

# **Breastfeeding Support in the Hospital and Beyond**

**Florida Breastfeeding Coalition Webinar  
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# Disclosure Statement

- I have no relevant financial relationships with any manufacturer(s) or any commercial product(s) and/or provider of commercial services discussed in this CME activity.
- • I do not intend to discuss an unapproved/investigative use of a commercial product/device in this presentation.
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# Objectives

- Identify three evidence-based recommendations for peripartum breastfeeding management
- Assess adequacy of milk production/intake
- Identify ways to support breastfeeding in newborns with hyperbilirubinemia

# ABM Protocols

## ABM Clinical Protocol #5: Peripartum Breastfeeding Management for the Healthy Mother and Infant at Term

Revision, June 2008

The Academy of Breastfeeding Medicine Protocol Committee

*A central goal of The Academy of Breastfeeding Medicine is the development of clinical protocols for managing common medical problems that may impact breastfeeding success. These protocols serve only as guidelines for the care of breastfeeding mothers and infants and do not delineate an exclusive course of treatment or serve as standards of medical care. Variations in treatment may be appropriate according to the needs of an individual patient.*

# PEDIATRICS®

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## **Breastfeeding and the Use of Human Milk** SECTION ON BREASTFEEDING

*Pediatrics*; originally published online February 27, 2012;  
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# Peripartum Breastfeeding Management

## Prenatal

- Provide evidence-based information to allow informed decision (include education of maternal support people)
- Educate on potential side effects of labor medications, drug-free ways to address labor pain
- Physician, lactation consultant, LLLI, peer counselors

## Labor and Delivery

- Delivery companion (doula)

ABM Clinical Protocol # 5: Peripartum Breastfeeding Management for the Healthy Mother and Infant at Term

Breastfeed Med. 2008 Jun;3(2):129-32

# Peripartum Breastfeeding Management

## Peripartum policies and practices

- Skin-to-skin contact immediately after delivery until the first feeding is accomplished and encouraged throughout the postpartum period (even for Cesarean deliveries)
- Delay in routine procedures (weighing, measuring, bathing, blood tests, vaccines and eye prophylaxis) until after the first feeding is completed
- Practice rooming-in 24 hours a day (mother and infant should sleep in proximity to each other to facilitate breastfeeding)

ABM Clinical Protocols # 3 and # 5

American Academy of Pediatrics (AAP) Section on Breastfeeding: Breastfeeding and the Use of Human Milk. Pediatrics 2012 Mar;129(3):e827-41

# Peripartum Breastfeeding Management

## Peripartum policies and practices

- Ensure formal evaluation and documentation of breastfeeding by trained caregivers (including position, latch, milk transfer) at least for each nursing shift
- Give no supplements (water, glucose water, commercial infant formula or other fluids) unless medically indicated using standard evidence-based guidelines for the management of hyperbilirubinemia and hypoglycemia



# Model Breastfeeding Policy

- Give no pacifiers or artificial teats to breastfeeding infants
- Give to infants in NICU/ neonatal abstinence syndrome or during painful procedures
- Avoid routine use of nipple shields or bottle nipples on breast
- Avoid nipple ointments, creams unless for a dermatological problem; can use breast milk or colostrum after feeds

# Peripartum Breastfeeding Management

## Problems and Complications

- Includes: maternal anxiety, previous breast surgery, multiple births, prematurity
- Early discharge requires early risk assessment
- Maintain lactation if infant not able to consistently feed at the breast

# Model Breastfeeding Policy

- Show mothers how to breastfeed and maintain lactation, even if separated from infant
  - If not latching by 24 hours, instruct on breast massage and hand expression
  - Continue skin-to-skin and watch for feeding cues
  - Hand expression or double electric breast pump
  - AT LEAST every 3 hours for 15 minutes, should wake up during night
  - Continue feeding on demand
  - Proper storage and handling

# Early management of breastfeeding

- Colostrum: small amounts
- Extra water is not necessary
- Weight loss observation
  - Up to 5.5-6.6% weight loss in breastfed babies between days 2-3 of life
  - Regain birth weight by age 10-14 days
- Education and reassurance of mothers is key to maintaining exclusive breastfeeding during this period
- Common problems leading to unnecessary supplementation:
  - Sleepy infants who feed <12 times in first 48 hours
  - Fussy babies and exhausted mothers

