

# Safe blood starts with me! Blood saves lives!



Stories and souvenirs from World Health Day 2000 together with useful information on blood safety



## **Acknowledgements**

The WHO Department of Blood Safety and Clinical Technology wishes to pay tribute to all individuals and institutions involved in the preparation and follow-up to World Health Day 2000. Special mention goes to the major contribution of the WHO regional and country offices, the numerous departments and services at WHO/HQ, to national blood programmes, and to our major partners and collaborators. The support of the Government of Japan towards World Health 2000 is gratefully acknowledged.

This book is dedicated to regular, voluntary, non-remunerated blood donors everywhere.

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from World Health Day 2000  
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on blood safety



Ordering code: WHO/BCT/01.03  
Printed: December 2001  
Copies may be requested from:  
Department of Blood Safety and  
Clinical Technology  
World Health Organization  
1211 Geneva 27, Switzerland  
Fax: +4122 791 4836  
E-mail: [blood\\_safety@who.int](mailto:blood_safety@who.int)  
[www.who.int/bct](http://www.who.int/bct)

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Cover photo: Perre-Yves Dhinaut  
Overall direction: Jean C. Emmanuel  
Principal editor: Kay L. Bond  
Design and layout: minimum graphics

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# Foreword

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**“Despite all the technological marvels that humanity is experiencing, a reliable and safe blood supply is still out of reach for untold millions of people around the world”.**

These were the words of Dr Gro Harlem Brundtland, Director-General of the World Health Organization, at the launch of World Health Day 2000 dedicated to blood safety. In highlighting the unbalanced situation in the world today with regard to blood supply, Dr Brundtland drew attention to



Dr Yasuhiro Suzuki with Mr Guy-Olivier Second, President of the State Council of Geneva (7 April 2000)

the low priority given to blood transfusion services by many national public health authorities, resulting in chronic shortages of safe blood donors.

In developing countries, where women and children are the hardest hit, hundreds of thousands of women die of pregnancy-related causes every year, a significant number of

which are associated with loss of blood that could be avoided if safe blood were available. Children with severe anaemia are another large group needing safe blood transfusions.

The absence of quality control and testing of blood products is also evident from the statistics issued in 2000 on the blood safety situation across the world. A diagnostic test for the HIV antibody became commercially available over 15 years ago; yet many countries still cannot guarantee 100% testing of donated blood. In addition, there is still widespread recourse to family or paid donors, compounded by a lack of awareness of the appropriate use of blood and blood products.

In fact, remarkably little has changed since a World Health Assembly resolution in 1975 urged Member States to promote the development of national blood services based on voluntary, non-remunerated donations.

The importance of controlling transfusion transmissible infections such as HIV/AIDS, hepatitis C and syphilis has heightened global awareness of the need to reinforce national policies and programmes to ensure safe blood and blood products.

This is why blood safety was the theme of World Health Day 2000, but also one of WHO's priorities for the future, with the launch of a long-term programme aimed to assist national health authorities, especially those in greatest need, to establish and maintain well-organized blood transfusion services with appropriate infrastructure and trained personnel.

World Health Day 2000 was a tremendous success. This book is primarily a tribute to those who contributed to this success, and the momentum they created to make this life source—our blood—safe and available for all. In addition, it will serve as a useful indicator to compare the global situation in 2000 and what we will have achieved by 2005.

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It is our hope that the ideas and experiences outlined in this collection of World Health Day 2000 stories may also serve as a useful toolkit for blood safety activities in the future. We would be pleased to receive any new ideas—particularly with an educational perspective—to add to our interactive database of blood safety initiatives.

In this context, I should like to draw your attention to one such initiative called “Pledge 25”, first launched in the 1990s by the youth of Zimbabwe (see Annex 1). Realizing that an adequate and safe blood supply was largely within their own hands, a group of school leavers set up a club whereby they pledged to donate blood 25 times within their life time. The first group of Club Members reaching this target were honoured at graduation ceremonies during the year 2000, many on their 25th birthday. It is thanks to the commitment of this group and their efforts to promote healthy living among their peers that the availability and safety of the blood supply in Zimbabwe dramatically increased.

This initiative has since been successfully launched in neighbouring South Africa. Why not in your country? If you would like to start your own “Pledge 25”, the WHO Blood Transfusion Safety team would be happy to provide you with information and advice.

We aim to create a global environment whereby safe donors give blood regularly and whereby 100% of donated blood is tested before transfusion. It is a case of the three ‘A’s: blood should be **available** when needed at **affordable** costs and used **appropriately**.

This document is organized as follows:

### **Introduction**

Chapter 1 places WHO’s World Health Day in context, and describes the objectives, plans and expected results of World Health Day 2000.

### **Global activities**

An occasion to commemorate and to celebrate: opening commentaries from WHO/HQ and its principal partner in World Health Day 2000, the International Federation of the Red Cross and Red Crescent Societies.

### **National events**

Five countries are highlighted from each of WHO’s six regions. Each country portrays in words and images its blood safety challenges and successes, accompanied by a regional summary.

### **Annexes and bibliography**

A comprehensive set of information for clinicians, national health authorities, blood programmes and the general public, is compiled as an easy-access reference kit.

In conclusion, I would like to pass a personal message of appreciation to those who participated in World Health Day 2000 “Safe blood starts with me—blood saves lives” and those who give blood regularly, voluntarily, and seek nothing in return... Thank you.

“Safe blood starts with me” is indeed a personal message, a reminder that we owe it to ourselves, to our friends and family, but especially to those whom we may never know, to offer this precious gift of life. Let’s build on this momentum, let’s make blood safe. It’s up to us.

**Dr Yasuhiro Suzuki**

Executive Director  
Health Technology and Pharmaceuticals



# Introduction

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## What is World Health Day?

World Health Day (WHD) is celebrated each year on 7 April in commemoration of the founding of the World Health Organization (WHO) in 1948. The objective of WHD is to raise global awareness of a specific health priority of the Organization and serves as a launch for a long-term advocacy programme to address and improve the situation.

## World Health Day 2000

World Health Day 2000 was dedicated to blood safety, the key objectives and messages of which were the following.

## Objectives

The aim of WHD 2000 was to increase awareness among the public, policy makers/politicians

and health professionals of the important issues related to blood safety and to strengthen global efforts in this regard.

## Key messages

- There is a significant, positive health impact from safe blood.
- Blood safety means availability of quality blood and blood products as well as transfusion safety, covered by national policies and legislation.
- There is a vital need for more safe blood donations.
- We should safeguard our health—blood donors must be aware that their blood can transmit a virus to the recipient.
- Effective and appropriate measures are needed to prevent the transmission of

blood-borne diseases, especially through injection safety.

- Donated blood must be used safely and appropriately to ensure patient safety, and demonstrate respect for the donor.

WHD 2000 highlighted the broad concerns of blood safety, e.g. the interrelation with maternal and child health, malaria, injection safety, trauma, HIV/AIDS, hepatitis infection and waste management.

In addition, the “Safe Blood Starts With Me” event witnessed WHO’s commitment to developing partnerships. The International Federation of Red Cross and Red Crescent Societies was a primary partner in this important project. Other collaborators included the

International Society for Blood Transfusion, the World Federation of Haemophilia and the International Federation of Thalassemia, as well as health organizations that take an active interest in World Health Day each year.

## Impact

The country reports in this book are a clear reflection of the momentum created around safe blood. These efforts, however, will only be rewarded if the objectives of WHO and national health authorities are attained in the longer term. The expected outcomes outlined below will be reviewed over the next five years with a view to providing



Safe blood logo specially designed for WHD 2000

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continual technical assistance to ensure an improved global supply of safe blood.

The success of this ambitious goal will depend on the commitment of both policy makers and an increased body of voluntary, non-remunerated blood donors.

### Expected outcomes of World Health Day 2000

- Increased awareness among the public that blood donation is a safe process, handled in confidence and professionally.
- Awareness of the need for blood and thereby regular blood donations.
- Health professionals will be better equipped to make rational decisions on the need for blood transfusion.
- Health authorities will be more informed of the requirements of blood services to deliver safe and adequate blood supplies.

### List of activities

Evidence shows that participatory activities at both grass roots and national levels lead to effective changes in perception. The role of the WHO regional and country offices was therefore considered key to ensuring the success of WHD 2000, which is why support went directly to countries to commemorate WHD 2000 and enhance safe blood in the most fitting way within each national context.

Health professionals, policy-makers, politicians, young people, governmental agencies, nongovernmental organizations, international agencies, the private sector and the general public were therefore offered the following suggestions for activities that could be organized within four priority areas. Each country prioritized their activities so as to make a real impact given the resources available, often centred around existing networks (blood transfusion services, educational establishments, health centres, specialized interest groups, etc).

### 1. Organization and management

- Panel discussion on TV/radio with representatives of the national blood service, transfusion experts, prescribers of blood, public health experts, scientists, patients' societies (thalassaemia or haemophilia societies).
- Create national web site on blood transfusion services, advertise widely, and create e-mail address for comments from community.
- Speeches by dignitaries with messages on blood donation.
- Telecast from patients whose lives were saved by blood transfusion.
- Telecast of video spots moderated by celebrities with messages of thanks from recipients; donor interviews; quiz programmes; press conferences.
- Encourage nationally-based television/radio "soaps" to

write into their story lines aspects of safe blood and transfusion services.

- Publish letter of thanks from government to donors in local papers.
- Messages from blood recipients on websites, newspapers, etc.

### 2. Voluntary blood donor recruitment

- National appeal for voluntary blood donors.
- Students as target groups to develop "Pledge 25 Clubs" (i.e. form a club, pledge to give blood after leaving school, get T-shirt/cap/badge, and encourage others to become donors.
- Poster campaign among schoolchildren with prizes from airlines.
- Information messages related to blood safety on mass media with complete information on where to go for blood donation.

- 
- A “walk/run of life” for blood donor awareness by the youth (student nurses, youth blood donor clubs) and distribution of WHO kits with blood safety brochure, stickers, posters, CDs or other educational material—calendars, T-shirts, banners, mugs, leaflets, etc.
  - Banners with blood safety message on important national buildings and public transport.
  - School essay/slogan/poster competitions: winners rewarded (this could promote idea of first donation on a given birthday, e.g. 21st).
  - Donor recognition and reward functions.
  - Educational talks in schools, colleges and universities.

- Release of balloons with message.
- Launch hotline for information about blood donation.

### *3. Appropriate screening of blood*

- Training in “Quality Assurance in Blood Transfusion Laboratories” for medical/laboratory staff in blood transfusion services.
- Talk on TV/radio on importance of screening, good laboratory practice and quality assurance.
- Guided tour of blood service to TV producers for documentaries.

### *4. Effective clinical use of blood*

- Training programme on “Effective Clinical Use of Blood” in hospitals for clinicians from blood user departments.
- Talk by blood services for schools and public on TV/radio on importance of effective clinical use of blood by prescribers of blood.
- Local medical associations have lectures around WHD on appropriate blood usage and use of alternatives for fluid replacement such as crystalloid and colloids. ▲

# WHO Headquarters

## A special Happy Birthday!

**7 April 2000.** At WHO Headquarters, the months of planning and anticipation had come to an end and the sun rose on World Health Day. Dr Gro Harlem Brundtland, Director-General of WHO had set the scene in her message to all Heads of State and Ministries of Health worldwide, urging them to commit to this priority area for WHO: safe blood. A packed day of commemoration and celebration lay ahead.



Dr Gro Harlem Brundtland,  
Director-General of WHO



Dr Yasuhiro Suzuki addressing  
WHO staff

The Day started with coffee and croissants for all staff of the Organization, who gathered in large numbers to mark the event in the main hall, to the backdrop of safe blood murals, flags and information stands.

Dr Yasuhiro Suzuki, Executive Director of the Health Technology and Pharmaceuticals (HTP) cluster that houses the Blood Safety team, set an example by wearing his bright “safe blood” T-shirt. Many others wore pins with the safe blood logo, specially

designed by WHO for the event. In his speech to staff, Dr Suzuki talked of blood as both a unique resource on the one hand, yet a unique resource that can be shared, urging every healthy person to donate blood as part of a safe “vein-to-vein chain” that helps millions of people to survive worldwide.

As an echo to this plea, the Joint WHO/United Nations Medical Services, in collaboration with the



Staff donating blood at WHO/HQ

Geneva Hospital, had set up special areas for staff to donate blood. A special telephone hot line was also set up for those who could not donate on the day to pledge blood donations by phone. The City of Geneva had set as a target 2000 new voluntary blood donors for the year 2000.

In addition to donating blood, staff could then join the hundred-strong march from WHO/HQ to the United Nations square, where further celebrations had been planned that would last well into the night.

These included interventions from top-level Swiss Government officials, such as Mr Guy-Olivier Second, President of the State Council of Geneva in April 2000. In expressing the nation’s commitment to blood safety, Mr Second invited all citizens to visit the information stand on the United Nations square where

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leaflets, flags, pins, stickers and a wealth of other safe blood material was being distributed.

In the large marquee erected for the occasion, a very festive atmosphere prevailed with pluricultural gastronomic specialities, music from student choirs and folklore groups, ending—appropriately—with a reception in honour of voluntary, non-remunerated blood donors.

A colourful event was the releasing of safe blood helium balloons by tiny tots, and for several days, the buses and bridges of WHO's Geneva headquarters dressed for the occasion, with giant versions of the safe blood logo.

This was a very stimulating day. But World Health Day is not a 24-hour event. WHO, in collaboration with its partners, will continue to raise public awareness of important issues related to safe blood over the next five years and beyond. We count on your support.

### **Other activities coordinated by WHO/HQ**

- WHO Director-General's letter to Heads of State and Ministers of Health
- Media campaign in international newspapers, radio and TV
- Development of fact sheets and press releases
- Special issue of United Nations magazine
- CD-Rom, film, video and material for Public Service Announcements (PSAs)
- Information pack (brochure, poster and sticker) in Arabic, Chinese, English, French, German, Russian, Spanish, Farsi, Greek, Hindi, Khmer, Lao, Mandarin, Pashto, Portuguese, Japanese, Vietnamese, Turkish among others
- Website with photobank (see [www.who.int/bct](http://www.who.int/bct))
- Exhibition panels. ▲



March to UN square

**For further information on blood safety activities at WHO/HQ, contact:**

**The Coordinator  
Blood Transfusion Safety  
Department of Blood Safety and  
Clinical Technology  
World Health Organization  
1211 Geneva 27  
Switzerland  
Tel: +41 22 791 2262  
Fax: +41 22 791 4836  
E-mail: [bloodsafety@who.int](mailto:bloodsafety@who.int)  
Internet: [www.who.int/bct](http://www.who.int/bct)**

# Red Cross and Red Crescent Societies

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## World Health Day Report 7 April 2000

A global partnership between the International Federation and the World Health Organization was launched on 7 April, 2000 in a series of joint news conferences around the world. From Sarajevo to New Delhi, from Kuwait City to Helsinki, the theme of blood safety was highlighted and the importance of voluntary, non-remunerated blood donation stressed by health officials and speakers from Red Cross and Red Crescent Societies.

In Geneva, at the official opening ceremony marking World Health Day, spokesperson for the International Federation, Dr Jukka Koistinen (Director, Blood and Blood Components, Finnish Red Cross), underlined the importance of the slogan “*Safe blood starts*

*with me*” insofar as it helps dispel one of the common myths often said in reference to major global health problems, i.e. “There is nothing I can do to help!”

“The fact is that medicine, and transfusion medicine as well, even today is a science still far from perfect, and each one of us can do quite a bit to help, particularly in the issue of global blood safety,” said Dr Koistinen.

