

Strategies to Prevent Obesity and Other Chronic Diseases

# The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies



National Center for Chronic Disease Prevention and Health Promotion  
Division of Nutrition, Physical Activity, and Obesity



## For Free Copies

### Download

<http://www.cdc.gov/breastfeeding>

### E-mail

[cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov)

### Write

The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies  
Centers for Disease Control and Prevention  
1600 Clifton Rd.  
Atlanta, GA 30333

### Call

1-800-CDC-INFO (1-800-232-4636); TTY: 1-888-232-6348

## Suggested Citation

Centers for Disease Control and Prevention. *Strategies to Prevent Obesity and Other Chronic Diseases: The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies*. Atlanta: U.S. Department of Health and Human Services; 2013.

Web site addresses of nonfederal organizations are provided solely as a service to readers. Provision of an address does not constitute an endorsement of this organization by CDC or the federal government, and none should be inferred. CDC is not responsible for the content of other organizations' Web pages.

**Strategies to Prevent Obesity and Other Chronic Diseases**

# **The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies**

**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
CENTERS FOR DISEASE CONTROL AND PREVENTION  
NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION  
DIVISION OF NUTRITION, PHYSICAL ACTIVITY, AND OBESITY**



# Contents

- Using This Guide ..... 1
- Introduction ..... 3
- Strategy 1. Maternity care practices ..... 5
- Strategy 2. Professional education..... 11
- Strategy 3. Access to professional support..... 15
- Strategy 4. Peer support programs ..... 19
- Strategy 5. Support for breastfeeding in the workplace ..... 23
- Strategy 6. Support for breastfeeding in early care and education..... 29
- Strategy 7. Access to breastfeeding education and information ..... 33
- Strategy 8. Social marketing ..... 37
- Strategy 9. Addressing the marketing of infant formula ..... 43
- References ..... 47





## Using This Guide

This document provides guidance for public health professionals and others on how to select strategies to support breastfeeding mothers and increase breastfeeding rates. It offers the most relevant information on each type of strategy. The discussion of each strategy follows the outline defined here.

### Strategy

Describes an environmental change or activity intended to prevent disease or promote health in a group of people, also referred to as an *intervention* or *approach*. Criteria for inclusion of a strategy in this document are a rationale supporting the strategy and examples of implemented programs.

### Definition

Briefly describes the strategy.

### Rationale

Explains why the particular strategy is important to efforts to support breastfeeding mothers and increase breastfeeding rates.

### Evidence of Effectiveness

Draws on peer-reviewed literature and current practice to summarize the evidence of the strategy's effectiveness.

### Key Considerations

Includes information that may be important to keep in mind during the planning, implementation, or evaluation phases of a strategy.

### Action Steps

Identifies specific activities for each strategy that public health professionals can take to implement strategies in specific settings, including communities, schools, child care facilities, work sites, and medical care facilities.

### Program Examples

Includes examples of programs that use the strategy as a way to support and increase breastfeeding. Program examples were selected from interventions described in other publications, such as peer-reviewed journals or program reports, or identified by key informants and through Internet searches. Readers should review these examples for local applicability and evidence of effectiveness.

### Resources

Guides the reader to additional materials and information that might be useful in planning, implementing, or evaluating the strategy. Many of the examples and success stories in this document reflect programs conducted by organizations outside of the Centers for Disease Control and Prevention (CDC) and the federal government without CDC or federal funding. These examples are provided for illustrative purposes and do not constitute a CDC or federal government activity or endorsement. Readers should review these examples for local applicability and evidence of effectiveness.





## Introduction

Research has shown that breastfeeding is recognized as the best source of nutrition for most infants. In 2007, the Agency for Healthcare Research and Quality (AHRQ) published a summary of systematic reviews and meta-analyses on breastfeeding and maternal and infant health outcomes in developed countries.<sup>1</sup> The AHRQ report reaffirmed the health benefits of breastfeeding and the health risks associated with formula feeding and early weaning from breastfeeding. Infants who are not breastfed experience more episodes of diarrhea, ear infections, and lower respiratory tract infections and are at higher risk of sudden infant death syndrome, diabetes, and obesity. Breastfeeding also helps protect mothers from breast and ovarian cancer.<sup>1</sup>

To help support breastfeeding mothers and increase breastfeeding rates in the United States, the U.S. Surgeon General released *The Surgeon General's Call to Action to Support Breastfeeding* in 2011. The *Call to Action* sets out clear action steps that communities, health care systems, health care providers, employers, public health

professionals, and other organizations and individuals can take to support mothers and make breastfeeding easier.

This publication, *Strategies to Prevent Obesity and Other Chronic Diseases: The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies*, provides information on interventions and programs that address many of the steps called for by the U.S. Surgeon General. These interventions and programs also are designed to meet many of the health objectives set forth in *Healthy People 2020*. This 10-year national health agenda provides a framework for health promotion and disease prevention for the United States. It includes new objectives to increase breastfeeding rates and improve outcome measures specific to work sites and maternity care.

These objectives are in addition to CDC's ongoing goal of decreasing disparities in breastfeeding rates and increasing collaboration between partners at federal, state, and community levels to overcome breastfeeding challenges.

<b>Healthy People 2020 Objectives</b>		
<b>Maternal, Infant, and Child Health (MICH) Objectives</b>	<b>Baseline</b>	<b>Target</b>
<b>MICH 21: Increase the proportion of infants who are breastfed</b>		
Ever	74.0%	81.9%
At 6 months	43.5%	60.6%
At 1 year	22.7%	34.1%
Exclusively through 3 months	33.6%	46.2%
Exclusively through 6 months	14.1%	25.5%
<b>MICH 22: Increase the proportion of employers that have work-site lactation support programs</b>	25.0%	38.0%
<b>MICH 23: Reduce the proportion of breastfed newborns who receive formula supplementation within the first 2 days of life</b>	24.2%	14.2%
<b>MICH 24: Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies</b>	2.9%	8.1%



Many types of interventions have been implemented in the United States and in other parts of the world to try to increase breastfeeding initiation and duration, as well as exclusive breastfeeding. The strategies described in this guide focus on policy and environmental changes that are designed to increase support for women who choose to breastfeed and to increase the number of women who choose to breastfeed. Strategies were selected on the best available evidence, as well as the knowledge and expertise of the authors and CDC partners, including breastfeeding experts and members of state breastfeeding coalitions.

Because formal evaluation of breastfeeding interventions is not widespread, this guide includes some practices and interventions that have not been formally evaluated but which have an established history of use or a strong rationale for use. These strategies are included because this guide is intended to provide information on all major types of interventions known to have been implemented to promote and support breastfeeding.

Some interventions have been shown to be effective when they were evaluated as components of multifaceted interventions. CDC does not discourage the use of individual interventions with limited evidence of effectiveness, but recommends that if they are used, they should be formally evaluated before they are widely disseminated.

The planning process for any new breastfeeding intervention should include a process for formal evaluation. Evaluation results should be disseminated broadly, especially in peer-



reviewed journals, to increase the evidence base for breastfeeding interventions and help other decision makers choose effective strategies to support and increase breastfeeding.

This guide is best used as an introduction to the many interventions that have been developed to protect, promote, and support breastfeeding. Readers can review the program examples, resources, and references or contact the organizations involved for more information about specific interventions.

## Strategy 1. Maternity Care Practices

### Definition

Maternity care practices related to breastfeeding take place during the intrapartum hospital\* stay and include practices related to immediate prenatal care, care during labor and birthing, and postpartum care.

Maternity care practices that support breastfeeding include developing a written breastfeeding policy for the facility, providing all staff with education and training on breastfeeding, maintaining skin-to-skin contact between mother and baby after birth, encouraging early breastfeeding initiation, supporting cue-based feeding, supplementing with formula or water only when medically necessary, and ensuring postdischarge follow-up.<sup>2-6</sup> Maternity care practices that can have a negative effect on breastfeeding include using medications during labor and giving formula, water, or sugar water to breastfeeding infants when not medically necessary.<sup>2,3,7-11</sup>

\* We use the term *hospital* to include hospitals, birthing clinics, and freestanding birth centers.

### Rationale

The maternity care experience can influence both breastfeeding initiation and later infant feeding behavior. In the United States, nearly all infants are born in a hospital, and even though their stay is typically short,<sup>12</sup> events during this time have a lasting effect. Breastfeeding is an extremely time-sensitive activity. Experiences with breastfeeding in the first hours and days of life are significantly associated with an infant's later feeding.<sup>3</sup>

Because of its relationship with the birth experience, breastfeeding should be supported throughout the entire maternity hospital stay, not postponed until the infant goes home.

Many of the experiences of mothers and newborns in the hospital and the practices in place there affect breastfeeding success. In most cases, these experiences reflect routine practices at the facility level. Routine medications and procedures received by mothers during labor can affect the infant's behavior at the time of birth, which in turn affects the infant's ability to suckle at the breast.<sup>7-10</sup>

### Time Periods for Pregnancy and Childbirth

The *prenatal* period is the time during pregnancy but before childbirth.

The *peripartum* or *perinatal* period is the time surrounding childbirth. It is generally considered to include pregnancy and several weeks after childbirth.

The *intrapartum* period is the time just before, during, and after childbirth. It is generally considered to be the time from the onset of true labor until the birth of the infant and delivery of the placenta.

The *postpartum* period is the time shortly after childbirth. It is generally considered to include the first 6 weeks after childbirth.

Infants whose first breastfeed is delayed because of being weighed, measured, and cleaned do not breastfeed as long as infants who are immediately put skin-to-skin with the mother or put to the breast within the first hour after birth.<sup>5,13</sup>



In addition, mothers who “room in” with their infants, rather than having the infant taken to a nursery at night, will have more chances to learn feeding cues and practice breastfeeding because of the infant’s proximity.

## Evidence of Effectiveness

A Cochrane review of studies designed to evaluate the effectiveness of interventions to promote the initiation of breastfeeding found that institutional changes in maternity care practices effectively increased breastfeeding initiation and duration rates.<sup>14</sup> In 1991, the World Health Organization (WHO) and the United Nations Children’s Fund (UNICEF) established the Baby-Friendly Hospital Initiative (BFHI), which supports and recognizes hospitals and birthing centers that offer an optimal level of care for infant feeding by following the BFHI’s Ten Steps to Successful Breastfeeding. These steps are practices that hospitals can implement that have been shown to improve breastfeeding outcomes.<sup>4,15,16</sup> The American Academy of Pediatrics (AAP) endorsed the BFHI in 2009.<sup>17</sup>

Multiple studies have demonstrated improved breastfeeding outcomes when hospitals adopt these steps. Educating hospital staff through an 18-hour UNICEF training program has been shown to enhance compliance with optimal maternity care practices and increase breastfeeding rates.<sup>18</sup> Immediate skin-to-skin contact between mother and infant has been associated with longer duration of breastfeeding.<sup>5,13</sup> In contrast, supplemental feeding of breastfed newborns negatively affects overall infant health and breastfeeding outcomes.<sup>1–3,11</sup>

Birth facilities that have achieved the Baby-Friendly designation typically experience an increase in breastfeeding rates.<sup>16</sup> A relationship has been found between the number of BFHI steps in place at a hospital and a mother’s

### Baby-Friendly Hospital Initiative: Ten Steps to Successful Breastfeeding<sup>15</sup>

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within 1 hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
6. Give newborn infants no food or drink other than breast milk, unless medically indicated.
7. Practice “rooming in”—allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no pacifiers or artificial nipples to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them upon discharge from the hospital or clinic.

breastfeeding success.<sup>3,6</sup> One study found that mothers who stayed in hospitals that did not follow any of the steps were eight times as likely to stop breastfeeding before their infants were 6 weeks old as mothers who stayed at hospitals that followed six of the steps.<sup>3</sup> In a randomized trial of maternity hospitals and clinics in Belarus, regardless of the type of facility, those that received the Baby-Friendly designation reported improved breastfeeding rates and health outcomes for infants and mothers, as well as greater patient and staff satisfaction.<sup>4</sup>



Other birthing practices not included in the Ten Steps to Successful Breastfeeding may also have an effect on breastfeeding. For example, lower breastfeeding rates have been found among infants whose mothers were given labor analgesics<sup>8,9</sup> or epidural anesthesia<sup>7,10</sup> or who had a surgical (cesarean) birth.<sup>19–21</sup> Women who experience these procedures may need extra breastfeeding support.<sup>22</sup> In addition to implementing the Ten Steps to Successful Breastfeeding to become designated as Baby-Friendly, hospitals must also abide by WHO's *International Code of Marketing of Breast-milk Substitutes*, which prohibits distribution of gift bags with formula or other materials that promote formula.



A 2000 Cochrane review found that distributing samples of infant formula to new mothers negatively affected exclusive breastfeeding.<sup>23</sup> A study in Oregon found that women who breastfed exclusively and who did not receive commercial discharge bags were more likely to exclusively breastfeed for up to 10 weeks than women who received the bags.<sup>24</sup>

## Key Considerations


The Ten Steps to Successful Breastfeeding have been implemented in maternity care facilities worldwide as part of the BFHI. As of May 2013, a total of 166 hospitals and maternity care facilities in the United States carry the BFHI designation. However, this number covers only about 7% of all U.S. births. Hospital officials should consider the following issues when they apply to be designated as Baby-Friendly:

- Designation as a BFHI facility requires that the facility demonstrate adherence to all Ten Steps to Successful Breastfeeding and WHO's *International Code of Marketing of Breast-milk Substitutes* to outside evaluators.

