

# From Bottles to Breast Milk to Baby-Friendly: The Boston Medical Center Experience

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I have no conflicts to disclose.

# Objectives

## Best-Practice Maternity Care and Breastfeeding

- Review: What we are suppose to be doing?
- Review: How are we doing?
- Discuss:
  - The BMC Baby-Friendly journey
  - Outcomes
  - Activities in state of Massachusetts

# What are we suppose to be doing?

- Recommendations from medical organizations
- Goals from the government



# American Academy of Pediatrics

Breastfeeding and the Use of Human Milk

*Pediatrics* 2012;129:e827–e841

- Recommends exclusive breastfeeding for approximately the first six months of life\*
- Continue breastfeeding to at least a year or beyond
- Add solid foods at about six months of life

# American College of Obstetricians and Gynecologists 2007

Breastfeeding: Maternal and Infant Aspects  
*Obstet Gynecol.* 2007 Feb;109(2 Pt 1):479-80

# American Academy of Family Physicians 2008

- Exclusive breastfeeding for 6 months
- Breastfeed beyond the first year as long as mutually desired
- Add solid foods at 6 months

<http://www.aafp.org/online/en/home/policy/policies/b/breastfeedingpositionpaper.html>

The common denominator

Exclusivity for 6 months

Maybe your hospital is different  
than my hospital but...

# Healthy People 2020 Objective RATES

MICH-21: Increase the proportion of infants  
who breastfed

Ever (initiation, any)	81.9%
At 6 months	60.6%
At 1 year	34.1%
Exclusively through 3 months	46.2%
Exclusively through 6 months	25.5%

# Healthy People 2020

- MICH-23: Reduce the proportion of breastfed newborns who receive formula supplementation within the first 2 days of life
- Target 14.2%

# How are we doing?

## 2011 Breastfeeding Report Card

	Ever (%)		
	Initiation	6 mo	12 mo
All women	74.6	44.3	23.8

Breastfeeding Report Card 2011  
[www.cdc.gov/breastfeeding](http://www.cdc.gov/breastfeeding)



# How are we doing?

## 2011 Breastfeeding Report Card

	Exclusively (%) through	
	3 mo	6 mo
All women	35.0	14.8

Breastfeeding Report Card 2011  
[www.cdc.gov/breastfeeding](http://www.cdc.gov/breastfeeding)



## Breastfeeding Rates: Initiation, Any (%)

1.	Oregon	91.2
2.	Washington	89.0
3.	California	86.6
4.	Vermont	85.2
5.	Hawaii	85.0
15.	Florida	79.5
21.	Massachusetts	76.9
37.	Michigan	69.3
50.	Mississippi	50.3
51.	Louisiana	48.9

Breastfeeding Report Card 2011  
[cdc.gov/breastfeeding](http://cdc.gov/breastfeeding)

## Breastfeeding Rates: Ever at 6 Months (%)

1.	Vermont	63.2
2.	Oregon	62.5
3.	Utah	61.5
4.	Idaho	61.2
5.	Montana	61.1
21.	Massachusetts	46.0
30.	Michigan	42.9
36.	Florida	39.0
50.	Mississippi	22.4
51.	Louisiana	18.2

Breastfeeding Report Card 2011  
[cdc.gov/breastfeeding](http://cdc.gov/breastfeeding)

## Breastfeeding Rates: Ever at 12 Months (%)

1.	California	40.0
2.	Vermont	37.1
3.	Washington	35.0
4.	Oregon	34.5
5.	Washington DC	32.4
32.	Massachusetts	20.4
33.	Florida	20.2
38T.	Michigan	18.2
50.	Alabama	8.0
51.	Louisiana	7.0

## Breastfeeding Rates: Exclusively through 3 mos (%)

1.	Vermont	58.9
2.	Montana	51.9
3.	New Hampshire	50.5
4.	Oregon	50.3
5.	Idaho	49.5
14.	Massachusetts	42.8
33.	Florida	31.7
35.	Michigan	31.3
50.	Alabama	19.8
51.	Mississippi	19.2

Breastfeeding Report Card 2011  
[cdc.gov/breastfeeding](http://cdc.gov/breastfeeding)

## Breastfeeding Rates: Exclusively through 6 mos (%)

1.	California	25.7
2.	Vermont	25.5
3.	Colorado	24.0
4T.	Montana	23.0
4T.	Washington	23.0
17.	Michigan	16.3
26.	Massachusetts	14.1
32.	Florida	12.9
50.	Mississippi	5.7
51.	West Virginia	5.6

## Formula Supplementation Before 2 Days (%)

1.	Montana	8.0
2.	Vermont	8.5
3.	Wyoming	11.6
4.	Idaho	12.3
5.	North Dakota	12.4
15.	Massachusetts	16.5
18T.	Michigan	17.9
47T.	Florida	31.4
47T.	Washington DC	31.4
49.	Georgia	32.5
50.	New York	33.2
51.	New Jersey	38.0

# *HHS Blueprint for Action on Breastfeeding*

- Surgeon General
- Need to address “alarmingly low... rates among African American women”



	Ever (%)		
	Initiation	6mo	12mo
<u>All women</u>	<u>75.0</u>	<u>43.0</u>	<u>22.4</u>
Asian/Pacific Isl	83.0	56.4	32.8
Hispanic/Latino	80.6	46.0	24.7
White	77.7	45.1	23.6
Black	59.7	27.9	12.9

Breastfeeding Report Card 2010

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



	Exclusive (%)	
	3mo	6mo
<u>All women</u>	<u>33.0</u>	<u>13.3</u>
Asian/Pacific Isl	34.1	14.5
White	35.3	14.4
Hispanic/Latino	33.4	13.4
Black	22.7	8.2

Breastfeeding Report Card 2010

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

# Healthy People 2020

- MICH-24. Increase the proportion of live births that occur in Baby-Friendly facilities
- Target 8.1%

# Baby-Friendly Hospital Initiative

- WHO/UNICEF designation
- Compliance with the Ten Steps at >80%
- Pay fair market price for formula and infant feeding supplies
- Baby-Friendly USA
- 4D Pathway

# The Ten Steps

1. Written breastfeeding policy
2. Train people to implement policy
3. Inform pregnant women about choices
4. Initiate breastfeeding within 1 hour of birth
5. If separated, maintain lactation

# The Ten Steps

6. Exclusivity
7. Rooming-in
8. Breastfeeding on demand
9. No pacifiers
10. Support groups

Compliance >80%

Pay for formula & formula products

# Baby-Friendly sites around the world

20,000

China:	6000+
Malaysia:	1200/1600
Mexico:	700
Norway:	95%
Sweden:	100%

# March 2012

- How many Baby-Friendly sites out of the 3500 maternity facilities in USA?
- 139 (4%)



# Florida: 4 Baby-Friendly Hospitals

Site	Annual Births
■ Cape Canaveral Hospital	778
■ Mease Countryside Hospital	1750
■ Morton Plant Hospital	2753
■ Naval Hospital Jacksonville	1000

