







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 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.



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

In 2013, 30% pregnant women in Sierra Leone consumed 90 or more IFA tablets

Less than half of women (45%) took IPTp to prevent malaria during pregnancy (2013)

In 2013, 32% of children 6-23 months of age consumed foods rich in iron*

61% of children 12-59 months were given deworming medication in the past six months (2013)

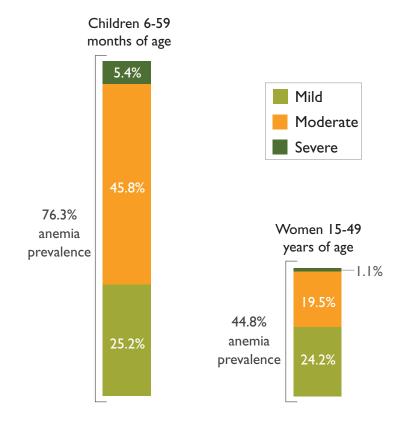
17% of married adolescent girls expressed an unmet need for family planning (2013)

*Includes meat, fish, and eggs

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. 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

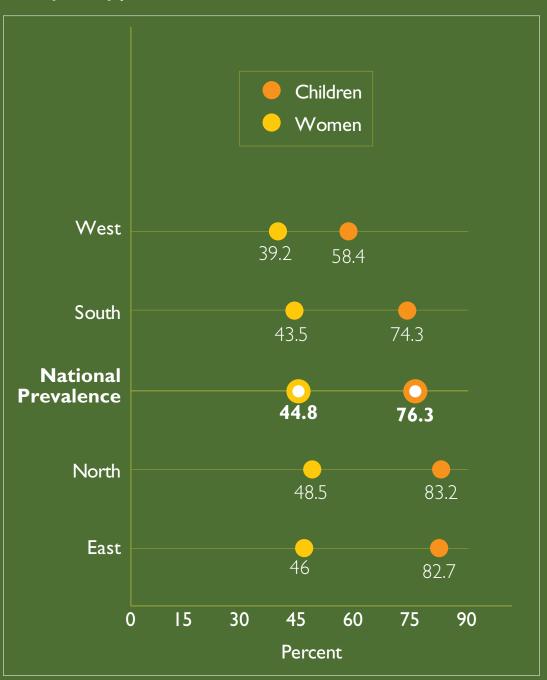
Prevalence of anemia among children 6-59 months and women 15-49 years in Sierra Leone

Source: SLMS 2013



I. 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.

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



^{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.

Status of Policies or Strategies to Support Reductions in Anemia*

		IFA for	pregnant	women
--	--	---------	----------	-------

☑ IFA for women of reproductive age

▼ IFA for adolescent girls

Iron and/or folic acid fortificationlegislations

Delayed cord clamping

Dietary diversity for complementary feeding

Micronutrient powders for children

Long-lasting insecticidal nets for household use

Indoor residual spraying

Mational policy on sanitation

IPTp for pregnant women

Malaria diagnosis and treatment

✓ Deworming for children

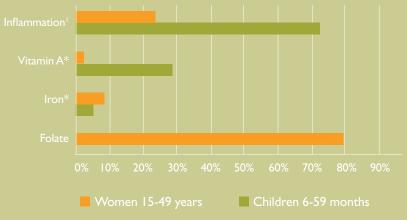
Deworming for pregnant women

Breastfeeding

■ policy pending

policy in place imissing documentation

Prevalence of micronutrient deficiencies among children 6-59 months and women 15-49 years



Inflammation defined as elevated CRP and/or AGP

Prevalence of malaria among children 6-59 months and women 15-49 years, by province



Source: SLMS 2013

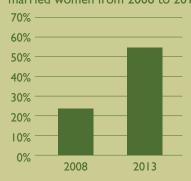
^{*} Information from the Global database on the Implementation of Nutrition Action (GINA) (https://extranet.who.int/nutrition/gina/en) or country documentation. The status of polcies and strategies have been identified to the best of our knowledge. Revisions and updates are welcome.

^{*}Values adjusted for inflammation by mathematical correction

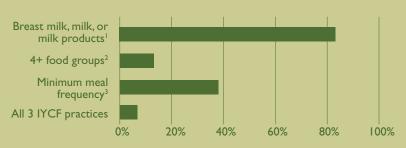
Anemia is a Preventable Condition—Simple Interventions Can Have a Huge Impact

Increase iron uptake and stores

Modern contraception use increased among married women from 2008 to 2013

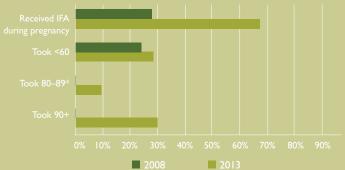


Very few children 6-23 months old were fed according to 3 key Infant and Young Child Feeding (IYCF) practices in 2013



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

IFA supplementation among pregnant women improved from 2008 to 2013

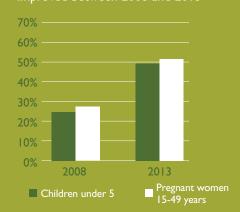






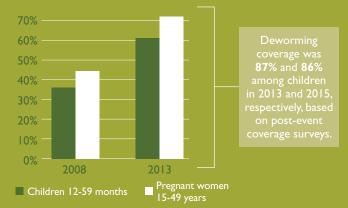
Reduce iron losses and infection

Insecticide-treated mosquito net (ITN) use improved between 2008 and 2013*



*Percentage who slept under an ITN the night before the survey

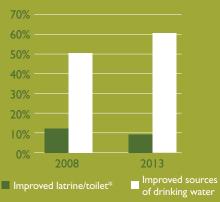
Deworming coverage increased between 2008 and 2013*



*Deworming medication given in past 6 months for children and during last pregnancy for women



Not enough households have access to improved sources of drinking water, and even fewer have an improved latrine/toilet



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

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

Data Sources:

Jalloh, U. H., H. I. Kamara, M. Turay, A. Kargbo, H. Turay, M. S. Bah, D.H. Marke, L. Conteh, A.S. Koroma, and M.H. Hodges. 2016. "Impact of Ebola on Mass Vitamin A Supplementation and Deworming Coverage in Sierra Leone." Freetown, Sierra Leone: Helen Keller International.

Ministry of Health and Sanitation (Sierra Leone), UNICEF, Helen Keller International, and WHO. 2013 Sierra Leone Micronutrient Survey. Freetown, Sierra Leone; 2015.

Statistics Sierra Leone (SSL) and ICF International. 2014. Sierra Leone Demographic and Health Survey 2013. Freetown, Sierra Leone and Rockville, Maryland, USA: SSL and ICF International.

Statistics Sierra Leone (SSL) and ICF Macro. 2009. Sierra Leone Demographic and Health Survey 2008. Calverton, Maryland, USA: Statistics Sierra Leone (SSL) and ICF Macro.

Profile prepared February 2016.

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-I I-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.

Education

- Female literacy
- Health education
- Hygiene education
- Family planning education
 - Nutrition education
- Genetic counseling and management

www.spring-nutrition.org