National Blood Policy
for the
Health Sector

Ministry of Health, Republic of Ghana
February 2006
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>ABC</td>
<td>Area Blood Centre</td>
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<tr>
<td>ABCC</td>
<td>Area Blood Centre Committee</td>
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<tr>
<td>DBC</td>
<td>District Blood Committee</td>
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<td>DCE</td>
<td>District Chief Executive</td>
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<td>DD</td>
<td>Deputy Director</td>
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<td>DDHS</td>
<td>District Director of Health Service</td>
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<td>DDNS</td>
<td>District Director of Nursing Services</td>
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<td>GHS</td>
<td>Ghana Health Service</td>
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<td>GOG</td>
<td>Government of Ghana</td>
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<td>HBB</td>
<td>Hospital Blood Bank</td>
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<td>HBTC</td>
<td>Hospital Blood Transfusion Committee</td>
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<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<td>HLS</td>
<td>Health Laboratory Services</td>
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<td>JSS</td>
<td>Junior Secondary School</td>
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<td>MDA</td>
<td>Ministries, Department and Agencies</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>NACP</td>
<td>National AIDS Control Programme</td>
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<td>NBC</td>
<td>National Blood Committee</td>
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<td>NBS</td>
<td>National Blood Service</td>
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<td>NGO</td>
<td>Non Governmental Organization</td>
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<td>NMIMR</td>
<td>Noguchi Memorial Institute for Medical Research</td>
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<td>PHRL</td>
<td>Public Health Reference Laboratory</td>
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<td>PNO</td>
<td>Principal Nursing Officer</td>
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<td>RBC</td>
<td>Regional Blood Committee</td>
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<td>RBSD</td>
<td>Regional Blood Service Director</td>
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<td>RDHS</td>
<td>Regional Director of Health Service</td>
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<td>SOP</td>
<td>Standard Operating Procedures</td>
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<td>TTI</td>
<td>Transfusion Transmissible Infection</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Preface

This policy directive approved by cabinet in February 2006, covers the organizational structure and status of the National Blood Service (NBS), blood donor recruitment, selection and retention, blood collection, laboratory testing, component preparation, storage and distribution. It also covers quality assurance, clinical transfusion practice, code of ethics, the financing of the National Blood Service and the roles of all organizations involved in these processes.

An earlier exercise carried out by the Ministry of Health to assess the status of the blood service in Ghana, revealed the following:

i. Accommodation for the area blood centres and hospital blood banks were inadequate.

ii. Equipment in all the sites were generally inadequate.

iii. Supplies were sourced from the open market by each institution and only in few instances were blood bags supplied from the Central Medical Stores.

iv. The safety of virtually all the sites which collected and screened blood could not be guaranteed.

v. The Area Blood Centres (ABCs) were not functioning as intended and depended on replacement donors and did very little for mobile blood collection sessions.

vi. Accounts for the area centres were merged with those of the hospitals making access to funds difficult with the resultant shortage of essential logistics.

vii. Command structure of the ABC team was not clearly defined with the resultant conflicts between staff.

Currently, there is no formal legal instrument to guide the operation and as a result, voluntary non-remunerated blood donation which should be 100% accounts for only 41% of the total donations.

In Ghana, blood is screened for HIV 1 and 2, Hepatitis B, Hepatitis C and Syphilis. HIV prevalence in blood donors had increased from 1.5% in 1994 to 3.4% in 2004. The quality assurance programme is under-developed.

More than 75% of blood in the rural areas and 50% in urban areas are transfused to children under five years and women in the child bearing age. Blood Banks are not equipped with standby generators and because of frequent power cuts, the cold chain is often not reliable. Communication system is poor and qualified staffs are not adequate to effectively manage the system.

The Blood Transfusion Service depends largely on internally generated funds through the cost recovery system which is only partial but Government Budget is inadequate.
As at January, 2003, Cabinet approved a Credit Agreement between the Nordic Development Fund (NDF) and the Government of Ghana (GOG) for the co-financing of the Health Services Rehabilitation Project 3. The loan agreement was subsequently signed in the same year.

In spite of the enthusiasm that accompanied the approval of the agreement which was in respect of NDF Credit No. 403 for the sum of Euro 8,300,000 (Eight million, three hundred thousand Euros) the loan had then not been declared effective by the NDF.

In a special mission to get the loan declared effective by Ministry of Health, the NDF Regional Manager for Africa and the Middle East explained that the loan could not become effective until the Government of Ghana/Ministry of Health had in place a national Blood Policy. Their reason being that the NDF loan was essentially to support the implementation of the National Blood Policy.

