

# The Strategic Plan for Improving Breastfeeding Rates in Kentucky



Kentucky WIC Program and Lactation Improvement Network of Kentucky (LINK)

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## Why We Need This Report

This plan is for Kentucky breastfeeding supporters, policy makers, leaders, administrators, breastfeeding advocates, health professionals, and anyone with an interest in the health and future of Kentucky citizens. It is intended to be a blueprint for effective action to increase breastfeeding initiation and duration in Kentucky to meet or exceed the Healthy People 2020 goals.

## Who We Are

### **Kentucky Women, Infant and Children Program (WIC)**

The WIC Program is a federally funded supplemental nutrition program for low income women and children. The program offers pregnant, postpartum, breastfeeding women, infants, and children breastfeeding information and support, nutrition education, and nutritious foods.

### **Regional Breastfeeding Coordinators**

There are eleven (11) Regional Breastfeeding Coordinators who work in local health departments across the Commonwealth to promote and support breastfeeding in the public and private sectors.

### **Lactation Improvement Network of Kentucky (LINK)**

Lactation Improvement Network of Kentucky (LINK) is a partnership with a wide range of public and private supporters from across the Commonwealth. Their primary goal is to increase breastfeeding initiation and duration.

## How This Plan Was Developed

In April 2010, the first Breastfeeding Summit was held in Bowling Green, Kentucky, as a pre-conference to the Kentucky Dietetic Association annual meeting. National presenters set the stage for a lively strategic planning session among one-hundred-twenty-five (125) breastfeeding advocates. Facilitated breakout sessions were used to brainstorm on the following six (6) evidence-based areas outlined in the Center for Disease Control (CDC) Guide to Breastfeeding Interventions<sup>58</sup>.

- Maternity Care and Hospital Practice;
- Support for Breastfeeding in the Workplace;
- Peer Support;
- Educating Mothers and Families;
- Healthcare Professional Support; and
- Media and Social Marketing.

Many great ideas stemmed from the Summit; however, it was clear that more work was needed to develop a strategic plan. Two (2) follow-up meetings were held to further refine the breastfeeding strategies. We would like to thank all those who contributed to the plan. Together we can “Shape the Future” of Kentucky.

## Introduction

### Breastfeeding Initiation and Duration Affects the Health of Kentuckians

Forty-two percent (42%) of Kentucky infants never receive breast milk, giving the Commonwealth the unfortunate ranking of number forty-eight (48) for breastfeeding rates<sup>45</sup>. Kentucky has a breastfeeding initiation rate of fifty-nine percent (59%) compared to a seventy-five percent (75%) national rate<sup>26</sup>. Kentucky also has one of the lowest breastfeeding duration ratings with only twenty-nine point six percent (29.6%) of infants being breastfed at six months compared to forty-three percent (43%) nationally<sup>26</sup>. Breastfeeding is a natural resource that has far reaching implications for the health and economic future of Kentucky.

The Healthy People 2020 goals for breastfeeding were expanded to not only include objectives about increasing breastfeeding initiation, duration and exclusive breastfeeding rates but to include worksite breastfeeding and baby friendly hospitals<sup>22</sup>. See the objective summary chart at the end of this section.

The benefits of breastfeeding have been recognized at a national level. Statements from several of these agencies are attached in the appendices and include:

- National WIC Association Breastfeeding Plan;
- Ten Steps to Successful Breastfeeding;
- The Surgeon General's Call to Action to Support Breastfeeding;
- United States Breastfeeding Committee Strategic Breastfeeding Plan; and
- American Academy of Pediatrics (AAP) Policy on Breastfeeding.

In January 2011 the United States Department of Health and Human Services released *The Surgeon General's Call to Action to Support Breastfeeding*<sup>42</sup>. This document encourages support for breastfeeding through interventions in the following areas:

- Mothers and their families;
- Communities;
- Healthcare;
- Research and surveillance; and
- Public health infrastructure.

Research shows that breastfeeding and breast milk unequivocally hold many health advantages for children and mothers<sup>46</sup>. Breast milk is uniquely suited to the human infant's nutritional needs and is a live substance with unparalleled immunological and anti-inflammatory properties<sup>47</sup>. It protects against a host of childhood illnesses and diseases including ear infections, upper respiratory illness, childhood cancers and allergies. Breastfeeding also plays a foundational role in preventing weight problems in children<sup>35</sup>. Children fed mainly breast milk for the first six (6) months of life are twenty-two percent (22%) less likely to be overweight by age fourteen (14)<sup>36</sup>. The greatest protection against obesity is seen when exclusive breastfeeding continues for more than three (3) months<sup>37,38</sup>. According to 2009 data from the Pediatric Nutrition Surveillance System (PedNSS), over twenty percent (20%) of Kentucky one (1)-year olds participating in WIC are above the ninety-fifth (95<sup>th</sup>) percentile for weight and less than fifteen percent (15%) are receiving any breast milk at six (6) months<sup>53</sup>.

Breastfeeding also has many health benefits for mothers. Women who exclusively breastfeed for six (6) months are more likely to have a decrease in body fat mass and improved weight loss<sup>48</sup>. By breastfeeding, the mother can decrease her risk of breast<sup>49</sup> and uterine cancer and type 2

diabetes<sup>46</sup>. Research shows that if ninety percent (90%) of families breastfed exclusively for six (6) months, almost one-thousand (1,000) infant deaths would be prevented and the United States would save thirteen (13) billion dollars in healthcare costs<sup>2,3</sup>.

Many social issues influence a mother's decision to breastfeed, and Kentucky mothers are similar to mothers throughout the United States. In some families and communities, breastfeeding is not viewed as the norm for feeding children and the mothers receive social pressure to formula feed their children. Breastfeeding in public is not widely supported, even at home in the presence of family. Despite having a law that protects Kentucky mothers who breastfeed in public spaces<sup>50</sup>, mothers continue to report harassment.

Many mothers also face challenges as they go back to work. Many mothers must return to work soon after delivery and are not provided suitable break time or location to express their breast milk. Many working mothers cannot afford a breast pump and are not supported by co-workers. Recent changes to the federal Fair Labor Standards Act<sup>51</sup> ensures that hourly wage employees' be provided with sufficient time and privacy to express milk during the work day as needed. However, these mothers, along with salaried or commissioned working mothers, will still face challenges in accessing these resources.

Mothers are also influenced by healthcare providers. Many healthcare providers are not up to date on evidence-based breastfeeding practices, which results in inconsistent or inaccurate recommendations regarding breastfeeding. In a survey of hospital maternity and infant care practices in 2007, Kentucky birthing hospitals generally did not utilize best practices, placing Kentucky in the lowest quartile of hospitals nationwide<sup>7</sup>. In 2008, only five (5) out of fifty-three (53) Kentucky birthing hospitals reported breastfeeding initiation rates of seventy (70%) or more<sup>52</sup>, and Kentucky has only one Baby-Friendly Hospital.

Once the mother is discharged from the hospital, there is little clinical or social support available, especially in medically-underserved areas of the state.

## **Kentucky Legislation**

Kentucky currently has the following two laws related to breastfeeding:

- KRS 211.755 permits a mother to breastfeed her baby or express breast milk in any public or private location. This law requires that breastfeeding not be considered an act of public indecency, indecent exposure, sexual conduct, lewd touching or obscenity. Municipalities may not ordinances that prohibit breastfeeding in a public or private place<sup>50</sup>.
- KRS 29A.100 directs judges to excuse women who are breastfeeding or expressing breast milk from jury service until the child is no longer nursing<sup>57</sup>.

## **National Legislation**

**Adapted from *Fact Sheet #73: Break Time for Nursing Mothers under the FLSA*<sup>51</sup>:**

### **General Requirements**

Employers are required to provide reasonable break time for an employee to express breast milk for her nursing child for one (1) year after the child's birth each time such employee has need to express the milk." Employers are also required to provide a place, other than a bathroom, that is shielded from view and free from intrusion for an employee to express breast milk. This law does not preempt state laws that provide greater protections to employees.

### Time and Location of Breaks

Employers are required to provide a reasonable amount of break time to express milk as frequently as needed by the nursing mother. The frequency of breaks needed to express milk as well as the duration of each break will likely vary.

A bathroom, even if private, is not a permissible location under the Act. The location provided must be functional as a space for expressing breast milk. If the space is not dedicated to the nursing mother's use, it must be available when needed in order to meet the statutory requirement. A space temporarily created or converted into a space for expressing milk or made available when needed by the nursing mother is sufficient provided that the space is shielded from view, and free from any intrusion.

Employers with fewer than fifty (50) employees are not subject to the Fair Labor Standards Act (FLSA) break time requirement if compliance with the provision would impose an undue hardship. Whether compliance would be an undue hardship is determined by looking at the difficulty or expense of compliance for a specific employer in comparison to the size, financial resources, nature, and structure of the employer's business. All employees who work for the covered employer, regardless of work site, are counted when determining whether this exemption may apply.

