



December 5, 2007

Secretary Roderick L. Bremby
Kansas Department of Health and Environment
Curtis State Office Building
1000 SW Jackson
Topeka, KS 66612

Dear Secretary Bremby:

On behalf of the Governor's Child Health Advisory Committee, it is my pleasure to submit the Committee's recommendations related to breastfeeding in the workplace. In developing the policy, the Committee reviewed and discussed related information, including presentations by a panel of invited guests, state staff and university researchers and supportive work policies such as "infant to work."

As you know, this Committee has been charged to "advise the Governor and the Secretary of Kansas Department of Health and Environment on various issues involving children, including: obesity, newborn screening, immunizations and education." Breastfeeding addresses two of these issues: obesity and immunizations. Among breastfeeding's many benefits, studies suggest children who are breastfed are less likely to be overweight or obese, and mothers who breastfeed have an earlier return to pre-pregnancy weight. Breast milk is an infant's first "immunization", with research providing strong evidence that breastfeeding improves the infant's immunological system and decreases the incidence and/or severity of a wide range of infectious diseases.

In Kansas, the proportion of women breastfeeding decreases significantly between hospital discharge and 6-months. Feedback from public and private health professionals in the state suggests this is due to the difficulties women face in continuing to breastfeed after they return to work. To address this, the Child Health Advisory Committee recommends that

- All State of Kansas agencies adopt the "Breastfeeding Support in the Workplace" policy (attached) thus serving as a model for the private sector and for other states.
- The "Breastfeeding Support in the Workplace" policy be promoted for adoption by the Kansas business community.

Please let us know what action is taken regarding our recommendations, and do not hesitate to contact us if you would like more information from the Committee.

Sincerely,

Dennis Cooley, MD
Chair, Governor's Child Health Advisory Committee

C: Susan Allen, Office of the Governor
Richard J Morrissey, Interim Director of Health

Enclosure

State of Kansas

Breastfeeding Support in the Workplace

Policy Statement

Both state law (Appendix A) and medical research (Appendix B) form the basis of this policy statement. The State of Kansas supports state employees who are breastfeeding. There are many health benefits for mother and child. In addition to the health benefits, breastfeeding provides significant social and economic benefits to the state, including reduced health care costs and reduced absenteeism for care attributable to child illness.

Therefore, employees who choose to breastfeed shall be allowed a flexible schedule for nursing or pumping. The time allowed will not exceed the normal time allowed for lunch or breaks. For time above and beyond normal lunch and breaks, annual leave may be used or the employee can arrive at work earlier, leave work later, or shorten the lunch period. Eligible employees shall discuss and plan schedules that fit their needs with their supervisors.

A private room (not a toilet stall) will be available for the employee to breastfeed the infant or to express milk for storage.

Program Guidelines

Appendix C provides practical guidance to both the employer and employee in implementing this policy statement. In addition, the Kansas Department of Health and Environment Policy on Infant at Work Program (Appendix D) may be useful in planning for the individual employee.

Appendix A - Kansas statute

Appendix B - AAP Policy Statement

Appendix C - Why Support a Worksite Breastfeeding Program

Appendix D - Kansas Department of Health and Environment , Policy on Infant at Work Program.

Appendix A

Kansas Statute

Kansas Breastfeeding Legislation
House Bill No. 2284

AN ACT relating to breastfeeding mothers; concerning right to breastfeed; jury duty while breastfeeding; amending K.S.A. 43-158 and repealing the existing section.

Be it enacted by the Legislature of the State of Kansas:

New Section 1. (a) Breast milk is widely acknowledged to be the most complete form of nutrition for infants, with a range of benefits for infant's health, growth, immunity and development and has also been shown to improve maternal health and bonding in addition to contributing to society at large through economic and environmental gains, it is therefore the public policy of Kansas that a mother's choice to breastfeed should be supported and encouraged to the greatest extent possible.

(b) A mother may breastfeed in any place she has a right to be.

Sec. 2. K.S.A. 43-158 is hereby amended to read as follows: 43-158. The following persons shall be excused from jury service: (a) Persons unable to understand the English language with a degree of proficiency sufficient to respond to a jury questionnaire form prepared by the commissioner;

(b) persons under adjudication of incompetency;

(c) persons who within 10 years immediately preceding have been convicted of or pleaded guilty, or *nolo contendere*, to an indictment or information charging a felony;

(d) persons who have served as jurors in the county within one year immediately preceding; *and*

(e) a mother breastfeeding her child. Jury service shall be postponed until such mother is no longer breastfeeding the child.

Sec. 3. K.S.A. 43-158 is hereby repealed.

Sec. 4. This act shall take effect and be in force from and after its publication in the Kansas register.

I hereby certify that the above BILL originated in the
HOUSE, and passed that body

Signed by Governor Kathleen Sebelius on April 7, 2006

Appendix B

AAP Policy Statement

To see this document online please click on the following link:
<http://aappolicy.aappublications.org/cgi/content/full/pediatrics:115/2/496#SEC2#SEC2>

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



ABSTRACT

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.

Key Words: breast • breastfeeding • breast milk • human milk • lactation

Abbreviations: AAP, American Academy of Pediatrics • WIC, Supplemental Nutrition Program for Women, Infants, and Children • CMV, cytomegalovirus • G6PD, glucose-6-phosphate dehydrogenase



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.¹ 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*.² 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.³ These recommendations are consistent with the goals and objectives of *Healthy People 2010*,⁴ the Department of Health and Human Services' *HHS Blueprint for Action on Breastfeeding*,⁵ and the United States Breastfeeding Committee's *Breastfeeding in the United States: A National Agenda*.⁶

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*⁷ and chapters dealing with breastfeeding in the AAP/American College of Obstetricians and Gynecologists *Guidelines for Perinatal Care*,⁸ the *Pediatric Nutrition Handbook*,⁹ the *Red Book*,¹⁰ and the *Handbook of Pediatric Environmental Health*.¹¹

▶ 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.¹² 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.^{13–22} 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 diseases²³ including bacterial meningitis,^{24,25} bacteremia,^{25,26} diarrhea,^{27–33} respiratory tract infection,^{22,33–40} necrotizing enterocolitis,^{20,21} otitis media,^{27,41–45} urinary tract infection,^{46,47} and late-onset sepsis in preterm infants.^{17,20} In addition, postneonatal infant mortality rates in the United States are reduced by 21% in breastfed infants.⁴⁸

Other Health Outcomes

Some studies suggest decreased rates of sudden infant death syndrome in the first year of life^{49–55} and reduction in incidence of insulin-dependent (type 1) and non-insulin-dependent (type 2) diabetes mellitus,^{56–59} lymphoma, leukemia, and Hodgkin disease,^{60–62} overweight and obesity,^{19,63–70} hypercholesterolemia,⁷¹ and asthma^{36–39} 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.^{14,15,72–80} Breastfeeding during a painful procedure such as a heel-stick for newborn screening provides analgesia to infants.^{81,82}

Maternal Health Benefits

Important health benefits of breastfeeding and lactation are also described for mothers.⁸³ The benefits include decreased postpartum bleeding and more rapid uterine involution attributable to increased concentrations of oxytocin,⁸⁴ decreased menstrual blood loss and increased child spacing attributable to lactational amenorrhea,⁸⁵ earlier return to prepregnancy weight,⁸⁶

decreased risk of breast cancer,⁸⁷⁻⁹² decreased risk of ovarian cancer,⁹³ and possibly decreased risk of hip fractures and osteoporosis in the postmenopausal period.⁹⁴⁻⁹⁶

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^{97,98}; decreased costs for public health programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)⁹⁹; 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.¹⁰⁰⁻¹⁰² 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)¹⁰³; mothers who have active untreated tuberculosis disease or are human T-cell lymphotropic virus type I–or II–positive^{104,105}; 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)¹⁰⁶⁻¹⁰⁸; mothers who are receiving antimetabolites or chemotherapeutic agents or a small number of other medications until they clear the milk^{109,110}; 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.¹¹¹

In the United States, mothers who are infected with human immunodeficiency virus (HIV) have been advised not to breastfeed their infants.¹¹² 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.^{113,114} One study in Africa detailed in 2 reports^{115,116} 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,¹¹¹ mothers who are infected with hepatitis C virus (persons with hepatitis C virus antibody or hepatitis C virus-RNA–positive blood),¹¹¹ mothers who are febrile (unless cause is a contraindication outlined in the previous section),¹¹⁷ mothers who have been exposed to low-level environmental chemical agents,^{118,119} and mothers who are seropositive carriers of cytomegalovirus (CMV) (not recent converters if the infant is term).¹¹¹ 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.^{120,121} Freezing and pasteurization can significantly decrease the CMV viral load in milk.¹²²

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.¹¹⁰

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.¹²³

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.¹²⁴

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.^{4,125} Furthermore, many of the mothers counted as breastfeeding were supplementing their infants with formula during the first 6 months of the infant's life.^{5,126} 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.¹²⁵ 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.^{4,127–130} 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.¹³¹ 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^{132,133}; disruptive hospital policies and practices¹³⁴; inappropriate interruption

of breastfeeding¹³⁵; early hospital discharge in some populations¹³⁶; lack of timely routine follow-up care and postpartum home health visits¹³⁷; maternal employment^{138,139} (especially in the absence of workplace facilities and support for breastfeeding)¹⁴⁰; lack of family and broad societal support¹⁴¹; media portrayal of bottle feeding as normative¹⁴²; commercial promotion of infant formula through distribution of hospital discharge packs, coupons for free or discounted formula, and some television and general magazine advertising^{143,144}; misinformation; and lack of guidance and encouragement from health care professionals.^{135,145,146}

