
Progress report on the strategic framework for blood safety and availability, 2016–2025

Introduction

1. In October 2016, the 63rd session of the WHO Regional Committee for the Eastern Mediterranean adopted resolution EM/RC63/R.5 endorsing the regional strategic framework for blood safety and availability 2016–2025 and its framework for action.
2. The implementation of the strategic framework has continued, with a focus on: leadership and governance of blood systems; coordination and collaboration; adequacy and safety of blood and blood products, especially during emergencies; appropriate clinical use; and quality management systems. In addition, in line with the recommendations of the 69th session of the WHO Regional Committee for the Eastern Mediterranean, the scope of the blood programme has expanded to include other products of human origin, including organs, tissues and cells, and has contributed to global efforts on the management of the donation and use of these products.
3. This report provides a progress update on implementation by Member States and WHO during the fourth two-year period of the 10-year strategic framework, as well as the challenges and the way forward.

Progress update

Strengthening the leadership and governance of national blood systems

4. During the fourth two-year period, WHO has continued to support countries to strengthen blood regulation: Egypt established a national blood monitoring council to support blood regulation and endorsed national blood standards; the Islamic Republic of Iran hosted the first G5 meeting of directors of blood transfusion services; Lebanon has been implementing a blood system reform programme; Libya established a national blood transfusion authority; Pakistan developed a new national blood policy and strengthened support to provincial blood transfusion authorities to carry out regulatory functions; Saudi Arabia initiated a national blood reform programme to consolidate blood banks and establish blood regulation; Somalia inaugurated a national blood centre in Mogadishu; Sudan initiated accreditation of the national blood bank through the African Society for Blood Transfusion Accreditation Programme; and Morocco, Oman and Tunisia were supported in their efforts to establish national organ donation and transplantation programmes. In addition, the WHO Regional Office for the Eastern Mediterranean, in collaboration with WHO headquarters, WHO collaborating centres and partners, organized and supported online workshops on: blood regulation; the WHO global benchmarking tool + Blood; the organization and management of national blood systems; strengthening data and information management for blood and transfusion safety and the capacity to report to the Global Database on Blood Safety; organ donation and transplantation; and haematopoietic stem cell transplantation. The inclusion of blood, blood components and plasma-derived medicinal products in the national list of essential medicines was promoted and advocated in all countries.

Supporting coordination and collaboration

5. The WHO Regional Office has been working closely with WHO collaborating centres in the Islamic Republic of Iran (Iranian Blood Transfusion Organization), Spain (National Transplant Organization) and Tunisia (National Blood Transfusion Centre of Tunis) on blood regulation, blood donor management, quality management systems and the donation and transplantation of organs, tissues and cells.

6. The WHO Regional Office has also collaborated with and provided support to many organizations in the area of blood safety and availability, including with the Arab Authority for Blood Transfusion Services, under the Arab League, as well as to global and regional professional societies, such as the Africa Society for Blood Transfusion, Arab Transfusion Medicine Forum, Asian Association of Transfusion Medicine, Association for the Advancement of Blood and Biotherapies (formerly the American Association of Blood Banks), and International Society of Blood Transfusion, and patient associations, including the Hemophilia Eastern Mediterranean Region Network, Thalassaemia International Federation, and World Federation of Hemophilia, in addition to other international and regional partners, including the Blood Regulators Network, International Haemovigilance Network, International Plasma and Fractionation Association, and the Worldwide Network for Blood and Marrow Transplantation.

Strengthening the provision of safe blood and blood products to meet patients' needs

7. With contributions from health ministries and other relevant stakeholders in the Region, WHO developed guidance on stepwise implementation of haemovigilance systems, ensuring a sufficient supply of safe blood and blood components during emergencies, and identifying barriers in blood services using the blood system self-assessment tool. The WHO Advisory Group on Blood Regulation, Availability and Safety, including experts from Egypt, Oman, Pakistan and Saudi Arabia as members representing the Region, meets regularly and provides technical guidance. In collaboration with the WHO Collaborating Centre for Research and Training on Blood Safety in the Islamic Republic of Iran, capacity-building workshops were conducted on the preparation of blood components and on the lessons learned in achieving 100% voluntary blood donation. In addition, the WHO Regional Office is working closely with the French Biomedicine Agency on improving access to the donation and transplantation of organs, tissues and cells in the Region.

