

# **Infant Feeding as Public Health Advocacy**

Providing Equity in Decisions about Infant Nutrition

**Optimum Infant Feeding:  
A Breastfeeding Medicine Elective for  
Physicians & Advance Practice Nurses**

**Module I**

# OBJECTIVES

- Health risks of suboptimal infant feeding
- Risks of suboptimal infant feeding that go beyond health
- Breastfeeding rates in the United States
- Breastfeeding rates in the United States by socio-economic factors

# THE RISKS OF NOT BREASTFEEDING

# HEALTH BENEFITS TO BABIES

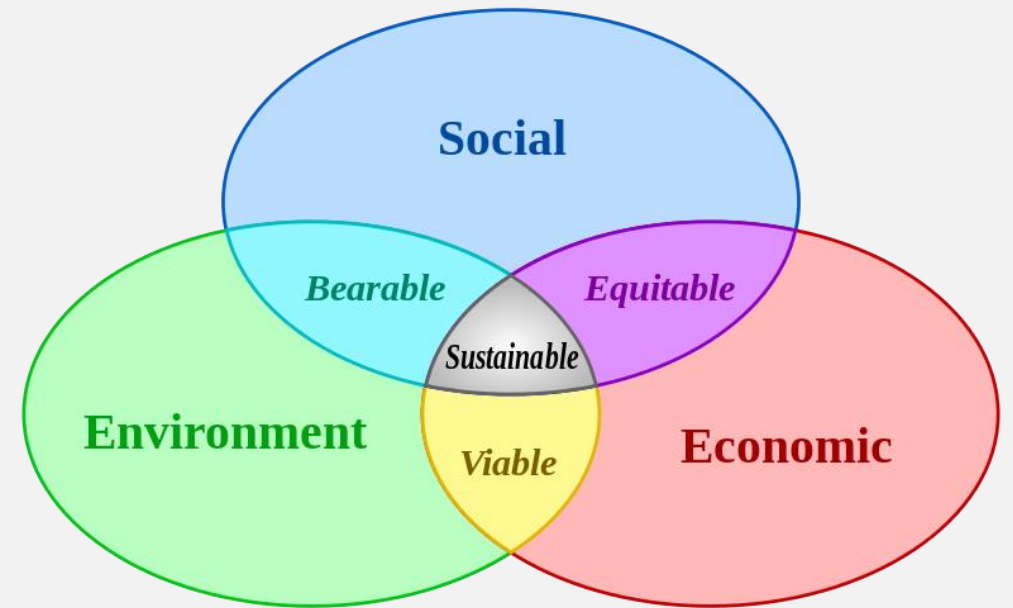
Disease	Amount BF compared to formula feeding	Risk Measure	Type of Risk Measure
Acute lymphoblastic leukemia	Any BF > 6m	0.82 [0.73, 0.93]	Odds ratio (OR)
Acute otitis media	Any BF	0.77 [0.64, 0.91]	Pooled Adjusted OR
Crohn's disease	Any BF	0.45 [0.26, 0.79]	Pooled OR
Ulcerative colitis	Any BF	0.56 [0.38, 0.81]	Pooled OR
Gastrointestinal infection	Exc 4m & Any 6m	0.41 [0.26, 0.64]	OR
Lower respiratory tract infection (hospital)	Exc > 4m	0.72 [0.46, 0.86]	Risk Reduction
Obesity (non-Hispanic white)	Any BF 6-11.9m	0.49 [0.25, 0.95]	Pooled Adjusted OR
Necrotizing enterocolitis (500-1000g)	Any BF < 36w gest age	0.72 [0.43, 1.21]	Adjusted OR
Sudden Infant death syndrome	Any BF month before death	0.29 [0.16, 0.53]	OR

# HEALTH BENEFITS TO MOTHERS

Disease	Amount BF compared to formula feeding	Risk Measure	Type of Risk Measure
Breast cancer	Per year lifetime BF	4.3% [2.9%, 5.8%]	Risk reduction
Premenopausal ovarian cancer	>18m lifetime BF	0.66 [0.46, 0.96]	Relative risk
Type 2 diabetes	>23m lifetime BF	0.53 [0.40, 0.70]	Hazard ratio
Myocardial infarction	>23m lifetime BF	0.66 [0.49, 0.89]	Hazard ratio

# BENEFITS BEYOND HEALTH

BENEFITS BEYOND HEALTH



Howarth, Richard B. "Sustainability, well-being, and economic growth." *Minding Nature* 5.2 (2012): 32-39.

