

2020-2030

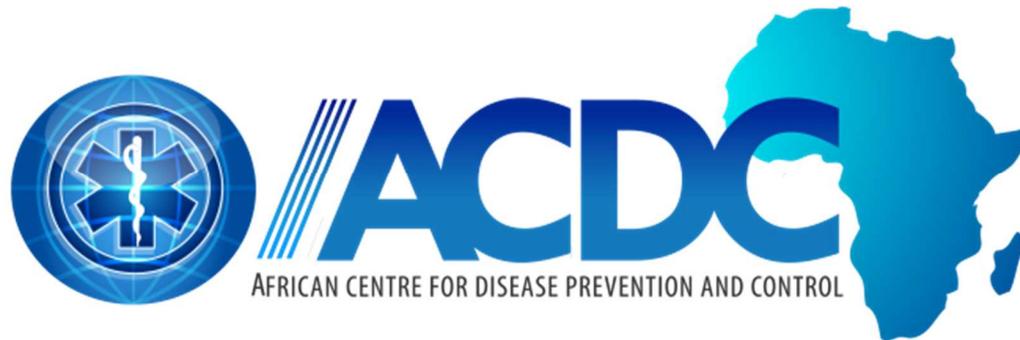


AFRICA HEALTH
ORGANISATION

SAFE BLOOD

AHO PLAN OF ACTION FOR
UNIVERSAL ACCESS TO SAFE
BLOOD

Partners



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Preface

AHO reaffirmed her commitment to universal health coverage in Africa. The commitment is also expressed in the targets of the AHO Strategic Plan 2020-2030, in which universal health coverage is one of the main unifying elements. Universal access to blood transfusions and safe blood products is an essential service for universal health coverage, helping to save millions of lives and improving the health of people who need them. Blood transfusions have been identified as one of the eight key life-saving interventions in health centres that offer emergency obstetric services.

Transfusions are also necessary for the care of: *a)* children with severe anaemia; *b)* patients with haemoglobin disorders such as thalassemia and sickle cell anaemia; *c)* people injured in accidents; *d)* cancer patients; *e)* people who undergo major surgery and other surgical interventions such as transplants; and *f)* patients with chronic age-related diseases such as bleeding resulting from vascular problems or orthopaedic surgery, among other causes. These groups are particularly vulnerable to blood scarcity and unsafe blood, since they are exposed to transfusion-transmitted infections such as HIV and hepatitis B and C.

In light of the above, this Plan of Action seeks to promote universal, timely access to safe blood in order to save lives and improve the health conditions of all patients who need it.

Every year, over 500,000 women die worldwide during pregnancy, childbirth, or the postpartum period, and 99% of these deaths occur in the developing world. An estimated 25% of these deaths are due to haemorrhage during delivery, the most common cause of maternal mortality, accounting for 21% of maternal deaths in Africa. If not addressed, this problem could compromise the target of reducing maternal mortality and the enjoyment of the right to life, personal integrity, and the highest attainable standard of health, among other human rights. Maternal mortality from haemorrhage and the subsequent lack of blood for transfusion can be considered a human rights violation. An inversely proportional relationship is observed between the maternal mortality ratio and the availability of blood; in countries where the availability of blood is low, maternal mortality is higher