8. The availability and safety of blood transfusion during humanitarian emergencies remains a major concern in the Region. WHO provided technical support to affected countries and territories (Afghanistan, Libya, Iraq, Palestine, Somalia, Sudan, the Syrian Arab Republic and Yemen) to implement the recommendations in the recently-published WHO guidance on ensuring a sufficient supply of safe blood and blood components during emergencies.¹ In collaboration with the World Federation of Hemophilia, WHO also facilitated donations of clotting factor concentrates to Afghanistan, Palestine and Sudan.

9. To support countries to optimize the use of plasma for fractionation, reduce plasma wastage and facilitate the integration of blood and plasma programmes, WHO and partners supported efforts to increase the supplies of plasma-derived medical products in the Region through: holding a regional workshop on the optimal use of recovered and source plasma for fractionation (in the Islamic Republic of Iran) and a subregional workshop on plasma fractionation and haemovigilance (in Saudi Arabia); providing technical guidance on the implementation of a national plasma fractionation project in Egypt and the initiation of plasma fractionation projects in Pakistan and Saudi Arabia; and strengthening ongoing plasma fractionation programmes in the Islamic Republic of Iran, Morocco and Tunisia.

Promoting appropriate clinical use of blood and blood products

10. Inappropriate use of blood, unsafe transfusion practices and a lack of effective patient blood management programmes continue to be major concerns in the Region. WHO has encouraged and supported countries to implement the recommendations included in the 2021 WHO policy brief on patient blood management.² Efforts are also ongoing to establish hospital transfusion committees for improving the clinical governance of blood transfusion services.

¹ WHO guidance on ensuring a sufficient supply of safe blood and blood components during emergencies. Geneva: World Health Organization; 2023 (<https://iris.who.int/handle/10665/366870>, 22 May 2024). License: CC BY-NC-SA 3.0 IGO.

² The urgent need to implement patient blood management: policy brief. Geneva: World Health Organization; 2021 (<https://iris.who.int/handle/10665/346655>, accessed 22 May 2024). License: CC BY-NC-SA 3.0 IGO.

Strengthening quality system management throughout the blood transfusion chain

11. Quality system management and haemovigilance remain suboptimal in most countries of the Region. WHO is encouraging countries to establish appropriate quality management systems for blood supply and transfusion systems. To this end, quality management training was conducted for Libya. WHO is also developing technical guidance on the stepwise implementation of national haemovigilance systems.

12. The WHO Regional Office also supported data collection on blood safety and availability for the Global Database on Blood Safety and on donation and transplantation for the Global Observatory on Donation and Transplantation, and disseminated the resulting global reports to Member States.

Challenges

13. The regulatory oversight of blood remains weak, with limited oversight by governments of the quality of blood products. Similarly, the centralization of blood testing and processing is limited to a few countries in the Region, affecting the quality of blood products and resulting in minimal economies of scale in the majority of countries.

14. Inadequate efforts are being made to guarantee regular voluntary non-remunerated donation of blood and plasma, and to establish effective and sustainable blood donor management programmes. The emerging trend towards collecting plasma for fractionation from compensated donors will negatively affect the voluntary non-remunerated blood donation programmes.

15. Wastage of plasma due to a lack of integration of blood and plasma programmes and absence of national or regional mechanisms for plasma fractionation is still a challenge in most countries.

16. A lack of adequate resources at WHO has affected the provision of sustained and coordinated technical support to Member States to implement the regional strategic framework for blood safety and availability.

The way forward

17. Member States are urged to continue taking action to accelerate implementation of the strategic framework, with a focus on updating the organization of their national blood systems through centralization of blood testing and processing and establishing appropriate regulatory systems for blood and blood products.

18. Member States should continue to promote and support the establishment of effective blood donor management programmes and promote regular voluntary non-remunerated blood and plasma donations, including converting family replacement donors to regular voluntary non-remunerated donors and promoting voluntary non-remunerated plasma donations for plasma fractionation.

19. Member States should facilitate the development of national and regional capacity for plasma fractionation to optimize the use of plasma and reduce its wastage.

20. WHO will develop a regional strategic framework for increasing the availability, ethical access and oversight of the transplantation of human cells, tissues and organs, in line with resolution WHA77.4 of the Seventy-seventh World Health Assembly.

21. The current regional strategic framework for blood safety and availability 2016–2025 should be revised and extended beyond 2025.