# Infant Feeding Patterns

- Alternate the breast which is offered first
- No time limit on feedings
- Allow baby to feed on one breast until she falls off the breast
- Breastfeeding minimum of 8-12 times/day
- Use infant cues to determine when to feed: increased activity or alertness, rooting, mouthing

# Elimination pattern

## Indicators of adequate intake:

- Yellow bowel movements by day 5, at least six urinations per day and three to four stools per day by the fourth day of life, and regain birth weight by days 10–14

# Frequency of Breastfeeding and Serum Bilirubin Concentration

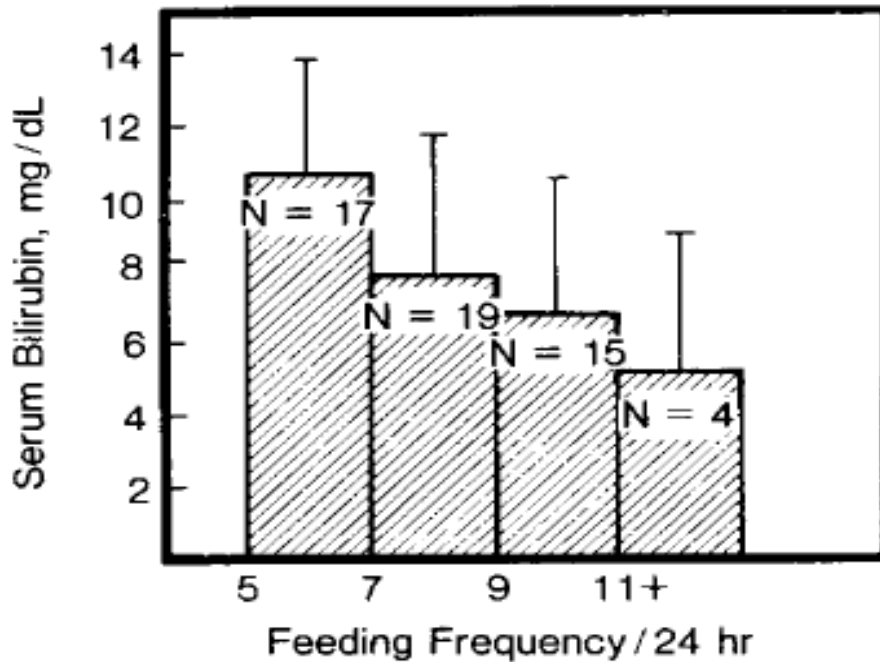


Table 2.—Results of Study

Day 3

	Group 1, ≤ 8 Feedings/24 hr	Group 2, > 8 Feedings/24 hr
No. of subjects	29	26
Feeding frequency/24 hr	6.8 ± 0.8* (5.3-8)	10.1 ± 1.6† (8.3-15.3)
Serum bilirubin, mg/dL	9.3 ± 3.5 (3.5-15.5)	6.5 ± 4.0‡ (1.5-12.5)
Length of feeding, min	14.3 ± 4	13.3 ± 3.7§
Weight loss, g	219 ± 86	216 ± 59§
Hematocrit, %	54 ± 6.5	55 ± 7.8§

\* Mean ± SD (range).

† P < .0001.

‡ P < .01.

§ Not significant.

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## **Family-Centered, Evidence-Based Phototherapy Delivery**

Kinga A. Szucs and Marc B. Rosenman

*Pediatrics*; originally published online May 13, 2013;

DOI: 10.1542/peds.2012-3479

The online version of this article, along with updated information and services, is located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/early/2013/05/08/peds.2012-3479>



# Results

- Baby naked (no hat) with only a diaper
- Protective eyewear for mother and baby
- Tape measure to ensure correct distance from the baby
- No difficulty with maternal or infant temperature regulation
- Supports family-centered care
- Encourage frequent breastfeeding
- Review early feeding cues
- Evaluate latch and milk transfer by trained provider
- Note: if mother is sleeping, the baby should be monitored by other family members or returned to the bassinet

# Risks of supplementation

- May alter infant bowel flora
- Potentially sensitizes the infant to foreign proteins/allergens
- Increases the risk of diarrhea and other infections
- Disrupts the supply-demand cycle, leading to inadequate milk supply
- Interferes with maternal-infant bonding
- Risk of decreasing breastfeeding duration and exclusivity

ABM Clinical Protocol #3 : Hospital Guidelines for the Use of Supplementary Feedings in the Healthy Term Breastfed Neonate. *Breastfeeding Medicine* 4 (3), 175-178.