### Healthy People 2020 Goals for Breastfeeding<sup>22,26</sup>

Healthy People 2020 Breastfeeding Objectives Topic #	Description- Increase the proportion of infants who:	National Baseline	Kentucky Baseline <sup>26</sup>	Objective
MICH-21.1	Were ever breastfed (any breastfeeding)	73.9%	58.7%	81.9%
MICH-21.2	Were breastfed at 6 months	43.4%	29.6%	60.5%
MICH-21.3	Were breastfed at 1 year	22.7%	13.1%	34.1%
MICH-21.4	Were breastfed exclusively through 3 months	33.1%	26.4%	44.3%
MICH-21.5	Were breastfed exclusively through 6 months	13.6%	12%	23.7%
MICH-22	Increase the proportion of employers that have worksite lactation support programs	25%	NA	38%
MICH-23	Reduce the proportion of breastfed newborns who receive formula supplementation within the first 2 days of life	15.6%	18.6%	10%
MICH-24	Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies	2.9%	5.58%	8.1%

## **Objectives and Strategies**



## Summary of Objectives/Strategies

**Kentucky breastfeeding advocates have created a strategic plan to increase breastfeeding rates to improve the health and well being of our residents, as well as reduce health care costs. For a quick review of the goals and strategies of the plan see the list below. The pages that follow outline the action steps, key partners, and rationale for each strategy. This blueprint is designed to create a systematic approach for increasing breastfeeding rates in Kentucky by 2015.**

### **Maternity Care and Hospital Practices**

- Increase the number of hospitals that implement skin to skin policies from nineteen percent (19%)<sup>7</sup> to twenty-five percent (25%).
- Establish insurance reimbursement strategies for breastfeeding education during prenatal care utilizing American Congress of Obstetricians and Gynecologists (ACOG) standards.
- Establish outpatient clinical lactation services within hospitals and/or local health departments through pediatric primary care providers or hospitals.
- Increase follow up breastfeeding visits by pediatric care providers.
- Increase the number of hospitals that achieve baby friendly status or implementing the Ten (10) Steps to Successful Breastfeeding.
- Increase the number of health professionals that become International Board Certified Lactation Consultants (IBCLCs).

### **Support for Breastfeeding in the Workplace**

- Increase the number of employers with policies to support lactation programs.
- Increase the number of health insurance plans available that cover lactation support services, breast pump equipment and supplies for all participants.

### **Peer Support**

- Establish the WIC Breastfeeding Peer Counselor Program statewide.
- Increase referrals to WIC Breastfeeding Peer Counselors, La Leche League, and other breastfeeding peer groups by healthcare professionals.

### **Educating Mothers and Families**

- Educate network of social service programs and other public and private partners to provide a consistent breastfeeding message to prenatal women.
- Establish a breastfeeding education and marketing campaign to target a mother's primary support network.

### **Healthcare Professional Support**

- Offer evidence based content on breastfeeding and human lactation in health professional courses of study.
- Increase opportunities for evidence based content on breastfeeding and human lactation in continuing education.

### **Media and Social Marketing**

- Lactation Improvement Network of Kentucky (LINK) will develop an integrated network of online media to disseminate breastfeeding information.

## Maternity Care and Hospital Practices<sup>7-19, 24,32,33,39-42,56</sup>

Breastfeeding information supplied to pregnant women allows for informed decisions to be made about infant feeding. Women who receive breastfeeding information during pregnancy are more likely to breastfeed. Breastfeeding friendly hospital practices can increase initiation and duration of breastfeeding<sup>40</sup>. These hospitals encourage skin-to-skin contact. Babies that receive skin-to-skin contact for at least one hour after birth are more likely to latch well, have normal skin temperatures, more stable blood pressure and blood sugars, and breastfeed longer. Once the breastfeeding mother is discharged from the hospital, follow-up care is essential for continued breastfeeding success<sup>7</sup>.

In The *Surgeon General's Call to Action* step number seven (7) recommends that maternity care practices throughout the United States be fully supportive of breastfeeding through the Baby Friendly Hospital Initiative and reporting of maternity care practices through the *Maternity Practices and Infant Nutrition Care* (mPINC) survey. Action step number eight (8) recommends that systems be developed to guarantee continuity of skilled support for lactation services between hospitals and health care settings. Action step number eleven (11) recommends ensuring access to lactation services provided by International Board Certified Lactation Consultants (IBCLCs).

**Strategy #1:** Increase the number of hospitals that implement skin to skin policies in Kentucky from nineteen percent (19%) to twenty-five percent (25%).

**Action Step #1:** Provide statewide training on implementing skin-to-skin care.

**Action Step #2:** Meet with hospital administrators to discuss implementation of policies.

**Action Step #3:** Gather feedback and revisit hospital administrators to check status of implementation.

**Action Step #4:** Encourage participation in next round of Maternity Practices and Infant Nutrition Care (mPINC) survey.

### Key Partners:

- Hospitals with skin-to-skin policies and practices
- Hospital Association
- The Joint Commission
- Association of Women's Health Obstetric and Neonatal Nurses (AWHONN)
- Case Western Reserve University (CWRU) Kangaroo Mother Care Program
- University of Kentucky Hospital
- University of Louisville Hospital
- Women, Infant and Children Program (WIC)

**Strategy #2** Establish insurance reimbursement strategies for breastfeeding education during prenatal care utilizing American Congress of Obstetricians and Gynecologists (ACOG) standards.

**Action Step #1:** Meet with the Department of Insurance and Kentucky Medicaid officials.

**Action Step #2:** Establish reimbursement policies and procedures.

**Action Step #3:** Educate providers regarding reimbursement; documentation; coding and education protocol.

**Action Step #4:** Provide education.

**Key Partners:**

- Medicaid Program
- Obstetric Clinicians
- Department of Insurance
- Kentucky Medical Association (KMA)
- American Congress of Obstetricians and Gynecologist (ACOG)
- Association of Women's Health Obstetric and Neonatal Nurses (AWHONN)
- Partnership for Fit Kentucky

**Strategy #3:** Establish outpatient clinical lactation services within hospitals and/or the local health departments through referral from pediatric primary care providers or hospitals.

**Action Step #1:** Identify policy/program structural needs in order to establish services through public and private partners.

**Action Step #2:** Develop a workgroup.

**Action Step #3:** Identify funding sources.

**Action Step #4:** Identify hospital and local health department staff and programs needed and/or available to provide service.

**Action Step #5:** Establish training protocol for staff and provide training.

**Key Partners:**

- Maternal and Child Health Division related programs
- Health Access Nurturing Development Services (HANDS)
- Women, Infant and Children Program (WIC)
- Pediatric Society
- Hospital Association
- Medicaid Program
- Department of Insurance
- Public and private lactation consultants and International Board Certified Lactation Consultants (IBCLC)
- National Association of County and City Health Officials (NACCHO)

**Strategy #4:** Increase follow-up breastfeeding visits by pediatric care providers.

**Action Step #1:** Create a workgroup with representatives from Kentucky Pediatric Society (KPS); Kentucky Family Practice Association (KFPA); Kentucky Association of Women's Health Obstetric and Neonatal Nurses (AWHONN); and Maternal and Child Health to develop a plan to assess existing services for early postpartum follow-up in the first week including:

- Discharge planning
- Providers
- Lactation services.

**Action Step #2:** Assess services and develop written report.

**Action Step #3:** Develop a strategy to address deficiencies.

**Key Partners:**

- Maternal and Child Health Division
- Health Access Nurturing Development Services (HANDS)
- Women, Infant and Children Program (WIC)
- Pediatric Society

- Hospital Association
- Medicaid Program
- Department of Insurance
- Public and private International Board Certified Lactation Consultants (IBCLC)
- Family Practice Association
- Association of Women's Health Obstetric and Neonatal Nurses (AWHONN)

**Strategy #5:** Increase the number of hospitals that achieve baby friendly status or implement the Ten (10) Steps to Successful Breastfeeding.

**Action Step #1:** Train on steps needed for hospital to become baby friendly and how to implement the Ten (10) Steps to Successful Breastfeeding.

**Action Step #2:** Meet with hospital administrators to discuss the baby friendly initiative and the Ten (10) Steps to Successful Breastfeeding.

**Action Step #3:** Provide assistance in achieving baby friendly status or the Ten (10) steps as requested.

**Key Partners:**

- Hospital Association
- The Joint Commission
- Association of Women's Health Obstetric and Neonatal Nurses (AWHONN)
- Women, Infant and Children Program (WIC)

**Strategy #6:** Increase the number of health professionals that become International Board Certified Lactation Consultants (IBCLC).