“Today’s theme—safe blood starts with me—will penetrate far beyond our National Societies involved with blood services



Kenya Red Cross volunteers donating blood on World Health Day 2000.

because so much of our work is directly concerned with supporting numerous community health programmes: strategies to prevent AIDS, hepatitis, or to control diseases like measles and cholera. Fundamental to the success of any blood programme is a good basis for the safest possible source of blood supply. Any programme, therefore, that is focused on disease prevention or health promotion, a programme which gradually develops healthy lifestyles in local communities, is in fact working towards the formation of a low-risk population which forms the source of a blood supply that is as safe as possible. For this reason we can confidently claim the WHO has 100% support of all 176 National Societies in their celebrations today,” added Dr Koistinen.

Dr Koistinen also pointed out that action was needed at the highest levels in some countries to address crucial factors which our National Societies believe are real obstacles in the goal of achieving global blood safety.

“Here we refer to the lack of national blood programmes and policies and in some countries the existence of payment for blood donation which can undermine the basis of a safe blood supply, and erode all our efforts in the expansion of voluntary, non-remunerated blood donation and structured blood transfusion service systems,” said Dr Koistinen.

Dr Koistinen’s message had particular significance for South Asia, where the partnership between the WHO and the Federation was launched with a joint news conference held at

WHO House in New Delhi. In this region the partnership is absolutely crucial where the need for greater advocacy in blood safety is so essential. Geoffrey Dennis, head of the Federation regional delegation in South Asia, spoke about the vital role played by Red Cross and Red Crescent volunteers in motivating and retaining voluntary donors:

“Safe blood should not be perceived solely as blood that has been screened for diseases. Safe blood is about advocating individual and collective responsibility at all levels—donors, providers of blood services and governments alike,” he said.

The New Delhi news conference highlighted the problem of demand and supply in the region. India alone faces a shortfall of 3.5 million units of blood every year and the gap continues to widen. Geoffrey Dennis stressed the need for the rational use of blood in the region and said that the national Red Cross and Red Crescent

societies in the region were actively involved in promoting and popularizing the use of blood components amongst health practitioners. ▲

**For further information on blood safety activities at the IFRCRCs, contact:**

**Health and Care (Blood)  
International Federation of Red  
Cross and Red Crescent  
Societies**

**P.O. Box 372, 1211 Geneva  
Switzerland**

**Tel: +41 22 730 42 22**

**Fax: +41 22 733 0395**

**E-mail: [secretariat@ifrc.org](mailto:secretariat@ifrc.org)**

**Internet: [www.ifrc.org](http://www.ifrc.org)**

**Message from**

## **Kofi Annan, Secretary-General of the United Nations on World Health Day 2000**

**E**ach year, blood transfusions save millions of lives. They are an essential component of the health-care system. The theme for this year’s World Health Day “Safe Blood Starts With Me—Blood Saves Lives” is a timely reminder of the importance of an accessible, safe blood supply for the world’s people.

The safety of blood transfusion continues to be a critical problem in many parts of the world. Technological advances have led to substantial improvements in industrial countries, but progress in developing countries has lagged behind.

World Health Day 2000 draws our attention to the avoidable deaths that result from a lack of safe blood supply. Current estimates suggest that each year about 13 million unites of untested blood are transfused. The women, children and poor people of the developing world are particularly susceptible to infections transmitted through transfusion. Although considerable progress has been made, much remains to be done to ensure global blood safety.

Of the 191 WHO Member States, only 43% systematically screen donor’s blood for hepatitis B and C and HIV, and 29% have national policies and plans to ensure blood safety. Blood safety must be a key element of national health systems.

On this World Health Day 2000, let us commit ourselves to the goal of making safe blood supplies available to every patient who needs them, wherever he or she may live. We should see this as one of the essential services to which every human being is entitled. ▲

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## BLOOD SAVES LIVES IN WHO'S REGIONAL OFFICE FOR

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# Africa

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### Overview

The WHO Regional Office for Africa (AFRO) commemorated World Health Day 2000 by organizing a week-long awareness campaign among all Member States of the Region on the need

for safe blood donation. Throughout the week, educational messages were broadcast by the media, at seminars and conferences with high-level participation from ministries of health and universities.

In addition to a school poster competition (see inset), a video was produced in collaboration with the national television networks and blood transfusion services of Angola, Cameroon, Côte d'Ivoire, Guinée and Uganda. Interviews with the Regional Director, AFRO, blood donors and patients featured on this video.

### Message of Regional Director to Member States

The theme of the World Health Day this year is "Safe Blood Starts With Me. Blood Saves Lives". This theme has been chosen because blood safety is one of the priorities of WHO and because of the importance of safe blood to our health.

Safe blood can be defined as "blood that does not contain any viruses, parasites, drugs, alcohol, chemical substances or other extraneous factors that might cause harm, danger or disease to the recipient".

Safe blood is important to the health of an individual, right from the womb and throughout the life cycle. Healthy blood contributes to a healthy life. On the other hand, unhealthy blood is a threat to life and health.

### WHO/AFRO Press Release, 24 April 2000

Ten students from different countries have won the poster competition organized by the WHO Regional Office for Africa to commemorate this year's World Health Day. They designed posters to illustrate the theme "give a little of your blood to save a life".

The competition was held for two categories of students: those in primary schools and those in secondary schools.

The winners in the primary school category are: Julie Vander Veen of Namibia; Kanda Assuncao of Sao Tomé e Príncipe; and Darrel Lozaique of Seychelles.

The secondary school winners are: Boiki Nthibe of Botswana; Ott Ott Patrik André of Cameroon; Retselisitsoe Chigando of Lesotho; Yasmina Eyasim of Mauritius; Cremlido W. Zandomela of Mozambique; Nayo Ankuvi and Kokou Petida, both of Togo.

The winners were selected from among 61 candidates nominated from 19 countries.

Reports from the 46 countries of this Region confirm the immense interest and participation of our populations during the many different activities that took place, and increased awareness of the issues related to blood transfusion safety in Africa.

The message of the Regional Director—reprinted below—was drawn on during official ceremonies and by the various medias across the continent.





Dr Ebrahim M. Samba

Each and everyone has a personal responsibility to ensure that their blood is healthy and safe, as we may one day have to donate blood for the benefit of others. Each year, blood donated by some people is used to save the lives of millions of accident victims, mothers during childbirth, severely anaemic people, cancer patients and people with other serious health problems. It is therefore important for everyone to know about safe blood and blood donation as well as their implications for life and health.

It is particularly important to ensure that only those who have safe blood donate blood. Some conditions, such as malaria, HIV/

AIDS, hepatitis and sleeping sickness which threaten the lives of millions of people are caused by viruses and parasites passing from one person to another through the blood. Blood donors should therefore know that the blood they give may help save lives, if it is safe, or compromise health, if it is not.

In view of the importance of this subject, the World Health Assembly, in 1975, passed a resolution urging Member States to promote the development of national blood transfusion services based on voluntary non-remunerated blood donations. In 1994 the WHO Regional Committee for Africa passed a resolution which urged Member States to develop blood safety policies, mobilize resources for the development of blood transfusion service infrastructures at central and district levels and to set goals and targets for the attainment of safe blood transfusion.

Twenty-five years after the World Health Assembly resolution and seven years after the Regional

Committee resolution on the development of national blood services, less than 50% of countries in the African Region have adopted a national blood transfusion policy, while less than 30% have implemented their policies.

Given such poor response, the WHO Regional Office for Africa decided in 1998 to develop and implement a blood safety programme. The programme coordinates all transfusion-related activities and provides support to countries in policy development and implementation, staff training, quality management, development of standard operative procedures, and promotion of operational research on blood transfusion.

More recently, we started to further strengthen the capacity of the National Blood Transfusion Service in Harare, Zimbabwe, which is a WHO Collaborating Centre. We intend very soon to give similar support to the National Blood Transfusion Service in Abidjan, Côte d'Ivoire. These two centres will organize

training courses for blood transfusion staff of all Member States.

It is clear, however, that to solve blood transfusion problems in the African Region, each country must have a well-organized donor recruitment system. To this end, everyone must be sensitized to commit to the theme "Safe Blood Starts With Me. Blood Saves Lives". To attain our goal, we need everyone's contribution and a strong commitment on the part of our governments to the Blood Safety Initiative for Africa.

Safe blood starts with you and me. Safe blood saves lives. ▲

**Dr Ebrahim M. Samba**  
**Regional Director**

**For further information on blood safety activities in the African Region, contact:**

**Dr J.B. Tapko**  
**Regional Adviser, Blood Safety**  
**WHO Regional Office for Africa**  
**P.O. Box No. 6**  
**Brazzaville, Congo**  
**Tel: +242 81 15 53**  
**Fax: +242 81 19 39**  
**E-mail: [tapkob@whoafr.org](mailto:tapkob@whoafr.org)**  
**Internet: [www.whoafr.org/](http://www.whoafr.org/)**

# Algeria

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## Minister leads official launch

World Health Day was officially inaugurated on 4 April 2000 by the Minister of Health and Population, Mr Amara Benyounes. Using the slogan “Safe Blood Starts With Me—Blood Saves Lives”, the National Institute of Public Health hosted a series of events, ranging from scientific debates, exhibition stands, information programmes and video transmissions. Two major themes were identified, namely Developing Blood Donor Loyalty, and Safe Blood Transfusion. For both themes, invited experts facilitated discussions on ten given topics, for example *the quality control of blood bags*. Among the 250 guests at this high level launch were delegates from many ministries and United Nations agencies. The success of



Official safe blood poster

the Day was also assured by the keen participation of the Algerian Scouts Movement, as well as the NGO community, including associations and federations representing disadvantaged groups.

Festivities were spread over several weeks. The Tlemcen district (wilaya) in the extreme west of the country was the first to commemorate World Health Day on 28 March. The capital city held an “Open Day” on 10 April in the heart of Alger, under the auspices of the Department of Health; and the town of Mascara was the last to devote a special Information Day to blood transfusion safety, on Sunday 16 April 2000.

## Scouts Honour!

In fact, it was the Scouts Movement that kicked off the festivities in Algeria a fortnight before World Health Day. In collaboration with the National Blood Agency, a course was organized for trainee scouts from Alger on safe blood transfusion. The training was timed to lead into

several blood donation campaigns, planned by the Scouts Movement for 7 and 8 April in schools and universities in the city.

## Media impact a huge success

The messages passed by the excellent media campaign—press conference, radio programmes, TV broadcasts and press articles—were instrumental in sensitizing people to the need for safe blood. Journalists at the press conference, held on 2 April at the Ministry of Health and Population, were keen to support the awareness-building campaign for increased and sustained blood donation and safe blood transfusion. The WHO Liaison Officer, Dr N. Dekkar, emphasized that blood donation concerns everyone, not just the Ministry of Health, acknowledging nonetheless that

political commitment and support were critical to the success of any safe blood initiative, including quality management following WHO guidelines.

**“Blood donation concerns us all, not just the Ministry of Health.”**

According to the Director General of the National Blood Agency, Professor Kamal Kezzal, Algeria

collects about

230 000 blood donations per year, which is sadly inadequate to meet the needs of the nation. Moreover, of the eight donations per 1000 population, 85% represent family, or “replacement” donations. The Department of Preventive Medicine told the press that blood donors face insignificant risks since they are seen by a doctor at the Blood Transfusion Centre prior to donation, and only the highest standards of hygiene are tolerated. What is more significant, is that donors are likely to save someone’s life.

Public radio with its three national and 22 local stations across the country, transmitted key messages in all dialects, e.g. the need for vigilance to prevent transfusion-transmissible infections, despite its low prevalence in Algeria. The same commitment applied to Algerian Television, which devoted close to a dozen programmes to the theme of World Health Day, or more than one broadcast per day.



Champion blood donor Mohamed Hadj Sadok rewarded by Minister of Health

WHO’s specific televised material was heavily exploited during news bulletins, and on 7 April itself, nearly 20 minutes of the peak viewing 20h00 News were devoted to health and blood safety, including issues facing dialysis patients in Algeria. Every Algerian newspaper—whether public or private—played its role in the information chain, conveying vital messages in a way that ensured World Health Day 2000 would not be forgotten.

### Winning initiatives

The media were not alone in supporting blood safety. Special note should be made too of the religious affairs leaders in the country, who dedicated the sermon, and the TV broadcasts, of Friday 7 April 2000 to safe blood donation and transfusion.

Blood collection campaigns took place during the first week of April right across the country, in health facilities, schools, universities and in the work place.

With the support of WHO, 20,000 posters were distributed to the 48 District Health Offices. Five hundred posters were displayed in Post Offices, schools and even in

**Every Algerian newspaper played its part in the information chain.**

some military centres. About 800 posters listing the rules for safe blood

transfusion were given to health professionals; and 1,200 information kits supplied by WHO were disseminated to the different national and international partners in this field.

One million envelopes, distributed by the Ministry of Post and Telecommunications, were embossed with a safe blood message. The Ministry of Education is also considering the introduction into the school syllabus of a class on safe blood donation.

Another example of industrial partnerships in safe blood was SONATRACH, a national enterprise specializing in the development of hydrocarbons. This company celebrated World Health Day in three corners of the country by organizing scientific debates and hosting galas so that the top SONATRACH blood donors could be duly recognized.

World Health Day 2000 in Algeria was not just 7 April, and the Ministry of Health and Population, with the National Blood Services, expect activities to continue well into 2001. ▲

**For more information on blood safety activities in Algeria:**

**Director General  
National Blood Agency, Alger  
Tel: +213 21 550370  
Fax: +213 21 550366  
E-mail: [ans@ibnsina.ands.dz](mailto:ans@ibnsina.ands.dz)  
Internet: [www.ands.dz](http://www.ands.dz)  
and click on ANS!**

## What is safe blood?

**S**afe blood is blood that does not contain any viruses, parasites, drugs, alcohol, chemical substances, or other extraneous factors that might cause harm, danger or disease to the recipient. People who donate blood should be in good health and should not suffer or have suffered from any serious illnesses. The recipient should not be harmed by receiving blood; the donor should not be put at risk by giving blood.

The world relies on safe blood, yet only 20–30% of the world's health systems are able to provide a safe and adequate blood supply. There are a limited number of healthy people donating blood. Every year, over 100 million blood units are collected from blood donors. Many millions more are still needed to fulfil global requirements and ensure availability of blood when and where it is needed.

Although blood can be screened for infectious agents such as viruses, it cannot be treated to kill viruses and micro-organisms because the red blood cells would be destroyed by the methods currently available. Supplies of blood tests for screening blood are sometimes interrupted in poor countries. Honesty in answering the donors questionnaire and at interviews is critical for the safety of blood transfusion. Blood donors take on a remarkable responsibility when offering themselves as life-savers.

Governments should take every opportunity to review the requirements of all health authorities and see that they are committed to supporting the blood services with sufficient funding. The health authorities should also ensure that all necessary safety procedures are available and in place, are supported financially, and are protected and enforced by national legislation. ▲

# Burundi

The Head of State of Burundi lent his personal support to the theme of World Health Day 2000, “Safe

Blood Starts With Me”, which was celebrated in style on Saturday 8 April in the nation’s capital

city Bujumbura, next to the shores of the beautiful Lake Tanganika.

This day, organized by the National Blood Transfusion Centre in collaboration with WHO and the

Red Cross and Red Crescent Societies, was first and foremost dedicated to blood donors.

Dr Stanislas Ntahobari, Minister of Public Health, rewarded 123 of the keenest donors with medals, diplomas and various other prizes, watched on by eminent personalities, including the Minister for Human Rights, the President of the Burundi Red Cross, and representatives of WHO, the Red Cross and Red Crescent Societies and the World Bank.

