



JUNE 2015

# OPTIMAL BREASTFEEDING

THE MOST EFFECTIVE INTERVENTION TO REDUCE CHILD MORTALITY IN BIHAR

**Optimal breastfeeding for the first two years of life is the single most effective intervention to prevent child deaths worldwide.<sup>i</sup>** It can also be one of the most cost-effective interventions to improve child health.

<sup>ii</sup> Recently, early initiation of breastfeeding was ranked as the most equitable maternal, newborn, and child health intervention, with the greatest potential to reach families of all economic backgrounds.<sup>iii</sup>

Policymakers, program leaders, and healthcare providers have clear and specific actions that they can take to protect, promote, and support optimal breastfeeding practices. By doing so, we can help improve a child's future growth, development, educational achievement, and even economic status. When mothers have the support and resources they need to make the best feeding choices, countries get the human resources they need for a prosperous future.

**Optimal breastfeeding** includes initiating breastfeeding within an hour of birth, breastfeeding exclusively (not even water) for up to 6 months of age, and continuing to breastfeed a child up to 2 years of age. Appropriate complementary foods should be introduced at 6 months of age. (UNICEF, WHO)



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## Optimal Breastfeeding Dramatically Improves Infant Health and Survival

Poor breastfeeding practices result in 800,000 child deaths annually, or almost 12 percent of all child deaths. By promoting optimal breastfeeding, we can save lives in numerous ways:

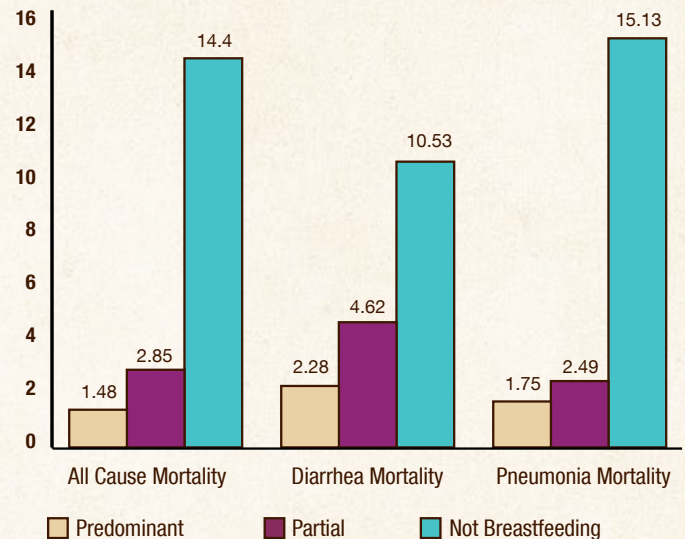
### – Early breastfeeding prevents newborn deaths.

Early initiation within one hour of birth could prevent about 20 percent of newborn deaths by serving as the baby's first "immunization" against infection and disease.<sup>iv</sup>

### – Exclusive breastfeeding can reduce diarrhea and pneumonia—the two leading killers of children.<sup>iii</sup> Exclusively breastfed infants are 11 times less likely to die from diarrhea and 15 times less likely to die from pneumonia.<sup>iv</sup>

### – Breastfeeding saves lives during emergencies, such as a national disaster, where lack of clean water and sanitation can make breastmilk substitutes potentially lethal.

Relative risk of suboptimal breastfeeding on mortality from diarrhea and pneumonia in the first six months of life.



Source: Black RE et al, 2013

In addition, continued breastfeeding through 24 months is essential to continue providing maximum nutrients to children that protect them from disease and promote life-long health and growth.

## Benefits of Optimal Breastfeeding

### SHORT-TERM BENEFITS

- Helps infants fight disease and illness, including diarrhea, pneumonia, asthma, ear infections, and respiratory infections
- Composition of breastmilk changes over time to meet a child's growing needs
- Fewer hospital visits or prescriptions

### LONG-TERM BENEFITS

- Decreased risk of childhood obesity, types I and II diabetes, hypertension, and cardiovascular disease
- Associated with an increase in IQ scores and school performance
- Improved cognitive, linguistic, and motor skills

### BENEFITS FOR MOTHERS

- Lower risk of type II diabetes, breast cancer, ovarian cancer, and postpartum depression
- Faster rate of weight loss after giving birth
- Supports birth spacing

Breastmilk provides all of the nutrients, vitamins, and minerals an infant needs to grow in the first six months of life. At six months, appropriate complementary foods should be introduced, but breastmilk continues to provide more than half of a child's nutrition needs from 6 to 12 months, and about one-third of nutrition needs from 12 to 24 months.<sup>v</sup> And the quality of nutrition that breastmilk provides is excellent.





## Risks from Formula and Bottle Feeding

Giving an infant breastmilk substitutes in the first six months of life can be harmful in more ways than one. Breastmilk substitutes—cow milk, goat milk, and formula—are vulnerable to mixing mistakes, manufacturing errors, and contaminations that contribute to increases in disease and death. Even though powdered formula is made from pasteurized milk, contamination can occur during the later stages of manufacturing. Powdered formula is therefore not actually sterile.<sup>vi</sup>

Moreover, when formulas are mixed with unclean water, or bottles and nipples are washed with unclean water, it introduces contamination that can lead to illnesses and death. When babies are introduced to an artificial nipple, it can lead to “nipple confusion,” which can lead to the baby rejecting the breast in favor of a bottle. The less that a baby breastfeeds, the less milk the mother will produce.