# Indications for Supplementation

Have institutional policies regarding supplementation:

- Maternal or infant illness resulting in separation
- Inborn errors of metabolism (galactosemia)
- Maternal medications incompatible with breastfeeding
- Infant is unable to feed at the breast due to malformation or illness
- Severe hypoglycemia unresponsive to breastfeeding
- HIV positive mother in certain areas

ABM Clinical Protocol #3 : Hospital Guidelines for the Use of Supplementary Feedings in the Healthy Term Breastfed Neonate. *Breastfeeding Medicine* 4 (3), 175-178.

WHO/UNICEF Acceptable medical reasons for use of breast-milk substitutes 2009

# Contraindications to Breastfeeding

- Illicit drug use (cocaine, heroin)
- Active, untreated tuberculosis - can still use expressed milk
- Active herpetic lesion – if one breast unaffected, can nurse from that breast
- Varicella onset 5 days before or up to 48 hours after delivery – resume breastfeeding when no longer infectious
- Infection with HTLV I or II

# ***NOT* Contraindications to Breastfeeding**

- The following are **not** contraindications
  - CMV infection
  - Narcotic dependency
  - Alcohol ingestion
    - Less than 2 oz liquor, 8oz wine, 2 beers; >2 hours prior to nursing
  - Maternal smoking
  - PKU (requires close monitoring)

# Maternal Medications

- **References**

- **AAP Committee on Drugs**

- **Hale: *Medications and Mothers' Milk***

- **LactMed at ToxNet:**

- <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT>

- **Lawrence and Lawrence: *Breastfeeding: A Guide for the Medical Profession***

- **Briggs, Freeman, and Yaffe:**

- *Drugs in Pregnancy and Lactation*

- **Lactation Study Center Drug Data Bank, University of Rochester, NY**

- **American College of Radiology**

- <http://www.e-lactancia.org/ingles/inicio.asp>

# Human Milk Storage Information for Home Use for Full-Term Infants

## Preparation

- Wash hands (not breasts)
- Express milk via hand or pump
- Glass or polypropylene storage container - avoid polyethylene, steel, bisphenol A

## Storage

- Room temp (16-29°C) for 6-8 hours acceptable
- Refrigerated (4°C) for 5-8 days under very clean conditions
- Frozen (-17°C) 6-12 months
- Cool fresh milk before adding to stored milk
- Stored milk will have an altered smell and taste than fresh milk due to enzyme activity (lipase)

# Human Milk Storage Information for Home Use for Full-Term Infants

## Using Stored Milk

- Fresh better than frozen
- Defrost in refrigerator overnight or with warm water, avoid microwave
- No need for universal precautions
- Pasteurization destroys contaminants, freezing does not destroy all
- Pasteurization not ideal: breakdown of protective factors/immunoglobulins

ABM Protocol # 8: Human Milk Storage Information for Home Use for Full-Term Infants. Breastfeed Med. 2010

American Academy of Pediatrics (AAP) Section on Breastfeeding: Breastfeeding and the Use of Human Milk. Pediatrics 2012 Mar;129(3):e827-41



# The “Going Home Protocol” for Breastfeeding Mothers

## Breastfeeding Assessment

- Formal assessment of breastfeeding effectiveness every 8-12 hours in the hospital
- Evaluate risk factors for failure of exclusive breastfeeding upon discharge (including: early intention to use formula, early pacifier use, sore nipples)
- Decision for discharge
  - Health of mother/infant
  - Confidence to care for infant
  - Adequacy of support
  - Access to follow-up

# Going Home Protocol

## Maternal education

- Provide noncommercial educational materials
- Anticipatory guidance:
  - Engorgement
  - Signs of excessive jaundice
  - Indicators of adequate intake (void, stool, weight)
- Tips and information for mothers returning to work
- Instruction on hand expression

# Going Home Protocol

Resources (list and contact information):

- Knowledgeable physicians
- Lactation consultants
- Hospital/clinic based support groups
- WIC programs
- La Leche League International
- Peer counselors
- Nutritionists
- Telephone hot line and warm line

ABM Clinical Protocol #2: Guidelines for Hospital Discharge of the Breastfeeding Term Newborn and Mother: "The Going Home Protocol." *Breastfeeding Medicine* 2 (3), 158-161.