First prize—an open return air ticket to Kigali—went to both Nyamubiri Ménard and Barakanuza Léonidas, who had already donated blood 56 and 50 times respectively.

But the biggest prize of all went to the public at large, since this occasion was taken to launch a brand new Voluntary Blood Donors Association. The creation of such an Association was the stated ambition of the former Minister of Health of Burundi, on this same spot six months previously. Today, his wish has come true, and the not-for-profit Association’s members are thrilled at the opportunity to combine the opening with the celebration of World Health Day “Safe Blood Starts With Me”.

Mr Siméon Gitabu, Legal Adviser to the Centre, lamented the high cost of blood in public and private

hospitals alike, and wondered whether blood donors, in return for donating their blood for free, could be exonerated from paying if a relative required a blood transfusion.

The message of the day—safe blood donation is an act of solidarity and of fraternity—was chanted to the beat of the renowned Burundi drums, performed by tambourin players from the Rukinzo Legacy Club. The

**To give blood is a sign of solidarity.**

captivating rhythm of the drums accompanied activities throughout the day, and the singing and dancing, in turn, reflected the joy of giving blood to save a life. Graceful traditional dancers from

**To give blood is a gift of love.**



the University of Bujumbura twirled, for example, with outstretched arms and smiling faces in honour of altruistic blood donors. Under blue skies, the young girls sang songs in praise of the Lord for the gift of safe blood and paraded little baskets, decorated with the logo of the day and containing packets of safe donated blood. They appealed particularly to the women of Burundi to donate their blood to save a life, since giving life came so naturally to them.

The Director of the National Blood Transfusion Centre, Dr Déogratias Songore, welcomed the crowds that had gathered to celebrate the

**Blood discriminates against no one creed, ethnic group or frontier. It's our communal life line.**

event, and recalled the sense of duty and responsibility of each and every citizen to observe a healthy lifestyle, and thereby

protect his or her blood from harmful elements.

This was followed by an intervention by Dr Louis Mboneko, Inspector General for Public Health, who told blood donors "The 7th of April 2000 is *your* day". He congratulated them for their humane actions, and urged them to continue giving blood, and to spread the word to family and friends. Give blood: give love.

The theme of this year's World Health Day was taken as an opportunity to offer a workshop-seminar on blood safety for clinicians across the nation. For two days, Professor Reghis Abderezzak, Director of a large Blood Transfusion Centre in Algeria, reinforced the messages of appropriate use of blood and blood products. Used judiciously, blood transfusion saves lives. The clinicians were shown, however, the many reasons why a transfusion may be unnecessary, and received a checklist designed especially to assist clinicians in making decisions on whether or not to prescribe blood.



Dr Stanislas Ntahobari, MInister of Health, joins in.

### A People's Pledge

The challenge that the Association has given itself is daunting: to raise the number of voluntary, non-remunerated donors from the current level of 11,000 to 60,000 over the next five years. That's an increase of nearly 450% with the aim of having one in every hundred Burundians a safe donor. To attain this magnificent goal, the Association will launch a solid advocacy campaign, targeting schools, universities and the army, in cities, towns, and villages— basically, anywhere where there is a community of *people*.

The WHO Representative in Burundi, Dr P.M.M. Yankalbé, told the press that he was happy with the outcome of the day. "It is vital", he said, "that blood donors are part of an awareness campaign to sensitize their friends, family and neighbours to the need for them to give blood, as Blood Saves Lives." ▲

**For more information on blood safety activities in Burundi, contact:**

**The Director  
National Blood Transfusion Centre  
B.P. 3585, Bujumbura  
Tel: +257 22 35 76  
Fax: +257 21 73 68**

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## SAFE BLOOD STARTS WITH ME – BLOOD SAVES LIVES

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# Côte d'Ivoire

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This West African nation celebrated, along with the rest of the world, World Health Day on 7 April 2000, a day devoted to safe blood transfusion. Abidjan, Bouaké, Korhogo and Daloa—our four towns with a Blood Transfusion Centre—were the natural choice for the focus of activities. Each location followed a designated programme as follows:

- global gathering followed by a blood donor march;
- operation “give blood”;
- official speeches;
- a show on blood donation;
- prize-giving ceremony for loyal and worthy blood donors;
- cocktail and closing ceremony.

### A capital affair

In Abidjan, first city of the nation, more than a thousand blood donors assembled at the Saint Paul Cathedral under the patronage of the Minister of Health and Social Affairs to embark on their 5 km march towards the Esplanade of the Town Hall. On this bright Friday morning, walkers sporting colourful T-shirts with the “safe blood starts with me” logo advanced to the catchy rhythm of the fanfare. All ten communes of the capital were represented, and carried banners advertising slogans such as “Someone’s blood, another one’s life” “To give blood is an act of brotherly love” or again “Blood: a shared lifeline”.

Walkers received a special escort from the metropolitan Police Force, the Emergency Medical Aid Service (SAMU), the Fire Brigade

and aides from the Red Cross throughout the entire route towards their destination.

On arrival, they were greeted by dignitaries who had prepared special messages for the occasion. The Mayor of Abidjan’s representative was the first to applaud the occasion, followed by the Presidents of the National Union of Voluntary Blood Donors and the Ivorian Red Cross, the WHO Country Representative and culminating with that of the Minister of Health and Social Affairs of the nation. At the heart of all these addresses were the need to motivate and retain blood donors, to strengthen blood transfusion services, nationwide praise for blood donors and their critical role in assuring

good health in the population of Côte d’Ivoire.

Integrated in the official tone of this commemorative event were specially created performances by talented local artists, who drew attention to the vital need for voluntary blood donations, and who were supported in their efforts by the intermittent playing of enchanting melodies offered by



World Health Day 2000 in Abidjan, Côte d’Ivoire

### Faithful Blood Donor Prizes

<b>1st</b>	<b>150kg rice</b>	<b>1 polo, 5 T-shirts, 2 caps</b>
<b>2nd</b>	<b>100kg rice</b>	<b>1 polo, 4 T-shirts, 2 caps</b>
<b>3rd</b>	<b>75kg rice</b>	<b>1 polo, 3 T-shirts, 2 caps</b>
<b>4th</b>	<b>50kg rice</b>	<b>1 polo, 2 T-shirts, 1 caps</b>
<b>5th</b>	<b>25kg rice</b>	<b>1 polo, 1 T-shirts, 1 caps</b>

a municipal fanfare.

When the applause finally died down, the ceremony turned to the important moment when loyal blood donors are justly recognized. Thus, under the auspices of the National Union of Voluntary Blood Donors and their first competition for the best advocate for blood donation, five altruistic blood donors who had given their blood on a regular basis, were publicly rewarded.

Five public schools, five religious groups, two public service groups and two youth clubs also received honorary diplomas from the Ministry of Health. Indeed, during 1999, these groups had achieved the commendable goal of collecting for the National Blood Transfusion Service between 200

and 900 bags of blood per event. This translates into a total of five thousand, four hundred and thirty four blood bags! Last but by no means least, eight loyal blood donors having donated more

than 200 times were knighted in the enviable title of Order of Merit of Health of the Republic of Côte d'Ivoire. The President of the National Union of Voluntary Blood Donors received the honour of Officer of the Order of Merit for Health for his devotion, his sense of initiative in social mobilisation and for having instilled a new dynamism in the Union.

The official representative of blood transfusion beneficiaries took this occasion to express his sincere gratitude to loyal and recurrent blood donors and to the authorities for acknowledging their valiant acts. He went on to encourage the general population, and particularly blood donors, to follow a healthy lifestyle and continue to give blood, without

which there would be no safe blood transfusion.

### Inside elsewhere

The enthusiasm for World Health Day was no less articulated in the Ivorian towns of Bouaké, Korhogo and Daloa, where dignitaries such as local government leaders, mayors and regional health directors participated in a very animated Day. Everywhere, the general public—and especially blood donors—were out in mass to celebrate the occasion.

Diplomas were bestowed on blood donors and associations that had particularly contributed to the promotion of safe blood donation over the course of the previous year.

### Special thanks

The entire nation was aware of World Health Day 2000 “Safe Blood Starts With Me—Blood Saves Lives”. This achievement is due to the strong support of the media and of WHO, who made

possible the technical and logistic assistance required. The commitment and active participation of the local authorities and Red Cross should also be noted, and that of the Canadian Embassy and the United Nations personnel, who organized a blood collection event on the eve of World Health Day. This collection enabled more than 60 unexpected blood bags to be available to the Blood Transfusion Services and, more importantly, to save lives.

The intensity of interest and commitment in this special World Health Day by blood donors and the general public leads Côte d'Ivoire to conclude that the creation of a National Blood Donation Day would be a welcome and useful measure towards ensuring the supply of safe blood for all. ▲

**For more information on blood safety activities in Côte d'Ivoire, contact:**

**The National Centre for Blood Transfusion**  
**18 B.P., Abidjan 18**  
**Tel: +225 21 35 57 23**  
**Fax: +225 21 35 27 43**



# South Africa

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## Drawing attention to the need for safe blood

As many as 15–20% of the South African population have been affected by the HIV virus. Although its blood transfusion services (BTS) have the resources and technology to screen donations by the most modern and sophisticated systems, the priority is clearly to identify and educate low-risk blood donors and to motivate them to donate regularly. It is therefore not surprising that the BTS, the Department of Health, health care workers and the public at large embraced WHO's choice of blood safety as the theme for World Health Day 2000.

## National and international harmony

To harmonize activities, April 2000 was designated as national Blood Donor Month, during which a blue ribbon lapel badge was widely distributed as a symbol for blood donation and the quest for safe blood. All stakeholders enthusiastically adopted the national and World Health Day activities. The Department of Health adopted a National Blood Policy in 1998, and on World Health Day 2000, made public its policy to protect the blood supply against the threat of HIV/AIDS.

## Partnerships

The BTS collaborated with the Department of Health to maximise impact, widely distributing posters before, on and after 7 April. The successful build-up also involved

major businesses, religious communities, the media, telephone networks, educational institutions and health care workers. The response was overwhelming.

The Democratic Nursing Organisation of South Africa (DENOSA), in association with the International Council of Nurses, publicly affirmed their support in *Nursing Update*. Nurses play a key role in

practising safe injection techniques, safeguarding health and blood, and providing counsel on healthy life styles, combating drug abuse and promoting blood donor programmes.

## Major events

On World Health Day the Minister of Health, Dr Manto Tshabalala

Msimang chaired a media launch at the Johannesburg International Airport. In stressing that blood is a national resource and that all patients are entitled to low-risk blood, Mrs Msimang showed that a safe blood supply is a cornerstone of the National Blood



Minister of Health, Dr Manto Tshabalala Msimang, with a blood donor.



The Johannesburg cycling team.

Policy. She also regards the BTS as a key arm of the educational programme to limit the impact of HIV/AIDS on the people of South Africa.

Lectures and symposia were arranged by the BTS at major hospitals to emphasise the importance of a safe blood supply. The risks involved in blood transfusion, the appropriate use of blood and alternatives to blood products were also discussed with all health care workers.

The main event of *Blood Donor Month* was a national cycle tour of six teams, departing from major cities of the country. Presentations on blood safety were held in sixty stopover centres en route. Cyclists arrived in Johannesburg and in smaller towns (Hoedspruit, Cradock, Dordrecht and Richards Bay) as part of the

celebrations, but the highlight was their arrival in Bloemfontein on 14 April. The kits of the cyclists included the WHO slogan 'Blood safety starts with me', enthusiastically embraced by the local media and prominent members of society. These dignitaries honoured local blood donors, volunteer helpers and community service organizations.

### Media impact

Numerous press articles appeared on or about the 7 April stressing

the need for safe blood, the threat of transmissible diseases, and demonstrating the link between a healthy lifestyle and a safe blood supply.

On 7 April, many radio interviews were broadcast with blood transfusion personnel, health care workers, hospital staff, patients who have benefited from blood transfusion and spokespersons for the Department of Health. The message was clear: patients desperately need safe blood and this can only come from regular, voluntary, non-remunerated blood donors from low risk population groups.

Presenters of popular TV programmes such as *Who wants to be a millionaire* and the national news prominently wore ribbons and badges in support of World Health Day, applauding the commitment of blood donors to serve the community and explaining the need for safe blood.

A TV commercial sponsored by a major retail consumer organization and an international

manufacturer of blood bags was launched on 7 April. This one and a half minute promotion appeals to the public to donate blood and highlights important facets of blood donation, processing and transfusion. The public is enlightened on laboratory screening, statistics on blood usage and blood collection targets.

The *South African Medical Journal* has agreed to publish an editorial on the theme during the course of the year.

### Other initiatives

National and private cellular telephone networks transmitted to all who received calls on 7 April the Minister of Health's message that "safe blood starts with me".

Exhibition stands were set up in major libraries and shopping malls; the Professional Soccer League adopted the blood safety project as a social responsibility and the national football team, Bafana Bafana, wore the blue ribbon all through April.

Scholars represent a key opportunity to spread the message that safe blood is the responsibility of the individual. A national art competition was launched, with secondary school students asked to submit artwork on the theme "a celebration of life". Student involvement has a positive effect on blood donation and makes them aware of the link between safe blood and the lifestyle of blood donors.

Honours were bestowed on voluntary donors who had given more than 200 units of blood. In Johannesburg, tribute was paid to



Scholars stage a pageant to illustrate the role of a blood transfusion for crash victims.



Anthony Heyns of the South African Blood Transfusion Services, rewards Rodney Richardson.

Rodney Richards and Morris Creswick who had clearly demonstrated their commitment to serve the community by donating more than 300 units of blood, on average almost six times a year, for more than fifty years: a truly remarkable achievement!

In Gauteng Province, the

youth staged a motor vehicle accident with health care workers providing first aid and replicated the demonstration on a truck that paraded around the neighbourhood. The proces-

sion aimed to illustrate the life-saving role that blood donors play in the treatment of casualties and gave the BTS an opportunity to educate the community on the importance of safe blood. This project has motivated many members of the community to become involved in the blood programme either as blood donors, sponsors of blood donation or as voluntary helpers.

World Health Day 2000 was a great success in South Africa, and will no doubt continue into 2001, the Year of the Volunteer, with a

lasting and positive impact on public awareness, blood procurement and the practice of blood transfusion in this country. ▲

**For more information on blood safety activities in South Africa, contact:**

**Chief Executive Director  
South African National Blood Service, Private Bag X14,  
Weltevreden Park 1715  
Tel: +27(11) 761 9111  
Fax: +27(11) 761 9113  
E-mail: aheyms@inl.sanbs.org.za  
Internet: www.sanbs.org.za**

# Zimbabwe

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## Nothing new in Zimbabwe

The quest to provide adequate and safe blood is not a new concept for the National Blood Transfusion Service (NBTS). The organization has followed WHO guidelines for the appropriate collection, processing, storage and distribution of blood and blood products in Zimbabwe and has been designated as a WHO Collaborating Centre, making it one of seven such centres in the world. It was natural, therefore, that the NBTS welcomed the theme of World Health Day 2000 and was at the forefront of activities to coordinate, with the Ministry of Health and Child Welfare and other stakeholders, the numerous commemorative events held at venues countrywide.

## The key to success: prior commitment

To ensure the success of the event and secure commitment at the highest level, the NBTS coordinated a strategic plan, which included regular contacts with a team chaired by an Officer from the Ministry of Health and Child Welfare. Also involved were representatives from the Army

and Airforce of Zimbabwe, Prison Services, The Zimbabwe Red Cross Society, Harare City Health Department, hospitals and the Ministry of Education, Sports and Culture and that of Information, Posts and Telecommunications. Following an official launch of the event in Harare by the WHO Representative on 23 February, a strategy was initiated to decentralize activities of the day to rural

areas. The provincial blood donor shield was chosen as the symbol of safe blood donation. The shield is awarded to the school with the highest ratio of units of blood donated per year per eligible blood donors.