**Action Step #1:** Determine number of practicing International Board Certified Lactation Consultants (IBCLC).

**Action Step #2:** Provide and promote "45-Hour" comprehensive courses which follow the International Board of Lactation Consultant Examiners (IBLCE) Blueprint.

**Action Step #3:** Identify and promote opportunities for supervised clinical practice in lactation care as outlined by the International Board of Lactation Consultant Examiners (IBLCE).

**Action Step #4:** Identify and promote opportunities for candidates to complete general education in the health sciences as required by the International Board of Lactation Consultant Examiners (IBLCE).

**Action Step #5:** Promote International Board Certified Lactation Consultants (IBCLC) certification and recertification.

**Key Partners:**

- Hospitals
- Local Health Departments
- Women, Infant and Children Program (WIC)
- Obstetric and pediatric physician practices

## Support for Breastfeeding in the Workplace<sup>15,20-22,26,27,42</sup>

Women with children are the fastest growing segment in today's workforce.. Almost fifty-five percent (55%) of women with children under three (3) years of age are employed outside the home. This has been shown to have a direct correlation with decreased breastfeeding initiation and duration. In today's society, many mothers have to return to work soon after delivery and she may not receive support for breastfeeding. Many businesses do not provide breastfeeding women with adequate time or space to express breast milk. Research has shown that worksite wellness programs with lactation support increase breastfeeding duration<sup>1,21</sup>.

*The Surgeon General's Call to Action* recommends that employers establish and maintain comprehensive, high quality lactation support programs for their employees through compliance with the Fair Labor Standards Act (FLSA) and offering lactation support with the employee benefit package.

**Strategy# 1:** Increase the number of employers with policies to support lactation programs.

**Action Step#1:** Collaborate with the Labor Cabinet on the new Fair Labor Standards Act (FLSA) for Break Time for Nursing Mothers.

**Action Step #2:** Identify all current employers who have worksite lactation programs and support.

**Action Step #3:** Contact Kentucky employers who have lactation programs to determine the strategies that was successful in implementing the program.

**Action Step #4:** Contact Breastfeeding Coordinators in other states with success in worksite breastfeeding promotion.

**Action Step #5:** Collaborate with Society for Human Resource Management (SHRM) and Chamber of Commerce to include breastfeeding in worksite wellness.

**Action Step #6:** Provide outreach to employers without lactation support utilizing the "Business Case for Breastfeeding" program.

**Action Step #7:** Develop an awards program to recognize those employers who have implemented a lactation support program.

**Action Step #8:** Educate working mothers on breast pump tax relief.

### Key Partners:

- Women, Infant and Children Program (WIC)
- Labor Cabinet-Division of Employment Standards
- Personnel Cabinet
- Local and State Breastfeeding Coalitions
- Chamber of Commerce
- La Leche League
- Society for Human Resource Management (SHRM)
- Partnership for Fit KY
- Occupational Health Nurses Association
- State Breastfeeding Coordinators

**Strategy # 2:** Increase the number of health insurance plans available that cover lactation support services and breast pump equipment and supplies for all participants.

**Action Step #1:** Contact Breastfeeding Coordinators in other states with success in the implementation of insurance lactation support benefit packages.

**Action Steps #2:** Assist insurance companies in developing a lactation services benefit package for clients.

**Key Partners:**

- Labor Cabinet
- Insurance Providers
- Women, Infant, and Children Program (WIC)
- Personnel Cabinet
- State Breastfeeding Coordinators

## Peer Support<sup>28,29,42</sup>

It has been shown that many women turn to their peers for advice on their infant feeding decisions. Peer Counselors can provide one-on-one counseling to women regarding the benefits and management of breastfeeding. Research has shown that breastfeeding initiation and duration rates are positively associated with peer counseling<sup>28, 29</sup>.

The *Surgeon General's Call to Action* encourages strengthening of programs that provide mother-to-mother support and peer counseling. It proposes establishing breastfeeding peer counselors core services available to all women participating in WIC. It also recommends the creation and maintenance infrastructure for peer groups and mother-to-mother support groups.

**Strategy #1:** Expand the WIC Breastfeeding Peer Counselor Program statewide.

**Action Step #1:** Determine which local health department agencies have access to International Board Certified Lactation Consultants (IBCLC) or Certified Lactation Counselors (CLC)/Certified Lactation Specialists (CLS).

**Action Step #2:** Assess location of International Board Certified Lactation Consultants (IBCLC) and Certified Lactation Counselors (CLC)/Certified Lactation Specialists (CLS) statewide.

**Action Step #3:** Increase number of Certified Lactation Counselors (CLC)/Certified Lactation Specialists (CLS) by providing and promoting Certified Lactation Counselors (CLC)/Certified Lactation Specialists (CLS) courses.

**Action Step #4:** Establish referrals for areas without International Board Certified Lactation Consultants (IBCLC) or Certified Lactation Counselors (CLC)/Certified Lactation Specialists (CLS).

**Action Step #5:** Implement the programs in local health department agencies that currently do not have the Peer Counselor Program.

### Key Partners:

- Local Health Departments
- Women, Infant and Children Program (WIC)
- International Board Certified Lactation Consultants (IBCLC)
- Certified Lactation Counselors (CLC) and Certified Lactation Specialists (CLS)

**Strategy #2:** Increase referral to WIC Breastfeeding Peer Counselors, La Leche League, and other breastfeeding peer groups by healthcare professionals.

**Action Step #1:** Survey counties on peer group interest and availability.

**Action Step #2:** Identify current referral systems and their effectiveness.

**Action Step #3:** Set up meetings with physician offices and hospitals to discuss peer groups in their local areas.

**Action Step #4:** Develop informational and educational materials on effectiveness of peer group support for increasing breastfeeding rates.

**Action Step #5:** Provide handouts on peer support options to physician offices and hospitals.

**Action Step #6:** Develop reporting systems for referrals.

**Key Partners:**

- Obstetric, gynecological, pediatric and family practice physician offices
- Hospitals
- La Leche League
- Women, Infant and Children Program (WIC)
- International Board Certified Lactation Consultants (IBCLC)
- Certified Lactation Counselors (CLC)/Certified Lactation Specialist (CLS)



## Educating Mothers and Families<sup>34,42</sup>

Research has shown that although many women know about the benefits of breastfeeding, they lack the knowledge and confidence to breastfeed successfully<sup>34</sup>. Pregnant women need to receive accurate information in order to make informed decisions on infant feeding. The social support networks that women have also impact the decision to breastfeed with their mothers and their significant others having the greatest influence.

The *Surgeon General's Call to Action* encourages using community organizations to support breastfeeding, create campaigns to promote breastfeeding that target fathers and grandmothers in action steps two (2), four (4) and five (5).

**Strategy #1:** Educate network of social service programs and other public and private partners to provide a consistent breastfeeding message to prenatal women.

**Action Step #1:** Identify or develop a breastfeeding resource for key partners to utilize.

**Action Step #2:** Offer training to key partners.

### **Key Partners:**

- Department of Community Based Services (DCBS)
- Health Access Nurturing Development Services (HANDS)
- Family Resource Youth Service Centers (FRYSC)
- Expanded Food and Nutrition Education Program (EFNEP) and Cooperative Extension
- Substance Abuse Prevention Centers
- International Board Certified Lactation Consultants (IBCLC)
- Hospitals and Clinics
- Faith Based Organizations
- Peer counseling groups
- Women, Infant and Children Program (WIC)

**Strategy #2:** Establish a breastfeeding education and marketing campaign to target a mother's primary support network.

**Action Step #1:** Identify educational materials for mother's support network such as baby's father and grandmother.

**Action Step #2:** Develop and promote strategies that include baby's grandmother and father in the breastfeeding education.

**Action Step #3:** Develop a media campaign targeting mother's support network.

**Key Partners:**

- Women, Infant and Children Program (WIC)
- Department of Community Based Services (DCBS)
- Health Access Nurturing Development Services (HANDS)
- Family Resource Youth Service Centers (FRYSC)
- Expanded Food and Nutrition Education Program (EFNEP) and Cooperative Extension
- Substance Abuse Prevention Centers
- International Board Certified Lactation Consultants (IBCLC)
- Hospitals and Clinics
- Faith Based Organizations
- Peer counselor groups

## Healthcare Professional Support <sup>30,31,42</sup>

Physicians and nurses currently receive limited breastfeeding education during their training. Patients rely on physicians and nurses to provide them with accurate breastfeeding information. It is vitally important to remain current with breastfeeding education in order to provide the client with the best information. Physicians and health professionals need continuing education on breastfeeding.

In the *Surgeon General's Call to Action*, step number nine (9) recommends education and training in breastfeeding for all health professionals who care for women and children through preparatory studies competency requirements, and continuing education. Action step number ten (10) recommends for include basic support for breastfeeding to be a standard of care for midwives, obstetricians, family physicians, nurse practitioners, and pediatricians.

