**Supplementary appendix**

This appendix formed part of the original submission.

**Supplementary appendix**

Geographical variations and temporal trend in anemia among children 6-59 months of age in low- and middle-income countries during 2000-2018: forecasting the 2030 SDG target

**Appendix S1**

**Modeling Bayesian regression**

We applied Bayesian linear regression models using normally distributed non-informative priors to calculate the estimates of anemia in children 6-59 months of age during 2000-2018 and extended it up to 2030. This technique was previously used to draw projections for health indicators(1). For projection analysis, we first draw the prevalence estimates in proportions for anemia in children for all survey years of each study countries. We performed a logit transformation of all proportions. All the calculations were done after this transformation and then transformed back to probabilities to ensure that the predicted probabilities lie between 0 and 1. We considered time as a covariate in each model.

We obtained 30000 samples from the posterior distribution by applying a Markov Chain Monte Carlo (MCMC) algorithm with two chains. MCMC is a general sampling method to draw values/samples from parameter distributions which are then used to estimate the posterior distribution of parameters given the data. We used both trace plots and Gelman-Rubin diagnostic statistics to check parameter convergence by using the value of potential scale reduction factor (PSRF)(2). We consider that the convergence was achieved if the value of PSRF was close to 1, and a value greater than 1.10 was considered as convergence failure (**Table S2**). We used rjags package(3) in the R programming language with JAGS, a BUGS language, MCMC library for generating the estimates. For each model, the first 5000 iterations were discarded as burn-in and the number of iterations were increased until the output was diagnosed as convergent. During checking of the convergence, trace plots were generated each time to verify the mixing of iterations, and the iteration chains were always past in burn-in phase. These posterior predictive distributions were used to obtain estimates along with 95% credible intervals (CrI). We conducted subgroup analysis to examine the projections across subgroups such as socioeconomic status, place of residence, education and age of mother, and child sex to understand the sociodemographic groups who are lagging.

**Model equation**

We defined our indicators yi as the logit transformed value of the proportion of the indicator and assumed the distribution as follows:

yi ~ N(µi, σi2) …….. (i)

Here, µi is the conditional mean of the indicator and has the following linear form:

µi = β0 + β1 xi ……… (ii)

where, xi is the time, β0 is the intercept and β1 is the regression coefficient. The prior distribution for β0 and β1 was assumed as follows:

β0 ~ Normal(0, 0.0001)

β1 ~ Normal(0, 0.0001)

and

σ2 ~ Normal(0.0001, 100)

We fitted the model separately for each indicators of each countries at overall level. We repeat the procedure to make projections for each subgroups of each countries.

**Handling missing values**

For trend analysis, we omitted the countries with missing values of childhood anemia for more than one time points. We used information of anemia for children 6-59 months of age.

**Cross-validation of estimates**

We compared the estimates drawn from the Bayesian linear regression model with those drawn from original micro-data from the most recent survey. We calculated the absolute differences in the estimates drawn from regression models and original data for each of the time points the surveys were originally conducted. We then checked the differences between them to validate the results. This procedure depicts that the pooled arithmetic mean of this difference was 0.7. Across countries, this difference between original and estimated rates of child anemia varied from -2.4 in Armenia in 2016 to 2.6 in Uganda in 2016 (beared -4.6 in Egypt in 2014, -3.7 in Zimbabwe in 2015, 3.2 in Malawi in 2016, 3.6 in Tanzania in 2017, 4.0 in Ethiopia in 2016, 6.8 in Senegal in 2017 and 7.4 in Benin in 2018. See **Table S3** for details.

**Supplementary**

**Table S1:** Survey year, sample size and sample characteristics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Regions and countries** | **Survey year** | **Sample size** | **Child sex** | | **Place of residence** | | **Wealth quintiles** | | | | | **Mother's education** | | **Mother's age** | |
| **Male** | **Female** | **Urban** | **Rural** | **Poorest** | **Poorer** | **Middle** | **Richer** | **Richest** | **Below secondary** | **Secondary+** | **15-19 y** | **20-49 y** |
| ***Pooled*** | 2000-2018 | 776,689 | 51.2% | 48.8% | 30.8% | 69.2% | 23.8% | 22.2% | 20.5% | 18.6% | 14.9% | 61.6% | 38.4% | 4.0% | 96.0% |
| **South & Southeast Asia** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Bangladesh** | 2011 | 2,283 | 51.1% | 48.9% | 21.4% | 78.6% | 24.6% | 20.9% | 18.3% | 19.2% | 17.1% | 52.6% | 47.4% | 12.6% | 87.4% |
| Cambodia | 2000 | 1,552 | 51.1% | 48.9% | 13.2% | 86.8% | 34.5% | 35.9% | 29.7% | 60.9% | 39.1% | 86.1% | 13.9% | 2.1% | 97.9% |
| Cambodia | 2005 | 3,134 | 49.4% | 50.6% | 13.0% | 87.0% | 38.5% | 33.7% | 27.8% | 50.7% | 49.3% | 83.5% | 16.5% | 2.2% | 97.8% |
| Cambodia | 2010 | 3,394 | 52.1% | 47.9% | 15.3% | 84.7% | 39.9% | 31.6% | 28.5% | 51.9% | 48.1% | 76.1% | 23.9% | 2.3% | 97.7% |
| Cambodia | 2014 | 3,906 | 50.9% | 49.1% | 13.8% | 86.2% | 39.4% | 30.8% | 29.8% | 48.3% | 51.7% | 69.0% | 31.0% | 2.7% | 97.3% |
| India | 2006 | 35,851 | 53.0% | 47.0% | 24.3% | 75.7% | 37.5% | 33.2% | 29.3% | 56.5% | 43.5% | 64.0% | 36.0% | 5.5% | 94.5% |
| India | 2016 | 209,495 | 52.2% | 47.8% | 27.9% | 72.1% | 37.7% | 32.8% | 29.5% | 55.7% | 44.3% | 44.5% | 55.5% | 2.1% | 97.9% |
| Maldives | 2017 | 1,936 | 53.0% | 47.0% | 26.6% | 73.4% | 23.2% | 24.7% | 24.6% | 17.5% | 10.0% | 19.9% | 80.1% | 0.1% | 99.9% |
| Myanmar | 2016 | 3,526 | 51.4% | 48.6% | 21.0% | 79.0% | 31.2% | 23.3% | 17.3% | 16.1% | 12.1% | 64.6% | 35.4% | 1.7% | 98.3% |
| Nepal | 2006 | 4,693 | 51.0% | 49.0% | 11.3% | 88.7% | 38.4% | 32.2% | 29.4% | 55.6% | 44.4% | 79.1% | 20.9% | 5.2% | 94.8% |
| Nepal | 2011 | 2,088 | 50.6% | 49.4% | 8.7% | 91.3% | 38.1% | 29.4% | 32.4% | 55.4% | 44.6% | 67.9% | 32.1% | 5.6% | 94.4% |
| Nepal | 2016 | 2,082 | 52.1% | 47.9% | 52.1% | 47.9% | 30.8% | 33.8% | 35.4% | 62.2% | 37.8% | 55.3% | 44.7% | 7.1% | 92.9% |
| Timor-Leste | 2010 | 2,377 | 50.1% | 49.9% | 21.8% | 78.2% | 35.8% | 33.4% | 30.8% | 50.1% | 49.9% | 62.2% | 37.8% | 2.1% | 97.9% |
| Timor-Leste | 2016 | 1,798 | 53.8% | 46.2% | 26.3% | 73.7% | 33.5% | 34.2% | 32.3% | 53.1% | 46.9% | 45.9% | 54.1% | 1.8% | 98.2% |
| **Central Asia** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kyrgyz Republic | 2012 | 7,234 | 51.0% | 49.0% | 28.2% | 71.8% | 19.3% | 20.7% | 21.8% | 22.2% | 16.0% | 0.5% | 99.5% | 1.0% | 99.0% |
| Tajikistan | 2017 | 10,520 | 50.6% | 49.4% | 20.8% | 79.2% | 18.8% | 21.0% | 22.1% | 21.6% | 16.6% | 8.7% | 91.3% | 0.4% | 99.6% |
| **Sub-Saharan Africa** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Angola | 2007 | 1,192 | 48.0% | 52.0% | 49.9% | 50.1% | 33.2% | 34.4% | 32.3% | 55.0% | 45.0% | 90.5% | 9.5% | 13.7% | 86.3% |
| Angola | 2011 | 2,888 | 50.0% | 50.0% | 31.8% | 68.2% | 35.2% | 32.8% | 32.0% | 61.2% | 38.8% | 90.1% | 9.9% | 10.9% | 89.1% |
| Angola | 2016 | 5,600 | 50.5% | 49.5% | 60.0% | 40.0% | 32.7% | 34.9% | 32.4% | 56.4% | 43.6% | 69.0% | 31.0% | 7.8% | 92.2% |
| Benin | 2001 | 2,052 | 50.4% | 49.6% | 32.5% | 67.5% | 37.3% | 32.1% | 30.7% | 59.1% | 40.9% | 93.3% | 6.7% | 2.8% | 97.2% |
| Benin | 2006 | 3,849 | 50.8% | 49.2% | 33.2% | 66.8% | 34.2% | 33.4% | 32.3% | 54.8% | 45.2% | 93.2% | 6.8% | 3.2% | 96.8% |
| Benin | 2012 | 3,287 | 51.5% | 48.5% | 40.3% | 59.7% | 34.6% | 32.4% | 33.0% | 47.9% | 52.1% | 87.7% | 12.3% | 2.7% | 97.3% |
| Benin | 2018 | 5,565 | 51.1% | 48.9% | 37.8% | 62.2% | 32.7% | 32.4% | 34.9% | 53.8% | 46.2% | 84.4% | 15.6% | 3.9% | 96.1% |
| Burkina Faso | 2003 | 2,583 | 50.8% | 49.2% | 11.8% | 88.2% | 26.4% | 33.7% | 39.9% | 56.1% | 43.9% | 97.3% | 2.7% | 4.6% | 95.4% |
| Burkina Faso | 2010 | 5,928 | 51.0% | 49.0% | 16.8% | 83.2% | 33.1% | 32.4% | 34.5% | 58.6% | 41.4% | 95.0% | 5.0% | 3.8% | 96.2% |
| Burundi | 2010 | 3,080 | 51.0% | 49.0% | 8.1% | 91.9% | 32.1% | 34.5% | 33.4% | 53.4% | 46.6% | 93.8% | 6.2% | 1.2% | 98.8% |
| Burundi | 2017 | 5,382 | 50.4% | 49.6% | 8.7% | 91.3% | 33.7% | 32.7% | 33.6% | 55.3% | 44.7% | 89.7% | 10.3% | 1.6% | 98.4% |
| Cameroon | 2004 | 2,926 | 50.3% | 49.7% | 42.2% | 57.8% | 37.5% | 32.1% | 30.5% | 54.6% | 45.4% | 73.3% | 26.7% | 8.0% | 92.0% |
| Cameroon | 2011 | 4,566 | 48.6% | 51.4% | 43.5% | 56.5% | 36.2% | 32.8% | 31.0% | 55.6% | 44.4% | 68.9% | 31.1% | 7.2% | 92.8% |
| Congo | 2005 | 1,741 | 49.6% | 50.4% | 45.0% | 55.0% | 38.9% | 29.9% | 31.2% | 51.9% | 48.1% | 46.0% | 54.0% | 6.2% | 93.8% |
| Congo | 2012 | 3,960 | 49.1% | 50.9% | 59.4% | 40.6% | 35.4% | 36.5% | 28.1% | 54.2% | 45.8% | 39.9% | 60.1% | 7.7% | 92.3% |
| Congo DR | 2007 | 3,158 | 48.9% | 51.1% | 39.6% | 60.4% | 35.8% | 29.5% | 34.7% | 57.4% | 42.6% | 66.2% | 33.8% | 4.4% | 95.6% |
| Congo DR | 2014 | 7,317 | 50.1% | 49.9% | 29.7% | 70.3% | 34.2% | 35.2% | 30.7% | 55.1% | 44.9% | 63.5% | 36.5% | 5.0% | 95.0% |
| Cote d'Ivoire | 2012 | 2,805 | 48.1% | 51.9% | 36.3% | 63.7% | 26.6% | 22.4% | 18.9% | 18.4% | 13.7% | 91.0% | 9.0% | 6.8% | 93.2% |
| Ethiopia | 2005 | 3,346 | 49.9% | 50.1% | 6.3% | 93.7% | 34.0% | 32.5% | 33.5% | 59.2% | 40.8% | 96.3% | 3.7% | 3.7% | 96.3% |
| Ethiopia | 2011 | 8,491 | 51.3% | 48.7% | 11.7% | 88.3% | 34.4% | 34.0% | 31.6% | 59.1% | 40.9% | 96.8% | 3.2% | 3.4% | 96.6% |
| Ethiopia | 2016 | 7,743 | 51.9% | 48.1% | 10.1% | 89.9% | 34.5% | 34.1% | 31.4% | 57.5% | 42.5% | 93.9% | 6.1% | 2.7% | 97.3% |
| Gabon | 2012 | 3,049 | 50.7% | 49.3% | 84.1% | 15.9% | 22.2% | 21.1% | 21.3% | 19.4% | 16.1% | 34.8% | 65.2% | 7.8% | 92.2% |
| Gambia | 2013 | 2,931 | 52.0% | 48.0% | 45.3% | 54.7% | 21.2% | 23.9% | 17.7% | 19.8% | 17.4% | 74.3% | 25.7% | 3.4% | 96.6% |
| Ghana | 2003 | 2,859 | 50.1% | 49.9% | 32.3% | 67.7% | 39.1% | 32.3% | 28.6% | 52.9% | 47.1% | 63.1% | 36.9% | 2.9% | 97.1% |
| Ghana | 2008 | 2,168 | 51.5% | 48.5% | 37.0% | 63.0% | 38.9% | 34.8% | 26.3% | 57.8% | 42.2% | 57.8% | 42.2% | 3.5% | 96.5% |
| Ghana | 2014 | 2,388 | 52.9% | 47.1% | 45.8% | 54.2% | 36.0% | 32.3% | 31.6% | 50.0% | 50.0% | 48.6% | 51.4% | 2.7% | 97.3% |
| Ghana | 2016 | 2,655 | 51.0% | 49.0% | 44.8% | 55.2% | 35.4% | 32.1% | 32.5% | 53.6% | 46.4% | 47.4% | 52.6% | 3.5% | 96.5% |
| Guinea | 2005 | 2,330 | 50.9% | 49.1% | 23.2% | 76.8% | 36.8% | 30.5% | 32.7% | 54.6% | 45.4% | 95.5% | 4.5% | 6.5% | 93.5% |
| Guinea | 2012 | 2,793 | 52.5% | 47.5% | 24.3% | 75.7% | 35.0% | 34.1% | 30.8% | 58.5% | 41.5% | 90.7% | 9.3% | 8.4% | 91.6% |
| Lesotho | 2004 | 1,154 | 51.8% | 48.2% | 10.9% | 89.1% | 35.8% | 39.3% | 25.0% | 57.6% | 42.4% | 69.5% | 30.5% | 6.1% | 93.9% |
| Lesotho | 2009 | 1,440 | 50.1% | 49.9% | 18.1% | 81.9% | 36.7% | 32.5% | 30.7% | 58.0% | 42.0% | 59.3% | 40.7% | 7.3% | 92.7% |
| Lesotho | 2014 | 1,152 | 47.1% | 52.9% | 27.7% | 72.3% | 35.0% | 32.0% | 33.0% | 54.5% | 45.5% | 47.1% | 52.9% | 5.5% | 94.5% |
| Liberia | 2009 | 3,046 | 51.2% | 48.8% | 37.1% | 62.9% | 37.2% | 33.4% | 29.5% | 59.8% | 40.2% | 81.8% | 18.2% | 6.8% | 93.2% |
| Liberia | 2011 | 2,449 | 51.5% | 48.5% | 38.1% | 61.9% | 38.0% | 34.3% | 27.7% | 58.5% | 41.5% | 78.4% | 21.6% | 6.1% | 93.9% |
| Liberia | 2016 | 1,625 | 50.3% | 49.7% | 55.3% | 44.7% | 33.2% | 35.9% | 31.0% | 51.6% | 48.4% | 62.1% | 37.9% | 9.6% | 90.4% |
| Madagascar | 2004 | 1,397 | 49.2% | 50.8% | 18.4% | 81.6% | 41.9% | 27.8% | 30.2% | 49.2% | 50.8% | 77.7% | 22.3% | 6.3% | 93.7% |
| Madagascar | 2009 | 4,750 | 49.8% | 50.2% | 10.1% | 89.9% | 36.6% | 34.5% | 28.9% | 58.9% | 41.1% | 81.4% | 18.6% | 9.2% | 90.8% |
| Madagascar | 2011 | 5,256 | 50.4% | 49.6% | 5.6% | 94.4% | 34.7% | 34.7% | 30.6% | 58.3% | 41.7% | 82.1% | 17.9% | 7.5% | 92.5% |
| Madagascar | 2013 | 4,539 | 49.9% | 50.1% | 5.7% | 94.3% | 37.7% | 32.5% | 29.8% | 57.3% | 42.7% | 80.6% | 19.4% | 10.0% | 90.0% |
| Madagascar | 2016 | 5,867 | 51.2% | 48.8% | 7.9% | 92.1% | 37.3% | 33.8% | 28.8% | 51.7% | 48.3% | 74.7% | 25.3% | 10.6% | 89.4% |
| Malawi | 2004 | 2,068 | 48.7% | 51.3% | 10.4% | 89.6% | 28.1% | 33.6% | 38.2% | 63.5% | 36.5% | 90.2% | 9.8% | 5.8% | 94.2% |
| Malawi | 2010 | 4,177 | 49.3% | 50.7% | 14.6% | 85.4% | 28.8% | 36.1% | 35.1% | 49.5% | 50.5% | 85.4% | 14.6% | 4.6% | 95.4% |
| Malawi | 2012 | 1,900 | 46.5% | 53.5% | 13.2% | 86.8% | 34.7% | 34.8% | 30.6% | 53.7% | 46.3% | 85.6% | 14.4% | 4.7% | 95.3% |
| Malawi | 2014 | 1,752 | 49.6% | 50.4% | 14.0% | 86.0% | 37.4% | 32.2% | 30.4% | 54.3% | 45.7% | 82.7% | 17.3% | 5.3% | 94.7% |
| Malawi | 2016 | 4,638 | 48.6% | 51.4% | 12.7% | 87.3% | 36.2% | 35.2% | 28.6% | 53.1% | 46.9% | 79.2% | 20.8% | 5.9% | 94.1% |
| Mali | 2001 | 2,516 | 50.9% | 49.1% | 21.5% | 78.5% | 39.5% | 31.3% | 29.3% | 54.9% | 45.1% | 95.7% | 4.3% | 5.4% | 94.6% |
| Mali | 2006 | 3,318 | 50.8% | 49.2% | 27.1% | 72.9% | 32.7% | 35.4% | 31.9% | 53.6% | 46.4% | 95.9% | 4.1% | 6.6% | 93.4% |
| Mali | 2013 | 4,159 | 51.2% | 48.8% | 18.4% | 81.6% | 34.7% | 33.8% | 31.5% | 55.0% | 45.0% | 92.9% | 7.1% | 5.6% | 94.4% |
| Mozambique | 2011 | 4,361 | 49.6% | 50.4% | 26.5% | 73.5% | 36.4% | 34.7% | 29.0% | 58.5% | 41.5% | 88.6% | 11.4% | 7.5% | 92.5% |
| Mozambique | 2015 | 3,870 | 49.2% | 50.8% | 23.9% | 76.1% | 35.1% | 33.7% | 31.2% | 58.0% | 42.0% | 85.4% | 14.6% | 10.2% | 89.8% |
| Namibia | 2013 | 1,537 | 49.0% | 51.0% | 43.2% | 56.8% | 25.8% | 21.1% | 19.6% | 20.8% | 12.6% | 30.5% | 69.5% | 5.4% | 94.6% |
| Niger | 2006 | 3,207 | 51.7% | 48.3% | 15.3% | 84.7% | 32.1% | 33.7% | 34.2% | 52.0% | 48.0% | 96.2% | 3.8% | 5.1% | 94.9% |
| Niger | 2012 | 4,384 | 50.2% | 49.8% | 13.4% | 86.6% | 32.3% | 32.4% | 35.3% | 53.8% | 46.2% | 95.9% | 4.1% | 4.1% | 95.9% |
| Nigeria | 2015 | 5,298 | 50.8% | 49.2% | 33.9% | 66.1% | 20.6% | 23.4% | 18.6% | 18.3% | 19.1% | 62.9% | 37.1% | 5.1% | 94.9% |
| Rwanda | 2005 | 3,312 | 49.3% | 50.7% | 13.7% | 86.3% | 32.4% | 34.7% | 32.8% | 55.9% | 44.1% | 91.3% | 8.7% | 0.7% | 99.3% |
| Rwanda | 2008 | 4,344 | 49.8% | 50.2% | 14.1% | 85.9% | 23.2% | 45.4% | 31.4% | 53.4% | 46.6% | 92.6% | 7.4% | 1.1% | 98.9% |
| Rwanda | 2010 | 3,733 | 50.7% | 49.3% | 11.4% | 88.6% | 34.4% | 34.1% | 31.5% | 54.8% | 45.2% | 91.6% | 8.4% | 1.1% | 98.9% |
| Rwanda | 2015 | 3,230 | 50.8% | 49.2% | 16.1% | 83.9% | 36.7% | 33.7% | 29.6% | 51.3% | 48.7% | 87.9% | 12.1% | 1.6% | 98.4% |
| Sao Tome and Principe | 2009 | 1,540 | 50.0% | 50.0% | 47.7% | 52.3% | 21.2% | 21.6% | 21.7% | 20.4% | 15.0% | 76.6% | 23.4% | 5.4% | 94.6% |
| Senegal | 2005 | 2,387 | 52.5% | 47.5% | 35.4% | 64.6% | 38.1% | 31.6% | 30.3% | 49.1% | 50.9% | 91.6% | 8.4% | 4.4% | 95.6% |
| Senegal | 2009 | 3,705 | 49.0% | 51.0% | 36.8% | 63.2% | 33.4% | 33.5% | 33.1% | 53.5% | 46.5% | 91.9% | 8.1% | 5.0% | 95.0% |
| Senegal | 2011 | 3,326 | 51.8% | 48.2% | 39.3% | 60.7% | 34.7% | 33.6% | 31.8% | 55.7% | 44.3% | 91.9% | 8.1% | 4.1% | 95.9% |
| Senegal | 2013 | 5,099 | 49.9% | 50.1% | 35.2% | 64.8% | 36.2% | 32.1% | 31.7% | 51.4% | 48.6% | 90.5% | 9.5% | 3.6% | 96.4% |
| Senegal | 2014 | 5,419 | 51.7% | 48.3% | 42.4% | 57.6% | 37.1% | 32.6% | 30.3% | 53.9% | 46.1% | 88.2% | 11.8% | 3.8% | 96.2% |
| Senegal | 2015 | 5,457 | 50.9% | 49.1% | 35.3% | 64.7% | 36.6% | 32.7% | 30.7% | 53.3% | 46.7% | 89.1% | 10.9% | 3.7% | 96.3% |
| Senegal | 2016 | 10,784 | 51.1% | 48.9% | 36.1% | 63.9% | 36.9% | 33.4% | 29.7% | 53.3% | 46.7% | 88.0% | 12.0% | 3.9% | 96.1% |
| Senegal | 2017 | 9,516 | 51.8% | 48.2% | 36.3% | 63.7% | 36.5% | 32.8% | 30.7% | 51.5% | 48.5% | 84.8% | 15.2% | 3.9% | 96.1% |
| Sierra Leone | 2008 | 1,894 | 49.4% | 50.6% | 26.3% | 73.7% | 32.4% | 32.9% | 34.7% | 60.3% | 39.7% | 90.0% | 10.0% | 4.9% | 95.1% |
| Sierra Leone | 2013 | 4,140 | 49.0% | 51.0% | 24.3% | 75.7% | 34.4% | 34.3% | 31.3% | 56.8% | 43.2% | 83.4% | 16.6% | 5.6% | 94.4% |
| Swaziland | 2007 | 1,785 | 49.8% | 50.2% | 17.2% | 82.8% | 22.3% | 23.3% | 20.3% | 18.6% | 15.4% | 46.8% | 53.2% | 8.6% | 91.4% |
| Tanzania | 2005 | 6,415 | 50.4% | 49.6% | 18.8% | 81.2% | 35.0% | 32.4% | 32.6% | 57.6% | 42.4% | 95.5% | 4.5% | 4.9% | 95.1% |
| Tanzania | 2008 | 5,642 | 50.2% | 49.8% | 16.6% | 83.4% | 35.1% | 32.3% | 32.6% | 55.3% | 44.7% | 95.7% | 4.3% | 4.1% | 95.9% |
| Tanzania | 2010 | 6,041 | 49.4% | 50.6% | 18.8% | 81.2% | 32.3% | 34.8% | 32.9% | 58.0% | 42.0% | 94.1% | 5.9% | 4.1% | 95.9% |
| Tanzania | 2012 | 6,718 | 50.1% | 49.9% | 16.1% | 83.9% | 34.9% | 34.7% | 30.3% | 54.2% | 45.8% | 91.7% | 8.3% | 4.8% | 95.2% |
| Tanzania | 2016 | 7,944 | 50.5% | 49.5% | 25.6% | 74.4% | 37.1% | 33.2% | 29.6% | 53.1% | 46.9% | 86.2% | 13.8% | 5.4% | 94.6% |
| Tanzania | 2017 | 6,216 | 50.3% | 49.7% | 26.3% | 73.7% | 37.0% | 32.9% | 30.0% | 53.7% | 46.3% | 85.8% | 14.2% | 5.3% | 94.7% |
| Togo | 2014 | 2,890 | 50.4% | 49.6% | 34.3% | 65.7% | 35.5% | 33.6% | 30.9% | 51.5% | 48.5% | 78.7% | 21.3% | 3.3% | 96.7% |
| Togo | 2017 | 2,834 | 50.0% | 50.0% | 34.5% | 65.5% | 37.0% | 32.9% | 30.2% | 52.3% | 47.7% | 73.3% | 26.7% | 3.1% | 96.9% |
| Uganda | 2001 | 4,659 | 49.8% | 50.2% | 9.2% | 90.8% | 33.9% | 34.4% | 31.8% | 57.5% | 42.5% | 89.1% | 10.9% | 5.5% | 94.5% |
| Uganda | 2006 | 2,110 | 50.0% | 50.0% | 10.2% | 89.8% | 32.0% | 34.3% | 33.8% | 53.8% | 46.2% | 87.1% | 12.9% | 3.4% | 96.6% |
| Uganda | 2009 | 3,068 | 49.1% | 50.9% | 12.5% | 87.5% | 35.3% | 33.4% | 31.3% | 53.6% | 46.4% | 84.5% | 15.5% | 4.1% | 95.9% |
| Uganda | 2011 | 1,808 | 49.6% | 50.4% | 12.9% | 87.1% | 35.3% | 32.7% | 31.9% | 52.6% | 47.4% | 79.0% | 21.0% | 4.6% | 95.4% |
| Uganda | 2015 | 3,747 | 48.8% | 51.2% | 15.9% | 84.1% | 35.7% | 34.3% | 29.9% | 51.9% | 48.1% | 79.3% | 20.7% | 4.7% | 95.3% |
| Uganda | 2016 | 3,923 | 50.3% | 49.7% | 20.7% | 79.3% | 35.7% | 32.8% | 31.5% | 47.5% | 52.5% | 72.9% | 27.1% | 4.7% | 95.3% |
| Zimbabwe | 2006 | 3,394 | 50.8% | 49.2% | 25.6% | 74.4% | 40.2% | 31.9% | 27.9% | 59.5% | 40.5% | 41.8% | 58.2% | 5.3% | 94.7% |
| Zimbabwe | 2011 | 3,379 | 50.0% | 50.0% | 24.2% | 75.8% | 37.3% | 33.0% | 29.8% | 60.7% | 39.3% | 35.5% | 64.5% | 6.4% | 93.6% |
| Zimbabwe | 2015 | 4,121 | 49.7% | 50.3% | 29.5% | 70.5% | 39.4% | 32.4% | 28.2% | 59.5% | 40.5% | 33.3% | 66.7% | 5.2% | 94.8% |
| **North Africa-West Asia-Europe** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Albania | 2009 | 1,355 | 49.5% | 50.5% | 40.5% | 59.5% | 33.6% | 32.0% | 34.4% | 54.1% | 45.9% | 66.6% | 33.4% | 1.3% | 98.7% |
| Albania | 2018 | 1,948 | 51.6% | 48.4% | 53.1% | 46.9% | 37.0% | 34.4% | 28.6% | 54.5% | 45.5% | 52.7% | 47.3% | 1.2% | 98.8% |
| Armenia | 2000 | 1,384 | 56.6% | 43.4% | 51.3% | 48.7% | 35.4% | 38.6% | 26.0% | 47.0% | 53.0% | 0.1% | 99.9% | 2.3% | 97.7% |
| Armenia | 2005 | 1,024 | 55.6% | 44.4% | 60.8% | 39.2% | 32.2% | 32.2% | 35.6% | 51.9% | 48.1% | 1.2% | 98.8% | 1.4% | 98.6% |
| Armenia | 2016 | 1,349 | 53.2% | 46.8% | 53.5% | 46.5% | 34.2% | 35.5% | 30.3% | 42.1% | 57.9% | 6.0% | 94.0% | 0.7% | 99.3% |
| Azerbaijan | 2006 | 1,812 | 53.7% | 46.3% | 50.2% | 49.8% | 24.0% | 22.1% | 21.5% | 16.6% | 15.8% | 3.6% | 96.4% | 1.8% | 98.2% |
| Egypt | 2000 | 4,674 | 51.3% | 48.7% | 38.9% | 61.1% | 34.8% | 33.9% | 31.2% | 51.5% | 48.5% | 56.1% | 43.9% | 2.4% | 97.6% |
| Egypt | 2005 | 3,853 | 50.6% | 49.4% | 36.6% | 63.4% | 33.9% | 31.9% | 34.1% | 52.5% | 47.5% | 44.9% | 55.1% | 2.7% | 97.3% |
| Egypt | 2014 | 4,603 | 52.7% | 47.3% | 32.4% | 67.6% | 28.8% | 30.8% | 40.4% | 56.3% | 43.7% | 26.5% | 73.5% | 1.8% | 98.2% |
| Jordan | 2002 | 1,454 | 52.6% | 47.4% | 74.1% | 25.9% | 37.2% | 33.9% | 28.9% | 60.4% | 39.6% | 12.8% | 87.2% | 1.6% | 98.4% |
| Jordan | 2007 | 4,124 | 49.5% | 50.5% | 83.5% | 16.5% | 38.0% | 32.6% | 29.5% | 59.0% | 41.0% | 8.6% | 91.4% | 0.8% | 99.2% |
| Jordan | 2009 | 3,746 | 52.2% | 47.8% | 82.3% | 17.7% | 34.1% | 38.0% | 27.9% | 65.6% | 34.4% | 8.1% | 91.9% | 1.5% | 98.5% |
| Jordan | 2012 | 5,522 | 51.7% | 48.3% | 81.5% | 18.5% | 34.8% | 32.9% | 32.3% | 61.8% | 38.2% | 8.5% | 91.5% | 1.3% | 98.7% |
| Jordan | 2018 | 8,502 | 51.3% | 48.7% | 88.5% | 11.5% | 37.6% | 32.9% | 29.5% | 63.9% | 36.1% | 8.7% | 91.3% | 1.8% | 98.2% |
| Moldova | 2005 | 1,259 | 52.3% | 47.7% | 35.4% | 64.6% | 20.3% | 20.0% | 23.0% | 17.6% | 19.2% | 1.2% | 98.8% | 3.9% | 96.1% |
| Yemen | 2013 | 3,754 | 50.2% | 49.8% | 27.8% | 72.2% | 23.7% | 22.0% | 19.1% | 17.6% | 17.6% | 85.6% | 14.4% | 2.7% | 97.3% |
| **Latin America & Caribbean** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bolivia | 2003 | 2,789 | 51.9% | 48.1% | 55.2% | 44.8% | 37.0% | 31.5% | 31.6% | 63.0% | 37.0% | 70.7% | 29.3% | 4.4% | 95.6% |
| Bolivia | 2008 | 2,316 | 52.0% | 48.0% | 53.5% | 46.5% | 36.4% | 31.8% | 31.8% | 61.6% | 38.4% | 59.8% | 40.2% | 6.5% | 93.5% |
| Guatemala | 2015 | 10,385 | 51.7% | 48.3% | 35.5% | 64.5% | 26.5% | 22.2% | 20.0% | 17.9% | 13.3% | 72.0% | 28.0% | 7.6% | 92.4% |
| Guyana | 2009 | 1,427 | 49.2% | 50.8% | 21.2% | 78.8% | 31.7% | 21.3% | 18.0% | 14.8% | 14.2% | 26.9% | 73.1% | 10.3% | 89.7% |
| Haiti | 2000 | 2,562 | 46.4% | 53.6% | 30.5% | 69.5% | 34.2% | 36.5% | 29.3% | 58.5% | 41.5% | 86.1% | 13.9% | 4.3% | 95.7% |
| Haiti | 2006 | 2,277 | 47.9% | 52.1% | 33.7% | 66.3% | 37.0% | 34.4% | 28.6% | 58.4% | 41.6% | 75.9% | 24.1% | 5.2% | 94.8% |
| Haiti | 2012 | 3,509 | 51.2% | 48.8% | 32.9% | 67.1% | 36.9% | 33.2% | 29.8% | 61.1% | 38.9% | 65.4% | 34.6% | 5.1% | 94.9% |
| Haiti | 2017 | 4,884 | 50.2% | 49.8% | 33.8% | 66.2% | 38.9% | 30.6% | 30.5% | 56.6% | 43.4% | 59.5% | 40.5% | 3.0% | 97.0% |
| Honduras | 2006 | 8,258 | 50.9% | 49.1% | 40.4% | 59.6% | 37.6% | 31.5% | 30.9% | 59.7% | 40.3% | 79.7% | 20.3% | 7.1% | 92.9% |
| Honduras | 2012 | 8,538 | 52.4% | 47.6% | 44.5% | 55.5% | 38.6% | 31.4% | 30.0% | 60.1% | 39.9% | 65.7% | 34.3% | 9.2% | 90.8% |
| Peru | 2000 | 2,334 | 51.7% | 48.3% | 56.6% | 43.4% | 39.4% | 28.9% | 31.7% | 55.2% | 44.8% | 45.8% | 54.2% | 4.2% | 95.8% |
| Peru | 2006 | 8,254 | 50.4% | 49.6% | 58.7% | 41.3% | 21.3% | 41.0% | 37.7% | 50.2% | 49.8% | 39.5% | 60.5% | 5.3% | 94.7% |
| Peru | 2008 | 8,254 | 50.4% | 49.6% | 58.7% | 41.3% | 21.3% | 41.0% | 37.7% | 50.2% | 49.8% | 39.5% | 60.5% | 5.3% | 94.7% |
| Peru | 2009 | 7,858 | 51.9% | 48.1% | 63.4% | 36.6% | 35.4% | 34.3% | 30.3% | 59.0% | 41.0% | 36.6% | 63.4% | 4.9% | 95.1% |
| Peru | 2010 | 7,747 | 50.2% | 49.8% | 63.8% | 36.2% | 36.0% | 33.0% | 31.0% | 60.7% | 39.3% | 36.2% | 63.8% | 5.1% | 94.9% |
| Peru | 2011 | 7,746 | 50.4% | 49.6% | 65.8% | 34.2% | 34.9% | 32.6% | 32.6% | 58.5% | 41.5% | 34.2% | 65.8% | 4.2% | 95.8% |
| Peru | 2012 | 8,247 | 51.2% | 48.8% | 65.3% | 34.7% | 34.5% | 33.6% | 31.9% | 58.0% | 42.0% | 31.8% | 68.2% | 5.4% | 94.6% |