# Follow-Up Essential

- Office or home visit within 2-3 days by a physician or a physician-supervised breastfeeding-trained licensed health care provider (LC, home health nurse)
- If discharged in < 48 hrs: Follow-up 24-48 hrs post discharge for ALL infants
- All breastfeeding newborns should be seen by a pediatrician at 3 to 5 days of age ( within 48-72 hours after discharge)
  - Evaluate hydration (pattern of voiding/stooling)
    - Evaluate weight (no more than 7% loss from birth, no further weight loss by day 5)
  - Observe feeding
  - Presence or absence of jaundice
- Routine preventive care visit by 2 weeks of age

Academy of Breastfeeding Medicine (ABM) Protocols 2 & 7

American Academy of Pediatrics (AAP) Section on Breastfeeding: Breastfeeding and the Use of Human Milk. Pediatrics 2012 Mar;129(3):e827-41

AAP Committee on Fetus and Newborn: Hospital stay for healthy term newborns. Pediatrics 2004 May;113(5):1434-6.

AAP Clinical Practice Guideline. Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation. Pediatrics 114.1 (2004): 297-310.

# Hospital Routines

**TABLE 4** WHO/UNICEF Ten Steps to Successful Breastfeeding

---

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in the skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within the first hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation even if they are separated from their infants.

- Adhering to the Ten Steps improves breastfeeding initiation, duration, and exclusivity

6. Give newborn infants no food or drink other than breast milk, unless medically indicated.
  7. Practice rooming-in (allow mothers and infants to remain together) 24 h a day.
  8. Encourage breastfeeding on demand.
  9. Give no artificial nipples or pacifiers to breastfeeding infants.<sup>a</sup>
  10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital.
- 

<sup>a</sup> The AAP does not support a categorical ban on pacifiers because of their role in SIDS risk reduction and their analgesic benefit during painful procedures when breastfeeding cannot provide the analgesia. Pacifier use in the hospital in the neonatal period should be limited to specific medical indications such as pain reduction and calming in a drug-exposed infant, for example. Mothers of healthy term breastfed infants should be instructed to delay pacifier use until breastfeeding is well-established, usually about 3 to 4 wk after birth.

# Eight Focus Groups using Semi-Structured Interviews

## Methods

- Pediatricians
- Obstetricians
- Pediatric Nurses & Allied Health Professionals
- Obstetric Nurses & Allied Health Professionals
- 24-hour Telephone Triage Answering Service Nurses
  - Public Health Nurses
    - WIC \*
  - Lactation Consultants & Peer Counselors

**\* Special Supplemental Nutrition Program for Women, Infants, and Children**

# Results

- **Knowledge deficiencies and practice variation in breastfeeding management**
- **Inadequate breastfeeding counseling skills for vulnerable populations**
  - **Providers' own cultures and attitudes affect breastfeeding promotion and support**
- **Providers' personal breastfeeding experiences can generate incorrect advice for breastfeeding dyads**
  - **Communication disconnects between providers**
  - **Providers underestimate their own influence and overestimate others' influence on breastfeeding dyads**
- **The need for system-level mission and coordination for breastfeeding**

# **ABM Clinical Protocol # 14: The Breastfeeding-Friendly Physicians' Office Part 1: Optimizing Care for Infants and Children**





- 1) Establish a written breastfeeding-friendly office policy.
- 2) Encourage exclusive breastfeeding. Instruct mother to not offer bottles or pacifier until breastfeeding is well established.
- 3) Culturally and ethnically competent care.
- 4) Offer a prenatal visit and show your commitment to breastfeeding during that visit.
- 5) Collaborate with local hospitals and maternity care professionals in the community.
- 6) Schedule a first follow-up visit for the infant 48-72 hours after discharge.
- 7) Ensure availability of appropriate educational resources for parents.
- 8) Do not interrupt or discourage breastfeeding in the office. Allow and encourage breastfeeding in the waiting room. Display signs in waiting area encouraging mothers to breastfeed.
- 9) Ensure an office environment that demonstrates breastfeeding promotion and support.

