In pregnancy, infections are a key cause of anemia and can be prevented by sleeping under a bednet and taking intermittent preventive treatment (IPTp) for malaria and deworming pills.

In longevity, anemia can be prevented by taking iron folic acid (IFA) supplements.

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

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

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

A multisectoral approach to prevent anemia will save lives and improve the wellbeing of mothers, infants, and children.
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.

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

Source: Rwanda DHS 2014-15, Key Indicators


Status of Policies or Strategies to Support Reductions in Anemia*

- Long-lasting insecticidal nets (LLINs) for household use
- Indoor residual spraying
- National policy on sanitation
- IPTp for pregnant women
- Malaria diagnosis and treatment
- Deworming for children
- Deworming for pregnant women
- Breastfeeding

*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 policies and strategies have been identified to the best of our knowledge. Revisions and updates are welcome.

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

IFA supplementation among pregnant women increased from 2005 to 2010

Received any IFA during pregnancy

- Took <60
- Took 60-89
- Took 90+

<table>
<thead>
<tr>
<th>Year</th>
<th>&lt;60</th>
<th>60-89</th>
<th>90+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>20%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>2010</td>
<td>20%</td>
<td>40%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Contraception use plateaued among married women from 2010 to 2014-2015

Few children 6-23 months old were fed according to 3 key Infant and Young Child Feeding (IYCF) practices in 2010*

Breast milk, milk, or milk products^1
4+ food groups^2
Minimum meal frequency^3
All 3 IYCF practices

<table>
<thead>
<tr>
<th>Year</th>
<th>Breast milk</th>
<th>Other milk or milk products</th>
<th>4+ food groups</th>
<th>Minimum meal frequency</th>
<th>All 3 IYCF practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>60%</td>
<td>40%</td>
<td>20%</td>
<td>0%</td>
<td>10%</td>
</tr>
<tr>
<td>2010</td>
<td>60%</td>
<td>40%</td>
<td>20%</td>
<td>0%</td>
<td>10%</td>
</tr>
<tr>
<td>2014-2015</td>
<td>60%</td>
<td>40%</td>
<td>20%</td>
<td>0%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Reduce iron losses and infection

Insecticide-treated mosquito net (ITN) use has not changed since 2010*

<table>
<thead>
<tr>
<th>Year</th>
<th>2007-2008</th>
<th>2010</th>
<th>2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITN</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
</tr>
</tbody>
</table>

The majority of children, but not enough women, received deworming medication in 2007-2008 and 2010^*

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

Pregnant women 15-49 years
Children under 5 years

<table>
<thead>
<tr>
<th>Year</th>
<th>Pregnant women</th>
<th>Children under 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2008</td>
<td>60%</td>
<td>0%</td>
</tr>
<tr>
<td>2010</td>
<td>60%</td>
<td>0%</td>
</tr>
<tr>
<td>2014-2015</td>
<td>60%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Exclusive breastfeeding of children <6 months has not changed since 2005

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2010</th>
<th>2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breastfeeding</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

The percentage of households with an improved latrine/toilet increased from 2000 to 2010^*

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latrine/Toilet</td>
<td>0%</td>
<td>70%</td>
<td>80%</td>
</tr>
</tbody>
</table>

*Definition of ‘improved latrine/toilet’ has changed slightly across years. See Demographic and Health Surveys.

All data is from Rwanda 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
- Dietary diversity

**Health**
- Iron supplementation
- Deworming
- Breastfeeding and complimentary 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 Statistics of Rwanda (NSR) [Rwanda], Ministry of Health (MOH) [Rwanda], and ICF International. 2012. Rwanda Demographic and Health Survey 2010. Calverton, Maryland, USA: NSR, MOH, and ICF International.

Ministry of Health (MOH) [Rwanda], National Institute of Statistics of Rwanda (NSR), and ICF Macro. 2009. Rwanda Interim Demographic and Health Survey 2007-08. Calverton, Maryland, USA: MOH, NSR, and ICF Macro.

Institut National de la Statistique du Rwanda (NSR) and ORC Macro. 2006. Rwanda Demographic and Health Survey 2005. Calverton, Maryland, USA: NSR and ORC Macro.

National Institute of Statistics of Rwanda (NSR) [Rwanda], Ministry of Health (MOH) [Rwanda], and ICF International. 2015. Rwanda Demographic and Health Survey 2014-15: Key Indicators. Rockville, Maryland, USA: NSR, MOH, and ICF International.

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