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.^{147–149}
 - When direct breastfeeding is not possible, expressed human milk should be provided.^{150,151} 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.^{152,153} 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.^{154,155}
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.^{156–158}
 - The alert, healthy newborn infant is capable of latching on to a breast without specific assistance within the first hour after birth.¹⁵⁶ 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.^{159,160} 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.¹⁵⁶ Except under unusual circumstances, the newborn infant should remain with the mother throughout the recovery period.¹⁶¹

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.^{148,162-165}

5. Pacifier use is best avoided during the initiation of breastfeeding and used only after breastfeeding is well established.¹⁶⁶⁻¹⁶⁸
 - 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.¹⁶⁹
 - 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.¹⁷⁰
 - Crying is a late indicator of hunger.¹⁷¹ Appropriate initiation of breastfeeding is facilitated by continuous rooming-in throughout the day and night.¹⁷² The mother should offer both breasts at each feeding for as long a period as the infant remains at the breast.¹⁷³ 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.^{174,175}
 - 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.^{124,176,177}
 - 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[‡] and provides continuing protection against diarrhea and respiratory tract infection.^{30,34,128,178–184} Breastfeeding should be continued for at least the first year of life and beyond for as long as mutually desired by mother and child.¹⁸⁵
 - Complementary foods rich in iron should be introduced gradually beginning around 6 months of age.^{186–187} 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.^{148,188–192} 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.¹⁹³
 - 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.¹⁹⁴
 - 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.¹⁹⁵
 - 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).¹⁹⁶
 - 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.¹⁹⁷
 - Infants weaned before 12 months of age should not receive cow's milk but should receive iron-fortified infant formula.¹⁹⁸

11. All breastfed infants should receive 1.0 mg of vitamin K₁ oxide intramuscularly after the first feeding is completed and within the first 6 hours of life.¹⁹⁹
 - 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.²⁰⁰

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.²⁰¹

- 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.²⁰²
- 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.²⁰³
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.¹³ 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.^{204,205} Fortification of expressed human milk is indicated for many very low birth weight infants.¹³ 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.²⁰⁶⁻²⁰⁸ 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.²⁰⁹ 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.^{210,211}

▶ **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,² the American College of Obstetricians and Gynecologists,¹²⁷ the American Academy of Family Physicians,¹²⁸ and many other organizations.^{5,6,8,130,133,142,162} 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.²¹²
- 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.²¹³

- 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.²¹⁴
- 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.²¹⁵ 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.²¹⁶



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.

Section on Breastfeeding, 2003–2004

Lawrence M. Gartner, MD, Chairperson

Jane Morton, MD

Ruth A. Lawrence, MD

Audrey J. Naylor, MD, DrPH

Donna O'Hare, MD

Richard J. Schanler, MD

Arthur I. Eidelman, MD

Policy Committee Chairperson

Liaisons

Nancy F. Krebs, MD

Committee on Nutrition

Alice Lenihan, MPH, RD, LPN

National WIC Association

John Queenan, MD

American College of Obstetricians and Gynecologists

Staff

Betty Crase, IBCLC, RLC

FOOTNOTES

†There is a difference of opinion among AAP experts on this matter. The Section on Breastfeeding acknowledges that the Committee on Nutrition supports introduction of complementary foods between 4 and 6 months of age when safe and nutritious complementary foods are available.

[Back to Top](#)

REFERENCES

1. 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 :413 – 420
2. American Academy of Pediatrics, Work Group on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics*. 1997;100 :1035 –1039
3. American Academy of Pediatrics, Medical Home Initiatives for Children With Special Needs Project Advisory Committee. The medical home. *Pediatrics*. 2002;110 :184 –186
4. US Department of Health and Human Services. *Healthy People 2010: Conference Edition—Volumes I and II*. Washington, DC: US Department of Health and Human Services, Public Health Service, Office of the Assistant Secretary for Health; 2000:47–48
5. US Department of Health and Human Services. *HHS Blueprint for Action on Breastfeeding*. Washington, DC: US Department of Health and Human Services, Office on Women's Health; 2000
6. United States Breastfeeding Committee. *Breastfeeding in the United States: A National Agenda*. Rockville, MD: US Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau; 2001
7. American Academy of Pediatrics. *New Mother's Guide to Breastfeeding*. Meek JY, ed. New York, NY: Bantam Books; 2002
8. American Academy of Pediatrics, American College of Obstetricians and Gynecologists. *Guidelines for Perinatal Care*. Gilstrap LC, Oh W, eds. 5th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2002
9. American Academy of Pediatrics, Committee on Nutrition. *Pediatric Nutrition Handbook*. Kleinman RE, ed. 5th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2004
10. American Academy of Pediatrics. *Red Book: 2003 Report of the Committee on Infectious Diseases*. Pickering LK, ed. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003
11. American Academy of Pediatrics, Committee on Environmental Health. *Handbook of Pediatric Environmental Health*. Etzel RA, Balk SJ, eds. 2nd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003
12. Hambraeus L, Forsum E, Lönnerdal B. Nutritional aspects of breast milk and cow's milk formulas. In: Hambraeus L, Hanson L, MacFarlane H, eds. *Symposium on Food and Immunology*. Stockholm, Sweden: Almqvist and Wiksell; 1975
13. Schanler RJ. The use of human milk for premature infants. *Pediatr Clin North Am*. 2001;48 :207 –219

14. Lucas A, Morley R, Cole TJ. Randomised trial of early diet in preterm babies and later intelligence quotient. *BMJ*. 1998;317 :1481 –1487
15. Horwood LJ, Darlow BA, Mogridge N. Breast milk feeding and cognitive ability at 7–8 years. *Arch Dis Child Fetal Neonatal Ed*. 2001;84 :F23 –F27
16. Amin SB, Merle KS, Orlando MS, Dalzell LE, Guillet R. Brainstem maturation in premature infants as a function of enteral feeding type. *Pediatrics*. 2000;106 :318 –322
17. Hylander MA, Strobino DM, Dhanireddy R. Human milk feedings and infection among very low birth weight infants. *Pediatrics*. 1998;102(3) . Available at: www.pediatrics.org/cgi/content/full/102/3/e38
18. Hylander MA, Strobino DM, Pezzullo JC, Dhanireddy R. Association of human milk feedings with a reduction in retinopathy of prematurity among very low birthweight infants. *J Perinatol*. 2001;21 :356 –362
19. Singhal A, Farooqi IS, O'Rahilly S, Cole TJ, Fewtrell M, Lucas A. Early nutrition and leptin concentrations in later life. *Am J Clin Nutr*. 2002;75 :993 –999
20. Schanler RJ, Shulman RJ, Lau C. Feeding strategies for premature infants: beneficial outcomes of feeding fortified human milk versus preterm formula. *Pediatrics*. 1999;103 :1150 –1157
21. Lucas A, Cole TJ. Breast milk and neonatal necrotising enterocolitis. *Lancet*. 1990;336 :1519 –1523
22. Blaymore Bier J, Oliver T, Ferguson A, Vohr BR. Human milk reduces outpatient upper respiratory symptoms in premature infants during their first year of life. *J Perinatol*. 2002;22 :354 –359
23. Heinig MJ. Host defense benefits of breastfeeding for the infant. Effect of breastfeeding duration and exclusivity. *Pediatr Clin North Am*. 2001;48 :105 –123, ix
24. Cochi SL, Fleming DW, Hightower AW, et al. Primary invasive *Haemophilus influenzae* type b disease: a population-based assessment of risk factors. *J Pediatr*. 1986;108 :887 –896
25. Istre GR, Conner JS, Broome CV, Hightower A, Hopkins RS. Risk factors for primary invasive *Haemophilus influenzae* disease: increased risk from day care attendance and school-aged household members. *J Pediatr*. 1985;106 :190 –195
26. Takala AK, Eskola J, Palmgren J, et al. Risk factors of invasive *Haemophilus influenzae* type b disease among children in Finland. *J Pediatr*. 1989;115 :694 –701
27. Dewey KG, Heinig MJ, Nommsen-Rivers LA. Differences in morbidity between breast-fed and formula-fed infants. *J Pediatr*. 1995;126 :696 –702
28. Howie PW, Forsyth JS, Ogston SA, Clark A, Florey CD. Protective effect of breast feeding against infection. *BMJ*. 1990;300 :11 –16
29. Kramer MS, Guo T, Platt RW, et al. Infant growth and health outcomes associated with 3 compared with 6 mo of exclusive breastfeeding. *Am J Clin Nutr*. 2003;78 :291 –295