In order to move the process forward, the Ministry organized a special one week workshop in Swedru with all the stakeholders (MOH, GHS, KATH, KBTH, WHO, UNDP, MOF and NDF) in order to arrive at a consensus on a National Blood Policy Document. The meeting was successful and the Ministry of Health arrived at a consensus with the final draft of the National Blood Policy document duly signed by all stakeholders.

It is against this backdrop that the approved National Blood Policy document is viewed as timely and very essential to provide the basis for the organization and practice of safe blood transfusion nationwide, and also to facilitate the development of the first (1st) five year strategic plan for the Nation Blood Service. This will also facilitate the development of the legal instrument to guide the operations of the National Blood Service.

The approved National Blood Policy for Ghana will guide the Health Sector to ensure safe and adequate blood and blood component supplies and usage to meet the countrywide needs of all Government, Quasi-Government, Private and Mission Healthcare Delivery Institutions.

MAJOR COURAGE E. K. QUASHIGAH (RTD)
MINISTER OF HEALTH
(April, 2007)
Acknowledgement

The Ministry of Health/National Blood Service takes this opportunity to express the sincere appreciation of the initiative taken by Prof. J K Acquaye and his colleagues to produce a document in 1989 for a blood service for Ghana.

Our appreciation also goes to Dr Eunice Brookman-Ammisah who as the then Minister of Health in 1998 set up a committee to review and produce a new document for a national blood programme for the country.

Our appreciation also goes to Mr. Samuel Nuamah-Donkor who as the then Minister of Health in 1999 accepted the new national blood programme document and constituted the first National Blood Advisory Committee (NBAC).

We appreciate the untiring efforts of the NBAC under the chairmanship of Mr. Kwasi Abeasi, in guiding the implementation of the blood programme, formulation of a draft national blood policy and in the implementation of changes necessary for the development of a national blood programme in accordance with suggestions made in the draft policy document.

We here recognize the efforts of Dr E.N.Mensah and Prof. A.B. Akosa, the past Director Generals of the Ghana Health Service in the implementation of the provisions in the draft policy and in further review of the of the policy document.

Our appreciation goes to all the stakeholders (MOH, GHS, KATH, KBTH, WHO, UNDP, MOF and NDF) for their support and active participation in the processes and the activities culminating in the review and adoption of a final draft National Blood Policy in February 2005.

Last but not the least, the final appreciation goes to Major Courage E.K. Quashigah (rtd), the current Minister of Health who requested and obtained in February 2006 the approval of Cabinet of the final draft National Blood Policy for full implementation.

Dr Justina Kordai Ansah
Director National Blood Service
(April 2007)
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1 INTRODUCTION

1.1 The National Policy for the Blood Service of Ghana provides directives to guide the Ministry of Health to ensure safe and adequate blood and blood component supplies and usage to meet the country wide needs of all Government, Quasi-Government, Private and Mission Health Care Delivery Institutions.

1.2 This policy directive covers the organizational structure and status of the National Blood Service (NBS), blood donor recruitment, selection and retention, blood collection, laboratory testing, component preparation, storage and distribution. The policy also covers quality assurance, clinical transfusion practice, code of ethics, the financing of the National Blood Service and the roles of all organizations involved in these process.

1.3 The Minister of Health is ultimately responsible for the safety and adequacy of the supply of blood and blood products in the country, and shall take all measures to ensure the effective implementation of the National Blood Policy, and the safety of transfusion practice nationwide.

2 SITUATION ANALYSIS

A visit to a number of service points at regional and district levels revealed that:

(i) Accommodation for the area blood centres and hospital blood banks were inadequate,

(ii) Equipment in all the sites were generally inadequate,

(iii) Supplies were sourced from the open market by each institution and only in a few instances were blood bags supplied from the central medical stores,

(iv) Virtually all the sites collected and screened blood, the safety of which could not be guaranteed

(v) The Area Blood Centres (ABCs) depended on replacement donors and did very little for mobile sessions

(vi) Accounts for the area centres were merged with those of the hospitals making access to funds difficult with resultant shortage of essential logistics

(vii) Command structure of the ABC team was not clearly defined with resultant conflicts between staff.
There is no formal legal instrument to guide the operation. Currently, blood donation, which should be 100% voluntary non-remunerated, accounts for only 41% of the total donations. In Ghana, blood is screened routinely for HIV 1 and 2, hepatitis B, Hepatitis C and syphilis. HIV prevalence has increased from 1.5% in 1994 to 3.4% in 2004. The system of reagent and essential supplies procurement is unreliable. The quality assurance programme is underdeveloped.