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Introduction

1. This document is presented with a two-fold purpose: for the countries of Africa to use this Plan as a reference when drafting national plans and strategies, tailoring it to their own needs; and for them to monitor and evaluate its implementation in order to reach the targets set for 2019.
2. AHO reaffirmed her commitment to universal health coverage in Africa. The commitment is also expressed in the targets of the AHO Strategic Plan 2020-2030, in which universal health coverage is one of the main unifying elements. Universal access to blood transfusions and safe blood products is an essential service for universal health coverage, helping to save millions of lives and improving the health of people who need them. Blood transfusions have been identified as one of the eight key life-saving interventions in health centres that offer emergency obstetric services.
3. Transfusions are also necessary for the care of: *a)* children with severe anaemia; *b)* patients with haemoglobin disorders such as thalassemia and sickle cell anaemia; *c)* people injured in accidents; *d)* cancer patients; *e)* people who undergo major surgery and other surgical interventions such as transplants; and *f)* patients with chronic age-related diseases such as bleeding resulting from vascular problems or orthopaedic surgery, among other causes. These groups are particularly vulnerable to blood scarcity and unsafe blood, since they are exposed to transfusion-transmitted infections such as HIV and hepatitis B and C.
4. In light of the above, this Plan of Action seeks to promote universal, timely access to safe blood in order to save lives and improve the health conditions of all patients who need it.
5. In this regard, the Plan is the result of: *a)* the systematization of the priorities and recommendations of the AHO Global Strategic Plan for Universal Access to Safe Blood Transfusion (2); *b)* the work done in Africa for over a decade (3); *c)* the results of the evaluation of the Africa Plan of Action for Transfusion Safety (4); *d)* the contributions made by the AHO expert group and external experts; and *e)* the contributions received from the national blood programs in the Region.

Background

6. Every year, over 500,000 women die worldwide during pregnancy, childbirth, or the postpartum period, and 99% of these deaths occur in the developing world. An estimated 25% of these deaths are due to haemorrhage during delivery, the most common cause of maternal mortality, accounting for 21% of maternal deaths in Africa. If not addressed, this problem could compromise the target of reducing maternal mortality and the enjoyment of the right to life, personal integrity, and the highest attainable standard of health, among other human rights. Maternal mortality from haemorrhage and the subsequent lack of blood for transfusion can be considered a human rights violation. An inversely proportional relationship is observed between the maternal mortality ratio and the availability of blood; in countries where the availability of blood is low, maternal mortality is higher
7. To achieve universal access to safe blood for transfusions key strategies must be strengthened, among them: ensuring self-sufficiency in blood and blood products through voluntary non-remunerated blood donation; improving the quality of donated blood (from the donor's arm to the recipient's arm); maximizing appropriate blood use; strengthening human resources; adopting new advances; and establishing strategic partnerships with the different sectors involved in the area.

10. Finally, in 2016, a group of external experts in transfusion medicine from different countries and organizations evaluated the Africa Plan of Action for Transfusion Safety. Their evaluation was presented to the AHO Health Congress, with the following recommendations: *a*) to continue the strengthening of blood collection, screening, and processing; *b*) to achieve the goal of 100% voluntary donation (mainly repeat donations); and *c*) to establish quality control systems. If these basic recommendations are followed, it will be possible for Africa to obtain sufficient quantities of safe blood in a timely fashion.

Situation Analysis

11. Some countries in Africa have specific national blood legislation, while others have an integrated, intersectoral, national strategic blood plan with resources for its implementation, monitoring, and evaluation. In some areas, a specific health ministry entity is responsible for planning, monitoring, and evaluating the national blood system; national intersectoral blood commissions.

12. Furthermore, despite the demonstrated benefits of reducing the number of services that process blood—in terms of quality, safety, and lowering costs—the number of processing centres Production in the other countries is less than 5,000 units/bank/year, a figure that some studies have shown not to be cost-effective and that can compromise blood quality and safety (29, 30)

13. When reorganizing blood services networks, each country should give particular consideration to its specific needs, including its geographic and demographic characteristics, communication channels, and regional needs to ensure that blood is available and accessible where it is needed.

16. The percentage of volunteer blood donors in Africa remained at around 41.4% in 2010-2011, meaning that the number of volunteer donors has not increased

17. Some countries reported having implemented some components of quality systems. However, certain aspects require greater development, for example, achieving 100% screening for transfusion-transmitted infections such as the human immunodeficiency virus (HIV), hepatitis B HBsAg, hepatitis C (HCV), and syphilis. In 2011, 99.7% of blood was screened in Latin America and the Caribbean, which indicates that 107,702 blood units are not being screened for some of these infectious agents. With regard to *T. cruzi*, 202,610 units were not screened for this marker in Latin America in 2011. (Table 3, available at

18. It should be pointed out that there is insufficient evidence in the Region to support the regulation of hepatitis E screening in high-risk groups, such as patients who undergo transplants and similar surgical interventions, patients on dialysis, and pregnant women who need surgery. As a result, research should be conducted in order to reach timely conclusions on this subject.