On 7 April itself, the Marimba Band and drum majorettes provided public entertainment while others marched for blood safety



**The provincial blood donor shield, a symbol of safe blood donation**

donned with special Safe Blood T-shirts. Banners and flyers abounded in towns and provinces to promote altruistic blood donation.

## Youth: Zimbabwe's key to the future

Two thirds of all blood used in this country is donated by school



**Keynote address, Dr T.J. Stamps, Minister of Health and Child Welfare**

**I will not forget Mr Goodluck, lying on the Ground, bleeding profusely. We took him To Silveira. Where Dr Mitchell started By saying 'he needs blood'.**

**I will not forget my brother Jena, nose Bleeding and losing several litres of blood.**

**We took him to hospital, where he was Given blood.**

**I used to ask myself a silly question "Where do these doctors get the blood from?"**

**Do we have a lake full of blood?**

**Do we have a river full of blood?**

**Do we have a dam full of blood?**

**No, No, No, blood comes from you**

**Sons and daughters of Zimbabwe**

**Let's donate blood to rescue our relatives**

**And friends before they die.**

**By denying patients your blood**

**You will be murdering somebody indirectly**

**Let's donate blood.**

***Oswell Ushe***

***4A, Simbaravanhu Secondary School***

children. The recognition bestowed on provincial schools that donate the highest number of blood units as a ratio of their eligible blood donor population is intended to motivate young people, the future of any blood bank, to continue donating blood. It also aims to encourage young people to minimize risk-taking behaviours that could lead to contracting blood transmissible infections.

To mark the occasion, all schools organized colourful pupil-led events such as drama, songs and poems highlighting the Safe Blood theme.

Community leaders, traditional and political leaders and pupils from neighbouring schools attended all these activities, and pupils, teachers and headmasters gave interviews to local radio, television, and newspapers on their beliefs about safe blood provision and healthy living. It is worth noting that of the eight winner schools in 1999, four of them were girls only schools. Special funds were allocated to ensure that school children could participate in the events.

### **Pledge 25**

Zimbabwe's youth realized early that their future is in their own hands. This is why, some years ago, a project was launched by the youth themselves which has significantly contributed to the success of the nation's safe blood supply. The project, already being emulated in neighbouring countries, is called "Pledge 25".

HIV caused Blood Transfusion Services across the world to rethink seriously their blood donor

recruitment strategies and, in 1989, Zimbabwe started targeting an as-yet untapped pool of low-risk donors: school-children aged 16–19. However, history proved that—successful as the programme was—most school blood donors ceased to donate regularly upon leaving school. Pledge 25 was therefore created by and for school leavers, who pledged to make at least 25 blood donations after leaving school. Members also actively share information and knowledge with other current and prospective donors and, in this way, help to promote healthy lifestyles and reduce the amount of infected blood collected. The first group of members to graduate were saluted at the NBTS Annual General Meeting on 6 September 2000, and many of the pioneers are considering the formation of a "Pledge 50" division.

The Club elects national and provincial administrative committees to ensure the running of their affairs. Selected Peer Donor Promoters now assist the

NBTS with donor recruitment, retention and motivation and, in turn, the NBTS plays a regulatory and advisory role to the Club.

It is critical to reiterate the self-motivated commitment of the pupils themselves that has led to a window of hope for the national blood bank. It is thanks to the students, who instituted a National Youth Blood Donors Day, that the availability of safe blood at peak times of the year such as Christmas, has gone from 50% to 80% and rising. Other statistics speak for themselves: HIV sero positivity among blood donors has fallen from 4.45% in 1989 to 0.7% in 1999 (general population sero prevalence: 25.8%); 99.3% of all blood collected in 1999 was HIV-negative; and 69% of the 82,365 units collected in this same year were donated by pupils.

### Media exposure

An event as important to health as blood safety deserves media attention, and a special

subcommittee made sure that the media fully participated. Media personnel from government and private organizations visited the NBTS to share the calendar of events and plan logistics, ending with a tour of the Transfusion Service, and the Zimbabwe Broadcasting Corporation Television aired this occasion during national news time.

It was credit to the NBTS that, despite daunting competition for broadcasting time, an average of three media representatives accompanied the WHO/NBTS delegation during visits to provincial schools; the national daily newspaper published an article on the safe blood theme at least once a week; and television time earmarked for the Safe Blood theme went ahead despite serious setbacks. Recorded interviews by Radio 2 were also aired on other stations, increasing the impact of the health messages.

The opportunity for the Zimbabwe National Blood Transfusion Service to feature in the



TJ Stamps at the blood donor shield presentation ceremony for Mahonaland East Province, Marondera, at Nagle House Girls High School.

commemorative video organized by WHO added a special international dimension to the day, and a window for the world—and national colleagues—on what is happening in Zimbabwe. Schools that participated in the event were greatly motivated and blood collected there increased by 135% on average during school visits after the film was shot.

### Conclusion

The hosting of World Health Day encouraged awareness of the need for regular blood donation; new partnerships, especially in the field of youth projects, and greater appreciation of the work of the NBTS by the government, civil society and the media.

A lot of learning and appreciation went on at all the venues. The NBTS will reflect on this and adapt as necessary its targeted



Masiyarwa Secondary School banner

promotion activities for safe blood donation. For example, it has been observed that schools that win the shield usually continue performing well.

World Health Day 2000 was just the launch of the day and hospitals, clinics and rural health care centres continued to commemorate the event throughout the year. Pledge 25, the National Youth Festival, the NBTS Annual General Meeting and the Youth Blood Donors Day—ending the year's festivities on

9 December 2000—are but examples of these continued activities.

The NBTS looks forward to a lasting partnership in the field of school blood donor recruitment, retention and motivation. With the necessary support, young

people of this land can help sustain the blood bank of Zimbabwe. ▲

**For more information on blood safety activities in Zimbabwe, contact:**

**Director  
National Blood Transfusion Service  
Zimbabwe, Harare  
Tel: +2634 707 801  
Fax: +2634 707 820  
E-mail: [zimnbts@africaonline.co.zw](mailto:zimnbts@africaonline.co.zw)  
Internet: [www.epicnewmedia.net.nbts](http://www.epicnewmedia.net.nbts).**

## Safety from me to you, throughout

**S**afety of blood and blood products depends on many factors, starting with the recruitment and recall (at safe intervals) of voluntary, non-remunerated blood donors who have been eliminated from any risk. Safety is ensured by providing clean conditions for blood collection, appropriate screening of donors, extensive testing, proper storage, and appropriate clinical use of transfusion. ▲

# Americas

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## **New initiative launched on World Health Day 2000 rallies the Americas on blood safety**

Unsafe blood and blood shortages threaten the health of people who need blood transfusions in some countries of the Americas. A new initiative has been launched to encourage more blood donations and raise awareness of the importance of having a safe and adequate blood supply at all times,



Dr George A.O. Alleyne

said Dr George A.O. Alleyne, Director of the Pan American Health Organization.

This initiative, launched on 7 April, World Health Day 2000, focused on the critical issue of safe blood throughout the Americas and the world, with the theme: Safe Blood Starts With Me, Safe Blood Saves Lives.

It is critical for all countries to join the effort to raise awareness of the importance of safe, adequate blood supplies and for people everywhere to donate blood at least twice a year. Safe blood, with no infectious agents, can only come through adequate screening and testing of blood. All citizens of the Americas must be assured of receiving safe blood when they need it, Dr Alleyne said. We want people to understand and accept blood donation as a desirable, altruistic act, and health workers

to discourage replacement donation and retain and educate volunteer donors, he added.

Blood for transfusion is obtained from voluntary, unpaid donors in only a small proportion of countries and territories in the Americas. At the national level, only Aruba, Curaçao, Cuba, Canada, and the United States, report 100% voluntary donations. Only 16 countries—eight in the English-speaking Caribbean, six in Latin America, and Canada and the United States—report screening 100% of donated units for the human immunodeficiency virus (HIV), hepatitis B (HBV), and hepatitis C (HCV).

Available data for the Americas, excluding Canada and the United States, indicate that 99% of all units of blood collected are screened for HIV and HBV and 60% for HCV. This means that,

annually, around 50,000 units are transfused that have not been screened for HIV and HBV, and around 1,500,000 units are transfused that have not been screened for HCV, according to PAHO figures from the countries.

In a World Health Day 2000 ceremony at PAHO, Dr Alleyne accepted a donation of US\$100,000 from the Pan American Health and Education Foundation (PAHEF) for PAHO's new regional blood safety initiative. It was given by Sandra de Castro Buffington, Vice President of Corporate Communications for BuenaSalud.com, and a member of PAHEF's Board of Trustees.

The World Health Day observation in Washington featured US Surgeon General Dr David Satcher, American Red Cross President and CEO Dr Bernadine



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Healy, American Association of Blood Banks President Dr Paul Ness, America's Blood Centers President Dr Celso Bianco, and American Blood Resources Association Chair Dr Toby Simon. The observance was organized in conjunction with the American Association for World Health and the US Department of Health and Human Services.

We know that the risk of transfusion-transmitted infections is higher when blood products come from paid or replacement donors, rather than volunteer and repeat donors, so we must meet the challenge of promoting voluntary blood donation, said Dr Alleyne.

Safe and adequate blood supplies are needed in every country, yet some lack the necessary infrastructure to manage blood collection and distribution. In addition, wars, civil unrest or natural disasters can place severe strains on blood supplies. Screening of all donated blood for infection with HBV, HCV, syphilis, *Trypanosoma cruzi*, which causes

Chagas disease, and HIV is a very important step which must be taken by all blood banks, said Dr. José Ramiro Cruz, PAHO's regional advisor on blood safety.

As a result of PAHO initiatives, there has been a significant increase in the proportion of units of blood screened for HIV, HBV, HCV, and *T. cruzi* in the past four years. Laws, regulations, and standards governing blood transfusions in the Latin American countries have been promulgated or amended. National blood commissions have been established in some countries, and in others, technical committees have been formed to find ways to improve the quality of the blood banks. PAHO has set up training programs for national personnel and a Distance Learning Program on Safe Blood and Blood Products in 11 countries. National information systems help evaluate progress in each country and identify priority areas for intervention. Academic institutions, professional associations, and others also are involved to

guarantee that the training reaches physicians, nurses, laboratory staff, and personnel who work with blood donors.

### **World Health Day Celebrations set for 7 April**

World Health Day 2000, focusing on the critical issue of safe blood, was observed in all communities around the world.

We want to raise the awareness in the Americas about the importance of blood safety and encourage every country to establish national blood programs and pass blood safety legislation, Dr. Cruz said. Working together, we can improve the safety of blood banking services throughout the Western Hemisphere, and thus achieve the goals adopted by the ministers of health in this region of screening all blood and having all blood banks participate in quality control programs, he added.

The Pan American Health Organization (PAHO) which serves as the regional office of WHO for the Americas, works to improve health and raise living standards in all the countries of the Americas. ▲

**For further information on blood safety activities in the Americas, contact:**

**Daniel Epstein  
Office of Public Information  
World Health Organization/Pan  
American Health Organization  
525, 23rd Street N.W.  
Washington, D.C. 20037  
Tel: +1 202 974-3459  
Fax +1 202 974-3143  
E-mail: [epsteind@paho.org](mailto:epsteind@paho.org)  
Internet: [www.paho.org](http://www.paho.org)**

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# Backgrounder issued by PAHO/AMRO for WHD 2000: Questions and answers about blood

## What is blood?

**T**he average adult has 10–12 pints (or about 5 liters) of blood. Since it contains living cells, blood needs the nourishment provided by vitamins and minerals. Blood delivers essential ingredients throughout the body and removes wastes and disease. Blood is composed of trillions of tiny cells suspended in a straw-colored clear liquid called plasma. Forty-five percent of these cells are red blood cells, which carry oxygen from the lungs to all parts of the body. For every 100 reds, there is one white cell; white blood cells fight disease and infections. The liquid plasma carries these solid cells and the platelets that help blood clot. When you experience a minor cut, the platelets cause the blood to clot. The bleeding stops. And, because

new blood is always being made inside of your bones, the body replaces the lost blood. But if you lose a lot of blood through a major wound, in surgery, or through disease, your body can't manufacture enough replacement blood quickly. You have to get a blood transfusion, using blood from other people.

## Who can donate blood for transfusions?

Professional interviewers screen potential blood donors before they donate. Donors must be healthy individuals who lead a healthy lifestyle, be 17 years or older, and weigh at least 110 pounds. Healthy means that a donor must be free of major cold, flu and allergy symptoms. Acceptable donors can't have

had a blood-transmitted infection such as hepatitis or Chagas disease. Nor can they have had any risk behaviors associated with HIV or AIDS.

## Why is donated blood safe?

The blood donation is made under sterile conditions, labeled, and immediately sent to a laboratory for rigorous testing—and re-testing. It is then sent to a blood bank, which acts as a distribution center for hospitals, clinics, etc.

## Why should I be a blood donor?

There is no easier way for you to save lives on a regular basis. After donating, your body replaces the plasma in about a day, and the other

components within a few weeks. You can donate blood every eight weeks. And chances are, you may be helping yourself: you have a one in five chance of needing donated blood at least once during your lifetime.

## What type of risk is there for someone who donates blood?

Donating blood is not risky. The needle that withdraws the blood is new and sterile. It is used only for your donation, then thrown away. There is no chance of getting an infectious disease such as AIDS while giving blood. The bones in your body continually make blood; if you're healthy, then it is very safe to donate a unit without major side effects.

### What is blood used for?

Red cells are needed for surgical procedures and to treat patients with anaemia. Platelets are used in open-heart surgery. They are also needed by cancer patients undergoing chemotherapy, which destroys the body's blood cells. Plasma is 90% water, 7% protein, and very small amounts of fats, sugar and minerals. Plasma and concentrated clotting factors are needed by patients with hemophilia and other bleeding disorders.

### Why do we have to keep giving blood?

Like every living organism, blood has a life cycle. Within the body, red blood cells have an average life span of 120 days. Red blood cells in donated blood can be used up to 42 days from the day of donation. Platelets must be used within five days. Plasma can be frozen, expanding its shelf life to a year.

### What do I have to do to give blood?

Call your local blood bank for an appointment or information about the next blood collection drive. The night before, get a good night's sleep. Eat breakfast. And drink plenty of fluids several hours before

you donate blood. Be honest in your pre-donation interview. In the 10 minutes it takes to give blood, read, relax or think about the lives your safe blood will save.

### What happens after I give blood?

After donating, rest for 5 or 10 minutes. Drink juice or eat something with sugar to raise your blood sugar level. Don't smoke for at least an hour, nor drink alcoholic beverages for five hours. Share your good experience with your friends, so they'll be encouraged to donate their blood, too!

### Who should NOT give blood?

- People with AIDS, or anyone who has had a positive blood test for HIV
- Anyone who has injected illegal drugs - even once
- Hemophiliacs
- Any male who has had unprotected sex with another male since 1977.
- Any male or female who has had sex for money or drugs any time since 1977

People should not use blood donation testing as a method for discovering their HIV status; that information can be obtained through your local health department. ▲

# Argentina

## “Safe blood starts with us”: national and provincial ministries launch United Plan

The first successful blood transfusion using sodium citrate as an anticoagulant was performed in Argentina by Dr Luis Agote in 1914. This was an important advance since it led to the possibility of storage of blood and the creation of blood banks. Previously, the donor had to be present at the time of transfusion. “Yet we must not rest on our

“a drop of blood is more precious than a diamond”

laurels”, warned Héctor Lombardo, Minister of Health, during the opening ceremony on World Health



An invitation to give blood

Day. With the poignant image “a drop of blood is more precious than a diamond”, he announced the launch of a nationwide campaign to attract altruistic blood donors, in collaboration with the Argentine Red Cross. “The integration of nongovernmental organizations with the Ministry of Health is fundamental”, Lombardo continued. The need for a unified approach was reiterated across

all 24 provincial ministries, where education material was distributed and special projects initiated.