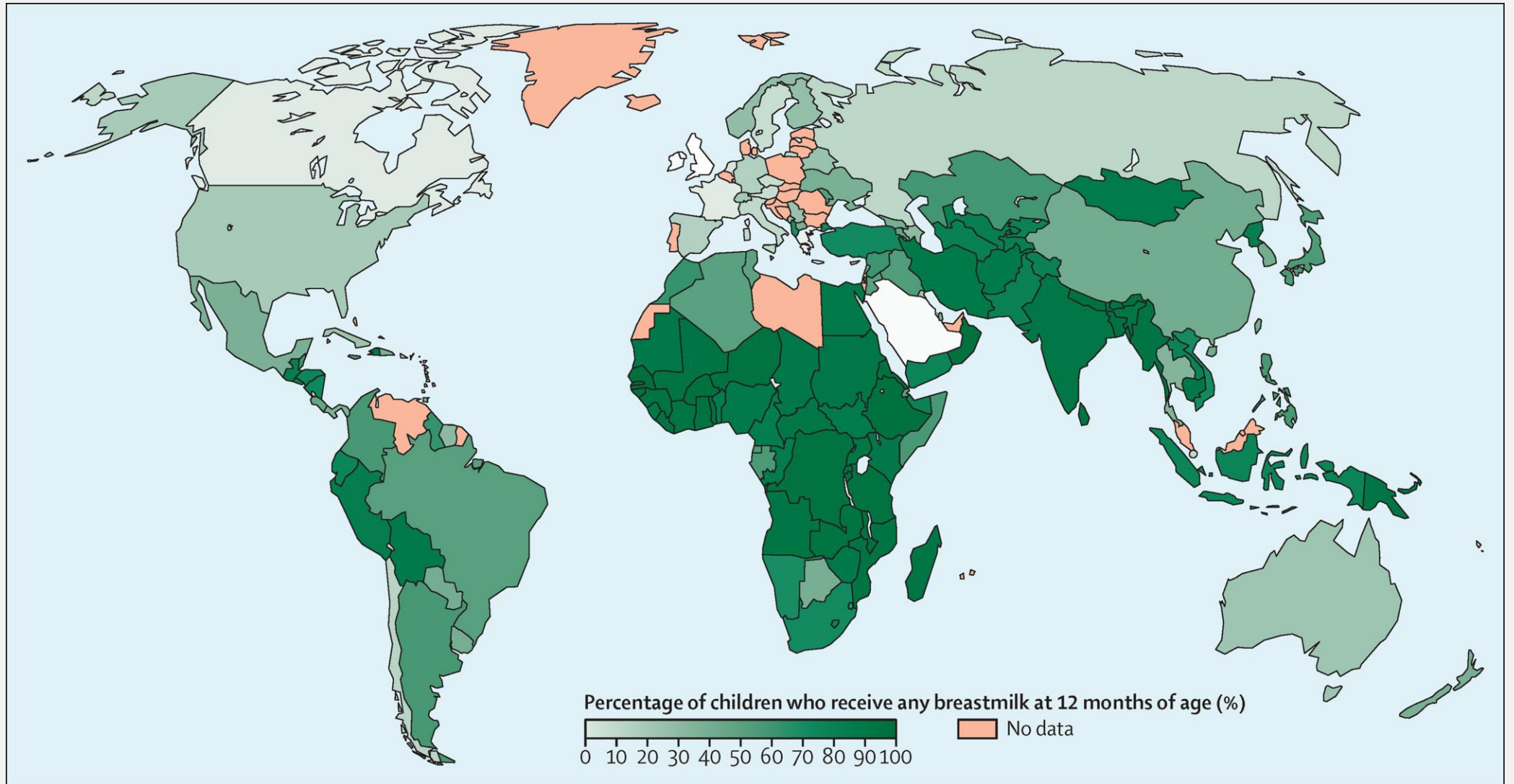
## BENEFITS TO SOCIETY



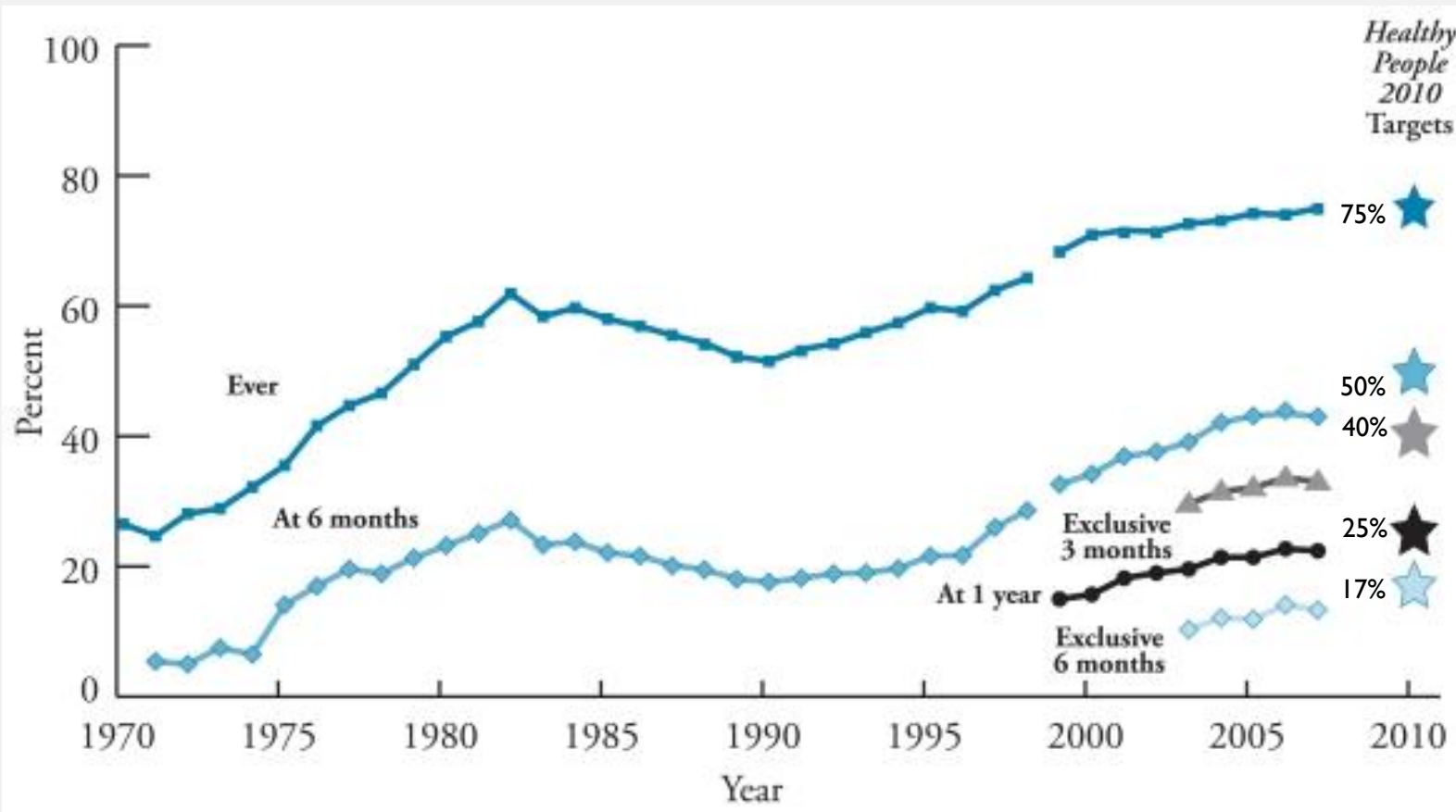


# BREASTFEEDING RATES IN THE UNITED STATES

# BREASTFEEDING IN THE WORLD



# TRENDS IN BREASTFEEDING RATES



## Current rates (2013)

### Any Breastfeeding

- Initiation 81%