More than 75% of blood in the rural areas and 50% in urban areas are transfused to children under five years and women in the child bearing age. Blood banks are not equipped with standby generators, and because of frequent power cut, the cold chain is often not reliable. The communication system is poor and qualified staffs are not adequate.

The Blood Transfusion Service depends largely on internally generated funds through the cost recovery system which is only partial. Government Budget is inadequate.

3 AIM AND OBJECTIVES

3.1 AIM

Ensure safety, efficacy and adequacy of blood and blood products for all patients, in all Health Institutions of the country, both public and private, making it accessible and affordable.

3.2 OBJECTIVES

3.2.1 Provide guidelines for the establishment of a well coordinated blood service;
3.2.2 Provide guidelines for blood donor recruitment system through education and advertising;
3.2.3 Ensure the welfare and confidentiality on all matters pertaining to the blood donor.
3.2.4 Provide guidelines for the supply of adequate safe blood and the manufacture of blood products to those who require it in order to reduce morbidity and mortality from failure to transfuse;
3.2.5 Ensure adequate and appropriate provision of equipment and consumables for the smooth running of the blood service;
3.2.6 Establish norms and standards for blood services nationwide;
3.2.7 Ensure that freely donated blood are ethically and appropriately used;
3.2.8 Ensure a sustainable and cost effective service;
3.2.9 Maintain the highest standard of transfusion practice in the country, through appropriate training programmes and career development for the various categories of staff;
3.2.10 Establish a system for data collection and management for blood transfusion in the country;
3.2.11 Ensure active scientific and social research surveys in order to improve the service.
3.2.12 Develop legal instruments for the operation of the blood service.
4 STRATEGY

The blood service is to be centrally co-ordinated and shall have a net work of Area Centres well distributed in the country to provide effective coverage. The service shall rely on voluntary non-remunerated repeating blood donors to provide adequate and safe blood. Only scientifically proven effective, affordable and quality methods in the hands of well trained and motivated staff will be used to recruit blood donors, collect, test, process and distribute blood for appropriate clinical use.

The National Blood Service shall collaborate with all National, Regional and International bodies and organizations for the purpose of improving the blood services offered in the country and mobilize funds for their development. It shall also cooperate with researchers in the relevant fields.

5 STATUS

The National Blood Service is to operate as an agency under the Ministry of Health.

6 ORGANIZATIONAL STRUCTURE

6.1. THE MINISTER OF HEALTH

The Minister of Health is ultimately responsible for the safety and adequacy of the supply of blood and blood products in the country and shall take every measure to secure Government commitment and support for the National Blood Programme. The implementation of the activities of the National Blood Programme shall be delegated to the National Blood Service (NBS) under the supervision of a National Blood Committee (NBC) appointed by the Minister. (Appendix 1)

6.2. NATIONAL BLOOD COMMITTEE (NBC)

6.2.1. The Minister shall appoint a NBC with a membership of not less than eleven (11) and not more than thirteen (13) under a chairperson nominated by him/her.

6.2.2. The composition of the NBC shall include;

(i) A chairman appointed by the Minister
(ii) One nominee of the minister preferably a female media practitioner, from the print and electronic media
(iii) The Director-General, Ghana Health Service or his representative
(iv) Two representatives from the Teaching Hospitals.
(v) A Representative of the Attorney General’s Department.
(vi) A nominee of the Security Health Services
(vii) A Haematologist nominated in rotation by the Deans of the Medical Schools.
(viii) A nominee of the Voluntary Blood Donors Associations
(ix) The Director, National Blood Service (NBS)
(x) Nominee, Ghana Red Cross Society and any other relevant associations that the Minister from time to time may find relevant to be represented.

The tenure of office shall be for four (4) years and members shall be eligible for reappointment.

6.2.3. The NBC shall be directly accountable to the Minister of Health.

6.2.4. The NBC shall form subcommittees on finance, research and development, ethics and insurance, human resource management and any other subcommittees as it thinks expedient in the discharge of its duties

6.3. NATIONAL BLOOD SERVICE (NBS)

6.3.1. The NBS shall be a specialised, statutory, autonomous, non-profit making organization with an adequate budget, and management team consisting of trained and experienced staff under the directorship of a qualified medical doctor specialized in blood transfusion, haematology, Immunology or any sub-speciality of laboratory medicine (Appendix 2). There shall be a transitional period of four (4) years during which it shall operate as a semi autonomous organization, starting from the year of adoption/approval of the policy

6.3.2. The Headquarters of the NBS and the area centres shall be de-linked from the hospital setting

6.3.3. The NBS shall establish Area Blood Centers (ABCs), the number of which will be determined by National needs, and shall supervise and integrate the services of these centres.

