

207/1000

WHO/GPA/INF/89.15  
WHO/LAB/89.8  
Original: English  
Distr.: General

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# GLOBAL BLOOD SAFETY INITIATIVE

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## ESSENTIAL CONSUMABLES AND EQUIPMENT FOR A BLOOD TRANSFUSION SERVICE

GENEVA  
20-22 MARCH 1989



WORLD  
HEALTH  
ORGANIZATION

GLOBAL  
PROGRAMME  
ON AIDS

Health  
Laboratory  
Technology Unit



League of Red Cross  
and Red Crescent  
Societies

## Essential consumables and equipment for a blood transfusion service

The Global Blood Safety Initiative (GBSI) is a cooperative endeavour to support the development of safe and effective blood transfusion services in all countries. Core participants are the World Health Organization's Global Programme on AIDS (WHO/GPA) and unit of Health Laboratory Technology (LAB), the League of Red Cross and Red Crescent Societies (LRCS), the United Nations Development Programme (UNDP) and the International Society of Blood Transfusion (ISBT). The Initiative is also supported by The World Federation of Hemophilia and other bilateral and multilateral development agencies and nongovernmental organizations.

This document was reviewed and endorsed by the GBSI Consultation on Developing and Strengthening Blood Transfusion Services, held in Geneva from 20 to 22 March 1989. A total of 23 specialists in blood transfusion medicine and haematology from 17 countries participated in the consultation. The participants are listed on the opposite page.

### A. Consumables

#### Blood collection and administration

1. Disposable lancets.
2. Disinfectants and dressings.
3. Material and supplies for the determination of haemoglobin concentration and packed cell volume (Copper sulphate at the basic level).
4. Blood collection containers, preferably plastic, including disposable needles.
5. Multiple packs for component preparation where feasible.
6. Test tubes for sample collection.
7. Transfusion administration sets with needles.
8. Labels for blood containers, samples and records.
9. Supplies for donor refreshment.

#### Laboratory

1. Test tubes, tiles and microscope slides.
2. Reagents for blood grouping and compatibility testing.
3. Test reagents and supplies for screening for transfusion transmissible infections.
4. Laboratory glassware (beakers, flasks, pipettes).
5. Disinfectants and detergents.
6. Sharps containers for disposal of contaminated articles.
7. Protective clothing, disposable gloves.
8. Timers.
9. Aspirator bottles.

#### Office

1. Stationery and material for adequate documentation of blood donors, donations, laboratory testing, blood storage and delivery.

### B. Equipment

#### Blood collection and administration

1. Donor beds.
2. Scales for controlling the blood collection procedure.
3. Domestic scales for weighing donors.
4. Suitable vehicles for blood collection and distribution.
5. Miscellaneous equipment and surgical items, e.g., scissors, forceps, sphygmomanometers, tourniquets, stethoscopes, thermometers.
6. Necessary equipment for donor refreshment.

#### Laboratory and office

1. Bench centrifuges for separation of samples and serological testing.
2. Microscope.
3. 37°C incubators and/or waterbaths.
4. Refrigerators with temperature monitoring system.
5. -20°C freezer with temperature monitoring system.
6. Emergency generator, mechanical or solar.
7. Voltage stabilizers.
8. Containers and coolant (or ice) for transportation of blood products.
9. Laboratory scales.
10. Plasma extractors, hand sealers and tube strippers.
11. Plastic or cardboard holders for blood units and frozen plasma.
12. Laboratory thermometers.
13. Autoclave.
14. Equipment necessary for producing chemically pure and/or pyrogen-free water (e.g., still; deionizer).
15. Laboratory and office furniture.

## List of participants

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