# % Live Births at Baby-Friendly Facilities

2011 Breastfeeding Report Card [cdc.gov/breastfeeding](http://cdc.gov/breastfeeding)

1. Nebraska	22.33
2. Alaska	21.30
3. Maine	19.41
4. New Hampshire	16.10
5. Connecticut	15.55
6. California	14.59
7. Wisconsin	12.42
8. Washington	9.79
9. Rhode Island	9.42
10. Indiana	8.76
11. Hawaii	8.68

# Breastfeeding in the US...

## What's the problem?

- I support breastfeeding...
- You support breastfeeding...
- We all support breastfeeding...
- Actually, that's not what mothers say

# Beverly Winikoff

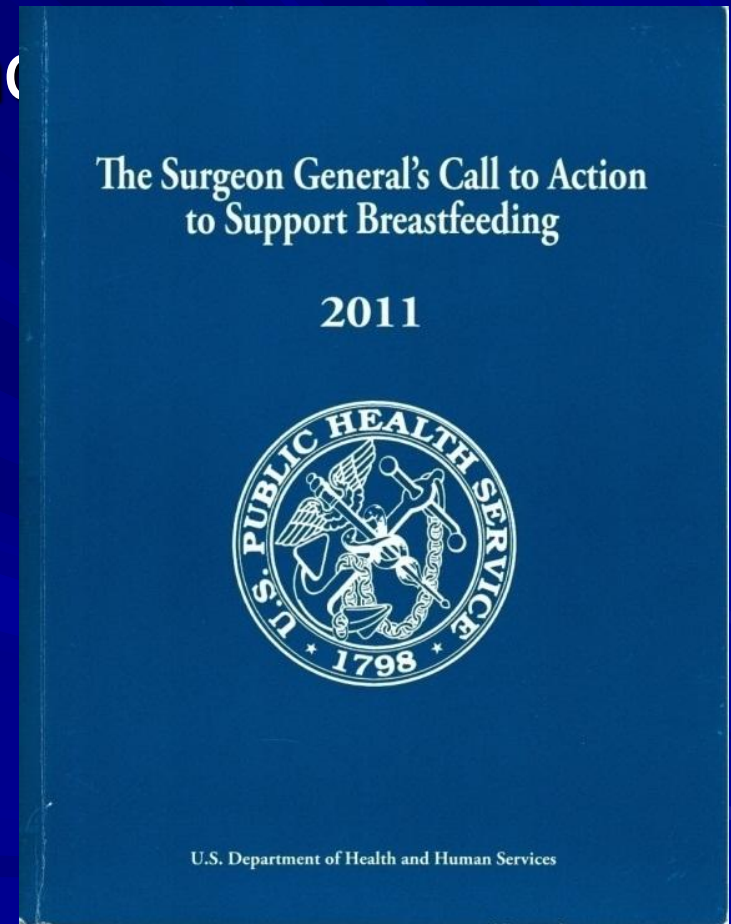
International Programs, Population Council

“...it appears that women who rely most on the medical establishment for infant feeding information are the least likely to breastfeed successfully.”

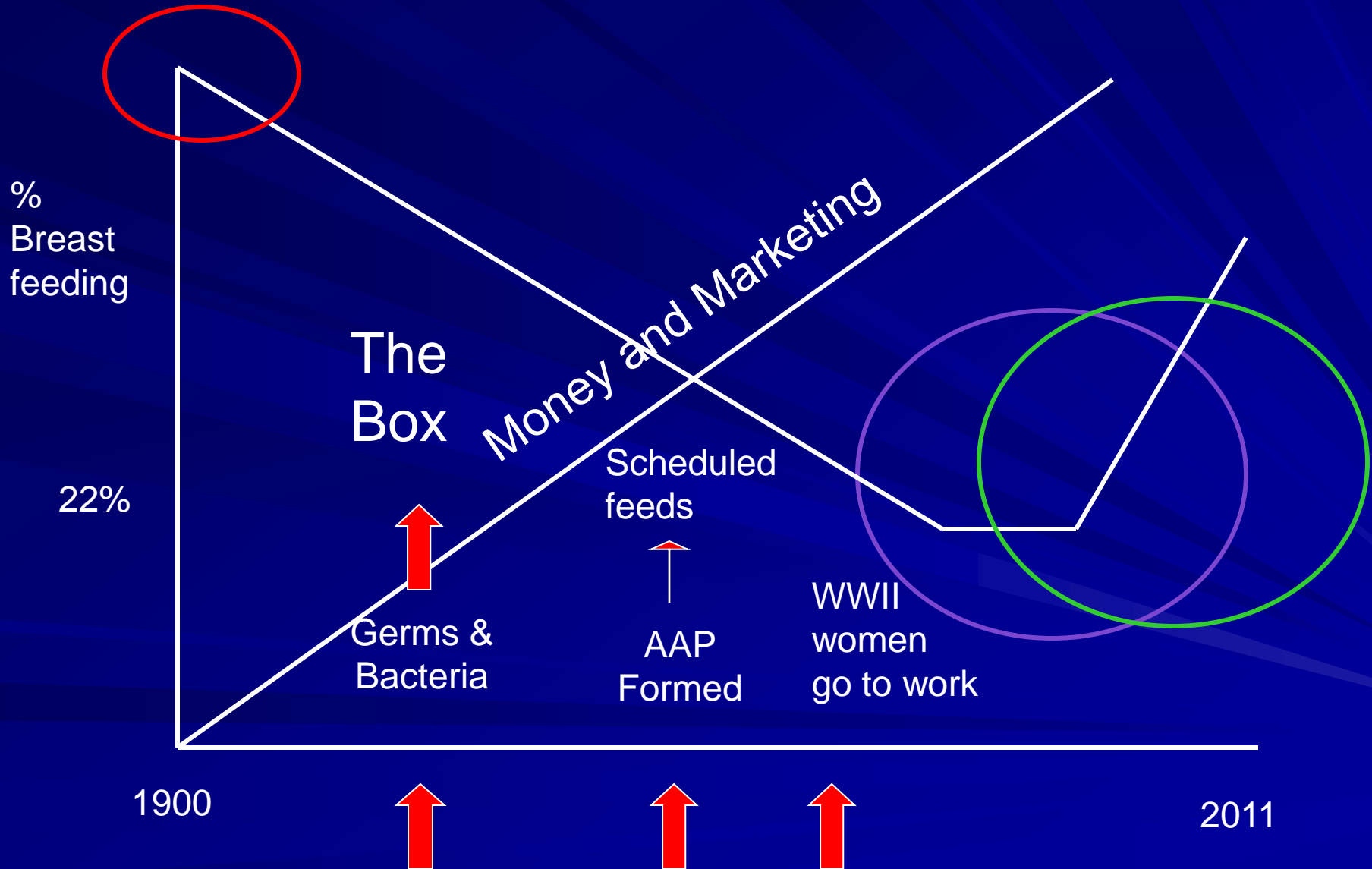
# 2011 Call to Action

“All too often, mothers who wish to breastfeed encounter daunting challenges in moving through the health care system.”