6.4. AREA BLOOD CENTRE COMMITTEE (ABCC)

The ABCC shall consist of the Deputy Director of the ABC, the Heads of the five (5) units under the ABC i.e. Nursing, Laboratory, Administration, Donor Organisation and Quality Control as well as One (1) representative each from the Regional Blood Committees in the catchment area

6.5 AREA BLOOD CENTER (ABC)

6.5.1. The ABCs shall consist of five (5) functional units; Donor Organisation, Nursing, Laboratory Services, Quality control and Administration with appropriately trained staff headed by a Deputy Director (DD) who shall be a qualified Medical Doctor specialized in a relevant medical science.
6.5.2. ABCs shall be established preferably as close to the major users as possible. Where the ABC is located on the hospital premises, its management should be separated from that of the hospital.

6.5.3. The Head of the ABC shall be responsible to the director of the NBS at headquarters, but have functional relationship with all service providers within its catchment area.

6.6. REGIONAL BLOOD COMMITTEE (RBC)

6.6.1. The NBC in consultation with the Minister shall appoint a RBC with a membership of not less than nine (9) and not more than eleven (11) under a chairperson nominated by him/her.

6.6.2. The composition of the RBC shall include:

(i) The Regional Director of Health Services (RDHS) or his/her representative
(ii) A representative of the Teaching Hospital where applicable.
(iii) A local representative of the Ghana Red Cross Society
(iv) Two Local Opinion Leaders who are not members of the Health Profession, one of whom shall be the chairman.
(v) A Blood Donor Organiser not below the rank of Senior Organiser
(vi) A Representative of Voluntary Blood Donors Associations.
(vii) One Clinician nominated by the Medical Director of the Regional Hospital
(viii) The Deputy Director of the Area Blood Centre.
(ix) A local Representative of the NBS
(x) One (1) District Director of the Health Services (DDHS) nominated by the RDHS.
(xi) A representative of Mission/Private Hospitals, and any relevant group(s) the RDHS shall find relevant to be present.

The tenure of office shall be for four (4) years and members shall be eligible for reappointment.

6.6.3. The RBC shall operate as a sub-committee of the NBC

6.7 DISTRICT BLOOD COMMITTEE (DBC)

6.7.1. The RBC in consultation with the RDHS shall appoint a DBC with a membership of not less than eight (8) and not more than eleven (11) under a chairperson nominated by him/her.

6.7.2. The composition of the DBC shall include:

(i) The DDHS
(ii) A Medical Director of a hospital in the district
(iii) One (1) DDNS/PNO (Matron) of a district hospital.
(iv) A private midwife in the district
(v) A technologist/laboratory technical officer of a district hospital
(vi) A Blood Donor Organiser
(vii) A Representative of the Voluntary Blood Donors Associations.
(viii) A Representative of the District Assembly who shall be the chairman.
(ix) A Representative of any relevant groups in the region, nominated by the District Director.

The tenure of office shall be for four (4) years and members shall be eligible for reappointment.

6.7.3. The DBC shall operate as a subcommittee of the RBC.

6.8. HOSPITAL BLOOD BANK (HBB)

6.8.1. The HBB shall exist and function in all Government, Quasi Government, Mission and Private hospitals practising Blood Transfusion Therapy. It shall be part of the hospital laboratory and under the overall supervision of the Head of the Hospital.

6.8.2. The HBB shall be staffed with trained Laboratory Technical Officers. There shall be no Nurses or Donor Organisers at the HBB as Blood Collection shall be based only at the ABCs.

7.0 FUNCTIONS

7.1 MINISTER OF HEALTH

7.1.1 The Minister of Health shall be ultimately responsible for the National Blood and Blood Product supplies and shall ensure the provision of adequate resources for the procurement of blood from only voluntary non-remunerated blood donors from the low risk populations. The Minister shall also be ultimately responsible for the availability of safe, adequate and affordable blood and blood products to all patients in the country's hospitals requiring such therapy.