**Strategy #1:** Offer evidence based content on breastfeeding and human lactation in health professional courses of study.

**Action Step #1:** Develop a comprehensive database of all institutions offering health professional training.

**Action Step #2:** Identify minimal requirements for training on breastfeeding for state/national board exams for health professions.

**Action Step #3:** Convene a curriculum meeting with representatives of pre-service education stakeholders.

**Action Step #4:** Assist in curriculum development or fulfillment of curriculum development.

**Action Step #5:** Develop a speakers bureau and identify teaching resources.

### Key Partners:

- Providers of medical, dietetic, and nursing education
- Certifying /licensing boards

**Strategy #2:** Increase opportunities for evidence based content on breastfeeding and human lactation in continuing education.

**Action Steps #1:** Collaborate with stakeholders to identify and develop continuing education.

**Action Step #2:** Collaborate with key partners to ensure that continuing education on breastfeeding and human lactation is provided annually.

**Action Step #3:** Develop online resources through TRAIN for continuing education.

**Action Step #4:** Develop a speaker's bureau.

### Key Partners:

- Women, Infant and Children Program (WIC)
- Local and State Breastfeeding Coalitions
- Medical Association
- Pediatric Society
- Perinatal Association
- Academy of Physician Assistants
- Universities
- Kentucky Association of Women's Health Obstetric and Neonatal Nurses (AWHONN)
- Nursing and Dietetic Associations

## Media and Social Marketing <sup>16,18,41,42,45</sup>

Social media is social interaction through web-based technology. In 2010, Facebook announced that it had over four hundred (400) million followers worldwide and Twitter had fifty (50) million tweets. The United States alone has over three hundred (300) million Facebook users and over eighty percent (80%) of Americans use social media monthly. It is estimated that the amount of time spent on social network sites has grown to over 5.5 hours per month<sup>41</sup>. Mobile internet browsing has increased over two hundred percent (200%) since 2009.

Millennial moms are defined as those who are born between 1978 and 2000. This is the first generation that has grown up with the internet. Millennial moms turn to peers, blogs, and the web to help raise their children.

WIC moms are no different from all millennial moms. Studies show that ninety-nine percent (99%) of WIC moms use electronic online resources, eighty-nine percent (89%) use parenthood advice and information from websites and seventy-two percent (72%) of WIC moms visit retailer websites<sup>44</sup>. Fifty-four percent (54%) of all WIC moms sign up for e-newsletters for new and expectant mothers and eighty-two percent (82%) of them use social networks.

**Strategy #1:** Lactation Improvement Network of Kentucky (LINK) will develop an integrated network of online media to disseminate breastfeeding information.

**Action Step #1:** Develop policies and procedures for the social media accounts.

**Action Step #2:** Designate and train individuals that can monitor the website and other social media accounts.

**Action Step #3:** Develop evidence based content for social media outlets.

**Action Step #4:** Monitor utilization of social media accounts.

### **Key Partners:**

- Local Health Departments
- Women, Infant and Children (WIC) Program
- Maternal and Child Health Branch
- La Leche League

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## **Appendices**

### **National WIC Association Breastfeeding Plan**

The National WIC Association (NWA) has developed a strategic breastfeeding plan. Below is the NWA's strategic plan.

As the nation's premiere public health nutrition program, the Supplemental Nutrition Program for Women, Infants, and Children (WIC) will be recognized as a resource and advocate for breastfeeding promotion and support. The National WIC Association (NWA) calls on all state and local WIC programs to assume a leadership role in breastfeeding promotion and support, and to empower WIC staff and postpartum participants to exclusively breastfeed their babies. NWA encourages all WIC programs to adopt the following breastfeeding strategic goals for their programs.

#### **Goal #1: Promote and Support exclusive breastfeeding for all mothers.**

**Objective #1:** WIC agencies adopt the NWA Six Steps to Achieve Breastfeeding Goals for WIC clinics.

**Action #1:** State WIC agencies will encourage local agencies to assess their existing status in breastfeeding promotion and support.

**Action #2:** Local WIC agencies will develop plans to become breastfeeding-friendly using the NWA Six Steps to Achieve Breastfeeding Goals for WIC Clinics.

**Objective #2:** NWA and WIC agencies will promote breastfeeding to other health care organizations/institutions.

**Action #1:** WIC agencies and NWA will work with the American Hospital Association (AHA) and other stakeholders to increase the number of baby-friendly hospitals in the US.

**Action #2:** State WIC agencies will partner with the American Academy of Pediatrics (AAP) Chapter Breastfeeding Coordinator(s) and the American Congress of Obstetricians and Gynecologists (ACOG) at the state level to promote consistent breastfeeding messages.

**Objective #3:** NWA and WIC agencies will promote breastfeeding in the community.

**Action #1:** WIC agencies will support and become active members of state/regional/local breastfeeding coalitions.

**Action #2:** WIC agencies will collaborate with other breastfeeding advocates to market the benefits of breastfeeding within communities.

**Action #3:** NWA and WIC agencies will recognize exemplary breastfeeding promotion and support efforts.

#### **Goal #2: All WIC staff is knowledgeable/skilled in breastfeeding promotion and support.**

**Objective #1:** WIC Agencies develop staff competencies appropriate to their role to promote and support breastfeeding.

**Action #1:** WIC agencies will include breastfeeding competencies in job descriptions and performance evaluations.

**Action #2:** NWA will encourage and collaborate with USDA to ensure that breastfeeding promotion and support language is included in the Nutrition Services Standards.

**Objective #2:** WIC staff and volunteers will gain competencies appropriate to their role in the program to promote and support breastfeeding.

**Action #1:** WIC agencies will train all new WIC staff to provide breastfeeding support as defined by their roles.

**Action #2:** WIC agencies will provide training on an ongoing basis to support staff competencies.

**Action #3:** NWA will include breastfeeding topics/tracks in annual association conferences and nutrition and breastfeeding conferences.

**Objective #3:** The WIC agencies will increase the number of International Board Certified Lactation Consultants (IBCLCs) at the local and state levels.

**Action #1:** WIC agencies will provide lactation-specific education opportunities to staff identified to become IBCLCs.

**Action #2:** WIC agencies will enable staff to obtain the required clinical experience necessary to complete certification.

**Goal #3: WIC is recognized as a community resource for breastfeeding promotion and support.**

**Objective #1:** WIC agencies will educate public health organizations, education institutions and community organizations about WIC's role in breastfeeding promotion and support.

**Action #1:** WIC agencies will encourage local agency visits to medical staff offices, schools, universities, and community organizations to share information on WIC's breastfeeding services and breastfeeding specific programs.

**Action #2:** WIC agencies will invite public health programs and other community groups to WIC breastfeeding in-services and trainings.

**Action #3:** WIC agencies will increase visibility of and promote the Breastfeeding Peer Counseling Program within the community.

**Action #4:** State agencies will collaborate with programs that provide prenatal, postpartum and infant health care at the local level to assure comprehensive breastfeeding promotion and support services.

**Action #5:** WIC agencies will plan collaborative breastfeeding events within communities.

**Objective #2:** WIC management will play a leadership role in local, state and national breastfeeding promotion and support efforts.

**Action #1:** WIC leadership will serve as NWA/WIC spokespersons at breastfeeding conferences, meetings and seminars.

**Action #2:** WIC leadership will empower WIC personnel to actively engage in breastfeeding promotion programs and projects at the local, state and national levels.

**Action #3:** NWA will host regularly scheduled breastfeeding summits.

**Goal #4:** NWA and WIC agencies will advocate for the development and implementation of Federal/State/Local policies and procedures that protect, support and promote breastfeeding.

**Objective #1:** NWA and WIC agencies will work with Congress/State/Local government in passing legislation to protect and support women's rights to breastfeed.

**Action #1:** NWA and WIC agencies will provide input to Congress/State/Local government in developing breastfeeding promotion related legislation.

**Action #2:** NWA and WIC agencies will garner support from the WIC community to advocate for legislation that protects women's rights to breastfeed both in public and in the work place.

**Objective #2:** NWA and State WIC agencies will collaborate with USDA to develop and update policies and procedures that positively impact WIC breastfeeding promotion and support efforts.

**Action #1:** NWA will provide input to USDA to develop and update breastfeeding-related regulations and policies.

**Action #2:** NWA will work with USDA to continually enhance the WIC food packages to support exclusive breastfeeding.

**Action #3:** State agencies will seek USDA grants and operational adjustment funds to support and enhance breastfeeding programs.

**Action #4:** NWA Evaluation Committee will collaborate with USDA to recommend breastfeeding-related research and evaluation..

**Action #5:** NWA and State WIC agencies will work with USDA to standardize breastfeeding data collection and reporting.

**Objective #3:** All WIC agencies will develop policies and procedures for establishing exemplary employee breastfeeding support programs and recognize those that are exemplary.

