BANGLADESH
National Anemia Profile

USAID FROM THE AMERICAN PEOPLE

SPRING
Strengthening Partnerships, Results, and Innovations in Nutrition Globally

In pregnancy, anemia can be prevented by taking iron folic acid (IFA) supplements, increased dietary diversity, sleeping under a bednet, taking intermittent preventative treatment (IPTp) for malaria, handwashing, and taking deworming pills.

For infants, young children, and mothers, delayed cord clamping, sleeping under a bednet, exclusive breastfeeding, birth spacing, and handwashing reduce the risk of becoming anemic.

For young children, continued breastfeeding and adequate complementary feeding (including micronutrients), preventing and treating malaria, handwashing, and taking deworming pills can prevent anemia and promote healthy growth.

In adolescence, IFA supplements, deworming pills, and handwashing help prevent anemia. Family planning delays the age at first birth.

In 2014, only 31% of pregnant women in Bangladesh attended 4+ ANC visits

55% of infants in Bangladesh are exclusively breastfed during the first six months after birth (2014)

In 2011, 54% of children 6-23 months of age consumed foods rich in iron*

50% of children 6-59 months were given deworming medication in the past six months (2011)

17% of married adolescent girls expressed an unmet need for family planning (2014)

*Includes meat, fish, and eggs

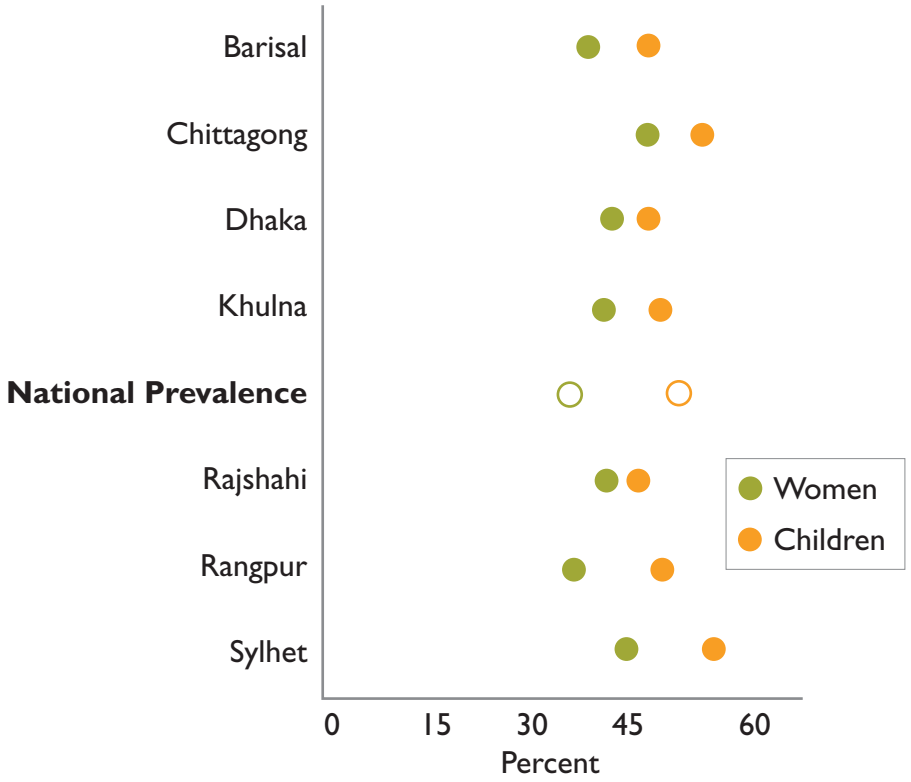
A multisectoral approach to prevent anemia will save lives and improve the well-being of mothers, infants, and children

All data is from Bangladesh Demographic and Health Surveys, unless otherwise noted

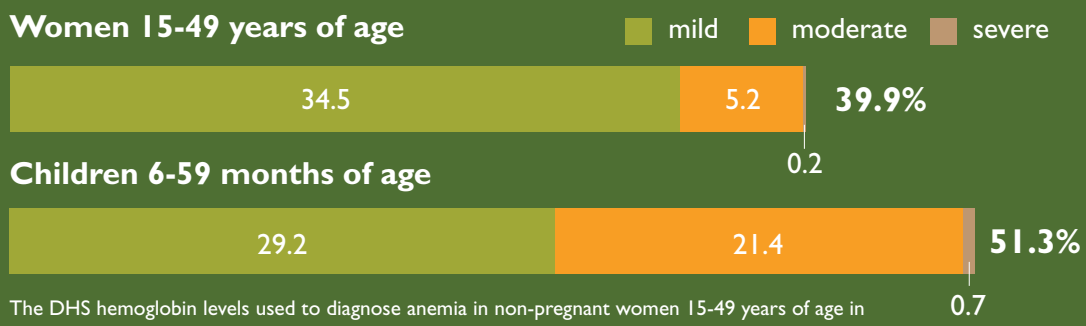
Anemia has substantial negative effects on the health and economic wellbeing of nations and communities. Children with anemia experience irrevocable cognitive and developmental delays and exhibit decreased worker productivity as adults.[1] Globally, maternal anemia increases the risk of pre-term delivery and low birth weight, and iron-deficiency anemia underlies 115,000 maternal deaths and 591,000 perinatal deaths each year.[2]