- Each step has detailed requirements.
- Evaluation requires an on-site visit that includes interviews with multiple staff members and patients, as well as reviews of patient charts.
- Many different types of facilities have achieved BFHI status in the United States, from small facilities that serve primarily low-risk, privately insured patients to large facilities that serve mainly high-risk, publicly insured or uninsured patients. All types of hospitals, including comprehensive hospitals, military facilities, and freestanding birth centers, have achieved BFHI status.

Some maternity care practices may be easier to improve than others. Hospitals may choose to make incremental changes while working to improve overall maternity care. For example,

- Incremental changes in maternity care may be easier to achieve, particularly if hospital leaders are unaware of the role that routine maternity care practices can play in supporting breastfeeding.
- Changes can include adding new practices that support breastfeeding, eliminating practices known to negatively affect



breastfeeding, or using some combination of these strategies.

- Incremental steps are not limited to those identified in the Ten Steps to Successful Breastfeeding, but they should be evidence-based.<sup>25</sup>

## Program Examples

### Baby-Friendly USA

Baby-Friendly USA is the organization responsible for designating maternity care facilities as Baby-Friendly in the United States. It works with external evaluators to coordinate all BFHI activities. The BFHI is a global program sponsored by WHO and UNICEF to encourage and recognize hospitals and birthing centers that offer an optimal level of care for infant feeding. The BFHI helps hospitals give mothers the information, confidence, and skills they need to successfully initiate and continue breastfeeding their babies or to feed formula safely, and it gives special recognition to hospitals that have done so.

### National Survey of Maternity Practices in Infant Nutrition and Care (mPINC)

In 2007, CDC completed a national survey of maternity care feeding practices and policies at all facilities in the United States and U.S. territories that provide intrapartum care. Subsequent mPINC surveys have been conducted every 2 years since then. For each survey, facilities receive individualized reports, and states receive aggregated reports. Facility and state leaders use these reports to assess current maternity care efforts and look for ways to make improvements.

The Carolina Breastfeeding Institute used mPINC data as part of a comprehensive, baseline assessment tool for hospitals involved in a breastfeeding-friendly health care project. The program is designed to support efforts by North Carolina hospitals to implement the Ten Steps to Successful Breastfeeding and make sure these efforts are effective and sustainable.

## Action Steps

1. Review state regulations for maternity care facilities to determine if they reflect evidence-based practices or other practices in this report.
2. Sponsor a statewide summit of key decision makers at maternity care facilities to improve maternity care practices across your state.
3. Provide opportunities for hospital staff members to participate in training courses in breastfeeding.
4. Focus on hospitals that serve large numbers of low-income families and those that serve a large portion of your state's population.
5. Create links between maternity care facilities and community breastfeeding support networks across your state.
6. Integrate maternity care into related quality improvement efforts.
7. Encourage hospitals to use The Joint Commission's\* Perinatal Care core measure set to collect data on exclusive breastfeeding.

\* The Joint Commission is an independent organization that accredits and certifies health care organizations and programs in the United States.



St. Dominic's Hospital in Jackson, Mississippi, used its 2007 mPINC data to look for ways to improve its maternity care practices. As a result, the hospital has changed several of its policies and practices, including buying donated human milk and not giving formula to mothers at discharge. The hospital is also changing bedside transition practices to keep infants with their mothers instead of taking them to the nursery for baths, shots, and newborn exams.

### **Colorado Can Do 5! Initiative**

This initiative provides informational sessions to state hospitals and medical centers on five Baby-Friendly steps that are associated with breastfeeding duration.<sup>25</sup> It is a collaborative effort of the Colorado Physical Activity and Nutrition Program, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Colorado Women's Health Unit, and the Colorado Breastfeeding Coalition.

As a result of the initiative, 51 of the state's 55 hospitals have received training. The Colorado Department of Public Health and Environment also manages a Listserv with resources and updates for a network of hospital staff members who provide lactation services.

### **New York State Department of Health**

Officials in New York learned from the results of CDC's National Immunization Survey that the state had the highest proportion of breastfed infants who were receiving supplemental feeding with formula by age 2 days. To address this issue, infant feeding data from the New York Statewide Perinatal Data System were used to rank state hospitals on three breastfeeding indicators: initiation, exclusivity, and formula supplementation of breastfed infants during the birth hospitalization. Each hospital received information about its ranking compared with other hospitals.



The data were also added to the Maternity Information leaflet given to each patient at time of admission and posted on the New York State Department of Health (NYSDOH) Web site.

In addition, the NYSDOH provided every maternity hospital in the state access to the *Ten Steps to Successful Breastfeeding: 18-Hour Interdisciplinary Breastfeeding Management Course in the United States*. They also partnered with the National Initiative for Children's Healthcare Quality to include 12 state hospitals in a quality improvement learning collaborative.

### **Washington State Department of Health**

The Washington State Department of Health's Nutrition and Physical Activity Program funded the Breastfeeding Coalition of Washington to pilot a project to encourage hospitals to



implement evidence-based maternity care practices to improve breastfeeding rates. Yakima Valley Memorial Hospital, which is located in a rural county and serves a population with high rates of health disparities, was chosen for this project. The coalition provided a 1.5-hour training for doctors, hospital administrators, maternity staff, and other staff members.

After the training, the hospital set up the multidisciplinary Promoting Breastfeeding Success Performance Improvement Committee. This committee updated the hospital's breastfeeding policies and procedures, stopped the distribution of commercial discharge bags with formula, and identified three of the Ten Steps to Successful Breastfeeding to focus on.

## Resources

### **Model Breastfeeding Policy**

*Academy of Breastfeeding Medicine*

Provides an example of a breastfeeding policy for hospitals.

<http://www.bfmed.org/Media/Files/Protocols/English%20Protocol%207%20Model%20Hospital%20Policy.pdf>

### **Baby-Friendly USA**

Information about the Baby-Friendly designation process and requirements and a list of all Baby-Friendly facilities in the United States.

<http://www.babyfriendlyusa.org>

### **Breastfeeding-Friendly Healthcare Project**

*Carolina Global Breastfeeding Institute*

Example of efforts to improve maternity care practices.

<http://cgbi.sph.unc.edu/healthcare>

### **National Survey of Maternity Practices in Infant Nutrition and Care (mPINC)**

*Centers for Disease Control and Prevention*

Contains information about and reports from this national survey of maternity care practices and policies.

<http://www.cdc.gov/breastfeeding/data/mpinc/index.htm>

### **Colorado Can Do 5! Initiative**

Promotes five steps that have been shown to affect breastfeeding duration.

<http://www.colorado.gov/cs/Satellite/CDPHE-PSD/CBON/1251639562433>

### **Breastfeeding Promotion Program**

*New York State Department of Health*

Provides breastfeeding resources and information.

<http://www.health.ny.gov/community/pregnancy/breastfeeding>

### **Washington State's Hospital Initiative**

#### **Project: Breastfeeding Partnership in Yakima**

*Washington Department of Health, Nutrition and Physical Activity Program*

Learn more about efforts in Washington to improve hospital practices.

<http://depts.washington.edu/waaction/action/n3/a8.html>



## Strategy 2. Professional Education

### Definition

Professional education includes any program that improves the knowledge, skills, attitudes, or behaviors of health care providers in relation to the importance of breastfeeding, the physiology and management of lactation, or the need for breastfeeding counseling for mothers. Health care providers are defined here as doctors, nurses, midwives, nurse practitioners, nutritionists, lactation consultants, and other health care professionals working in maternity care.

### Rationale

Health care professionals working in maternity care (obstetrics, midwifery, pediatrics, family practice) need in-depth knowledge and skills directly related to breastfeeding and lactation management because 86% of Americans still turn to a health professional, such as a doctor, as their primary source of health information.<sup>26</sup> Other health care providers who interact with women of reproductive age or infants need to recognize that breastfeeding is a normal and biologically important physiologic process that is critical to infant and maternal health, and they need a basic understanding of breastfeeding.

Health care providers can influence a woman's decision to breastfeed and her ability and desire to continue breastfeeding.<sup>27</sup> However, some clinicians lack the skills to help women when they have problems with breastfeeding. Some also believe that breastfeeding provides only modest benefits and that formula-fed babies are just as healthy as breastfed babies.<sup>28</sup> Education to improve health care providers' knowledge, skills, and attitudes in this area is a key step to increasing professional support for breastfeeding.

significant increase in initiation (from 59% to 65%). The training was taught by public health professionals, perinatal clinicians, and peer counselors in three 4-hour sessions. It covered a broad range of breastfeeding topics, from managing hyperbilirubinemia (which causes jaundice) to providing culturally competent care.<sup>29</sup>

To address the lack of breastfeeding knowledge among doctors, the AAP worked with several partners to develop its Breastfeeding Residency Curriculum for medical residents in pediatrics, family medicine, and obstetrics and gynecology. An evaluation of the curriculum found that residents at six intervention sites improved significantly in knowledge, practice patterns, and confidence compared with residents at seven control sites.<sup>30</sup>

The study's results also showed a significant increase in exclusive breastfeeding rates for 6-month-old infants at intervention sites (from 2.3% to 9.0%). At control sites, 6-month-old infants were half as likely to be exclusively breastfeeding after the intervention.<sup>30</sup>

### Evidence of Effectiveness

The results of a recent study on the effects of practitioner education on breastfeeding initiation and exclusivity at four Massachusetts hospitals with low breastfeeding rates found a statistically

## Key Considerations

- Breastfeeding education programs can be provided in person or online and can range from 1-hour lectures to intensive courses that last several weeks. Building skills to help health care providers deal with even routine lactation problems takes a combination of extensive formal instruction and practical experience. Short lectures should only be used to raise general awareness and increase acceptance of breastfeeding and lactation management.
- Health care providers need to be aware of how the procedures they perform or the medications they prescribe can directly or indirectly affect women who breastfeed now or who may do so in the future.
- Nurses often provide the most regular care for breastfeeding mothers and infants. Professional education provided through school curricula, in-service training, and continuing education can help ensure that nurses learn about breastfeeding approaches and techniques.



## Action Steps

1. Make available and coordinate grand rounds or in-service presentations on breastfeeding by health care professionals with training in this area.
2. Distribute clinical protocols developed by experts, such as the Academy of Breastfeeding Medicine, to local doctors.
3. Expand the reach of professional development by providing training.
4. Identify and promote access to evidence-based online and CD-based training courses for the health care workforce.



## Program Examples

### Breastfeeding Promotion in Physicians' Office Practices (BPPOP III)

The AAP's BPPOP III program works to increase doctors' confidence and skills in breastfeeding care. As part of this program, a curriculum was developed to teach residents in pediatrics, family medicine, and obstetrics and gynecology how to promote and manage breastfeeding in

#### World Health Organization Course for BFHI Hospitals

To be designated as Baby-Friendly under the Baby-Friendly Hospital Initiative (BFHI), a facility must train its staff on the topics covered in the WHO course entitled *Section 3: Breastfeeding Promotion and Support in a Baby-friendly Hospital*. The following topics are covered in this course:

- Session 1: BFHI: a part of the Global Strategy
- Session 2: Communication skills
- Session 3: Promoting breastfeeding during pregnancy
- Session 4: Protecting breastfeeding
- Session 5: Birth practices and breastfeeding
- Session 6: How milk gets from breast to baby
- Session 7: Helping with a breastfeed
- Session 8: Practices that assist breastfeeding
- Session 9: Milk supply
- Session 10: Infants with special needs
- Session 11: If baby cannot feed at the breast
- Session 12: Breast and nipple conditions
- Session 13: Maternal health concerns

racially and ethnically diverse populations. The curriculum has seven major sections: advocacy, community outreach and coordination of care, anatomy and physiology, basic skills, peripartum support, ambulatory management, and cultural competency. Technical assistance is provided by the AAP and other experts.

### Educating Physicians In their Communities (EPIC)

The first EPIC training was launched in 2000 in Georgia to give free educational programs on immunization to doctors in private practice. In 2007, the Georgia Chapter of the AAP launched the EPIC Breastfeeding Program. The curriculum for this program is intended to educate health care providers about the most current breastfeeding information available so they can provide optimal care and guidance to breastfeeding mothers.

### A Case Study in Breastfeeding and Human Lactation

This University of Pennsylvania School of Nursing course is for junior and senior nursing students. The course gives students who plan to work with women and infants a way to focus their knowledge in the area of breastfeeding. The course combines classroom and clinical experiences that focus on current research and issues related to breastfeeding.

### Certified Lactation Counselor (CLC) Training Program

The CLC Training Program is a 40-hour course taught at several locations across the United States. It is designed to provide up-to-date, research-based information on lactation, the art of counseling, and comprehensive breastfeeding management. The CLC Training Program also offers continuing education credits for registered nurses, registered dietitians, International Board Certified Lactation Consultants (IBCLCs), and nurse-midwives.