30. Popkin BM, Adair L, Akin JS, Black R, Briscoe J, Fliieger W. Breast-feeding and diarrheal morbidity. *Pediatrics*. 1990;86 :874 –882
31. Beaudry M, Dufour R, Marcoux S. Relation between infant feeding and infections during the first six months of life. *J Pediatr*. 1995;126 :191 –197
32. Bhandari N, Bahl R, Mazumdar S, Martines J, Black RE, Bhan MK. Effect of community-based promotion of exclusive breastfeeding on diarrhoeal illness and growth: a cluster randomized controlled trial. Infant Feeding Study Group. *Lancet*. 2003;361 :1418 –1423
33. Lopez-Alarcon M, Villalpando S, Fajardo A. Breast-feeding lowers the frequency and duration of acute respiratory infection and diarrhea in infants under six months of age. *J Nutr*. 1997;127 :436 –443
34. Bachrach VR, Schwarz E, Bachrach LR. Breastfeeding and the risk of hospitalization for respiratory disease in infancy: a meta-analysis. *Arch Pediatr Adolesc Med*. 2003;157 :237 –243
35. Oddy WH, Sly PD, de Klerk NH, et al. Breast feeding and respiratory morbidity in infancy: a birth cohort study. *Arch Dis Child*. 2003;88 :224 –228
36. Chulada PC, Arbes SJ Jr, Dunson D, Zeldin DC. Breast-feeding and the prevalence of asthma and wheeze in children: analyses from the Third National Health and Nutrition Examination Survey, 1988–1994. *J Allergy Clin Immunol*. 2003;111 :328 –336
37. Oddy WH, Peat JK, de Klerk NH. Maternal asthma, infant feeding, and the risk of asthma in childhood. *J Allergy Clin Immunol*. 2002;110 :65 –67
38. Gdalevich M, Mimouni D, Mimouni M. Breast-feeding and the risk of bronchial asthma in childhood: a systematic review with meta-analysis of prospective studies. *J Pediatr*. 2001;139 :261 –266
39. Oddy WH, Holt PG, Sly PD, et al. Association between breast feeding and asthma in 6 year old children: findings of a prospective birth cohort study. *BMJ*. 1999;319 :815 –819
40. Wright AL, Holberg CJ, Taussig LM, Martinez FD. Relationship of infant feeding to recurrent wheezing at age 6 years. *Arch Pediatr Adolesc Med*. 1995;149 :758 –763
41. Saarinen UM. Prolonged breast feeding as prophylaxis for recurrent otitis media. *Acta Paediatr Scand*. 1982;71 :567 –571
42. Duncan B, Ey J, Holberg CJ, Wright AL, Martinez FD, Taussig LM. Exclusive breast-feeding for at least 4 months protects against otitis media. *Pediatrics*. 1993;91 :867 –872
43. Owen MJ, Baldwin CD, Swank PR, Pannu AK, Johnson DL, Howie VM. Relation of infant feeding practices, cigarette smoke exposure, and group child care to the onset and duration of otitis media with effusion in the first two years of life. *J Pediatr*. 1993;123 :702 –711
44. Paradise JL, Elster BA, Tan L. Evidence in infants with cleft palate that breast milk protects against otitis media. *Pediatrics*. 1994;94 :853 –860

45. Aniansson G, Alm B, Andersson B, et al. A prospective cohort study on breast-feeding and otitis media in Swedish infants. *Pediatr Infect Dis J*. 1994;13 :183 –188
46. Pisacane A, Graziano L, Mazzarella G, Scarpellino B, Zona G. Breast-feeding and urinary tract infection. *J Pediatr*. 1992;120 :87 –89
47. Marild S, Hansson S, Jodal U, Oden A, Svedberg K. Protective effect of breastfeeding against urinary tract infection. *Acta Paediatr*. 2004;93 :164 –168
48. Chen A, Rogan WJ. Breastfeeding and the risk of postneonatal death in the United States. *Pediatrics*. 2004;113(5) . Available at: www.pediatrics.org/cgi/content/full/113/5/e435
49. Horne RS, Parslow PM, Ferens D, Watts AM, Adamson TM. Comparison of evoked arousability in breast and formula fed infants. *Arch Dis Child*. 2004;89 (1):22 –25
50. Ford RPK, Taylor BJ, Mitchell EA, et al. Breastfeeding and the risk of sudden infant death syndrome. *Int J Epidemiol*. 1993;22 :885 –890
51. Mitchell EA, Taylor BJ, Ford RPK, et al. Four modifiable and other major risk factors for cot death: the New Zealand study. *J Paediatr Child Health*. 1992;28(suppl 1) :S3 –S8
52. Scragg LK, Mitchell EA, Tonkin SL, Hassall IB. Evaluation of the cot death prevention programme in South Auckland. *N Z Med J*. 1993;106 :8 –10
53. Alm B, Wennergren G, Norvenius SG, et al. Breast feeding and the sudden infant death syndrome in Scandinavia, 1992–95. *Arch Dis Child*. 2002;86 :400 –402
54. McVea KL, Turner PD, Pepler DK. The role of breastfeeding in sudden infant death syndrome. *J Hum Lact*. 2000;16 :13 –20
55. Mosko S, Richard C, McKenna J. Infant arousals during mother-infant bed sharing: implications for infant sleep and sudden infant death syndrome research. *Pediatrics*. 1997;100 :841 –849
56. Gerstein HC. Cow's milk exposure and type 1 diabetes mellitus. A critical overview of the clinical literature. *Diabetes Care*. 1994;17 :13 –19
57. Kostraba JN, Cruickshanks KJ, Lawler-Heavner J, et al. Early exposure to cow's milk and solid foods in infancy, genetic predisposition, and the risk of IDDM. *Diabetes*. 1993;42 :288 –295
58. Pettit DJ, Forman MR, Hanson RL, Knowler WC, Bennett PH. Breastfeeding and the incidence of non-insulin-dependent diabetes mellitus in Pima Indians. *Lancet*. 1997;350 :166 –168
59. Perez-Bravo E, Carrasco E, Guitierrez-Lopez MD, Martinez MT, Lopez G, de los Rios MG. Genetic predisposition and environmental factors leading to the development of insulin-dependent diabetes mellitus in Chilean children. *J Mol Med*. 1996;74 :105 –109
60. Davis MK. Review of the evidence for an association between infant feeding and childhood cancer. *Int J Cancer Suppl*. 1998;11 :29 –33

61. Smulevich VB, Solionova LG, Belyakova SV. Parental occupation and other factors and cancer risk in children: I. Study methodology and non-occupational factors. *Int J Cancer*. 1999;83 :712 –717
62. Bener A, Denic S, Galadari S. Longer breast-feeding and protection against childhood leukaemia and lymphomas. *Eur J Cancer*. 2001;37 :234 –238
63. Armstrong J, Reilly JJ, Child Health Information Team. Breastfeeding and lowering the risk of childhood obesity. *Lancet*. 2002;359 :2003 –2004
64. Dewey KG, Heinig MJ, Nommsen LA, Peerson JM, Lonnerdal B. Breast-fed infants are leaner than formula-fed infants at 1 year of age: the DARLING study. *Am J Clin Nutr*. 1993;57 :140 –145
65. Arenz S, Ruckerl R, Koletzko B, Von Kries R. Breast-feeding and childhood obesity—a systematic review. *Int J Obes Relat Metab Disord*. 2004;28 :1247 –1256
66. Grummer-Strawn LM, Mei Z. Does breastfeeding protect against pediatric overweight? Analysis of longitudinal data from the Centers for Disease Control and Prevention Pediatric Nutrition Surveillance System. *Pediatrics*. 2004;113(2) . Available at: www.pediatrics.org/cgi/content/full/113/2/e81
67. Stettler N, Zemel BS, Kumanyika S, Stallings VA. Infant weight gain and childhood overweight status in a multicenter, cohort study. *Pediatrics*. 2002;109 :194 –199
68. Gillman MW, Rifas-Shiman SL, Camargo CA, et al. Risk of overweight among adolescents who were breastfed as infants. *JAMA*. 2001;285 :2461 –2467
69. Toschke AM, Vignerova J, Lhotska L, Osancova K, Koletzko B, von Kries R. Overweight and obesity in 6- to 14-year old Czech children in 1991: protective effect of breast-feeding. *J Pediatr*. 2002;141 :764 –769
70. American Academy of Pediatrics, Committee on Nutrition. Prevention of pediatric overweight and obesity. *Pediatrics*. 2003;112 :424 –430
71. Owen CG, Whincup PH, Odoki K, Gilg JA, Cook DG. Infant feeding and blood cholesterol: a study in adolescents and a systematic review. *Pediatrics*. 2002;110 :597 –608
72. Horwood LJ, Fergusson DM. Breastfeeding and later cognitive and academic outcomes. *Pediatrics*. 1998;101(1) . Available at: www.pediatrics.org/cgi/content/full/101/1/e9
73. Anderson JW, Johnstone BM, Remley DT. Breast-feeding and cognitive development: a meta-analysis. *Am J Clin Nutr*. 1999;70 :525 –535
74. Jacobson SW, Chiodo LM, Jacobson JL. Breastfeeding effects on intelligence quotient in 4- and 11-year-old children. *Pediatrics*. 1999;103(5) . Available at: www.pediatrics.org/cgi/content/full/103/5/e71
75. Reynolds A. Breastfeeding and brain development. *Pediatr Clin North Am*. 2001;48 :159 –171
76. Mortensen EL, Michaelsen KF, Sanders SA, Reinisch JM. The association between duration of breastfeeding and adult intelligence. *JAMA*. 2002;287 :2365 –2371