19. With regard to the separation of blood units into components, a figure of 62.9% was achieved for red blood cell concentrates in 2011 in Africa.

20. When the increased availability of red blood cells is compared with the number of units of red blood cells discarded due to expiration, it is observed that 10.3% was discarded in 2011—a slight improvement in this indicator over the 14.1% in 2009. This indicates that 799,738 units of red blood

cells were no longer available for transfusion to patients because they had passed their expiration date

21. Concerning the rational use of blood and blood products, some countries in Africa reported having guidelines for the clinical use of blood, while only seven have transfusion committees in 75% of hospitals at the national level. From the information available in the countries, it is not possible to characterize blood recipients by age, sex, and pathology or determine the epidemiological factors that affect needs or the estimated number of units transfused by event.

22. Concerning the public health functions involved in health surveillance and hemovigilance, few countries have programs for the inspection, monitoring, and oversight of blood services. Concerning the monitoring of adverse transfusion-related events, only two countries reported having information, research, and analysis mechanisms for timely decision-making. This situation underscores the need to integrate and harmonize blood and other public health indicators to improve hemovigilance and health surveillance. This would make it possible to determine whether the blood supply is self-sufficient, accessible, timely, and safe, and how it is affecting national morbidity and mortality. It would also make it possible to design risk management plans aimed at identifying and managing the risks associated with the transfusion chain in terms of blood safety and adverse events in donation and transfusion, which are related to blood supply, access, and availability, as well as emergencies and disasters.

Plan of Action (2020-2030)

Goal

23. The goal of this Plan is to promote universal access to safe blood through voluntary non-remunerated donations to help save lives and improve the health of patients who need them.

24. This Plan advocates appropriate blood use and greater leadership by health authorities, urging them to implement quality management programs in the transfusion chain (from promoting blood donation to monitoring patients) and to integrate the blood system into the national health system. Ultimately, this Plan calls for the restructuring of blood services, based on efficient and sustainable models.

Strategic Lines of Action

25. Given this background and consistent with the progress made in the Region toward maintaining achievements and tackling new challenges, the regional Plan 2020-2030 focuses on the following critical areas:

- a) effective and sustainable integration of national blood programs and services into the national health system to achieve blood self-sufficiency, safety, efficiency, availability, and universal access to blood and blood products;
- b) self-sufficiency in safe blood and blood products through 100% voluntary non remunerated donations;

- c) Quality management in the national blood system and screening for transfusion-transmitted infections;
- d) Health surveillance, hemovigilance, risk management, monitoring, and evaluation.

Strategic Line of Action 1: Effective and sustainable integration of national blood programs and services into the national health system to achieve blood self-sufficiency, safety, efficiency, availability, and universal access to blood and blood products.

26. The intention is to guarantee, through greater political will and the participation of the ministries of health and other sectors, the countries' commitment to making it a national priority to achieve blood self-sufficiency, safety, availability, and universal access to blood and blood products, given that blood for transfusions is an indispensable cross-cutting health intervention and a basic requirement for guaranteeing the right to the enjoyment of the highest attainable standard of health and other related human rights.

Objective 1.1. Strengthen planning, implementation, monitoring, and evaluation processes in national blood programs.

Indicators:

1.1.1 Number of countries that have a specific functioning entity in the ministry of health that is responsible for planning, monitoring, and evaluation of the national blood system.
(Baseline: 27/41. Target: 36 countries)

1.1.2 Number of countries that have a functioning intersectoral national blood commission or advisory mechanism.
(Baseline: 14/41. Target: 21 countries)

1.1.3. Number of countries whose blood policy includes self-sufficiency, availability, and universal access to safe blood and blood products.
(Baseline: 18/41. Target: 26 countries)

Objective 1.2. Include the issue of safe blood in national health plans in order to ensure resources and intersectoral support.