**Table S2:** Potential scale reduction factor (PSRF) to diagnose convergence after Markov Chain Monte Carlo simulation in Bayesian regression model for child anemia

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Overall** | **Wealth quintiles** | | | | | **Place of residence** | | **Mother’s education** | | **Mother’s age** | | **Child sex** | |
| **Poorest** | **Poorer** | **Middle** | **Richer** | **Richest** | **Urban** | **Rural** | **Below secondary** | **Secondary+** | **15-19 years** | **20-49 years** | **Male** | **Female** |
| Albania | 0.999454 | 1.010192 | 0.999413 | 0.999175 | 1.00366 | 1.007724 | 1.000124 | 1.011532 | 1.023088 | 1.004384 | 1.025007 | 1.001552 | 1.001208 | 1.01899 |
| Angola | 1.063992 | 1.009331 | 1.004504 | 1.007901 | 0.999928 | 1.002579 | 1.007879 | 1.012079 | 1.005765 | 1.007581 | 1.005296 | 1.000475 | 0.999528 | 1.001628 |
| Armenia | 1.015233 | 1.024861 | 1.005078 | 0.99931 | 1.065123 | 1.000212 | 1.001087 | 1.033575 | 1.021697 | 0.99973 | 1.028366 | 1.002226 | 1.000389 | 1.002462 |
| Benin | 1.013754 | 1.008937 | 0.999382 | 1.003931 | 1.012843 | 1.012479 | 0.999292 | 1.001456 | 1.001737 | 1.002117 | 1.000142 | 1.008119 | 1.000484 | 1.017256 |
| Bolivia | 1.001426 | 1.008153 | 0.99975 | 1.084844 | 0.999791 | 1.000039 | 1.001093 | 1.000491 | 1.011548 | 1.008098 | 1.000144 | 1.002677 | 1.032447 | 1.00017 |
| Burkina Faso | 1.02781 | 1.003298 | 0.999829 | 1.006575 | 0.999758 | 1.002377 | 0.999463 | 1.001555 | 1.001226 | 1.039861 | 1.002469 | 1.015242 | 1.000121 | 1.041207 |
| Burundi | 0.999233 | 1.011771 | 1.008325 | 1.001947 | 0.999918 | 1.011625 | 1.045483 | 1.015408 | 1.000048 | 1.007932 | 1.017795 | 1.014135 | 1.003625 | 1.004215 |
| Cambodia | 1.017054 | 1.005556 | 1.006196 | 1.001879 | 1.001301 | 1.029914 | 1.002703 | 1.001693 | 1.002363 | 1.015637 | 1.002986 | 1.008474 | 1.00239 | 1.002438 |
| Cameroon | 0.999238 | 1.000609 | 1.024166 | 1.002106 | 0.999186 | 0.999728 | 1.024872 | 1.000686 | 1.008459 | 1.00012 | 1.027708 | 0.999753 | 1.018605 | 1.00942 |
| Congo | 0.999529 | 1.014074 | 1.003554 | 1.000039 | 1.00318 | 1.037513 | 1.005413 | 0.999792 | 1.000264 | 1.000434 | 0.999182 | 1.004696 | 1.000343 | 1.005282 |
| Congo DR | 0.999315 | 1.002216 | 1.001833 | 1.02708 | 0.999389 | 1.001368 | 1.030523 | 1.003397 | 1.0111 | 1.007357 | 0.999235 | 1.000616 | 1.00106 | 0.999679 |
| Egypt | 0.99925 | 1.007696 | 0.999719 | 1.003771 | 1.000212 | 1.006455 | 0.999759 | 1.00207 | 1.050501 | 1.003978 | 1.001308 | 1.001285 | 1.013185 | 1.003052 |
| Ethiopia | 1.002867 | 0.999661 | 1.001719 | 0.999301 | 0.999213 | 0.9995 | 1.002026 | 1.00225 | 0.999263 | 1.00241 | 1.001902 | 1.030359 | 1.008275 | 1.011317 |
| Ghana | 1.004167 | 1.001557 | 1.009625 | 1.004429 | 0.999392 | 1.002522 | 1.006812 | 1.003675 | 1.016384 | 1.00586 | 1.001086 | 1.010357 | 1.013838 | 1.000691 |
| Guinea | 1.002263 | 1.003001 | 1.014434 | 1.000549 | 0.999178 | 1.003399 | 1.004496 | 1.009996 | 1.055106 | 1.003097 | 1.001345 | 1.001292 | 0.999654 | 1.005496 |
| Haiti | 0.999258 | 1.003945 | 1.003891 | 1.008707 | 0.999246 | 1.020336 | 1.00276 | 1.000223 | 1.001441 | 1.001597 | 1.003337 | 1.003511 | 1.010543 | 1.005914 |
| Honduras | 1.009746 | 1.008358 | 1.00262 | 0.999472 | 1.013251 | 1.01082 | 1.006077 | 1.007626 | 1.002498 | 1.000035 | 1.008021 | 0.999436 | 1.006123 | 1.001713 |
| India | 1.004292 | 1.000353 | 1.003934 | 1.002203 | 1.011277 | 0.99956 | 1.000853 | 1.003653 | 1.003817 | 1.00102 | 1.000055 | 0.999559 | 1.002108 | 1.003012 |
| Jordan | 1.011599 | 0.999385 | 1.000186 | 1.002026 | 1.017811 | 1.013131 | 1.004839 | 1.008404 | 0.999549 | 1.005083 | 1.000546 | 1.003197 | 1.003303 | 1.017617 |
| Lesotho | 0.999816 | 1.004054 | 1.002962 | 1.0023 | 1.000246 | 1.001424 | 1.001141 | 1.016704 | 1.000236 | 0.999597 | 1.005515 | 1.002731 | 1.009405 | 1.001622 |
| Liberia | 1.003763 | 1.042778 | 1.000787 | 1.000813 | 1.002803 | 1.004533 | 1.004838 | 1.003887 | 0.999709 | 1.000473 | 1.002017 | 1.030009 | 1.003272 | 1.003169 |
| Madagascar | 1.008661 | 1.040723 | 1.00401 | 1.026187 | 1.020902 | 0.999217 | 1.028133 | 1.001453 | 1.019269 | 1.001555 | 1.032901 | 1.011934 | 1.004278 | 1.014327 |
| Malawi | 1.000914 | 1.000109 | 1.001043 | 0.99998 | 1.00534 | 1.01429 | 1.004767 | 1.000063 | 1.003041 | 1.003685 | 1.011122 | 1.010121 | 1.006736 | 1.001149 |
| Mali | 1.018383 | 1.005626 | 1.006333 | 1.001984 | 1.016738 | 1.020112 | 1.006568 | 1.01949 | 0.999772 | 1.001292 | 1.033436 | 1.003997 | 1.010165 | 1.003363 |
| Mozambique | 1.002574 | 1.024803 | 0.9995 | 1.000414 | 0.999607 | 1.006378 | 1.006776 | 0.999545 | 1.001294 | 1.000856 | 1.001802 | 1.003037 | 1.017906 | 1.000085 |
| Nepal | 1.001251 | 1.003083 | 1.001187 | 1.001229 | 1.001871 | 1.004506 | 1.001982 | 0.99977 | 0.99989 | 1.00157 | 1.000728 | 1.001827 | 1.000374 | 0.999662 |
| Niger | 1.011451 | 1.003577 | 1.008233 | 1.007791 | 1.004819 | 1.030953 | 1.007021 | 1.035806 | 1.000516 | 1.012373 | 1.000584 | 1.001489 | 1.004148 | 1.003669 |
| Peru | 0.999237 | 1.007518 | 1.002208 | 1.00244 | 1.010346 | 1.024007 | 1.019696 | 1.00334 | 1.01427 | 1.004986 | 1.007379 | 1.003571 | 0.999303 | 1.010362 |
| Rwanda | 1.001623 | 1.007861 | 1.001498 | 1.009871 | 1.033112 | 1.004397 | 1.001789 | 0.999319 | 1.04584 | 1.00206 | 1.00551 | 1.000259 | 1.005305 | 1.008389 |
| Senegal | 1.005802 | 1.000975 | 1.020864 | 1.001935 | 1.001513 | 0.999278 | 1.009332 | 1.00382 | 1.014437 | 1.008421 | 1.003257 | 1.001165 | 1.001829 | 0.999508 |
| Sierra Leone | 1.005226 | 1.000567 | 1.019412 | 0.99934 | 1.048091 | 0.999674 | 1.024618 | 1.001412 | 1.007809 | 1.008592 | 0.999167 | 1.000545 | 1.006124 | 1.001451 |
| Tanzania | 1.020422 | 1.032544 | 1.002341 | 0.999962 | 1.000175 | 1.015406 | 1.000522 | 1.000279 | 1.000849 | 0.999878 | 1.012383 | 1.002695 | 1.002957 | 1.000169 |
| Timor-Leste | 0.999357 | 1.00042 | 1.003603 | 0.999766 | 1.013888 | 0.999347 | 1.015284 | 1.00067 | 1.011356 | 1.00753 | 1.011908 | 1.006295 | 1.000753 | 1.006419 |
| Togo | 0.999598 | 1.013342 | 0.999707 | 1.00552 | 1.002851 | 0.999396 | 1.020409 | 0.999196 | 1.007604 | 0.99928 | 1.000075 | 1.009796 | 1.002844 | 0.999379 |
| Uganda | 1.033132 | 1.008463 | 0.999915 | 1.033509 | 1.005359 | 1.011641 | 1.00396 | 1.00655 | 1.006198 | 1.003944 | 1.002095 | 1.0034 | 1.024435 | 1.023138 |
| Zimbabwe | 1.001402 | 1.004877 | 1.006105 | 1.004419 | 1.010114 | 1.001316 | 1.019499 | 1.00138 | 0.999894 | 1.004922 | 1.000015 | 1.002001 | 1.001676 | 1.004093 |

