source of support for promoting and improving the health and well-being of the nation's mothers, children, including through breastfeeding, funding 59 states and jurisdictions. Therefore, states have flexibility in how Title V funds are used to support a wide range of activities that address state and national needs.
- Further research to determine evidence-based approaches to providing adjunctive support for breastfeeding women with mental health and substance use conditions, with specific attention to the impact of breastfeeding on rates of substance use relapse, postpartum depression, and loss of custody.

### Accommodation in Public Spaces

- Assess effective approaches for training retail staff, public safety officers, and others on breastfeeding public accommodation laws, and on managing customer complaints about public breastfeeding; define best practices.

- Quantify use of breastfeeding spaces in transportation stations (airports, bus/train stations, etc.) and identify opportunities to improve access.
- Measure the extent to which different public accommodation laws and implementation strategies affect maternal comfort with breastfeeding in public and breastfeeding outcomes.

## Opportunities to Further Support Breastfeeding

The HP2020 objectives related to breastfeeding set ambitious targets for the decade. While ambitious, 3 of the targets (initiation, continued breastfeeding at 12 months, and exclusive breastfeeding through 3 months) have already been met, at least in part due to the use of laws and policies. These tools can continue to play an important role in helping improve rates of breastfeeding and to support mothers and their infants. This report discussed many evidence-based approaches to achieving these national goals. The following approaches could help to accelerate process to meeting these targets:

- Promote coverage of lactation-support providers and timely access to the appropriate and necessary breastfeeding equipment and supplies for each person.
- Encourage incorporation of the Ten Steps and breastfeeding-friendly maternity care as the standard of care via state regulations for maternity hospital licensure or as a requirement for CMS/private payer reimbursement.
- Collect data on breastfeeding outcomes in clinical care and administrative processes to facilitate quality improvement and policy evaluation.
- Encourage incorporation of breastfeeding-friendly care in specialized treatment settings, such as substance use and mental health treatment settings.
- Consider elimination of formula marketing in health care settings.
- Encourage increased access to workplace accommodations for breastfeeding employees, including break time, access to a clean private space, and other accommodations as necessary.

- Determine whether different legal and policy approaches to support breastfeeding have varying effects among different populations, and help to promote cultural competence, eliminate racial bias, and encourage equity.
- Consider whether laws or policies can be strengthened to help ensure that breastfeeding mothers are protected from being fired or discriminated against in the workplace via pregnancy accommodation/nondiscrimination legislation with explicit inclusion of lactation in the statutory language.
- Increase access to paid, job-protected family and medical leave that is affordable and cost-effective for workers, employers, and the government.
- Study the development and implementation of baby-at-work policies to encourage continuation of breastfeeding.
- Incorporate coverage for breastfeeding support and supplies as part of standard medical insurance coverage, by both public and private payors.
- Consider extending breastfeeding protections in the Affordable Care Act beyond 1 year through the full duration of desired breastfeeding.

## Conclusion

Breastfeeding is a proven primary prevention strategy, building a foundation for lifelong health and wellness. The evidence for the value of breastfeeding to children's and women's health is scientific, solid, and continually being reaffirmed by new research, reinforcing the connections between breastfeeding and a broad spectrum of other health topics and initiatives. Individuals and organizations across the United States are working to meet and exceed the targets for the following HP2020 breastfeeding objectives:

- MICH-21: Increase the proportion of infants who are breastfed.
  - MICH-21.1: Increase the proportion of infants who are ever breastfed.
  - MICH-21.2: Increase the proportion of infants who are breastfed at 6 months.
  - MICH-21.3: Increase the proportion of infants who are breastfed at 1 year.
  - MICH-21.4: Increase the proportion of infants who are breastfed exclusively through 3 months.
  - MICH-21.5: Increase the proportion of infants who are breastfed exclusively through 6 months.
- MICH-22: Increase the proportion of employers that have worksite lactation support programs.
- MICH-23: Reduce the proportion of breastfed newborns who receive formula supplementation within the first 2 days of life.
- MICH-24: Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies.

The effect of this work extends far beyond these 8 objectives. The cross-cutting, collective impact of breastfeeding means that supporting its success creates a tidal wave of progress toward our Nation's health goals, addressing a range of negative health outcomes (including obesity, certain cancers, and diabetes) for both mothers and children.

While more than 4 of 5 new mothers initiate breastfeeding, a variety of factors influence whether they are able to reach their personal breastfeeding goals. As demonstrated in this report, families across the

United States have varying levels of access to breastfeeding-supportive maternity care practices, lactation-support providers, paid family leave, workplace accommodations, and community support. Families continue to face multiple barriers to breastfeeding success in health care settings, in their communities, at work, and beyond. In addition, racial and geographic disparities in breastfeeding rates highlight systems-level inequities in breastfeeding-supportive environments. These barriers make the choice to breastfeed much more difficult. Legal and policy interventions are needed to address these barriers to ensure that all women and families have that choice.

Supporting breastfeeding families through law and policy helps maximize our public health dollars to address the high rates of acute and chronic disease, rising health care costs, and racial and geographic disparities that plague our Nation. To address these issues, today's public health practitioners are equipped with evidence-based strategies that increasingly recognize the value of multisector collaborative efforts.

This report offers evidence about how specific laws and policies are helping to move our Nation toward the HP2020 breastfeeding targets. It summarizes existing laws and policies that affect breastfeeding families, and highlights national and state initiatives that demonstrate emerging trends in breastfeeding support. The information gathered within these pages may offer guidance for public health professionals, educators, and policy makers on strategies that can enable more mothers to initiate and sustain breastfeeding.

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