Indicator:

1.2.1 Number of countries that have an integrated intersectoral national strategic blood plan that includes human resources training, monitoring and evaluation of the plan, and guaranteed resources for its implementation.
(Baseline: 13/41. Target: 21 countries)

Objective 1.3. Organize and consolidate an integrated blood services network within the health services network, tailored to the needs of each country.

Indicator:

1.3.1. Number of countries with more than one processing center that have increased the average number of units processed per blood bank/year (including screening) to over 5,000 units as a result of the restructuring of the blood services network.

(Baseline: 12/25. Target: 17 countries)

Strategic Line of Action 2: Self-sufficiency in safe blood and blood products through 100% voluntary non-remunerated donations.

27. The supply of blood and blood products should be based on voluntary non-remunerated donations to ensure blood self-sufficiency, availability, and safety; and on the promotion of healthy lifestyles, participation, and public solidarity.

Objective 2.1. Calculate the country's need for blood and blood products to achieve self-sufficiency in safe blood.

Indicator:

2.1.1 Number of countries that have calculated their blood needs at the national and regional level.

(Baseline: 6/41. Target: 12 countries)

Objective 2.2. Reach blood self-sufficiency through non-remunerated voluntary blood donations.

Indicator:

2.2.1 Number of countries that reach 100% non-remunerated voluntary blood donations.

(Baseline: 8/41. Target: 16 countries).

Strategic Line of Action 3: Quality management in the national blood system and screening for transfusion-transmitted infections.

28. This is aimed at fostering the countries' commitment to ensuring that their national blood system operates under a quality management framework and achieves 100% screening for the infections listed in AHO recommendations, with a view to achieving blood self-sufficiency, safety, and availability, and universal access to blood and blood products.

Objective 3.1. Establish, monitor, and evaluate the quality management system in the blood services network, which includes screening for HIV, HBV, HCV, syphilis, and *T. cruzi* (the latter in endemic areas).

Indicators:

3.1.1 Number of countries that screen 100% of blood units for transfusion for HIV, HBV, HCV, syphilis, and *T. cruzi*.

(Baseline: 39/41. Target: 41 countries)

3.1.2 Number of countries that have a national program for external serology performance evaluations.

(Baseline: 22/41. Target: 27 countries)

3.1.3 Number of countries that have a national program for external immunohematology performance evaluations.

(Baseline: 12/41. Target: 18 countries)

Objective 3.2. Adopt the necessary mechanisms to increase the availability and appropriate use of blood and blood products.

Indicators:

3.2.1 Number of countries that have functioning transfusion committees in at least 75% of hospitals that perform daily transfusions.

(Baseline: 7/41. Target: 12 countries)

3.2.2 Number of countries that have national guidelines in place for the appropriate use of blood and blood products.

(Baseline: 20/41. Target: 30 countries)

3.2.3 Five percent (5%) reduction, in Africa, in the number of red blood cell units discarded due to expiration.

(Baseline 10.3%. Target: 5.3%)

Strategic Line of Action 4: Health surveillance, hemovigilance, risk management, monitoring, and evaluation.

29. The purpose of this strategic line is to strengthen the surveillance, evaluation, and monitoring system in order to obtain information to identify and implement timely and appropriate interventions that will ensure sufficient supply, safety, and availability of blood, and universal access to blood and blood products.

Objective 4.1. Strengthen the national blood system so that health surveillance is included in blood services.

Indicator:

4.1.1 Number of countries that have a national model for inspection, surveillance, and oversight in blood services.

(Baseline: 20/41. Target: 30 countries)

Objective 4.2. Strengthen the national blood system to integrate hemovigilance in blood services.

Indicator:

4.2.1 Number of countries that have a national hemovigilance system

(Baseline: 2/41. Target: 7 countries)

Objective 4.3. Establish a mechanism to enable countries to monitor the implementation of their national plan.

Indicator:

4.3.1 Number of countries that annually report the indicators of their national plan in response to the implementation of the regional Plan 2014-2019.