Regina M. Benjamin, MD  
US Surgeon General



# What Happened?



# Obstacles to BFHI in US

Merewood. *Pediatrics* 2005;116(3):628-634

- Step 2: Clinician education
- Step 6: Pay for formula/formula products
- Step 7: Rooming-in



Change is  
good...  
You go first.  
*Dilbert*





# Boston Medical Center

- 2500 births per year
- LIII, 15-bed NICU
- Boston University School of Medicine
- Residency programs in Pediatrics, Ob/Gyn, Family Medicine +++
- Serving poor, minority, immigrant families

# BMC patients

- 56% Black
- 25% Hispanic
- 11% White (mostly immigrants)
  
- 53% Medicaid
- 24% Universal HI (Medicaid)
- Majority receive WIC benefits

# 1995

- Does anybody breastfeed around here?
- 0/1000 telephone triage calls re breastfeeding
- My first day as nursery attending:
  - Staff knowledge poor
  - Hospital policies obstructive
  - “Our mothers don’t want to breastfeed”
  - And...

# Larry

~ the infant formula salesman ~

Harry Houdini





# BMC Breastfeeding Task Force

- September 1997
- Three co-chairs
- Multidisciplinary
- Monthly meetings



# Let's Go

## The plan

- Change policies
- Keep moms and babies together
- Educate staff
- Tell Larry we don't want his free stuff anymore

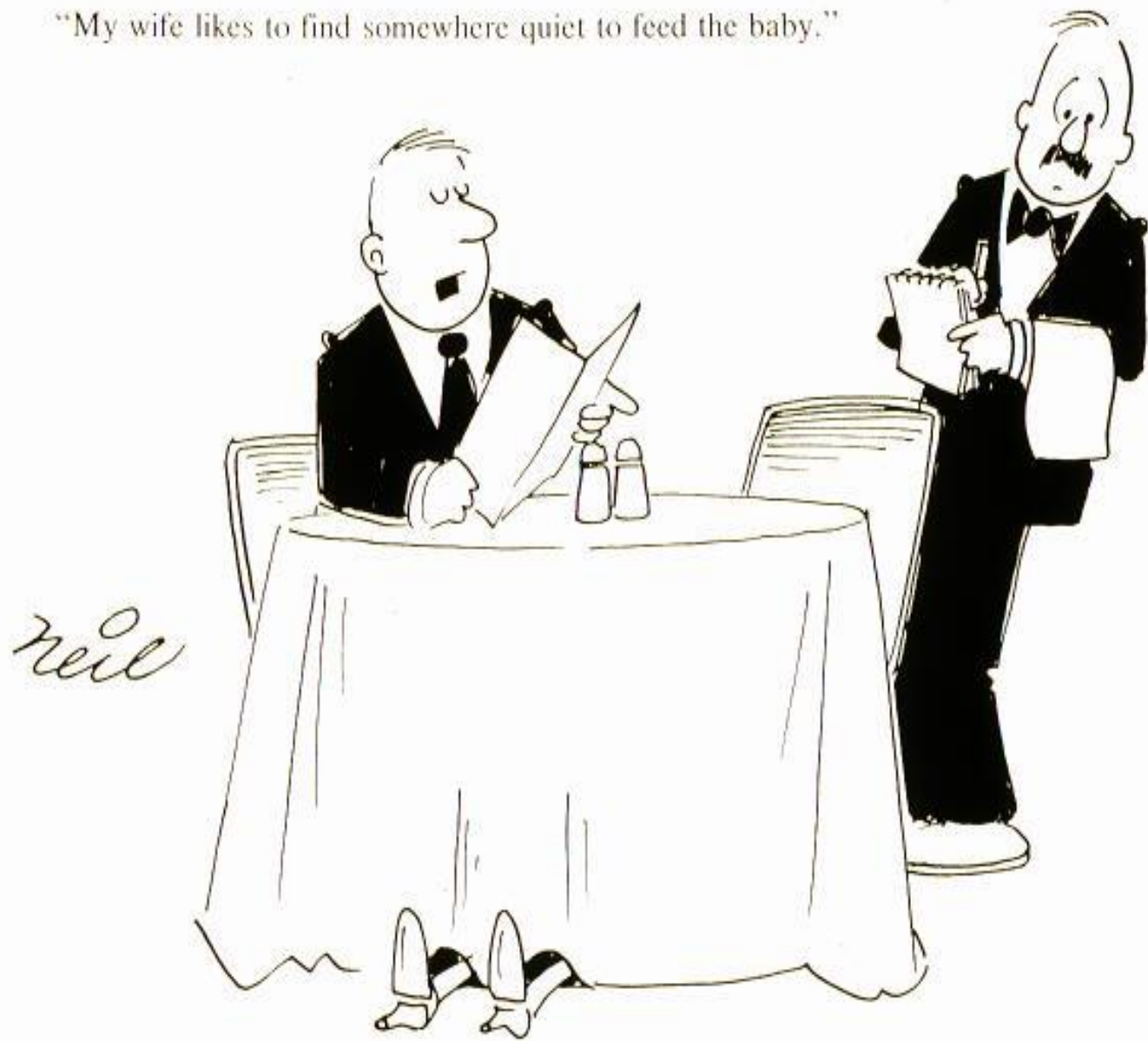




# Our Strategy

- Baby steps
- Would not accept No as the answer
- Our focus
  - Separation
  - Education
  - The free stuff
- Celebrate success

"My wife likes to find somewhere quiet to feed the baby."



# Breastfeeding & Pumping Room

- February 1998
- The Kids Fund
- \$2000



The beginning of a  
strategy:

Cut a ribbon





# Cut a cake



# Get breastfeeding in the news

## MedCenter News

BOSTON MEDICAL CENTER, BOSTON UNIVERSITY SCHOOLS OF MEDICINE, PUBLIC HEALTH AND DENTAL MEDICINE

### Street search

#### Outreach Van combs the night for those in need

*"Outreach. We have food, blankets and a doctor." The voices echo through the bitter cold night. BUSM students Josh Keong and David Chien, and SPH student Sharon Jakus trek through the snow looking for signs that someone might be living in this desolate area — a barren gully overlooking Boston Harbor. Meanwhile, another BUSM student, Josh Liberman, and Lana Habash, MD, clinical instructor of family medicine at BUSM, anxiously wait in a nearby van with warm blankets, steaming soup and, most importantly, medical care for those who call this area home. While the searchers stumble upon a blue tarp, some old milk crates and a few pieces of tattered clothing, their efforts to find the owners are fruitless. Slowly, they trudge back through the snow, into the van and onto the next location.*

**E**very Thursday night this scene is reenacted — the headlights of the BUMC Outreach Van slicing through the blackness of East Boston's streets like the beacon of a lighthouse. Scouring MBTA stations, abandoned lots and other deserted sites, BU Medical Campus student



### Nursing babies in comfort

*Bobbi Philipp, MD, medical director of the Pediatric Primary Care Practice, makes a new friend with 1-year-old Mahoude Kamara and her mom, Marie Tamboua, at the ribbon-cutting ceremony for the opening of the BMC Breastfeeding Room on Friday, Feb. 13. The room, located in the Ambulatory Care Center, is sponsored by The Kids Fund. The new facility is equipped with a rocking chair and stool, changing table, privacy curtain, a state-of-the-art scale that computes how many ounces of breast milk a baby drinks, a TV and VCR for education, patient-education materials, and an electric pump.*

# What next?

- Dr. Debbie Frank: Let's ask the Lt. Gov to open the Breastfeeding Center
- Hmm , great idea but ...
- We don't have a Breastfeeding Center
- She's coming!!!