7.1.2 The Minister of Health shall ensure that adequate human and financial resources are available to maintain the highest possible standards of transfusion practice and quality management throughout the country.

7.1.3 The Minister of Health shall be responsible for securing Government commitment and support for the National Blood Service, to ensure a safe and adequate supply of blood nationwide, and that nobody needing blood is deprived.

7.1.4 The Minister shall actively advocate for the education of the populace, particularly the young on the need for community support of the blood programme.
7.2 **NATIONAL BLOOD COMMITTEE (NBC)**

7.2.1 The NBC shall advise the Minister on the implementation of the blood policy, management of the NBS, and the scale of fees to be paid by patients for services and also advise the Minister on matters of adequate provision of human and financial resources to the NBS.

7.2.2 The NBC shall ensure that safe blood and blood products are always available, affordable, and easily accessible, to every one who needs them without any form of discrimination. No vulnerable group shall be deprived.

7.2.3 The finance subcommittee shall organise activities for the generation of funds; shall plan for capital projects including buildings and shall review the financial reports of the NBS.

7.2.4 The Ethics and Insurance subcommittee shall advise on policies pertaining to ethics with regards to blood donors, NBS staff, patients receiving blood and ensure blood donors and staffs are adequately insured against litigation from patients.

7.2.5 The research and development sub-committee shall ensure that research and development pertaining to donor education, recruitment, retention, screening and other aspects of transfusion medicine are carried out and results used to improve relevant activities; and also the guidelines on the usage of blood and blood products are updated and complied with.

7.2.6 The Human Resource Management sub-committee shall ensure the identification, recruitment, retention and development of competent staff to man the service.

7.2.7 The NBS shall ensure that the NBS and RBS function effectively.

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7.3 **NATIONAL BLOOD SERVICE (NBS)**

7.3.1 The National Blood Service is dedicated to collect blood from safe, altruistic voluntary blood donors, process it into safe and effective blood components and to monitor the use of these in conformity with laid down standards and protocols. The service shall ensure that its products are adequate, safe, accessible and affordable to all sections of the community. This function shall be delivered by the ABCs whose activities shall be co-ordinated and integrated through the headquarters of the NBS.

7.3.2 The NBS shall be the sole organisation responsible for blood collection, processing, storage and distribution. However the NBS with prior approval by the Chairman of the NBC shall contract out any of its functions to any non-profit organisation under the supervision of the National Director.

7.3.3 The NBS shall develop guidelines for the implementation of the National Blood Policy, set the standards of performance by evolving and revising standard operating procedures (SOP) and quality manuals. The NBS shall co-ordinate, integrate and supervise all the ABCs.
7.3.4 NBS shall follow national and MOH procurement guidelines.

7.3.1 The NBS shall plan, collate and present the overall NBS budget and the accountability and financial reports to the Minister of Health through the National Blood Committee.

7.3.1 The NBS shall audit the usage of all blood and blood products in all hospitals.

7.3.1 The NBS shall organise training for the various categories of staff.

7.3.1 The NBS shall plan research work on blood and blood products for the improvement of blood transfusion, in conformity with international trends.

7.4 AREA BLOOD CENTRE COMMITTEE (ABCC)

7.4.1 The ABCC shall ensure the implementation of the blood policy in the catchment area of the blood centre.

7.4.2 The ABCC shall monitor the performance of the area centre.

7.4.3 The ABCC shall ensure that service are adequately provided in the catchment area.

7.5 AREA BLOOD CENTER (ABC)

7.5.1 The ABCs shall be responsible for education and recruitment of blood donors, collection, screening, testing, processing, storage and distribution of blood and blood products, and auditing their usage in all hospitals in their catchment area.

7.5.2 The ABCs shall be responsible for the preparation of budget, revenue and expenditure returns for the internally generated and other funds to be used to improve services at centres. It shall also prepare the individual budget (recurrent and capital) for submission as part of the NBS budget.

7.6 REGIONAL BLOOD SERVICE DIRECTORATE

7.6.1 There shall be a Regional Blood Service Directorate headed by a Regional Blood Service Director.

7.6.2 The Regional Blood Service Director (RBSD) in consultation with the NBC shall be responsible for the creation of Regional Blood Committees and nomination of its chairman and membership.

7.6.3 The RBSD shall ensure that the RBC, DBCs and Hospital Blood Transfusion Committees (HTBC) in his/her region are functional.
7.6.4. The RBSD shall make available to the Deputy Director of the ABC, the regional maintenance team of GHS to ensure that structures and equipment at the centre are maintained, and that hospital equipment in HBBs are also maintained and kept functional.