**Table S3:** Cross-validation of rates of child anemia drawn from regression models and original micro data from most recent survey

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Country** | **Survey year** | **Observed rate of anemia** | **Estimated rate of anemia** | **Difference between observed and estimated rates of anemia** |
| Albania | 2018 | 24.5% | 24.7% | -0.2% |
| Angola | 2016 | 65.3% | 64.1% | 1.2% |
| Armenia | 2016 | 15.9% | 18.3% | -2.4% |
| Benin | 2018 | 72.2% | 64.7% | 7.4% |
| Bolivia | 2008 | 62.0% | 61.6% | 0.5% |
| Burkina Faso | 2010 | 87.9% | 87.4% | 0.5% |
| Burundi | 2017 | 61.0% | 60.6% | 0.4% |
| Cambodia | 2014 | 56.6% | 55.7% | 0.8% |
| Cameroon | 2011 | 61.3% | 60.9% | 0.4% |
| Congo | 2012 | 67.1% | 67.1% | 0.1% |
| Congo DR | 2014 | 60.1% | 59.7% | 0.4% |
| Egypt | 2014 | 27.4% | 32.0% | -4.6% |
| Ethiopia | 2016 | 57.8% | 53.8% | 4.0% |
| Ghana | 2016 | 64.2% | 65.1% | -0.9% |
| Guinea | 2012 | 77.6% | 77.2% | 0.4% |
| Haiti | 2017 | 67.2% | 66.8% | 0.4% |
| Honduras | 2012 | 29.3% | 30.0% | -0.7% |
| India | 2016 | 58.7% | 58.6% | 0.0% |
| Jordan | 2018 | 32.2% | 32.7% | -0.5% |
| Lesotho | 2014 | 54.1% | 53.1% | 1.0% |
| Liberia | 2016 | 76.5% | 77.2% | -0.8% |
| Madagascar | 2016 | 45.5% | 43.6% | 1.9% |
| Malawi | 2016 | 63.2% | 60.0% | 3.2% |
| Mali | 2013 | 81.9% | 81.4% | 0.5% |
| Mozambique | 2015 | 64.3% | 64.4% | 0.0% |
| Nepal | 2016 | 52.4% | 51.0% | 1.4% |
| Niger | 2012 | 73.7% | 73.7% | 0.0% |
| Peru | 2012 | 32.7% | 33.6% | -0.9% |
| Rwanda | 2015 | 36.6% | 34.7% | 2.0% |
| Senegal | 2017 | 72.1% | 65.3% | 6.8% |
| Sierra Leone | 2013 | 80.0% | 79.4% | 0.5% |
| Tanzania | 2017 | 59.4% | 55.8% | 3.6% |
| Timor-Leste | 2016 | 41.8% | 41.8% | 0.0% |
| Togo | 2017 | 75.3% | 74.8% | 0.5% |
| Uganda | 2016 | 54.0% | 51.4% | 2.6% |
| Zimbabwe | 2015 | 38.3% | 42.0% | -3.7% |

**Table S4:** Prevalence (95% confidence interval) of anemia in children 6-59 months of age in low- and middle- income countries during the latest DHS rounds by wealth quintiles, place of residence, mother’s education and age

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country (year)** | **Wealth quintiles** | | | | | **Place of residence** | | **Mother’s education** | | | **Mother’s age** | |
| **Poorest** | **Poorer** | **Middle** | **Richer** | **Richest** | **Urban** | **Rural** | **Below Secondary** | **Secondary+** | **15-19 years** | | **20-49 years** |
| Albania  (2018) | 32.1  (27.3-37.2) | 25.1  (20.4-30.5) | 25.8  (20.4-32.1) | 19.5  (14.1-26.2) | 16  (9.8-25) | 21.9  (18.1-26.3) | 27.4  (24.4-30.6) | 28.7  (25.2-32.5) | 19.8  (16.4-23.7) | 29.1  (12.2-54.9) | | 24.5  (21.9-27.2) |
| Angola  (2016) | 65.4  (62.2-68.4) | 64.2  (61.2-67) | 68.3  (64.5-71.8) | 65.7  (60.8-70.3) | 62.2  (56.3-67.7) | 65.3  (62.8-67.7) | 65.4  (63.1-67.7) | 66.8  (64.8-68.7) | 62  (58.4-65.5) | 75.9  (70.6-80.6) | | 64.4  (62.6-66.2) |
| Armenia  (2016) | 19.4  (15-24.7) | 14.6  (10.9-19.4) | 20.1  (15.4-25.8) | 14.2  (10.1-19.7) | 11.6  (7.6-17.2) | 13.9  (11.2-17.1) | 18.2  (15.2-21.6) | 17.1  (10.3-26.9) | 15.8  (13.7-18.2) | 10.8  (1.5-49.7) | | 15.9  (13.9-18.2) |
| Azerbaijan  (2006) | 45.4  (39.8-51.1) | 41.3  (35.6-47.3) | 41.6  (35.4-48) | 35.8  (28.9-43.3) | 28.1  (21.4-36) | 36.8  (32.6-41.2) | 41.9  (38.1-45.8) | 31  (17.6-48.7) | 39.7  (36.8-42.6) | 47.3  (28.6-66.8) | | 39.2  (36.3-42.2) |
| Bangladesh  (2011) | 56.9  (52.1-61.6) | 58.9  (53.9-63.8) | 51.9  (46.4-57.3) | 44.7  (39.5-50) | 43.5  (38.2-48.9) | 46.6  (42-51.3) | 53.2  (50.5-55.8) | 53  (49.7-56.2) | 50.4  (47.1-53.8) | 65.7  (59.2-71.7) | | 49.8  (47.3-52.3) |
| Benin  (2018) | 79.6  (77-81.9) | 75.3  (72.4-77.9) | 77.5  (74.8-79.9) | 69  (66-71.8) | 58.2  (54.9-61.4) | 66.5  (64.3-68.6) | 75.6  (74-77.1) | 73.3  (71.9-74.6) | 66  (62.6-69.3) | 81.9  (75.9-86.7) | | 71.8  (70.5-73) |
| Bolivia  (2008) | 70.2  (66-74) | 66.9  (61.8-71.5) | 64.5  (59.1-69.6) | 53.9  (48-59.6) | 44.3  (37.4-51.3) | 56.2  (52.7-59.6) | 68.7  (65.5-71.8) | 63.4  (60.3-66.4) | 60  (56-63.7) | 74.5  (65.8-81.6) | | 61.2  (58.6-63.6) |
| Burkina Faso  (2010) | 89  (87-90.8) | 91.1  (89.2-92.6) | 91.8  (90-93.3) | 88.1  (86-89.9) | 75.7  (72.3-78.9) | 77.6  (74.5-80.3) | 90  (89-90.9) | 88.7  (87.8-89.6) | 72.2  (66-77.7) | 95  (90.4-97.5) | | 87.6  (86.6-88.5) |
| Burundi  (2017) | 69.9  (66.9-72.6) | 68.1  (65.1-71) | 60.4  (57.2-63.4) | 55.9  (52.6-59.1) | 47  (43.2-50.8) | 48.7  (43.7-53.6) | 62.2  (60.7-63.7) | 62.8  (61.3-64.2) | 45.7  (41.1-50.4) | 75.1  (64.1-83.6) | | 60.8  (59.3-62.2) |
| Cambodia  (2014) | 65  (61.3-68.6) | 61.5  (57.2-65.6) | 54.6  (49.8-59.3) | 54.1  (49.4-58.7) | 43.6  (39.2-48.1) | 43.4  (39.3-47.7) | 58.7  (56.5-60.8) | 58.6  (56.2-60.9) | 52.1  (48.7-55.5) | 78.7  (66.1-87.5) | | 55.9  (54-57.9) |
| Cameroon  (2011) | 67.5  (64.1-70.8) | 61  (57.5-64.5) | 64.6  (61.1-67.9) | 59.5  (55.8-63.1) | 50.5  (46.4-54.6) | 57.2  (54.6-59.6) | 64.4  (62.3-66.5) | 63.9  (61.9-65.9) | 55.4  (52.5-58.1) | 72  (65.5-77.7) | | 60.4  (58.7-62.1) |
| Congo  (2012) | 65.5  (62.9-68) | 73.2  (69.1-76.9) | 70  (63.7-75.6) | 67.6  (61.2-73.3) | 56.1  (49-62.9) | 68.7  (65.1-72.1) | 64.8  (62.6-66.8) | 69.3  (66.2-72.2) | 65.7  (62.5-68.8) | 77.9  (70.4-83.9) | | 66.2  (63.8-68.6) |
| Congo DR  (2014) | 66  (62.9-68.8) | 59.4  (55.9-62.8) | 61.9  (58.4-65.2) | 56.6  (52.5-60.6) | 54.2  (50.4-58.1) | 59.4  (56.8-62) | 60.3  (58.4-62.3) | 60.2  (58.2-62.1) | 59.9  (57.2-62.5) | 66.4  (59.3-72.8) | | 59.7  (58.1-61.4) |
| Cote d'Ivoire  (2012) | 81.3  (77.3-84.8) | 81.4  (77.1-85.1) | 76.5  (71.8-80.5) | 69  (63.7-73.8) | 63.4  (57.2-69.2) | 68.1  (64.4-71.6) | 80  (77.5-82.3) | 76.7  (74.5-78.7) | 65.8  (58.1-72.7) | 89  (83.2-93) | | 74.7  (72.5-76.8) |
| Egypt  (2014) | 34.6  (31-38.5) | 32.9  (29.4-36.6) | 24.1  (21.1-27.3) | 25.4  (22.3-28.7) | 21.2  (18.1-24.7) | 23.2  (20.8-25.7) | 29.5  (27.6-31.4) | 27.9  (25.1-31) | 27.2  (25.5-29) | 43.3  (31.4-56) | | 27.1  (25.6-28.7) |
| Ethiopia  (2016) | 68.3  (65.2-71.1) | 58.2  (54.7-61.6) | 54.1  (50.4-57.7) | 55  (51.1-58.7) | 48.5  (44.2-52.7) | 49.7  (44.8-54.5) | 58.7  (57-60.4) | 58.4  (56.7-60) | 48.6  (42.5-54.7) | 71.9  (62-80.1) | | 57.4  (55.7-59) |
| Gabon  (2012) | 65.9  (62.4-69.1) | 62.6  (56.7-68.2) | 61.2  (54.3-67.7) | 61.6  (53.7-68.8) | 53  (44.2-61.6) | 60.5  (57.1-63.8) | 65.5  (62.1-68.6) | 65.1  (61-69.1) | 59.2  (55.3-63) | 77.8  (69.1-84.6) | | 59.9  (56.8-62.9) |
| Gambia  (2013) | 77.3  (73.6-80.7) | 77.1  (73.4-80.5) | 76.2  (71.4-80.3) | 64.8  (58.8-70.3) | 59.7  (52.5-66.4) | 64.5  (60.3-68.4) | 77.3  (75.1-79.4) | 73.5  (71.1-75.7) | 65.8  (60.2-71) | 79  (68.5-86.7) | | 71.3  (68.9-73.5) |
| Ghana  (2016) | 77.9  (74.4-81.1) | 71.5  (66.4-76.1) | 62.2  (56.2-67.8) | 57.3  (51.2-63.1) | 49.2  (42.4-55.9) | 58.6  (54.7-62.4) | 68.7  (65.4-71.8) | 72.8  (69.6-75.8) | 56.5  (52.8-60.1) | 76  (62.9-85.5) | | 63.8  (61.2-66.3) |
| Guatemala  (2015) | 38.1  (36-40.1) | 35.3  (33.1-37.5) | 32.8  (30.5-35.1) | 28.3  (25.9-30.8) | 24.2  (21.5-27.1) | 27.6  (25.9-29.4) | 35.6  (34.3-36.9) | 34.6  (33.4-35.9) | 28.1  (26.2-30.1) | 49  (45-53) | | 31.4  (30.4-32.5) |
| Guinea  (2012) | 83.6  (80.4-86.3) | 81.5  (77.6-84.8) | 77.6  (73.4-81.3) | 72.2  (68.1-75.9) | 68.4  (62.4-73.9) | 71  (66.9-74.7) | 79.7  (77.7-81.6) | 78.9  (77-80.6) | 65  (58-71.5) | 85.5  (79.9-89.7) | | 76.9  (74.9-78.7) |
| Guyana  (2009) | 40.3  (34.5-46.3) | 42.3  (35.2-49.8) | 43.3  (35.9-51) | 35.1  (27.3-43.8) | 31.8  (23.9-40.9) | 40.2  (33.3-47.5) | 39.1  (35.4-42.8) | 42.6  (35.9-49.4) | 38.1  (34.4-41.9) | 50.3  (39.2-61.3) | | 38  (34.6-41.5) |
| Haiti  (2017) | 66.8  (64-69.5) | 68.3  (65-71.4) | 72.6  (69.2-75.8) | 66.5  (62.4-70.5) | 59.1  (54.4-63.6) | 67.8  (64.9-70.6) | 66.8  (64.9-68.6) | 68.8  (66.8-70.8) | 64.7  (62.1-67.2) | 82.7  (75.3-88.3) | | 66.7  (65.1-68.2) |
| Honduras  (2012) | 31.7  (29.8-33.6) | 29.8  (27.5-32.1) | 32.3  (29.5-35.3) | 28  (24.9-31.2) | 21.5  (18.4-24.9) | 28.5  (26.5-30.5) | 30  (28.6-31.4) | 31.2  (29.8-32.6) | 25.6  (23.6-27.8) | 43.4  (39.4-47.5) | | 27.9  (26.7-29.1) |
| India  (2016) | 64.1  (63.6-64.6) | 59.9  (59.3-60.5) | 59.1  (58.4-59.8) | 54.5  (53.6-55.3) | 51.9  (50.9-52.8) | 56.1  (55.4-56.9) | 59.6  (59.3-60) | 63.6  (63.2-64.1) | 54.7  (54.2-55.1) | 65  (62.9-67.1) | | 58.5  (58.2-58.8) |
| Jordan  (2018) | 37.8  (35.2-40.4) | 35.4  (32.4-38.5) | 33.4  (30.2-36.7) | 25.2  (21.6-29.2) | 18.6  (14.1-24.1) | 32.4  (30.7-34) | 31.1  (28.3-34.1) | 35.9  (31.2-40.9) | 31.9  (30.3-33.5) | 43.1  (32.4-54.5) | | 32  (30.5-33.5) |
| Kyrgyz Republic  (2012) | 44.3  (41.5-47.2) | 42.1  (39.3-44.9) | 41  (38.2-43.8) | 42.9  (39.9-45.9) | 45.1  (41.2-49) | 45.5  (42.8-48.3) | 41.9  (40.4-43.5) | 44  (24.9-65) | 42.9  (41.6-44.3) | 49.3  (36-62.7) | | 42.9  (41.5-44.2) |
| Lesotho  (2014) | 58.3  (52.1-64.3) | 57.5  (50.6-64.1) | 53.1  (45.7-60.4) | 54  (45.1-62.6) | 45.5  (36.3-55.1) | 50.2  (42.4-58) | 55.5  (51.8-59.2) | 51.2  (46.6-55.9) | 56.6  (51.6-61.5) | 64.3  (50-76.4) | | 53.5  (49.9-57) |
| Liberia  (2016) | 84.3  (79.4-88.1) | 79.7  (73.9-84.5) | 82  (76.1-86.6) | 72.3  (65-78.5) | 62.3  (53.9-70) | 72.2  (67.9-76.1) | 81.8  (78.1-84.9) | 79  (75.6-82.1) | 72.3  (67.1-76.9) | 84.3  (74.9-90.6) | | 75.6  (72.6-78.4) |
| Madagascar  (2016) | 47.3  (44.1-50.5) | 45.3  (42.1-48.5) | 42.6  (39-46.2) | 43.9  (39.9-47.9) | 48.3  (43.6-53.1) | 53.6  (48.8-58.4) | 44.8  (43.1-46.5) | 45  (43.1-46.8) | 47.1  (43.6-50.5) | 57.1  (52.1-61.9) | | 44.1  (42.4-45.9) |
| Malawi  (2016) | 69.2  (65.7-72.4) | 66.3  (62.7-69.7) | 60  (56.2-63.6) | 61.6  (57.4-65.7) | 55.3  (50.4-60.1) | 57  (51.3-62.6) | 64.2  (62.3-65.9) | 64.5  (62.6-66.4) | 58.4  (54.3-62.4) | 76  (69.4-81.6) | | 62.4  (60.6-64.2) |
| Maldives  (2017) | 45.3  (41-49.7) | 47.2  (42.7-51.8) | 44.4  (39.5-49.3) | 58.8  (48.9-68.1) | 76  (61.4-86.3) | 67.3  (58.4-75.1) | 45.1  (42.7-47.5) | 43.1  (37.4-49) | 53  (49.5-56.3) | 59.4  (16.4-91.6) | | 51  (48-54) |
| Mali  (2013) | 88.2  (85.7-90.3) | 87.1  (84.5-89.4) | 85.8  (83-88.2) | 80.9  (77.5-84) | 63  (59.2-66.7) | 67.4  (64.1-70.6) | 85.1  (83.7-86.5) | 83.2  (81.8-84.5) | 64.8  (58.6-70.5) | 86.2  (80.6-90.4) | | 81.6  (80.2-82.9) |
| Moldova  (2005) | 39.2  (32.6-46.2) | 33.7  (27.4-40.7) | 28.9  (23.5-34.9) | 30.7  (25-37.1) | 20.7  (16.2-26.2) | 24.8  (21.6-28.4) | 33.9  (30.2-37.8) | 39.4  (19.9-62.9) | 30.6  (27.9-33.4) | 47.1  (32.9-61.9) | | 30  (27.3-32.9) |
| Mozambique  (2015) | 73.6  (70-77) | 66.7  (62.6-70.5) | 62.2  (58.1-66) | 61.8  (57.9-65.4) | 50.7  (46.6-54.8) | 57.3  (54-60.5) | 66.6  (64.5-68.6) | 65.7  (63.8-67.6) | 56.2  (51.9-60.3) | 72.1  (66.5-77) | | 63.5  (61.6-65.3) |
| Myanmar  (2016) | 59.5  (56-63) | 59.7  (55.5-63.8) | 61.4  (56.6-66) | 53.9  (48.8-58.9) | 61.4  (55.4-67.2) | 60.4  (55.8-64.8) | 58.9  (56.6-61.1) | 59.1  (56.6-61.5) | 59.5  (56-62.8) | 72  (55.7-84.1) | | 59  (56.9-61) |
| Namibia  (2013) | 50.4  (45.1-55.8) | 55  (48.8-61) | 51.9  (45.7-58.1) | 47.7  (41.3-54.3) | 38.3  (30.1-47.2) | 48  (43.3-52.8) | 50.8  (47.2-54.3) | 50.8  (45.9-55.7) | 49.1  (45.5-52.6) | 65  (53.4-75) | | 48.7  (45.8-51.7) |
| Nepal  (2016) | 48.4  (43.7-53.2) | 49.7  (44.6-54.8) | 58.8  (53.7-63.7) | 59.2  (53.6-64.5) | 40.8  (33.6-48.3) | 48.9  (45.5-52.4) | 56.2  (52.8-59.6) | 55.7  (52.4-58.9) | 48.4  (44.7-52.1) | 68.4  (59.3-76.2) | | 51.2  (48.7-53.7) |
| Niger  (2012) | 76.7  (73.1-79.9) | 70.4  (66.6-74) | 76.4  (73.1-79.4) | 74.9  (71.5-78.1) | 69.4  (66.1-72.5) | 69.8  (66.4-73) | 74.3  (72.6-76) | 74  (72.4-75.5) | 68  (60.7-74.5) | 80.8  (72.7-86.9) | | 73.4  (71.8-74.9) |
| Nigeria  (2015) | 81.4  (78.6-83.9) | 76.5  (73.7-79) | 72.4  (69.4-75.1) | 60.6  (57.3-63.8) | 48.9  (45.4-52.4) | 55  (52.4-57.5) | 75.5  (73.9-77) | 75.4  (73.7-77) | 56.9  (54.5-59.3) | 82  (76-86.8) | | 67.8  (66.4-69.2) |
| Peru  (2012) | 40.4  (38.2-42.7) | 38.6  (36.1-41.1) | 32.4  (29.4-35.5) | 24.6  (21.4-28.1) | 19.4  (15.8-23.6) | 28.6  (26.9-30.3) | 40.4  (38.5-42.3) | 38.5  (36.4-40.6) | 30  (28.4-31.7) | 51  (45-57) | | 31.6  (30.3-33) |
| Rwanda  (2015) | 41.3  (37.8-44.9) | 39.4  (35.7-43.2) | 37.1  (33.2-41.1) | 32  (28-36.2) | 29.9  (26-34.1) | 30.1  (26.3-34.1) | 37.9  (36-39.8) | 36.7  (34.8-38.5) | 36.4  (31.6-41.5) | 58.6  (44.3-71.7) | | 36.3  (34.5-38) |
| Sao Tome and Principe  (2009) | 67.5  (61.6-72.9) | 65.3  (59-71.1) | 64.1  (57.4-70.3) | 58.8  (51.5-65.8) | 61.5  (52.7-69.6) | 68.5  (63.8-72.8) | 59.2  (55.2-63.1) | 64.2  (60.8-67.4) | 61.8  (54.8-68.2) | 71.8  (59.6-81.4) | | 63.2  (60-66.2) |
| Senegal  (2017) | 79.4  (77.7-80.9) | 77.3  (75.3-79.1) | 74.3  (72-76.5) | 64  (60.5-67.3) | 59  (54.9-62.9) | 62.9  (60.6-65.2) | 77.3  (76.1-78.4) | 73.4  (72.2-74.6) | 64.7  (61.1-68.1) | 83.6  (78.5-87.7) | | 71.6  (70.4-72.8) |
| Sierra Leone  (2013) | 80.9  (77.8-83.6) | 82.1  (79-84.8) | 83.4  (80.3-86.2) | 79.5  (75.8-82.7) | 70.2  (64.9-75) | 73  (69.3-76.3) | 82.2  (80.6-83.7) | 80.9  (79.3-82.4) | 75.1  (70.8-79) | 82.8  (75.6-88.1) | | 79.8  (78.2-81.3) |
| Swaziland  (2007) | 45.6  (40.6-50.6) | 41.1  (36.3-46) | 45.7  (40.5-51.1) | 48.2  (42.6-53.9) | 41.6  (35.4-48.2) | 52.6  (46.6-58.5) | 42.8  (40.1-45.4) | 43.8  (40.4-47.3) | 45  (41.7-48.4) | 63.6  (55.4-71.1) | | 42.6  (40.1-45.2) |
| Tajikistan  (2017) | 46.1  (43.5-48.8) | 44  (41.6-46.5) | 46  (43.6-48.4) | 39.9  (37.6-42.2) | 30.9  (28.9-33) | 33.3  (31.6-35) | 44  (42.7-45.3) | 40.3  (36.8-43.9) | 41.9  (40.8-43.1) | 53.7  (38.3-68.4) | | 41.7  (40.7-42.8) |
| Tanzania  (2017) | 63.2  (60.3-66) | 66.2  (63.1-69.1) | 57.3  (53.6-60.9) | 57.4  (53.5-61.2) | 50.2  (45.5-54.8) | 53  (49.3-56.7) | 61.7  (60-63.4) | 59.7  (58-61.4) | 57.5  (53-61.9) | 79.7  (74.4-84.2) | | 58.3  (56.6-59.9) |
| Timor-Leste  (2016) | 39.8  (34.4-45.4) | 41.8  (36.3-47.6) | 40.1  (34.2-46.2) | 44.9  (38.9-51.1) | 42.5  (35.1-50.1) | 42.6  (36.5-49) | 41.5  (38.5-44.5) | 42.6  (38.7-46.6) | 41.1  (37.3-45) | 53.7  (35.7-70.8) | | 41.6  (38.8-44.4) |
| Togo  (2017) | 80.8  (77.7-83.6) | 79.7  (76.2-82.8) | 76.7  (72.7-80.3) | 71.1  (66-75.7) | 65.2  (59.5-70.6) | 70.3  (66.5-73.9) | 77.9  (75.8-79.8) | 78  (75.9-79.9) | 67.9  (63.7-71.8) | 77  (66.4-84.9) | | 75.2  (73.3-77) |
| Uganda  (2016) | 67  (63.7-70.1) | 56.4  (52.6-60.1) | 48.8  (44.8-52.7) | 48.9  (44.6-53.1) | 46.4  (41.6-51.3) | 48.8  (44.3-53.3) | 55.3  (53.4-57.3) | 55.6  (53.6-57.6) | 49.6  (45.7-53.4) | 77.5  (70.4-83.4) | | 52.8  (51-54.7) |
| Yemen  (2013) | 91  (88.5-93) | 90.7  (88-92.9) | 86.7  (83.4-89.4) | 84.3  (80.4-87.5) | 77.5  (72.5-81.9) | 81.7  (78.1-84.9) | 88.4  (86.9-89.8) | 87.3  (85.8-88.7) | 81.9  (77-86) | 90.4  (80.7-95.5) | | 86.5  (84.9-87.8) |
| Zimbabwe  (2015) | 42  (38.6-45.5) | 34  (30.6-37.7) | 38.8  (34.8-42.8) | 39.1  (35.5-42.9) | 36.5  (32.3-41) | 38.6  (35.5-41.9) | 38.2  (36.2-40.2) | 39.1  (36.2-42.1) | 38  (35.9-40.1) | 54.1  (46.9-61.1) | | 37.5  (35.7-39.2) |