# Cut a ribbon



# Cut a cake (nice cake!)

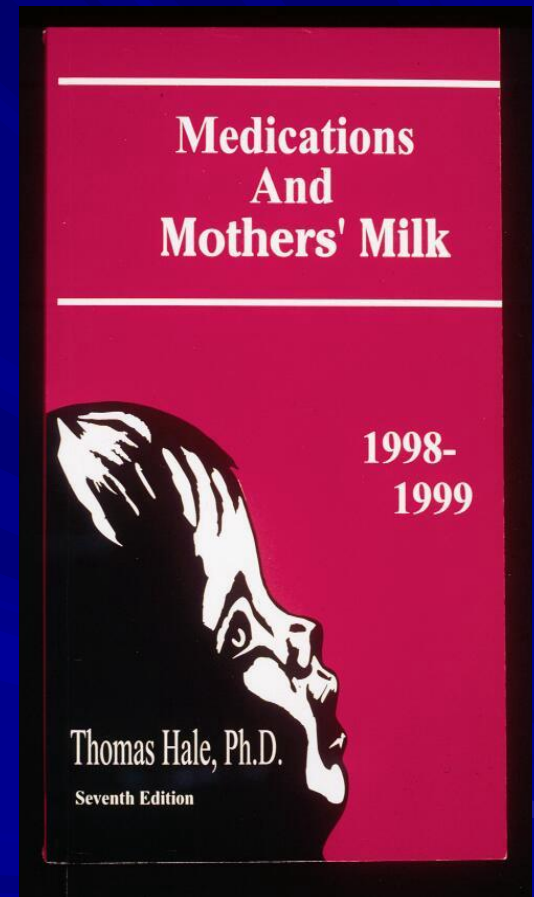




# Get breastfeeding in the news




# Breastfeeding Supportive Environment Posters



## Old crib cards

**ROSS**  
PEDIATRICS

BABY \_\_\_\_\_  
MOTHER \_\_\_\_\_ ROOM NO: \_\_\_\_\_  
DATE OF BIRTH \_\_\_\_\_ TIME \_\_\_\_\_  
WEIGHT \_\_\_\_\_ LENGTH \_\_\_\_\_  
HEAD \_\_\_\_\_ CHEST \_\_\_\_\_  
BABY'S DOCTOR \_\_\_\_\_  
MOTHER'S DOCTOR \_\_\_\_\_



**I'M A GIRL!**

## New crib cards

*I am:* \_\_\_\_\_

*born on:* \_\_\_\_\_

*at:* \_\_\_\_\_

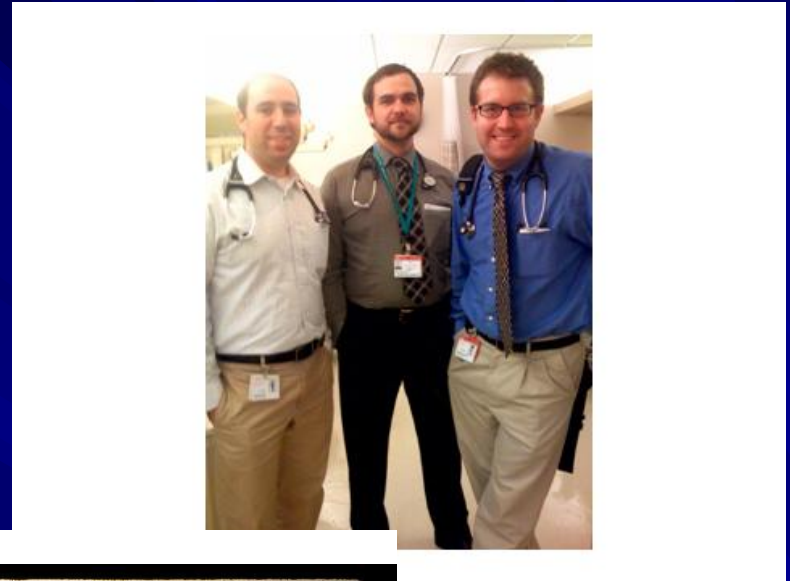
*and I weighed:* \_\_\_\_\_

**Breastfeeding**  
nourishing the future



# Education





# Education: Reach and Teach

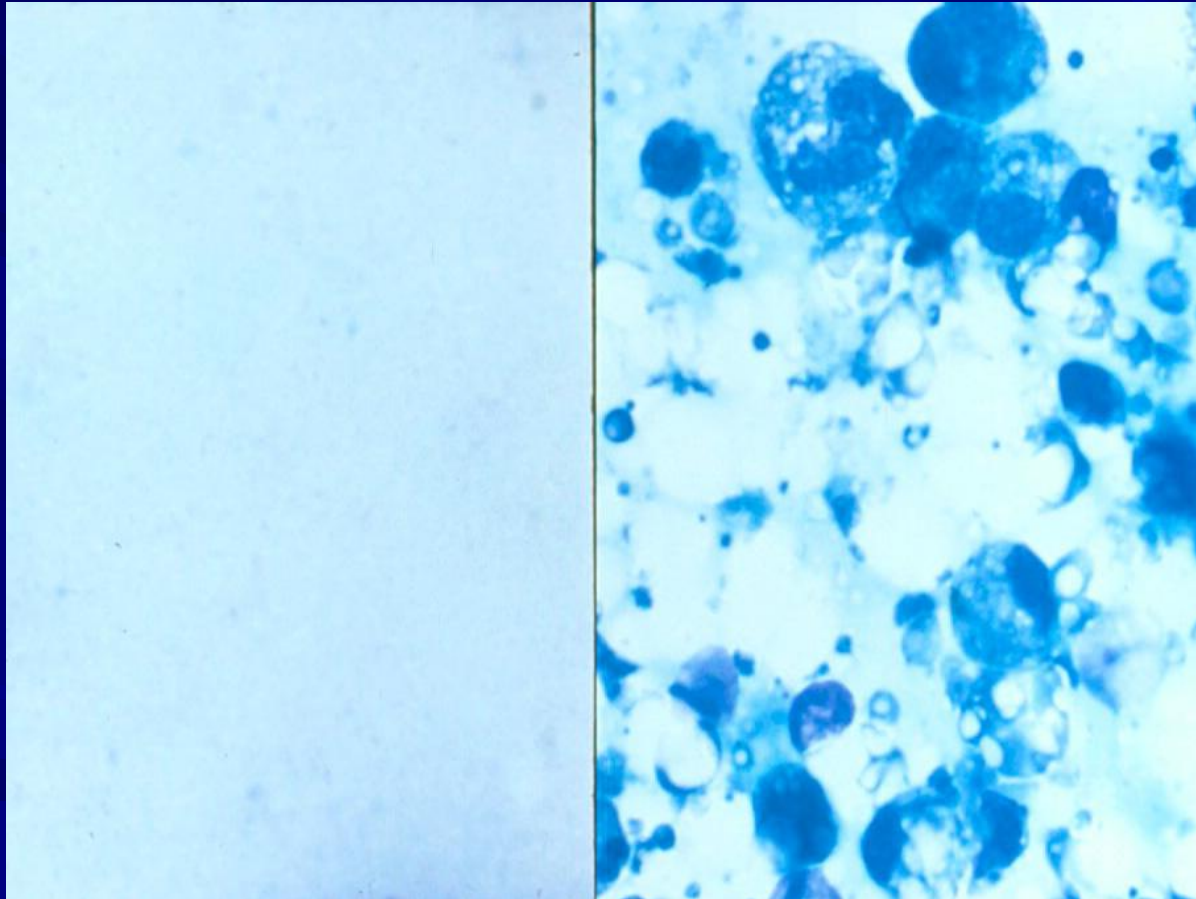
- 20 minute teaching sessions for BMC staff
- Interpreters
- Dietary staff
- Housecleaners
- Unit secretaries
- Hospital operators
- Development Office
- CEO