- 6 month 52%
- 12 month 31%

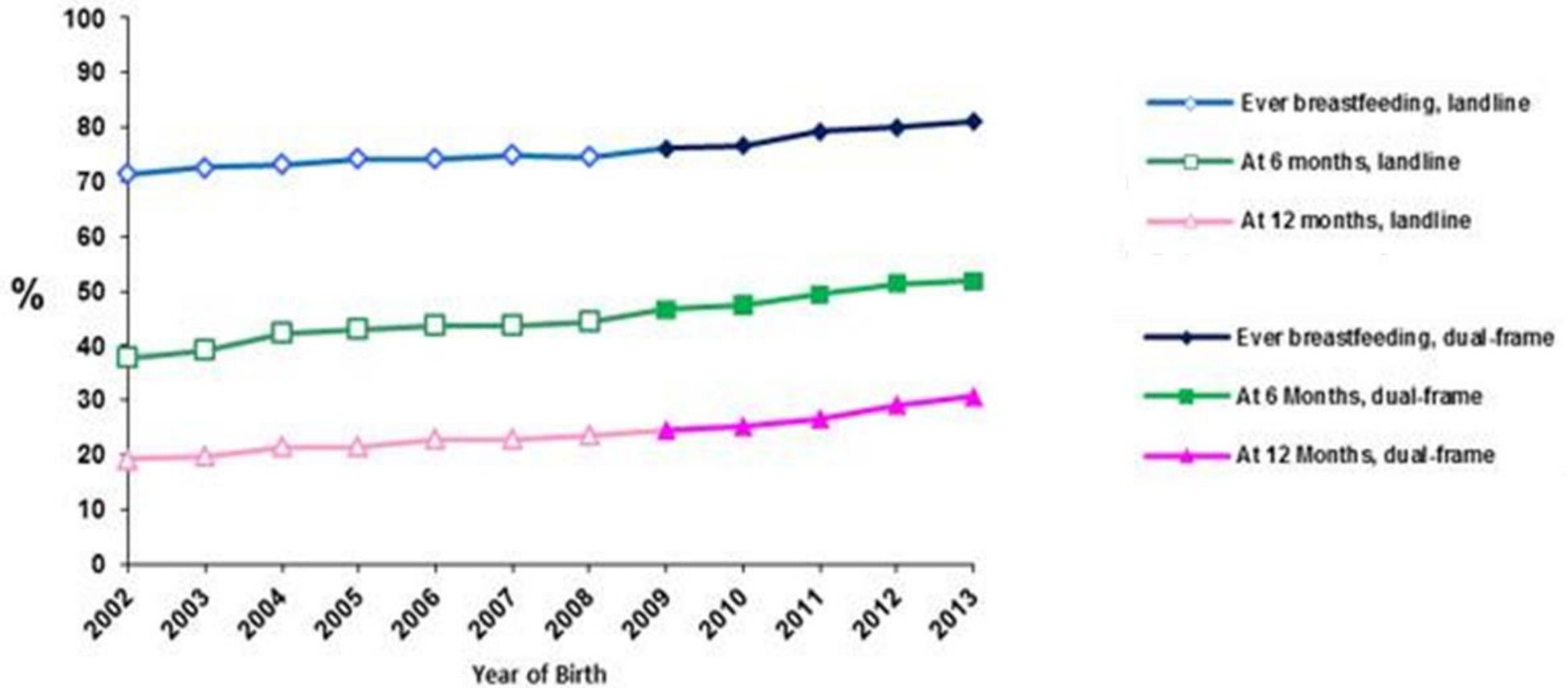
### Exclusive Breastfeeding

- 3 months 44%
- 6 months 22%

[www.cdc.gov/breastfeeding/data/nis\\_data/index.htm](http://www.cdc.gov/breastfeeding/data/nis_data/index.htm)