- 10) Telephone triage protocols to address breastfeeding concerns.
- 11) Commend breastfeeding mothers during each visit.
- 12) Encourage mothers to exclusively breastfeed for 6 months and continue breastfeeding with complementary foods until at least 24 months and thereafter as long as mutually desired.
- 13) Set an example for your patients and community. Have a written breastfeeding policy and provide a lactation room with supplies for your employees who breastfeed or express breast milk at work.
- 14) Acquire or maintain a list of community resources (e.g., breast pump rental locations) and be knowledgeable about referral procedures.
- 15) Work with insurance companies to encourage coverage of breast pump costs and lactation support services.
- 16) Encourage community employers and daycare providers to support breastfeeding.
- 17) All clinical physicians should receive education regarding breastfeeding. Staff education and training should be provided to the front office staff, nurses, and medical assistants.
- 18) Participate in medical student and resident physician education.
- 19) Track breastfeeding initiation and duration rates in your practice

# Physician Breastfeeding Survey Study

- Academic medical center
- 20-item internet-based survey
- Resident and staff physicians who are parents
  - Pediatrics and family medicine
  - Convenience sample
- Survey items
  - Prenatal intentions/ Postnatal difficulties
  - Ability to meet goals
  - Emotions if goals were not met
  - Resources for support pre- and postnatally
  - Ideas about what would have helped them breastfeed longer

# Results

76% who initiated breastfeeding had difficulties

among these,

73% were able to resolve the difficulties

27% were not

- 88% of the latter did not meet their breastfeeding goal
- overall, 24% (10/41) did not reach their duration goal
- 8 of these 10 experienced negative emotions:

**“inadequate,” “sad,” “disappointed,” “frustrated,”  
“bad,” “like I had failed,” “a bit depressed,” “disappointed,  
failed badly”**

Riggins C, Rosenman MB, Szucs KA. Breastfeeding Experiences Among Physicians. Breastfeeding Medicine 2011. In press.

*What (if anything) would have allowed you to continue breastfeeding for longer? (onsite childcare, better pumping facilities, etc.)*

61% (17/28) of respondents (41% of all subjects) described **improvements that could be made in the workplace**

- 13/17 mentioned the need for a **pumping location or improved facilities**
- 4/17 mentioned **more flexible work hours and/or on-site child care**

Riggins C, Rosenman MB, Szucs KA. Breastfeeding Experiences Among Physicians. Breastfeeding Medicine 2011. In press.

One resident answered:

**"I'm still breastfeeding, but it would be a lot easier with more/better pumping facilities (especially rooms with phones in case you get paged) and better understanding from colleagues about the need for regular and frequent pumping sessions."**

Riggins C, Rosenman MB, Szucs KA. Breastfeeding Experiences Among Physicians. Breastfeeding Medicine 2011. In press.

# Business Case for Breastfeeding

- A mother/baby-friendly worksite provides benefits to employers:
  - Reduction in company health care costs
  - Increased employee morale and productivity
  - Lower employee absenteeism
  - Reduction in employee turnover

# ACA & LACTATION SUPPORT IN THE WORKPLACE: Section 4207

- Amendment to Section 7 of the Fair Labor Standards Act of 1938 (29 U.S.C. 207)
- Employers are required to provide “reasonable break time for an employee to express breast milk for her nursing child for 1 year after the child’s birth each time such employee has need to express the milk.”
- Employers are also required to provide “a place, other than a bathroom, that is shielded from view and free from intrusion from coworkers and the public, which may be used by an employee to express breast milk.”







INDIANA PERINATAL NETWORK

WORKPLACE LACTATION SUPPORT

**REDUCES ABSENTEEISM**

- One-day absences occur half as often for employees whose babies are breastfed
- Absenteeism rates are lower for male employees when female partners breastfeed

**LOWERS TURNOVER RATES**

Companies with lactation programs have employee retention rates between 83-94% compared to national retention rate of 59% after maternity leave.