# Education: Importance of Colostrum

Formula

Breast Milk



Education drive:  
Consistency in message about basic principles



# Next up: Change to Couplet Care

- Old way

- 1 nurse for mom and 1 nurse for baby

- New way

- 1 nurse for both mom and baby
- And a “nursery nurse”

# And then, practice Evidence-Based Medicine

- Antibiotics
- Immunizations
- Surgical procedures
- Breastfeeding

# To Breast in the First Hour

## ■ Evidence

- Very strong on this point

## ■ Status

- Separating: early and often

## ■ Action plan

- Figure out a way to keep them together
- Skin-to-Skin













# Rooming In

- Status
  - Not bad
- Action plan
  - The best nursery is an empty nursery



# Two Issues Particularly Difficult

- Pacifiers
- The free diaper bags from Larry

# Pacifiers

- Status

- They were everywhere

- Action plan

- We met and met and talked and talked

- Meditated, Educated

- October 10<sup>th</sup>: the new Pacifier Policy

# BMC Pacifier Policy

Pacifiers for:

1. Premature babies
2. Babies withdrawing from illegal drugs
3. Babies undergoing a painful procedures (then thrown out)
4. Or if family brought in their own



# The Free Diaper Bag Issue

- Evidence

- Very strong

- Bergevin. *Lancet* 1983;1:1148
- Frank. *Pediatrics* 1987;80:845
- Dungy. *Pediatrics* 1992;90:233
- Perez-Escamilla. *Am J Public Health* 1994;84:89
- Cochrane Data Base Systematic Review. 2000; 2: CD002075
- Rosenberg. *Am J Public Health* 2008;98:290



# The Free Diaper Bag Issue

## Action Plan

- BMC would no longer give them out
- Replaced with
- The Kids Fund Baby Bag
- \$15 per bag



This was not easy.

# Nationally

- Portland, Oregon became the first US city to ban the bags
- 2006: NYC Dept of Health banned the bags from all 11 public health hospitals operated by NYCHH Corporation
- 2011: RI became the first state to ban the bags
- Our success: Massachusetts has 5 sites to go (44/49 have banned the bags)

# Banned the Bags in Florida

- Celebration Health, Celebration
- Cape Canaveral Hospital, Cocoa Beach
- Martin Memorial Medical Center, Stuart
- Morton Plant Hospital, Clearwater
- Naval Hospital Jacksonville, Jacksonville
- North Florida Regional Medical Center,  
Gainesville
- Shands Medical Center Jacksonville,  
Jacksonville



# Paying for the formula

**ROSS**

ROSS PRODUCTS DIVISION • ABBOTT LABORATORIES

February 26, 1998

Charles Motley  
 Director of Material Management  
 Morrison Health Care, Inc.  
 Boston Medical Center  
 88 East Newton Street  
 Boston, MA 02118

Dear Mr. Motley,

Enclosed you will find a listing of products in the Ross Hospital Formula System. Effective immediately, the following products will be at no charge. All pricing agreements are subject to existing pricing agreements between Ross Products/Division Abbott Laboratories, and the Premier Buying Group. The Premier contract pertaining to Pediatric Nutritionals will take precedent over any existing agreement between Ross Pediatrics and the Boston Medical Center. This pricing agreement will be effect for a period of 3 years starting February 1, 1998 to January 31, 2001.

For more than 30 years, Ross Products Division, Abbott Laboratories, has been supplying hospital nurseries with infant formulas for safe, efficacious and convenient feeding. We have developed special products to meet special nutritional needs, while providing practical and educational services to assist the hospital-based health care professional.

Since their introduction in 1925, Similac Infant Formulas have continued to evolve through clinical research and innovation. Our commitment to providing superior nutritional products that advance the quality of life is evident in continuous product improvements. Advancements such as hypercaloric formulas, premature infant formulas, patented infant formulas and unique delivery systems have enabled you to provide state-of-the-art health care for a variety of patients.

The Ross Hospital Formula System gratefully acknowledges the opportunity to assist health care professionals in the care of infants and children. We pledge to continue to meet the health care profession's changing needs with products supported by clinical research.

We at Ross would like to take this opportunity to bring you up to date with the latest programs and products that Ross Pediatrics has available to your Obstetrics Department, In Hospital Programs, and Pediatric Communities.

ITEM NUMBER	DESCRIPTION	CASE PRICE
00415	Similac 20 - 4oz Btl	No Charge
51008	Similac "20" 2oz Plastic	No Charge
00404	Similac 24 - 4oz Btl	No Charge
51010	Similac "24" 2oz Plastic	No Charge
00427	Similac 27 - 4oz Btl	No Charge
51012	Similac "27" 2oz Plastic	No Charge
00426	Similac 20 W/I - 4oz Btl	No Charge
54442	PM 60/40 Powder 4oz	No Charge
51014	Similac W/I "20" 2oz	No Charge
51018	Isomil "20" 2oz Plastic	No Charge
00403	Similac 24 W/I - 4oz Btl	No Charge
51016	Similac W/I "24" 2oz	No Charge
00406	Isomil 20 - 4oz Btl	No Charge
00405	5% Glucose Water 4oz Btl	No Charge
51002	Sim 5% Glucose Wtr 2oz	No Charge
51004	Sim 10% Glucose Wtr 2oz	No Charge
00410	10% Glucose Water 4oz Btl	No Charge
00432	Sterile Water - 4oz Btl	No Charge
51000	Sim Water/Oral Use 2oz	No Charge
00433	Sim Spec Care 24-4oz Btl	No Charge
51022	Similac Spec Care 24 2oz	No Charge
00439	Sim Spec Care 20-4oz Btl	No Charge
51020	Similac Spec Care 20 2oz	No Charge
52418	Sim SP Care 20 W/I 2oz	No Charge
50588	Sim Spec Care W/I 20 4oz	No Charge
00443	Sim Natural Care-4oz Btl	No Charge
00478	Sim Spec Care W/I-4oz Btl	No Charge
51024	Similac Spec Care W/I 24	No Charge
51848	Similac NeoCare 4oz Btl	No Charge
51856	Pedialyte Unfl 4oz Btl RHFS	No Charge
00180	Volu Feed Disp Nur 60ml	No Charge
00081	Volu Feed Disp Caps	No Charge
00079	Stand Nipples - Twist	No Charge
00094	Premature Nipples	No Charge
00095	Special Care Nipples	No Charge
52998	Cooler Bag	No Charge
51430	Diaper Bag	No Charge
51516	Alimentum	No Charge

