

Anemia in the Kyrgyz Republic

USAID Advancing Nutrition Supports Anemia Reduction Efforts

Anemia and its Causes in the Kyrgyz Republic

The Ministry of Health (MOH) of the Kyrgyz Republic—in collaboration with United Nations Children’s Fund (UNICEF) and other partners—conducted the National Integrated Micronutrient and Anthropometric Survey (NIMAS) in the Kyrgyz Republic in 2021. The NIMAS provided biomarker data on the prevalence of anemia and its causes and risk among children 6–59 months of age, children aged 5–9 years, adolescent girls 10–18 years, non-pregnant women of reproductive (WRA) aged 15–49 years, and pregnant women. The survey also provided information on specific anemia interventions like infant and young child feeding (IYCF) practices and the availability and consumption of fortified foods.

Anemia is a moderate public health problem (>20 percent) among children under five and WRA in the Kyrgyz Republic. It is a mild public health problem (5–20 percent) among children aged five–nine years and adolescent girls (figure 1). Almost half (49.3 percent) of pregnant women in the Kyrgyz republic are anemic.

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Iron and folate deficiency are major contributors to anemia. Vitamin A deficiency contributes to anemia in children aged five–nine years, adolescent girls, and non-pregnant WRA.

Promote dietary diversity, quality, and use of local foods.

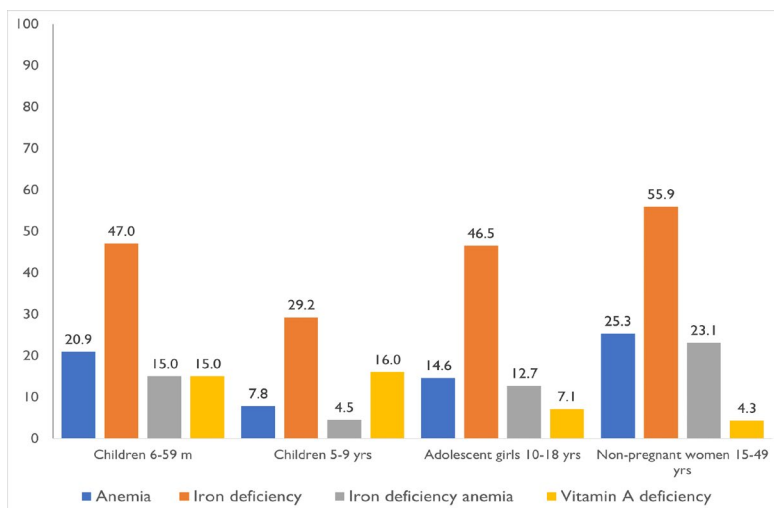
Maintain capacity strengthening efforts with training on IYCF, AWNA, and BFHI programs.

Identify solutions to challenges in uptake of IFA and Vitamin A supplementation.