77. Batstra L, Neeleman, Hadders-Algra M. Can breast feeding modify the adverse effects of smoking during pregnancy on the child's cognitive development? *J Epidemiol Community Health.* 2003;57 :403 –404
78. Rao MR, Hediger ML, Levine RJ, Naficy AB, Vik T. Effect of breastfeeding on cognitive development of infants born small for gestational age. *Acta Paediatr.* 2002;91 :267 –274
79. Bier JA, Oliver T, Ferguson AE, Vohr BR. Human milk improves cognitive and motor development of premature infants during infancy. *J Hum Lact.* 2002;18 :361 –367
80. Feldman R, Eidelman AI. Direct and indirect effects of breast-milk on the neurobehavioral and cognitive development of premature infants. *Dev Psychobiol.* 2003;43 :109 –119
81. Gray L, Miller LW, Phillip BL, Blass EM. Breastfeeding is analgesic in healthy newborns. *Pediatrics.* 2002;109 :590 –593
82. Carbajal R, Veerapen S, Couderc S, Jugie M, Ville Y. Analgesic effect of breast feeding in term neonates: randomized controlled trial. *BMJ.* 2003;326 :13
83. Labbok MH. Effects of breastfeeding on the mother. *Pediatr Clin North Am.* 2001;48 :143 –158
84. Chua S, Arulkumaran S, Lim I, Selamat N, Ratnam SS. Influence of breastfeeding and nipple stimulation on postpartum uterine activity. *Br J Obstet Gynaecol.* 1994;101 :804 –805
85. Kennedy KI, Labbok MH, Van Look PF. Lactational amenorrhea method for family planning. *Int J Gynaecol Obstet.* 1996;54 :55 –57
86. Dewey KG, Heinig MJ, Nommsen LA. Maternal weight-loss patterns during prolonged lactation. *Am J Clin Nutr.* 1993;58 :162 –166
87. Newcomb PA, Storer BE, Longnecker MP, et al. Lactation and a reduced risk of premenopausal breast cancer. *N Engl J Med.* 1994;330 :81 –87
88. Collaborative Group on Hormonal Factors in Breast Cancer. Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50302 women with breast cancer and 96973 women without the disease. *Lancet.* 2002;360 :187 –195
89. Lee SY, Kim MT, Kim SW, Song MS, Yoon SJ. Effect of lifetime lactation on breast cancer risk: a Korean women's cohort study. *Int J Cancer.* 2003;105 :390 –393
90. Tryggvadottir L, Tulinius H, Eyfjord JE, Sigurvinnsson T. Breastfeeding and reduced risk of breast cancer in an Icelandic cohort study. *Am J Epidemiol.* 2001;154 :37 –42
91. Enger SM, Ross RK, Paganini-Hill A, Bernstein L. Breastfeeding experience and breast cancer risk among postmenopausal women. *Cancer Epidemiol Biomarkers Prev.* 1998;7 :365 –369
92. Jernstrom H, Lubinski J, Lynch HT, et al. Breast-feeding and the risk of breast cancer in BRCA1 and BRCA2 mutation carriers. *J Natl Cancer Inst.* 2004;96 :1094 –1098

93. Rosenblatt KA, Thomas DB. Lactation and the risk of epithelial ovarian cancer. WHO Collaborative Study of Neoplasia and Steroid contraceptives. *Int J Epidemiol.* 1993;22 :192 –197
94. Cumming RG, Klineberg RJ. Breastfeeding and other reproductive factors and the risk of hip fractures in elderly women. *Int J Epidemiol.* 1993;22 :684 –691
95. Lopez JM, Gonzalez G, Reyes V, Campino C, Diaz S. Bone turnover and density in healthy women during breastfeeding and after weaning. *Osteoporos Int.* 1996;6 :153 –159
96. Paton LM, Alexander JL, Nowson CA, et al. Pregnancy and lactation have no long-term deleterious effect on measures of bone mineral in healthy women: a twin study. *Am J Clin Nutr.* 2003;77 :707 –714
97. Weimer J. *The Economic Benefits of Breast Feeding: A Review and Analysis.* Food Assistance and Nutrition Research Report No. 13. Washington, DC: Food and Rural Economics Division, Economic Research Service, US Department of Agriculture; 2001
98. Ball TM, Wright AL. Health care cost of formula-feeding in the first year of life. *Pediatrics.* 1999;103 :870 –876
99. Tuttle CR, Dewey KG. Potential cost savings for Medi-Cal, AFDC, food stamps, and WIC programs associated with increasing breast-feeding among low-income Hmong women in California. *J Am Diet Assoc.* 1996;96 :885 –890
100. Cohen R, Mrtek MB, Mrtek RG. Comparison of maternal absenteeism and infant illness rates among breast-feeding and formula-feeding women in two corporations. *Am J Health Promot.* 1995;10 :148 –153
101. Jarosz LA. Breast-feeding versus formula: cost comparison. *Hawaii Med J.* 1993;52 :14 –18
102. Levine RE, Huffman SL, Center to Prevent Childhood Malnutrition. *The Economic Value of Breastfeeding, the National, Public Sector, Hospital and Household Levels: A Review of the Literature.* Washington, DC: Social Sector Analysis Project, Agency for International Development; 1990
103. Chen Y-T. Defects in galactose metabolism. In: Behrman RE, Kliegman RM, Jenson HB, eds. *Nelson Textbook of Pediatrics. 16th ed.* Philadelphia, PA: W. B. Saunders; 2000:413 –414
104. Ando Y, Saito K, Nakano S, et al. Bottle-feeding can prevent transmission of HTLV-I from mothers to their babies. *J Infect.* 1989;19 :25 –29
105. Centers for Disease Control and Prevention and USPHS Working Group. Guidelines for counseling persons infected with human T-lymphotropic virus type I (HTLV-1) and type II (HTLV-II). *Ann Intern Med.* 1993;118 :448 –454
106. Gori G, Cama G, Guerresi E, et al. Radioactivity in breastmilk and placenta after Chernobyl accident [letter]. *Am J Obstet Gynecol.* 1988;158 :1243 –1244

107. Robinson PS, Barker P, Campbell A, Henson P, Surveyor I, Young PR. Iodine-131 in breast milk following therapy for thyroid carcinoma. *J Nucl Med.* 1994;35 :1797 – 1801
108. Bakheet SM, Hammami MM. Patterns of radioiodine uptake by the lactating breast. *Eur J Nucl Med.* 1994;21 :604 –608
109. Egan PC, Costanza ME, Dodion P, Egorin MJ, Bachur NR. Doxorubicin and cisplatin excretion into human milk. *Cancer Treat Rep.* 1985;69 :1387 –1389
110. American Academy of Pediatrics, Committee on Drugs. Transfer of drugs and other chemicals into human milk. *Pediatrics.* 2001;108 :776 –789
111. American Academy of Pediatrics. Transmission of infectious agents via human milk. In: Pickering LK, ed. *Red Book: 2003 Report of the Committee on Infectious Diseases.* 26th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003:118 – 121
112. Read JS; American Academy of Pediatrics, Committee on Pediatric AIDS. Human milk, breastfeeding, and transmission of human immunodeficiency virus type 1 in the United States. *Pediatrics.* 2003;112 :1196 –1205
113. World Health Organization. *HIV and Infant Feeding: A Guide for Health Care Managers and Supervisors.* Publication Nos. WHO/FRH/NUT/98.2, UNAIDS/98.4, UNICEF/PD/NUT/(J)98.2. Geneva, Switzerland: World Health Organization; 1998
114. Kourtis AP, Buteera S, Ibegbu C, Belec L, Duerr A. Breast milk and HIV-1: vector of transmission or vehicle of protection? *Lancet Infect Dis.* 2003;3 :786 –793
115. Coutsooudis A, Pillay K, Spooner E, Kuhn L, Coovadia HM. Influence of infant-feeding patterns on early mother-to-child transmission of HIV-I in Durban, South Africa: a prospective cohort study. South African Vitamin A Study Group. *Lancet.* 1999;354 :471 –476
116. Coutsooudis A, Rollins N. Breast-feeding and HIV transmission: the jury is still out. *J Pediatr Gastroenterol Nutr.* 2003;36 :434 –442
117. Lawrence RA, Lawrence RM. Appendix E. Precautions and breastfeeding recommendations for selected maternal infections. In: *Breastfeeding: A Guide for the Medical Profession.* 5th ed. St Louis, MO: Mosby Inc; 1999:868 –885
118. Berlin CM Jr, LaKind JS, Sonawane BR, et al. Conclusions, research needs, and recommendations of the expert panel: Technical Workshop on Human Milk Surveillance and Research for Environmental Chemicals in the United States. *J Toxicol Environ Health A.* 2002;65 :1929 –1935
119. Ribas-Fito N, Cardo E, Sala M, et al. Breastfeeding, exposure to organochlorine compounds, and neurodevelopment in infants. *Pediatrics.* 2003;111(5) . Available at: www.pediatrics.org/cgi/content/full/111/5/e580
120. Hamprecht K, Maschmann J, Vochem M, Dietz K, Speer CP, Jahn G. Epidemiology of transmission of cytomegalovirus from mother to preterm infant by breastfeeding. *Lancet.* 2001;357 :513 –518

