Introduction

The Comprehensive framework for action addresses and consolidates evidence on direct and indirect causes and risk factors of anaemia, and puts forward ways to improve the prevention and management of anaemia, leading to better health and well-being of populations. The technical and programmatic background plus supporting information are available in the full document and accompanying web annex (1, 2).

Anaemia is a strong indicator of overall health. It mainly affects infants, young children, pregnant and postpartum women, and menstruating adolescent girls and women (Box 1). It is most common in low- and middle-income countries, especially among populations living in conditions of poverty or social exclusion. Anaemia increases the risk of infections, reduced cognitive performance, poor pregnancy outcomes, and death in severe cases.

Anaemia has important economic consequences for individuals, families, communities and countries, including poor school performance and lower adult productivity due to fatigue.

Progress towards global targets is slow. WHO is committed to supporting countries in reducing by half the prevalence of anaemia in women of reproductive age during the period 2012 to 2025 (5). This target aligns with the 2030 Sustainable Development Goal indicator on anaemia in the same population group. However, the prevalence of anaemia has stagnated and the pace of progress in reducing anaemia has been less than half the pace of other indicators for nutrition, child and maternal health (1).

Strategies to reduce anaemia now require a significantly different approach. Anaemia has a complex etiology, with multiple possible causes and risk factors (6). Direct causes include micronutrient deficiencies, inflammation, infection, uterine bleeding and inherited red blood cell disorders.

BOX 1

Key facts

- Globally, it is estimated that 40% of all children aged 6–59 months, 37% of pregnant women and 30% of women 15–49 years of age are affected by anaemia (3).
- For all population groups combined, it is estimated that nearly one quarter of the world’s population, or 1.8 billion people, suffered from some form of anaemia in 2019 (4).

Whereas previously anaemia has primarily been addressed through the nutrition lens, the importance of addressing all direct causes and underlying risk factors such as poverty, gender, social and environmental inequities is becoming increasingly clear (7).

Progress in reducing anaemia depends on the meaningful participation and collective action of stakeholders at all levels, including national and local governments, educational institutions, civil society organizations, food producers, and local and international organizations. The Comprehensive framework for action describes an inclusive approach that brings together multiple actors and sectors.

The Framework lays out five key action areas that are needed to increase the coverage and uptake of interventions designed to reduce anaemia (Fig. 1).
Fig. 1. Framework for accelerating anaemia reduction

**2030 SUSTAINABLE DEVELOPMENT GOALS (SDGs)**
Zero hunger (SDG 2) and good health and well-being (SDG 3)

**SDG TARGET 2.2** End all forms of malnutrition

**2025 WORLD HEALTH ASSEMBLY TARGET 2**
Achieve a 50% reduction of anaemia in women of reproductive age

**PHYSIOLOGICAL MECHANISMS**
Optimize haemoglobin synthesis, prevent excessive destruction of red blood cells, and decrease blood loss

**TACKLING THE DIRECT CAUSES OF ANAEMIA**

**OUTCOME 1** Improved micronutrient status

**OUTCOME 2** Reduced infection, inflammation, and chronic diseases

**OUTCOME 3** Reduced gynaecological and obstetric conditions (e.g. abnormal uterine bleeding)

**OUTCOME 4** Improved screening and management of inherited red blood cell disorders

**IMPROVE SUSTAINED, EQUITABLE, AND EFFECTIVE COVERAGE OF PRIORITY INTERVENTIONS FOR ANAEMIA PREVENTION, DIAGNOSIS, AND TREATMENT**

**ACTION AREAS**

- Analyse data on causes and risk factors
- Prioritize key preventive and therapeutic interventions
- Optimize service delivery across platforms and sectors
- Strengthen leadership, coordination, and governance at all levels
- Expand research, learning, and innovation

**CONTRIBUTING SECTORS**
Five action areas for accelerating anaemia reduction

1. Analyse data on causes and risk factors for anaemia
Diagnostic tools are essential for collecting, analysing and interpreting data that will help understand context-specific causes and risk factors of anaemia. Getting the right data is crucial to identifying how best to intervene.