7.6.5. The RBSD shall receive from ABC monthly, quarterly and annual statistics of blood collected, screened, processed into blood and blood products and finally distributed to HBBs for compatibility and usage in all hospitals in his/her catchment area. Copies of such returns shall be submitted to NBS headquarters for the compilation of nationwide statistics on blood and blood products.

7.6.6. The staff complement of the Regional Blood Service Directorate shall be specified in the structure and scheme of service.

7.7. REGIONAL BLOOD COMMITTEE (RBC)

7.7.1. The RBC shall ensure the implementation of the Blood Policy at the Regional and District level; and advise the NBC on any proposal that may improve blood transfusion practices. It shall also receive, study and analyze relevant statistics of blood transfusion in the region, the financial management of transfusion activities and perform any other function pertaining to Blood Transfusion that the RDHS and the NBC shall assign to it.

7.7.2. The RBC shall ensure that the DBC function effectively.

7.7.3. The Regional Blood Committee shall report to the ABCC.

7.8. DISTRICT BLOOD COMMITTEE (DBC)

7.8.1. The DBC shall ensure the implementation of the blood policy at the district level.

7.8.2. The DBC shall ensure that a viable Blood Donors Association is in place.

7.8.3. The DBC shall take on the responsibility to ensure that the blood needs of the district are met.

7.8.4. The DBC shall report to the RBC

7.9. ROLE OF OTHER INSTITUTIONS

7.9.1. HOSPITAL BLOOD BANKS (HBB)

7.9.1.1. The HBB shall be responsible for patient grouping and crossmatching of screened blood from the ABCs for transfusion and offer other immunohaematological services the hospital may require.
7.9.1.2. The HBB shall receive processed blood and blood products from the ABC and issue out readily available blood and blood products of suitable quality in adequate amounts to patients in their respective hospitals.

7.9.1.3. Medical Directors of the hospitals in consultation with RDHS in their catchment areas shall create functional Hospital Blood Transfusion Committees (HTBC) to encourage appropriate blood utilization in their hospitals, and auditing of same.

7.9.1.4. The Minister of Health shall in conformity with the National Blood Policy inform the Medical Directors of the hospitals of the security services to create functional HBC to encourage appropriate blood utilization in their hospitals, and auditing of same.

7.9.1.5. The composition of the HBTC shall include:

(i) Senior Representatives of all major Clinical Specialties that prescribe blood in the hospital.
(ii) A matron/Senior Nursing Officer
(iii) The Medical Administrator/Finance Officer
(iv) Blood Bank Technical Officer, and other relevant groups that may from time to time be determined.

7.9.2. SPECIALISED UNITS IN TEACHING HOSPITALS

The specialized Units/Departments in Teaching Hospitals shall in collaboration with NBS assist in validation and determination of kits used for microbiological screening of Transfusion Transmissible Infections (TTIs) in donated blood and ensure that the Hospital Laboratories are accredited, functional and effectively monitored.

7.9.3 HEALTH LABORATORY SERVICE (HLS)

The HLS of the Ghana Health Service (GHS) shall ensure that hospital laboratories which incorporate HBB are accredited, functional and effectively monitored.

7.9.4 PUBLIC HEALTH REFERENCE LABORATORY (PHRL)

This in collaboration with the NBS shall be responsible for validation and assist in the determination of kits used for microbiological screening of Transfusion Transmissible Infections (TTIs) in donated blood.

7.9.5 NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH (NMIMR) AND OTHER RESEARCH INSTITUTIONS

7.9.5.1 The NBS shall collaborate with the NMIMR to carry out active research programmes for the development or adaptation of new technologies and for assessment of the real blood needs of the country, and research into any microbes suspected of being transmissible by blood.
7.9.5.2 Other research institutions (both National and International) are to be involved as and when necessary.

7.10 COLLABORATION WITH OTHER M.O.H AGENCIES

Working relationship shall be established with relevant divisions of the GHS and other agencies of MOH to facilitate a dependable team work, e.g.

i. The Nutrition division of the GHS shall assist in counselling on good nutrition to correct anaemias in the society.

ii. The Health Education Unit shall assist in the development of educational materials and publicity, as well as education on anaemia prevention.

iii. The National AIDS Control Programme (NACP) and other divisions of the GHS Division shall assist through exchange of information and financial support.