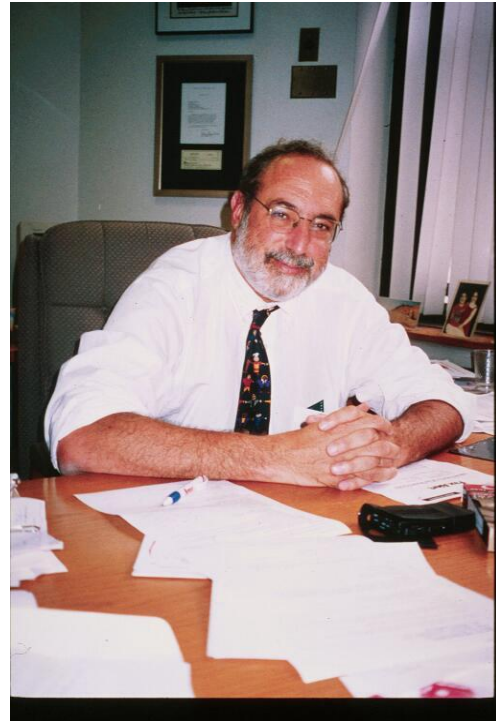
# The real cost per year?

\$72,000

or

\$16,000

Decision:  
BMC would  
pay for formula  
because  
“it’s the right  
thing to do”





# BMC earns international 'Baby-Friendly' recognition



*Celebrating the Baby-Friendly recognition are (from left) Barbara Philipp, MD, chief of the Division of Ambulatory Pediatrics at BMC and assistant professor of pediatrics at BUSM; Rebecca Gadon, RN, director of Nursing Operations at BMC; Cindy Turner-Maffei and Karin Cadwell, both of Baby-Friendly USA; and Susan O'Brien, MD, director of Newborn Nursery at BMC and assistant professor of pediatrics at BUSM.*

# Baby-Friendly

Snappy slogan or standard of care?

# Data drives change

To get our rates, we do a lot of counting

7 tiers

- 100% Breast
- 90-<100
- 75-<90
- 50-<75
- 25-<50
- 1->25
- 0

BW 3865

DATE	WEIGHT		% WEIGHT CHANGE
	KILOGRAMS	POUNDS	
3/31	3844	8-7.5	0%
4/1	3710	8-2.8	↓4.0%

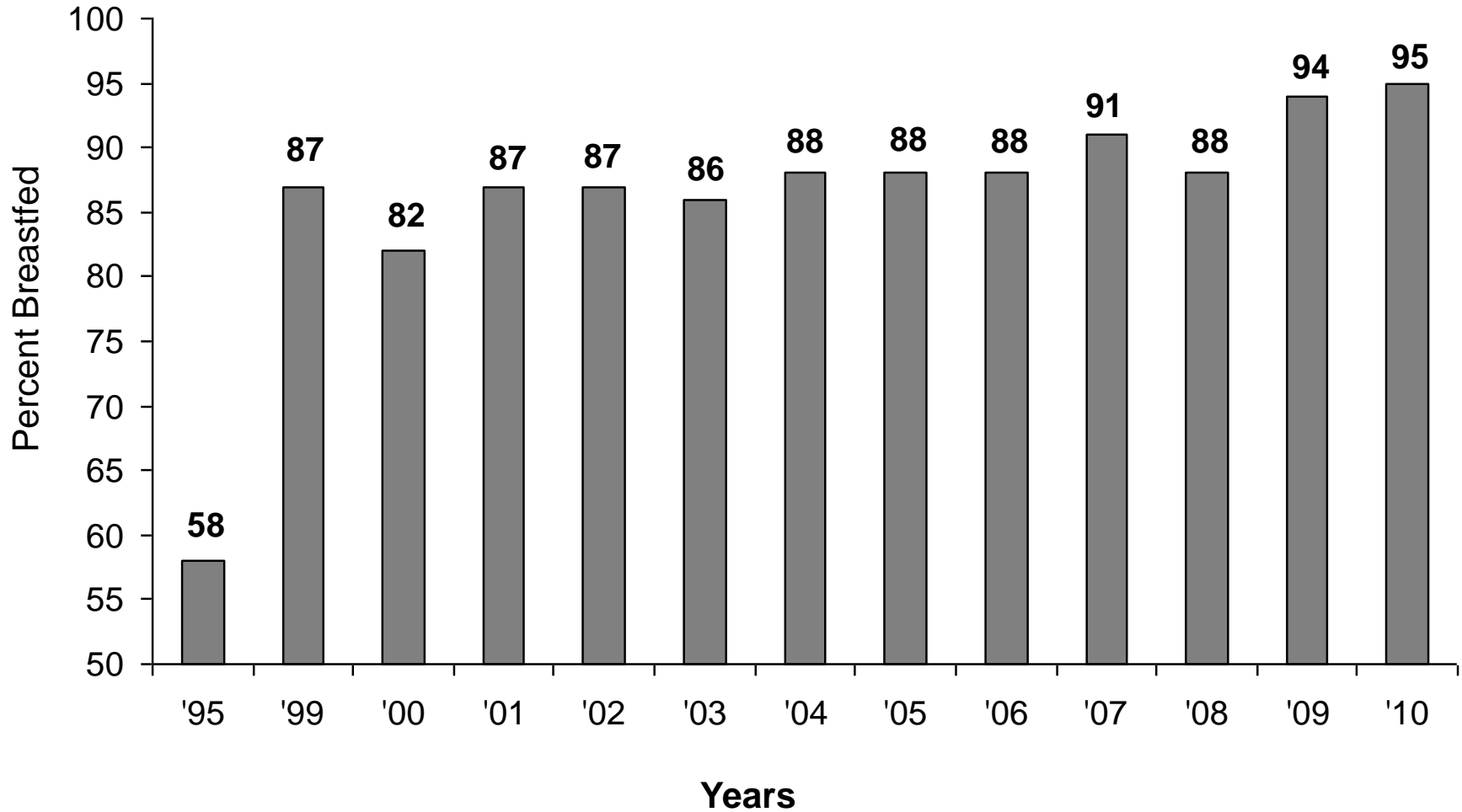
Route:  
Breast feed (BF)  
Syringe (Sy)  
Finger (F)  
Bottle (B)  
Cup (C)

DATE	TIME	INTAKE				LATCH TOOL					LATCH TOTAL	OUTPUT		Nurse's Initials		
		TYPE	AMOUNT	ROUTE	ABILITY TO FEED (BOTTLE)	L	A	T	C	H		Total	Urine		Stool	
3/30	0100	BF		sleepy												
	0200	BF		not a good latch		2	2	2	2	2	10					BLD
	0200	BF		not a good latch												
	0200	BF		not a good latch												
	0835	BF		stimulated		1	1	2	2	2	8					PLD
	1130	BF		(bottle)												ML
	1600	BF		not a good latch		2	2	2	1	1	10					ML
	1800	BF		not a good latch												ML
	2030	BF		not a good latch		2	2	2	2	2	10					ML
	2130	BF	20min	BF		2	2	2	2	2	10					ML
	2230	BF	20min	BF		2	2	2	2	2	10					ML
	0100	BF	20min	BF		2	2	2	2	2	10					ML
	0400	BF	20min	BF												ML
	0600	BF	20min	BF		2	2	2	2	2	10					ML
	0800	BF	ON	(L)		2	2	2	2	2	10					SF

\*Latch Tool - Latch observation must be completed once a shift.  
A score of 5 or less indicates a need for a feeding note in the infant's chart and a plan of care.