2. Prioritize key preventive and therapeutic interventions
Once there is a better understanding of the causes and risk factors of anaemia, the data can be used to prioritize the most appropriate interventions to improve haemoglobin concentrations and reduce anaemia prevalence [8].

3. Optimize service delivery across platforms and sectors
After prioritizing the relevant interventions that address the local causes and risk factors of anaemia, coordination must be done with the appropriate implementing sectors. In some cases, interventions can be integrated into existing delivery platforms or programmes. Other situations may require increased coordination with complementary interventions, or simply the co-location of interventions and service delivery. Common systems of monitoring and evaluation will help ensure that interventions are delivered successfully [9].

4. Strengthen leadership, coordination, and governance at all levels
Sustainable and sustained work on reducing anaemia, especially across sectors, requires strong commitment, leadership, coordination, and communication. One way to hold leaders accountable is to incorporate shared tasks and indicators into workplans across sectors. This will include social and behaviour change communication to raise awareness at the political, social and individual levels.

5. Expand research, learning and innovation
Implementation research will help determine how best to improve the design and delivery of interventions to enhance their reach, effectiveness in different contexts, and return on investment. There is an urgent need to develop strong economic arguments that consider and include all causes of anaemia.

Roles for different actors

Here are suggestions of what some of the main actors can do to help reduce anaemia:

- **Member States** can prioritize the prevention and reduction of anaemia by collecting and using data to inform targeted actions. These include developing, financing and implementing equitable policies, plans and strategies, and mobilizing investments.

- **Civil society** can advocate, mobilize communities, and monitor commitments. Its role is crucial in contributing to national discourse on anaemia reduction.

- **Academia, researchers and funding agencies** can generate evidence and ensure it is easy to use in making decisions. By including policymakers in research design, this group can better seek answers to the questions that governments have prioritized. They can offer a more nuanced understanding of how risk factors for anaemia interact, and advocate for advancing innovation in diagnostics and implementation science.

- **International organizations** can support Member States’ leadership in developing national and sub-national strategies to accelerate anaemia reduction. They can foster innovation in people-centred and culturally appropriate tools and services, and support implementation research. They can advance the development of the economic argument for investing in accelerating anaemia reduction.

- **Professional associations and societies** can educate their members, other professionals and the public about the importance of coming together to address anaemia comprehensively.

- **Media** can inform the general population by telling human interest stories and reinforcing a more comprehensive narrative on anaemia. It can influence social norms, promote the use of health services, and strengthen demand for public accountability.
The Anaemia Action Alliance, established in 2022, brings together a broad group of actors committed to reducing anaemia. The Alliance has four workstreams, each with a dedicated working group to share information and expertise:

- **National integrated anaemia action** to support countries putting multisectoral anaemia programmes and policies into practice.
- **Programmatic implementation** to improve the quality and coverage of existing recommendations on the prevention and management of anaemia.
- **Investment for anaemia reduction** to foster global and domestic investments in anaemia research and implementation of national comprehensive approaches to the prevention and management of anaemia.
- **Integrated research** to consolidate existing research, and foster the generation of new research where needed, that addresses evidence gaps.

These workstreams support the adaptation and implementation of the WHO Comprehensive framework for action. The Alliance will harness experiences and expertise from current and past anaemia reduction initiatives and other multisectoral approaches, adapting and amplifying successes through collaborating partners, advocacy and communications, and technical support.

The Alliance is hosted by WHO working in close collaboration with UNICEF, and includes government organizations and technical institutions, intergovernmental organizations, and non-State actors. Participants represent multiple disciplines, sectors and geographies. To find out more about the Alliance, and how your organization can participate, please visit https://www.who.int/teams/nutrition-and-food-safety/anaemia-action-alliance.

References and resources