**Table S5:** Trends and projections of anemia in children 6-59 months of age in low- and middle-income countries by wealth quintiles

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Poorest** | | | **Richest** | | | **% AARC,2000-2018** | | | **Probability of target attainment in 2030** | |
| **2000** | **2018** | **2030** | **2000** | **2018** | **2030** | **Poorest** | **Richest** | **Poorest** | | **Richest** |
| Albania | 13.4 (3.2-32.6) | 32.5 (21-47.1) | 52 (20.4-84.8) | 8 (1.7-22) | 16.1 (9.3-25.1) | 28 (7-63.2) | 4.9 | 3.9 | 0% | | 0% |
| Angola | 43.8 (20.1-69.8) | 65 (47.1-80.8) | 74.6 (35.6-95.7) | 43.8 (18.9-71.8) | 60.5 (43.1-76.6) | 68.6 (28.7-94.3) | 2.2 | 1.8 | 0% | | 0% |
| Armenia | 38.5 (28.8-48.1) | 18.5 (11.4-28.2) | 10.9 (4-24.7) | 25.5 (13.4-39.6) | 14.3 (5.6-29.4) | 11.1 (1.6-36.7) | -4.1 | -3.2 | 0% | | 0% |
| Benin | 85.6 (76.1-92.2) | 72.7 (59.4-83.3) | 60.2 (30.9-84) | 64.9 (51.5-76) | 53.9 (41.1-65.9) | 46.4 (24-70.3) | -0.9 | -1.0 | 0% | | 0% |
| Bolivia | 48 (25-71.7) | 85.2 (46.5-98.6) | 91.1 (32.2-100) | 38.9 (17.1-65.5) | 52 (10.5-91.5) | 57.8 (2.5-99.2) | 3.2 | 1.6 | 0% | | 1% |
| Burkina Faso | 93.6 (86.4-97.3) | 80.6 (51.1-95.3) | 64.2 (10.2-97.4) | 81.3 (64.3-91.6) | 67.9 (34.1-90.3) | 56.7 (7.9-96.4) | -0.8 | -1.0 | 0% | | 0% |
| Burundi | 24.1 (4.4-60) | 72 (56.6-83.7) | 89.5 (59.5-98.8) | 30.1 (7.9-69.2) | 48.2 (32.1-64.5) | 60.7 (18.1-91.2) | 6.1 | 2.6 | 0% | | 0% |
| Cambodia | 68.3 (57.4-77.9) | 61.1 (44.6-75) | 55.8 (24.9-81.9) | 50.1 (38.9-59.6) | 41.5 (26.9-55.2) | 36.7 (13.7-61.7) | -0.6 | -1.0 | 0% | | 0% |
| Cameroon | 77.7 (57.6-90.7) | 58 (27.5-83.1) | 44.5 (4.3-91) | 63.5 (39.7-82.5) | 42.8 (17.6-76.3) | 32.7 (3.1-88) | -1.6 | -2.2 | 0% | | 0% |
| Republic of the Congo | 69.5 (46.7-87.8) | 62 (34.2-85.4) | 55.8 (9.8-94.8) | 54.2 (28.7-76.1) | 56.9 (28.6-81.2) | 57.4 (9.4-94.6) | -0.6 | 0.3 | 0% | | 0% |
| Democratic Republic of the Congo | 74.4 (42.3-92.6) | 62.5 (39.3-82.7) | 52.5 (8.6-92.9) | 76.9 (48.9-93.4) | 46.5 (24-70.4) | 28.9 (2.8-78.5) | -1.0 | -2.8 | 0% | | 0% |
| Egypt | 45.2 (28.9-60.6) | 37.5 (17.9-60.7) | 34.2 (6.5-76.2) | 25.8 (14.3-40) | 25.6 (10.4-47.4) | 27.3 (4.6-68.6) | -1.0 | 0.0 | 0% | | 0% |
| Ethiopia | 52.1 (26.6-76) | 63.7 (43.6-79.1) | 68.5 (27-93.8) | 45.4 (24.2-67.8) | 43.7 (26.8-62.1) | 43.4 (12.8-81.2) | 1.1 | -0.2 | 0% | | 0% |
| Ghana | 86.1 (76.3-92.5) | 78.4 (67.7-86.6) | 70.7 (42.3-89.6) | 66.2 (53.9-76) | 46.5 (37.1-58.3) | 34 (16.9-57.1) | -0.5 | -2.0 | 0% | | 0% |
| Guinea | 76.8 (55-90.8) | 84.5 (66.4-94.8) | 85.3 (44.5-99) | 74.1 (48.9-90.1) | 63.2 (34.3-86.3) | 54.5 (7.9-95) | 0.5 | -0.9 | 0% | | 0% |
| Haiti | 58.3 (48.4-66.7) | 66.3 (57.2-74.4) | 70.7 (52.9-85) | 56.9 (45.3-67.7) | 58.3 (46.9-68.6) | 58.9 (37.5-77.8) | 0.7 | 0.1 | 0% | | 0% |
| Honduras | 50 (20.8-78.2) | 26 (7.6-55.1) | 19.3 (0.9-74.5) | 32.5 (11.4-61.6) | 19.2 (5.9-42.5) | 16.9 (0.8-66.2) | -3.6 | -2.9 | 2% | | 1% |
| India | 81.5 (63.9-92.1) | 61.1 (42-76.8) | 44.2 (13.8-82.5) | 59.2 (35.4-81.1) | 50.6 (33.2-67.6) | 45 (12.7-80.3) | -1.6 | -0.9 | 0% | | 0% |
| Jordan | 43.9 (34.9-52.5) | 39 (31.5-46.5) | 36.1 (20.9-52.5) | 41 (25-58.1) | 18.7 (10.4-30.4) | 11.2 (2.6-30.7) | -0.7 | -4.4 | 0% | | 0% |
| Lesotho | 38.4 (21.7-54.9) | 64.4 (47.7-79.6) | 77 (47-95.4) | 56.2 (37-72.2) | 43.6 (27.8-61.4) | 36.5 (11.1-71.4) | 2.9 | -1.4 | 0% | | 0% |
| Liberia | 25.4 (8.4-54.3) | 88.2 (79.4-93.6) | 97.8 (90.2-99.7) | 73.5 (39.2-93.6) | 61.9 (40.8-79.4) | 51.6 (9.6-90.9) | 6.9 | -1.0 | 0% | | 0% |
| Madagascar | 82.7 (69.4-90.8) | 41.2 (27.2-55.7) | 17.6 (4.7-42.1) | 60.1 (40.9-77.9) | 40.5 (25.7-54.8) | 30.1 (7.7-61.8) | -3.9 | -2.2 | 0% | | 0% |
| Malawi | 80.1 (64.7-90.4) | 68.1 (55.3-78.4) | 57.4 (26.9-83.6) | 62.4 (46.9-76) | 49.6 (38.1-60) | 41.3 (18.3-63.5) | -0.9 | -1.3 | 0% | | 0% |
| Mali | 88.1 (81-93.4) | 88.9 (77-95.7) | 87.8 (58.3-98.3) | 70.4 (58.8-79.1) | 59.1 (42.3-74.4) | 51.1 (20.8-80.5) | 0.1 | -1.0 | 0% | | 0% |
| Mozambique | 83 (34.3-99.2) | 68.7 (41.1-86.2) | 51.4 (2.7-96.8) | 56.4 (8.1-94.9) | 49.1 (24.8-73.7) | 45 (2.4-96.1) | -1.0 | -0.8 | 1% | | 0% |
| Nepal | 46.3 (25.8-67.4) | 47.5 (31.7-62.7) | 48.4 (16-80.7) | 39.8 (21.9-59.8) | 40.3 (27.1-53.6) | 41.3 (13-71.7) | 0.1 | 0.1 | 0% | | 0% |
| Niger | 92.8 (79.1-98.2) | 59.3 (29.7-84.6) | 29.6 (1.6-83.7) | 86 (63.6-96.1) | 55.6 (25.8-82.8) | 33.5 (2.3-89.1) | -2.5 | -2.4 | 1% | | 0% |
| Peru | 56 (45.4-66.1) | 36.2 (24.8-47.4) | 25.7 (9.1-47.6) | 39.5 (27.8-52.6) | 13 (7.2-20.7) | 6 (1.5-16.2) | -2.4 | -6.2 | 0% | | 0% |
| Rwanda | 56.9 (39-74.9) | 36.4 (20.6-52.8) | 26.5 (5.4-58.4) | 50 (34.8-64.4) | 27.2 (17.7-39) | 17.2 (5.8-41.8) | -2.5 | -3.4 | 0% | | 0% |
| Senegal | 89.8 (81.3-95.1) | 73.6 (66.1-79.6) | 55.6 (31.9-75.7) | 84.9 (76.4-90.4) | 50.8 (43.8-58.1) | 25.4 (13.8-41) | -1.1 | -2.8 | 0% | | 0% |
| Sierra Leone | 74.5 (36.9-95.2) | 80.4 (55.2-94.1) | 77.9 (17.4-99.3) | 62.5 (21.4-92.1) | 70.5 (38.1-90.6) | 69.9 (9.4-99) | 0.4 | 0.7 | 0% | | 0% |
| Tanzania | 78.3 (64.8-88.2) | 58.6 (47.7-69.1) | 43.2 (19.6-69.6) | 72.2 (61.2-82.6) | 50.2 (40.5-59) | 35.3 (17.7-56) | -1.6 | -2.0 | 0% | | 0% |
| Timor-Leste | 44.7 (11-82.1) | 39.3 (21.4-57.4) | 38.3 (4.2-82.1) | 24.2 (4.5-61.8) | 45.7 (27-64.7) | 61.4 (13.4-94.8) | -0.7 | 3.5 | 0% | | 0% |
| Togo | 29.3 (0.4-93) | 82.8 (70.5-91.7) | 92.2 (50-99.9) | 45.5 (1.2-98) | 65.9 (45.2-81.2) | 70.7 (7-99.5) | 5.8 | 2.1 | 0% | | 0% |
| Uganda | 79.1 (68.8-87) | 59.4 (47-70.6) | 44 (21.3-67.2) | 63.2 (50.6-74.4) | 41.4 (30-53.4) | 28.8 (12.3-52) | -1.6 | -2.4 | 0% | | 0% |
| Zimbabwe | 77.8 (55.4-92.2) | 37.6 (20.9-57.6) | 18 (2-55) | 71.5 (45.4-89.8) | 33.2 (18.2-50.4) | 16.9 (2.2-49) | -4.0 | -4.3 | 0% | | 0% |

**Note:** AARC = Average annual rate of change, calculated as ln(rate in 2018/rate in 2000)/18

**Table S6:** Trends and projections of anemia in children 6-59 months of age in low- and middle-income countries by place of residence