## Resources

### **Breastfeeding Promotion in Physicians' Office Practices (BPPOP III)**

*American Academy of Pediatrics*

Provides information about the BPPOP III professional training program and the locations in the pilot study.

[http://www2.aap.org/breastfeeding/curriculum/curriculum\\_developers.html](http://www2.aap.org/breastfeeding/curriculum/curriculum_developers.html)

### **Academy of Breastfeeding Medicine (ABM)**

The ABM clinical protocols inform providers about the care of breastfeeding mothers and infants.

<http://www.bfmed.org/Resources/Protocols.aspx>

### **Certified Lactation Counselor (CLC) Training Program**

Provides information about the CLC Training Program.

<http://www.healthychildren.cc/CLC.HTM>

### **Educating Physicians In their Communities (EPIC)**

Find out more about EPIC trainings for doctors in Georgia.

<http://www.gaepic.org>

### **International Lactation Consultant Association (ILCA)**

A listing of courses offered by the ILCA.

<http://www.ilca.org>

### **Wellstart International**

Information and resources to improve the knowledge, skills, and abilities of health care providers related to optimal infant and maternal health and nutrition.

<http://www.wellstart.org>

### **Core Competencies in Breastfeeding Care and Services for All Health Professionals**

*United States Breastfeeding Committee*

This document provides health care professionals with guidelines and a framework for integrating evidence-based breastfeeding knowledge, skills, and attitudes into standard health care delivery.

<http://www.usbreastfeeding.org/HealthCare/TrainingforHealthCareProfessionals/CoreCompetencies/tabid/225/Default.aspx>



## Strategy 3. Access to Professional Support

### Definition

Access to support from health care professionals such as doctors, nurses, or lactation consultants is important for the health of the mother during pregnancy, after giving birth, and after release from the hospital. If a mother chooses to breastfeed, this support may include counseling or behavioral interventions to improve breastfeeding outcomes. It may also include helping the mother and baby with latch and positioning, helping with a lactation crisis, counseling mothers returning to work or school, or addressing concerns of mothers and their families.

Professional support can be given in many different ways and settings—in person, online, over the telephone, in a group, or individually. Some women receive individual in-home visits from health care professionals, while others visit breastfeeding clinics at hospitals, health departments, or women's health clinics.

### Rationale

Women's early experiences with breastfeeding can affect whether and how long they continue to breastfeed. Lack of support from professionals is a barrier to breastfeeding, especially among African American women.<sup>31,32</sup> Mothers often identify support received from health care providers as the most important intervention the health care system could have offered to help them breastfeed. However, few health care professionals are adequately trained and experienced in providing breastfeeding support.<sup>33</sup> Short hospital stays after birth mean that the responsibility for breastfeeding support often rests with health care professionals who provide ongoing care, such as primary care doctors and lactation consultants.<sup>32,34</sup> The role of these health care professionals is to give consistent and evidence-based advice and support to help mothers breastfeed effectively and continue breastfeeding.


### Evidence of Effectiveness

A 2005 Cochrane review of support for breastfeeding mothers found that professional support had a significant beneficial effect on exclusive breastfeeding in the first few months after an infant was born.<sup>35</sup> The review also found that professional support had a beneficial effect on breastfeeding duration, but this effect was only significant at 4 months.

A review of breastfeeding interventions in primary care by the U.S. Preventive Services Task Force did not find that individual professional support alone significantly affected breastfeeding outcomes.<sup>36</sup> However, reviewers did find that professional support given as part of a multicomponent intervention during the prenatal and postnatal periods increased short-term exclusive breastfeeding and duration of any breastfeeding.


A randomized controlled trial in Texas was used to determine whether assigning first-generation Hispanic mothers who were feeding their infants both breast milk and formula at age 1 week to a hospital-based breastfeeding clinic would increase exclusive breastfeeding at 1 month. Mothers in the intervention group were offered breastfeeding support from paraprofessionals supervised by a registered nurse or IBCLC. Mothers in this group had significantly higher rates of exclusive breastfeeding than mothers in the control group who did not receive the intervention (16.8% versus 10.4%).<sup>37</sup>

An evaluation of the results of a randomized intervention among primarily low-income Hispanic and African American women in New York City found that women who received two prenatal and one postnatal visit or telephone call



from a lactation consultant were more likely to be breastfeeding at week 20 than women who received standard care (53.0% versus 39.3%).<sup>38</sup> Exclusive breastfeeding rates did not differ between the two groups.

## Key Considerations

- The Patient Protection and Affordable Care Act of 2010 (as amended by the Healthcare and Education Reconciliation Act of 2010 and referred to collectively as the Affordable Care Act) expands insurance coverage, consumer protections, and primary care access in the United States. It also emphasizes prevention in addition to care and treatment. Comprehensive breastfeeding support and counseling from trained providers, as well as access to breastfeeding supplies, for pregnant and nursing women is recommended in comprehensive guidelines from the Health Resources and Services Administration (HRSA).
  - Professional support can be provided during both the prenatal and postpartum periods, but it is particularly critical in the first few weeks after delivery, when lactation is being established.
  - Support may be given by trained doctors, nurses, lactation consultants, or other trained health care professionals. Many third-party payers in the United States do not reimburse for services given by lactation professionals unless they are otherwise eligible for reimbursement as nurses, doctors, or other health care professionals.
  - Lack of reimbursement may be a barrier to seeking professional support for many women because they would have to pay out-of-pocket for this support.
- 
- The Affordable Care Act requires new health plans to cover prenatal and postpartum breastfeeding counseling and supplies. For example, they must cover rental fees for breast pumps at no out-of-pocket cost (e.g., for co-pays, co-insurance, or deductibles). For Medicaid, the Affordable Care Act also provides states the opportunity to earn a one percentage point increase in their federal matching rate (starting on January 1, 2013) if they cover certain recommended immunizations and preventive services for beneficiaries without cost-sharing.
  - Professional support can be given through telephone hotlines or live online chats. Hotlines include those staffed 24 hours a day, 7 days a week; those staffed only during working hours; those that offer call-back support to mothers who leave a message describing their needs; and those with pager services similar to the on-call services used by health care professionals. Some online communities offer live chats with IBCLCs, pediatricians, or other health care professionals.
  - IBCLCs are health care professionals who specialize in the clinical management of breastfeeding. They are certified by the International Board of Lactation



Consultant Examiners, which operates under the direction of the U.S. National Commission for Certifying Agencies. IBCLCs and other lactation professionals work in a variety of health care settings, such as hospitals, private pediatric or other medical offices, public health clinics, and their own private practices.

## Program Examples

### Best Start Three Step Counseling Strategy

This counseling method addresses barriers to breastfeeding through open-ended questions, affirmation, and education. It can be used by a wide range of health care professionals, and it is time efficient. This strategy has been used in WIC clinics to support breastfeeding women.

### SoonerCare

The Oklahoma Health Care Authority administers this state Medicaid program, which covers lactation consultant services for SoonerCare members up to 60 days postpartum. To be reimbursed, lactation consultants must be

licensed by the state as a nurse or dietician and be an IBCLC. Consultations are provided face-to-face in an individual setting, such as in an office, patient's home, or other confidential outpatient location. The program allows six sessions per pregnancy.

### MilkWorks

This nonprofit, community breastfeeding center in Lincoln, Nebraska, was founded in 2001 by a small group of mothers working in the health care field who identified a lack of outpatient breastfeeding services for mothers in the area. Currently, MilkWorks has about 20 part-time employees, including a breastfeeding medicine specialist, IBCLCs, breastfeeding educators, and registered dietitians. Staff provide clinical services to about 1,000 mothers a year at the main location, in homes, and at two inner-city outreach clinics that serve Spanish-speaking and single or young mothers. Nursing, dietetic, child development, and family practice residents work in the clinics to increase breastfeeding knowledge among health care providers.

## Action Steps

1. Collaborate with state Medicaid and insurance commissioners to explore ways to increase access to lactation services.
2. Consider options for developing walk-in breastfeeding clinics that are available to all new mothers in the community and that are staffed by trained breastfeeding professionals who are reimbursed for all services provided.
3. Create comprehensive, statewide networks to provide home-based or clinic-based follow-up care to newborns in the state.
4. Develop and disseminate a resource directory of local lactation support services available to new mothers.
5. Given that the WIC Program serves 53% of all new mothers and infants, ensure that WIC participants have professional services for breastfeeding support in place before they are discharged from the hospital.



### **La Leche League International (LLL)**

The LLLI operates a toll-free telephone helpline (1-877-452-5324) from 9 am to 9 pm CST. Callers are required to leave a message, which is answered by a trained volunteer. The LLLI also has an online help form that women can use to get answers to breastfeeding questions ([http://www.llli.org/help\\_form](http://www.llli.org/help_form)).

### **Harris County Breastfeeding Coalition**

The Harris County Breastfeeding Coalition in Texas set up a hospital-based breastfeeding clinic that is staffed by paraprofessionals supervised by a lactation specialist at Baylor College of Medicine's Ben Taub General Hospital. This clinic provides breastfeeding support to high-risk mothers who are referred by hospital staff or mothers who request this service within 2 weeks of discharge.

Mothers receive counseling and direct assistance from breastfeeding counselors who have completed the Texas Department of Health's lactation management training program. Complex cases are referred to the clinic manager (a registered nurse or IBCLC). Follow-up visits or telephone contact is arranged when problems are not resolved during the initial visit. Mothers are also referred to other sources of breastfeeding support in the community. Support from breastfeeding counselors is provided without charge beyond the costs for infant check-ups.

## **Resources**

### **Breastfeeding and Follow-Up Clinic of Stormont-Vail HealthCare**

Provides professional support through a postdischarge visit by clinic staff in Kansas. <http://www.stormontvail.org/birthplace/>

### **Find a Lactation Consultant**

*International Lactation Consultant Association*

Provides a directory to help mothers find IBCLCs working in private practice and hospitals. <http://www.ilca.org>

### **MilkWorks**

An example of a community breastfeeding center. <http://www.milkworks.org>

### **SoonerCare**

*Oklahoma Health Care Authority*

This state Medicaid program covers lactation consultant services for members up to 60 days postpartum. <http://okhca.org/individuals.aspx?id=3091&menu=44>

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

*Center for Medicaid and CHIP Services*

This issue brief explores how the Centers for Medicare & Medicaid Services can encourage and help states increase access to lactation services. [http://www.medicare.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Lactation\\_Services\\_IssueBrief\\_01102012.pdf](http://www.medicare.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Lactation_Services_IssueBrief_01102012.pdf)





## Strategy 4. Peer Support Programs

### Definition

The goal of peer support is to encourage and support pregnant and breastfeeding women. It is often provided by mothers who are from the same community and who are currently breastfeeding or have done so in the past. It can be provided in several ways. The two most common and effective methods are peer support groups and individual peer support from a peer counselor. Women who provide peer support receive specific training. They may lead support groups or talks with groups in the community or provide one-on-one support through telephone calls or visits in a home, clinic, or hospital. Contact may be made by telephone, in the home, or in a clinical setting. Peer support includes emotional support, encouragement, education about breastfeeding, and help with solving problems.

### Rationale

Women's decision-making processes are highly influenced by their social networks. These networks can be either barriers or points of encouragement for breastfeeding.<sup>39,40</sup> For new mothers, the preferred resource for information about child rearing is other mothers.<sup>41</sup> Advice from friends and family is commonly cited as a reason for decisions about infant feeding, as is knowing someone that has breastfed.<sup>40,42,43</sup> Perceived social support has also been found to predict breastfeeding success.<sup>44</sup>


Women who serve as peer counselors can help other women overcome barriers to breastfeeding and prevent and manage breastfeeding problems during both the prenatal and postpartum periods.<sup>40</sup> For example, peer counselors help pregnant women make informed infant feeding decisions and prepare for the breastfeeding experience. After childbirth, peer counselors provide breastfeeding information, emotional support, nonmedical assistance, and referrals as needed. Peer support may represent a cost-effective, individually tailored approach and culturally competent way to promote and support breastfeeding for women from different socioeconomic backgrounds, especially in places where professional breastfeeding support is not widely available.<sup>36,45,46</sup> Given the importance of peer counseling, many WIC clinics provide this service.

### Evidence of Effectiveness

Systematic reviews of peer support programs have found them to be effective in increasing the initiation, duration, and exclusivity of breastfeeding.<sup>14,35,36</sup> Significant increases in initiation, duration, and exclusivity were observed among women who received support from a peer counselor or other lay person.<sup>35,36</sup> Multifaceted interventions with peer support as one of the main components have also been found to be effective in increasing breastfeeding initiation and duration.<sup>35</sup>

A study conducted in Michigan at WIC clinics among low-income women who asked for peer support compared those who received support with those who did not. Women in the second group did not receive peer support because of a higher demand for services than the clinics could meet. The results of this study demonstrated that women who received the requested services breastfed 2 weeks longer and were 22% more likely to initiate breastfeeding than those who did not receive services.<sup>46</sup>

Studies that compared breastfeeding rates among women who visited WIC clinics that offered peer counseling in Maryland and Missouri with clinics that did not offer counseling found a significantly higher rate of breastfeeding initiation in clinics with counseling.<sup>47,48</sup> Peer support is



effective in many population groups, including disadvantaged, middle-income, and low-income populations. Peer support is considered vital to breaking down barriers to breastfeeding in a woman's social network, especially among groups with low breastfeeding rates.<sup>47,49,50</sup> A randomized controlled trial of a peer support program among low-income Latina women found that women who received individual peer counseling were more likely to be breastfeeding at 1 and 3 months postpartum than those who received only routine breastfeeding support.<sup>45</sup> In addition, more women in the intervention group initiated breastfeeding.