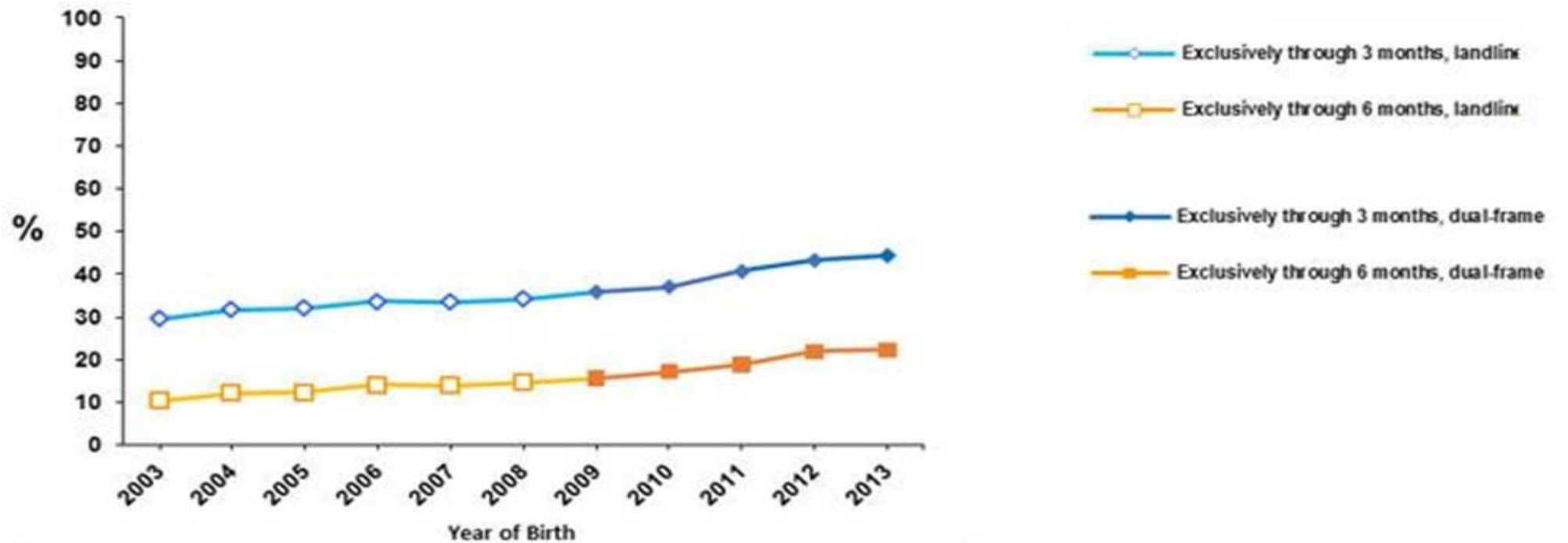
# ANY BREASTFEEDING: UNITED STATES

**Any breastfeeding** among U.S. children born 2002-2013. CDC National Immunization Survey  
Percentage of U.S. Children breastfed, by birth year