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Rural** | | | **Urban** | | | **% AARC,2000-2018** | | **Probability of target attainment in 2030** | |
| **2000** | **2018** | **2030** | **2000** | **2018** | **2030** | **Rural** | **Urban** | **Poorest** | **Richest** |
| Albania | 17.5 (5.1-38.6) | 27.6 (17.5-39.5) | 38.5 (11.3-71.7) | 8 (1.9-20.8) | 22.4 (13.7-32.2) | 41.8 (14-76.2) | 2.5 | 5.7 | 0% | 0% |
| Angola | 38 (16.4-61.3) | 67 (51.3-79.5) | 80 (46.4-95.9) | 48.1 (24.7-72) | 64.8 (47-78.5) | 72.4 (33.7-93.7) | 3.2 | 1.7 | 0% | 0% |
| Armenia | 37.4 (25.4-51) | 18.4 (9.6-29.2) | 11.4 (2.8-26.7) | 23.6 (13.5-36.1) | 17 (7.2-32.1) | 15.1 (2.7-45.2) | -3.9 | -1.8 | 0% | 0% |
| Benin | 84.8 (74.8-91.3) | 67.8 (52.4-80.1) | 52.3 (23.1-80.8) | 73.4 (59.5-83.8) | 60.7 (47.4-73.3) | 51.1 (26.2-75.5) | -1.2 | -1.1 | 0% | 0% |
| Bolivia | 48.9 (26.4-71.8) | 82.6 (42.2-97.9) | 88.5 (23.8-99.9) | 43.7 (23.3-68.3) | 68.3 (21-95.2) | 75.4 (5.6-99.7) | 2.9 | 2.5 | 0% | 0% |
| Burkina Faso | 94.5 (87.6-97.8) | 81.6 (55.9-95.4) | 64.1 (11.4-97.4) | 74.4 (53.7-88.4) | 77.3 (45.8-94.6) | 76 (19.4-99) | -0.8 | 0.2 | 0% | 0% |
| Burundi | 25.4 (5.1-62.4) | 63.9 (46.2-78.1) | 82.2 (40.7-97.8) | 31.6 (7.6-68.6) | 49.6 (33.3-65.7) | 61.6 (19.3-93.1) | 5.1 | 2.5 | 0% | 0% |
| Cambodia | 64.4 (55.7-72.9) | 55.4 (41.6-66.8) | 49.3 (24.2-70.8) | 59.9 (48.2-70.8) | 39.3 (24-55.4) | 28.2 (8.2-55.1) | -0.8 | -2.3 | 0% | 0% |
| Cameroon | 77.8 (60.8-90.3) | 53 (24.1-79.8) | 37.7 (4.4-85.9) | 67.1 (43.5-84.1) | 49.4 (21.6-80.2) | 39.3 (4.6-91.3) | -2.1 | -1.7 | 0% | 0% |
| Republic of the Congo | 67.5 (41.3-88.3) | 61.6 (31.4-84.8) | 56.6 (8-95) | 58.2 (32.2-80.2) | 72.1 (44-90.2) | 76 (24.3-98.4) | -0.5 | 1.2 | 0% | 0% |
| Democratic Republic of the Congo | 80.8 (55-94.6) | 52.1 (28.2-75.9) | 32.8 (3.6-84.2) | 77.2 (51.6-92.8) | 52.9 (29.7-72.7) | 36.5 (4.3-82.7) | -2.4 | -2.1 | 0% | 0% |
| Egypt | 41.6 (28.3-56) | 31.9 (15-55.6) | 28.1 (5.6-68.5) | 32.5 (19.4-48.4) | 27 (12.1-47.4) | 25.6 (4.8-63) | -1.5 | -1.0 | 0% | 0% |
| Ethiopia | 49.3 (26.7-71.2) | 55.3 (38.5-70.6) | 58.4 (21.8-87.8) | 44.4 (21.9-69.3) | 44.9 (26.4-62.5) | 45.8 (12.3-82.1) | 0.6 | 0.1 | 0% | 0% |
| Ghana | 85.4 (74.7-93) | 68.5 (54.5-79.5) | 52.5 (22.5-79.6) | 71.6 (59.6-81.1) | 56.9 (47.3-66.5) | 46.2 (26.1-69) | -1.2 | -1.3 | 0% | 0% |
| Guinea | 76.9 (55-90.7) | 78.7 (54.4-92.6) | 76.4 (25.1-98) | 75.1 (52-90) | 66.5 (38.2-86.9) | 58.8 (11.2-94.8) | 0.1 | -0.7 | 0% | 0% |
| Haiti | 61.6 (50.6-72) | 65.9 (55.3-75.1) | 68.2 (46.8-84.6) | 62.7 (53.1-71.2) | 68.9 (59.9-77.8) | 72.2 (54.7-86.5) | 0.4 | 0.5 | 0% | 0% |
| Honduras | 52.5 (23.3-80.8) | 22.5 (5.8-49.3) | 14.6 (0.4-66.6) | 38.4 (12.6-67.8) | 26.4 (8.5-54.3) | 24.1 (1.2-82.2) | -4.7 | -2.1 | 3% | 1% |
| India | 76.7 (55.9-91.2) | 56.4 (38.3-73.7) | 41.4 (10.9-78.7) | 66.2 (42.8-86.2) | 54.2 (36.9-71.3) | 46 (12.2-81.5) | -1.7 | -1.1 | 0% | 0% |
| Jordan | 42.5 (33.6-52.4) | 31.5 (24.4-39.3) | 25.5 (13.4-40.7) | 35.6 (24.8-47.1) | 32.6 (22.9-42) | 31.3 (14.3-50.3) | -1.7 | -0.5 | 0% | 0% |
| Lesotho | 45.5 (28-63.9) | 56.6 (39.7-73.6) | 62.6 (27.1-89.6) | 57.4 (40.2-71.9) | 48.4 (30.9-65) | 42.9 (13.5-75.6) | 1.2 | -0.9 | 0% | 0% |
| Liberia | 35.6 (10.9-66.3) | 85.6 (75.4-93.1) | 95.6 (82.2-99.6) | 64.6 (30.5-90.8) | 73.8 (55.9-86.4) | 74.8 (24.2-97.1) | 4.9 | 0.7 | 0% | 0% |
| Madagascar | 75.4 (61.6-86.7) | 38.6 (27.6-51.4) | 19 (6-40.9) | 63.7 (43.1-79) | 49.8 (36.5-63.7) | 40.8 (15.1-72.5) | -3.7 | -1.4 | 0% | 0% |
| Malawi | 78.1 (63.8-88.8) | 58.3 (45.1-69.2) | 42.9 (17-70.8) | 67.5 (49.7-80.6) | 50.5 (39.8-62.8) | 39.2 (17.5-67.8) | -1.6 | -1.6 | 0% | 0% |
| Mali | 84.6 (76.8-89.6) | 85.2 (74.9-92.7) | 84.6 (62.5-96.4) | 75.8 (64.8-84.3) | 62.8 (42.2-77.3) | 52.9 (18.8-82.4) | 0.0 | -1.0 | 0% | 0% |
| Mozambique | 78.4 (22.4-98.8) | 61.6 (34.8-84.4) | 45.1 (2.1-96.6) | 65.1 (14.8-97.2) | 54.4 (27.5-79.1) | 46.4 (2.1-96.1) | -1.3 | -1.0 | 1% | 1% |
| Nepal | 44.5 (23.4-67.4) | 55.3 (37.9-70.5) | 61.3 (24.4-89.1) | 36.5 (19.4-57.7) | 49.6 (34.2-64.8) | 58 (23.2-85.7) | 1.2 | 1.7 | 0% | 0% |
| Niger | 92.1 (79.3-98.2) | 56.2 (26.5-83.7) | 27.1 (1.3-83.1) | 83.5 (59.4-95.6) | 58.4 (25.7-84.1) | 39.9 (2.1-91.7) | -2.7 | -2.0 | 0% | 1% |
| Peru | 55.3 (47.4-63.1) | 35.5 (26.9-44.8) | 24.8 (12.4-41.9) | 48.4 (39.7-57.4) | 21.5 (14.5-29.8) | 11.3 (4.5-22.7) | -2.5 | -4.5 | 0% | 0% |
| Rwanda | 55.6 (37.6-73.2) | 32.1 (18.5-48.8) | 21.7 (4.6-52.7) | 53.8 (38.4-68.8) | 25.7 (15.6-38.3) | 14.5 (3.3-36.2) | -3.0 | -4.1 | 0% | 0% |
| Senegal | 88 (79.4-94.2) | 68.3 (60.4-75.6) | 48.3 (26-71.2) | 85.6 (77.4-92.5) | 54.9 (46.3-62.6) | 30 (14.3-48.5) | -1.4 | -2.5 | 0% | 0% |
| Sierra Leone | 68.8 (27.6-92.8) | 83.8 (62-96.1) | 85 (32-99.7) | 71.3 (32.9-95) | 70.7 (39.3-91.4) | 65.7 (7.4-98.6) | 1.1 | 0.0 | 0% | 0% |
| Tanzania | 73.8 (59.5-84.6) | 56.3 (45.6-66.2) | 43.5 (20.4-66.7) | 75.6 (64.8-84.4) | 51.3 (41.8-59.5) | 34.3 (17-52.7) | -1.5 | -2.2 | 0% | 0% |
| Timor-Leste | 39.1 (8.6-78.6) | 42.3 (24.3-62.6) | 45.9 (7.4-91) | 22.4 (3.6-59.8) | 46.1 (26.3-66.6) | 63.3 (14.5-95.1) | 0.4 | 4.0 | 0% | 0% |
| Togo | 50.4 (0.9-98.5) | 78.4 (60.5-89.6) | 81.5 (13.5-99.9) | 42.5 (0.8-97.3) | 71.2 (52.1-84.7) | 77.8 (12-99.7) | 2.5 | 2.9 | 0% | 0% |
| Uganda | 76 (66.2-84.4) | 49.8 (38-60.4) | 32 (13.4-53.2) | 60.3 (47.8-72.4) | 43.2 (32.6-53.8) | 32.9 (15.4-54.8) | -2.4 | -1.9 | 0% | 0% |
| Zimbabwe | 76 (55.2-91.2) | 34.4 (18.5-52.3) | 15.9 (2.1-46.8) | 72.9 (45.5-91.2) | 37.3 (18.8-57.9) | 20.8 (2.1-61.9) | -4.4 | -3.7 | 0% | 0% |

**Note:** AARC = Average annual rate of change, calculated as ln(rate in 2018/rate in 2000)/18

**Table S7:** Trends and projections of anemia in children 6-59 months of age in low- and middle-income countries by mother’s education

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Below secondary** | | | **Secondary+** | | | **% AARC,2000-2018** | | **Probability of target attainment in 2030** | |
| **2000** | **2018** | **2030** | **2000** | **2018** | **2030** | **Below secondary** | **Secondary+** | **Below secondary** | **Secondary+** |
| Albania | 14.9 (4.4-35.5) | 29.1 (18.6-42.6) | 43.8 (13.3-78) | 9 (2.1-24.4) | 20.4 (12.3-30.8) | 35.6 (10.3-70.2) | 3.7 | 4.6 | 0% | 0% |
| Angola | 40.5 (19.4-64.2) | 67.9 (52.6-80.3) | 80 (46.4-95.7) | 47.8 (19.3-77.2) | 59.1 (40.5-77.6) | 64.1 (21.8-94.4) | 2.9 | 1.2 | 0% | 0% |
| Armenia | 49.1 (38.7-60.2) | 14.7 (8.6-22.9) | 5.6 (1.7-13.1) | 31.4 (19-44.9) | 17.5 (7.7-31.6) | 12.8 (2.2-36.9) | -6.7 | -3.2 | 0% | 0% |
| Benin | 82.4 (71.4-90.5) | 66 (51.5-77.9) | 51.8 (24.2-77.2) | 61.1 (45.8-74.5) | 59.9 (45.6-74.1) | 58.5 (30.6-84.2) | -1.2 | -0.1 | 0% | 0% |
| Bolivia | 49.7 (26.7-73.1) | 74.8 (30.5-96.7) | 80.8 (13.8-99.8) | 34.7 (16-55.5) | 81 (42.4-97.7) | 90.3 (38.1-99.9) | 2.3 | 4.7 | 0% | 0% |
| Burkina Faso | 92.9 (85-97.2) | 81.5 (56.8-95.6) | 66.7 (15.1-97.7) | 70.2 (50.7-86.2) | 71.4 (37.6-91.2) | 69.8 (12.6-97.6) | -0.7 | 0.1 | 0% | 0% |
| Burundi | 24.8 (4.8-58.2) | 64.8 (47.5-79) | 83.4 (48.1-98.1) | 32 (7-68.7) | 46.5 (29.9-62.8) | 56.7 (15.9-91.9) | 5.3 | 2.1 | 0% | 0% |
| Cambodia | 65.4 (55.4-73.6) | 55 (41.2-68.1) | 47.9 (24.6-71) | 52 (45.9-59) | 52.3 (43.7-61.2) | 52.4 (33.8-69.5) | -1.0 | 0.0 | 0% | 0% |
| Cameroon | 75.6 (56-89.4) | 53.7 (23.9-80.9) | 39.9 (4.1-89.2) | 65.4 (41.8-84.3) | 48.5 (20.2-78.6) | 39.3 (3.4-90.4) | -1.9 | -1.7 | 0% | 0% |
| Republic of the Congo | 64.9 (39.9-84.3) | 69.4 (44.6-88.3) | 69.2 (18.9-97.3) | 61.2 (35.5-82.3) | 66.7 (38.1-87.6) | 67.6 (14.9-96.7) | 0.4 | 0.5 | 0% | 0% |
| Democratic Republic of the Congo | 82.8 (59.3-95.2) | 50.8 (26.7-74.9) | 29.5 (2.7-78.5) | 72.2 (43.2-91.9) | 55.2 (30.2-75.5) | 43.6 (5.4-86.2) | -2.7 | -1.5 | 0% | 0% |
| Egypt | 42.6 (27.9-57.8) | 31.4 (13.9-54.6) | 26.9 (4.6-66.9) | 34.2 (20.3-49.7) | 30.9 (13.7-52.2) | 30.4 (5.4-68.8) | -1.7 | -0.6 | 0% | 0% |
| Ethiopia | 48.7 (25.7-71) | 55.1 (37.4-71.7) | 58.4 (23.4-87.8) | 48.5 (27.4-70) | 44.1 (28-61.5) | 42.1 (12.3-78.2) | 0.7 | -0.5 | 0% | 0% |
| Ghana | 83.7 (75.2-90.7) | 72.1 (61.8-80.1) | 61.4 (35.4-81.8) | 75.7 (63.5-86.8) | 55 (42-67.3) | 39.9 (16-66.9) | -0.8 | -1.8 | 0% | 0% |
| Guinea | 76.1 (53-90.8) | 78.3 (55.5-92.7) | 76.5 (25.9-98.3) | 77.6 (57.5-90.9) | 56.5 (29.6-80.9) | 41.9 (6.1-89.2) | 0.2 | -1.8 | 0% | 0% |
| Haiti | 62.8 (53.2-71.7) | 68.2 (59.3-76.3) | 71.2 (54.3-84.7) | 58 (46.4-67.7) | 66 (55.6-75) | 70.4 (49.6-84.8) | 0.5 | 0.7 | 0% | 0% |
| Honduras | 48.9 (18.9-80.3) | 25.7 (8.1-52.6) | 19.2 (0.8-73.2) | 37.3 (14.4-69.5) | 22.9 (6.4-50.4) | 20.1 (0.7-75.8) | -3.6 | -2.7 | 2% | 2% |
| India | 77.2 (57.7-90.4) | 61.3 (43.6-77) | 48.5 (15.1-83.1) | 66.7 (43.8-84.2) | 53.3 (36-69.3) | 44.3 (12.8-77.9) | -1.3 | -1.2 | 0% | 0% |
| Jordan | 40.2 (28.6-52.8) | 38.1 (28.2-49.7) | 37.3 (17.4-61.9) | 37.1 (27.6-47.4) | 31.9 (24.5-41.5) | 29.2 (15.9-48.5) | -0.3 | -0.8 | 0% | 0% |
| Lesotho | 46.5 (28.5-63) | 51.5 (33.4-67.7) | 54.5 (20.2-84.3) | 51.5 (31-69.3) | 55.2 (35.3-73.6) | 56.9 (18-89) | 0.6 | 0.4 | 0% | 0% |
| Liberia | 46.5 (15.4-78.2) | 82.1 (69.1-91.1) | 91.1 (65-99.3) | 53.9 (18.7-85.1) | 75.1 (56-88.3) | 80.9 (35.9-98.5) | 3.2 | 1.8 | 0% | 0% |
| Madagascar | 76.5 (61.9-87.8) | 39 (27.2-52.3) | 19 (5.8-42.5) | 63.1 (47.7-77.2) | 40.5 (29.1-52.3) | 27.8 (10.3-52.2) | -3.7 | -2.5 | 0% | 0% |
| Malawi | 77.3 (62.4-89) | 59 (45.7-70.5) | 44.8 (17.6-74.1) | 66.2 (50.5-80.5) | 51.9 (40.8-62.2) | 42.3 (19.5-67.9) | -1.5 | -1.3 | 0% | 0% |
| Mali | 82.7 (74.7-88.8) | 81.9 (68.2-90.4) | 80.1 (51.3-94.7) | 69.2 (54.5-80) | 66.2 (40.4-83.9) | 63.3 (20.2-92.1) | -0.1 | -0.2 | 0% | 0% |
| Mozambique | 78.1 (24.3-98.5) | 60.4 (35.6-82.9) | 44 (2.4-96.7) | 46.7 (5-93.2) | 57.5 (28.1-82.4) | 61.4 (4.3-98.7) | -1.4 | 1.2 | 0% | 0% |
| Nepal | 45.4 (24.6-67.5) | 55.1 (38.3-70.1) | 60.5 (24.1-89.2) | 40.6 (22.8-62.5) | 48.3 (32.9-63.8) | 53.2 (21.6-84.2) | 1.1 | 1.0 | 0% | 0% |
| Niger | 90.7 (74.8-98) | 58 (27.8-83.8) | 31.1 (1.7-87.1) | 85 (65.5-95.6) | 54.6 (24.5-79.9) | 33.4 (2.3-85) | -2.5 | -2.5 | 1% | 1% |
| Peru | 54.5 (45.4-62.4) | 32.5 (23.5-41.3) | 21.4 (9-38.7) | 49 (40.4-58.3) | 23.2 (16.5-31.8) | 12.8 (5.4-26.5) | -2.9 | -4.2 | 0% | 0% |
| Rwanda | 56.6 (38.8-74) | 30.8 (17.7-47.1) | 19.5 (4.1-48.9) | 44.5 (30-59.2) | 33.7 (22-46.7) | 28.4 (9.3-57.2) | -3.4 | -1.5 | 0% | 0% |
| Senegal | 88 (78.1-94.3) | 64.2 (56-71.8) | 41.2 (20.1-65.5) | 74.6 (60.2-86.4) | 58.1 (48.7-66.6) | 45.6 (23-69) | -1.7 | -1.4 | 0% | 0% |
| Sierra Leone | 71 (32.6-94.1) | 81.3 (55.8-94.9) | 80.7 (19.7-99.5) | 56.9 (16.7-89.9) | 78.7 (53.3-93.9) | 83 (19.2-99.5) | 0.7 | 1.8 | 0% | 0% |
| Tanzania | 74.1 (60.9-84.2) | 55.1 (46.1-64.4) | 41.3 (22.2-63.1) | 77.9 (63.2-87.8) | 53.4 (42.1-64.6) | 35.6 (15.7-63.9) | -1.6 | -2.1 | 0% | 0% |
| Timor-Leste | 35 (6.6-79.1) | 43.8 (24.7-62.4) | 51.2 (7.6-92.1) | 36.1 (8.5-75.9) | 41.7 (22.7-61.1) | 47.3 (6.9-90.3) | 1.2 | 0.8 | 0% | 0% |
| Togo | 48.2 (1.1-97.9) | 78.7 (63.8-90) | 82.7 (21.7-99.9) | 37.9 (0.5-97.2) | 69.1 (51.2-84.5) | 77.7 (12.6-99.7) | 2.7 | 3.3 | 0% | 0% |
| Uganda | 75.3 (64.4-84.8) | 49.7 (37.7-61.2) | 32.4 (14-54.7) | 66.8 (54.3-77.3) | 46.1 (35.5-57.8) | 33.2 (15.2-55.9) | -2.3 | -2.1 | 0% | 0% |
| Zimbabwe | 75.8 (50.1-91.8) | 36 (18.5-54.9) | 17.7 (1.9-52.5) | 75.3 (51.5-90.5) | 34.6 (19.2-52.4) | 16.4 (2.3-46.3) | -4.1 | -4.3 | 0% | 0% |

**Note:** AARC = Average annual rate of change, calculated as ln(rate in 2018/rate in 2000)/18

**Table S8:** Trends and projections of anemia in children 6-59 months of age in low- and middle-income countries by mother’s age