Ana del Pozo, Chief of Haemotherapy at the Juan Garrahan Hospital, couldn’t agree more. Our efforts are in vain, she cautioned, if we do not

have an undivided, strong educational message, that must come from the highest level and be heard at the lowest.

## All together: altruism

This one strong message in the blood safety campaign was the vital need to increase the number of voluntary, unpaid donors from low-risk population groups. The

Minister of Health of Argentina affirmed that “professional blood donations should be curtailed and strategies developed to put an end to this practice”, remarks reiterated by Juan Manuel Sotelo, PAHO/WHO Representative. Furthermore, the Minister considered that the solidarity and generosity of the nation—particularly in emergency situations when they rush to give blood—has been underestimated. “Through education, we should harness this gesture of communal solidarity”, he concluded.

## Commitment at the highest level

Well in advance of the celebrations, hosted at the top level, a National Work Commission was formed with representatives of the Ministry of Health, PAHO/WHO, the Argentine Association



Youth solidarity with the blood donor movement

for Haemotherapy and Immunohaematology (AAHI) and the National Distance Learning Programme on Safe Blood. All 24 Provincial Health Ministries were encouraged to look beyond the commemoration of World Health Day, to the importance of implementing a Safe Blood Plan. Indeed, the Health Commission of the National Senate was motivated to foster the modernization of legislation on blood transfusion, incorporating the suggestions of COFESA (National Health Council).

Governmental commitment to the campaign was evident across the

country, starting in Buenos Aires where the Mayor Dr Anibal Ibarra, for example, planned to use the municipal elections, bringing together around two million voters, as an occasion to encourage the voluntary enrolment of donors using their ID cards.

In **Cordoba**, the provincial Minister of Health invited experts to analyse the situation of blood transfusion worldwide, and propose specific measures to increase the number of altruistic blood donors in the province. To date, the requirement for blood in the Province was not being met.

### “D” Day

The turnout in **Mendoza** was superb, especially young people in the civic squares where a wealth of educational material awaited them at the decorated booths. Fifty free breakfasts also awaited

new and regular blood donors at the haemotherapy service, after which they could enjoy a production from the cast of “La Pericana”, or appreciate the music specially composed and



A token of appreciation for voluntary, non-remunerated blood donors

recorded for the occasion by singer Daniel Allaria. This was indeed a special Day for Donors. In placing blood transfusion safety in the context of overall health goals, the three most prominent religious groups in Mendoza (Catholic, Evangelical and Jewish) came together to agree on a plan of action to increase awareness and altruistic donors.

The Hospital of **Cachi** was proud

to announce its new Blood Bank to radio listeners, who could also follow the address of Dr George A.O. Alleyne, Director of PAHO, and Dr Gro Harlem Brundtland, Director-General of WHO. The success of the “safe blood starts with me” campaign was borne out by the increased number of requests for voluntary blood donor cards in April.

### National workshop on blood safety

This was the first time that the Minister of Health has invited all provinces nationwide to participate in such an important issue. At the workshop, responsible experts on blood transfusion discussed the survey specially commissioned to assess blood services countrywide, and the need to form an ad-hoc Blood Committee of COFESA. Participants noted deficiencies in the national blood system, e.g. the accuracy of data, and implementation of legislation. Dr del Pozo pointed at a lack of coordination in



## Materials

Every form imaginable was used to make sure the message got home. In close collaboration with PAHO, Spanish versions of the brochure, posters, fliers, Q&As, press kits, videos, badges, and much, much more was made available to Argentine citizens everywhere in paper, digital and audiovisual formats. Modern technology ensured that the Safe Blood Starts With Me theme and information materials were all accessible via the internet, on a variety of health sciences sites. Existing internet lists of users in the fields of health, education and communication, all received safe blood material. ▲

**For further information on blood safety activities in Argentina, contact:**

**Mrs Ana del Pozo**  
**Chief of Transfusion Medicine**  
**Service**  
**Hospital de Pediatría “Prof. Dr J.P. Garrahan”**  
**Buenos Aires.**  
**Tel/Fax: +54 11 4362 0645**  
**E-mail: [adelpozo@garrahan.gov.ar](mailto:adelpozo@garrahan.gov.ar)**  
**Internet: [www.garrahan.gov.ar](http://www.garrahan.gov.ar)**

## Good health contributes to safe blood

**G**ood health depends on lifestyle and disease prevention. Eating a balanced diet with an adequate vitamin and micronutrient supply, keeping a clean environment, and avoiding risk situations help to keep people, and their blood, healthy. A healthy society means more safe blood and a reduced need for blood transfusion.

Iron-deficiency anaemia is one of the most widespread micronutrient deficiencies in the world. It affects about 50% of pre-school-age children and pregnant women in developing countries. In children, it affects growth and impairs cognitive performance. In pregnant women, it increases the risk of diseases and maternal mortality. Additional iron in the form of iron supplements combined with a diet containing iron-rich food can improve iron status.

Cancer patients are frequently recipients of blood transfusions, especially in industrialized countries. Reducing the overall number of cancer patients through prevention measures would reduce the need for heavy treatment schedules and thus the need for transfusions. This would have many benefits including an overall gain in health and quality of life, and in economic terms as well.

Education, from primary schools onwards, plays an important part in maintaining a healthy society and promoting risk-free behaviour, and in cultivating positive attitudes towards voluntary, non-remunerated blood donation. Raising people's awareness about the importance of unpaid blood donation should increase the number of regular, safe blood donations. ▲

# Chile

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## Global overview

World Health Day focuses on activities that span not just a day, but a whole calendar year, and that's just what happened in Chile. Starting early January 2000, the Committee for Centralization of Blood Banks at the Health Ministry reviewed WHO's proposals and planned a National Workshop for all 28 Health Services to introduce them to the theme. Representatives at the Workshop agreed on the need to address salient activities on blood transfusion, as follows:

- a national policy for safe blood;
- ways to switch to and sustain repeated voluntary blood donations, based on successful experiences in Chile;
- training and the appropriate clinical use of blood, using results from an audit;

performed by the Blood Commission at the Health Ministry and new ministerial guidelines for the active evaluation of clinical use and haemovigilance.

To assist promotional activities, participants received posters in English and Spanish, guidelines for blood collections, the programme for World Health Day and the recommendations of the Transfusion Medicine group at the Ministry of Health.

## The Valparaíso Agreement “Unity with the community”

Valparaíso, a popular hub of activity on the west coast, was the Chilean centre of attention with a packed programme. It was attended by Dr Michelle Bachelet, Minister of Health, and



Dr Michelle Bachelet, Minister of Health, signing the Valparaíso Agreement

representatives from WHO/PAHO, UNICEF, the Red Cross, public and private health systems, scientific societies, universities, nongovernmental organizations (including the Association of Voluntary Blood Donors and the National Institute of Youth), blood banks and, importantly, the community itself. The “Valparaíso Agreement”, solemnly signed by all individuals and organizations present, is reproduced at the end of this article.

Many other events took place in the capital city and throughout the country; for example a patient who had received multiple transfusions—Miss Maria Luisa Aguayo—publicly expressing her thanks to a regular voluntary blood donor (Mr Narciso García).

## Activities in Chile's regional health services

**Arica:** a poster exhibition was displayed at the Hospital Juan Noé, the outpatients clinics, and the town centre. Celebrations also took place in local universities and other educational institutions. Radio and TV programmes, and a press conference supported the constitution of the Transfusion Medicine Committee and the approval of a *new blood transfusion request form*.

**Iquique:** Information was



targeted at health personnel of the Hospital and the community on voluntary blood donations. Radio, the local press and a press conference issued safe blood messages, with the participation of health authorities and transfused patients. Local schools were also involved, as well as clinicians, who were trained in the *appropriate use of whole blood and plasma*.

**Antofagasta:** a massive information campaign was launched on voluntary blood donation and the activities of blood banks, with the key participation of TV actors, and with a *panel presentation on local TV* and radio. Badges were issued to loyal blood donors.

**Atacama:** here too, the Hospital Copiapó was the nucleus of a campaign for health personnel and the general population. Press conferences were held in the cities of Chañaral, Copiapó and Vallenar; articles appeared in local newspapers, including testimonies from people in need of blood products and posters were

displayed in all hospitals. Of note was the *launch of a web site* at [www.saludatacama.cl](http://www.saludatacama.cl) and a prize giving ceremony for voluntary blood donors.

**Coquimbo:** events included a promotion in a shopping centre, a poster exhibition, *free blood typing*; press conferences; spots in the media; and the active participation of local authorities. Voluntary blood donation and information on the appropriate use of blood were heavily promoted at the hospitals of Salamanca, Combarbalá, Los Vilos, Vicuña, and Coquimbo y la Serena. Conferences in local schools and a painting competition enhanced the momentum.

**Valparaíso-San Antonio :** at the health services of these areas, blood safety messages were reinforced through stickers and pamphlets distributed in public places. A press conference was held at the regional Blood Centre



Safe Blood Banner

and support to the campaign of promotion, motivation and retention of voluntary blood donors was prominent at the Gustavo Fricke Hospital. Blood collections were organized at *new venues*, drawn by the donation of a public person.

**Aconcagua:** all hospitals of this region participated in the campaign, supported by publications in local newspapers and

radio. A local blood transfusion committee was also formed and *official letters sent to blood donors*.

**O'Higgins Health Service:** the clinical use of blood in the region, including the treatment of coagulation defects and an *overall evaluation report*, was the focus of

attention at the Hospitals San Fernando and Rancagua.

**Maule Health Service:** a meeting was held for all medical specialities at the Hospital of Talca focusing on the "Recommendations for the Clinical Use of Blood and Blood Products" prepared by the Ministry of Health. Celebrities, including Mr Sergio Aguiló, MP, *testified as blood donors* and local schools learnt about voluntary blood donations from students of the University of Talca. The main square showed exhibitions, a survey on blood donation was carried out and the creation of a blood transfusion committee was much applauded.

**Bio-Bio Health Service:** stickers, poster exhibitions, educational meetings for the community and the distribution of key blood safety materials at all health centres in the region figured in the blood safety campaign of this service. The voluntary blood donation of the *Head of the Dialysis Unit*, covered by local press and TV, and the

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active participation of authorities from the 12 communes in the region, contributed to the success of this campaign.

**Concepción Health Service** : visual aids such as banners were also prominent in the voluntary blood collection campaign in all towns in this region. *Breaking news* was the signature of a cooperative agreement with Maule Health Service, and a ceremony to acknowledge repeated voluntary blood donors in the presence of local authorities.

**Talcahuano Health Service:** the Hospital Las Higueras campaigned to promote repeated altruistic voluntary blood donations, carried out *an audit* on the clinical use of blood and blood products, and supported a meeting to discuss the clinical use of blood guides.

**Araucanía Sur** : the Temuco and Valdivia hospitals were instrumental in the success of a campaign to promote repeated voluntary blood donations. The signing of a collaborative agreement with the

Red Cross, a *photographic exhibit*, clinical meetings in hospitals, an audit on the clinical use of blood and blood products, and close collaboration with local media all reinforced the messages of blood transfusion safety.

**Osorno Health Service:** local media noted that regional authorities paid homage to the work of the blood bank in this region, the Red Cross dedicated locations to promote voluntary blood donations, and that educational materials were distributed to all health services. Workshops were also held to discuss the clinical use of blood and blood products, and *collaboration was actively sought* with all institutions and organizations involved in blood safety.

**Llanchipal Health Service:** organized a campaign consisting of a press conference with local media and a blood collection by the Hospital Puerto Montt, the Red Cross and *medical technology students*.

**Aisén Health Service** : hospitals distributed pamphlets and arranged panel exhibitions; the media reinforced the messages, and meetings on the appropriate use of blood took place at the Coyhaique and Puerto Aisén Hospitals. Clinical meetings with directors at different hospitals took place to promote *voluntary blood donation* and blood safety.

**Metropolitan Central Health Service:** The Emergency Hospital held a conference for workers in the field of emergency relief and a poster exhibition on its voluntary blood donors club. Megavisión broadcasted television spots and a blood collection was successful at the University, with the blood mobile from the Red Cross. In addition, a *conference on transfusion medicine was specially designed for surgeons*.

**Metropolitan East Health Service:** At the Hospital El Salvador, a clinical audit on the use of blood was held at Torax Hospital and Neurosurgery.

**Metropolitan South Health Service:** the Sótero del Río and Padre Hurtado hospitals set up promotions of voluntary blood donation and blood bank activities, including *a video*. Health workers were invited to participate as voluntary blood donors and a panel was held at the hospitals on this special World Health Day.

The Hospital Barros Luco y Exequiel Gonzalez Cortés sent a letter to all its personnel promoting voluntary blood donation and organized a blood collection at the San Miguel Council. An audit was also carried out on the *use of plasma in surgery*, and a practical guide for the clinical use of blood and blood products was delivered at a clinical meeting.

**Metropolitan West Health Service:** Under the auspices of the Hospital San Juan de Dios, a promotional campaign was set up based on *panel exhibits* and a conference and blood collection at the University of Santiago. Clinical units had a meeting and audit on the clinical use of plasma.

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### **Metropolitan North Health**

**Service:** the Hospital San José was the centre for this blood donation campaign within hospital personnel, extending to *schools* in the area about voluntary blood donation. Visits to the blood bank were organized, an audit on the clinical use of red cells and plasma and a clinical meeting to report the results of the audit were highlights of World Health Day.

### **Other health services activities**

#### **Catholic University Medical**

**School:** information was channelled to the public through the Catholic University TV on voluntary blood donation and World Health Day. Blood was collected by *medical students* in coordination with the Red Cross and articles were published by the media on voluntary altruistic blood donations.

**Chilean Navy:** an exhibition was mounted by the Hospital Naval Viña del Mar in the main hall and

outpatient clinics on World Health Day and voluntary blood donations. Further *clinical meetings* were organized with Internal Medicine, Surgery, Obstetrics and Anesthesiology introducing WHO concepts of blood safety, the appropriate clinical use of blood and a presentation of the results of an audit on the use of whole blood, red cells and plasma.

### **Summary**

An evaluation of the activities carried out shows that:

- The Chilean population is sensitive to solidarity acts such as voluntary blood donation, especially the youth, showing that this could be attained in the mid term.
- The authorities understand the importance of the problem and are very involved in the activities of blood banks.
- It was possible to demonstrate failures in the clinical use of blood in all places were an

audit was performed, allowing many hospitals to take action and form Blood Transfusion Committees.

### **Valparaiso Agreement**

We the undersigned, representatives of organizations attending the World Health Day ceremony here in the city of Valparaíso, in considering past experiences, hereby endorse the “Valparaíso Agreement” as follows:

#### **Current situation**

Blood is essential for life, blood transfusions are needed for some treatments, and there is currently no substitute for it.

The only source of blood for transfusion is blood donation.

Donated blood can be fractionated into components, allowing the development of different areas of medicine. The fractionation process is more and more demanding given the need to attain quality standards in line

with the health services and do this within available resources.

Although technological development has provided alternatives to some blood products, they are not always used.

In Chile, the blood supply is based on family/replacement donations. The change from this system to one based on repeated, voluntary, altruistic blood donations, which exhibit a lower incidence of markers for infectious agents, is a medium term goal that depends not only on health workers, but on the community as a whole.