Integrate water, sanitation, and hygiene (WASH) practices in nutrition messaging

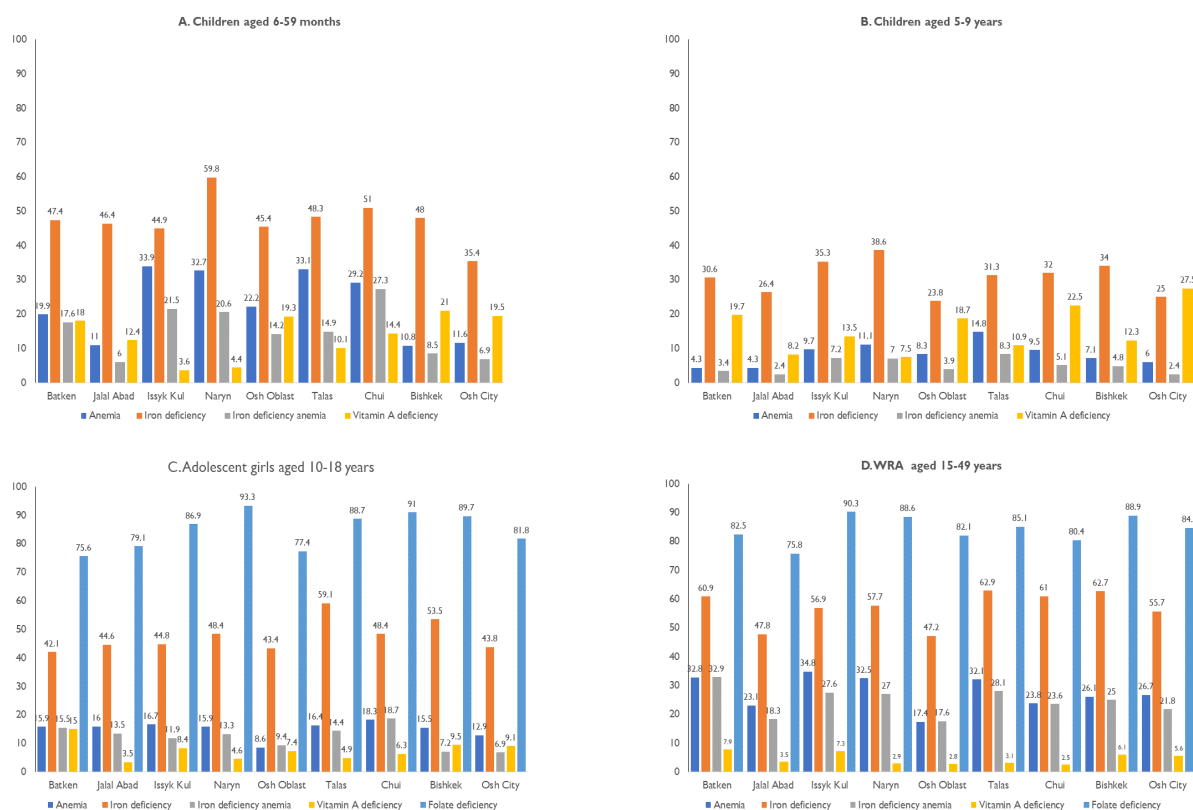
Strengthen enforcement of wheat flour fortification standards.

Figure 1: Prevalence of Anemia, Iron Deficiency, Iron Deficiency Anemia, and Vitamin A Deficiency in Children 6–59 Months, Children Aged 5–9 Years, Adolescent Girls 10–18 Years, and Women Of Reproductive Aged 15–49 Years in the Kyrgyz Republic



There is no significant variation in the prevalence of anemia and its main causes (iron and folate acid [IFA] deficiency) between the different oblasts (figure 2).

Figure 2: Regional Prevalence of Anemia, Iron Deficiency, Iron Deficiency Anemia, and Vitamin A Deficiency in Children 6–59 months (A), Children Aged 5–9 Years (B), Adolescent Girls 10–18 Years (C), and Women of Reproductive Aged 15–49 Years (D) in the Kyrgyz Republic



Iron and folate deficiency are major contributors to anemia. Prevalence of iron deficiency is over 40 percent among children under five, adolescent girls, and WRA; and over 20 percent among children aged five–nine years. Folate deficiency is over 80 percent among adolescent girls and non-pregnant women. Vitamin A deficiency also contributes to nutritional anemia in children aged five–nine years, adolescent girls, and non-pregnant WRA. Iron, as well as vitamin A deficiency, are highly significantly associated with anemia in women 15–49 years of age

Children under five with respiratory infections and children aged five–nine years with increased inflammatory markers had higher anemia prevalence.

Children aged five–nine years who had elevated inflammatory markers also had a higher prevalence of anemia compared to those without inflammation. Women living in households without access to safe drinking water have a significantly higher prevalence of anemia and iron deficiency.

Coverage of Key Interventions for Anemia in the Kyrgyz Republic

- Poor coverage of fortified foods and supplements in children under five, children aged five–nine years, and adolescent girls. Poor coverage deworming programs in children under five.
- IYCF indicators in children under five—good outcomes in early and sustained breastfeeding initiatives but poor performance of continued breastfeeding and dietary diversity and quality

indicators. Dietary diversity and quality are adequate in children aged five–nine years, adolescent girls, and WRA.

- Almost all surveyed households consume bread (99.2 percent) and had wheat flour in the household (95.7 percent). More than half (55.2 percent) of household respondents believed their flour was fortified. However, testing revealed that only 24.1 percent of wheat flour was fortified and 1.7 percent was fortified as per national requirements.