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | **15-19 y** | | | **20-49 y** | | | **% AARC, 2000-2018** | | **Probability of target attainment in 2030** | |
| **2000** | **2018** | **2030** | **2000** | **2018** | **2030** | **15-19 y** | **20-49 y** | **15-19 y** | **20-49 y** |
| Albania | 10 (2.4-28.4) | 29.5 (19-42.2) | 52.3 (18.7-83.9) | 13.9 (3.4-36.1) | 24.8 (14.4-35.9) | 37.6 (9.8-74.6) | 6.0 | 3.2 | 0% | 0% |
| Angola | 45.9 (20.6-72.2) | 76 (60.9-87.1) | 86.2 (57.2-98.1) | 42.2 (21.2-67) | 65.3 (47.3-78.8) | 76.1 (39.8-94.8) | 2.8 | 2.4 | 0% | 0% |
| Armenia | 48.7 (35.6-61.7) | 8 (3.8-14.5) | 2 (0.4-5.6) | 30.7 (19.3-44.3) | 17.9 (8.9-32.4) | 13.3 (3-36.7) | -10.0 | -3.0 | 4% | 0% |
| Benin | 88.1 (78.3-94.4) | 71.7 (54.8-84.3) | 54.8 (21.6-84.9) | 81 (70.8-88.8) | 64.4 (50.9-76) | 50.6 (23.7-74.8) | -1.2 | -1.3 | 0% | 0% |
| Bolivia | 71 (48.7-87.3) | 74.1 (29.1-97.2) | 72.5 (6.2-99.7) | 45 (23.5-68.2) | 74.7 (32.5-96.3) | 82.1 (16.8-99.8) | 0.2 | 2.8 | 0% | 0% |
| Burkina Faso | 95.3 (89.5-98.2) | 93.3 (80.3-98.6) | 88.9 (44.5-99.6) | 92.2 (84.9-96.6) | 79.6 (52.3-94.7) | 64.6 (11.7-96.9) | -0.1 | -0.8 | 0% | 0% |
| Burundi | 44.7 (12.9-80.9) | 76.1 (63.7-86.7) | 86.4 (52.6-98.4) | 25.2 (5.7-64.4) | 62.8 (48.1-76.9) | 81.3 (39.8-97.5) | 3.0 | 5.1 | 0% | 0% |
| Cambodia | 81.9 (73.2-88.6) | 72.8 (59.8-84.4) | 64.8 (35.6-87.8) | 63.4 (54.2-71.6) | 52.4 (40-64.2) | 45.1 (23.4-67) | -0.6 | -1.1 | 0% | 0% |
| Cameroon | 87.3 (72.9-95.3) | 56.2 (26.6-82.6) | 33.2 (2.8-85.1) | 71.4 (48-87.3) | 51.7 (24.6-78.7) | 40 (4.5-89) | -2.5 | -1.8 | 0% | 0% |
| Republic of the Congo | 56.6 (27.6-80) | 83.8 (64.6-95) | 89.9 (55.2-99.5) | 63.7 (38.9-85.5) | 65.5 (33.8-86.3) | 64.7 (9.3-96.4) | 2.2 | 0.2 | 0% | 0% |
| Democratic Republic of the Congo | 84.6 (65.6-95.6) | 58.5 (36-77.6) | 37.5 (6.5-81.7) | 79 (52.9-93.9) | 52.9 (27.7-75.9) | 35.4 (3.6-83.5) | -2.1 | -2.2 | 0% | 0% |
| Egypt | 42.5 (26.1-60.2) | 53.4 (30.5-78.5) | 59 (18.4-92.9) | 38.2 (24.2-53.4) | 29.8 (12.4-53.8) | 26.7 (4.3-66.2) | 1.3 | -1.4 | 0% | 0% |
| Ethiopia | 55.3 (29.9-78.6) | 69 (52-82.8) | 74.3 (38.1-95.6) | 48.9 (25.6-71.5) | 53.3 (34.9-70.3) | 55.6 (19.2-87.5) | 1.2 | 0.5 | 0% | 0% |
| Ghana | 90.1 (83.1-95.3) | 74.1 (62.3-83.9) | 56.3 (28.3-81.4) | 80.8 (70.8-88.9) | 62.2 (50-73.2) | 47 (22.9-72.2) | -1.1 | -1.4 | 0% | 0% |
| Guinea | 77.2 (54.6-91.3) | 86.9 (66.7-95.9) | 88.3 (44.9-99.3) | 76 (54.3-89.7) | 75.3 (51-91.2) | 71.9 (22.6-97.5) | 0.7 | -0.1 | 0% | 0% |
| Haiti | 75.6 (65.8-84) | 81 (72.1-88) | 83.2 (65-93.8) | 61.4 (53.4-69.2) | 66.6 (58.3-73) | 69.5 (53.8-81.2) | 0.4 | 0.4 | 0% | 0% |
| Honduras | 61.1 (26.8-86.5) | 35.8 (12.5-66.3) | 25.9 (1.2-83.4) | 46.6 (19.1-74.2) | 22.2 (6-47.3) | 16 (0.5-63.4) | -3.0 | -4.1 | 1% | 2% |
| India | 86.8 (72.6-95.2) | 60.9 (42.6-76.6) | 38.1 (8.9-73.6) | 73.4 (52.5-89) | 55.9 (38.8-72.9) | 43.1 (14-78.8) | -2.0 | -1.5 | 0% | 0% |
| Jordan | 48.3 (33-64) | 42.7 (28.6-58.2) | 39.6 (14.8-69.6) | 37 (27.1-48.5) | 32.4 (24.7-41.6) | 30.1 (15.2-49.8) | -0.7 | -0.7 | 0% | 0% |
| Lesotho | 63.4 (44.5-78.8) | 63.1 (45.1-79.4) | 61.8 (26-90.2) | 46.5 (28.7-66.4) | 54 (35.2-72.3) | 58.1 (19.5-88.8) | 0.0 | 0.8 | 0% | 0% |
| Liberia | 64.2 (27.4-92.2) | 86.3 (73-94.1) | 89.9 (52.8-99.4) | 50.8 (19.2-79.5) | 78.6 (64.5-88.5) | 86.6 (52.9-98.7) | 1.6 | 2.4 | 0% | 0% |
| Madagascar | 84 (68.4-92.9) | 46.6 (31.2-62.6) | 22.6 (5.1-55.3) | 73.2 (58.1-83.5) | 38.4 (27.6-51.2) | 19.9 (6.8-41.6) | -3.3 | -3.6 | 0% | 0% |
| Malawi | 80.7 (67.2-89.9) | 72.4 (63.3-81) | 64.8 (39.1-86) | 76.4 (61.9-87.6) | 56.2 (43.3-67.5) | 41.2 (15.8-68.3) | -0.6 | -1.7 | 0% | 0% |
| Mali | 84.9 (76.3-90.9) | 86.8 (74.8-94.2) | 86.5 (58.4-97.6) | 82.1 (73.5-89.1) | 80.4 (67.3-90.7) | 78.1 (48.3-95.4) | 0.1 | -0.1 | 0% | 0% |
| Mozambique | 82.5 (31.9-99.1) | 66.9 (39.9-86.7) | 49 (2.8-96.5) | 75.5 (17.8-98.5) | 58.7 (31.5-81.6) | 44 (2.1-96.8) | -1.2 | -1.4 | 1% | 0% |
| Nepal | 58.7 (33.8-80) | 66.3 (50.4-80.3) | 69 (32.1-93.4) | 45.9 (25.3-69.4) | 50.4 (35.9-66.3) | 53.2 (18.6-84) | 0.7 | 0.5 | 0% | 0% |
| Niger | 96.7 (90-99.3) | 57.9 (27.3-84.7) | 20.2 (0.8-78.2) | 90.4 (73.2-97.4) | 57.2 (29.5-82.9) | 30.6 (2.2-85.8) | -2.8 | -2.5 | 1% | 1% |
| Peru | 64.2 (56.6-71.4) | 49.5 (40.2-58.7) | 39.8 (22.2-58.3) | 51 (42.2-59.7) | 24.9 (17.4-34.7) | 14 (5.7-28.6) | -1.4 | -4.0 | 0% | 0% |
| Rwanda | 51.6 (30.8-70.3) | 61.8 (43.8-78) | 66.5 (28.8-92.2) | 55.5 (37.9-72.6) | 30.8 (17.8-45.6) | 20 (4.3-47.6) | 1.0 | -3.3 | 0% | 0% |
| Senegal | 92.4 (84.7-97.1) | 76.3 (66.9-83.7) | 55.5 (25-81.9) | 87 (78.3-93) | 62.8 (54.5-71.1) | 40.3 (21.2-63.2) | -1.1 | -1.8 | 0% | 0% |
| Sierra Leone | 62.1 (21.8-91.5) | 86.1 (63.4-96.7) | 89.3 (34.9-99.8) | 69.4 (30.5-94.4) | 81.2 (56.6-94.5) | 81.4 (20-99.4) | 1.8 | 0.9 | 0% | 0% |
| Tanzania | 77.6 (59.6-89.2) | 72.8 (62.1-82.1) | 67.6 (37.1-89.1) | 74.5 (62.7-84) | 53.9 (45.4-62.9) | 39.1 (20.8-60.6) | -0.4 | -1.8 | 0% | 0% |
| Timor-Leste | 40.5 (9.8-81.9) | 55.6 (35.9-74.3) | 63.7 (14.4-95.7) | 34.7 (7.3-72.5) | 43.1 (25.1-60.9) | 50.1 (8.1-90.1) | 1.8 | 1.2 | 0% | 0% |
| Togo | 91.6 (32.3-100) | 73.5 (55.4-86.1) | 38.5 (1-96.3) | 46.5 (1.2-97.5) | 76 (59.6-88) | 81 (16.2-99.8) | -1.2 | 2.7 | 2% | 0% |
| Uganda | 87.8 (79.2-93.6) | 62.8 (48-76.4) | 39.8 (14.4-69.8) | 73.7 (62.3-82.4) | 47.8 (35.8-58.8) | 30.9 (13.3-53.6) | -1.9 | -2.4 | 0% | 0% |
| Zimbabwe | 84.6 (64.9-95.4) | 52.5 (31.7-71.7) | 29.7 (3.9-74.8) | 74.9 (50.4-89.9) | 34 (18.6-52.5) | 16 (2.2-47.4) | -2.7 | -4.4 | 0% | 0% |

**Note:** AARC = Average annual rate of change, calculated as ln(rate in 2018/rate in 2000)/18

**Table S9:** Trends and projections of anemia in children 6-59 months of age in low- and middle-income countries by child sex

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| country | **Male** | | | **Female** | | | **% AARC, 2000-2018** | | **Probability of target attainment in 2030** | |
|  | **2000** | **2018** | **2030** | **2000** | **2018** | **2030** | **Male** | **Female** | **Male** | **Female** |
| Albania | 14.3 (3.8-36.3) | 26 (15.5-37.5) | 39.3 (10.6-73.5) | 13.2 (3.4-30.1) | 23.9 (15.2-34.7) | 36.3 (11.1-72.1) | 3.3 | 3.3 | 0% | 0% |
| Angola | 39 (18.1-61.2) | 69.3 (52.2-81.8) | 82.1 (50.1-96.6) | 46.1 (19.7-72) | 62.2 (44.7-78.1) | 69.8 (30.6-94.9) | 3.2 | 1.7 | 0% | 0% |
| Armenia | 38 (23.5-53.9) | 19.2 (8-35.8) | 12.9 (2.1-41.9) | 29.6 (17.6-42.9) | 17.6 (7.4-31.6) | 13.5 (2.5-39.2) | -3.8 | -2.9 | 0% | 0% |
| Benin | 83.1 (72-90.7) | 65.3 (49-78.5) | 49.9 (22.3-77.5) | 78.6 (67.2-87.3) | 65.1 (51.6-76.9) | 54 (27.1-79.8) | -1.3 | -1.1 | 0% | 0% |
| Bolivia | 45.2 (22.8-70) | 80.1 (38.3-97.9) | 87 (22-99.9) | 46.7 (25.4-68.9) | 69.2 (25.6-95.3) | 75.4 (10.6-99.6) | 3.2 | 2.2 | 0% | 0% |
| Burkina Faso | 92.2 (83.7-96.9) | 82.1 (55.4-95.7) | 69.5 (14.3-98.2) | 92.6 (84.8-97.2) | 77.2 (44.6-94.1) | 59.4 (6.8-96.6) | -0.6 | -1.0 | 0% | 0% |
| Burundi | 26.1 (5.3-61.4) | 64.8 (49.1-78.9) | 82.7 (45.2-98) | 25.2 (5.5-63) | 60.9 (44-75.1) | 79.3 (36.2-97.3) | 5.1 | 4.9 | 0% | 0% |
| Cambodia | 65.7 (57-73.6) | 54.4 (40.7-66.5) | 46.7 (22.6-70.8) | 61.4 (52-69.3) | 51.3 (38.5-63.3) | 44.7 (22.2-67.3) | -1.1 | -1.0 | 0% | 0% |
| Cameroon | 77.2 (58.6-90.8) | 51.2 (24.5-78.6) | 35.4 (3.1-86.4) | 69 (47.9-86.1) | 52.5 (20.3-81.9) | 42.7 (3.6-91.6) | -2.3 | -1.5 | 0% | 0% |
| Republic of the Congo | 66 (38.6-85.4) | 64.7 (37.9-87.1) | 61.9 (14.3-96) | 59.1 (31.3-80.6) | 71.3 (45.3-89.9) | 74.8 (25.4-98.3) | -0.1 | 1.0 | 0% | 0% |
| Democratic Republic of the Congo | 82.8 (60.5-95.4) | 53.3 (28.9-75.1) | 32.5 (3-78.8) | 75.2 (46.7-91.8) | 52.4 (29.1-74.2) | 37.1 (5.2-85.7) | -2.5 | -2.0 | 0% | 0% |
| Egypt | 37.6 (24.3-52.3) | 29.6 (13.2-50.5) | 26.7 (5.1-63.7) | 39.4 (24-55.2) | 31.3 (12.9-53.1) | 28.4 (4.5-66.6) | -1.3 | -1.3 | 0% | 0% |
| Ethiopia | 49.8 (28-72.4) | 54.1 (37.8-70.6) | 56.3 (20.9-86.5) | 48 (25.5-70) | 54.3 (37.6-70.8) | 57.7 (21.7-89) | 0.5 | 0.7 | 0% | 0% |
| Ghana | 80.6 (67.8-89.2) | 65.8 (53-76.8) | 53.2 (25.2-78.9) | 81.5 (71.1-88.7) | 59.8 (47-71.9) | 42.2 (19.9-69.6) | -1.1 | -1.7 | 0% | 0% |
| Guinea | 77.4 (54.9-92) | 75.1 (49.2-92.1) | 70.5 (17.1-97.8) | 75.1 (50.3-90.7) | 77.5 (51.8-92.3) | 75.8 (19.6-98.2) | -0.2 | 0.2 | 0% | 0% |
| Haiti | 63.3 (55.4-71.2) | 68.4 (59.8-75.3) | 71.4 (54.6-83.3) | 60.9 (51.7-68.7) | 65.6 (56.8-73.7) | 68.2 (51.2-82.4) | 0.4 | 0.4 | 0% | 0% |
| Honduras | 49.4 (20.3-77.2) | 23.8 (7.6-51.3) | 16.7 (0.8-70.9) | 45.4 (19.2-77.8) | 23.3 (6.5-49.5) | 17.7 (0.6-68.8) | -4.1 | -3.7 | 1% | 2% |
| India | 73.8 (51-89.1) | 56.2 (39.2-74.7) | 43.4 (11.8-80.5) | 75.1 (54.4-89.7) | 56.1 (37.3-72.1) | 42.3 (11.4-77.3) | -1.5 | -1.6 | 0% | 0% |
| Jordan | 40.6 (30.9-51.3) | 31.7 (24.2-39.5) | 26.9 (13.8-43.7) | 33.7 (23.7-44.7) | 33.3 (23.8-43) | 33.6 (15.6-54.4) | -1.4 | -0.1 | 0% | 0% |
| Lesotho | 47.5 (30.2-66.4) | 56.4 (38.2-74.5) | 61.1 (24.5-89.8) | 47.3 (31.2-65.4) | 52.7 (35.3-70.8) | 55.9 (22.1-86.2) | 1.0 | 0.6 | 0% | 0% |
| Liberia | 49.7 (20.2-78.3) | 83 (71-91.6) | 91.6 (68-99.2) | 52 (17.6-82.7) | 75.4 (57.1-87.7) | 82.3 (42.9-98.5) | 2.9 | 2.1 | 0% | 0% |
| Madagascar | 74.9 (59.2-86.8) | 40.6 (28.1-54) | 21.6 (6.5-46.7) | 72.5 (57-84.3) | 38.5 (27-51.2) | 20.5 (6.4-42.9) | -3.4 | -3.5 | 0% | 0% |
| Malawi | 76.6 (63-87.4) | 58.9 (48.2-69.3) | 45.2 (21-70) | 75.8 (59.2-88.1) | 56.6 (43-68.6) | 42.4 (16.2-71.8) | -1.5 | -1.6 | 0% | 0% |
| Mali | 81 (72.1-88) | 82.8 (68.9-91.4) | 82.7 (53.4-95.7) | 83.8 (77-89.4) | 78.7 (66-88.5) | 74.1 (43-91.8) | 0.1 | -0.3 | 0% | 0% |
| Mozambique | 69.4 (14.7-97.6) | 64.5 (39.2-86.1) | 56.1 (4.4-98.2) | 79.7 (28.6-98.4) | 55.7 (29.9-80.4) | 37.2 (1.8-93.4) | -0.4 | -2.0 | 0% | 1% |
| Nepal | 44.8 (22.9-69.7) | 51.1 (34.1-68.2) | 55 (19.4-86.9) | 47.4 (28.1-68.4) | 52.4 (39.3-67.5) | 55.3 (24.6-85.2) | 0.7 | 0.6 | 0% | 0% |
| Niger | 90.5 (74.2-97.6) | 59.3 (28.5-86) | 33.2 (1.9-90.4) | 90.4 (72.9-97.7) | 56.5 (26.3-85) | 29.6 (1.6-89.2) | -2.3 | -2.6 | 0% | 0% |
| Peru | 53.1 (43.6-62.4) | 26.7 (17.5-36.4) | 15.3 (5.4-31.7) | 50 (41.7-58.7) | 25 (17.9-33.1) | 14.3 (5.9-27.6) | -3.8 | -3.9 | 0% | 0% |
| Rwanda | 57.4 (38.2-73.3) | 31.9 (18.4-49.2) | 20.5 (4.8-53.3) | 52.7 (31.7-72.3) | 31 (16.8-47.8) | 21.7 (3.9-57.8) | -3.3 | -3.0 | 0% | 0% |
| Senegal | 89.7 (81.3-94.9) | 65.2 (56.2-73) | 40.2 (19-64.2) | 84.4 (75.6-91.1) | 61.1 (52.8-68.1) | 40.8 (21.9-61.2) | -1.8 | -1.8 | 0% | 0% |
| Sierra Leone | 70.6 (31.6-94.3) | 81.4 (57.1-95) | 81 (21-99.5) | 68.7 (25.2-93.3) | 80.7 (55.1-94.5) | 81 (21.2-99.5) | 0.8 | 0.9 | 0% | 0% |
| Tanzania | 75.3 (64.7-84.4) | 57.2 (47.3-66.3) | 43.6 (24.3-65) | 73.2 (58.9-84.8) | 52.8 (41.9-63) | 38.5 (16.2-63.7) | -1.5 | -1.8 | 0% | 0% |
| Timor-Leste | 34.6 (7.7-74.2) | 43 (26.2-63.4) | 49.9 (9.5-90.9) | 36.5 (8.2-76.3) | 43 (25.6-63.2) | 48.9 (8.4-89.9) | 1.2 | 0.9 | 0% | 0% |
| Togo | 45.1 (1.6-98.1) | 77.7 (62.1-88.7) | 83.1 (13.9-99.7) | 50.9 (1.3-99.1) | 74.1 (56.2-87) | 76.2 (6.9-99.8) | 3.0 | 2.1 | 0% | 0% |
| Uganda | 75.6 (63.9-84.6) | 50.1 (37.4-61.9) | 32.9 (12.9-56.5) | 73.1 (62.5-81.9) | 47.2 (35.5-57.7) | 30.4 (13.2-51.3) | -2.3 | -2.4 | 0% | 0% |
| Zimbabwe | 77 (53-91.4) | 36.2 (18.1-55) | 17.2 (1.9-52.6) | 73.2 (49.1-89.8) | 34.2 (19.3-53.8) | 17.1 (2.4-51) | -4.2 | -4.2 | 0% | 0% |

**Note:** AARC = Average annual rate of change, calculated as ln(rate in 2018/rate in 2000)/18

**Figure S1:** Predicted gaps in anemia among children 6-59 months of age across countries by place of residence in 2030



**Figure S2:** Predicted gaps in anemia among children 6-59 months of age across countries by mother’s education in 2030



**Figure S3:** Predicted gaps in anemia among children 6-59 months of age across countries by mother’s age in 2030



**Table S10:** Countries with earliest, latest and predicted prevalence and associated level of burden of anemia of children 6-59 months of age