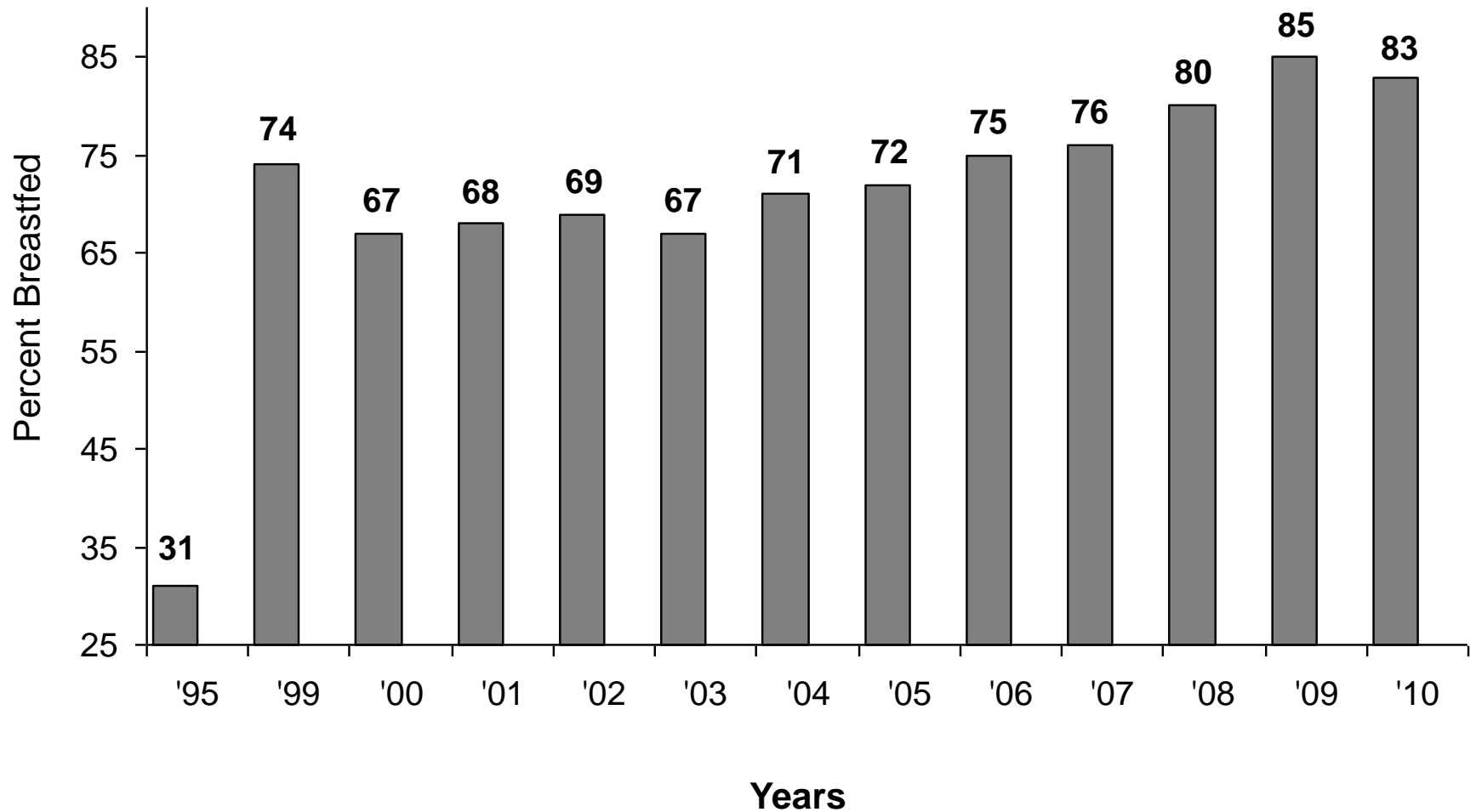
	0	1	2
L Latch	Too sleepy or reluctant; No sustained latch or suck achieved	Repeated attempts for sustained latch or suck; Hold nipple in mouth; Stimulate to suck	Grasps breast; Tongue down; Lips flanged Rhythmic sucking
A (Audible Swallowing)	None	A few with stimulation	Spontaneous and intermittent, less than 24 hours old Spontaneous and intermittent, greater than 24 hours old
T Type of Nipple	Inverted	Flat	Everted (after stimulation)
C Comfort (Breast/Nipple)	Engorged; Cracked, bleeding, large blisters or bruises; Severe discomfort	Filling; Reddened/small blisters or bruises Mild/moderate discomfort	Soft Nontender
H Holding (Positioning)	Full assist (Staff holds infant to breast)	Minimal assist (i.e. elevate head of bed, place pillows for support) Teach one side; mother demonstrates on the other Staff holds and then mother takes over	No assist from staff Mother able to position and hold infant