Prevalence of anemia among children 6-59 months and women 15-49 years, by region

Source: Bangladesh DHS, 2011

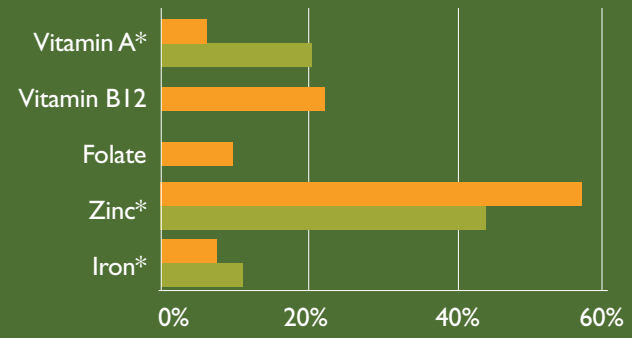


Prevalence of anemia in women and children in Bangladesh in 2011



The DHS hemoglobin levels used to diagnose anemia in non-pregnant women 15-49 years of age in grams/dL are: Mild 10.0-11.9; Moderate 7.0-9.9; Severe <7.0; Any <12.0. In children 6-59 months of age, the levels are: Mild 10.0-10.9; Moderate 7.0-9.9; Severe <7.0; Any <11.0.

Prevalence of micronutrient deficiencies in 2011-2012



*Values adjusted for inflammation by mathematical correction
Source: National Micronutrient Status Survey 2011-2012

Status of Policies or Strategies to Support Reductions in Anemia*

- ☑ IFA for pregnant women
- ☑ IFA for women of reproductive age
- ☑ IFA for adolescent girls
- ☑ Micronutrient powders for children
- ☒ Indoor residual spraying
- ☑ National policy on sanitation
- N/A IPTp for pregnant women[1]
- ☑ Malaria diagnosis and treatment
- ☑ Long-lasting insecticidal nets (LLINs) for household use
- ☑ Deworming for children
- ☑ Deworming for pregnant women
- ☑ Breastfeeding
- ☐ Iron and/or folic acid fortification legislation
- ☑ Dietary diversity for complementary feeding

☒ no policy ☐ policy pending
☑ policy in place ◉ missing documentation

1. Walker, S. P., T. D. Wachs, J. M. Gardner, B. Lozoff, G. A. Wasserman, E. Pollitt, and J. A. Carter. 2007. "Child development: risk factors for adverse outcomes in developing countries." Lancet, 369(9556): 145-157.

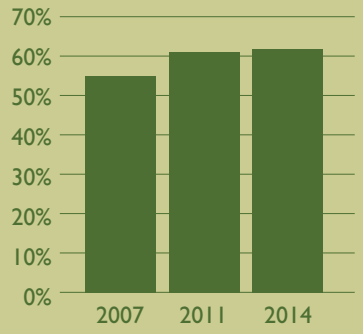
2. Stoltzfus, R. J., L. Mullany, and R. E. Black. 2004. "Iron Deficiency Anemia." In Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors. M. Ezzati, A. D. Lopez, A. Rodgers, and C. J. L. Murray, eds. Geneva: World Health Organization.

* Information from the Global database on the Implementation of Nutrition Action (GINA) or country documentation. The status of policies and strategies have been identified to the best of our knowledge. Revisions and updates are welcome.
[1] Not part of national malaria strategy due to low prevalence of malaria during pregnancy.
Evidence-informed WHO guidance can be found here: http://www.who.int/elena/en/

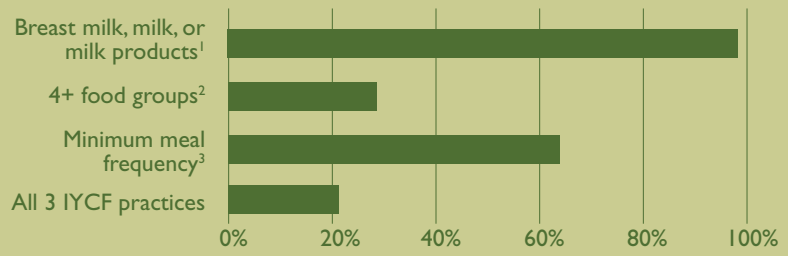
Anemia is a Preventable Condition—Simple Interventions Can Have a Huge Impact