## Key Considerations

- For individual peer support, consider the following:
    - ◆ Timing is important. The first days and weeks of breastfeeding are critical for establishing breastfeeding.
    - ◆ Peer mothers should have the same or a similar sociocultural background as mothers needing support.
    - ◆ Peer support programs have used both paid and volunteer counselors. However, a report prepared for the U.S. Department of Agriculture's (USDA's) Food and Nutrition Service found that paying counselors helped retain counselors and sustain programs.<sup>49</sup>
  - For peer support groups, consider the following:
    - ◆ Timing is important. Support groups are especially helpful in the first few days after childbirth, although many mothers benefit from longer term participation.
    - ◆ Groups are usually ongoing and meet regularly at an easily accessible location. Some groups may charge a fee or request donations, but most
- group leaders are volunteers. Some organizations provide breastfeeding management and support from IBCLCs or other health care professionals who specialize in lactation.
- Training is a necessary component of peer support and should include basic breastfeeding management, nutrition, infant growth and development, counseling techniques, and criteria for making referrals. In both individual and group settings, peer counselors are trained by, gain practical experience from, and are monitored or overseen by a health care professional. These professionals include IBCLCs, nurses, nutritionists, or doctors with training in skilled lactation care.
  - Other factors critical to the success of peer support programs are leadership and support from management, adequate supervision of counselors, standardized and ongoing training for counselors, access to IBCLCs, and community partnerships for making and receiving referrals for mothers. Integrating peer support within the overall health system seems to contribute to the ongoing maintenance of a program.<sup>49</sup>
  - Peer support can be provided and received in many different ways, and contact does





not have to be in person only. Internet and telecommunication technology can be used to increase contact and enhance a peer support program.

- Fathers can have a tremendous influence on breastfeeding, and they can offer support that helps mothers breastfeed.<sup>42,51</sup> An innovative pilot study in a Texas WIC Program used a father-to-father peer counseling approach. The program increased breastfeeding rates and improved fathers' knowledge about breastfeeding and their belief that they could provide support to their breastfeeding partners.<sup>52</sup>
- Grandmothers also influence a woman's decisions and practices related to feeding her infant.<sup>53–56</sup> If a baby's grandmother previously breastfed, she can share her experience and knowledge, and she can support a mother through any challenges. If a baby's grandmother did not breastfeed, she may try to discourage it or suggest formula feeding when a problem arises.<sup>56</sup> Breastfeeding support programs that include grandmothers and older women could help increase support for breastfeeding women (see the Naomi and Ruth Project in the Program Examples).

## Program Examples

### Using *Loving Support* to Implement Best Practices in Peer Counseling

In 2004, the USDA's Food and Nutrition Service launched a project called Using *Loving Support* to Implement Best Practices in Peer Counseling to help managers and staff in WIC Programs implement and expand breastfeeding peer counseling programs. The goal of the project was to help WIC Programs use the *Loving Support* model as a framework to design, build, and sustain peer counseling programs. Two training curricula were developed for the project—one for managers of peer counseling programs and one for trainers of peer counselors.

In 2011, the training curricula were updated, and the project name was changed to *Loving Support Through Peer Counseling: A Journey Together*. Peer counselors receive extensive training on how to support pregnant and breastfeeding mothers in WIC Programs at home through telephone contacts. In many programs, peer counselors also provide clinic-based counseling, make home visits during the early postpartum period, lead prenatal breastfeeding classes and postpartum support groups, and provide one-on-one support in the hospital setting.

## Action Steps

1. Given the reach of the WIC Program, help WIC providers increase the availability of peer counseling services for all WIC participants.
2. Establish peer counseling programs for women not eligible for the WIC Program.
3. Improve the quality of existing peer counseling services by increasing contact hours, improving training, and making prenatal visits earlier.
4. Make sure that peer counselors have support and adequate supervision from an IBCLC.
5. Create and maintain a sustainable infrastructure for mother-to-mother support groups and peer counseling programs in hospitals and community health care settings.



### **Breastfeeding: Heritage and Pride**

This peer counseling program is a collaborative effort between Hartford Hospital, the Hispanic Health Council, and the University of Connecticut's Family Nutrition Program. Perinatal peer support is provided to low-income Latina women living in Hartford, Connecticut. The program calls for at least one home visit during the prenatal period and daily visits during the hospital stay. Peer counselors are required to make three contacts after hospital discharge, with the initial contact made within 24 hours. Peer counselors are paid and receive benefits if they work at least 20 hours a week.

### **Naomi and Ruth Project**

This project is a faith-based initiative of the Indiana Black Breastfeeding Coalition. It was started in an African American church after several young women began breastfeeding their infants during services. A survey of church members found that many of the older women had breastfed and were willing to offer advice and support to breastfeeding mothers. This discovery sparked a new mentoring relationship between older women and younger women in the community. Older women who act as mentors are often grandmothers, aunts, or well-respected women in the community.

### **La Leche League International**

The LLLI offers group peer support services nationwide through an ongoing series of four meetings, often held monthly. Telephone counseling and support are available to mothers 24 hours a day. In addition to leading LLLI meetings, some leaders make home visits. Leaders are mothers who are members of the LLLI and who have breastfed at least one child for at least 9 months. Although they are volunteers, they have undergone an

LLLI accreditation process that includes training and education about breastfeeding management, parenting, child development, communication skills, and supporting and counseling mothers.

### **Resources**

#### **La Leche League International**

Information and materials related to the LLLI Peer Counselor Program.  
<http://www.llli.org/llleaderweb/lv/lvaugsep99p92.html>

This Web site helps women find an LLLI support group in a specific area.  
<http://lalecheleague.org/leaderinfo.html>

#### **Loving Support Makes Breastfeeding Work**

*U.S. Department of Agriculture, Food and Nutrition Service*

Information and materials about this USDA peer counseling program for WIC Programs.  
[http://www.nal.usda.gov/wicworks/Learning\\_Center/loving\\_support.html](http://www.nal.usda.gov/wicworks/Learning_Center/loving_support.html)

#### **Breastfeeding: Heritage and Pride**

A community-based program in Connecticut working to improve breastfeeding initiation and duration among low-income women.  
<http://www.hispanichealth.com/hhc/breastfeeding>



## Strategy 5. Support for Breastfeeding in the Workplace

### Definition

Support for breastfeeding in the workplace can include several types of employee benefits and services.<sup>57,58</sup> Examples include the following:

- Developing corporate policies to support breastfeeding women.
- Providing designated private space for women to breastfeed or express milk.
- Allowing flexible scheduling to support milk expression during work.
- Giving mothers options for returning to work, such as teleworking, part-time work, or extended maternity leave.
- Providing on-site or nearby child care.
- Providing high-quality breast pumps.
- Allowing babies at the workplace.
- Offering professional lactation management services and support.

### Rationale

Mothers are one of the fastest growing segments of the U.S. labor force. In 2012, 57% of all mothers with infants were employed.<sup>59</sup> Working full-time outside the home is related to a shorter duration of breastfeeding.<sup>60,61</sup> Intentions to work full-time are associated with lower rates of breastfeeding initiation and shorter duration.<sup>62</sup>

Low-income women, among whom African American and Hispanic women are overrepresented, 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>60,63</sup>

Conversely, rates of breastfeeding initiation and duration are higher among women who have longer maternity leave,<sup>64</sup> work part-time rather than full-time,<sup>65</sup> or have breastfeeding support programs in the workplace.<sup>63,66</sup>

### Evidence of Effectiveness

A cross-sectional survey was conducted among a sample of women working for a large public-sector employer that had used at least one component of a work site lactation program in the past 3 years.<sup>67</sup> The program offered (1) prenatal classes on breastfeeding and how to maintain breastfeeding after returning to work, (2) telephone support from a nurse during a woman's maternity leave, (3) a return-to-work consultation with a nurse, and (4) access to lactation rooms.

Individual program components associated with exclusive breastfeeding at 6 months were telephone support and return-to-work consultation. In addition, the percentage of women who were exclusively breastfeeding at 6 months increased with each additional service received.



Several studies have indicated that support for lactation at work benefits not only families but employers as well by improving productivity; enhancing the employer's public image; and decreasing absenteeism, health care costs, and employee turnover.<sup>66,68,69</sup>

## Key Considerations

- Educate employers on the benefits of having a lactation policy in the workplace that is in compliance with state and federal laws.
- Consider recognition programs that highlight employers with exemplary programs and allow employers to apply for recognition.
- Some work sites, such as academic institutions and hospitals that also serve people who are not employees, can consider extending onsite breastfeeding support to nonemployees.



- Lactation programs can include policies that allow mothers to bring their infants to work until they reach a certain age.

## Action Steps

1. Provide employers with resources and technical assistance to help them comply with federal and state regulations on breastfeeding support in the workplace.
2. Sponsor a summit of employers, business organizations, and other key decision makers to develop a strategy to implement high-quality breastfeeding support programs in the workplace.
3. Support training on how to implement the steps in The Business Case for Breastfeeding tool kit (see Program Examples for more information).
4. Create links between state agencies that are responsible for implementing existing laws on work-site accommodations.
5. Develop a resource to help employers find creative ways to provide breastfeeding support in the workplace.
6. Enhance lactation support within state agencies.
7. Create recognition programs for businesses to set up high-quality breastfeeding support programs in the workplace.



## Program Examples

### AOL WellBaby Program

The AOL WellBaby Program was launched in 2003 as part of AOL's employee wellness program. The program offers preconception, pregnancy, and lactation support, including providing lactation consultation and rooms where mothers can breastfeed or express milk. The program serves more than 110 families a year and has reported a return on investment that is three to five times what is spent.

### The Business Case for Breastfeeding

The Maternal and Child Health Bureau (MCHB) in HRSA developed a program for employers called The Business Case for Breastfeeding. This program addresses barriers and the educational needs of employers and includes tool kits and guidelines for senior managers, human resources managers, and breastfeeding employees. During 2007–2009, the MCHB worked with the Office of Women's Health in the U.S. Department of Health and Human Services (HHS) to provide training in 30 states on how to use these materials. Those who receive training are then able to train others in their state and community.

The program is being used to help large businesses and organizations set up lactation programs for their employees. Most recently, the focus has been on getting information, education, and resources to employers in nontraditional, nonoffice settings. The U.S. Department of Labor provides technical assistance for this effort.

## Factors to Consider When Setting Up a Workplace Lactation Program

- **Population:** The number of women who need support, the resources available,<sup>68</sup> and the settings in which female employees work.
- **Space:** Lactation accommodations can take many forms, from a converted office or private space to a formal nursing mothers' room. This space cannot be a bathroom.
- **Time:** Employers can use many different strategies to make sure mothers have enough time to breastfeed or express milk. Examples include flexible work schedules and locations, break times for pumping, on-site child care services, and job sharing.
- **Support:** Employers can do a lot to create an atmosphere that supports employees who breastfeed. A supportive atmosphere will be easier to achieve as workplace support programs are promoted to human resources managers, employee health coordinators, insurers, and health care providers.

Several guides and tool kits with information about different types of practices can be used to support breastfeeding women in the workplace. These materials are available online from the United States Breastfeeding Committee, the National Business Group on Health, and the Health Resources and Services Administration.

See the Resources section (page 27) for more information.



In New York, the New York State Department of Health's Obesity Prevention Program and Healthy Heart Program and the New York State Breastfeeding Coalition adapted materials from The Business Case for Breastfeeding to help businesses and public health agencies implement or expand lactation programs in the workplace and support the state's Nursing Mothers in the Workplace Act. Through a partnership with the state's WIC Program, a Web-based *Return to Work Toolkit* is being developed for low-income breastfeeding mothers who are making the transition back to work.

The group also is redesigning its Web site (<http://www.breastfeedingpartners.org>) to include information to help employers develop, implement, and promote lactation programs in the workplace.

### **Infant at Work Program**

The Kansas Department of Health and Environment's Infant at Work Program allows mothers to bring their infants to work until age 6 months. Participating mothers must agree to all policies of the program, sign a consent and waiver form, and identify alternate care givers at the workplace who will care for their infant when they are temporarily unavailable.

### **Tippecanoe County WIC Program**

The Tippecanoe County WIC Program in Indiana allows staff to bring exclusively breastfed infants to work until age 6 months.

### **Breastfeeding Legislation**

In March 2010, President Obama signed the Patient Protection and Affordable Care Act into law. Section 4207 provides nonexempt breastfeeding employees with "reasonable break time" and a private place, other than a bathroom, to express breast milk during the workday up until a child's first birthday. The law does not preempt state laws that provide greater protections to employees.