**Action #1:** WIC agencies will share policies and procedures that are proven successful in increasing employee breastfeeding rates.

**Action #2:** State agencies will recognize local agencies that successfully implement programs to increase employee breastfeeding rates.

### **The Ten Steps to Successful Breastfeeding**

The Breastfeeding Friendly Hospital Initiative promotes, protects, and supports breastfeeding through the Ten Steps to Successful Breastfeeding for Hospitals, as outlined by UNICEF/WHO.

The steps for the United States are:

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 one hour after 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 on discharge from the hospital or clinic.

# **The Surgeon General's Call to Action to Support Breastfeeding**

## **FACT SHEET**

*The Surgeon General's Call to Action to Support Breastfeeding outlines steps that can be taken to remove some of the obstacles faced by women who want to breastfeed their babies.*

### **How many American women breastfeed their babies?**

- Three out of four mothers (75%) in the U.S. start out breastfeeding, according to the Centers for Disease Control and Prevention's 2010 Breastfeeding Report Card.
- At the end of six months, breastfeeding rates fall to 43%, and only 13% of babies are exclusively breastfed.
- Among African-American babies, the rates are significantly lower, 58% start out breastfeeding, and 28% breastfeed at six months, with 8% exclusively breastfed at six months.
- The Healthy People 2020 objectives for breastfeeding are: 82% ever breastfed, 61% at 6 months, and 34% at 1 year.

### **What are the health benefits of breastfeeding?**

- Breastfeeding protects babies from infections and illnesses that include diarrhea, ear infections and pneumonia.
- Breastfed babies are less likely to develop asthma.
- Children who are breastfed for six months are less likely to become obese.
- Breastfeeding also reduces the risk of sudden infant death syndrome (SIDS).
- Mothers who breastfeed have a decreased risk of breast and ovarian cancers.

### **What are the economic benefits of breastfeeding?**

- Families who follow optimal breastfeeding practices can save between \$1,200–\$1,500 in expenditures on infant formula in the first year alone.
- A study published last year in the journal *Pediatrics* estimated that if 90% of U.S. families followed guidelines to breastfeed exclusively for six months, the U.S. would annually save \$13 billion from reduced medical and other costs.
- For both employers and employees, better infant health means fewer health insurance claims, less employee time off to care for sick children, and higher productivity.
- Mutual of Omaha found that health care costs for newborns are three times lower for babies whose mothers participate in the company's employee maternity and lactation program.

### **What obstacles do mothers encounter when they attempt to breastfeed?**

- Lack of experience or understanding among family members of how best to support mothers and babies.
- Not enough opportunities to communicate with other breastfeeding mothers.
- Lack of up-to-date instruction and information from health care professionals.



- Hospital practices that make it hard to get started with successful breastfeeding.
- Lack of accommodation to breastfeed or express milk at the workplace.

#### **What can the health care community do?**

- More hospitals can incorporate the recommendations of UNICEF/WHO's Baby-Friendly Hospital Initiative.
- Provide breastfeeding education for health clinicians who care for women and children.
- Ensure access to International Board Certified Lactation Consultants.

#### **What can employers do?**

- Start and maintain high-quality lactation support programs for employees.
- Provide clean places for mothers to breastfeed.
- Work toward establishing paid maternity leave for employed mothers.

#### **What can community leaders do?**

- Strengthen programs that provide mother-to-mother support and peer counseling.
- Use community organizations to promote and support breastfeeding.

#### **What can families and friends of mothers do?**

- Give mothers the support and encouragement they need to breastfeed.
- Take advantage of programs to educate fathers and grandmothers about breastfeeding.

#### **What can policymakers do?**

- Support small nonprofit organizations that promote breastfeeding in African-American communities.
- Support compliance with the *International Code of Marketing of Breast-milk Substitutes*.
- Increase funding of high-quality research on breastfeeding.
- Support better tracking of breastfeeding rates as well as factors that affect breastfeeding.



## **United States Breastfeeding Committee STRATEGIC PLAN: 2009-2013**

### **MISSION STATEMENT**

The mission of the United States Breastfeeding Committee is to improve the Nation's health by working collaboratively to protect, promote, and support breastfeeding.

### **VISION STATEMENT(S)**

In order to achieve optimal health, enhance child development, promote knowledgeable and effective parenting, support women in breastfeeding, and make optimal use of resources, we envision breastfeeding as the norm for infant and child feeding throughout the U.S.

The United States Breastfeeding Committee: Advancing breastfeeding on our Nation's agenda.

*Collaboration*

*Leadership*

*Advocacy*

### **BOARD OF DIRECTORS' RESPONSIBILITY**

It is the responsibility of the Board of Directors to direct the United States Breastfeeding Committee towards achieving its vision and mission.

### **STRATEGIC GOALS: 2009-2013**

The United States Breastfeeding Committee has adopted the following strategic goals to achieve its vision and mission:

#### ***Goal A: Ensure that quality breastfeeding services are an essential component of health care for all families.***

1. Advocate for adoption of evidence-based breastfeeding standards, guidelines, and regulations for accreditation of facilities providing maternity and infant health care services.

a) Establish relationships with key organizations, such as the National Quality Forum and The Joint Commission.

b) Advocate for the National Quality Forum and The Joint Commission to adopt measures and standards addressing the Baby-Friendly Hospital Initiative's Ten Steps to Successful Breastfeeding.

Adopted 7/30/2009; Updated 1/5/2011 2

c) Advocate for increased funding to support the continuation and expansion of the *Maternity Practices in Infant Nutrition and Care (mPINC)* survey.

d) Develop a toolkit for state coalitions to use to highlight positive mPINC results in their states.

2. Encourage implementation of core competencies in health professional education.

a) Publish "Core Competencies in Breastfeeding Care for All Health Professionals" on the USBC Web site.

b) Distribute the Competencies to USBC member organizations and other relevant nonmember organizations.

- c) Develop and execute a campaign to promote the Competencies and advocate for their inclusion in health professional education and regulatory programs, including, but not limited to, preservice, post-graduate, continuing education, and competency assessment programs.
- 3. Ensure that health care professionals have the knowledge and resources to make evidence based recommendations and treatment decisions that optimize breastfeeding outcomes.
  - a) Advocate for the development and dissemination of coordinated education and information to health care professionals.
- 4. Advocate for quality breastfeeding services in implementation of the Affordable Care Act and other relevant legislation.

**Goal B: *Reduce marketing that undermines optimal breastfeeding.***

- 1. Counteract the negative impact of product marketing.
    - a) Publish a position statement on marketing of products that impact breastfeeding.
    - b) Support the publication of a white paper on the economic and environmental impact of formula feeding.
    - c) Develop and execute a campaign to build public and Congressional support for reducing such marketing.
    - d) Advocate for the elimination of the distribution of formula marketing materials through health care professionals and the health system.
    - e) Advocate for improved monitoring of product marketing claims.
    - f) Advocate for recognition of the ethical responsibilities of health care professionals and organizations related to product marketing.
- Adopted 7/30/2009; Updated 1/5/2011 3

**Goal C: *Ensure that women and their families in the workforce are supported in optimal breastfeeding.***

- 1. Support legislation to provide paid family leave.
  - a) Publish a position statement on paid family leave, and its impact on breastfeeding.
  - b) Approach other stakeholders to support their national campaigns for paid family leave legislation.
  - c) Collaborate with state breastfeeding coalitions to support state legislation to provide paid family leave.
- 2. Pursue legislation to require or incentivize workplace accommodations for breastfeeding.
  - a) Publish a position statement in support of requiring workplace accommodations.
  - b) Advocate for passage of federal legislation to require or incentivize workplace accommodations for all employees, and for effective and thorough implementation of such legislation.
  - c) Collaborate with state breastfeeding coalitions to pursue state legislation to require or incentivize workplace accommodations, and to facilitate smooth implementation of federal legislation.

**Goal D: *Ensure that USBC is a sustainable and effective organization, funded, structured, and aligned to do its work.***

- 1. Secure and maintain funding to support achievement of the strategic goals, and reserves to cushion against the unexpected.
- 2. Maintain a staffing structure to support achievement of the strategic goals.
- 3. Maintain a strong governance framework, including a committee structure that mobilizes members and volunteers to collaborate to support achievement of the strategic goals, while making the best use of their unique skills and expertise.
- 4. Continue to build a multi-sectoral, diverse membership and cultivate appropriate strategic partnerships.

5. Maintain a strong partnership with, and provide support for, a network of state, territory, and tribal breastfeeding coalitions.
6. Serve as an expert voice and a clearinghouse of breastfeeding information.
7. Coordinate advocacy to ensure that federal legislation and policy protects, promotes, and supports breastfeeding.