USAID Advancing Nutrition’s Anemia Prevention Efforts in the Kyrgyz Republic

USAID Advancing Nutrition works in partnership with national and local governments, village health committees, oblasts, district-level health centers, and local and international nongovernmental organizations to promote the uptake of the following 11 evidence-based practices:

1. consumption of IFA supplements by pregnant women
2. dietary diversity for women, with an emphasis on consumption of food sources of iron and foods that enhance iron absorption
3. dietary diversity for children aged 6–23 months, with an emphasis on consumption of food sources of iron, vitamin A, and foods that enhance iron absorption
4. optimal meal frequency for children 6–23 months of age
5. early initiation of breastfeeding
6. exclusive breastfeeding (EBF) from birth through the first six months
7. timely introduction of appropriate complementary foods
8. reduced consumption of high-calorie, low nutrient-density (i.e., junk) food
9. presumptive treatment of helminth infections for pregnant women and children
10. handwashing at five critical times: after using the latrine, after changing a baby’s diaper/cleaning a child, after handling animals, before preparing food, and before feeding a child
11. adoption of methods for safe and prolonged storage of nutrient-dense produce for the winter.

All these practices have an impact on anemia. Since 2020, USAID Advancing Nutrition has undertaken to improve the quality of nutrition services within the health system through training on IYCF, adolescent girls’ and women’s’ nutrition, and anemia (AWNA), and Baby-Friendly Hospital Initiative (BFHI) programs. In 2020, 26 trainings on IYCF for 433 individuals, including training of trainers, were conducted in Batken oblast. In 2021, USAID Advancing Nutrition completed 79 clinical nutrition trainings for 1,061 individuals, including 726 health workers on AWNA in Batken and Jalal-Abad oblasts. In 2022, USAID Advancing Nutrition inducted 25 new trainers from Batken and Jalal-Abad oblasts. They were trained to support nutrition services quality improvement efforts and a total of 35 qualified local trainers conducted 43 IYCF cascade trainings for 423 health providers in Batken and 391 in Jalal-Abad oblasts. They also conducted AWNA training for 575 health workers from Batken and Jalal-Abad oblasts.

The trained health workers subsequently conducted 3,881 nutrition and anemia counseling sessions for pregnant women and 6,560 counseling sessions for adolescent girls and WRA. As part of a general awareness campaign, USAID Advancing Nutrition ran a month-long initiative on preventing anemia; the project conducted a refresher AWNA training, hemoglobin testing, and counseling on preventing and treating anemia. The project also supported the health workers by funding 694 supervision visits to health centers in Batken and Jalal-Abad oblasts on IYCF and 1,760 on AWNA in Batken oblast.

Task Ahead for Anemia Reduction in the Kyrgyz Republic

The challenge faced by the government of the Kyrgyz Republic, especially its MOH, is to find the balance between conserving the successes of existing interventions (IYCF and health worker capacity strengthening) and focusing on areas (e.g., IFA) supplementation, deworming, dietary diversity, and quality) and population groups (children <five years, adolescent girls, nonpregnant and pregnant WRA) where additional attention is warranted. The approach should be two pronged: (1) improve health worker service delivery with training and supportive supervision activities and (2) concurrently increase evidenced-based practices and demand for increased quality of care among the population groups. Based on the USAID Advancing Nutrition experience, we suggest the following approaches:

- **Promote Dietary Diversity and Quality, and Use of Local Foods:** USAID Advancing Nutrition has conducted campaigns that promote the storage and consumption of nutrient-dense local foods that are rich in micronutrients. Using this as the template, the Kyrgyz MOH could continue to promote a dietary approach that will be more sustainable in the long-term due to the low cost of the program and the availability, accessibility, and affordability of the recommended foods.
- **Maintain Capacity Strengthening Efforts:** Continue the expanded training of health workers in the areas of IYCF, AWNA, and BFHI. The expanded training of new health care workers and existing workers should be accompanied by a program of supportive supervision and refresher training.
- **Identify Solutions to Challenges in Uptake of IFA and Vitamin A Supplementation:** The health system of the Kyrgyz Republic has the capacity to promote and expand the distribution of IFA A supplements to adolescent girls and WRA, and vitamin A supplements to children under five years and children aged five–nine years. After the supply of these essential supplements is ensured, they can be accompanied by awareness campaigns within the health system and in the community. Consider the use of micronutrient powders to supplement micronutrients in children under two years of age.
- **Integrate WASH practices:** Continue to integrate WASH practices in nutrition messaging and collaborate with WASH programs to increase adoption of these behaviors, especially in children under five and children aged five to nine years.
- **Strengthen enforcement of wheat flour fortification standards.** With almost universal consumption of bread and the availability of wheat flour in the household, this staple grain is an ideal vehicle to deliver micronutrients to the people of Kyrgyz Republic. Therefore, the MOH should improve adherence by wheat flour production industries to the national fortification standards at the production level, both for locally produced wheat flour and at the border for the proportion of wheat flour that is imported.



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