In 2008, Navajo Nation lawmakers passed a law that requires employers working in or doing contract work for the Navajo Nation to provide ways for mothers to continue to breastfeed. The Navajo Nation Healthy Start Act allows a mother unpaid time during work hours to breastfeed her infant or to use a breast pump. The act is enforced by the Navajo Nation Labor Commission.

Both California (in 2002) and New Jersey (in 2008) passed Family Leave Insurance to allow employees to take leave for several reasons, including to bond with newborn or newly adopted children and to care for sick family members. This insurance provides partial wage replacement for 12 weeks in California and 6 weeks in New Jersey.





## Resources

### **AOL WellBaby Program**

This employee wellness program includes lactation support, such as lactation consultation and rooms for mothers to breastfeed or express milk.  
<http://www.businessgrouphealth.org/pub/f3002033-2354-d714-51d4-f144c4d536e8>

### **Colorado Breastfeeding Coalition**

#### **YouTube Videos**

These videos share the experiences of employees and employers related to lactation support in the workplace.  
<http://cobfc.org>

### **The Business Case for Breastfeeding**

*Health Resources and Services Administration*

Program with several resources, including tool kits and guidelines, to help employers understand the benefits of making accommodations for breastfeeding mothers.  
<http://www.womenshealth.gov/breastfeeding/government-in-action/business-case-for-breastfeeding>

### **Infant at Work Program**

*Kansas Department of Health and Environment*

Information about this state program that allows mothers to bring their infants to work until age 6 months.  
<http://da.ks.gov/ps/subject/arc/resources/doainfant.pdf>

### **Worksite Wellness Program Toolkit**

*Massachusetts Department of Public Health*

This tool kit includes information and resources to help employers support employees to engage in healthy behaviors. It includes a section on policies, programs, and resources on lactation support.  
<http://www.mass.gov/eohhs/docs/dph/mass-in-motion/worksite-wellness-toolkit.pdf>

### **Breastfeeding & Working:**

#### **WorkAndPump.com**

Web site with practical advice and help for mothers who are trying to balance breastfeeding and work.  
<http://www.workandpump.com>





### **Navajo Nation Healthy Start Act**

*Navajo Nation*

Information about lactation protections in the workplace set by the Navajo Nation Healthy Start Act.

<http://www.usbreastfeeding.org/Portals/0/Coalitions/2010-NCSBC/BTT-Handouts/BTT-11-Handout.ppt>

### **Breastfeeding Laws**

*National Conference of State Legislatures*

Inventory of state legislation related to breastfeeding.

<http://www.ncsl.org/issues-research/health/breastfeeding-state-laws.aspx>

### **Texas Mother-Friendly Worksite Program**

*Texas Department of State Health Services*

List of mother-friendly work sites in Texas and information for employees and employers.

<http://www.motherfriendly.com>

### **Investing in Workplace Breastfeeding Programs and Policies: An Employer's Toolkit**

*National Business Group on Health*

This tool kit is designed to help employers make lactation accommodations and understand the benefits to employees and employers.

<http://www.businessgrouphealth.org/pub/f2ffe4f0-2354-d714-5136-79a21e9327ed>

## Strategy 6. Support for Breastfeeding in Early Care and Education

### Definition

Early care and education (ECE) is a term used to describe various types of child care arrangements, including prekindergarten (pre-K) programs, Head Start programs, child care centers, and in-home care. ECE programs play an important role in supporting breastfeeding mothers and their infants by welcoming breastfeeding mothers and making sure staff members are trained to handle breast milk and follow mothers' feeding plans. Increasing access to ECE programs that support breastfeeding families will help women start and continue breastfeeding.

### Rationale

In 2012, 57% of all mothers with infants were employed.<sup>59</sup> As a result, many children are regularly cared for by someone other than their mother from birth to age 4 years.<sup>70</sup> ECE providers and teachers influence the lives and health of the families they serve and can be an important source of support for working mothers who want to breastfeed.<sup>71</sup>

All ECE programs, including those in personal homes, can lower a breastfeeding mother's anxiety by allowing her to feed her infant on-site, having a posted breastfeeding policy that is routinely communicated, making sure procedures for storing and handling breast milk and feeding breastfed infants are in place, and making sure staff members are well-trained in these procedures.<sup>72</sup>

### Evidence of Effectiveness

Data from the Infant Feeding Practices Study II (IFPS II), a longitudinal study that followed mothers from the third trimester until children were age 1 year, found 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>73</sup> The IFPS II used a questionnaire to ask mothers five questions about breastfeeding support. Results showed that mothers who said they received five

### Infant Feeding Guidelines in *Caring for Our Children*

In 2011, the AAP and the American Public Health Association (APHA) published the third edition of *Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs*. This publication provides national guidelines on how ECE programs should accommodate breastfeeding mothers.

Specifically, the APA and APHA recommend the following: "The facility should encourage, provide arrangements for, and support breastfeeding. The facility staff, with appropriate training, should be the mother's cheerleader and enthusiastic supporter for the mother's plan to provide her milk. Facilities should have a designated place set aside for breastfeeding mothers who want to come during work to breastfeed, as well as a private area with an outlet (not a bathroom) for mothers to pump their breast milk. A place that mothers feel they are welcome to breastfeed, pump, or bottle feed can create a positive environment when offered in a supportive way."<sup>72</sup>

of the supports were three times as likely to be breastfeeding at 6 months as mothers who said they received fewer than three supports.<sup>73</sup>



## Key Considerations

- Setting and enforcing ECE standards is the responsibility of individual states and territories, although some local jurisdictions also have the authority to set additional standards. The 2011 *Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs* is based on scientific evidence and expert consensus. The document recognizes that, “Caregivers/teachers have a unique opportunity to support breastfeeding mothers, who are often daunted by the prospect of continuing to breastfeed as they return to work.”<sup>72</sup>
- As of December 2010, only six states had licensing regulations with language that fully meets best care guidelines, as defined by *Caring for Our Children*, such as encouraging and supporting breastfeeding and the feeding of breast milk.<sup>72</sup> These states are Arizona, California, Delaware, Mississippi, North Carolina, and Vermont.<sup>74</sup>
- ECE providers often find it difficult to attend training. Breastfeeding support training can be incorporated into other professional development or continuing education opportunities. Information about breastfeeding support can also be included in other annual trainings.
- Support for mothers is not limited to feeding an infant breast milk. It can include welcoming mothers to breastfeed on-site and providing a space. ECE providers should let mothers know what services are available so they do not wean their infants prematurely.
- Giving out printed materials and resources that communicate policies and procedures and the benefits of breastfeeding for mothers and children is helpful for both staff and parents.

## Action Steps

1. Review state ECE regulations related to breastfeeding practices. If licensing or regulation change is not appropriate, seek to integrate breastfeeding standards into statewide Quality Rating Improvement Systems.
2. Consider including breastfeeding materials that encourage breastfeeding initiation, duration, and exclusivity in preservice and professional development education and trainings for ECE providers.
3. Recognize ECE facilities that meet high standards for breastfeeding support.
4. Develop a model breastfeeding policy that can be shared with child care programs in your state or community.
5. Facilitate training for ECE providers on how to support breastfeeding mothers and feed breast milk to infants.
6. Encourage ECE facilities to develop breastfeeding policies that support breastfeeding employees.



## Program Examples

### **Breastfeeding-Friendly Child Care in Wake County**

The Breastfeeding-Friendly Child Care in Wake County project seeks to improve breastfeeding support in child care centers in North Carolina, especially those serving low-income families. It is a collaboration between the Carolina Global Breastfeeding Institute, the Wake County Child Care Health Consultants, and Wake County SmartStart.

Activities include identifying the knowledge, attitudes, and practices of current child care staff in the state and developing a self-appraisal tool called the 10 Steps for Breastfeeding-Friendly Child Care Centers. Future plans include the creation of a Breastfeeding-friendly Child Care Award.

### **How to Support a Breastfeeding Mother: A Guide for the Childcare Center**

The Mississippi Department of Health's WIC Program developed this training curriculum for child care providers. The curriculum includes guidelines on how to support breastfeeding mothers and how to store and handle expressed breast milk. It has been adopted by other state health departments across the United States. The Texas Department of Health houses these materials, and the curriculum and teaching materials can be downloaded free from the department's Web site.

### **Ten Steps to Breastfeeding Friendly Child Care Centers**

The Wisconsin Department of Health Services developed this publication to help child care centers develop policies and provide an environment that supports breastfeeding mothers.

## Resources

### **Nutrition & Physical Activity in Childcare Settings: Breastfeeding**

*Arizona Department of Human Services*

This program aims to empower children to make good choices about nutrition, physical activity, and tobacco. It includes information on breastfeeding.

<http://azdhs.gov/empowerpack>

### **Breastfeeding-Friendly Child Care in Wake County**

Learn about this North Carolina project that seeks to improve breastfeeding support in child care centers, especially those serving low-income families.

<http://cgbi.sph.unc.edu/child-care>

### **Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, Third Edition**

Guidance on how to feed infants and prepare for breastfeeding infants in child care settings.

<http://nrckids.org/CFOC3/index.html>





**Proper Handling and Storage of Human Milk**

*Centers for Disease Control and Prevention*

Instructions on the proper handling and storage of human breast milk.

[http://www.cdc.gov/breastfeeding/recommendations/handling\\_breastmilk.htm](http://www.cdc.gov/breastfeeding/recommendations/handling_breastmilk.htm)

**How to Support a Breastfeeding Mother:  
A Guide for the Childcare Center**

*Mississippi Department of Health*

Information and resources on this WIC training program are available on the Texas Department of Health's Web site.

<http://www.dshs.state.tx.us/wichd/bf/childcare.shtm>

**Ten Steps to Breastfeeding Friendly Child Care Centers**

*Wisconsin Department of Health Services*

This resource kit includes a self-appraisal questionnaire to help child care centers review existing practices.

<http://www.dhs.wisconsin.gov/physical-activity/Childcare/BFFChildCare.pdf>

**Family Checklist for Nutrition in Early Care and Education**

A checklist on nutrition practices that parents can consider when choosing an ECE provider.

<http://nrckids.org>



## Strategy 7. Access to Breastfeeding Education and Information

### Definition

Breastfeeding education usually occurs during the prenatal and intrapartum periods. It should be taught by someone with expertise or training in lactation management. It may be offered in a hospital or clinic setting, as well as at libraries, community centers, churches, schools, and work sites. Education primarily includes information and resources. First-time mothers report that they find books and written information helpful, while experienced women often rely on their past experience and doctors.<sup>75</sup> Although the audience is usually pregnant or breastfeeding women, it may include fathers and others who support the breastfeeding mother.

The goals of breastfeeding education are to increase mothers' knowledge and skills, help them view breastfeeding as normal, and help them develop positive attitudes toward breastfeeding.

### Rationale

In the United States, many new mothers do not have direct, personal knowledge of breastfeeding. They also may find it hard to rely on family members for consistent, accurate information and guidance about infant feeding.<sup>40</sup> Even though many women have a general understanding of the benefits of breastfeeding, they may not have access to information about how it is done, and they may receive incorrect information.<sup>33</sup>

found education especially effective if it was personalized for each woman's needs.<sup>76</sup> An earlier 2003 review by the USPSTF found that the use of printed breastfeeding information alone (such as pamphlets, books, and posters) had no effect on breastfeeding initiation or duration in the short term.<sup>77</sup> However, printed materials are often used as a component of multifaceted breastfeeding interventions, which have been shown through a Cochrane review to effectively increase breastfeeding initiation and duration.<sup>35</sup>

### Evidence of Effectiveness

A 2008 review by the U.S. Preventive Services Task Force (USPSTF) found formal breastfeeding education alone to be ineffective in increasing rates of breastfeeding initiation or duration. However, when used as part of a multicomponent intervention, both prenatal and postnatal education had an effect on short-term exclusive breastfeeding and the duration of any breastfeeding.<sup>36</sup>

A 2005 Cochrane review that looked at five studies that involved primarily low-income women found that education resulted in a significant increase in the number of women who initiated breastfeeding; subgroup analysis





## Key Considerations

- Women have different educational needs depending on their stage of pregnancy and past experience. Written information is sufficient for some women, but others need more formal education.
- For quick answers to many breastfeeding questions, education programs can refer pregnant and breastfeeding women to reputable hotlines, Web sites, and social media tools. They also can give out videos, pamphlets, tear-off information sheets, books, and posters.
- Many classes that include breastfeeding instruction are held at community-based organizations, community centers, birth centers, and hospitals. Many hospital-based classes include information about early feeding practices and how to prepare for the infant's birth that is directly tied to the policies at that particular hospital.
- Breastfeeding education during the intrapartum period is extremely time sensitive. It occurs in a hospital setting and is often less formal than prenatal education.
- All hospitals that routinely handle births should have staff with adequate training and knowledge to help with breastfeeding education during the intrapartum period for all mothers.