121. Yasuda A, Kimura H, Hayakawa M, et al. Evaluation of cytomegalovirus infections transmitted via breast milk in preterm infants with a real-time polymerase chain reaction assay. *Pediatrics*. 2003;111 :1333 –1336
122. Friis H, Andersen HK. Rate of inactivation of cytomegalovirus in raw banked milk during storage at –20 degrees C and pasteurisation. *Br Med J (Clin Res Ed)*. 1982;285 :1604 –1605
123. Anderson PO. Alcohol and breastfeeding. *J Hum Lact*. 1995;11 :321 –323
124. American Academy of Pediatrics, Subcommittee on Hyperbilirubinemia. Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. *Pediatrics*. 2004;114 :297 –316
125. Ryan AS, Wenjun Z, Acosta A. Breastfeeding continues to increase into the new millennium. *Pediatrics*. 2002;110 :1103 –1109
126. Polhamus B, Dalenius K, Thompson D, et al. *Pediatric Nutrition Surveillance 2001 Report*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention; 2003
127. American College of Obstetricians and Gynecologists. Breastfeeding: maternal and infant aspects. *ACOG Educational Bulletin Number 258*. Washington, DC: American College of Obstetricians and Gynecologists; 2000
128. American Academy of Family Physicians. *AAFP Policy Statement on Breastfeeding*. Leawood, KS: American Academy of Family Physicians; 2001
129. Fifty-Fourth World Health Assembly. *Global Strategy for Infant and Young Child Feeding. The Optimal Duration of Exclusive Breastfeeding*. Geneva, Switzerland: World Health Organization; 2001
130. United Nations Children's Fund. *Breastfeeding: Foundation for a Healthy Future*. New York, NY: United Nations Children's Fund; 1999
131. Institute of Medicine, Committee on Nutritional Status During Pregnancy and Lactation. *Nutrition During Lactation*. Washington, DC: National Academy Press; 1991:24–25, 161–171, 197–200
132. The Ross Mothers Survey. *Breastfeeding Trends Through 2002*. Abbott Park, IL: Ross Products Division, Abbot Laboratories; 2002
133. World Health Organization and United Nations Children's Fund. *Protecting, Promoting and Supporting Breast-Feeding: The Special Role of Maternity Services*. Geneva, Switzerland: World Health Organization; 1989:13–18
134. Powers NG, Naylor AJ, Wester RA. Hospital policies: crucial to breastfeeding success. *Semin Perinatol*. 1994;18 :517 –524
135. Freed GL, Clark SJ, Sorenson J, Lohr JA, Cefalo R, Curtis P. National assessment of physicians' breast-feeding knowledge, attitudes, training, and experience. *JAMA*. 1995;273 :472 –476

136. Braveman P, Egerter S, Pearl M, Marchi K, Miller C. Problems associated with early discharge of newborn infants. *Pediatrics*. 1995;96 :716 –726
137. Williams LR, Cooper MK. Nurse-managed postpartum home care. *J Obstet Gynecol Neonatal Nurs*. 1993;22 :25 –31
138. Gielen AC, Faden RR, O'Campo P, Brown CH, Paige DM. Maternal employment during the early postpartum period: effects on initiation and continuation of breast-feeding. *Pediatrics*. 1991;87 :298 –305
139. Ryan AS, Martinez GA. Breast-feeding and the working mother: a profile. *Pediatrics*. 1989;83 :524 –531
140. Frederick IB, Auerback KG. Maternal-infant separation and breast-feeding. The return to work or school. *J Reprod Med*. 1985;30 :523 –526
141. Spisak S, Gross SS. *Second Followup Report: The Surgeon General's Workshop on Breastfeeding and Human Lactation*. Washington, DC: National Center for Education in Maternal and Child Health; 1991
142. World Health Assembly. *International Code of Marketing of Breast-Milk Substitutes*. Resolution of the 34th World Health Assembly. No. 34.22, Geneva, Switzerland: World Health Organization; 1981
143. Howard CR, Howard FM, Weitzman ML. Infant formula distribution and advertising in pregnancy: a hospital survey. *Birth*. 1994;21 :14 –19
144. Howard FM, Howard CR, Weitzman M. The physician as advertiser: the unintentional discouragement of breast-feeding. *Obstet Gynecol*. 1993;81 :1048 –1051
145. Freed GL, Jones TM, Fraley JK. Attitudes and education of pediatric house staff concerning breast-feeding. *South Med J*. 1992;85 :483 –485
146. Williams EL, Hammer LD. Breastfeeding attitudes and knowledge of pediatricians-in-training. *Am J Prev Med*. 1995;11 :26 –33
147. Gartner LM. Introduction. Breastfeeding in the hospital. *Semin Perinatol*. 1994;18 :475
148. American Academy of Pediatrics, Committee on Nutrition. Breastfeeding. In: Kleinman RE, ed. *Pediatric Nutrition Handbook*. 5th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2004:55 –85
149. American Dietetic Association. Position of the American Dietetic Association: breaking the barriers to breastfeeding. *J Am Diet Assoc*. 2001;101 :1213 –1220
150. Schanler RJ, Hurst NM. Human milk for the hospitalized preterm infant. *Semin Perinatol*. 1994;18 :476 –484
151. Lemons P, Stuart M, Lemons JA. Breast-feeding the premature infant. *Clin Perinatol*. 1986;13 :111 –122
152. Kron RE, Stein M, Goddard KE. Newborn sucking behavior affected by obstetric sedation. *Pediatrics*. 1966;37 :1012 –1016

153. Ransjo-Arvidson AB, Matthiesen AS, Lilja G, Nissen E, Widstrom AM, Uvnas-Moberg K. Maternal analgesia during labor disturbs newborn behavior: effects on breastfeeding, temperature, and crying. *Birth*. 2001;28 :5 –12
154. Widstrom A-M, Thingstrom-Paulsson J. The position of the tongue during rooting reflexes elicited in newborn infants before the first suckle. *Acta Paediatr*. 1993;82 :281 – 283
155. Wolf L, Glass RP. *Feeding and Swallowing Disorders in Infancy: Assessment and Management*. San Antonio, TX: Harcourt Assessment, Inc; 1992
156. Righard L, Alade MO. Effect of delivery room routine on success of first breast-feed. *Lancet*. 1990;336 :1105 –1107
157. Wiberg B, Humble K, de Chateau P. Long-term effect on mother-infant behavior of extra contact during the first hour post partum. V. *Follow-up at three years*. *Scand J Soc Med*. 1989;17 :181 –191
158. Mikiel-Kostyra K, Mazur J, Boltruszko I. Effect of early skin-to-skin contact after delivery on duration of breastfeeding: a prospective cohort study. *Acta Paediatr*. 2002;91 :1301 –1306
159. Christensson K, Siles C, Moreno L, et al. Temperature, metabolic adaptation and crying in healthy, full-term newborns cared for skin-to-skin or in a cot. *Acta Paediatr*. 1992;81 :488 –493
160. Van Den Bosch CA, Bullough CH. Effect of early suckling on term neonates' core body temperature. *Ann Trop Paediatr*. 1990;10 :347 –353
161. Sosa R, Kennell JH, Klaus M, Urrutia JJ. The effect of early mother-infant contact on breast feeding, infection and growth. In: Lloyd JL, ed. *Breast-feeding and the Mother*. Amsterdam, Netherlands: Elsevier; 1976:179 –193
162. American Academy of Pediatrics, American College of Obstetricians and Gynecologists. Care of the neonate. In: Gilstrap LC, Oh W, eds. *Guidelines for Perinatal Care*. 5th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2002:222
163. Shrago L. Glucose water supplementation of the breastfed infant during the first three days of life. *J Hum Lact*. 1987;3 :82 –86
164. Goldberg NM, Adams E. Supplementary water for breast-fed babies in a hot and dry climate—not really a necessity. *Arch Dis Child*. 1983;58 :73 –74
165. Eidelman AI. Hypoglycemia in the breastfed neonate. *Pediatr Clin North Am*. 2001;48 :377 –387
166. Howard CR, Howard FM, Lamphear B, de Blicke EA, Eberly S, Lawrence RA. The effects of early pacifier use on breastfeeding duration. *Pediatrics*. 1999;103(3) . Available at: www.pediatrics.org/cgi/content/full/103/3/e33
167. Howard CR, Howard FM, Lanphear B, et al. Randomized clinical trial of pacifier use and bottle-feeding or cupfeeding and their effect on breastfeeding. *Pediatrics*. 2003;111 :511 –518