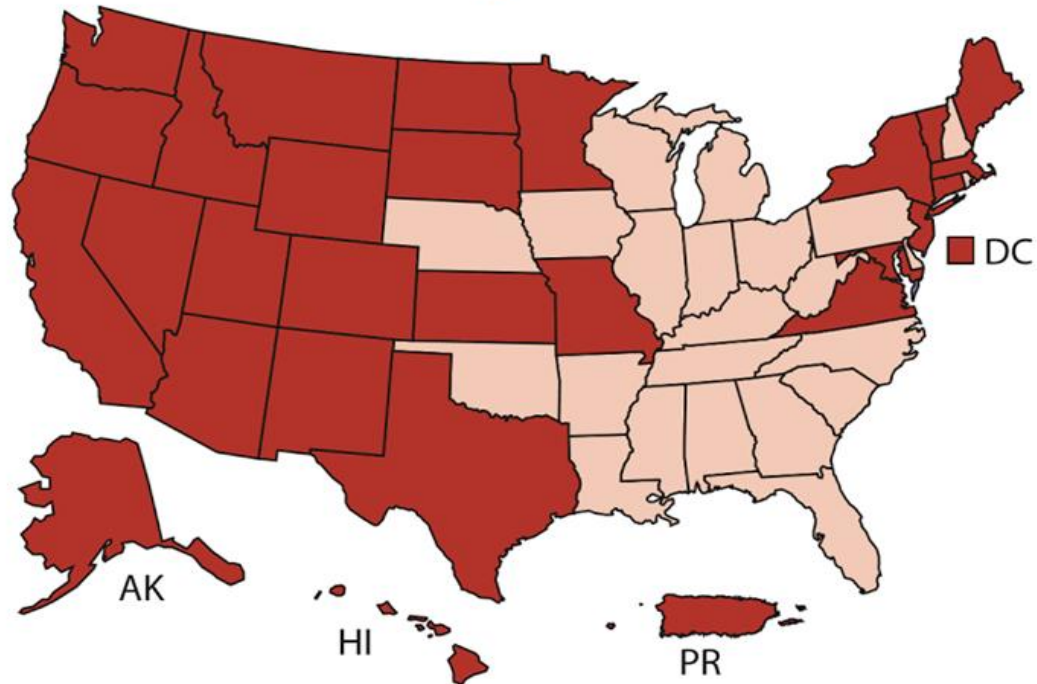
# EXCLUSIVE BREASTFEEDING

**Exclusive breastfeeding** among U.S. children born 2002-2013. CDC National Immunization Survey  
Percentage of U.S. Children breastfed, by birth