# BMC Breastfeeding Rates, Any Amount



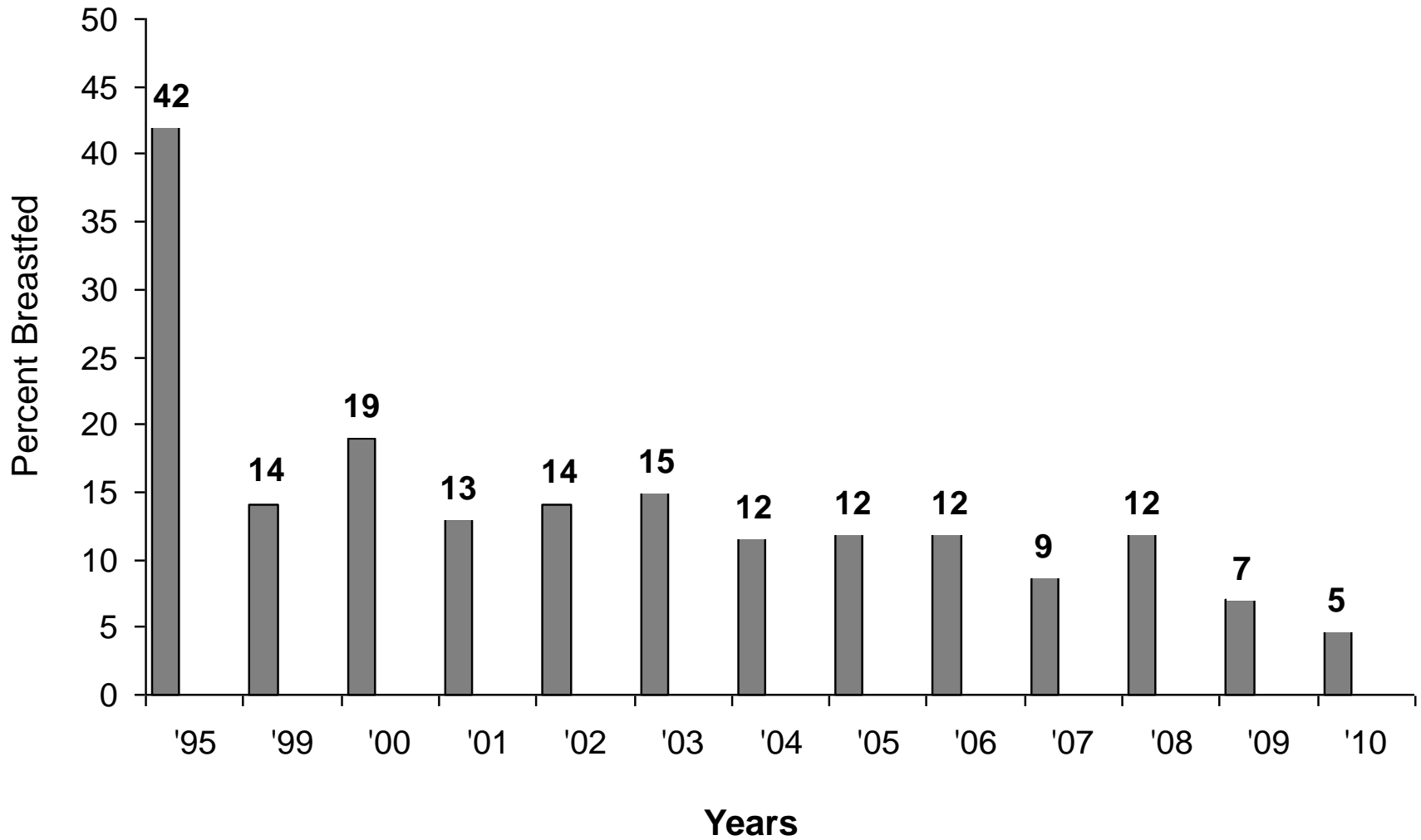
# BMC Breastfeeding Rates

## Breast Milk > Formula





# BMC Feeding Rates Exclusive Formula



# BMC Feeding Rates Exclusive Breast Milk

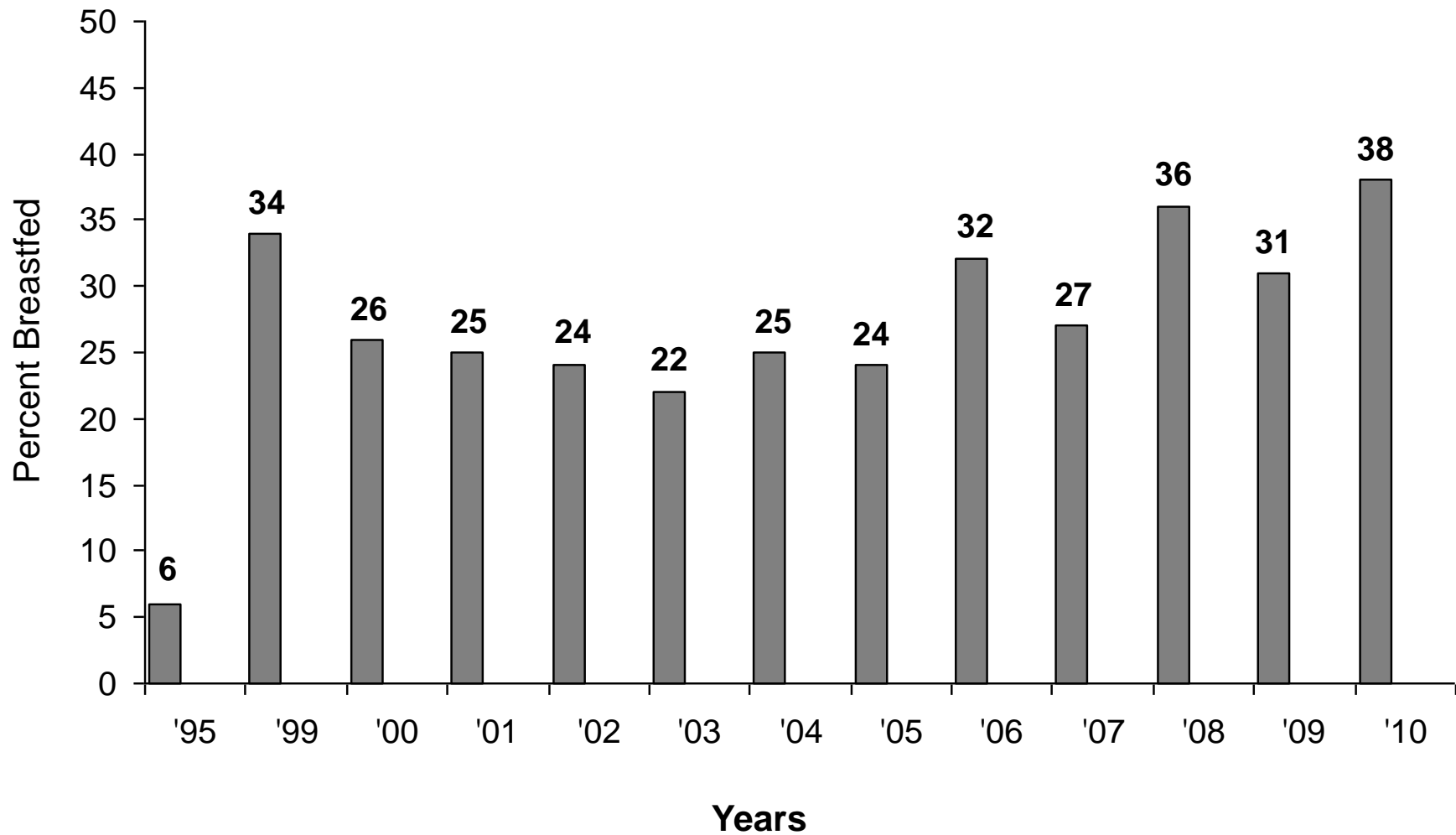




Photo: Best for Babes

# Our work continues mPINC 2009



# Scores

2007 73

2009 81

2011 82



# Massachusetts State Activities

- Melissa Bartick Mass BF Coalition
- Marsha Walker Ban the Bags NABA
- Anne Merewood BMC Breastfeeding Ctr
- MA Dept of Public Health
- MotherBaby Summit
- 2 to go to Ban the Bags
- 4 Baby Friendly hospitals
- Crib card free...?

# In conclusion

- Get your rates and track them
- Baby steps
- Don't take no for an answer
- Use mPINC
- Celebrate success!