Increase iron uptake and stores

Contraceptive use has plateaued among married women from 2007 to 2014

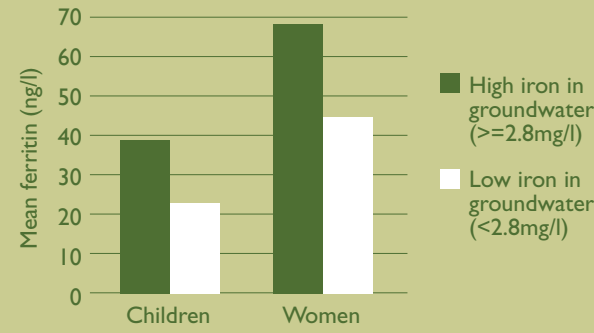


Few children 6-23 months old were fed according to 3 key Infant and Young Child Feeding (IYCF) practices in 2014



[1] Continued breastfeeding, or feeding of milk/milk products to non-breastfed children
[2] Feeding children Solid foods, semi-solid foods, and milk products from the minimum number of food groups
[3] Feeding children Solid foods, semi-solid foods, and milk products the minimum number of times

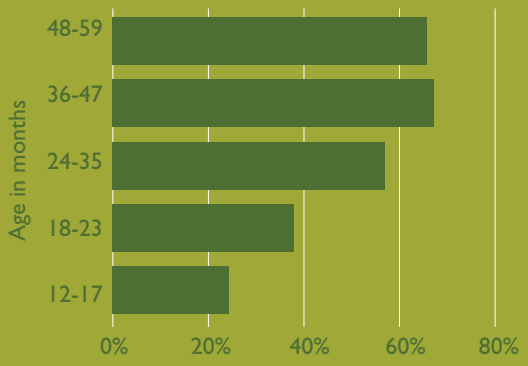
Relatively adequate iron stores may be due to iron in groundwater



*Ferritin adjusted for inflammation
Source: National Micronutrient Status Survey 2011-2012

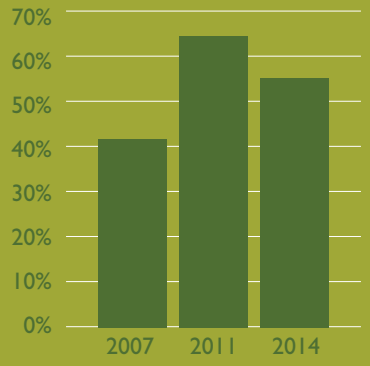
Reduce iron losses and infection

Not enough children were given deworming medication in 2011*

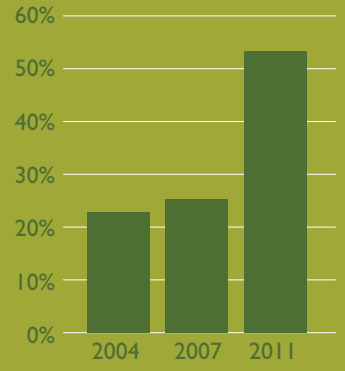


*Deworming medication given in past 6 months

Exclusive breastfeeding of children <6 months has increased from 2007 to 2014



Not enough households have an improved latrine/toilet*



*Definition of 'improved latrine' has changed slightly across years. See Demographic and Health Surveys.

Access to improved source of drinking water is almost universal

All data is from Bangladesh Demographic and Health Surveys, unless otherwise noted

Multiple Sectors Play a Role in Anemia Prevention and Treatment

Stunting and anemia share similar risk factors and are responsive to many of the same interventions

Agriculture

- Increase income and reduce poverty
- Production of biofortified and iron-rich crops
- Small livestock/poultry
- Fisheries
- Dietary diversity

Health

- Iron supplementation
- Deworming
- Breastfeeding and complementary feeding
- Family planning
- Malaria prevention and treatment
- Delayed cord clamping

Water and Sanitation

- Improved latrines
- Handwashing
- Access to clean water
- Livestock management
- Infectious disease prevention

Education

- Female literacy
- Health education
- Hygiene education
- Family planning education
- Nutrition education

Data Sources:

National Institute of Population Research and Training [Bangladesh], Mitra and Associates and ICF International. 2011. Bangladesh Demographic and Health Survey 2013. Dhaka, Bangladesh and Calverton, Maryland, USA: Central Statistical Agency and ICF International.

National Institute of Population Research and Training [Bangladesh], Mitra and Associates and Macro International. 2007. Bangladesh Demographic and Health Survey 2009. Dhaka, Bangladesh and Calverton, Maryland, USA: Central Statistical Agency and Macro International.

National Institute of Population Research and Training [Bangladesh], Mitra and Associates and ORC Macro. 2004. Bangladesh Demographic and Health Survey 2005. Dhaka, Bangladesh and Calverton, Maryland, USA: Central Statistical Authority and ORC Macro.

Profile prepared September 2015.

This profile is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement AID-OAA-A-11-00031 (SPRING), managed by JSI Research & Training Institute, Inc. (JSI) with partners Helen Keller International, the Manoff Group, Save the Children, and the International Food Policy Research Institute. The contents are the responsibility of JSI, and do not necessarily reflect the views of USAID or the United States Government.