## Program Examples

### WIC Baby Behavior Program

This program helps WIC participants exclusively breastfeed their infants longer by making sure they understand typical infant behaviors, including sleep patterns, cues, and crying. The content for the program came from information collected during a series of focus groups, which revealed that many mothers supplemented breastfeeding with formula and cereals because they misinterpreted common infant behaviors as

### Breastfeeding Education

Prenatal breastfeeding education includes the following:

- Guidance for mothers about anticipated situations and signs of effective breastfeeding or breastfeeding problems.
- The benefits of breastfeeding to mother, baby, and society.
- Correct positioning to help the infant latch onto the breast effectively.
- Specific needs in the early days of breastfeeding.
- Resources for help with problems.
- Common fears, concerns, problems, and myths.

Intrapartum breastfeeding education includes the following:

- Immediate issues such as correct latch and positioning.
- Adequate milk removal.
- Stability of the infant.
- Comfort of the mother.
- Concerns of mothers and family members.
- Referrals for postpartum support.
- Signs of success or potential problems in the first few days after hospital discharge.

indicators of hunger. Trained WIC staff members teach parents to recognize and respond to the range of cues given by infants (not just those related to hunger) and to understand that it is normal and healthy for young infants to wake up often. By promoting realistic expectations of infant behavior, WIC staff members give mothers options other than the use of formula or foods to respond to their infants' behavior.





### **Early Childhood Family Education**

The Minnesota Department of Education has integrated breastfeeding into its Early Childhood Family Education classes, which are part of a 35-year parenting program available to all Minnesota residents. School districts advertise the classes, which are taught by early childhood and parenting educators who cover parenting topics and child development and health from birth to age 3 years.

Class information is also available on the Minnesota Parents Know Web site. Information on breastfeeding includes the health benefits of breastfeeding, maternity care practices that support breastfeeding, basic breastfeeding information, signs that your baby is feeding well, and where to get help with breastfeeding.

### **Kaiser Permanente of Southern California**

Kaiser Permanente of Southern California offers patients a range of breastfeeding support services, including a breastfeeding helpline, support groups, and individual and group lactation consultations. New mothers also have access to general breastfeeding instruction, and at some facilities, classes specifically for mothers returning to work. Hospital policies

call for formal education to be reinforced with educational materials and one-on-one interaction with members of the patient's health care team. These interactions allow mothers and family members to ask specific questions about breastfeeding or how to deal with social norms surrounding breastfeeding in their family or community.

### **La Leche League International**

The LLLI operates a toll-free telephone helpline (1-800-525-3243) from 9 am to 5 pm CST. It is answered by a person who refers callers to specially trained mothers in their area. The LLLI also has an online help form that women can use to get answers to breastfeeding questions ([http://www.llli.org/help\\_form](http://www.llli.org/help_form)).

### **Text4baby**

This information service sends free text messages about maternal and child health to the cell phones of pregnant women and new mothers. It is supported by the National Healthy Mothers, Healthy Babies Coalition. Women sign up for the service by texting BABY (or BEBE for Spanish) to 511411. They receive free, short text messages each week, timed to the baby's due date or date of birth.

## **Action Steps**

1. Evaluate how breastfeeding education may be integrated into public health programs that serve new families, such as Early Intervention; Early Head Start; Success by Six; and family planning, teen pregnancy, and women's health clinic programs.
2. Partner with local community groups that support breastfeeding mothers by providing educational seminars and classes.
3. Work with childbirth educators to include evidence-based breastfeeding education in their curricula.
4. Promote and support breastfeeding classes that are convenient for family members to attend.
5. Work with health plans to encourage them to routinely offer prenatal classes on breastfeeding to all members.



### **Office on Women's Health**

The HHS's Office on Women's Health offers a telephone support line (1-800-994-WOMAN) and online breastfeeding support (<http://www.womenshealth.gov/breastfeeding/index.cfm>). The specialists who staff the support line are trained in breastfeeding management. Other resources include a publication entitled *Your Guide to Breastfeeding*, which is available free in three languages (English, Spanish, and Chinese) and in versions for different audiences (the general public, African American women, and Native American women).

## **Resources**

### **Breastfeeding Made Simple**

This interactive, multimedia Web resource provides information for breastfeeding mothers. <http://www.breastfeedingmadesimple.com>

### **Bright Future Lactation Resource Centre Ltd.**

Guidance and training for people who develop and conduct educational seminars on breastfeeding. <http://www.bfirc.info>

### **Kaiser Permanente of Southern California**

Information about breastfeeding classes offered at Kaiser Permanente facilities. <https://healthy.kaiserpermanente.org/health/care/consumer/health-wellness>

### **La Leche League International**

Information, resources, and a list of locations where breastfeeding mothers can find support. <http://www.lalecheleague.org>

### **Minnesota Parents Know**

*Minnesota Department of Education*  
Find out more about the state's Early Childhood Family Education classes for parents, which include information on breastfeeding. [http://parentsknow.state.mn.us/parentsknow/Newborn/topicsAZ/PKDEV\\_000282](http://parentsknow.state.mn.us/parentsknow/Newborn/topicsAZ/PKDEV_000282)

### **Text4baby**

Learn more about Text4baby and sign up to receive free educational texts and reminders. <http://www.text4baby.org>

### **WomensHealth.gov**

*U.S. Department of Health and Human Services, Office on Women's Health*  
Tips and suggestions to help women breastfeed successfully. <http://www.womenshealth.gov/breastfeeding/index.cfm>

### **WIC Baby Behavior Program**

*U.S. Department of Agriculture*  
Web site includes materials and a report on this program for WIC participants. [http://www.nal.usda.gov/wicworks/Sharing\\_Center/gallery/FitWICBaby.htm](http://www.nal.usda.gov/wicworks/Sharing_Center/gallery/FitWICBaby.htm)

## Strategy 8. Social Marketing

### Definition

Social marketing is an excellent tool for promoting public health activities. It may be used to promote breastfeeding practices in community, hospital, and workplace settings; educate policy makers about issues related to breastfeeding; and educate the public about healthy infant nutrition practices and support programs. Social marketing is a systematic and strategic planning process that results in an intended practice or program.<sup>78</sup>

Many different definitions of social marketing exist, but most have these common components:

- The adoption of strategies used by commercial marketers.
- A goal of promoting voluntary behavior change (not just improved knowledge or awareness).
- An end goal of improving personal or societal welfare.
- The use of pro-health messages (for public health campaigns).

### Rationale

Increasing the number of positive messages about and images of breastfeeding, as well as the visibility of the topic, through social marketing promotes breastfeeding and helps mothers and families understand the risks of not breastfeeding. This strategy can also help to make breastfeeding seem normal, which in turn will make it seem a more feasible and attainable goal for many women.

Social marketing seeks to bring about behavior change through comprehensive, multifaceted approaches that provide coordinated interventions to specific audiences. Examples of these audiences include breastfeeding mothers and their support systems, health care providers, members of a particular community, and the general public. Social marketing can be used to encourage certain personal behaviors by mothers or interpersonal behaviors between a mother and others—for example, to encourage nurses to support a mother's choice to start breastfeeding within 1 hour of birth. It can also be used to educate decision makers—for example, by helping a hospital adopt practices or strategies to help mothers initiate breastfeeding within 1 hour of birth.

### Evidence of Effectiveness

Social marketing has been established as an effective behavioral change model for several public health issues.<sup>79</sup> In Iowa, for example, the state's WIC Program participated in a promotional campaign called *Loving Support* designed to increase breastfeeding among WIC participants and increase supporting behaviors in relatives, friends, health care providers, and WIC staff who might influence these women.

The initial evaluation of the program found that after 6 months, in-hospital and 6-month breastfeeding rates were higher among WIC participants.<sup>80</sup> In addition, women in the program reported more support from their mothers, husbands or boyfriends, friends or other relatives, and prenatal health care providers.<sup>80</sup>

Some social marketing efforts may include media campaigns. For several public health issues, such as smoking, nutrition, and child survival, media campaigns have been found to be effective in changing behaviors.<sup>81</sup> A 2000 Cochrane review suggested that media campaigns, particularly television commercials, improve attitudes toward breastfeeding and increase initiation rates.<sup>14</sup>



## Components of Social Marketing<sup>82,83</sup>

**Problem:** The problem is the health issue of concern. For potential solutions to emerge, the problem must be well defined.

**Target Audience:** The target audience is the individual or group whose behavior should change. Social marketers focus on the audience and use a variety of tools to understand it. Formative research is used to better understand the target audience and develop insight into the wants, needs, daily lives, and behaviors of its members. Insights gained through these processes help strengthen program strategies and interventions.

**Target Behavior:** The goal of social marketing is always to inform people about voluntary strategies they can use to change their behavior. This behavior change should be voluntary, and it is the planner's job to make the desired behavior an easy choice for the target audience.

**Strategies for Change:** People who work in commercial marketing use a business tool called the marketing mix or 4 Ps, which stands for product, price, place, and promotion. These variables are used to create opportunity and motivation for an audience to adopt the desired behavior over the existing behavior.

The strategies for change also incorporate two additional concepts:

- **Exchange:** This concept refers to maximizing the benefits and minimizing the costs of the new behavior (or maximizing the costs and minimizing the benefits of the existing behavior). Both benefits and costs should be determined from the perspective of the audience.
- **Competition:** This concept refers to understanding what factors compete for the time and attention of the target audience and why the target audience prefers the current behavior.

## Key Considerations

- Effective social marketing campaigns are not confined to television ads and billboards. They may require a variety of social media tools.
- Depending on the scope and reach of the social marketing campaign, existing materials may be sufficient, or new materials may need to be developed.
- Campaigns may run public service announcements, which use time and space donated by broadcast stations or advertisers. Campaigns usually have little control over when these announcements run. Paying for time and advertising space allows greater control and may ensure better reach to the target audience.
- Framing is important to consider when using social marketing. Frames are mental structures or filters that are used to integrate new information in our brains in a meaningful way.<sup>84</sup> A well-framed message incorporates values held by and information relevant to the target audience and excludes information the audience finds irrelevant.



support of family and friends, the health care system, and the community are all essential for a breastfeeding mother to be successful.

The goals of the campaign include increasing breastfeeding initiation and duration among WIC participants, increasing referrals to the WIC Program for breastfeeding support, increasing general public acceptance and support of breastfeeding, and helping WIC staff at state and local levels promote and support breastfeeding. These goals are addressed through various components, including consumer research, an extensive media campaign, and resources for WIC staff.

## Program Examples

### ***Loving Support Makes Breastfeeding Work***

*Loving Support* is the USDA's national breastfeeding promotion and support campaign for the WIC Program. This campaign was launched in 1997 as a result of Public Law 102-342, which required the Secretary of Agriculture to create a national program to promote breastfeeding as the best method of infant nutrition and to foster wider public acceptance of breastfeeding in the United States. *Loving Support* uses a social marketing approach to promote breastfeeding to WIC participants and their families by emphasizing that the

### **Mother-Friendly Worksite Program**

The Texas Department of State Health Services conducted a social marketing campaign to promote its Mother-Friendly Worksite Program. The campaign focused on educating Texas employers about mother-friendly policies in the workplace. As part of the campaign, in-depth telephone interviews were conducted with breastfeeding promoters across the country, Texas businesses that participate in the Mother-Friendly Worksite Program, and businesses that do not participate in the program. Focus groups were also conducted with business leaders, mothers, and fathers in six Texas cities.

## Action Steps

1. Identify local experts who can pitch stories that promote breastfeeding to the media.
2. Provide materials from *Loving Support*, the USDA's national breastfeeding promotion and support campaign for the WIC Program, to local doctors, schools, clinics, hospitals, and child care centers.
3. Ask local media outlets (television, radio, and print) to air or feature public service announcements from the Office on Women's Health's Babies Were Born to Be Breastfed campaign.
4. Develop and implement a public health campaign on breastfeeding that uses social marketing.



The results were used to develop messages for businesses, working mothers, and the partners of working mothers. They were also used to strengthen the Mother-Friendly Worksite Program and the state's Every Ounce Counts Campaign, which provides resources to pregnant women and new mothers.

### **Best for Babes: Champions for Moms**

The Best for Babes' Champions for Moms campaign shares information from high-profile mothers about how they overcame obstacles to childbirth and breastfeeding. These stories are meant to encourage and support pregnant and breastfeeding mothers.

### **Fathers Supporting Breastfeeding**

The USDA's Fathers Supporting Breastfeeding program uses a video, poster, and brochures to reach African American fathers so that they may positively influence a woman's decision to breastfeed. It is part of national efforts to increase breastfeeding initiation and duration rates among African American women. Project materials can also be used with men in other racial and ethnic groups.



## Resources

### **Best for Babes: Champions for Moms**

A foundation with a mission to help women overcome breastfeeding obstacles.

<http://www.bestforbabes.org>

### **Talking about Breastfeeding: Why the Health Argument Isn't Enough**

*Berkeley Media Studies Group and California WIC Association*

A report that explores ways to frame breastfeeding issues for public audiences.

[http://www.bmsg.org/pdfs/BMSG\\_Issue\\_18.pdf](http://www.bmsg.org/pdfs/BMSG_Issue_18.pdf)

### **Babies Were Born to Be Breastfed**

Materials from this national breastfeeding campaign.

<http://www.womenshealth.gov/breastfeeding/government-in-action/national-breastfeeding-campaign/index.cfm#materials>

### **Loving Support Makes Breastfeeding Work**

*U.S. Department of Agriculture*

Find out more about this social marketing campaign designed to support WIC Program recipients who want to breastfeed.