## **American Academy of Pediatrics (AAP) Policy on Breastfeeding**

This policy is a revision of the **policy posted on December 1, 1997.**

### **POLICY STATEMENT**

PEDIATRICS Vol. 115 No. 2 February 2005, pp. 496-506 (doi:10.1542/peds.2004-2491)

### **Breastfeeding and the Use of Human Milk Section on Breastfeeding**

Considerable advances have occurred in recent years in the scientific knowledge of the benefits of breastfeeding, the mechanisms underlying these benefits, and in the clinical management of breastfeeding. This policy statement on breastfeeding replaces the 1997 policy statement of the American Academy of Pediatrics and reflects this newer knowledge and the supporting publications. The benefits of breastfeeding for the infant, the mother, and the community are summarized, and recommendations to guide the pediatrician and other health care professionals in assisting mothers in the initiation and maintenance of breastfeeding for healthy term infants and high-risk infants are presented. The policy statement delineates various ways in which pediatricians can promote, protect, and support breastfeeding not only in their individual practices but also in the hospital, medical school, community, and nation.

#### **INTRODUCTION**

Extensive research using improved epidemiologic methods and modern laboratory techniques documents diverse and compelling advantages for infants, mothers, families, and society from breastfeeding and use of human milk for infant feeding.<sup>1</sup> These advantages include health, nutritional, immunologic, developmental, psychologic, social, economic, and environmental benefits. In 1997, the American Academy of Pediatrics (AAP) published the policy statement *Breastfeeding and the Use of Human Milk*.<sup>2</sup> Since then, significant advances in science and clinical medicine have occurred. This revision cites substantial new research on the importance of breastfeeding and sets forth principles to guide pediatricians and other health care professionals in assisting women and children in the initiation and maintenance of breastfeeding. The ways pediatricians can protect, promote, and support breastfeeding in their individual practices, hospitals, medical schools, and communities are delineated, and the central role of the pediatrician in coordinating breastfeeding management and providing a medical home for the child is emphasized.<sup>3</sup> These recommendations are consistent with the goals and objectives of *Healthy People 2010*,<sup>4</sup> the Department of Health and Human Services' *HHS Blueprint for Action on Breastfeeding*,<sup>5</sup> and the United States Breastfeeding Committee's *Breastfeeding in the United States: A National Agenda*.<sup>6</sup>

This statement provides the foundation for issues related to breastfeeding and lactation management for other AAP publications including the *New Mother's Guide to Breastfeeding*<sup>7</sup> and chapters dealing with breastfeeding in the AAP/American College of Obstetricians and Gynecologists *Guidelines for Perinatal Care*,<sup>8</sup> the *Pediatric Nutrition Handbook*,<sup>9</sup> the *Red Book*,<sup>10</sup> and the *Handbook of Pediatric Environmental Health*.<sup>11</sup>

#### **THE NEED**

## **Child Health Benefits**

Human milk is species-specific, and all substitute feeding preparations differ markedly from it, making human milk uniquely superior for infant feeding.<sup>12</sup> Exclusive breastfeeding is the reference or normative model against which all alternative feeding methods must be measured with regard to growth, health, development, and all other short- and long-term outcomes. In addition, human milk-fed premature infants receive significant benefits with respect to host protection and improved developmental outcomes compared with formula-fed premature infants.<sup>13-22</sup> From studies in preterm and term infants, the following outcomes have been documented.

### **Infectious Diseases**

Research in developed and developing countries of the world, including middle-class populations in developed countries, provides strong evidence that human milk feeding decreases the incidence and/or severity of a wide range of infectious diseases<sup>23</sup> including bacterial meningitis,<sup>24,25</sup> bacteremia,<sup>25,26</sup> diarrhea,<sup>27-33</sup> respiratory tract infection,<sup>22,33-40</sup> necrotizing enterocolitis,<sup>20,21</sup> otitis media,<sup>27,41-45</sup> urinary tract infection,<sup>46,47</sup> and late-onset sepsis in preterm infants.<sup>17,20</sup> In addition, postneonatal infant mortality rates in the United States are reduced by 21% in breastfed infants.<sup>48</sup>

### **Other Health Outcomes**

Some studies suggest decreased rates of sudden infant death syndrome in the first year of life<sup>49-55</sup> and reduction in incidence of insulin-dependent (type 1) and non-insulin-dependent (type 2) diabetes mellitus,<sup>56-59</sup> lymphoma, leukemia, and Hodgkin disease,<sup>60-62</sup> overweight and obesity,<sup>19,63-70</sup> hypercholesterolemia,<sup>71</sup> and asthma<sup>36-39</sup> in older children and adults who were breastfed, compared with individuals who were not breastfed. Additional research in this area is warranted.

### **Neurodevelopment**

Breastfeeding has been associated with slightly enhanced performance on tests of cognitive development.<sup>14,15,72-80</sup> Breastfeeding during a painful procedure such as a heel-stick for newborn screening provides analgesia to infants.<sup>81,82</sup>

### **Maternal Health Benefits**

Important health benefits of breastfeeding and lactation are also described for mothers.<sup>83</sup> The benefits include decreased postpartum bleeding and more rapid uterine involution attributable to increased concentrations of oxytocin,<sup>84</sup> decreased menstrual blood loss and increased child spacing attributable to lactational amenorrhea,<sup>85</sup> earlier return to prepregnancy weight,<sup>86</sup> decreased risk of breast cancer,<sup>87-92</sup> decreased risk of ovarian cancer,<sup>93</sup> and possibly decreased risk of hip fractures and osteoporosis in the postmenopausal period.<sup>94-96</sup>

### **Community Benefits**

In addition to specific health advantages for infants and mothers, economic, family, and environmental benefits have been described. These benefits include the potential for decreased annual health care costs of \$3.6 billion in the United States<sup>97,98</sup>; decreased costs for public health programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)<sup>99</sup>; decreased parental employee absenteeism and associated loss of family income; more time for attention to siblings and other family matters as a result of decreased infant illness; decreased environmental burden for disposal of formula cans and bottles; and decreased energy demands for production and transport of artificial feeding products.<sup>100-102</sup> These savings for the country and for families would be offset to some unknown extent by increased costs for physician and lactation consultations, increased office-visit time, and cost of breast pumps and other equipment, all of which should be covered by insurance payments to providers and families.



## **CONTRAINDICATIONS TO BREASTFEEDING**

Although breastfeeding is optimal for infants, there are a few conditions under which breastfeeding may not be in the best interest of the infant. Breastfeeding is contraindicated in infants with classic galactosemia (galactose 1-phosphate uridylyltransferase deficiency)<sup>103</sup>; mothers who have active untreated tuberculosis disease or are human T-cell lymphotropic virus type I–or II–positive<sup>104,105</sup>; mothers who are receiving diagnostic or therapeutic radioactive isotopes or have had exposure to radioactive materials (for as long as there is radioactivity in the milk)<sup>106–108</sup>; mothers who are receiving antimetabolites or chemotherapeutic agents or a small number of other medications until they clear the milk<sup>109,110</sup>; mothers who are using drugs of abuse ("street drugs"); and mothers who have herpes simplex lesions on a breast (infant may feed from other breast if clear of lesions). Appropriate information about infection-control measures should be provided to mothers with infectious diseases.<sup>111</sup> In the United States, mothers who are infected with human immunodeficiency virus (HIV) have been advised not to breastfeed their infants.<sup>112</sup> In developing areas of the world with populations at increased risk of other infectious diseases and nutritional deficiencies resulting in increased infant death rates, the mortality risks associated with artificial feeding may outweigh the possible risks of acquiring HIV infection.<sup>113,114</sup> One study in Africa detailed in 2 reports<sup>115,116</sup> found that exclusive breastfeeding for the first 3 to 6 months after birth by HIV-infected mothers did not increase the risk of HIV transmission to the infant, whereas infants who received mixed feedings (breastfeeding with other foods or milks) had a higher rate of HIV infection compared with infants who were exclusively formula-fed. Women in the United States who are HIV-positive should not breastfeed their offspring. Additional studies are needed before considering a change from current policy recommendations.