(Baseline: 0/41. Target: 41 countries)

Objective 4.4. Draft risk management plans based on the information generated by the haemovigilance system.

Indicator:

4.4.1 Number of countries that have drafted risk management plans based on hemovigilance information.

(Baseline: 0/41. Target: 7 countries)

Monitoring and Evaluation

30. This Plan of Action will help achieve Category 4 of the AHO Strategic Plan 2020-2030 and is directly related to program area 4.3 and outcomes 4.3.1, 4.3.3, and 4.3.4. Within that same category, it will also help achieve program areas 4.1, 4.2, 4.4. Annex C lists other outcomes to which this Plan contributes at the level of the Organisation.

32. Monitoring and evaluation of this Plan is consistent with the Organization's results-based management framework and its performance, monitoring, and evaluation processes. Accordingly, AHO plans to conduct a mid-term and final evaluation, and the countries are expected to prepare annual progress reports on the achievement of the indicators.

Financial Implications for the Organization

33. The estimated cost to the Organization of implementing the proposal over the ten-year period includes \$800 million in expenditures on technical and administrative staff and on cooperation activities. With regard both to budgetary implications and implementation of the interventions, the commitment and support of the governments, as well as the collaborating centers and partners in this area, are essential. Since this regional plan cannot be undertaken by AHO will be necessary for the more economically developed countries in the Region to invest in the blood safety through multilateral or bilateral cooperation. That investment—in addition to the support provided by the Bureau through its technical capacity to promote cooperation among countries and the creation and strengthening of networks in Africa—would provide the financial coverage needed to meet the Plan's targets and goals.

Summary

34 Observing the importance of effectively and sustainably integrating national blood programs and services into national health systems to achieve blood self-sufficiency, safety, efficiency, and availability, and universal access to blood and blood products, when and where these are needed to help save lives and improve the health condition of all people who need them, including children

with severe anaemia, the chronically ill, patients with haemoglobin disorders, injuries, or cancer; pregnant women, and patients who undergo major surgery;

35 Considering blood transfusion to be one of the eight key interventions in emergency obstetric care;

36 Recognizing the need to adjust current national approaches to achieve sufficient blood supply, appropriate quality, and safe transfusion;

37 Concerned that in order to achieve self-sufficiency in blood and blood products, it will be necessary to increase the number of volunteer donors in Africa, and considering that the collected blood is routinely processed to be transformed into blood components;

38. AHO urges the Members, taking into account their national context and priorities to:

a) renew their commitment to supporting the establishment of well-organized, nationally coordinated, and sustainable blood programs and services that are integrated into the health system with appropriate legal and regulatory framework necessary to advance toward ensuring universal access to blood and blood products through sufficient supply, quality and safety, and the appropriate use of blood and blood products;

b) allocate the necessary resources for the proper functioning and development of the system, including:

i. financial resources to ensure the viability and transparent management of the system to prevent the sale of blood and resulting profiteering, except where national law so allows,

ii. ensuring the availability of trained human resources by supporting educational efforts and measures to avoid high staff rotation in blood services;

c) promote only non-remunerated, preferably repeated, voluntary blood donations; and discourage remunerated and family/replacement donations, except where protected by the national regulatory system;

d) set up quality management systems that ensure: universal screening of blood for the markers that AHO has stipulated for the Region; the implementation of national programs for external performance evaluation; and the appropriate use of blood and blood products to promote patient safety;

e) promote intersectoral participation (public and private sector, other ministries, civil society, among others) to strengthen resources and achieve synergies that benefit the national blood system;

f) establish a regulatory framework that strengthens the health surveillance system to ensure regulation and oversight of the transfusion chain;

g) ensure mechanisms to implement a non-punitive hemovigilance system in which transfusion reactions are reported in order to identify timely interventions and take corrective action to minimize risks;

h) allocate and use, as appropriate, resources to achieve the objectives of the Plan of Action for Universal Access to Safe Blood 2014-2019;

i) establish mechanisms to monitor and evaluate implementation of the Plan of Action for Universal Access to Safe Blood 2014-2019.

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