7.11 COLLABORATION WITH OTHER G.O.G MINISTRIES, DEPARTMENT AND AGENCIES (MDA)

7.11.1 The Minister of Health shall relate with the following MDA for the specified functions below:

7.11.2 The Minister(s) responsible for Education, Sports and Youth shall be encouraged to spearhead the sensitisation of young children from upper primary through to junior secondary school (J.S.S) level before they achieve the eligible age for donation on blood transfusion science as well as provide access in the secondary and tertiary institutions for blood collection sessions.

7.11.3 The Minister responsible for Employment shall encourage employers in both private and government organisations to provide safe blood for the community, provide access at their work sites for blood donor sessions and contribute towards meaningful motivational programmes for employees who contribute significantly to the blood programme.

7.11.4 The Minister responsible for Communication shall provide the platform for education and publicity to the public.

7.11.5 The Minister responsible for Local Government shall encourage the District Chief Executives (DCE) to play an active role in the formation and effective functioning of the mobile community blood collections in their localities.

7.11.6 The Ghana AIDS commission shall assist through information exchange and financial support.

7.12 COLLABORATION WITH NGOs

The Ghana Red Cross Society and other private agencies interested in donor education, recruitment, research and development and handling of blood and blood products shall do so under the guidance of the NBS, using the national protocols developed for the purpose. Any other further involvement shall be with the Authority of the NBC.
8.0 BLOOD DONOR RECRUITMENT, SELECTION AND BLOOD COLLECTION

8.1 BLOOD DONOR RECRUITMENT AND RETENTION

There shall be a controlled supervised blood donor programme for donor education, recruitment and retention which shall be targeted at specifically identifiable groups of the society e.g. second and third cycle institutions, workplaces, religious organizations and community based groups to provide adequate safe blood for all blood centres in the country.

8.2. BLOOD DONOR SELECTION

8.2.1. Voluntary non-remunerated blood donors shall be assessed medically and bled under the guidance of a clinical team responsible to the Deputy Directors of ABC.

8.2.2. There shall be criteria for donor selection and care that shall follow approved medical assessment protocols in line with internationally accepted guidelines.

8.2.3. Criteria for blood donor selection shall be reviewed every two (2) years or earlier by the National Director of NBS and endorsed by the relevant subcommittee.

8.2.4. Blood collection shall be done at suitable facilities approved by the Deputy Directors of the ABCs in compliance with the National Policy on blood collection.

8.2.5. Pre and Post donation counseling shall be the right of the blood donor; donors tested and found to be seropositive for any transfusion transmissible infection (TTI) shall be informed and counseled at sites with appropriate counseling facilities, during the post donation counseling.

8.3 AUTOLOGOUS BLOOD TRANSFUSION

Autologous blood transfusion shall be promoted and practiced where clinically indicated. Patients for autologous donation should be referred by attending clinicians, and may only be accepted by the deputy directors of the center.

8.4. BLOOD COLLECTION

8.4.1 National blood collection shall rely on voluntary, non-remunerated community-based blood donors who are appropriately educated on safe blood donation and are recruited from the second and third cycle institutions, religious organisations, social clubs, work places and from communities at the sub district level.

8.4.2 There shall be designated static collection centres and mobile collection points which have been previously examined and found adequate for safe blood collection which shall be examined by the ABC and found adequate for blood collection.
9.0 LABORATORY TESTING

9.1 All units collected should be grouped for ABO and Rhesus “D” grouping systems and any other group that may from time to time be determined, using well-controlled blood grouping techniques and reagents, based on established protocols using WHO guidelines.

9.2.1 All units collected must be tested prior to transfusion for Human Immunodeficiency Virus (HIV I & II), Hepatitis B, Hepatitis C and syphilis, and any other transfusion transmissible microbial diseases that may be thought to be relevant by the NBC, using approved well-controlled techniques and procedures according to WHO guidelines.

9.3 The testing procedures in 8.1 and 8.2 shall be reviewed regularly to include new Technologies.

10.0 PROCESSING AND STORAGE

10.1 Every unit of processed blood as well as its subsidiary packs shall have a blood label that contain adequate information that is important for every staff who administers the product, and shall allow the origins of the products to be traced. Such labeling shall include the batch number, results of microbial tests and blood group.

10.2 Appropriate blood component labels and associated technology that may be determined from time to time shall be used, the design and use of which shall conform with specifications set out by the Director and endorsed by the relevant sub-committee.

10.3 Blood and blood components shall be stored and distributed in appropriate temperature controlled facilities using established protocols conforming to internationally accepted standards drawn up by the National Director.