## Low Breastfeeding Rates Contribute to High Child Mortality Rates in Bihar and the Nation

Despite the established link between sub-optimal breastfeeding practices and infant mortality, each year thousands of children’s lives are put at risk in Bihar from poor breastfeeding practices<sup>iii,ix</sup>:

- Only 4 percent of mothers initiate breastfeeding within the first hour of birth.<sup>x</sup>
- In addition, almost all newborns receive pre-lacteals (a liquid that is not breastmilk) within the first few days of life—posing an additional risk for infection, and adversely impacting the impulse to breastfeed.
- Fewer than one in three children are exclusively breastfed for the first six months.<sup>x</sup>

The above numbers represent the data as of 2005. Much has changed since then, but we do not have reliable data to show what has changed. It is critical that systems are put in place to track progress on these key indicators.

“If a new vaccine became available that could prevent one million or more child deaths a year and that was moreover cheap, safe, administered orally and required no cold chain, it would become an immediate public health imperative. Breastfeeding can do all this and more.” – *The Lancet*, 1994



## We Know What Works

Strong implementation of breastfeeding policies and programs has consistently increased breastfeeding rates across southern Asia.

COUNTRY	SUCCESS	METHOD / APPROACH <i>Key activities that contributed to progress included:</i>
BANGLADESH	From 2010 to 2013, increased early initiation of breastfeeding from 64 percent to 82 percent, and increased exclusive breastfeeding for six months from 19 percent to 47 percent. <sup>vii</sup>	<ul style="list-style-type: none"> <li>– Policy dialogue to encourage investments in programs to improve infant and young child feeding (IYCF) and implementation of national-level policies</li> <li>– Partnerships with government and private initiatives to scale up coverage of effective nutrition interventions</li> <li>– NGO community-based activities including home visits, group sessions, and social mobilization</li> <li>– Multi-media communications with TV and radio ads to generate demand for IYCF services and create a supportive environment</li> <li>– Access to micronutrient powders through distribution by community volunteers along with education on better use of local foods and appropriate feeding practices</li> </ul>
SRI LANKA	Reduced under-5 mortality rate from 29 to 12 deaths per 1,000 live births, and infant mortality rate from 24 to 11 deaths per 1,000 live births. From 2000 to 2007, exclusive breastfeeding among infants increased from 53 percent to 76 percent. <sup>viii</sup>	<ul style="list-style-type: none"> <li>– Political commitment: expanded maternity leave from six weeks to 84 days, and expanded the International Code of Marketing of Breastmilk Substitutes</li> <li>– A well-developed and supportive healthcare workforce trained in the support and promotion of breastfeeding</li> <li>– More than 7,000 government-trained public health midwives who provided comprehensive maternal and child health care</li> <li>– Multiple strategies to increase awareness of new mothers, especially among support groups</li> </ul>

## Six Essential Actions for Health Policymakers and Programs

1. Ensure that all babies—whether delivered at home or in health facilities—are breastfed within an hour and given breastmilk only, no prelacteals.
2. Execute a media campaign to clearly communicate the importance of exclusive breastfeeding up to six months, with continued breastfeeding up to 24 months.
3. Ensure all health workers and Anganwadi Workers are trained to provide skilled counseling and support for breastfeeding.
4. Support and enact maternity entitlements, including extending paid maternity leave and workplace lactation support programs.
5. Develop monitoring and reporting systems to measure progress and identify gaps in implementation.
6. Work across sectors—including education, agriculture, and social protection—to ensure they are also promoting and supporting optimal breastfeeding in their own priorities and programs.

<sup>i</sup> The Lancet, "Executive Summary of The Lancet Maternal and Child Nutrition," 2013.

<sup>ii</sup> Horton S., et al., Health Policy Plan. "Breastfeeding promotion and priority setting in health," 1996.

<sup>iii</sup> Barros, A., et al., The Lancet, Vol. 379, "Countdown to 2015: a retrospective review of survey data from 54 countries: equity in maternal, newborn, and child health interventions," 2012.

<sup>iv</sup> Begum, K., & Dewey, K., Alive & Thrive Insight, "Impact of early initiation of exclusive breastfeeding on newborn deaths," 2010.

<sup>v</sup> UNICEF, "Complementary Feeding," 2005.

<sup>vi</sup> Naylor, A., & Wester, R., Wellstart International, "Lactation Management Self-Study Modules Level I," 2014.

<sup>vii</sup> Saha, K., et al., Alive & Thrive Summary Report, "Bangladesh Process Evaluation Survey 2013: Key Findings," 2013.

<sup>viii</sup> UNICEF, "Improving Child Nutrition: The achievable imperative for global progress," 2013.

<sup>ix</sup> UNICEF, "About us: India-Bihar."

<sup>x</sup> International Institute for Population Sciences (IIPS) and Macro International, "National Family Health Survey (NFHS-3), India, 2005-06: Bihar," 2008.

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