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Survey year** | | **Prevalence of child anemia** | | | **Public health problem1 of anemia** | | |
| **Earliest survey year, E** | **Latest survey year, L** | **E** | **L** | **2030** | **E** | **L** | **2030** |
| Albania | 2009 | 2018 | 17.6 | 24.5 | 37.5 | Mild | Moderate | Moderate |
| Angola | 2007 | 2016 | 54.0 | 65.3 | 77 | Severe | Severe | Severe |
| Armenia | 2000 | 2016 | 24.0 | 15.9 | 13 | Moderate | Mild | Mild |
| Benin | 2001 | 2018 | 82.2 | 72.2 | 51.2 | Severe | Severe | Severe |
| Bolivia | 2003 | 2008 | 51.7 | 62.0 | 82.4 | Severe | Severe | Severe |
| Burkina Faso | 2003 | 2010 | 91.6 | 87.9 | 63.8 | Severe | Severe | Severe |
| Burundi | 2010 | 2017 | 44.3 | 61.0 | 81.2 | Severe | Severe | Severe |
| Cambodia | 2000 | 2014 | 63.5 | 56.6 | 46.4 | Severe | Severe | Severe |
| Cameroon | 2004 | 2011 | 69.4 | 61.3 | 39.4 | Severe | Severe | Moderate |
| Congo | 2005 | 2012 | 65.3 | 67.1 | 68.3 | Severe | Severe | Severe |
| Congo DR | 2007 | 2014 | 71.7 | 60.1 | 34.2 | Severe | Severe | Moderate |
| Egypt | 2000 | 2014 | 30.5 | 27.4 | 28 | Moderate | Moderate | Moderate |
| Ethiopia | 2005 | 2016 | 53.9 | 57.8 | 57.1 | Severe | Severe | Severe |
| Ghana | 2003 | 2016 | 76.7 | 64.2 | 47.1 | Severe | Severe | Severe |
| Guinea | 2005 | 2012 | 77.4 | 77.6 | 73.6 | Severe | Severe | Severe |
| Haiti | 2000 | 2017 | 62.9 | 67.2 | 69.8 | Severe | Severe | Severe |
| Honduras | 2006 | 2012 | 37.8 | 29.3 | 17.7 | Moderate | Moderate | Mild |
| India | 2006 | 2016 | 69.5 | 58.7 | 42.7 | Severe | Severe | Severe |
| Jordan | 2002 | 2018 | 34.2 | 32.2 | 30.4 | Moderate | Moderate | Moderate |
| Lesotho | 2004 | 2014 | 50.0 | 54.1 | 58.5 | Severe | Severe | Severe |
| Liberia | 2009 | 2016 | 64.0 | 76.5 | 87.5 | Severe | Severe | Severe |
| Madagascar | 2004 | 2016 | 70.8 | 45.5 | 21.5 | Severe | Severe | Moderate |
| Malawi | 2004 | 2016 | 74.1 | 63.2 | 43.5 | Severe | Severe | Severe |
| Mali | 2001 | 2013 | 82.7 | 81.9 | 78.6 | Severe | Severe | Severe |
| Mozambique | 2011 | 2015 | 69.2 | 64.3 | 46.9 | Severe | Severe | Severe |
| Nepal | 2006 | 2016 | 49.1 | 52.4 | 55.2 | Severe | Severe | Severe |
| Niger | 2006 | 2012 | 85.0 | 73.7 | 31.6 | Severe | Severe | Moderate |
| Peru | 2000 | 2012 | 49.6 | 32.7 | 14.9 | Severe | Moderate | Moderate |
| Rwanda | 2005 | 2015 | 52.0 | 36.6 | 20.6 | Severe | Moderate | Moderate |
| Senegal | 2005 | 2017 | 83.0 | 72.1 | 41 | Severe | Severe | Severe |
| Sierra Leone | 2008 | 2013 | 77.1 | 80.0 | 80.1 | Severe | Severe | Severe |
| Tanzania | 2005 | 2017 | 72.4 | 59.4 | 39.9 | Severe | Severe | Moderate |
| Timor-Leste | 2010 | 2016 | 38.5 | 41.8 | 49.3 | Moderate | Severe | Severe |
| Togo | 2014 | 2017 | 71.0 | 75.3 | 79.6 | Severe | Severe | Severe |
| Uganda | 2001 | 2016 | 71.8 | 54.0 | 30.8 | Severe | Severe | Moderate |
| Zimbabwe | 2006 | 2015 | 61.3 | 38.3 | 17.5 | Severe | Moderate | Mild |

**1**The prevalence of anemia as a public health problem is categorized as follows: <5%, no public health problem; 5-19.9%, mild public health problem; 20-39.9%, moderate public health problem; ≥40%, severe public health problem.

**Table S11:** Countries with earliest, latest and predicted burden of anemia among children 6-59 months of age in low- and middle-income countries by wealth quintiles

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Earliest survey year** | **Latest survey year** | **Among poorest** | | | | | | **Among richest** | | | | | |
| **% anemia** | | | **Public health problem** | | | **% anemia** | | | **Public health problem** | | |
| **Earliest** | **Latest** | **2030** | **Earliest** | **Latest** | **2030** | **Earliest** | **Latest** | **2030** | **Earliest** | **Latest** | **2030** |
| Albania | 2009 | 2018 | 20.3 | 32.1 | 52 | Moderate | Moderate | Severe | 10.6 | 16.0 | 28 | Mild | Mild | Moderate |
| Angola | 2007 | 2016 | 54.8 | 65.4 | 74.6 | Severe | Severe | Severe | 54.5 | 62.2 | 68.6 | Severe | Severe | Severe |
| Armenia | 2000 | 2016 | 37.6 | 19.4 | 10.9 | Moderate | Mild | Mild | 15.9 | 11.6 | 11.1 | Mild | Mild | Mild |
| Benin | 2001 | 2018 | 87.2 | 79.6 | 60.2 | Severe | Severe | Severe | 65.0 | 58.2 | 46.4 | Severe | Severe | Severe |
| Bolivia | 2003 | 2008 | 57.0 | 70.2 | 91.1 | Severe | Severe | Severe | 40.3 | 44.3 | 57.8 | Severe | Severe | Severe |
| Burkina Faso | 2003 | 2010 | 92.8 | 89.0 | 64.2 | Severe | Severe | Severe | 80.3 | 75.7 | 56.7 | Severe | Severe | Severe |
| Burundi | 2010 | 2017 | 48.9 | 69.9 | 89.5 | Severe | Severe | Severe | 38.3 | 47.0 | 60.7 | Moderate | Severe | Severe |
| Cambodia | 2000 | 2014 | 68.1 | 65.0 | 55.8 | Severe | Severe | Severe | 47.6 | 43.6 | 36.7 | Severe | Severe | Moderate |
| Cameroon | 2004 | 2011 | 74.7 | 67.5 | 44.5 | Severe | Severe | Severe | 59.2 | 50.5 | 32.7 | Severe | Severe | Moderate |
| Congo | 2005 | 2012 | 68.0 | 65.5 | 55.8 | Severe | Severe | Severe | 55.6 | 56.1 | 57.4 | Severe | Severe | Severe |
| Congo DR | 2007 | 2014 | 71.1 | 66.0 | 52.5 | Severe | Severe | Severe | 67.5 | 54.2 | 28.9 | Severe | Severe | Moderate |
| Egypt | 2000 | 2014 | 37.6 | 34.6 | 34.2 | Moderate | Moderate | Moderate | 19.2 | 21.2 | 27.3 | Mild | Moderate | Moderate |
| Ethiopia | 2005 | 2016 | 60.4 | 68.3 | 68.5 | Severe | Severe | Severe | 48.8 | 48.5 | 43.4 | Severe | Severe | Severe |
| Ghana | 2003 | 2016 | 83.2 | 77.9 | 70.7 | Severe | Severe | Severe | 62.1 | 49.2 | 34 | Severe | Severe | Moderate |
| Guinea | 2005 | 2012 | 80.4 | 83.6 | 85.3 | Severe | Severe | Severe | 72.6 | 68.4 | 54.5 | Severe | Severe | Severe |
| Haiti | 2000 | 2017 | 59.8 | 66.8 | 70.7 | Severe | Severe | Severe | 55.5 | 59.1 | 58.9 | Severe | Severe | Severe |
| Honduras | 2006 | 2012 | 40.6 | 31.7 | 19.3 | Severe | Moderate | Mild | 25.9 | 21.5 | 16.9 | Moderate | Moderate | Mild |
| India | 2006 | 2016 | 76.6 | 64.1 | 44.2 | Severe | Severe | Severe | 56.6 | 51.9 | 45 | Severe | Severe | Severe |
| Jordan | 2002 | 2018 | 41.3 | 37.8 | 36.1 | Severe | Moderate | Moderate | 33.4 | 18.6 | 11.2 | Moderate | Mild | Mild |
| Lesotho | 2004 | 2014 | 43.3 | 58.3 | 77 | Severe | Severe | Severe | 52.8 | 45.5 | 36.5 | Severe | Severe | Moderate |
| Liberia | 2009 | 2016 | 60.0 | 84.3 | 97.8 | Severe | Severe | Severe | 65.1 | 62.3 | 51.6 | Severe | Severe | Severe |
| Madagascar | 2004 | 2016 | 79.2 | 47.3 | 17.6 | Severe | Severe | Mild | 62.4 | 48.3 | 30.1 | Severe | Severe | Moderate |
| Malawi | 2004 | 2016 | 78.2 | 69.2 | 57.4 | Severe | Severe | Severe | 62.4 | 55.3 | 41.3 | Severe | Severe | Severe |
| Mali | 2001 | 2013 | 86.9 | 88.2 | 87.8 | Severe | Severe | Severe | 70.4 | 63.0 | 51.1 | Severe | Severe | Severe |
| Mozambique | 2011 | 2015 | 78.2 | 73.6 | 51.4 | Severe | Severe | Severe | 52.5 | 50.7 | 45 | Severe | Severe | Severe |
| Nepal | 2006 | 2016 | 48.1 | 48.4 | 48.4 | Severe | Severe | Severe | 40.2 | 40.8 | 41.3 | Severe | Severe | Severe |
| Niger | 2006 | 2012 | 87.6 | 76.7 | 29.6 | Severe | Severe | Moderate | 79.8 | 69.4 | 33.5 | Severe | Severe | Moderate |
| Peru | 2000 | 2012 | 53.1 | 40.4 | 25.7 | Severe | Severe | Moderate | 35.4 | 19.4 | 6 | Moderate | Mild | Mild |
| Rwanda | 2005 | 2015 | 55.2 | 41.3 | 26.5 | Severe | Severe | Moderate | 43.4 | 29.9 | 17.2 | Severe | Moderate | Mild |
| Senegal | 2005 | 2017 | 86.7 | 79.4 | 55.6 | Severe | Severe | Severe | 77.4 | 59.0 | 25.4 | Severe | Severe | Moderate |
| Sierra Leone | 2008 | 2013 | 79.1 | 80.9 | 77.9 | Severe | Severe | Severe | 67.8 | 70.2 | 69.9 | Severe | Severe | Severe |
| Tanzania | 2005 | 2017 | 78.4 | 63.2 | 43.2 | Severe | Severe | Severe | 62.8 | 50.2 | 35.3 | Severe | Severe | Moderate |
| Timor-Leste | 2010 | 2016 | 41.2 | 39.8 | 38.3 | Severe | Moderate | Moderate | 33.6 | 42.5 | 61.4 | Moderate | Severe | Severe |
| Togo | 2014 | 2017 | 72.2 | 80.8 | 92.2 | Severe | Severe | Severe | 61.6 | 65.2 | 70.7 | Severe | Severe | Severe |
| Uganda | 2001 | 2016 | 75.7 | 67.0 | 44 | Severe | Severe | Severe | 61.8 | 46.4 | 28.8 | Severe | Severe | Moderate |
| Zimbabwe | 2006 | 2015 | 65.0 | 42.0 | 18 | Severe | Severe | Mild | 57.8 | 36.5 | 16.9 | Severe | Moderate | Mild |

**Table S12:** Countries with earliest, latest and predicted burden of anemia among children 6-59 months of age in low- and middle-income countries by place of residence

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Earliest survey year** | **Latest survey year** | **Among rural** | | | | | | | **Among urban** | | | | | | |
| **% anemia** | | | | **Public health problem** | | | **% anemia** | | | | **Public health problem** | | |
| **Earliest** | **Latest** | **2030** | **Earliest** | | **Latest** | **2030** | **Earliest** | **Latest** | **2030** | **Earliest** | | **Latest** | **2030** |
| Albania | 2009 | 2018 | 20.8 | 27.4 | 38.5 | Moderate | | Moderate | Moderate | 12.8 | 21.9 | 41.8 | Mild | | Moderate | Severe |
| Angola | 2007 | 2016 | 50.8 | 65.4 | 80 | Severe | | Severe | Severe | 57.1 | 65.3 | 72.4 | Severe | | Severe | Severe |
| Armenia | 2000 | 2016 | 32.8 | 18.2 | 11.4 | Moderate | | Mild | Mild | 15.6 | 13.9 | 15.1 | Mild | | Mild | Severe |
| Benin | 2001 | 2018 | 85.5 | 75.6 | 52.3 | Severe | | Severe | Severe | 75.3 | 66.5 | 51.1 | Severe | | Severe | Severe |
| Bolivia | 2003 | 2008 | 56.5 | 68.7 | 88.5 | Severe | | Severe | Severe | 47.7 | 56.2 | 75.4 | Severe | | Severe | Severe |
| Burkina Faso | 2003 | 2010 | 93.7 | 90.0 | 64.1 | Severe | | Severe | Severe | 76.1 | 77.6 | 76 | Severe | | Severe | Severe |
| Burundi | 2010 | 2017 | 44.7 | 62.2 | 82.2 | Severe | | Severe | Severe | 40.0 | 48.7 | 61.6 | Moderate | | Severe | Severe |
| Cambodia | 2000 | 2014 | 64.5 | 58.7 | 49.3 | Severe | | Severe | Severe | 56.8 | 43.4 | 28.2 | Severe | | Severe | Severe |
| Cameroon | 2004 | 2011 | 73.6 | 64.4 | 37.7 | Severe | | Severe | Moderate | 63.7 | 57.2 | 39.3 | Severe | | Severe | Severe |
| Congo | 2005 | 2012 | 67.1 | 64.8 | 56.6 | Severe | | Severe | Severe | 62.9 | 68.7 | 76 | Severe | | Severe | Severe |
| Congo DR | 2007 | 2014 | 72.9 | 60.3 | 32.8 | Severe | | Severe | Moderate | 70.0 | 59.4 | 36.5 | Severe | | Severe | Severe |
| Egypt | 2000 | 2014 | 34.5 | 29.5 | 28.1 | Moderate | | Moderate | Moderate | 24.3 | 23.2 | 25.6 | Moderate | | Moderate | Severe |
| Ethiopia | 2005 | 2016 | 54.3 | 58.7 | 58.4 | Severe | | Severe | Severe | 48.3 | 49.7 | 45.8 | Severe | | Severe | Severe |
| Ghana | 2003 | 2016 | 80.6 | 68.7 | 52.5 | Severe | | Severe | Severe | 68.5 | 58.6 | 46.2 | Severe | | Severe | Severe |
| Guinea | 2005 | 2012 | 78.4 | 79.7 | 76.4 | Severe | | Severe | Severe | 74.0 | 71.0 | 58.8 | Severe | | Severe | Severe |
| Haiti | 2000 | 2017 | 63.7 | 66.8 | 68.2 | Severe | | Severe | Severe | 61.2 | 67.8 | 72.2 | Severe | | Severe | Severe |
| Honduras | 2006 | 2012 | 40.8 | 30.0 | 14.6 | Severe | | Moderate | Mild | 33.2 | 28.5 | 24.1 | Moderate | | Moderate | Severe |
| India | 2006 | 2016 | 71.6 | 59.6 | 41.4 | Severe | | Severe | Severe | 63.1 | 56.1 | 46 | Severe | | Severe | Severe |
| Jordan | 2002 | 2018 | 39.7 | 31.1 | 25.5 | Moderate | | Moderate | Moderate | 32.3 | 32.4 | 31.3 | Moderate | | Moderate | Severe |
| Lesotho | 2004 | 2014 | 49.4 | 55.5 | 62.6 | Severe | | Severe | Severe | 55.5 | 50.2 | 42.9 | Severe | | Severe | Severe |
| Liberia | 2009 | 2016 | 62.5 | 81.8 | 95.6 | Severe | | Severe | Severe | 66.5 | 72.2 | 74.8 | Severe | | Severe | Severe |
| Madagascar | 2004 | 2016 | 72.1 | 44.8 | 19 | Severe | | Severe | Mild | 64.8 | 53.6 | 40.8 | Severe | | Severe | Severe |
| Malawi | 2004 | 2016 | 74.9 | 64.2 | 42.9 | Severe | | Severe | Severe | 67.2 | 57.0 | 39.2 | Severe | | Severe | Severe |
| Mali | 2001 | 2013 | 84.7 | 85.1 | 84.6 | Severe | | Severe | Severe | 75.7 | 67.4 | 52.9 | Severe | | Severe | Severe |
| Mozambique | 2011 | 2015 | 72.4 | 66.6 | 45.1 | Severe | | Severe | Severe | 60.4 | 57.3 | 46.4 | Severe | | Severe | Severe |
| Nepal | 2006 | 2016 | 50.2 | 56.2 | 61.3 | Severe | | Severe | Severe | 41.2 | 48.9 | 58 | Severe | | Severe | Severe |
| Niger | 2006 | 2012 | 86.2 | 74.3 | 27.1 | Severe | | Severe | Moderate | 78.1 | 69.8 | 39.9 | Severe | | Severe | Severe |
| Peru | 2000 | 2012 | 53.4 | 40.4 | 24.8 | Severe | | Severe | Moderate | 46.6 | 28.6 | 11.3 | Severe | | Moderate | Severe |
| Rwanda | 2005 | 2015 | 52.8 | 37.9 | 21.7 | Severe | | Moderate | Moderate | 47.0 | 30.1 | 14.5 | Severe | | Moderate | Severe |
| Senegal | 2005 | 2017 | 85.6 | 77.3 | 48.3 | Severe | | Severe | Severe | 78.2 | 62.9 | 30 | Severe | | Severe | Severe |
| Sierra Leone | 2008 | 2013 | 78.5 | 82.2 | 85 | Severe | | Severe | Severe | 73.3 | 73.0 | 65.7 | Severe | | Severe | Severe |
| Tanzania | 2005 | 2017 | 73.5 | 61.7 | 43.5 | Severe | | Severe | Severe | 67.2 | 53.0 | 34.3 | Severe | | Severe | Severe |
| Timor-Leste | 2010 | 2016 | 40.0 | 41.5 | 45.9 | Severe | | Severe | Severe | 32.8 | 42.6 | 63.3 | Moderate | | Severe | Severe |
| Togo | 2014 | 2017 | 73.9 | 77.9 | 81.5 | Severe | | Severe | Severe | 65.3 | 70.3 | 77.8 | Severe | | Severe | Severe |
| Uganda | 2001 | 2016 | 73.1 | 55.3 | 32 | Severe | | Severe | Moderate | 59.9 | 48.8 | 32.9 | Severe | | Severe | Severe |
| Zimbabwe | 2006 | 2015 | 62.0 | 38.2 | 15.9 | Severe | | Moderate | Mild | 59.4 | 38.6 | 20.8 | Severe | | Moderate | Severe |

**Table S13:** Countries with earliest, latest and predicted burden of anemia among children 6-59 months of age in low- and middle-income countries by mother’s education