10.4 Where blood disposal becomes necessary, the identification of each component to be destroyed, reason for destruction, date, details for destruction and person(s) discarding blood or blood components must be recorded and validated according to laid down protocol.

10.5 Destruction of blood shall conform to protocols that ensure safety for humans and the environment.

10.6 Blood and blood components being moved from one facility to the other shall be transported in labelled, validated containers, providing security and protection of components from damage; the information should include type of component and final destination of the product.

11.0 QUALITY ASSURANCE

11.1 Detailed methods and standard operating procedures (SOP) should be available for all activities of the NBS.

11.2 Quality standards and specifications for blood donations and products should be laid down by the Medical Director and endorsed by the relevant subcommittee, in accordance with WHO internationally accepted criteria.
11.3. Detailed Quality Assurance protocols developed by the NBS and conforming to internationally accepted standards shall be available for monitoring and supervision of quality standards in all health facilities (Public and Private) that practise Blood Transfusion Therapy.

11.3.1. The NBS and other relevant agencies shall be subject to external quality assurance programmes regularly.

12.0 CLINICAL TRANSFUSION PRACTICE

12.1 Prescription and administration of blood, blood products and plasma derivatives should be under the close supervision and responsibility of a qualified clinician and should be in accordance with laid down regulations and procedures.

12.2 HBBs shall follow strictly the directives of the National Blood Policy and the guidelines of the NBS.

12.3 Detailed techniques and procedures for pre-transfusion compatibility testing for patients should be in line with the National Policy Directives and approved by the National Director.

12.4. Detailed procedures for transfusing blood and blood products, using established protocols conforming to internationally accepted standards shall be followed strictly.

13.0 HAEMOVIGILANCE

13.1 It must be possible to follow every unit of blood or blood components (including each of the components prepared from the unit) from records of the donor, the required tests to disposition by transfusion or destruction.

13.2 All hospitals providing blood transfusion therapy shall provide information on all adverse reactions experienced by the patients to HBB, ABC and NBS and Heads of relevant Hospitals.

14.0 ETHICAL CONDUCT/LEGISLATION

There shall be a Legislative Instrument on code of ethics, defining the principles and rules to be observed in the field of blood donation and transfusion that shall seek to protect the safety and confidentiality of the blood donor, the patient and the transfusion institution, as approved by the ethics subcommittee.

15.0 HUMAN RESOURCE STRATEGY

15.1 The service shall have a strategy in place to identify, recruit and retain all categories of staff.

15.2 A training and staff development strategy shall be developed.

15.3 All categories of staff shall undergo regular approved in-service training at least once every year as well as other training as and when applicable.
15.4 The NBS shall make provision in the budget for continuing education and encourage NBS staff to attend seminars, workshops, conferences both nationally and internationally to enhance the efficiency and image of the Service as part of performance management.

15.5 The NBS shall make an input into the curriculum of the Pre-service training Institutions on Blood Transfusion Medicine.

16.0 FINANCE

16.1 The Government shall support the NBS and its activities to ensure sustainability. The main sources of funding of the NBS shall be:-

(i) Budgetary allocation from the Government of Ghana.

(ii) Contributions by Donors to the Health Fund.

(iii) Internally Generated Funds (through the cost recovery approach.)

(iv) Individual donations by organisations and members of the public.

16.2 The Ministry of Health shall dedicate such assets like buildings and equipment for the usage of the NBS to enable execution of this policy.

16.3 The NBS shall have its own dedicated budget which may be funded from sources as shown in 16.1

16.4 The NBS shall be financially accountable to the Minister of Health through the National Blood Committee.

17.0 ACTIVE RESEARCH AND DEVELOPMENT PROGRAMME

NBS shall collaborate with any approved institution to carry out active research programmes that will help improve blood transfusion activities in the country.

18.0 CONCLUSION

Blood safety, availability, accessibility and affordability should be the concern of all.

For the NBS to succeed in its mission of providing safe blood it needs the full support and commitment of government and all stakeholders.

This policy document provides the basis for the organization and practice of blood transfusion nationwide. The National Blood Policy should be adopted as a matter of urgency and the necessary machinery put in place to facilitate its implementation.
APPENDIX 1

STRUCTURAL ORGANOGRAM

Ministry of Health

National Blood Committee

National Blood Service

RBSO  ABC  ABC  ABC

HBB  HBB  HBB  HBB

NB

Broken line indicates service linkages, collaborative and advisory relationship

Solid lines indicate administrative linkages.