[http://www.nal.usda.gov/wicworks/Learning\\_Center/loving\\_support.html](http://www.nal.usda.gov/wicworks/Learning_Center/loving_support.html)

### **Social Marketing Resources**

*Centers for Disease Control and Prevention*

Training for public health professionals on how to use social marketing to plan nutrition, physical activity, and obesity prevention programs.

<http://www.cdc.gov/nccdphp/dnpao/socialmarketing/training.html>





### **Mother-Friendly Worksite Program**

*Texas Department of State Health Services*

Information about a Texas program that recognizes businesses that have made special efforts to accommodate breastfeeding mothers in the workplace.

<http://www.motherfriendly.com>

### **Every Ounce Counts Campaign**

Media and print resources and breastfeeding information for pregnant women and new mothers in Texas.

<http://www.breastmilkcounts.com/our-new-campaign.html>

### **Fathers Supporting Breastfeeding**

*U.S. Department of Agriculture*

Program information and materials.  
<http://www.fns.usda.gov/wic/fathers/supportingbreastfeeding.htm>

### **Massachusetts Breastfeeding Coalition**

Provides social marketing materials in Spanish and English that emphasize the importance of exclusive breastfeeding.

<http://www.cafepress.com/massbfc>



## Strategy 9. Addressing the Marketing of Infant Formula

### Definition

Monitoring how infant formula is marketed to ensure that potential negative effects on breastfeeding are minimized can help reduce barriers to breastfeeding for women who choose to do so. The negative association between the marketing of breast-milk substitutes and breastfeeding rates was the basis of the World Health Organization's *International Code of Marketing of Breast-milk Substitutes* (the Code).<sup>85</sup>

Developed with infant formula manufacturers, the Code is a set of guidelines that apply to the marketing of breast-milk substitutes. It reaffirms the role that key entities—such as governments, health care systems, health care workers, and manufacturers and distributors of breast-milk substitutes—play in making sure infant formula is marketed in ways that minimize its negative effects on breastfeeding.

### Rationale

The Code was developed with manufacturers of infant formula. It provides guidelines for the marketing and distribution of breastfeeding substitutes and limits direct marketing to pregnant women and new mothers. Until the late 1980s, infant formula was not marketed directly to consumers in the United States.<sup>86</sup> Instead, marketing efforts focused on the relationship between health care professionals and parents in making decisions about infant feeding. However, there has been a movement toward the use of direct-to-consumer marketing in recent years.<sup>86,87</sup>


Evidence suggests that the effect of the marketing practices used to promote breastfeeding substitutes is of particular concern because of its disproportionately negative effect on mothers in the United States who are known to be at high risk for early termination of breastfeeding. These groups include WIC participants, first-time mothers, and women who are less educated, nonwhite, or ill during the postpartum period.<sup>23,88</sup>

### Evidence of Effectiveness

One common way that infant formula is marketed is by giving women gift bags with free formula samples when they are discharged from

the hospital. In 2006, the U.S. Government Accountability Office reviewed 11 studies to determine the effect of distributing discharge bags with formula samples on breastfeeding.<sup>88</sup> Seven of the 11 studies found lower breastfeeding rates among women who receive discharge bags with formula samples than among women who did not receive bags with formula samples. More recently, the results of a study in Oregon found that receiving a commercial hospital discharge bag was associated with shorter duration of exclusive breastfeeding.<sup>24</sup>





In addition, the results of a randomized controlled trial of 547 women found that educational materials on breastfeeding produced by manufacturers of infant formula and distributed to pregnant women who intended to breastfeed had a substantially negative effect on the exclusivity and duration of breastfeeding.<sup>89</sup>

## Key Considerations

- The Code individually addresses the roles of health care systems, health workers, and people who manufacture, market, and distribute breast-milk substitutes. It also covers issues of labeling and quality, and it monitors compliance with the guidelines.
- In addition to the guidelines in the Code, many doctors belong to professional organizations that also provide standards on similar issues. For example, in 2010, the Council of Medical Specialty Societies (CMSS), which represents 32 leading medical professional societies, including the AAP, adopted its own *Code for Interactions with Companies*. This code, which was revised in 2011, provides guidance for appropriate interactions with for-profit companies in the health care sector to ensure that interactions benefit patients and lead to improved care.

The CMSS code ensures that interactions with companies, such as manufacturers of breast-milk substitutes, meet high ethical standards. These standards may include disclosing any company sponsorship or support to CMSS members and the public and not accepting company sponsorship of items or programs unless they are aligned with the CMSS's strategic plan and mission.<sup>90</sup>

## ***International Code of Marketing of Breast-milk Substitutes***

The Code\* includes the following guidelines:

- No advertising of breast-milk substitutes directly to the public.
- No free samples to mothers.
- No promotion of products in health care facilities.
- No commercial product representatives to advise mothers.
- No gifts or personal samples to health workers.
- No words or pictures idealizing artificial feeding, including pictures of infants on the products.

The Code states that

- Information to health workers should be scientific and factual.
- All information on artificial feeding, including product labels, should explain the benefits of breastfeeding and the costs and hazards associated with artificial feeding.
- Unsuitable products, such as condensed milk, should not be promoted for babies.
- All products should be of high quality and take into account the climatic and storage conditions of the country where they will be used.

\* The Code is currently voluntary in the United States.



## Action Steps

1. Establish guidelines for how public health clinics and facilities can display and distribute materials that do not deter breastfeeding initiation, duration, and exclusivity.
2. Provide educational materials that do not deter breastfeeding initiation, duration, and exclusivity to the offices of pediatricians, family practitioners, obstetrician-gynecologists, and nurse-midwives and to public health clinics and facilities.
3. Work with local associations of health care professionals such as pediatricians, family practitioners, obstetrician-gynecologists, and nurse-midwives to encourage the use of informational or educational materials that do not deter breastfeeding initiation, duration, and exclusivity.

## Program Examples

### Six Steps to Achieve Breastfeeding Goals for WIC Clinics

The National WIC Association developed the Six Steps to Achieve Breastfeeding Goals for WIC Clinics to increase breastfeeding and support mothers in WIC Programs who breastfeed. Step 2 is to “Provide an appropriate breastfeeding-friendly environment.” The first objective of this step is to “meet the *International Code of Marketing of Breast-milk Substitutes*.”

### National Alliance for Breastfeeding Advocacy: Research, Education, and Legal Branch (NABA REAL)

NABA REAL is the nonprofit organization that monitors compliance with the Code in the United States. NABA REAL trains volunteers to monitor compliance and publishes and distributes information about the Code.

### New Mexico Breastfeeding Task Force Honor Roll Project

The task force set up the Honor Roll project to identify and recognize hospitals in New Mexico that have eliminated the use of marketing materials from companies that make infant formula. Identified hospitals receive an award, and a list of awardees is posted on the task force’s Web site.





## Resources

### **Infant Formula Q&A**

*U.S. Food and Drug Administration*

Answers to consumer questions about infant formula.

<http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm048694.htm>

### **INFACT (Infant Feeding Action Coalition) Canada**

INFACT is a national, nongovernmental organization that works to protect infant and maternal well-being through the promotion and support of breastfeeding and optimal infant feeding practices.

<http://www.infactcanada.ca>

### **National Alliance for Breastfeeding Advocacy: Research, Education, and Legal Branch (NABA REAL)**

This nonprofit organization monitors compliance with the Code in the United States.

<http://www.naba-breastfeeding.org/nabareal.htm>

### **International Code of Marketing of Breast-milk Substitutes**

*World Health Organization*

Online link to this publication.

<http://www.who.int/nutrition/publications/infantfeeding/9241541601/en>

### **New Mexico Breastfeeding Task Force**

Information about the task force's Honor Roll project, which recognizes hospitals in New Mexico that have eliminated the use of marketing materials from companies that make infant formula.

[http://www.breastfeedingnewmexico.org/Hospital\\_Awards.html](http://www.breastfeedingnewmexico.org/Hospital_Awards.html)

### **Marketing Breastfeeding—Reversing Corporate Influence on Infant Feeding Practices**

This journal article describes the strategic approach taken by the New York City Department of Health and Mental Hygiene and its partners to change hospital practices and educate health care providers and the public on the benefits of breast milk.

<http://www.ncbi.nlm.nih.gov/pubmed/18463985>

### **Six Steps to Achieve Breastfeeding Goals for WIC Clinics**

*National WIC Association*

Six steps that WIC clinics can take to increase exclusive breastfeeding, initiation, and duration among program participants.

[http://learning.mihealth.org/Mediasite/WICCoordinator\\_02102011\\_Resources/SixSteps toAchieveBreastfeedingGoalsforWICClinics.pdf](http://learning.mihealth.org/Mediasite/WICCoordinator_02102011_Resources/SixSteps toAchieveBreastfeedingGoalsforWICClinics.pdf)

## References

1. Ip S, Chung M, Raman G, et al. Breastfeeding and maternal and infant health outcomes in developed countries. *Evid Rep Technol Assess.* 2007(153):1-186.
2. Blomquist HK, Jonsbo F, Serenius F, Persson LA. Supplementary feeding in the maternity ward shortens the duration of breast feeding. *Acta Paediatr.* 1994;83(11):1122-1126.
3. DiGirolamo A, Grummer Strawn L, Fein S. Effect of maternity-care practices on breastfeeding. *Pediatrics.* 2008;122(Suppl 2):S43-S49.
4. Kramer MS, Chalmers B, Hodnett ED, et al. Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus. *JAMA.* 2001;285(4):413-420.
5. Moore ER, Anderson GC, Bergman N. Early skin-to-skin contact for mothers and their healthy newborn infants. *Cochrane Database Syst Rev.* 2007(3):CD003519.
6. Rosenberg KD, Stull JD, Adler MR, Kasehagen LJ, Crivelli-Kovach A. Impact of hospital policies on breastfeeding outcomes. *Breastfeed Med.* 2008;3(2):110-116.
7. Baumgarder DJ, Muehl P, Fischer M, Pribbenow B. Effect of labor epidural anesthesia on breast-feeding of healthy full-term newborns delivered vaginally. *J Am Board Fam Pract.* 2003;16(1):7-13.
8. Reynolds F. The effects of maternal labour analgesia on the fetus. *Baillière's Best Pract Res Clin Obstet Gynaecol.* 2010;24(3):289-302.
9. Righard L, Alade MO. Effect of delivery room routines on success of first breast-feed. *Lancet.* 1990;336(8723):1105-1107.
10. Wiklund I, Norman M, Uvnas-Moberg K, Ransjo-Arvidson AB, Andolf E. Epidural analgesia: breast-feeding success and related factors. *Midwifery.* 2009;25(2):e31-38.
11. Petrova A, Hegyi T, Mehta R. Maternal race/ethnicity and one-month exclusive breastfeeding in association with the in-hospital feeding modality. *Breastfeed Med.* 2007;2(2):92-98.
12. MacDorman M, Menacker F, Declercq E. Trends and characteristics of home and other out-of-hospital births in the United States, 1990-2006. *Natl Vital Stat Rep.* 2010;58(11):1-14, 16.
13. Anderson GC, Moore E, Hepworth J, Bergman N. Early skin-to-skin contact for mothers and their healthy newborn infants. *Birth.* 2003;30(3):206-207.
14. Fairbank L, O'Meara S, Renfrew MJ, Woolridge M, Sowden AJ, Lister Sharp D. A systematic review to evaluate the effectiveness of interventions to promote the initiation of breastfeeding. *Health Technol Assess.* 2000;4(25):1-171.
15. Protecting, promoting and supporting breastfeeding: the special role of maternity services. A joint WHO/UNICEF statement. *Int J Gynaecol Obstet.* 1990;31(Suppl 1):171-183.
16. Philipp BL, Merewood A, Miller LW, et al. Baby-friendly hospital initiative improves breastfeeding initiation rates in a US hospital setting. *Pediatrics.* 2001;108(3):677-681.