168. Schubiger G, Schwarz U, Tonz O. UNICEF/WHO Baby-Friendly Hospital Initiative: does the use of bottles and pacifiers in the neonatal nursery prevent successful breastfeeding? Neonatal Study Group. *Eur J Pediatr.* 1997;156 :874 –877
169. Kramer MS, Barr RG, Dagenais S, et al. Pacifier use, early weaning, and cry/fuss behavior: a randomized controlled trial. *JAMA.* 2001;286 :322 –326
170. Gunther M. Instinct and the nursing couple. *Lancet.* 1955;1 :575 –578
171. Klaus MH. The frequency of suckling. A neglected but essential ingredient of breast-feeding. *Obstet Gynecol Clin North Am.* 1987;14 :623 –633
172. Procianoy RS, Fernandes-Filho PH, Lazaro L, Sartori NC, Drebes S. The influence of rooming-in on breastfeeding. *J Trop Pediatr.* 1983;29 :112 –114
173. Anderson GC. Risk in mother-infant separation postbirth. *Image J Nurs Sch.* 1989;21 :196 –199
174. Riordan J, Bibb D, Miller M, Rawlins T. Predicting breastfeeding duration using the LATCH breastfeeding assessment tool. *J Hum Lact.* 2001;17 :20 –23
175. Hall RT, Mercer AM, Teasley SL, et al. A breast-feeding assessment score to evaluate the risk for cessation of breast-feeding by 7 to 10 days of age. *J Pediatr.* 2002;141 :659 –664
176. American Academy of Pediatrics, Committee on Practice and Ambulatory Medicine. Recommendations for preventive pediatric health care. *Pediatrics.* 2000;105 :645 –646
177. American Academy of Pediatrics, Committee on Fetus and Newborn. Hospital stay for healthy term newborns. *Pediatrics.* 1995;96 :788 –790
178. Ahn CH, MacLean WC Jr. Growth of the exclusively breast-fed infant. *Am J Clin Nutr.* 1980;33 :183 –192
179. Brown KH, Dewey KG, Allen LH. *Complementary Feeding of Young Children in Developing Countries: A Review of Current Scientific Knowledge.* Publication No. WHO/NUT/98.1. Geneva, Switzerland: World Health Organization; 1998
180. Heinig MJ, Nommsen LA, Peerson JM, Lonnerdal B, Dewey KG. Intake and growth of breast-fed and formula-fed infants in relation to the timing of introduction of complementary foods: the DARLING study. Davis Area Research on Lactation, Infant Nutrition, and Growth. *Acta Paediatr.* 1993;82 :999 –1006
181. Kramer MS, Kakuma R. *The Optimal Duration of Exclusive Breastfeeding. A Systematic Review.* Geneva, Switzerland: World Health Organization; 2002
182. Chantry CJ, Howard CR, Auinger P. Breastfeeding fully for 6 months vs. 4 months decreases risk of respiratory tract infection [abstract 1114]. *Pediatr Res.* 2002;51 :191A
183. Dewey KG, Cohen RJ, Brown KH, Rivera LL. Effects of exclusive breastfeeding for four versus six months on maternal nutritional status and infant motor development: results of two randomized trials in Honduras. *J Nutr.* 2001;131 :262 –267

184. Butte NF, Lopez-Alarcon MG, Garza C. *Nutrient Adequacy of Exclusive Breastfeeding for the Term Infant During the First Six Months of Life*. Geneva, Switzerland: World Health Organization; 2002
185. Sugarman M, Kendall-Tackett KA. Weaning ages in a sample of American women who practice extended breastfeeding. *Clin Pediatr (Phila)*. 1995;34 :642 –647
186. Dallman PR. Progress in the prevention of iron deficiency in infants. *Acta Paediatr Scand Suppl*. 1990;365 :28 –37
187. Domellof M, Lonnerdal B, Abrams SA, Hernell O. Iron absorption in breast-fed infants: effects of age, iron status, iron supplements, and complementary foods. *Am J Clin Nutr*. 2002;76 :198 –204
188. American Academy of Pediatrics, Committee on Fetus and Newborn, and American College of Obstetricians and Gynecologists. Nutritional needs of preterm neonates. In: *Guidelines for Perinatal Care*. 5th ed. Washington, DC: American Academy of Pediatrics, American College of Obstetricians and Gynecologists; 2002:259 –263
189. American Academy of Pediatrics, Committee on Nutrition. Nutritional needs of the preterm infant. In: Kleinman RE, ed. *Pediatric Nutrition Handbook*. 5th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2004:23 –54
190. Pisacane A, De Vizia B, Valiante A, et al. Iron status in breast-fed infants. *J Pediatr*. 1995;127 :429 –431
191. Griffin IJ, Abrams SA. Iron and breastfeeding. *Pediatr Clin North Am*. 2001;48 :401 –413
192. Dewey KG, Cohen RJ, Rivera LL, Brown KH. Effects of age of introduction of complementary foods on iron status of breastfed infants in Honduras. *Am J Clin Nutr*. 1998;67 :878 –884
193. Naylor AJ, Morrow AL. *Developmental Readiness of Normal Full Term Infants to Progress From Exclusive Breastfeeding to the Introduction of Complementary Foods: Reviews of the Relevant Literature Concerning Infant Immunologic, Gastrointestinal, Oral Motor and Maternal Reproductive and Lactational Development*. Washington, DC: Wellstart International and the LINKAGES Project/Academy of Educational Development; 2001
194. Cohen RJ, Brown KH, Canahuati J, Rivera LL, Dewey KG. Determinants of growth from birth to 12 months among breast-fed Honduran infants in relation to age of introduction of complementary foods. *Pediatrics*. 1995;96 :504 –510
195. Ashraf RN, Jalil F, Aperia A, Lindblad BS. Additional water is not needed for healthy breast-fed babies in a hot climate. *Acta Paediatr*. 1993;82 :1007 –1011
196. Huffman SL, Ford K, Allen H, Streble P. Nutrition and fertility in Bangladesh: breastfeeding and post partum amenorrhoea. *Popul Stud (Camb)*. 1987;41 :447 –462
197. Dettwyler KA. A time to wean: the hominid blueprint for the natural age of weaning in modern human populations. In: Stuart-Macadam P, Dettwyler KA, eds.

198. American Academy of Pediatrics, Committee on Nutrition. Iron fortification of infant formulas. *Pediatrics*. 1999;104 :119 –123
199. American Academy of Pediatrics, Committee on Fetus and Newborn. Controversies concerning vitamin K and the newborn. *Pediatrics*. 2003;112 :191 –192
200. Hansen KN, Ebbesen F. Neonatal vitamin K prophylaxis in Denmark: three years' experience with oral administration during the first three months of life compared with one oral administration at birth. *Acta Paediatr*. 1996;85 :1137 –1139
201. Gartner LM, Greer FR; American Academy of Pediatrics, Section on Breastfeeding and Committee on Nutrition. Prevention of rickets and vitamin D deficiency: new guidelines for vitamin D intake. *Pediatrics*. 2003;111 :908 –910
202. Centers for Disease Control and Prevention. Recommendations for using fluoride to prevent and control dental caries in the United States. *MMWR Recomm Rep*. 2001;50 (RR-14):1 –42
203. Blair PS, Fleming PJ, Smith IJ, et al. Babies sleeping with parents: case-control study of factors influencing the risk of the sudden infant death syndrome. *BMJ*. 1999;319 :1457 –1462
204. Charpak N, Ruiz-Pelaez JG, Figueroa de C Z, Charpak Y. Kangaroo mother versus traditional care for newborn infants ≤ 2000 grams: a randomized, controlled trial. *Pediatrics*. 1997;100 :682 –688
205. Hurst N, Valentine CJ, Renfro L, Burns P, Ferlic L. Skin-to-skin holding in the neonatal intensive care influences maternal milk volume. *J Perinatol*. 1997;17 :213 –217
206. Hughes V. Guidelines for the establishment and operation of a human milk bank. *J Hum Lact*. 1990;6 :185 –186
207. Human Milk Banking Association of North America. *Guidelines for Establishment and Operation of a Donor Human Milk Bank*. Raleigh, NC: Human Milk Banking Association of North America Inc; 2003
208. Arnold LD. Clinical uses of donor milk. *J Hum Lact*. 1990;6 :132 –133
209. Kaplan M, Hammerman C. Severe neonatal hyperbilirubinemia: a potential complication of glucose-6-phosphate dehydrogenase deficiency. *Clin Perinatol*. 1998;25 :575 –590, viii
210. Kaplan M, Vreman HJ, Hammerman C, Schimmel MS, Abrahamov A, Stevenson DK. Favism by proxy in nursing glucose-6-dehydrogenase-deficient neonates. *J Perinatol*. 1998;18 :477 –479
211. Gerk PM, Kuhn RJ, Desai NS, McNamara PJ. Active transport of nitrofurantoin into human milk. *Pharmacotherapy*. 2001;21 :669 –675

212. American Academy of Pediatrics, Section on Pediatric Dentistry. Oral health risk assessment timing and establishment of the dental home. *Pediatrics*. 2003;111 :1113 – 1116
213. Fewtrell MS, Lucas P, Collier S, Singhal A, Ahluwalia JS, Lucas A. Randomized trial comparing the efficacy of a novel manual breast pump with a standard electric breast pump in mothers who delivered preterm infants. *Pediatrics*. 2001;107 :1291 –1297
214. American Academy of Pediatrics, Breastfeeding Promotion in Physicians' Office Practices Program. Elk Grove Village, IL: American Academy of Pediatrics; 2001, 2004
215. Freed GL, Clark SJ, Lohr JA, Sorenson JR. Pediatrician involvement in breastfeeding promotion: a national study of residents and practitioners. *Pediatrics*. 1995;96 :490 –494
216. Brown LP, Bair AH, Meier PP. Does federal funding for breastfeeding research target our national health objectives? *Pediatrics*. 2003;111(4) . Available at: www.pediatrics.org/cgi/content/full/111/4/e360

[Back to Top](#)

Appendix C

Why Support a Worksite Breastfeeding Program





Why Support a Worksite Breastfeeding Program

A significant portion of the work force is women. Seventy percent of employed mothers who have children under 3 years of age work full time. In 2001, 51 percent of married women returned to work while their children were under the age of one, with 67 percent of those women working full-time. (US Bureau of Labor Statistics 2001.)

As a new mother, returning to work after having a baby, can be one of the most difficult transitions in her life. A woman who wants to continue to breastfeed her baby after she returns to work faces many challenges.

Maintaining an adequate milk supply requires that she either nurse or pump breastmilk during working hours.

Employers' policies and practices that support nursing mothers can make the difference between continued successful breastfeeding and unwanted weaning.

Employers benefit by supporting nursing mothers.