Blood transfusion, as with all health interventions, is not risk-free, necessitating a constant review of clinical practices in prescribing blood.

To increase the safety of the whole process, we must simultaneously check all links in the chain, starting with the blood donor, continuing with the processing and distribution and ending with the appropriate use in the blood receiver. To assure these links needs the active participation of

the entire community, because the cornerstone of the system is based on people giving to people.

### The challenge

We want a situation where the population of Chile can rest assured that if they need a blood transfusion, they have access to safe blood or blood products manufactured to the highest quality standards, free from infection. To meet this challenge we propose that the whole community must unite:

- to instil the repeated, voluntary altruistic blood donation as the main source of blood for transfusions in Chile;
- to transform the current system of hospital-based blood banks into a network able to produce and supply good quality blood products to the population as and when needed;
- to improve the clinical use of blood through a continuous

review of prescription practices.

- contribute to the continuous improvement of the quality of blood products for transfusion;
- optimize the use of blood products for a maximum benefit to patients;
- promote training for those involved in blood transfusion. ▲

Signed:

Dated: 7 April 2000

**For further information on blood safety activities in Chile, contact:**

**Dr Maria de los Angeles Rodríguez  
Head of Blood Bank  
Hospital Naval de Vina Del Mar  
Subida Alessandri, s/n  
Vina Del Mar  
Tel: +56 32 573 000  
Fax: +56 32 573 500  
E-mail:  
mangrodriquez@entelchile.net**

## The appropriate use of blood...

In many cases, blood transfusion may not be the most appropriate, cost-effective or safe therapeutic intervention. It is important to minimize the number of inappropriate blood transfusions through the effective clinical use of blood or blood products and the assessment of existing alternatives. This implies a respect for the use of blood, which should only be transfused if no alternative treatment is possible. WHO recommends three key strategies:

- Developing national guidelines for giving transfusions
- Training people who prescribe blood to avoid unnecessary or inappropriate transfusion
- Ensuring accessibility and availability of volume replacement fluids, such as crystalloids and colloids, for use where appropriate. ▲

# Honduras

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## Background

In Latin America it is estimated that more than 10% of transfused blood is collected from paid donors. Honduras has been working very hard to improve the safety of its blood supply, notably through the Honduran Red Cross Blood Programme, that has been actively recruiting and retaining voluntary non-remunerated blood donors since 1978.

In 1994, the Ministry of Health designated the Red Cross' Medical Director to be Secretary General of the National Blood Council. Together, they have developed the legal framework for a blood transfusion system that includes a national policy and plan, as well as norms and regulations on the provision of safe and adequate blood supplies for the whole country. By the end of the year 2000, the Red Cross blood

programme, which processes all donated blood, was collecting, processing and testing about 30,000 units per year from the two main cities.

## World Health Day 2000

At the end of 1999, the Honduran National Blood Council developed a plan for a year-long celebration on the theme of Safe Blood, the highlights of which are described below.



**Blood donors reading about altruistic donation**



## Planning

Six months before the World Health Day launch, information material was developed and widely distributed, including posters, pamphlets, stickers and press articles.

Members of the National Blood Council appeared on television and gave radio presentations in the weeks leading up to World Health Day to sensitize the public with key blood safety messages. Participants in the events below included representatives from the Ministry of Health, the National Blood Council, the Honduran Red Cross, the International Federation of Red Cross and Red

Crescent Societies and the WHO Pan American Health Organization. There was great enthusiasm from all participants and the general public in the celebration of World Health Day.

## Graduation Ceremony

The pilot project for the WHO/PAHO Distance Learning Programme was initiated in 1997 following a regional workshop in El Salvador. The programme was formalized with an agreement between the Ministry of Health and one of the local universities. Seven students took part in the programme over a period of six months. These participants then

acted as instructors for the second group, who graduated in September 2000. Formal graduation ceremonies took place in March and September 2000, with the first ceremony setting the scene for the launch of World Health Day 2000.

### World Health Day Ceremony

Ceremonies were held simultaneously in Tegucigalpa, the capital, and San Pedro, with the participation of health authorities, NGOs, the Red Cross, PAHO, blood donors, and institutions that have supported voluntary blood donation over the years.

Dr Plutarco Castellano, Minister of Health, Dr Carlos Samayoa from PAHO and Mrs Meneca de Mencía, President of the Honduran Red Cross were united in emphasizing the importance of voluntary, non-remunerated blood donation. They applauded the efforts being made to increase the safety of the blood supply in Honduras, efforts that deserve enhanced support.



Mrs Mary Flake Flores, First Lady of Honduras, with her blood donor card

Mrs Mary Flake Flores, First Lady of Honduras and a long-standing blood donor herself, was the guest of honour. In a heart-felt address, she drew attention to the grave shortages of blood components that afflict our hospitals, the deaths that occur because of these shortages, and how each one of us can help alleviate the situation by donating blood regularly.

Special awards were conferred on repeat donors, coordinators of blood drives and institutions that have held blood campaigns every year since the programme's inception in 1978. An award was also presented to the winner of the National Award for Journalism (health).

### Blood Donation Fair

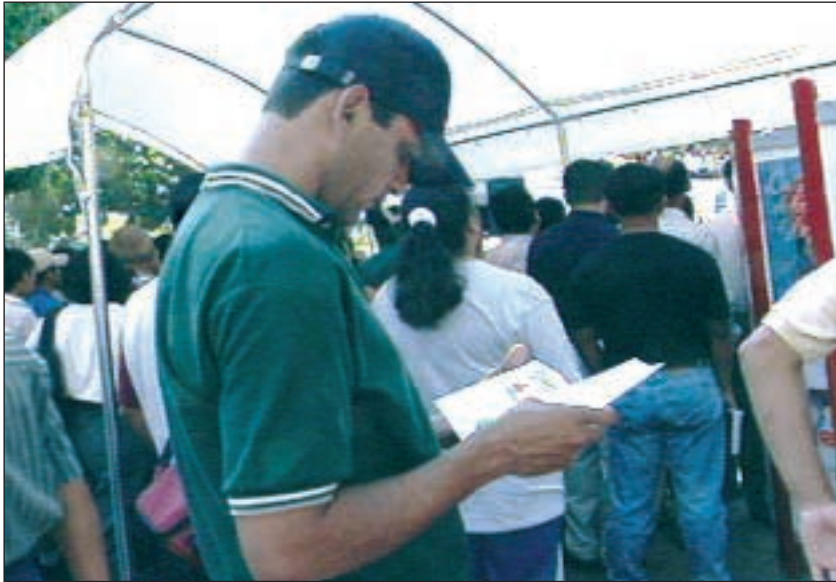
A Fair was held in Central Park, Tegucigalpa on World Health Day itself, during which the community could learn about safe blood donation from murals, leaflets, pamphlets and supporting educational materials. The contact details of individuals interested in donating blood were taken and forwarded to the blood collection unit.

### Running for Life—Blood Saves Lives

The race was organized on 9 April by the Honduran Red Cross to create visibility for World Health Day. Both the start and finish lines were located at the PAHO National Office. There was so much enthusiasm and good will that a second race was scheduled for the 21 October.



Running for life



Campaign at local university

### **Blood drive at the local university**

A special campaign was organized on 11 and 12 April to recruit voluntary non-remunerated blood donors at the National University main campus. This drive was of special importance because the 148 units collected enabled a much-needed reserve.

### **National Workshop on the Development of Guidelines for the Clinical Use of Blood**

In 1998, the Red Cross Blood Transfusion Service and WHO/PAHO organized a National Workshop on the Development of Policies and Guidelines on the Clinical Use of Blood. This group of local clinicians and expert consultants drafted a National Policy on the subject and further

identified the need for clinical guidelines on the handling and transfusion of blood components. A second workshop held on 19 May made recommendations on how the guidelines, now available, should be implemented.

Other events organized during the year to respect safe blood donations included...

- a presentation for Ministry of Health officials entitled “Legal Framework for the National Blood Programme (April)
- “*The State of Blood Transfusion in Honduras, 1998–1999*” a lecture by Drs Vinelli and Fernández at the PAHO National Office Monthly Technical Meeting (June)
- workshop on Quality Control in the Blood Bank (October). ▲

**For more information on blood safety activities in Honduras, contact:**

**Dr Elizabeth Vinelli**  
**Secretary**  
**National Blood Council**  
**2a Avenida**  
**Entre 6a y 7a calle**  
**Comayagua, D.C.**  
**Tel: +504 237 2240/4620/8876**  
**Fax: +504 238 0185**  
**E-mail: [cenasa@datum.hn](mailto:cenasa@datum.hn)**

# Mexico

## Introduction to blood safety in Mexico

Blood safety is a priority issue for WHO and for Mexico. Last year, the President of the country, Dr Ernesto Zedillo Ponce de Leon, set the tone in his official remarks by inviting his Secretary of Health to join him in donating blood, setting an example for all Mexicans, and to the great applause of the congregation. He also announced the creation of the annual “Eduardo Liceaga” award for those who devote their lives to a



Visit of mobile blood unit to Los Pinos, official residence of the President

valiant health cause. The first distinctions were bestowed by the President on Drs José Narro Samuel Ponce de León, Raúl Cicero Sabido, Jaime Kravzov Jinich and Antonio Zimbrón Levy.

## National Blood Transfusion Centre (CNTS)

The CNTS was set up in 1982 as the central, executive organ to ensure the application of transfusion medicine and management of blood and blood products in the country. Today, Mexico counts 31 State Blood Transfusion Centres (CETS) and 13 Regional Blood Banks. This has allowed the creation of a useful tracking system of donors and use of blood for the CETS. In 1990, the Interinstitutional Committee of Blood Banks and Transfusion Medicine was integrated with the CNTS and other health sector

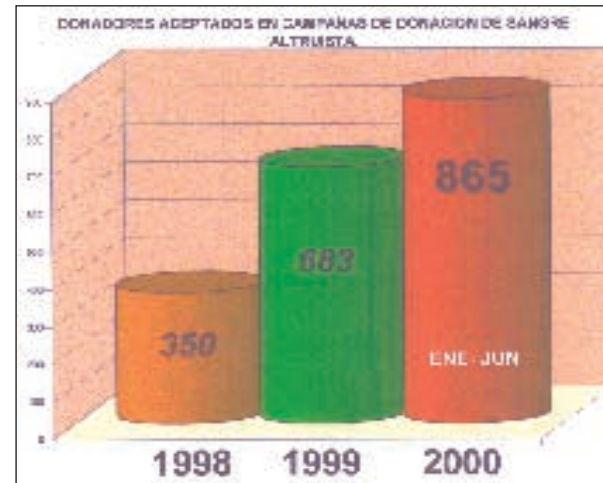


Figure 1. Accepted donors in altruistic blood donation campaigns

bodies, leading also to the creation of intrahospital groups to ensure the rational use of blood. Today all the CETS have their own Interinstitutional Committee of Blood Banks and Transfusion Medicine.

Although in Mexico altruistic donation does not have the value

it deserves, voluntary, non-remunerated donations have steadily increased each year through effective campaigns (see Figure 1).

## Institute of Health of the State of Mexico

Access to safe blood and its derivatives is not only the

responsibility of the CETS, but each and every one of us involved in blood transfusion, especially our blood donors. Health workers must seek efficiency and quality, but most of all care of donors and recipients. Blood must be given as if it were to be transfused to our own family, which implies three criteria for the donor:



- 
- *Love* of our fellow human beings;
  - *Responsibility* to prevent risks; and
  - *Altruism* to give a tiny part of yourself to save the life of someone else.

With these principles, the CETS organized a major Conference for over 200 participants on Auto-immune haemolytic anaemia associated with warm antibodies, with a wide variety of qualified health personnel.

An inauguration ceremony also took place with the participation of health regulatory authorities, health and transfusion services and those from the social sector. Dr Luis Alfonso Hernandez Gómez, Secretary for Health, made a moving speech pointing to transfusion medicine as a multi-faceted, yet highly specialized field that requires dedicated professionals to cover the entire vein-to-vein process if we are to assure quality and safety. TV, radio and press audiences covered the event.

An educational campaign was engineered to enhance public awareness of altruistic donation. 1000 students showed great interest in the process and use of blood units and received some of the hundreds of leaflets that were distributed during the campaign.

A campaign was also set up to identify Rhesus negative donors among preparatory schools in various municipalities. 1718 tests were carried out with the aim to enhance awareness of blood grouping among the student population.

A radio spot was emitted on altruistic blood donation with the message “The Institute of Health of the State of Mexico invites the Mexican population to participate on 7 April in the “Safe Blood Starts With Me” campaign. We are expecting you—don’t let us down”.

The 1st Altruistic Blood Donation Campaign 2000 took place under the auspices of the Autonomous University of the State of Mexico to collect 200 units of blood and distribute 12,000 leaflets and

posters to over 900 students.

Our youth today are the donors of tomorrow. The Institute of Health will therefore celebrate WHD 2000 every day and continue its education campaigns uninterrupted until the goal of only voluntary, non-remunerated blood donation is reached. Then we can say “Safe Blood Starts With Me”.

### **Learning programmes for blood transfusion**

In honour of World Health Day 2000, a new postgraduate qualification in transfusion medicine was endorsed by the National Autonomous University of Mexico and the Secretary for Health. This will build the capacity of blood banks to improve the rational use of transfusions, supervise the use of blood components and the various related therapies such as autologous transfusion or apheresis.

In order to increase significantly

the capacity of blood transfusion services while reducing the costs and time lost at work, Mexico welcomes the Distance Learning Programme on Safe Blood and Blood Products Diploma as an excellent opportunity for the decentralized development of skills. Already in the State of Mexico on 7 April 2000, 31 students had satisfactorily completed the course from many hospitals in the State. Students work in all disciplines required for the successful functioning of blood banks, e.g. general or specialist physicians, chemists, nurses, social workers or laboratory technicians.

Given the vast geographical, ethnic, cultural and religious diversity in Mexico State, this form of education is invaluable in motivating altruistic blood donation. Training on the Distance Learning Programme is in great demand and feedback from current and past students is very encouraging, all of whom have seen concrete improvement in their activities.



Secretary of State and Governor of Jalisco with other delegates

### Focus on the State of Jalisco

The State of Jalisco intensified its already committed information campaign to promote voluntary, non-remunerated blood donation. With the Department of Communication and under the auspices of the Secretary for Health, a variety of materials such as posters, documents and leaflets with poignant visual images and messages were distributed through the State health media networks.

On 6 April, a press conference took place with the Director-General of Health Services, Dr Héctor Gallardo Rincón and other key personnel from health legislation and transfusion medicine. The importance of altruistic blood donation formed the basis of a press release, made available to all communications media.

An official ceremony in the Auditorium of the *Hospital General de Occidente* on 7 April was highly mediated and honoured by the participation of

the State Governor and the Under State Secretary for Health, among other notable dignitaries. To the backdrop of key blood safety images, participants heard messages from WHO and a personal message from the State Governor, an extract of which is related below.

“Today, we must double our efforts to move gradually from family to voluntary blood donations. Hopefully, in a not too distant future, all Jalisciens in a position to do so will give blood regularly so that others, less fortunate, will live or benefit from treatment that only this noble and altruistic gesture of life blood can make happen. Our deepest thanks go to all who give blood, to the media that support us, and to all health professionals who care about the optimal use of this precious resource—a real gift of life.”

The Governor then set the example for all his colleagues by being the first voluntary blood donor of the podium.

### Focus on the State of Coahuila

The State Blood Transfusion Centre (CETS) was inaugurated in 1990 as a blood bank for the quality control of centres managing blood components and the supply of these around the clock. It also regulates blood banks and transfusion services through periodic controls to verify that safety procedures are assured. The State’s goal is to increase altruistic and autologous donors and minimize transfusion risks and counts, today, 75 public and private organizations related

to blood transfusion.