**REDUCES HEALTHCARE COSTS**

For every 1,000 babies NOT breastfed, there are an extra:

- 2033 physician visits
- 212 hospitalization days
- 609 prescriptions

**SATISFIES EMPLOYEES**

Employees of companies providing lactation support feel more productive and loyal to the company.

Medical of Omaha 2003, Ohio 2004, Utah 1997, Wash. 1998, Ind. 1999, Col. 2000

*Healthy Babies • Healthy Employees  
Healthy Businesses*

For more information visit [www.indianaperinatal.org](http://www.indianaperinatal.org).

**The BUSINESS CASE for BREASTFEEDING**

and Encourages • Sustains • Meets Needs •

# Sample Materials

*Healthy Babies*

*Healthy Employees*

*Healthy Businesses*



Room In Use  
*Cuarto ocupado*



*Healthy Babies  
Healthy Employees  
Healthy Businesses*

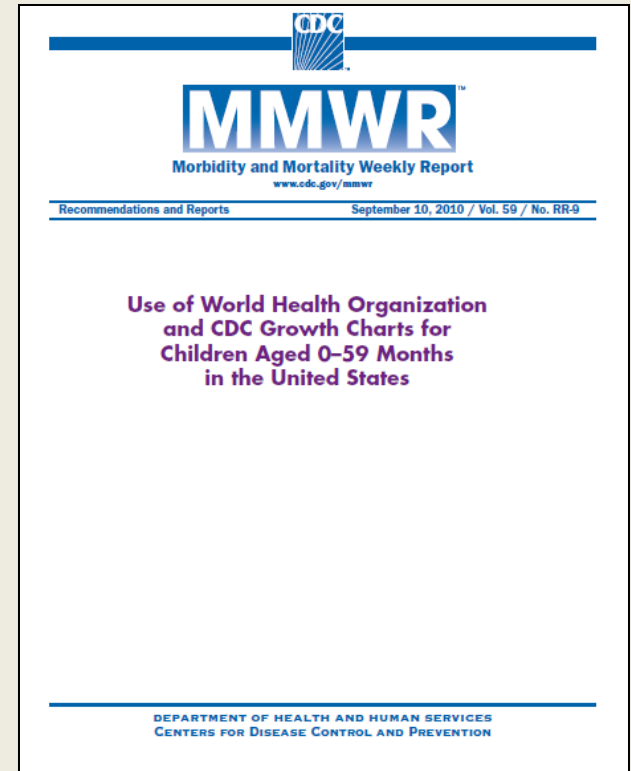
INDIANA PERINATAL NETWORK

Born to be Breastfed

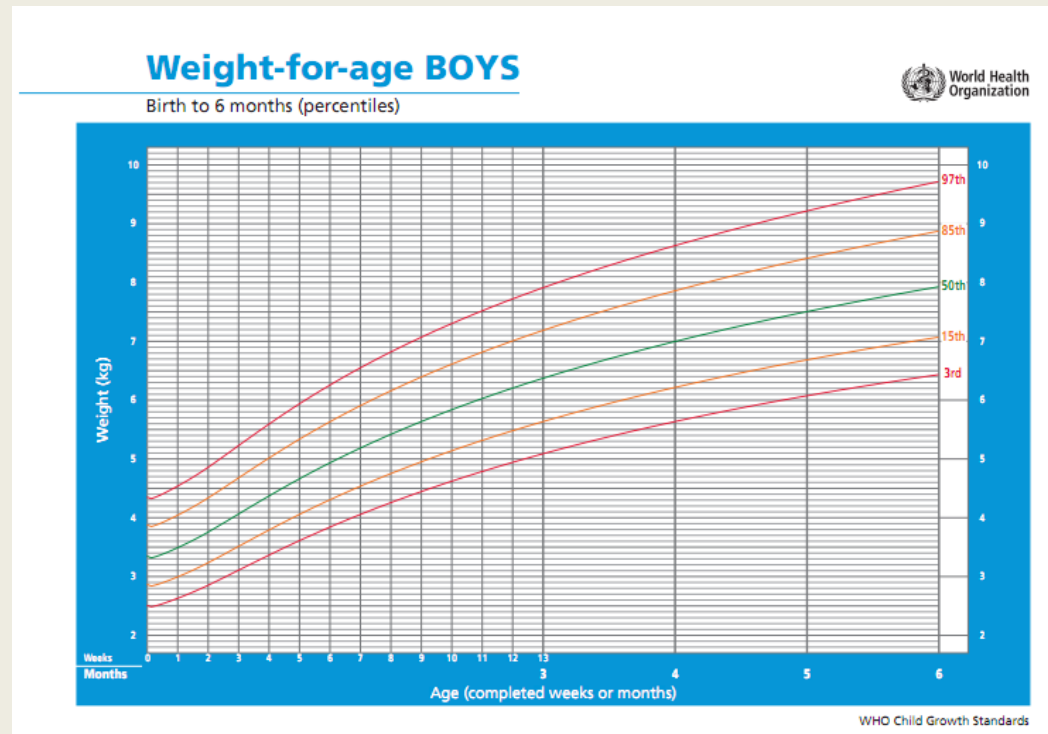
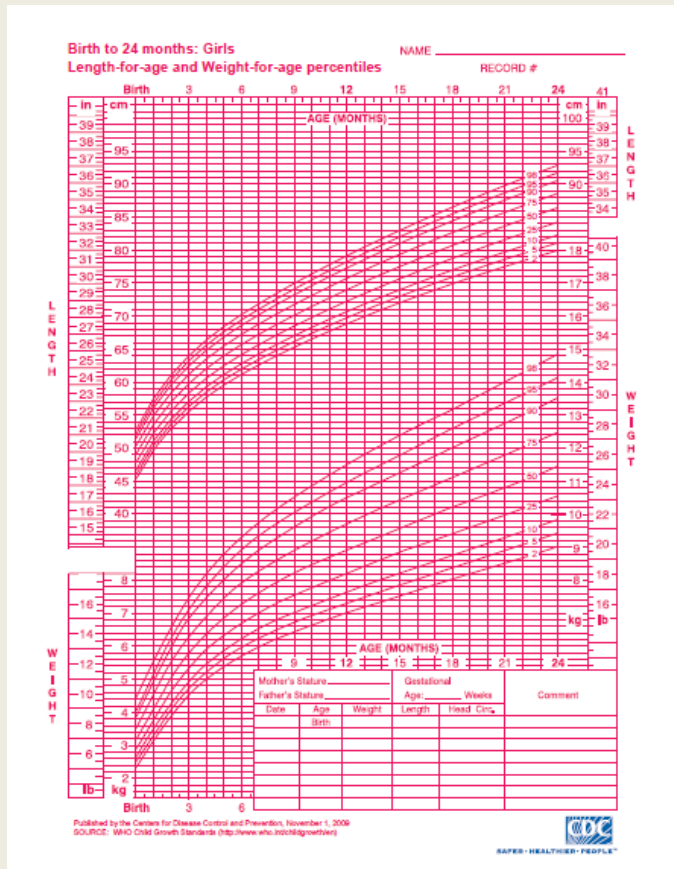
**Section 4207 of the Health Care Reform Law:**  
Employers shall provide "reasonable break time" and a private, non-bathroom place to express breast milk during the workday.

# Use of World Health Organization and CDC Growth Charts in the US

- CDC/AAP recommend:
  - Use the [WHO growth standards](http://www.who.int/childgrowth) ages 0 to 2 years  
<http://www.who.int/childgrowth>
  - Use the [CDC growth charts](#) for children age 2 years and older



# Magnified Birth to 6 month growth charts permit monitoring of trajectories



[www.cdc.gov/growthcharts](http://www.cdc.gov/growthcharts)

# Duration of Breastfeeding

- Exclusively for about 6 months
- AAP: for 1 year or longer as mutually desired
- Healthy People 2020: 34.1% nursing at 1 year
- ABM/WHO: 2 years of age and beyond
- Biologic norm: 2.5-7 years
  - Anthropologic
  - Talmud, Koran

# Long-term Health Benefits

Agency for Healthcare Research and Quality 4/07

- Mother
  - 4%-12% decreased risk of type 2 DM with each additional year of breastfeeding
  - 4.3% decreased risk of breast cancer with each year of breastfeeding
  - 21% decreased risk of ovarian cancer with breastfeeding at least 12 months
- Infant- 4% risk reduction of overweight as an adult with each additional month of breastfeeding

Thank you!



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