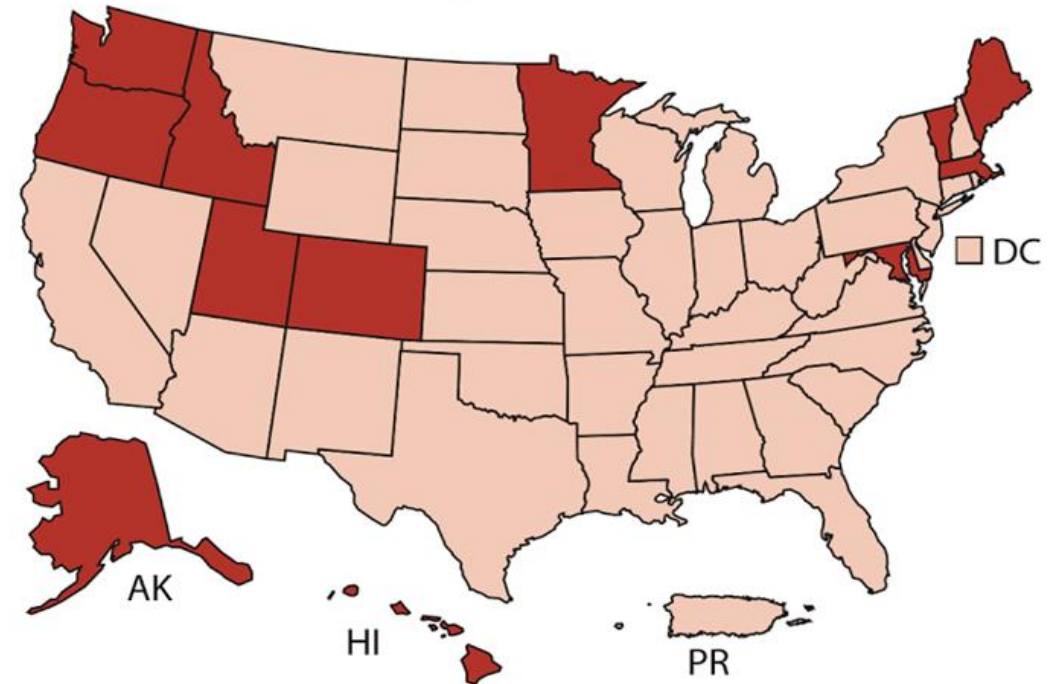


# INITIATION VS. DURATION

States that met the HP2020 goal for initiation rate of 81.9%\*



States that met the HP2020 goal for 6 months duration of 60.6%\*



Met the HP2020 goal Did not yet meet the HP2020 goal

Met the HP2020 goal Did not yet meet the HP2020 goal

\*Among infants born in 2013

**DISPARITIES IN BREASTFEEDING  
RATES IN THE UNITED STATES**

# BREASTFEEDING BY RACE

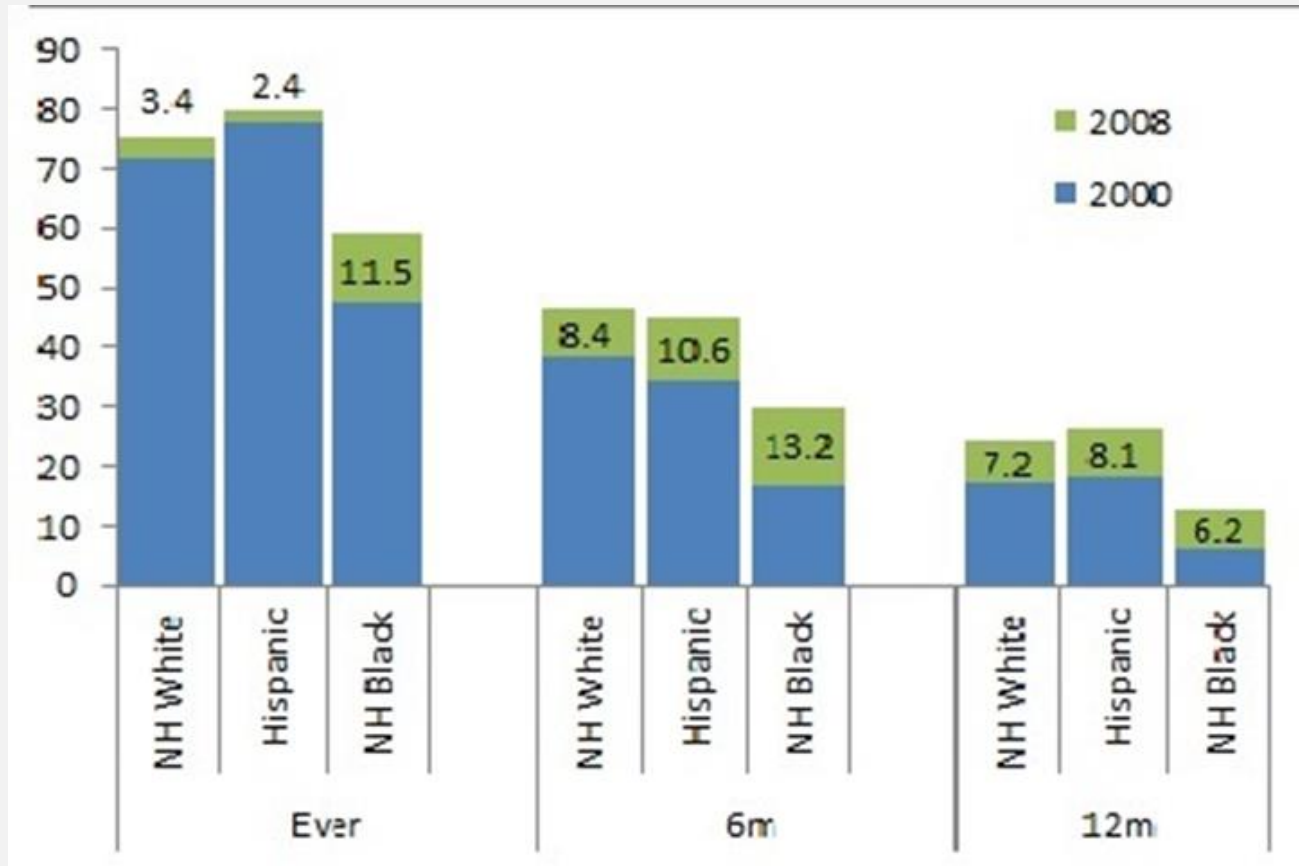
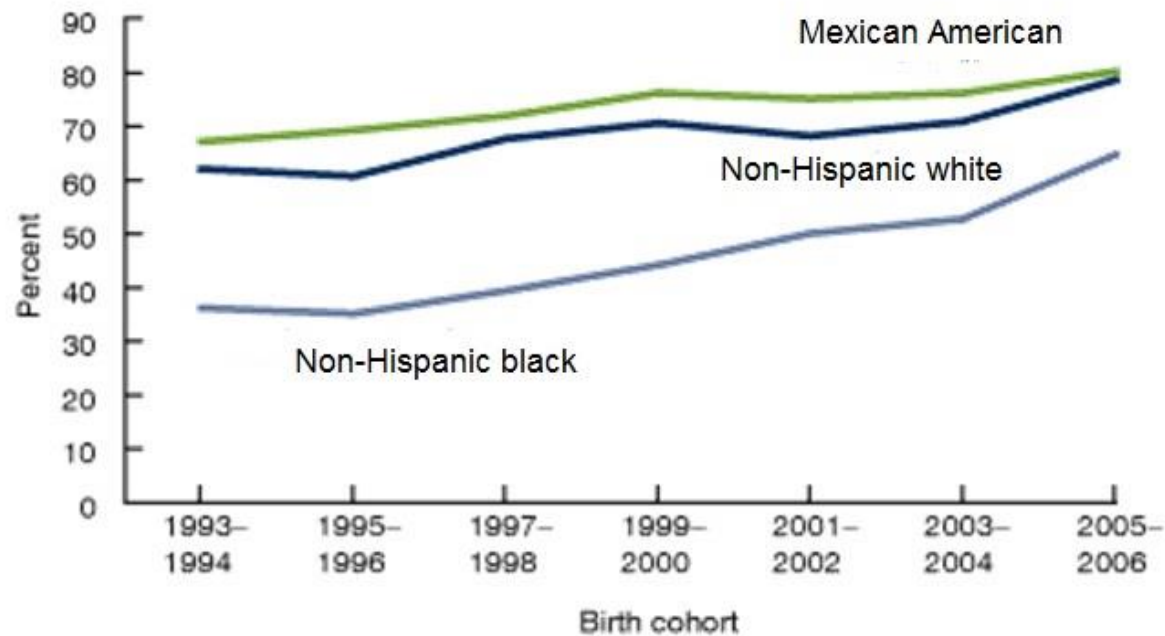