World Health Day 2000 means “Give Life”. Blood has always had a special place in the history of local

cultures, representing different emotions: symbolism, mysticism, colour, fear, terror, sadism, a lifeline, pain, love, racism,

**“... the Centre is open to blood donors 24 hours/day”**



Laboratory in Coahuila

tragedy, or pure gold. Mysterious and fascinating, the Egyptians used it to rejuvenate their elders and to cure illnesses, and the Romans to acquire strength.

A ceremony took place at the State Hospital for Women in the presence of the Secretary of State for Health, the Director of Health Services and many other health personnel of Coahuila, highlighting the activities of the CETS and the fact that the Centre is open to blood donors 24 hours a day. Potential donors pass three stages to ensure safe blood transfusion: first, completion of an auto-exclusion form, which explains the risks of unsafe blood; second, a medical visit to establish a clinical

dossier; and finally a laboratory analysis of a preliminary blood sample. Last year, 1946 units of blood were collected and underwent 12,845 tests for major transfusion transmissible infections.

### Focus on the State of Hidalgo

The concerted efforts—day after day—in Hidalgo go towards blood donation as an altruistic and noble act and, in parallel, discouraging paid or replacement donors. Altruistic donors should therefore have a comfortable and clean place where they are welcomed by competent health services personnel. All blood for transfusion should be safe and is tested for known infections.

With unconditional support from the State health authorities, the following activities were organized for WHD:

An “on site” *course in transfusion medicine* for physicians took place on 3–7 April, conferring a diploma

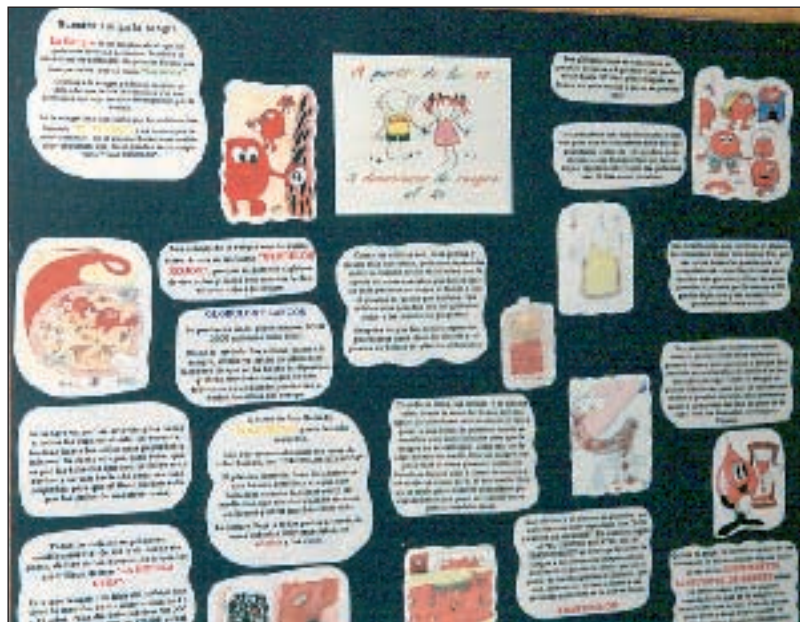
recognized by the Medical School and the Medical College of Hidalgo. Ten medical specialists taught the basic legal concepts related to blood donation to representatives of blood transfusion services, blood banks and various health organizations. The course was based on the General Health Law and in particular articles related to the donation of organs, tissue and other human parts, and official Mexican norms for the provision of blood and blood components for a wide range of clinical and therapeutic purposes. One of the most important themes of the course was quality assurance. It was agreed that quality norms should be assured through health control visits, as well as follow-up meetings, and that the course should be incorporated into the Distance Learning Programme.

An information meeting between the National and State Blood Transfusion Centres and WHO/PAHO agreed that the *State Blood Banks should be strengthened*.

The *media* was encouraged to promote altruistic blood donation. TV programmes compared the value of voluntary, non-remunerated blood donation against paid donation, and invited the general public to donate blood for the anonymous patient whose life they may save, at least three times a year. Radio interviews focused on motivating and sensitizing listeners to the different functions of blood components. The correct answers to key questions were rewarded with safe blood prizes (caps, T-shirts, etc.)

The safe blood theme was enthusiastically promoted throughout all strategic places in *health sector hospitals and public thoroughfares*.

*Educational establishments* such as the Institute of Social Sciences, the Institute of Economic Sciences and the School of Medicine were targeted with a mass information campaign, reaching a total of 800 students. They learnt why we need blood and why it must be safe. Also of the responsibility they



Drawing competition in Hidalgo

have to help make blood a quality product for the patient in need, and the confidentiality and care reserved for them as donors. Students received promotional material reinforcing the safe blood campaign.

Convinced of the importance of *early education* to improve the safety of blood transfusion, eleven elementary schools were invited to participate in a drawing

competition on altruistic blood donation, to be exhibited in the State BTC. The principal message coming from the 500 entries received was that of solidarity, 12 of which will adorn the calendar produced by the State BTC. Moreover, these schools mounted a one-month informative mural exhibition to encourage the concept of our future as one of voluntary, non-remunerated donors. ▲

For further information on blood safety activities in Mexico, contact:

**Dr Antonio Marin Lopez**  
**Director of the National Blood Transfusion Centre**  
**Avenida Othú de Mendizabal No. 195**  
**Col. Zacatenco**  
**Delegación Gustavo A. Madero C.P. 07360**  
**Tel/Fax : +51193976, 51191008**  
**E-mail: [amarin@mail.ssa.gob.mx](mailto:amarin@mail.ssa.gob.mx)**  
**Internet: [www.ssa.gob.mx/unidades/cnts](http://www.ssa.gob.mx/unidades/cnts)**

**In particular, note that a special project has been created in Mexico called the “Guía Roja” (the Red Route). The project consists of a series of maps, where you can discover all the information available on where to find blood services throughout the country. Go to the above web site and click on “mapa virtual”.**

# Nicaragua

## History

Nicaragua, situated in the heart of Central America, has a population of five million. Its health system faces similar budgetary constraints to that of other developing nations. The blood programme falls under the responsibility of the Ministry of Health and the Nicaraguan Red Cross (NRC). For a long time, blood donations were paid,

hospital needs difficult to meet and access to transfusion therapy limited and costly.

Then in 1975, the World Health Assembly urged governments to establish blood transfusion services based on voluntary, non-remunerated blood donation, thus avoiding the commercialisation of blood and exploitation of donors. A year later, the NRC founded the *Central Blood Bank* with a view to

collecting blood to meet the needs of the entire country. To assure maximum quality and safety, blood was thereafter only collected from voluntary, non-remunerated donors.

The *National Blood Programme* (PNS) collects, processes and supplies blood

and blood products to all public and private hospitals and clinics in Nicaragua. The programme comprises four blood banks situated in Managua, Juigalpa, Matagalpa and Estelí. The Programme also includes Centres for the Promotion of Voluntary Blood Donation throughout the country. The PNS collects two-thirds of the blood donated in Nicaragua and produces 80% of blood products for transfusion. Provision for the other third is the responsibility of the Ministry of Health through its 18 blood banks dotted around the country.

## Second National Congress of Blood Banks

Within the framework of World Health Day 2000, Nicaragua organized its Second National Congress of Blood Banks. The event, which took place in

Managua from 30 March to 1 April 2001, was in memory of Dr Ernesto López López, Director of the NBC who passed away in September 1999. The objectives of the Congress were to ensure a better service for donors and for those in need of blood, using

quality controls at every level to minimize risks. 165 specialists attended the event, including physicians, nurses, experts in

**“Of note was the presence of Jehovah Witnesses at the Congress.”**

bioanalysis, laboratory technicians, safe blood advocates and students. Also invited were staff from hospitals, universities and clinics, and officials from the Ministry of Health, including the



Second National Congress of Blood Banks

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Minister, Members of the National Assembly, WHO and NGOs. Of particular note was the presence of Jehovah Witnesses at the event.

### Modernization of National Blood Centre

At the opening ceremony, Mrs Esperanza B. de Morales, President of the NRC, underlined the promise of the Organization to continue to strive to develop the national Blood Programme based on voluntary, non-remunerated blood donation. This was also the ideal occasion to announce the restructuring and refurbishing of the National Blood Centre, funded by the American Red Cross.

### National Forum

Ritha Fletes, President of the Health Commission at the National Assembly, announced the creation of a National Forum to discuss the draft bill on transfusion safety with the different sectors concerned with the issue. The new PAHO/WHO Representative in

Nicaragua, Dr Patricio Rojas, assured participants of WHO's technical and financial assistance in strengthening blood banks in the country. The representative of the Minister of Health said that, in conjunction with the NRC, they would promote the development of appropriate policies to improve blood banks in the country.

### Workshops

On the first day of the Congress, practical workshops took place on the promotion of voluntary blood donation, the selection of donors and special studies on immunohaematology. In addition, participants in the Distance Learning Programme on Safe Blood and Blood Products had their fourth meeting. A total of 55 people participated in these simultaneous workshops.

**All participants expressed their gratitude to the humanitarian actions of voluntary blood donors**

### Conferences

On day two and three of the Congress, major conferences focused on topics related to the Modernization of Blood Banks, e.g. transfusion risks, serological studies, quality controls, national strategic plan on HIV/AIDS, viral hepatitis, molecular biology in blood banks, etc. The objective was to address the most urgent learning needs in immunohaematology.

All invited lecturers were eminent professionals in their field internationally. These included Dr José Ramiro Cruz from PAHO in Washington, Dr Benjamin Lichtiger from the UTMD Anderson Cancer Centre, Dr Graciela León from the Municipal Blood Bank in Venezuela (pictured from right to left in the official photograph), and Drs Kirstén Visoná and Dr Lizeth Taylor of the LSU-ICMRT Costa Rica. Lecturers also included national specialists in transfusion medicine, who covered various issues of particular relevance to blood safety in Nicaragua.

The event was a success both from the organizational perspective, as well as the attendance, quality of presentations, educational material available and the exchange of experiences between participants during all the various activities.

### Rhesus Negative Reunion

Another event that took place within the framework of World Health Day celebrations was the First Meeting of Rhesus Negative Voluntary Blood Donors. This was organized jointly between the Nicaraguan Red Cross and the Panamerican Health Organization on 7 April for 150 rhesus negative blood donors. The Minister of Health, the President of the Red Cross, the PAHO/WHO Representative and the President of the Commission on Health and Well-being were among the invited guests at the occasion. All participants recognized and expressed their gratitude to the humanitarian actions of voluntary blood donors.



During the event, diplomas and T-shirts with the official safe blood logo were issued to all 150 donors. In addition the official WHO safe blood pin was awarded to 10 voluntary donors who had exceeded 50 donations.

### Credits

Special thanks go to all those who supported us, nationally and from overseas, in our efforts to make blood safe in Nicaragua, but not least our voluntary, non-remunerated blood donors. ▲

**For further information on blood safety activities in Nicaragua, contact:**

**Dr Rene Berrós Cruz**  
**Director of the National Blood Programme**  
**Nicaraguan Red Cross**  
**Managua**  
**Tel/Fax: +505 2651 406**  
**E-mail: rbc20@ibw.com.ni**

## Research and progress in blood products

To date, there is no available man-made substitute for red blood cells. Although considerable progress has been made in both preventive and curative blood-derived products, red blood cells remain a rare commodity.

Progress in technology has made it possible to separate all the components of blood and to store them at temperatures which are best suited to maintain their viability. Biotechnology research has increased our knowledge and enables some of the different components of blood to be identified and purified. Research is continuing into new blood-derived products and technologies.

Blood tests have become more sophisticated and are faster and more cost-effective, yet in many countries blood is still not screened systematically. More resources have to be identified and allocated to ensure continuous screening programmes. ▲

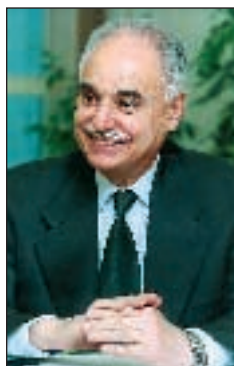
# Eastern Mediterranean

## WHO Regional Office activities

To mark World Health Day 2000 on blood safety, the WHO Regional Office for the Eastern Mediterranean (EMRO) started contacting Member States at a very early stage, and undertook the following arrangements:

The official theme and slogan were translated into Arabic and sent to all Member States.

Letters were sent from Dr Hussein Gezairy, Regional Director to Ministers of Health briefing them on the importance of the event and explaining the need to mobilize all walks of life in their countries for blood donation. The need to enhance blood services as a part of the health system was also underlined. This letter suggested activities that could be implemented locally to mark the



Hussein A. Gezairy, M.D., F.R.C.S.,

event based on the WHD theme, such as:

- celebrations and special events, e.g. sports matches;
- issue of stamps;
- seminars and discussions on blood safety and health in cultural and social centres;
- blood donation campaigns in clubs and universities with key figures from the arts and sports fields;

- urging NGOs to participate in the event;
- coordinating with the Ministry of Education to allocate the first lesson of 7 April 2000 in all elementary, preparatory and secondary school to discuss blood safety;
- arranging with the Imams of Mosques and priests of churches to allocate the Friday and Sunday speeches of 7 and 9 April to talk about the importance of blood safety and blood donation;
- participating in the annual art competition organized by EMRO on the WHD theme;
- urging media personnel to take up their role in assuring the importance of blood safety.

Simultaneously, contacts were made with all WHO

Representatives and Focal Points in the Region to coordinate support for the maximum and effective involvement of Member States.

## Preparation of information materials

The official World Health Day kit was translated into Arabic and printed in three languages. Local language versions such as Persian and Ardu were also produced. Information on blood safety and blood services in the Eastern Mediterranean Region was added to the main kit. Together with specially printed stickers and posters, these information kits were then disseminated to an extensive mailing list within EMR countries, including all media contacts.

The Regional Office produced its



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own video film on blood safety, using shots and footage from many countries of the Region. In addition, a videotape with the message from the Regional Director on blood safety was produced for the occasion. These two audiovisuals were broadcast on television channels in all Member States.

### Art competition

Thousands of entries were received from school children in response to an Art Competition launched by WHO/EMRO. Submissions were judged at the WHO Regional Office and winners awarded their prizes during local celebrations held on 7 April.

### Media day

Prior to World Health Day, the Regional Director held a media day during which he gave interviews and held discussions with representatives of the press and television and radio channels. The Head of the Egyptian Red



Dr Gezairy with staff and guests during the WHD 2000 reception

Crescent Association participated in this media day.

On the eve of 7 April, the Regional Office held a reception, attended by high-level officials in the health, political and media arenas. All attendees wore safe blood pins and admired the display of materials on blood safety.

### Evaluation

The reports received from Members States after the main events reflect successful implementation of the activities

recommended by WHO and others, to mark World Health Day 2000 "Safe Blood Starts With Me". ▲

**For more information on blood safety activities at the WHO Regional Office for the Eastern Mediterranean, contact:**

**Dr Nabila Metwalli**  
**Regional Adviser for Blood Safety**  
**Laboratory & Imaging**  
**WHO Regional Office for the**  
**Eastern Mediterranean**  
**Abdul Razzak Al Sanhoury Street**  
**P.O.Box 7608, Nasr City**  
**Cairo 11371**  
**Tel: +202 670 5314**  
**Fax: + (202) 670 24 92**  
**E-mail: metwalin@emro.who.int**  
**Internet: www.emro.who.int**

# Bahrain

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## “Festival kicked off on a healthy note”

Under this headline, the Daily News—Voice of Bahrain was pleased to announce that World Health Day 2000 was marked early in Bahrain. Indeed, a three-day festival in honour of WHD 2000 was organized by the Health Ministry’s health education section from 2 to 4 April at the Al A’ali Shopping Complex main hall under the patronage of Health Under-Secretary Abdulrahman Bu’ali. Several government schools, societies and Bahraini actors were involved in the exhibition, notably 11 intermediate and secondary schools, said senior health education specialist Aneesa Saad Alhuwaihei.