## ▶ CONDITIONS THAT ARE NOT CONTRAINDICATIONS TO BREASTFEEDING

Certain conditions have been shown to be compatible with breastfeeding. Breastfeeding is not contraindicated for infants born to mothers who are hepatitis B surface antigen–positive,<sup>111</sup> mothers who are infected with hepatitis C virus (persons with hepatitis C virus antibody or hepatitis C virus-RNA–positive blood),<sup>111</sup> mothers who are febrile (unless cause is a contraindication outlined in the previous section),<sup>117</sup> mothers who have been exposed to low-level environmental chemical agents,<sup>118,119</sup> and mothers who are seropositive carriers of cytomegalovirus (CMV) (not recent converters if the infant is term).<sup>111</sup> Decisions about breastfeeding of very low birth weight infants (birth weight <1500 g) by mothers known to be CMV-seropositive should be made with consideration of the potential benefits of human milk versus the risk of CMV transmission.<sup>120,121</sup> Freezing and pasteurization can significantly decrease the CMV viral load in milk.<sup>122</sup>

Tobacco smoking by mothers is not a contraindication to breastfeeding, but health care professionals should advise all tobacco-using mothers to avoid smoking within the home and to make every effort to wean themselves from tobacco as rapidly as possible.<sup>110</sup>

Breastfeeding mothers should avoid the use of alcoholic beverages, because alcohol is concentrated in breast milk and its use can inhibit milk production. An occasional celebratory single, small alcoholic drink is acceptable, but breastfeeding should be avoided for 2 hours after the drink.<sup>123</sup>

For the great majority of newborns with jaundice and hyperbilirubinemia, breastfeeding can and should be continued without interruption. In rare instances of severe hyperbilirubinemia, breastfeeding may need to be interrupted temporarily for a brief period.<sup>124</sup>

## THE CHALLENGE

Data indicate that the rate of initiation and duration of breastfeeding in the United States are well below the *Healthy People 2010* goals (see Table 1).<sup>4,125</sup> Furthermore, many of the mothers counted as breastfeeding were supplementing their infants with formula during the first 6 months of the infant's life.<sup>5,126</sup> Although breastfeeding initiation rates have increased steadily since 1990, exclusive breastfeeding initiation rates have shown little or no increase over that same period of time. Similarly, 6 months after birth, the proportion of infants who are exclusively breastfed has increased at a much slower rate than that of infants who receive mixed feedings.<sup>125</sup> The AAP Section on Breastfeeding, American College of Obstetricians and Gynecologists, American Academy of Family Physicians, Academy of Breastfeeding Medicine, World Health Organization, United Nations Children's Fund, and many other health organizations recommend exclusive breastfeeding for the first 6 months of life.<sup>2,127-130</sup> Exclusive breastfeeding is defined as an infant's consumption of human milk with no supplementation of any type (no water, no juice, no nonhuman milk, and no foods) except for vitamins, minerals, and medications.<sup>131</sup> Exclusive breastfeeding has been shown to provide improved protection against many diseases and to increase the likelihood of continued breastfeeding for at least the first year of life. Obstacles to initiation and continuation of breastfeeding include insufficient prenatal education about breastfeeding<sup>132,133</sup>; disruptive hospital policies and practices<sup>134</sup>; inappropriate interruption of breastfeeding<sup>135</sup>; early hospital discharge in some populations<sup>136</sup>; lack of timely routine follow-up care and postpartum home health visits<sup>137</sup>; maternal employment<sup>138,139</sup> (especially in the absence of workplace facilities and support for breastfeeding)<sup>140</sup>; lack of family and broad societal support<sup>141</sup>; media portrayal of bottle feeding as normative<sup>142</sup>; commercial promotion of infant formula through distribution of hospital discharge packs, coupons for free or discounted formula, and some television and general magazine advertising<sup>143,144</sup>; misinformation; and lack of guidance and encouragement from health care professionals.<sup>135,145,146</sup>

## RECOMMENDATIONS ON BREASTFEEDING FOR HEALTHY TERM INFANTS

1. Pediatricians and other health care professionals should recommend human milk for all infants in whom breastfeeding is not specifically contraindicated and provide parents with complete, current information on the benefits and techniques of breastfeeding to ensure that their feeding decision is a fully informed one.<sup>147-149</sup>
  - When direct breastfeeding is not possible, expressed human milk should be provided.<sup>150,151</sup> If a known contraindication to breastfeeding is identified, consider whether the contraindication may be temporary, and if so, advise pumping to maintain milk production. Before advising against breastfeeding or recommending premature weaning, weigh the benefits of breastfeeding against the risks of not receiving human milk.
2. Peripartum policies and practices that optimize breastfeeding initiation and maintenance should be encouraged.
  - Education of both parents before and after delivery of the infant is an essential component of successful breastfeeding. Support and encouragement by the father can greatly assist the mother during the initiation process and during subsequent periods when problems arise. Consistent with appropriate care for the mother, minimize or modify the course of maternal medications that have the potential for altering the infant's alertness and feeding behavior.<sup>152,153</sup> Avoid procedures that may interfere with breastfeeding or that may traumatize the infant, including unnecessary, excessive, and overvigorous suctioning of the oral



- cavity, esophagus, and airways to avoid oropharyngeal mucosal injury that may lead to aversive feeding behavior.<sup>154,155</sup>
3. Healthy infants should be placed and remain in direct skin-to-skin contact with their mothers immediately after delivery until the first feeding is accomplished.<sup>156-158</sup>
    - The alert, healthy newborn infant is capable of latching on to a breast without specific assistance within the first hour after birth.<sup>156</sup> Dry the infant, assign Apgar scores, and perform the initial physical assessment while the infant is with the mother. The mother is an optimal heat source for the infant.<sup>159,160</sup> Delay weighing, measuring, bathing, needle-sticks, and eye prophylaxis until after the first feeding is completed. Infants affected by maternal medications may require assistance for effective latch-on.<sup>156</sup> Except under unusual circumstances, the newborn infant should remain with the mother throughout the recovery period.<sup>161</sup>
  4. Supplements (water, glucose water, formula, and other fluids) should not be given to breastfeeding newborn infants unless ordered by a physician when a medical indication exists.<sup>148,162-165</sup>
  5. Pacifier use is best avoided during the initiation of breastfeeding and used only after breastfeeding is well established.<sup>166-168</sup>
    - In some infants early pacifier use may interfere with establishment of good breastfeeding practices, whereas in others it may indicate the presence of a breastfeeding problem that requires intervention.<sup>169</sup>
    - This recommendation does not contraindicate pacifier use for nonnutritive sucking and oral training of premature infants and other special care infants.
  6. During the early weeks of breastfeeding, mothers should be encouraged to have 8 to 12 feedings at the breast every 24 hours, offering the breast whenever the infant shows early signs of hunger such as increased alertness, physical activity, mouthing, or rooting.<sup>170</sup>
    - Crying is a late indicator of hunger.<sup>171</sup> Appropriate initiation of breastfeeding is facilitated by continuous rooming-in throughout the day and night.<sup>172</sup> The mother should offer both breasts at each feeding for as long a period as the infant remains at the breast.<sup>173</sup> At each feed the first breast offered should be alternated so that both breasts receive equal stimulation and draining. In the early weeks after birth, nondemanding infants should be aroused to feed if 4 hours have elapsed since the beginning of the last feeding.
    - After breastfeeding is well established, the frequency of feeding may decline to approximately 8 times per 24 hours, but the infant may increase the frequency again with growth spurts or when an increase in milk volume is desired.
  7. Formal evaluation of breastfeeding, including observation of position, latch, and milk transfer, should be undertaken by trained caregivers at least twice daily and fully documented in the record during each day in the hospital after birth.<sup>174,175</sup>
    - Encouraging the mother to record the time and duration of each breastfeeding, as well as urine and stool output during the early days of breastfeeding in the hospital and the first weeks at home, helps to facilitate the evaluation process. Problems identified in the hospital should be addressed at that time, and a documented plan for management should be clearly communicated to both parents and to the medical home.
  8. All breastfeeding newborn infants should be seen by a pediatrician or other knowledgeable and experienced health care professional at 3 to 5 days of age as recommended by the AAP.<sup>124,176,177</sup>
    - This visit should include infant weight; physical examination, especially for jaundice and hydration; maternal history of breast problems (painful feedings, engorgement); infant elimination patterns (expect 3–5 urines and 3–4 stools per

day by 3–5 days of age; 4–6 urines and 3–6 stools per day by 5–7 days of age); and a formal, observed evaluation of breastfeeding, including position, latch, and milk transfer. Weight loss in the infant of greater than 7% from birth weight indicates possible breastfeeding problems and requires more intensive evaluation of breastfeeding and possible intervention to correct problems and improve milk production and transfer.