Figure 1. Difference in prevalence of breastfeeding in the United States by race at initiation, 6 months (6m) and 12 months (12m) after birth in 2000 and 2008: National Immunization Survey, United States, 2000 and 2008 births (Centers for Disease Control and Prevention (CDC) 2013, 77-80. Found at <https://www.cdc.gov/nchs/products/databriefs/db05.htm>



## BREASTFEEDING INITIATION BY RACE-ETHNICITY

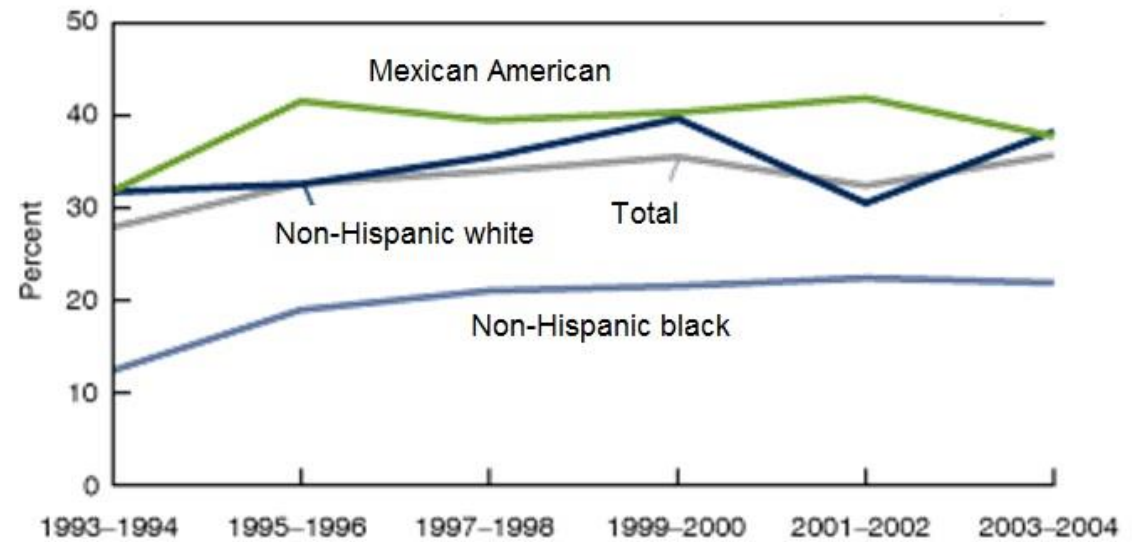
Percentage of infants who were ever breastfed by birth cohort and race-ethnicity:  
United States, 1993-2006



Source: CDC/NCHS, National Examination Survey

## BREASTFEEDING DURATION BY RACE-ETHNICITY

Percentage of infants who were still breastfed at 6 months of age by birth cohort and race ethnicity group: United States, 1993-2004

