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**The**

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**Clinical**

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**Use**

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**of**

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**Blood**

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*in*  
**Medicine**  
**Obstetrics**  
**Paediatrics**  
**Surgery & Anaesthesia**  
**Trauma & Burns**

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**World Health Organization**  
**Blood Transfusion Safety**  
GENEVA

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# Preface

Blood transfusion is an essential part of modern health care. Used correctly, it can save life and improve health. However, the transmission of infectious agents by blood and blood products has focused particular attention on the potential risks of transfusion.

The World Health Organization (WHO) has developed the following integrated strategy to promote global blood safety and minimize the risks associated with transfusion.

- 1 The establishment of nationally coordinated blood transfusion services with quality systems in all areas.
- 2 The collection of blood only from voluntary non-remunerated donors from low-risk populations.
- 3 The screening of all donated blood for transfusion-transmissible infections, including the human immunodeficiency virus (HIV), hepatitis viruses, syphilis and other infectious agents, and good laboratory practice in all aspects of blood grouping, compatibility testing, component preparation and the storage and transportation of blood and blood products.
- 4 A reduction in unnecessary transfusions through the appropriate clinical use of blood and blood products, and the use of simple alternatives to transfusion, wherever possible.

Many countries have established national blood transfusion services in accordance with WHO recommendations and guidelines. However, few countries have yet developed national policies and guidelines on the clinical use of blood or provide systematic education and training on the clinical use of blood and blood products.

In 1998, WHO published *Recommendations on Developing a National Policy and Guidelines on the Clinical Use of Blood*. This document was designed to assist Member States in developing and implementing national policies and guidelines and ensuring active collaboration between the blood transfusion service and clinicians throughout the management of patients who may require transfusion.

The Recommendations emphasize the importance of education and training in the clinical use of blood for all clinical and blood bank staff involved in

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the transfusion process. The WHO team responsible for Blood Transfusion Safety (WHO/BTS) has therefore developed *The Clinical Use of Blood* to provide a set of comprehensive learning materials that can be used in undergraduate and postgraduate programmes, in-service training and continuing medical education programmes or for independent study by individual clinicians. The pocket handbook that accompanies the module is designed for quick reference by clinicians who need to make urgent decisions on transfusion.

*The Clinical Use of Blood* is not designed to replace conventional textbooks or to provide a definitive text on the clinical use of blood. Rather, its purpose is to provide an accessible learning tool that will assist prescribers of blood to make appropriate clinical decisions on transfusion and contribute to wider efforts to minimize the unnecessary use of blood and blood products.

The materials have been written by an international team of clinical and blood transfusion medicine specialists and have been reviewed by a wide range of specialists throughout the world. They have also been reviewed by the WHO Department of Reproductive Health and Research, the Department of Adolescent and Child Development, the Roll Back Malaria Initiative and the Human Genetics Programme. Nevertheless, clinical transfusion practice should always be based on national guidelines, where available. Users are therefore encouraged to adapt the information and guidance contained in the module and pocket handbook to conform with national guidelines and established procedures in their own countries.

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