9. Breastfeeding infants should have a second ambulatory visit at 2 to 3 weeks of age so that the health care professional can monitor weight gain and provide additional support and encouragement to the mother during this critical period.
10. Pediatricians and parents should be aware that exclusive breastfeeding is sufficient to support optimal growth and development for approximately the first 6 months of life<sup>†</sup> and provides continuing protection against diarrhea and respiratory tract infection.<sup>30,34,128,178–184</sup> Breastfeeding should be continued for at least the first year of life and beyond for as long as mutually desired by mother and child.<sup>185</sup>
  - Complementary foods rich in iron should be introduced gradually beginning around 6 months of age.<sup>186–187</sup> Preterm and low birth weight infants and infants with hematologic disorders or infants who had inadequate iron stores at birth generally require iron supplementation before 6 months of age.<sup>148,188–192</sup> Iron may be administered while continuing exclusive breastfeeding.
  - Unique needs or feeding behaviors of individual infants may indicate a need for introduction of complementary foods as early as 4 months of age, whereas other infants may not be ready to accept other foods until approximately 8 months of age.<sup>193</sup>
  - Introduction of complementary feedings before 6 months of age generally does not increase total caloric intake or rate of growth and only substitutes foods that lack the protective components of human milk.<sup>194</sup>
  - During the first 6 months of age, even in hot climates, water and juice are unnecessary for breastfed infants and may introduce contaminants or allergens.<sup>195</sup>
  - Increased duration of breastfeeding confers significant health and developmental benefits for the child and the mother, especially in delaying return of fertility (thereby promoting optimal intervals between births).<sup>196</sup>
  - There is no upper limit to the duration of breastfeeding and no evidence of psychologic or developmental harm from breastfeeding into the third year of life or longer.<sup>197</sup>
  - Infants weaned before 12 months of age should not receive cow's milk but should receive iron-fortified infant formula.<sup>198</sup>
11. All breastfed infants should receive 1.0 mg of vitamin K<sub>1</sub> oxide intramuscularly after the first feeding is completed and within the first 6 hours of life.<sup>199</sup>
  - Oral vitamin K is not recommended. It may not provide the adequate stores of vitamin K necessary to prevent hemorrhage later in infancy in breastfed infants unless repeated doses are administered during the first 4 months of life.<sup>200</sup>
12. All breastfed infants should receive 200 IU of oral vitamin D drops daily beginning during the first 2 months of life and continuing until the daily consumption of vitamin D-fortified formula or milk is 500 mL.<sup>201</sup>
  - Although human milk contains small amounts of vitamin D, it is not enough to prevent rickets. Exposure of the skin to ultraviolet B wavelengths from sunlight is the usual mechanism for production of vitamin D. However, significant risk of sunburn (short-term) and skin cancer (long-term) attributable to sunlight exposure, especially in younger children, makes it prudent to counsel against

exposure to sunlight. Furthermore, sunscreen decreases vitamin D production in skin.

13. Supplementary fluoride should not be provided during the first 6 months of life.<sup>202</sup>
  - From 6 months to 3 years of age, the decision whether to provide fluoride supplementation should be made on the basis of the fluoride concentration in the water supply (fluoride supplementation generally is not needed unless the concentration in the drinking water is <0.3 ppm) and in other food, fluid sources, and toothpaste.
14. Mother and infant should sleep in proximity to each other to facilitate breastfeeding.<sup>203</sup>
15. Should hospitalization of the breastfeeding mother or infant be necessary, every effort should be made to maintain breastfeeding, preferably directly, or pumping the breasts and feeding expressed milk if necessary.

### ▶ **ADDITIONAL RECOMMENDATIONS FOR HIGH-RISK INFANTS**

- Hospitals and physicians should recommend human milk for premature and other high-risk infants either by direct breastfeeding and/or using the mother's own expressed milk.<sup>13</sup> Maternal support and education on breastfeeding and milk expression should be provided from the earliest possible time. Mother-infant skin-to-skin contact and direct breastfeeding should be encouraged as early as feasible.<sup>204,205</sup> Fortification of expressed human milk is indicated for many very low birth weight infants.<sup>13</sup> Banked human milk may be a suitable feeding alternative for infants whose mothers are unable or unwilling to provide their own milk. Human milk banks in North America adhere to national guidelines for quality control of screening and testing of donors and pasteurize all milk before distribution.<sup>206–208</sup> Fresh human milk from unscreened donors is not recommended because of the risk of transmission of infectious agents.
- Precautions should be followed for infants with glucose-6-phosphate dehydrogenase (G6PD) deficiency. G6PD deficiency has been associated with an increased risk of hemolysis, hyperbilirubinemia, and kernicterus.<sup>209</sup> Mothers who breastfeed infants with known or suspected G6PD deficiency should not ingest fava beans or medications such as nitrofurantoin, primaquine phosphate, or phenazopyridine hydrochloride, which are known to induce hemolysis in deficient individuals.<sup>210,211</sup>

### ▶ **ROLE OF PEDIATRICIANS AND OTHER HEALTH CARE PROFESSIONALS IN PROTECTING, PROMOTING, AND SUPPORTING BREASTFEEDING**

Many pediatricians and other health care professionals have made great efforts in recent years to support and improve breastfeeding success by following the principles and guidance provided by the AAP,<sup>2</sup> the American College of Obstetricians and Gynecologists,<sup>127</sup> the American Academy of Family Physicians,<sup>128</sup> and many other organizations.<sup>5,6,8,130,133,142,162</sup> The following guidelines summarize these concepts for providing an optimal breastfeeding environment.

#### **General**

- Promote, support, and protect breastfeeding enthusiastically. In consideration of the extensively published evidence for improved health and developmental outcomes in breastfed infants and their mothers, a strong position on behalf of breastfeeding is warranted.
- Promote breastfeeding as a cultural norm and encourage family and societal support for breastfeeding.

- Recognize the effect of cultural diversity on breastfeeding attitudes and practices and encourage variations, if appropriate, that effectively promote and support breastfeeding in different cultures.

### **Education**

- Become knowledgeable and skilled in the physiology and the current clinical management of breastfeeding.
- Encourage development of formal training in breastfeeding and lactation in medical schools, in residency and fellowship training programs, and for practicing pediatricians.
- Use every opportunity to provide age-appropriate breastfeeding education to children and adults in the medical setting and in outreach programs for student and parent groups.

### **Clinical Practice**

- Work collaboratively with the obstetric community to ensure that women receive accurate and sufficient information throughout the perinatal period to make a fully informed decision about infant feeding.
- Work collaboratively with the dental community to ensure that women are encouraged to continue to breastfeed and use good oral health practices. Infants should receive an oral health-risk assessment by the pediatrician between 6 months and 1 year of age and/or referred to a dentist for evaluation and treatment if at risk of dental caries or other oral health problems.<sup>212</sup>
- Promote hospital policies and procedures that facilitate breastfeeding. Work actively toward eliminating hospital policies and practices that discourage breastfeeding (eg, promotion of infant formula in hospitals including infant formula discharge packs and formula discount coupons, separation of mother and infant, inappropriate infant feeding images, and lack of adequate encouragement and support of breastfeeding by all health care staff). Encourage hospitals to provide in-depth training in breastfeeding for all health care staff (including physicians) and have lactation experts available at all times.
- Provide effective breast pumps and private lactation areas for all breastfeeding mothers (patients and staff) in ambulatory and inpatient areas of the hospital.<sup>213</sup>
- Develop office practices that promote and support breastfeeding by using the guidelines and materials provided by the AAP Breastfeeding Promotion in Physicians' Office Practices program.<sup>214</sup>
- Become familiar with local breastfeeding resources (eg, WIC clinics, breastfeeding medical and nursing specialists, lactation educators and consultants, lay support groups, and breast-pump rental stations) so that patients can be referred appropriately.<sup>215</sup> When specialized breastfeeding services are used, the essential role of the pediatrician as the infant's primary health care professional within the framework of the medical home needs to be clarified for parents.
- Encourage adequate, routine insurance coverage for necessary breastfeeding services and supplies, including the time required by pediatricians and other licensed health care professionals to assess and manage breastfeeding and the cost for the rental of breast pumps.
- Develop and maintain effective communication and coordination with other health care professionals to ensure optimal breastfeeding education, support, and counseling. AAP and WIC breastfeeding coordinators can facilitate collaborative relationships and develop programs in the community and in professional organizations for support of breastfeeding.
- Advise mothers to continue their breast self-examinations on a monthly basis throughout lactation and to continue to have annual clinical breast examinations by their physicians.

### **Society**

- Encourage the media to portray breastfeeding as positive and normative.

- Encourage employers to provide appropriate facilities and adequate time in the workplace for breastfeeding and/or milk expression.
- Encourage child care providers to support breastfeeding and the use of expressed human milk provided by the parent.
- Support the efforts of parents and the courts to ensure continuation of breastfeeding in separation and custody proceedings.
- Provide counsel to adoptive mothers who decide to breastfeed through induced lactation, a process requiring professional support and encouragement.
- Encourage development and approval of governmental policies and legislation that are supportive of a mother's choice to breastfeed.

### **Research**

- Promote continued basic and clinical research in the field of breastfeeding. Encourage investigators and funding agencies to pursue studies that further delineate the scientific understandings of lactation and breastfeeding that lead to improved clinical practice in this medical field.<sup>216</sup>



## **CONCLUSIONS**

Although economic, cultural, and political pressures often confound decisions about infant feeding, the AAP firmly adheres to the position that breastfeeding ensures the best possible health as well as the best developmental and psychosocial outcomes for the infant. Enthusiastic support and involvement of pediatricians in the promotion and practice of breastfeeding is essential to the achievement of optimal infant and child health, growth, and development.