- Breastfeeding women require less sick time and personal leave because their infants are more resistant to illness.
- Employers who cover health care costs for their employees and families also experience lower health care claims because breastfed infants are fifty percent (50%) less likely than formula fed infants to become ill in the first year of life.

Allowing a mother to participate in an Infant At Work Program benefits mother's, infants and employers.

Providing a designated area in the workplace for breastfeeding or to pump breastmilk is highly encouraged by the AAP (American Academy of Pediatrics). AAP also urges mothers to breastfeed their babies for at least one year for optimal health, development and nutrition.





Employers Benefit By Supporting Breastfeeding Mothers

Employers with worksite breastfeeding programs enjoy:

- Reduced staff turnover and retention of skilled workers after the birth of a child.
- Significantly lower working mother absenteeism. (Breastfed infants are ill less often and less severely.)
- Lower and fewer health insurance claims.
 - Breastfed infants typically require fewer sick care visits, prescriptions, and hospitalizations.
 - Breastfed babies have fewer respiratory infections, ear infections and allergies.
 - Breastfed infants have decreased rates of asthma, colic, constipation, diarrhea and other digestive disorders.
- Enhanced job productivity, employee satisfaction, loyalty and morale.
- A healthier workforce in the future.
 - Breastfed babies grow into adults with decreased risk of developing obesity, type I and II diabetes, digestive diseases such as Crohn's, and certain cancers.
 - Mothers who choose to breastfeed have less risk of developing ovarian and breast cancer and a reduced risk of osteoporosis.

The community of the employer with a worksite breastfeeding program enjoys:

- A “family friendly” business partner.
- A better environment because breastfeeding uses less energy and creates less waste.





Breastfeeding Support and Resources

- Set up a worksite breastfeeding support room (lactation room). This room should be a private space, not a restroom. See Worksite Breastfeeding Support Accommodations on the next page.
- Allow a flexible work schedule, adequate breaks and consider job-sharing or part-time work. A full-time working mother (8 hours per day) will generally need to pump 2-3 times per day. Each pumping session lasts approximately 10-15 minutes (these breaks can/may coincide with using employee AM and PM breaks).
- Develop a written workplace policy on breastfeeding. A written policy sends a comforting message to female employees that they are welcome to continue breastfeeding.
- Educate personnel about why their breastfeeding co-workers need support.
- Create a congratulations card to give to pregnant moms. Include information on workplace breastfeeding policies and support services so women realize they can continue breastfeeding upon return to work.
- Include a referral resource list of lactation consultants and breastfeeding educators in your lactation room (check with local hospitals). A resource list of breastfeeding books, websites, pamphlets or other information on breastfeeding and returning to work is also helpful.

Resource Links

HHS Blueprint for Action on Breastfeeding; www.4women.gov; 1-800-994-9662.

La Leche League International; www.la lecheleague.org; 1-800-LALECHE.

Medela, Incorporated; www.medela.com.


International Lactation Consultant Association; www.ilca.org.

American Academy of Pediatrics; www.aap.org/policy/re9729.html.

Academy of Breastfeeding Medicine; www.bfmed.org.



Worksite Breastfeeding Support Accommodations

Minimum Accommodations	Medium Accommodations	Maximum Accommodations
Private space or room with a door that locks. Minimum 49 square feet.	Private space or room with a door that locks. Minimum 49 square feet.	Private space or room with a door that locks. Minimum 49 square feet.
Electrical outlet	Electrical outlet	Electrical outlet
Chair (\$40) (used items ok)	Chair (\$40)	Chair (\$40)
Small table (\$40)	Small table (\$40)	Small table (\$40)
Wastebasket (\$5)	Wastebasket (\$5)	Wastebasket (\$5)
Nearby sink with hot water	Nearby sink with hot water	Nearby sink with hot water
Towel/soap dispensers (\$50)	Towel/soap dispensers (\$50)	Towel/soap dispensers (\$50)
Sanitizer for spills (\$10)	Sanitizer for spills (\$10)	Sanitizer for spills (\$10)
Storage for cooler/pump	Storage for cooler/pump (small refrigerator nearby or in the room \$150)	Storage for cooler/pump (small refrigerator nearby or in the room \$150)
Employee rents or owns breast pump OR baby brought to mom for feedings (especially for workplaces with on-site child care)	Employee rents or owns breast pump, OR company provides a personal pump (\$200), OR owns pump (\$500) and employee owns attachment kit OR baby brought to mom for feedings	Employee rents or owns breast pump, OR company provides a personal pump (\$200), OR owns pump (\$500) and purchases employee attachment kits (\$30 per person) OR baby brought to mom for feedings
Estimated Cost = \$145		
	Foot stool (\$20)	Foot stool (\$20)
	Bulletin board (\$10) or wall or door space for pictures of baby	Bulletin board (\$10) or wall or door space for pictures of baby
	Wall clock (\$15)	Wall clock (\$15)
	Estimated Cost = \$840	
		Bulletin board (\$10) or wall or door space for pictures of baby Wall clock (\$15) Full length mirror (\$20) Pillows (\$30) Library of breastfeeding resources (free materials) Radio/cassette player (\$60) Outgoing Phone (\$45) Motivating Art on Walls (\$60)
		Estimated Cost = \$1,085



Breast Pumps and Breastfeeding Equipment

- **Manual pumps** are inexpensive and used for occasional milk expression. Manual pumps express milk from one breast at a time. Manual pumps are a single-user pump.
- **Battery operated pumps** are also relatively inexpensive. They generate a vacuum with a small battery operated motor. These are also recommended for occasional milk expression. This is a single-user pump.
- **Electric pumps** are generally used by mothers who work full-time or are pumping regularly. Electric pumps, although more expensive than manual or battery operated pumps are the most efficient at expressing milk. They can express milk from both breasts at the same time. Some electric breast pumps are suitable for a single user. The Medela 'Pump-n Style' is a single-user pump. 'Hospital-grade electric breast pumps' are appropriate for multiple-users as long as each nursing mother purchases an individual pumping kit for the machine.

Below is a list of companies who have literature, breastfeeding supplies and equipment. (Check your local hospital - they also have information on purchasing or renting breast pumps and supplies).

Medela, Inc., 1101 Corporate Drive, McHenry, IL 60050
Local Sales Representative: Kathy Gamble ext. 5143
1-800-435-8316 / www.medela.com

Ameda c/o Hollister, Inc., 2000 Hollister Drive, Libertyville, IL 60048
Local Sales Representative: Nicki Tsimmogiannis, ext. 5285
1-877-992-6332 / www.ameda.com

Whittlestone Breast Expresser, PO Box 2237, Antioch, CA 94531
1-877-608-6455 / www.whittlestone.com





Resources for the Breastfeeding Mother Returning to Work

- Breastfeeding A Parent's Guide by Amy Spangler, RN, MN IBCLC
www.amysbabycompany.com
- The Womanly Art of Breastfeeding published by La Leche League International. <http://store.llli.org/public>
- The Breastfeeding Answer Book by Nancy Mohrbacher, Julie Stock. published by La Leche League International <http://store.llli.org/public>
- Dad's 10 Minutes Breastfeeding Guide by Pamela K. Wiggins, IBCLC published by LA Publishing, LLC www.breastfeedingbooks.com
- Nursing Mother, Working Mother by Gale Pryor published by the Harvard Common Press, available through Amazon.com



[Back to Top](#)

Appendix D

Kansas Department of
Health and Environment,

Policy on Infant at Work Program.

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

Policy on Infant at Work Program

Policy Category: Infant at Work Program

Subject: Infant at Work

Reference: N/A

The Kansas Department of Health and Environment (KDHE) values its employees and believes that they are the agency's and State's greatest resource. KDHE is interested and committed to developing and implementing family-friendly policies to attract and retain qualified and experienced staff. It is the goal of KDHE to provide opportunities for employees that are consistent with the mission of the agency and conducive to an employee's work and work environment. It is in this spirit that the Infant at Work Policy is being established for eligible employees.

Statement on Infant at Work Policy

General Policy Guidelines

A. Eligibility

1. *Parents.* KDHE full-time, regular classified and unclassified employees who are new mothers, fathers, or legal guardians are eligible to participate in the program whether custody of the infant is by birth, adoption, or legal guardianship. Grandparents, brothers, sisters, aunts, uncles, and other family members are excluded unless he or she is the legal guardian.
2. *Infants.* Infants of the KDHE full-time, permanent classified and unclassified employees are eligible for the first 45 - 120 days after birth or adoption. Requests for the infant to enter the program before 45 days will require a physician's approval. The program is designed to accommodate an employee's participation with a single infant.
3. *Exemption.* Parents of infants who are employed in the Division of Health and Environmental Laboratories are not eligible to participate in the Infant at Work Program due to the potential for exposure to substances in the environment that may be harmful to the infant's health.

B. Location in the Workplace

1. *Work Station.* Each parent shall make his or her workstation suitable for the new infant. The new infant shall be located primarily at the parent's workstation during the workday. Each parent will provide the necessary furniture and equipment suitable for the infant's need.