17. American Academy of Pediatrics. Letter endorsing WHO/UNICEF Ten Steps to Successful Breastfeeding. 2009. Available at [www2.aap.org/breastfeeding/files/pdf/TenStepswoisig.pdf](http://www2.aap.org/breastfeeding/files/pdf/TenStepswoisig.pdf).
18. Cattaneo A, Buzzetti R. Effect on rates of breast feeding of training for the baby friendly hospital initiative. *BMJ*. 2001;323(7325):1358-1362.
19. Procionoy RS, Fernandes-Filho PH, Lazaro L, Sartori NC. Factors affecting breastfeeding: the influence of caesarean section. *J Trop Pediatr*. 1984;30(1):39-42.
20. Chien LY, Tai CJ. Effect of delivery method and timing of breastfeeding initiation on breastfeeding outcomes in Taiwan. *Birth*. 2007;34(2):123-130.
21. Perez-Rios N, Ramos-Valencia G, Ortiz AP. Cesarean delivery as a barrier for breastfeeding initiation: the Puerto Rican experience. *J Hum Lact*. 2008;24(3):293-302.
22. Dewey KG, Nommsen-Rivers LA, Heinig MJ, Cohen RJ. Risk factors for suboptimal infant breastfeeding behavior, delayed onset of lactation, and excess neonatal weight loss. *Pediatrics*. 2003;112(3 Pt 1):607-619.
23. Donnelly A, Snowden HM, Renfrew MJ, Woolridge MW. Commercial hospital discharge packs for breastfeeding women. *Cochrane Database Syst Rev*. 2000(2):CD002075.
24. Rosenberg KD, Eastham CA, Kasehagen LJ, Sandoval AP. Marketing infant formula through hospitals: the impact of commercial hospital discharge packs on breastfeeding. *Am J Public Health*. 2008;98(2):290-295.
25. Murray E, Ricketts S, Dellaport J. Hospital practices that increase breastfeeding duration: results from a population-based study. *Birth*. 2007;34(3):202-211.
26. Fox S, Jones S. The social life of health information. Washington, (DC): Pew Internet & American Life Project; 2009.
27. DiGirolamo AM, Grummer-Strawn LM, Fein SB. Do perceived attitudes of physicians and hospital staff affect breastfeeding decisions? *Birth*. 2003;30(2):94-100.
28. Feldman-Winter LB, Schanler RJ, O'Connor KG, Lawrence RA. Pediatricians and the promotion and support of breastfeeding. *Arch Pediatr Adolesc Med*. 2008;162(12):1142-1149.
29. Grossman X, Chaudhuri J, Feldman-Winter L, et al. Hospital Education in Lactation Practices (Project HELP): does clinician education affect breastfeeding initiation and exclusivity in the hospital? *Birth*. 2009;36(1):54-59.
30. Feldman-Winter L, Barone L, Milcarek B, et al. Residency curriculum improves breastfeeding care. *Pediatrics*. 2010;126(2):289-297.
31. Caulfield LE, Gross SM, Bentley ME, et al. WIC-based interventions to promote breastfeeding among African-American Women in Baltimore: effects on breastfeeding initiation and continuation. *J Hum Lact*. 1998;14(1):15-22.
32. Taveras E, Li R, Grummer Strawn L, et al. Opinions and practices of clinicians associated with continuation of exclusive breastfeeding. *Pediatrics*. 2004;113(4):e283-290.



33. Taveras E, Li R, Grummer Strawn L, et al. Mothers' and clinicians' perspectives on breastfeeding counseling during routine preventive visits. *Pediatrics*. 2004;113(5):e405-411.
34. Lieu TA, Wikler C, Capra AM, Martin KE, Escobar GJ, Braveman PA. Clinical outcomes and maternal perceptions of an updated model of perinatal care. *Pediatrics*. 1998;102(6):1437-1444.
35. Britton C, McCormick FM, Renfrew MJ, Wade A, King SE. Support for breastfeeding mothers. *Cochrane Database of Syst Rev*. 2007(1):CD001141.
36. Chung M, Raman G, Trikalinos T, Lau J, Ip S. Interventions in primary care to promote breastfeeding: an evidence review for the U.S. Preventive Services Task Force. *Ann Intern Med*. 2008;149(8):565-582.
37. Hopkinson J, Konefal Gallagher M. Assignment to a hospital-based breastfeeding clinic and exclusive breastfeeding among immigrant Hispanic mothers: a randomized, controlled trial. *J Hum Lact*. 2009;25(3):287-296.
38. Bonuck KA, Trombley M, Freeman K, McKee D. Randomized, controlled trial of a prenatal and postnatal lactation consultant intervention on duration and intensity of breastfeeding up to 12 months. *Pediatrics*. Dec 2005;116(6):1413-1426.
39. McLorg PA, Bryant CA. Influence of social network members and health care professionals on infant feeding practices of economically disadvantaged mothers. *Med Anthropol*. 1989;10(4):265-278.
40. Rossman B. Breastfeeding peer counselors in the United States: helping to build a culture and tradition of breastfeeding. *J Midwifery Womens Health*. 2007;52(6):631-637.
41. Shields M. Parenting study gives birth to new media strategy: no media. *Media Daily News*. July 21, 2004.
42. Arora S, McJunkin C, Wehrer J, Kuhn P. Major factors influencing breastfeeding rates: Mother's perception of father's attitude and milk supply. *Pediatrics*. 2000;106(5):e67.
43. Wright CM, Parkinson KN, Drewett RF. Why are babies weaned early? Data from a prospective population based cohort study. *Arch Dis Child*. 2004;89(9):813-816.
44. Mitra AK, Khoury AJ, Hinton AW, Carothers C. Predictors of breastfeeding intention among low-income women. *Matern Child Health J*. 2004;8(2):65-70.
45. Chapman D, Damio G, Perez-Escamilla R. Differential response to breastfeeding peer counseling within a low-income, predominantly Latina population. *J Human Lact*. 2004;20(4):389-396.
46. Olson B, Haider S, Vangjel L, Bolton T, Gold J. A quasi-experimental evaluation of a breastfeeding support program for low income women in Michigan. *Matern Child Health J*. 2010;14(1):86-93.
47. Gross S, Resnik A, Cross-Barnet C, Nanda J, Augustyn M, Paige D. The differential impact of WIC peer counseling programs on breastfeeding initiation across the state of Maryland. *J Human Lact*. 2009;25(4):435-443.



48. Yun S, Liu Q, Mertzlufft K, et al. Evaluation of the Missouri WIC (Special Supplemental Nutrition Program for Women, Infants, and Children) breast-feeding peer counselling programme. *Public Health Nutr.* 2010;13(2):229-237.
49. Best Start Social Marketing. *Using Loving Support to Implement Best Practices in Peer Counseling.* Tampa (FL): Best Start Social Marketing; 2004.
50. Gill S, Reifsnider E, Lucke J. Effects of support on the initiation and duration of breastfeeding. *West J Nurs Res.* 2007;29(6):708-723.
51. Wolfberg AJ, Michels KB, Shields W, O'Campo P, Bronner Y, Bienstock J. Dads as breastfeeding advocates: results from a randomized controlled trial of an educational intervention. *Am J Obstet Gynecol.* 2004;191(3):708-712.
52. Stremler J, Lovera D. Insight from a breastfeeding peer support pilot program for husbands and fathers of Texas WIC participants. *J Hum Lact.* 2004;20(4):417-422.
53. Bentley M, Gavin L, Black MM, Teti L. Infant feeding practices of low-income, African-American, adolescent mothers: an ecological, multigenerational perspective. *Soc Sci Med.* 1999;49(8):1085-1100.
54. Heinig MJ, Ishii K, Bañuelos J, Campbell E, O'Loughlin C, Vera Becerra L. Sources and acceptance of infant-feeding advice among low-income women. *J Hum Lact.* 2009;25(2):163-172.
55. Ingram J, Johnson D. A feasibility study of an intervention to enhance family support for breast feeding in a deprived area in Bristol, UK. *Midwifery.* 2004;20(4):367-379.
56. Grassley J, Eschiti V. Grandmother breastfeeding support: what do mothers need and want? *Birth.* 2008;35(4):329-335.
57. Click ER. Developing a worksite lactation program. *MCN Am J Matern Child Nurs.* 2006;31(5):313-317.
58. United States Breastfeeding Committee. *Workplace Accommodations to Support and Protect Breastfeeding.* Washington, DC: United States Breastfeeding Committee; 2010.
59. U.S. Department of Labor, Bureau of Labor Statistics. *Employment Characteristics of Families Summary.* 2012. Available at <http://www.bls.gov/news.release/famee.nr0.htm>.
60. Kimbro RT. On-the-job moms: work and breastfeeding initiation and duration for a sample of low-income women. *Matern Child Health J.* 2006;10(1):19-26.
61. Ryan AS, Zhou W, Arensberg MB. The effect of employment status on breastfeeding in the United States. *Womens Health Issues.* 2006;16(5):243-251.
62. Mandal B, Roe BE, Fein SB. The differential effects of full-time and part-time work status on breastfeeding. *Health Policy.* 2010;97(1):79-86.





63. Ortiz J, McGilligan K, Kelly P. Duration of breast milk expression among working mothers enrolled in an employer-sponsored lactation program. *Pediatr Nurs.* 2004;30(2):111-119.
64. Chatterji PF K. Does Returning to Work After Childbirth Affect Breastfeeding Practices? *Rev Econ Househ.* 2005;3(3):315-335.
65. Fein SB, Roe B. The effect of work status on initiation and duration of breast-feeding. *Am J Public Health.* 1998;88(7):1042-1046.
66. Cohen R, Mrtek MB. The impact of two corporate lactation programs on the incidence and duration of breast-feeding by employed mothers. *Am J Health Promot.* 1994;8(6):436-441.
67. Balkam JA, Cadwell K, Fein S. Effect of components of a workplace lactation program on breastfeeding duration among employees of a public-sector employer. *Matern Child Health J.* 2011;15(5):677-683.
68. Bar-Yam NB. Workplace Lactation Support, Part II: Working with the Workplace. *J Hum Lact.* 1998;14(4):321-325.
69. Mills SP. Workplace lactation programs: a critical element for breastfeeding mothers' success. *AAOHN J.* 2009;57(6):227-231.
70. Federal Interagency Forum on Child and Family Statistics. *America's Children in Brief: Key National Indicators of Well-Being, 2010.* Washington, DC: U.S. Government Printing Office; 2010.
71. Clark A, Anderson J, Adams E, Baker S. Assessing the knowledge, attitudes, behaviors and training needs related to infant feeding, specifically breastfeeding, of child care providers. *Matern Child Health J.* 2008;12(1):128-135.
72. American Academy of Pediatrics, American Public Health Association, National Resource Center for Health and Safety in Child Care and Early Education. *Caring for our children: National health and safety performance standards; Guidelines for early care and education programs.* Elk Grove Village, IL: American Academy of Pediatrics; Washington, DC: American Public Health Association; 2011.
73. Batan M, Li R, Scanlon K. Association of child care providers breastfeeding support with breastfeeding duration at 6 months. *Matern Child Health J.* 2012. doi: 10.1007/s10995-012-1050-7.
74. National Resource Center for Health and Safety in Child Care and Early Education. *Achieving a State of Healthy Weight: A National Assessment of Obesity Prevention Terminology in Child Care Regulations 2010.* Aurora, CO: University of Colorado Denver; 2011.
75. Declercq E, Sakala C, Corry M, Applebaum S. *Listening to Mothers II: Report of the Second National U.S. Survey of Women's Childbearing Experiences.* *J Perinat Educ.* 2007;16(4):15-17.



76. Dyson L, McCormick F, Renfrew MJ. Interventions for promoting the initiation of breastfeeding. *Cochrane Database Syst Rev*. 2005(2):CD001688.
77. Guise JM, Palda V, Westhoff C, Chan BK, Helfand M, Lieu TA. The effectiveness of primary care-based interventions to promote breastfeeding: systematic evidence review and meta-analysis for the US Preventive Services Task Force. *Ann Fam Med*. 2003;1(2):70-78.
78. Weinreich NK. *Hands-On Social Marketing: A Step-by-Step Guide to Designing Change for Good*. 2nd ed. Thousand Oaks, CA: SAGE Publications, Inc; 1999.
79. Gordon R, McDermott L, Stead M, Angus K. The effectiveness of social marketing interventions for health improvement: what's the evidence? *Public Health*. 2006;120(12):1133-1139.
80. Social Marketing Institute. *Success Stories: National WIC Breastfeeding Promotion Project*. 2008. Available at <http://www.social-marketing.org/success/cs-nationalwic.html>.
81. Wakefield M, Loken B, Hornik R. Use of mass media campaigns to change health behaviour. *Lancet*. 2010;376(9748):1261-1271.
82. Andreasen AR. Marketing social marketing in the social change marketplace. *Journal of Public Policy & Marketing*. 2002;21(1):3.
83. The National Social Marketing Centre. *Social Marketing Benchmark Criteria*. 2006. Available at <http://thensmc.com/sites/default/files/benchmark-criteria-090910.pdf>.
84. FrameWorks Institute. *Changing public conversation on social problems*. 2009. Available at <http://sfa.frameworksinstitute.org>.
85. World Health Organization. *International Code of Marketing of Breast-Milk Substitutes*. Resolution passed by the 34th World Health Assembly 34.22. Geneva: World Health Organization, 1981. 1981.
86. Cutler BD, Wright RF. The U.S. infant formula industry: is direct-to-consumer advertising unethical or inevitable? *Health Mark Q*. 2002;19(3):39-55.
87. Merewood A, Grossman X, Cook J, et al. US hospitals violate WHO policy on the distribution of formula sample packs: results of a national survey. *J Hum Lact*. 2010;26(4):363-367.
88. U.S. Government Accountability Office. *Some Strategies Used to Market Infant Formula May Discourage Breastfeeding; State Contracts Should Better Protect Against Misuse of WIC Name*. Washington, DC: U.S. Government Accountability Office; 2006.
89. Howard C, Howard F, Lawrence R, Andresen E, DeBlicke E, Weitzman M. Office prenatal formula advertising and its effect on breast-feeding patterns. *Obstet Gynecol*. 2000;95(2):296-303.
90. Council of Medical Specialty Societies. *Code for Interactions with Companies*. Chicago, IL: Council of Medical Specialty Societies; 2011.