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Earliest survey year** | **Latest survey year** | **Among children of below secondary educated mother** | | | | | | **Among children of secondary+ educated mother** | | | | | | | |
| **% anemia** | | | **Public health problem** | | | **% anemia** | | | | **Public health problem** | | | |
| **Earliest** | **Latest** | **2030** | **Earliest** | **Latest** | **2030** | **Earliest** | **Latest** | **2030** | **Earliest** | | **Latest** | **2030** |
| Albania | 2009 | 2018 | 20.0 | 28.7 | 43.8 | Mild | Moderate | Severe | 12.8 | 19.8 | 35.6 | Mild | | Mild | Moderate |
| Angola | 2007 | 2016 | 53.3 | 66.8 | 80 | Severe | Severe | Severe | 57.9 | 62.0 | 64.1 | Severe | | Severe | Severe |
| Armenia | 2000 | 2016 | 50.0 | 17.1 | 5.6 | Severe | Mild | Mild | 23.9 | 15.8 | 12.8 | Moderate | | Mild | Mild |
| Benin | 2001 | 2018 | 83.7 | 73.3 | 51.8 | Severe | Severe | Severe | 61.6 | 66.0 | 58.5 | Severe | | Severe | Severe |
| Bolivia | 2003 | 2008 | 55.1 | 63.4 | 80.8 | Severe | Severe | Severe | 43.4 | 60.0 | 90.3 | Severe | | Severe | Severe |
| Burkina Faso | 2003 | 2010 | 92.2 | 88.7 | 66.7 | Severe | Severe | Severe | 71.1 | 72.2 | 69.8 | Severe | | Severe | Severe |
| Burundi | 2010 | 2017 | 44.7 | 62.8 | 83.4 | Severe | Severe | Severe | 38.7 | 45.7 | 56.7 | Moderate | | Severe | Severe |
| Cambodia | 2000 | 2014 | 65.4 | 58.6 | 47.9 | Severe | Severe | Severe | 51.8 | 52.1 | 52.4 | Severe | | Severe | Severe |
| Cameroon | 2004 | 2011 | 72.0 | 63.9 | 39.9 | Severe | Severe | Moderate | 62.4 | 55.4 | 39.3 | Severe | | Severe | Moderate |
| Congo | 2005 | 2012 | 67.3 | 69.3 | 69.2 | Severe | Severe | Severe | 63.5 | 65.7 | 67.6 | Severe | | Severe | Severe |
| Congo DR | 2007 | 2014 | 74.1 | 60.2 | 29.5 | Severe | Severe | Moderate | 67.1 | 59.9 | 43.6 | Severe | | Severe | Severe |
| Egypt | 2000 | 2014 | 33.1 | 27.9 | 26.9 | Moderate | Moderate | Moderate | 27.2 | 27.2 | 30.4 | Moderate | | Moderate | Moderate |
| Ethiopia | 2005 | 2016 | 54.0 | 58.4 | 58.4 | Severe | Severe | Severe | 50.6 | 48.6 | 42.1 | Severe | | Severe | Severe |
| Ghana | 2003 | 2016 | 80.5 | 72.8 | 61.4 | Severe | Severe | Severe | 70.2 | 56.5 | 39.9 | Severe | | Severe | Moderate |
| Guinea | 2005 | 2012 | 77.6 | 78.9 | 76.5 | Severe | Severe | Severe | 73.4 | 65.0 | 41.9 | Severe | | Severe | Severe |
| Haiti | 2000 | 2017 | 64.1 | 68.8 | 71.2 | Severe | Severe | Severe | 55.9 | 64.7 | 70.4 | Severe | | Severe | Severe |
| Honduras | 2006 | 2012 | 39.6 | 31.2 | 19.2 | Moderate | Moderate | Mild | 30.6 | 25.6 | 20.1 | Moderate | | Moderate | Moderate |
| India | 2006 | 2016 | 73.3 | 63.6 | 48.5 | Severe | Severe | Severe | 62.9 | 54.7 | 44.3 | Severe | | Severe | Severe |
| Jordan | 2002 | 2018 | 35.2 | 35.9 | 37.3 | Moderate | Moderate | Moderate | 34.1 | 31.9 | 29.2 | Moderate | | Moderate | Moderate |
| Lesotho | 2004 | 2014 | 48.0 | 51.2 | 54.5 | Severe | Severe | Severe | 54.7 | 56.6 | 56.9 | Severe | | Severe | Severe |
| Liberia | 2009 | 2016 | 64.6 | 79.0 | 91.1 | Severe | Severe | Severe | 61.2 | 72.3 | 80.9 | Severe | | Severe | Severe |
| Madagascar | 2004 | 2016 | 73.1 | 45.0 | 19 | Severe | Severe | Mild | 62.5 | 47.1 | 27.8 | Severe | | Severe | Moderate |
| Malawi | 2004 | 2016 | 75.1 | 64.5 | 44.8 | Severe | Severe | Severe | 64.7 | 58.4 | 42.3 | Severe | | Severe | Severe |
| Mali | 2001 | 2013 | 83.5 | 83.2 | 80.1 | Severe | Severe | Severe | 65.4 | 64.8 | 63.3 | Severe | | Severe | Severe |
| Mozambique | 2011 | 2015 | 71.2 | 65.7 | 44 | Severe | Severe | Severe | 53.6 | 56.2 | 61.4 | Severe | | Severe | Severe |
| Nepal | 2006 | 2016 | 50.4 | 55.7 | 60.5 | Severe | Severe | Severe | 44.4 | 48.4 | 53.2 | Severe | | Severe | Severe |
| Niger | 2006 | 2012 | 85.2 | 74.0 | 31.1 | Severe | Severe | Moderate | 78.4 | 68.0 | 33.4 | Severe | | Severe | Moderate |
| Peru | 2000 | 2012 | 52.8 | 38.5 | 21.4 | Severe | Moderate | Moderate | 46.8 | 30.0 | 12.8 | Severe | | Moderate | Mild |
| Rwanda | 2005 | 2015 | 52.9 | 36.7 | 19.5 | Severe | Moderate | Mild | 42.4 | 36.4 | 28.4 | Severe | | Moderate | Moderate |
| Senegal | 2005 | 2017 | 84.3 | 73.4 | 41.2 | Severe | Severe | Severe | 68.2 | 64.7 | 45.6 | Severe | | Severe | Severe |
| Sierra Leone | 2008 | 2013 | 78.0 | 80.9 | 80.7 | Severe | Severe | Severe | 69.1 | 75.1 | 83 | Severe | | Severe | Severe |
| Tanzania | 2005 | 2017 | 72.5 | 59.7 | 41.3 | Severe | Severe | Severe | 70.1 | 57.5 | 35.6 | Severe | | Severe | Moderate |
| Timor-Leste | 2010 | 2016 | 38.7 | 42.6 | 51.2 | Moderate | Severe | Severe | 38.0 | 41.1 | 47.3 | Moderate | | Severe | Severe |
| Togo | 2014 | 2017 | 73.5 | 78.0 | 82.7 | Severe | Severe | Severe | 61.6 | 67.9 | 77.7 | Severe | | Severe | Severe |
| Uganda | 2001 | 2016 | 72.9 | 55.6 | 32.4 | Severe | Severe | Moderate | 63.3 | 49.6 | 33.2 | Severe | | Severe | Moderate |
| Zimbabwe | 2006 | 2015 | 61.6 | 39.1 | 17.7 | Severe | Moderate | Mild | 61.2 | 38.0 | 16.4 | Severe | | Moderate | Mild |

**Table S14:** Countries with earliest, latest and predicted burden of anemia among children 6-59 months of age in low- and middle-income countries by mother’s age

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Earliest survey year** | **Latest survey year** | **Among children of adolescent mother** | | | | | | **Among children of adult mother** | | | | | | |
| **% anemia** | | | **Public health problem** | | | **% anemia** | | | | **Public health problem** | | |
| **Earliest** | **Latest** | **2030** | **Earliest** | **Latest** | **2030** | **Earliest** | **Latest** | **2030** | **Earliest** | | **Latest** | **2030** |
| Albania | 2009 | 2018 | 16.6 | 29.1 | 52.3 | Mild | Moderate | Severe | 17.6 | 24.5 | 37.6 | Mild | | Moderate | Moderate |
| Angola | 2007 | 2016 | 61.9 | 75.9 | 86.2 | Severe | Severe | Severe | 52.7 | 64.4 | 76.1 | Severe | | Severe | Severe |
| Armenia | 2000 | 2016 | 55.5 | 10.8 | 2 | Severe | Mild | No problem | 23.2 | 15.9 | 13.3 | Moderate | | Mild | Mild |
| Benin | 2001 | 2018 | 90.5 | 81.9 | 54.8 | Severe | Severe | Severe | 81.9 | 71.8 | 50.6 | Severe | | Severe | Severe |
| Bolivia | 2003 | 2008 | 72.7 | 74.5 | 72.5 | Severe | Severe | Severe | 50.7 | 61.2 | 82.1 | Severe | | Severe | Severe |
| Burkina Faso | 2003 | 2010 | 95.4 | 95.0 | 88.9 | Severe | Severe | Severe | 91.5 | 87.6 | 64.6 | Severe | | Severe | Severe |
| Burundi | 2010 | 2017 | 63.9 | 75.1 | 86.4 | Severe | Severe | Severe | 44.1 | 60.8 | 81.3 | Severe | | Severe | Severe |
| Cambodia | 2000 | 2014 | 83.9 | 78.7 | 64.8 | Severe | Severe | Severe | 63.0 | 55.9 | 45.1 | Severe | | Severe | Severe |
| Cameroon | 2004 | 2011 | 83.5 | 72.0 | 33.2 | Severe | Severe | Moderate | 68.2 | 60.4 | 40 | Severe | | Severe | Severe |
| Congo | 2005 | 2012 | 66.8 | 77.9 | 89.9 | Severe | Severe | Severe | 65.2 | 66.2 | 64.7 | Severe | | Severe | Severe |
| Congo DR | 2007 | 2014 | 77.8 | 66.4 | 37.5 | Severe | Severe | Moderate | 71.5 | 59.7 | 35.4 | Severe | | Severe | Moderate |
| Egypt | 2000 | 2014 | 29.9 | 43.3 | 59 | Moderate | Severe | Severe | 30.5 | 27.1 | 26.7 | Moderate | | Moderate | Moderate |
| Ethiopia | 2005 | 2016 | 63.7 | 71.9 | 74.3 | Severe | Severe | Severe | 53.5 | 57.4 | 55.6 | Severe | | Severe | Severe |
| Ghana | 2003 | 2016 | 86.7 | 76.0 | 56.3 | Severe | Severe | Severe | 76.4 | 63.8 | 47 | Severe | | Severe | Severe |
| Guinea | 2005 | 2012 | 81.4 | 85.5 | 88.3 | Severe | Severe | Severe | 77.1 | 76.9 | 71.9 | Severe | | Severe | Severe |
| Haiti | 2000 | 2017 | 79.5 | 82.7 | 83.2 | Severe | Severe | Severe | 62.2 | 66.7 | 69.5 | Severe | | Severe | Severe |
| Honduras | 2006 | 2012 | 53.0 | 43.4 | 25.9 | Severe | Severe | Moderate | 36.6 | 27.9 | 16 | Moderate | | Moderate | Mild |
| India | 2006 | 2016 | 81.0 | 65.0 | 38.1 | Severe | Severe | Moderate | 68.9 | 58.5 | 43.1 | Severe | | Severe | Severe |
| Jordan | 2002 | 2018 | 56.1 | 43.1 | 39.6 | Severe | Severe | Moderate | 33.9 | 32.0 | 30.1 | Moderate | | Moderate | Moderate |
| Lesotho | 2004 | 2014 | 65.2 | 64.3 | 61.8 | Severe | Severe | Severe | 49.1 | 53.5 | 58.1 | Severe | | Severe | Severe |
| Liberia | 2009 | 2016 | 74.1 | 84.3 | 89.9 | Severe | Severe | Severe | 63.2 | 75.6 | 86.6 | Severe | | Severe | Severe |
| Madagascar | 2004 | 2016 | 83.7 | 57.1 | 22.6 | Severe | Severe | Moderate | 69.9 | 44.1 | 19.9 | Severe | | Severe | Mild |
| Malawi | 2004 | 2016 | 80.0 | 76.0 | 64.8 | Severe | Severe | Severe | 73.7 | 62.4 | 41.2 | Severe | | Severe | Severe |
| Mali | 2001 | 2013 | 84.2 | 86.2 | 86.5 | Severe | Severe | Severe | 82.6 | 81.6 | 78.1 | Severe | | Severe | Severe |
| Mozambique | 2011 | 2015 | 77.2 | 72.1 | 49 | Severe | Severe | Severe | 68.5 | 63.5 | 44 | Severe | | Severe | Severe |
| Nepal | 2006 | 2016 | 64.2 | 68.4 | 69 | Severe | Severe | Severe | 48.3 | 51.2 | 53.2 | Severe | | Severe | Severe |
| Niger | 2006 | 2012 | 92.6 | 80.8 | 20.2 | Severe | Severe | Moderate | 84.5 | 73.4 | 30.6 | Severe | | Severe | Moderate |
| Peru | 2000 | 2012 | 62.3 | 51.0 | 39.8 | Severe | Severe | Moderate | 49.0 | 31.6 | 14 | Severe | | Moderate | Mild |
| Rwanda | 2005 | 2015 | 54.8 | 58.6 | 66.5 | Severe | Severe | Severe | 52.0 | 36.3 | 20 | Severe | | Moderate | Moderate |
| Senegal | 2005 | 2017 | 89.8 | 83.6 | 55.5 | Severe | Severe | Severe | 82.6 | 71.6 | 40.3 | Severe | | Severe | Severe |
| Sierra Leone | 2008 | 2013 | 76.8 | 82.8 | 89.3 | Severe | Severe | Severe | 77.1 | 79.8 | 81.4 | Severe | | Severe | Severe |
| Tanzania | 2005 | 2017 | 77.8 | 79.7 | 67.6 | Severe | Severe | Severe | 72.1 | 58.3 | 39.1 | Severe | | Severe | Moderate |
| Timor-Leste | 2010 | 2016 | 48.5 | 53.7 | 63.7 | Severe | Severe | Severe | 38.2 | 41.6 | 50.1 | Moderate | | Severe | Severe |
| Togo | 2014 | 2017 | 83.9 | 77.0 | 38.5 | Severe | Severe | Moderate | 70.5 | 75.2 | 81 | Severe | | Severe | Severe |
| Uganda | 2001 | 2016 | 86.0 | 77.5 | 39.8 | Severe | Severe | Moderate | 71.0 | 52.8 | 30.9 | Severe | | Severe | Moderate |
| Zimbabwe | 2006 | 2015 | 74.7 | 54.1 | 29.7 | Severe | Severe | Moderate | 60.6 | 37.5 | 16 | Severe | | Moderate | Mild |

**Table S15:** Countries with earliest, latest and predicted burden of anemia among children 6-59 months of age in low- and middle-income countries by child sex

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Earliest survey year** | **Latest survey year** | **Among male** | | | | | | **Among female** | | | | | |
| **% anemia** | | | **Public health problem** | | | **% anemia** | | | **Public health problem** | | |
| **Earliest** | **Latest** | **2030** | **Earliest** | **Latest** | **2030** | **Earliest** | **Latest** | **2030** | **Earliest** | **Latest** | **2030** |
| Albania | 2009 | 2018 | 18.1 | 25.7 | 39.3 | Mild | Moderate | Moderate | 17.1 | 23.2 | 36.3 | Mild | Moderate | Moderate |
| Angola | 2007 | 2016 | 52.2 | 67.3 | 82.1 | Severe | Severe | Severe | 55.6 | 63.3 | 69.8 | Severe | Severe | Severe |
| Armenia | 2000 | 2016 | 25.3 | 16.1 | 12.9 | Moderate | Mild | Mild | 22.2 | 15.7 | 13.5 | Moderate | Mild | Mild |
| Benin | 2001 | 2018 | 84.1 | 72.6 | 49.9 | Severe | Severe | Severe | 80.3 | 71.7 | 54 | Severe | Severe | Severe |
| Bolivia | 2003 | 2008 | 52.3 | 65.2 | 87 | Severe | Severe | Severe | 51.0 | 58.6 | 75.4 | Severe | Severe | Severe |
| Burkina Faso | 2003 | 2010 | 91.7 | 88.7 | 69.5 | Severe | Severe | Severe | 91.5 | 87.1 | 59.4 | Severe | Severe | Severe |
| Burundi | 2010 | 2017 | 46.0 | 62.8 | 82.7 | Severe | Severe | Severe | 42.5 | 59.2 | 79.3 | Severe | Severe | Severe |
| Cambodia | 2000 | 2014 | 65.4 | 58.1 | 46.7 | Severe | Severe | Severe | 61.4 | 55.0 | 44.7 | Severe | Severe | Severe |
| Cameroon | 2004 | 2011 | 72.9 | 63.1 | 35.4 | Severe | Severe | Moderate | 65.9 | 59.5 | 42.7 | Severe | Severe | Severe |
| Congo | 2005 | 2012 | 66.7 | 65.8 | 61.9 | Severe | Severe | Severe | 63.9 | 68.4 | 74.8 | Severe | Severe | Severe |
| Congo DR | 2007 | 2014 | 74.9 | 61.9 | 32.5 | Severe | Severe | Moderate | 68.7 | 58.2 | 37.1 | Severe | Severe | Moderate |
| Egypt | 2000 | 2014 | 30.2 | 27.3 | 26.7 | Moderate | Moderate | Moderate | 30.9 | 27.5 | 28.4 | Moderate | Moderate | Moderate |
| Ethiopia | 2005 | 2016 | 55.0 | 57.9 | 56.3 | Severe | Severe | Severe | 52.7 | 57.7 | 57.7 | Severe | Severe | Severe |
| Ghana | 2003 | 2016 | 76.5 | 68.6 | 53.2 | Severe | Severe | Severe | 77.0 | 59.7 | 42.2 | Severe | Severe | Severe |
| Guinea | 2005 | 2012 | 77.8 | 77.4 | 70.5 | Severe | Severe | Severe | 77.0 | 77.8 | 75.8 | Severe | Severe | Severe |
| Haiti | 2000 | 2017 | 64.2 | 68.8 | 71.4 | Severe | Severe | Severe | 61.9 | 65.5 | 68.2 | Severe | Severe | Severe |
| Honduras | 2006 | 2012 | 39.3 | 30.2 | 16.7 | Moderate | Moderate | Mild | 36.2 | 28.3 | 17.7 | Moderate | Moderate | Mild |
| India | 2006 | 2016 | 69.2 | 58.5 | 43.4 | Severe | Severe | Severe | 70.0 | 58.8 | 42.3 | Severe | Severe | Severe |
| Jordan | 2002 | 2018 | 37.7 | 31.8 | 26.9 | Moderate | Moderate | Moderate | 30.3 | 32.7 | 33.6 | Moderate | Moderate | Moderate |
| Lesotho | 2004 | 2014 | 51.1 | 56.1 | 61.1 | Severe | Severe | Severe | 49.0 | 52.2 | 55.9 | Severe | Severe | Severe |
| Liberia | 2009 | 2016 | 67.2 | 80.4 | 91.6 | Severe | Severe | Severe | 60.5 | 72.5 | 82.3 | Severe | Severe | Severe |
| Madagascar | 2004 | 2016 | 72.1 | 47.0 | 21.6 | Severe | Severe | Moderate | 69.4 | 43.9 | 20.5 | Severe | Severe | Moderate |
| Malawi | 2004 | 2016 | 74.7 | 63.9 | 45.2 | Severe | Severe | Severe | 73.5 | 62.6 | 42.4 | Severe | Severe | Severe |
| Mali | 2001 | 2013 | 81.8 | 83.3 | 82.7 | Severe | Severe | Severe | 83.7 | 80.4 | 74.1 | Severe | Severe | Severe |
| Mozambique | 2011 | 2015 | 69.0 | 66.7 | 56.1 | Severe | Severe | Severe | 69.3 | 62.0 | 37.2 | Severe | Severe | Moderate |
| Nepal | 2006 | 2016 | 48.8 | 52.6 | 55 | Severe | Severe | Severe | 49.5 | 52.3 | 55.3 | Severe | Severe | Severe |
| Niger | 2006 | 2012 | 85.1 | 74.7 | 33.2 | Severe | Severe | Moderate | 84.8 | 72.7 | 29.6 | Severe | Severe | Moderate |
| Peru | 2000 | 2012 | 50.7 | 33.4 | 15.3 | Severe | Moderate | Mild | 48.4 | 31.9 | 14.3 | Severe | Moderate | Mild |
| Rwanda | 2005 | 2015 | 53.4 | 36.8 | 20.5 | Severe | Moderate | Moderate | 50.6 | 36.4 | 21.7 | Severe | Moderate | Moderate |
| Senegal | 2005 | 2017 | 85.9 | 74.5 | 40.2 | Severe | Severe | Severe | 79.8 | 69.4 | 40.8 | Severe | Severe | Severe |
| Sierra Leone | 2008 | 2013 | 78.0 | 80.5 | 81 | Severe | Severe | Severe | 76.2 | 79.4 | 81 | Severe | Severe | Severe |
| Tanzania | 2005 | 2017 | 72.4 | 61.0 | 43.6 | Severe | Severe | Severe | 72.3 | 57.8 | 38.5 | Severe | Severe | Moderate |
| Timor-Leste | 2010 | 2016 | 37.9 | 41.7 | 49.9 | Moderate | Severe | Severe | 39.1 | 42.0 | 48.9 | Moderate | Severe | Severe |
| Togo | 2014 | 2017 | 71.9 | 76.7 | 83.1 | Severe | Severe | Severe | 69.9 | 73.9 | 76.2 | Severe | Severe | Severe |
| Uganda | 2001 | 2016 | 72.6 | 55.5 | 32.9 | Severe | Severe | Moderate | 71.1 | 52.5 | 30.4 | Severe | Severe | Moderate |
| Zimbabwe | 2006 | 2015 | 63.5 | 39.8 | 17.2 | Severe | Moderate | Mild | 59.2 | 36.9 | 17.1 | Severe | Moderate | Mild |

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