2. Home. In the event the infant becomes sick, or is fussy for a prolonged period of time or causing a distraction in the work place or preventing the parent from accomplishing work, the parent shall take the infant home. A parent taking a sick infant home, shall first use available paid leave, before being placed in leave without pay status. Compensatory hours may be used at the employee's discretion.
3. Nursing. KDHE provides an on-site Lactation Room for mothers who prefer a more private area to nurse. This room is located on the 5th floor of the Curtis State Office Building.
4. A sick baby shall not be brought to work. The Center for Disease Control (CDC) "*Recommendations for Inclusion or Exclusion*" of children from out-of-home child care settings are attached hereto as *Attachment "A"*, and are hereby adopted by the Department as a means for determining whether an infant is sick.

C. Care Providers

1. Each parent shall designate two alternate care providers in the workplace. The care providers shall be KDHE employees who voluntarily agree to care for the infant in the event the parent is unavailable due to attendance at a meeting, participating in a telephone conference, etc. The alternate care provider may not simultaneously participate in the program as a parent bringing his or her infant to work and as an alternate care provider for another parent's child. The alternate care providers must be authorized by his or her supervisor to participate.
2. Each care provider shall complete and sign a "*Care Provider Agreement*" setting forth the care provider's duties and responsibilities. A sample Care Provider Agreement is attached hereto as *Attachment "B"*.
3. If a parent is going to be unavailable, the parent shall notify a care provider and place the infant in the provider's care.
4. If the parent is going to be unavailable for a period exceeding one and a half hours within a four-hour period, the parent shall make arrangements for the infant's care *outside* KDHE. A care provider in the workplace shall not be required to care for an infant for a period exceeding one and a half hours within a four-hour period.

D. Individual Plan

1. Each participating parent shall complete and sign an *Individual Plan* setting forth an individualized care plan for the infant, which shall be submitted to the parent's supervisor and division director for review and approval. The Individual Plan shall set forth general information regarding the infant's care, including the days and times the infant will be present in the workplace, the names and schedules of the alternate care providers, and the dates the parent will begin and end the Program. A sample Individual Plan is attached hereto as *Attachment "C"*.
2. The parent's immediate supervisor must first approve the *Individual Plan*. The respective

section, bureau and division director must then approve it. The *Individual Plan* shall be submitted to the Director, Division of Human Resources and Service Quality for final approval. Upon final approval, the parent may bring the infant to the workplace.

3. The parent and his or her immediate supervisor shall meet periodically to discuss and resolve complaints, if any, made against the infant in the workplace.
4. The parent is unauthorized to travel with his or her infant while driving or riding in state-owned or leased vehicle.
5. Denial of the parent's request to participate in the Infant at Work Program may be appealed in writing by the parent to the Director, Division of Human Resources and Service Quality. The Director will review the appeal, in cooperation with the respective division director to determine the suitability of the request. The Director shall make the final ruling in writing to the division director and parent.

E. Complaints

1. Any complaints made about the infant in the workplace shall be made in writing, signed by the person(s) making the complaint, and submitted to the parent's immediate supervisor.
2. Any properly submitted complaint shall be reviewed and discussed by the supervisor and the complaining person(s). The supervisor shall provide a copy of the complaint to the parent, and discuss it with the parent, to determine how to resolve the complaint.
3. If the parent is required to take some type of affirmative action to resolve the complaint, the parent shall modify his or her "*Individual Plan*" to include the steps to be taken to resolve the complaint. The modified "*Individual Plan*" shall be re-submitted for approval.
4. Any complaints regarding a Program participant that cannot be resolved satisfactorily shall be referred to designated staff in the Division of Human Resources and Service Quality. The Division will investigate the complaint and interview the person(s) making the complaint, the parent and the parent's division director. The Division will make recommendations to resolve the complaint, which may include options up to and including revoking the parent's eligibility to bring the infant to work.
5. The Secretary of KDHE shall review the recommendation, and with the Director of Human Resources and Service Quality, make a final ruling on the complaint. There is no right to further review or appeal the final ruling.

F. Termination of Program Eligibility

1. A parent's eligibility to participate in the Infant at Work Program shall be terminated when:
 - a. The infant becomes 120 days old;
 - b. The parent is no longer a KDHE full-time regular or unclassified employee;

- c. A decision is made pursuant to the Complaint Process set out in *Section "E"* above, revoking parent's eligibility to bring the infant to work.
2. If a parent's eligibility is revoked pursuant to *Section F, I.c* above, the Division of Human Resources and Service Quality will notify the parent in writing of the final ruling. The parent shall then remove the infant from the workplace within one week from receiving such notice.
3. KDHE reserves the right to terminate a participant's eligibility, with or without cause, or to cancel or retire the Program in part or in its entirety, with or without cause, requiring the parent to remove his or her infant from the workplace immediately.

Roderick L. Bremby, Secretary
Department of Health and Environment

Date

[Back to Top](#)

Martha Hagen, Breastfeeding Coordinator
Nutrition and WIC Services
Bureau for Children, Youth & Families
KDHE
1000 SW Jackson, Suite 220
Topeka, KS 66612-1274

Curtis State Office Building

Lactation Room for Nursing Mothers

*We want to help you to raise a
bright and healthy baby!*



Combining Work and Breastfeeding

Did you know that Curtis State Office Building (CSOB) has a Lactation Room for nursing mothers? This room is private, secure, and comfortable, and is located right in the building. Any employee who is providing breastmilk to her baby while she's at work is encouraged to use this room.

It's a big decision to consider continuing to breastfeed after returning to work. We want to help you make this transition and successfully reach your breastfeeding goal for your baby. We understand the challenges a breastfeeding mom faces, and we offer support, referral, and a location to help meet these challenges and help you raise a bright and healthy baby.



Call Martha Hagen, the Breastfeeding
Coordinator, at 785 291 3161,
email mhagen@kdhe.state.ks.us

Did you know that breastfed babies get sick less often than formula-fed babies? Breastfeeding moms have been shown to have better work performance as well as take less sick days than their peers who do not choose to breastfeed. Kids who were breastfed score higher in intelligence tests than those who were fed formula. Breastmilk is a renewable resource with no waste. Mom's body filters out environmental toxins, protecting baby from many different hazards. These are some of the reasons we want to help you to have a bright and healthy baby, and to have a smooth transition back to work.

Call the Breastfeeding Coordinator with any questions you may have about the Lactation Room or anything else about combining work and breastfeeding. Your call is confidential and can help you in many different ways.

Combining Work and Breastfeeding

Congratulations for considering to breastfeed your new baby!

You are making an important step to help your baby to be healthy and bright, as well as establishing an important and unique bond between you two.

You may be concerned about returning to work and continuing to breastfeed. People might have told you that its not possible to work away from your baby and still breastfeed. This is not true! KDHE wants to help you make this transition as easy as possible, there is



an already established network of support for breastfeeding moms, you can be part of it.

We are very lucky to have a new facility to work in with space for a Lactation Room. Because of The State of Kansas' awareness of the benefits to mom, baby, and employers of supporting breastfeeding moms, Kansas has taken a bold step and established a Lactation Room for nursing mothers. This room is available to any employee nursing mom so she can express breast milk for her baby in a private, secure, and comfortable location.

To use the Lactation Room, moms set up a schedule for using this room with the Breastfeeding Coordinator. Every meeting with the Coordinator is confidential. Breaks for expressing milk are coordinated with mom's immediate supervisor, like any other break.

How Will I Find the Time To Pump?

Most moms return to work by the time their babies are about six weeks old. At that point in a baby's life, mom needs to express milk only about 2 to 3 times during an 8 hour day. This can easily be done on existing 15 minute breaks and over a lunch break. In fact, going to the Lactation Room to get away and pump is a very relaxing way for a new mom to get a break in an otherwise hectic day.

As the baby gets older, mom will need to pump less frequently. A mom who starts off pumping three times a day can go to two times a day later on, and eventually even once a day. The Breastfeeding Coordinator is available to help you figure out how much and how often you need to pump for your baby, and she has lots of other resources for support.

How Do I Talk To My Supervisor?

We know it can be tough to talk about infant feeding, and especially breastfeeding, with some people. We understand if you feel uncomfortable or feel like someone wouldn't understand why this is important.

We have numerous resources to help you, and part of maintaining the Lactation Room is informing supervisory staff of the importance of this service for our employees. We have experience discussing breastfeeding issues with people who may not initially be receptive to the public health importance of infant feeding choices. We are here to support you in your decision.

What If I Just Want To Try Pumping?

The Lactation Room is available to ANY mom who wants to provide breastmilk for her baby while she's at work. It doesn't matter if you use it only once or for a whole year. It is up to you to decide whether to pump and for how long. We want to help you achieve your goal for your baby.

Please contact the Breastfeeding Coordinator if you are interested in trying pumping but are unsure how to get a breast pump. While we cannot provide you a pump, we can steer you in the right direction to get one for your use.

My Partner Thinks I Shouldn't Bother.

Please contact the Breastfeeding Coordinator for tips and resources. If you have decided that you want to continue breastfeeding after your return to work but are having trouble getting the support you need for this decision. Combining work and breastfeeding can be challenging, but it is endlessly worth the effort. We can help you with discussing the issues involved with your partner.

I Want To Pump For My Baby!

Now What Do I Do?

Call the Breastfeeding Coordinator at the phone number listed below, or send an email. We will help you every step of the way after that! Congratulations on this important decision!

Martha Hagen, Breastfeeding Coordinator
Nutrition and WIC Services
Bureau for Children, Youth & Families
KDHE
1000 SW Jackson, Suite 220
Topeka, KS 66612-1274

Phone: 785 296 1322
Email: mhagen@kdhe.state.ks.us