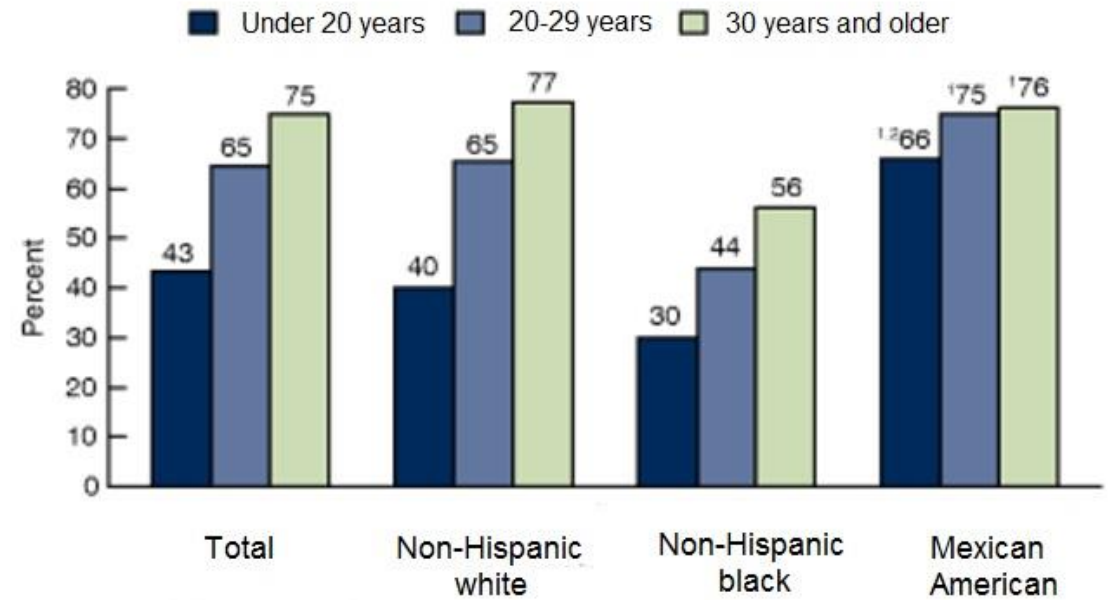


Source: CDC/NCHS, National Health and Nutrition Examination

Notes: Mexican American infants significantly higher than non-Hispanic black infants in all birth cohorts. Non-Hispanic white infants significantly higher than non-Hispanic black infants in all birth cohorts except the 2001-2002 cohort

## INITIATION BY MATERNAL AGE AND RACE

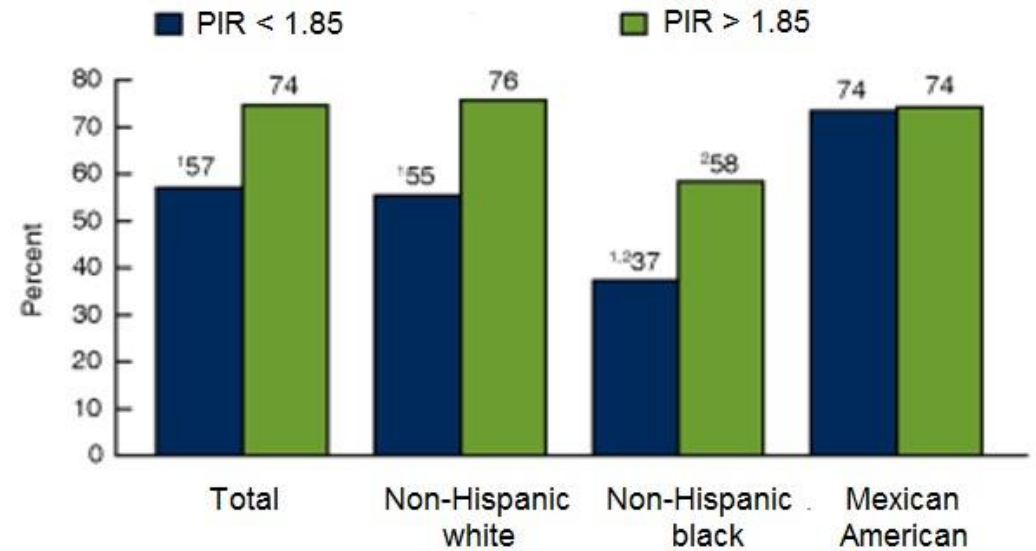
Percentage of infants who were ever breastfed by maternal age and race-ethnicity: United States, 1999-2006



Source: CDC/NCHS, National Health and Nutrition Examination

## INITIATION BY POVERTY INCOME RATIO AND RACE-ETHNICITY

Percentage of infants who were ever breastfed by poverty income ratio (PIR) and race-ethnicity: United States, 1999-2006



Source: CDC/NCHS, National Health and Nutrition Examination

## SUMMARY

- Breastfeeding is the optimal way to feed human children
- Breastfeeding rates in the United States are low compared to other countries
- There are inequities in breastfeeding rates in the US

Breastfeeding women in the US need the support of the medical community!

Thank you for taking time to educate yourself!