Students displayed drawings at the exhibition to express their views on the theme “Safe Blood is

### Intermediate and Secondary Schools involved in the festival

Abdulrahman Al Dakhil Int. School for Boys

Gudaibiya Int. School for Boys

Khadija Al Kubra Int. School for Girls

Zanoubia Int. School for Girls

Aisha Umm Al Moamineen Int. School for Girls

Khawla Sec. School for Girls

Al Esteqlal Int. Sec. School for Girls

Manama Sec. School for Girls

Muharrag Sec. School for Girls

Hoorah Sec. School for Girls

Muharrag Sec. Commercial School for Girls

Everyone’s Responsibility—Safe Blood Saves Lives”. The best drawings won valuable prizes. The following students were awarded for their outstanding work: Rashid Abdulrahman Al Aafi, Maha Ali Al Mahmeed, Mooza Al Benali, Wisal Ebrahim Haji, Naseema Hassan Al Shaikh, Noora Yousef Mohammed and Maha Abduljalil Abdullah.

The Islamic Society, the Blood Bank, Bahraini actors Jaman Al Ruwai’ee, Ali Al Ghurair and Ahmed Al Majli also supported the event along with many contributors from the private sector. A drawing competition for children between six and 10 years was held under the supervision of the Islamic Society and Salman Cultural Centre for Children.

Another hands-on painting contest was held, with instant prizes donated by the Islamic Society to the most innovative artists. These

art pieces, posters related to various health issues, along with information booklets to raise awareness among the general public, were also exhibited. Further prizes went to winners of a competition on general health during the evening of 3 April, with live entertainment from the local musical group, Al Dabdoob.

The Islamic Society also produced an explanatory newsletter for the occasion, and the Al Eslah Society had two educational stickers specially designed for distribution.

## Hands on health

A keen point of interest was the free blood tests carried out by the blood bank during the festival. To complement this, the Bahrain Nursing Society carried out free eye tests and offered to check your weight, height and blood

pressure. The Bahrain Diabetes Society also took the opportunity to offer diabetes tests and carry out awareness building among the public.

### Honours for festival promoters and participants

The Assistant Under-Secretary for Primary and Public Health, Dr Abdulwahab Mohammed

**Not one person would dispute the vital relationship between blood and health**

Abdulwahab and the Chief of Medical Staff for Primary Care, Dr Fawzi Amin, presented honours to people who made World Health Day such a success.

Those honoured included students, teachers, schools, societies, the media, companies, health personnel and other individuals. The ceremony was organized by the health education directorate to pass a special message of thanks to all who supported the day's

celebration from the Health Minister and Under-Secretary for Health. Dr Abdulwahab said that the support from outside the health and medicine field was an important asset and key to the success of any health strategy. "It helps reinforce the close ties between the health sector and the public" he continued. This joining-hands was also testimony to a cooperative society that is well aware of the need for shared responsibility and solid relationships between the public and private sectors.

Not one person would dispute the vital relationship between blood and health. "Our role to provide necessary health services to the people is a crucial strategy for Bahrain's leadership, which has left no stone unturned to achieve the plans and programmes of the health ministry" added Dr Al Mousawi.

### New drive aims at safe blood donation

The nursing community in Bahrain made a concerted effort to increase people's awareness of

**Bahrain's leadership has left no stone unturned to achieve the plans and programmes of the health ministry**

safe and voluntary blood donation. Bahrain Nursing Society President, Beema Sultan, said the world relied on

safe blood to save people's lives, yet sadly only 20 to 30 per cent of health systems around the world provide the necessary facilities for a safe and adequate blood supply.

At the beginning of this new millenium, said Ms Sultan, we as a society would like to emphasize the importance of managing blood properly. People need to know the value of safeguarding their health and the precious life source which

is our blood. Good nutrition, a healthy lifestyle and proper prevention and early treatment of diseases will contribute to healthy blood. The BNS reaffirmed its commitment to the community on the occasion of World Health Day, and made a tremendous effort to promote public awareness of safe blood donation. These efforts, said Ms Sultan, should be promoted right from primary schools to develop a positive attitude towards voluntary and non-remunerated blood donation. Special appreciation was given by the BNS to the blood donors in Bahrain who receive no remuneration for this altruistic act. But many more such donors are needed to fulfil our requirements for blood. Dr Amal Al Jowder, Head of the Health Education Department in the Ministry of Health, said that many people all over the world are in desperate need of blood every day, especially those with thalassemia who need blood regularly, and in emergency operations.

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Blood represents eight per cent of body weight, and a person with average height and weight carries blood with 25 billion red blood cells. WHO statistics were cited in the press to show that half a million women die each year from pregnancy-related causes, many due to lack of blood. Dr Al Jowder told the media that healthy adults can handle losing 20 per cent of their blood and that the average amount of blood being pumped through the heart is five litres per minute.

### **Combining religion and health: a truly outstanding achievement**

Traditionally, the 10th day of the Islamic New Year is a time when Moslems make themselves bleed, with a view to sharing the agony of the murder of the son of the prophet. With tremendous support from the media, new legislation was passed whereby those who wish to pay homage in this way should do so at the local blood bank. In this way, Shee'et

Moslems have successfully retained an important element of their culture as well as ensuring that many others in need will benefit from the gesture. This idea has been proposed in other countries, but has only been successfully implemented in Bahrain. A success story worth copying.

### **Conclusion**

The urgency to develop safe and effective blood transfusion services has been highlighted by the serious threat of infection by HIV and hepatitis B viruses. Of the 33 million HIV/AIDS patients worldwide, five per cent are reported to have contracted the virus through blood transfusion.

World Health Day 2000 on Safe Blood provided Bahrain with a timely opportunity to bring this home to its people. The national health authorities spotlighted, on the one hand, the need to recognize those who support safe blood initiatives and, on the other,

the need to increase voluntary, non-remunerated blood donation.

The Arab Health Ministers Council has established a Blood Transfusion Scientific Consultancy Committee and formulated a holistic plan to increase awareness of the key issues in this field. ▲

### **For further information on blood safety activities in Bahrain, contact:**

**Mrs Fakhreyya Ali Darwish**  
**Supervisor Medical Technologist**  
**Salmaniya Medical Complex**  
**Central Blood Bank**  
**Ministry of Health**  
**Government of Bahrain**  
**P.O. Box 12, Manama**  
**Tel: +973 289 454**  
**Fax: +973 289 467**

# Egypt

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## **Challenges facing the blood programme**

Historically, blood transfusion services (BTS) have always had a low priority within the Egyptian health care system. Lack of governmental attention and support, and no centralized—or regionalized—programme meant that the BTS were primitive and fragmented. Few blood centres could meet the needs for blood, either quantitatively or qualitatively and blood was only donated in a patient-based emergency, 90% of which came from family relatives. This situation was exacerbated by the growing commercialisation of blood. The scope of vision and a competent and credible national blood service that could equal other medical disciplines remained a pipe dream for quite some time.

## **Egyptian-Swiss turning point**

In 1997, the Minister of Health and Population spearheaded a revolution in blood transfusion services with a view to integrating this vital facility into the emerging health care system. A turning point was the agreement, signed

in this year, between the Egyptian Ministry of Health and the Swiss government to implement a project to restructure and upgrade the BTS as a priority.

Centralization of the BTS was the first objective of the Egyptian-Swiss project. The plan was to establish one central, or national

Blood Transfusion Centre, eight regional centres and 30 district blood banks that would gradually replace the old fragmented system with a viable blood programme. To achieve this ambitious objective, the Ministry of Health and Population is implementing the following strategy:

- the National Blood Transfusion Centre, supported by the General Directorate of Blood Affairs of the Ministry is the central body responsible for overseeing the blood programme. As a centre of excellence, it acts as a national reference, training and development centre;
- safe blood and blood products for transfusion must be available to all in need;
- paid blood donation was abolished by Ministerial



**National Blood Transfusion Centre**

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Decree No. 25 in 1999 and replaced accordingly with voluntary, non-remunerated blood donation;

- the highest international standards and criteria are followed for the testing of every unit of blood to avoid transfusion transmissible infections;
- the appropriate clinical use of blood and blood components is encouraged;
- quality management programmes have been established for the blood centres;
- various training programmes for staff at all levels have been defined; and
- an information technology department and communication network are being created.

### **National Blood Programme activities during 2000**

This strategy has proved very successful and enormous progress

has been made in safe blood transfusion services in the country. The following list of activities carried out during the year 2000, dedicated to blood safety, pays tribute to these efforts.

### **Donor recruitment programme**

- blood donation status assessed all over Egypt;
- training module prepared based on WHO Distance Learning Material and used as educational material for blood collection teams and donor recruiters in the national BTC and different regional centres;
- trained donor recruitment staff allocated to NBTC and operational RBCs;
- project for voluntary blood collection initiated in NGOs such as the Sunrise Rotary Club;
- several workshops with WHO and Family Health International, proposing

strategy for six-month action plan;

- educational materials (brochures, posters, etc.) to raise public awareness on value of safe blood donation disseminated;
- standard operating procedures and manual for donor recruitment programme produced by NBTC;
- Alexandria RBC piloted implementation of a donor recruitment programme with technical assistance from FHI; and
- national guidelines and basic information leaflet in use.

### **Serological testing**

- in the NBTC and operating RBCs, serological departments have two laboratories for routine testing of transfusion transmissible infections and red cell grouping;
- standard operating procedures available;

— technical manuals in preparation

- all personnel trained on proper use of new equipment and techniques;
- several seminars and workshops held.

### **Blood processing**

- different blood components (packed red cells, fresh frozen plasma), platelet concentrate, cryoprecipitate, etc., now all procured;
- logistics—quality control, appropriate storage conditions, proper labelling and disposal of infected or out-of-date blood—all in place;
- leucodepleted blood and irradiated components available;
- apheresis blood collection exists.

## Quality management

— quality department in NBTC has three related laboratories:

- confirmation lab: provides a confirmation service for all testing parameters related to blood transfusion;
- quality control lab: provides external proficiency testing practice for all blood banks and supervises and controls work performance. Also investigates blood transfusion incompatibility issues due to presence of red cell antibodies.

*N.B. To test this lab, the New Jersey External Quality Control Department sent two proficiency samples, the results of which were 100% accurate.*

- validation lab: provides advice on validity of reagents and consumables related to blood testing on the market. Also tests blood components for contamination.

— standard operating procedures being elaborated;

— bar code labels in use;

— continuous training to build new attitudes for implementation of good laboratory practice.

## Human resources development

— several scientific activities held repeatedly, e.g. training courses, workshops and seminars with educational material;

— guidelines published and distributed;

— training and education policy formulated and implemented;

— programme of TOT (training the trainers) established with five national cascade trainers already implementing a schedule of GLP training in the RBCs.

## Information technology

— communications network for the national, regional and district blood banks being set up

— web site for the NBTS available: [www.nbtsegypt.org](http://www.nbtsegypt.org)

## Appropriate use of blood

— routine use of blood components encouraged;

— hospital transfusion committees established in several hospitals

— national guidelines distributed to all clinicians for use.

## Future goals

Immediate goals for the National Blood Transfusion Centre are to complete the centralized and regionalized network of blood banks so that safe and adequate blood may be provided to the entire country.

A system that can register and follow reliable repeat blood donors

who are committed is a high priority.

Other priorities are to have the NBTC accredited as an international operating body, to introduce a complete External Quality Assessment Scheme, and the creation of a medical and technical postgraduate course in transfusion medicine.

Consideration is also being given to introducing novel assays to detect viral nucleic acid by genomic amplification technologies. ▲

## For further information on blood safety activities in Egypt, contact:

**Dr Faten Moftah**  
**Director**  
**National Blood Transfusion Centre**  
**P.O. Box 146, Cairo**  
**Tel: +20 2 355 3708**  
**Mobile phone: +201 221 74488**  
**Fax: +20 2 355 3756**  
**E-mail: [faten@mofteh.com](mailto:faten@mofteh.com)**  
**Internet: [www.nbtsegypt.org](http://www.nbtsegypt.org)**

# Jordan

## Planning for blood safety in Jordan

The Health Education Department of the Ministry of Health, in collaboration with the National Blood Bank, set up a Steering Committee to plan and conduct activities for World Health Day 2000 “Safe Blood Starts With Me”. Representatives from governmental and nongovernmental organizations offered their full support to the activities, a summary of which is outlined below.

## Official ceremony

The main celebration ceremony took place on 10 April 2000 at the Marriott Hotel in Amman under the patronage of Her Royal Highness Princess Basma Bint Talal. The event, which was captured on video, comprised:



Safe blood donation poster

- an art exhibition;
- a song about the importance of blood, sung by the Al Mashreq International schools coral. The song was written by Mrs Muna Hamzeh, Head of the Health Education Department and composed by one of the students—Tareq Abu Qura;
- Jordan received prizes for 2nd, 3rd, 4th and 5th place from the regional art competition, under the auspices of World Health Day, in the presence of the Minister of Islamic Affairs and the WHO Representative of Jordan;
- four papers were presented on the importance of safe blood donation.

## Significant moments

A **seminar** was organized in the Madabah governate for the

general population under the patronage of the Minister of Health, Dr Mosleh Al Tarawneh, during which rewards were given to faithful donors.

Religious leaders were able to assist in a specially-designed workshop in the King Abdulla Mosque on 23 March 2000 on the role of **religion** in encouraging safe blood donation. The following Friday, the speeches in all the mosques of the nation focused on this subject and were broadcast over television and radio networks.

The national blood bank also hosted a workshop for numerous participants from nongovernmental organizations and all Jordanian universities. The purpose of this event was to discuss their role in encouraging blood donation and the organization of regular blood



donation campaigns. The specific objective was to increase regular, **voluntary**, nonremunerated blood donation in Jordan.

A one-hour seminar was hosted by Mr Gunnar Lofberg, Director of the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) for operations in Jordan. The seminar was a joint collaboration with the Health and Education Department of the Ministry, under the theme Safe Blood Starts With Me.

A blood donor award **ceremony** was held in May-June 2000 under the patronage of the royal family. The objective was to reward and certify committed blood donor organizations that raise awareness of the community of the need for adequate and safe blood. Regular blood collection campaigns fall also under the purview of this association.

### Educational activities

A **muppet show** was staged, since this was considered an excellent medium to reflect to a wide audience the many ideas through songs, and tell children about the importance of blood and blood safety. The different roles of blood components in saving lives was the focus of the show, held at the Haya Cultural Centre.

A technical team for the muppet show included Dr Janiet Merza, responsible for Information; Mrs Muna Hamzeh for Supervision; Abdel Jaber Hassan, Writer and Director; and Hanan Hinatti, Muppet Designer and Producer. Issam Abu Fara and Naoomy were the actors and muppet movers.

**Schools** had a general knowledge quiz, art exhibitions and songs on the importance of voluntary, non-remunerated blood donation.

### Materials

Two posters and a brochure were widely distributed to the general population during face-to-face

#### Your blood—for the love of life

Seeking for it ... Seeking for it  
where we can find ... where  
we can find  
impossible ... impossible ever  
to reach it from the tree  
the secret of our life  
to find it from the rocks  
or from the depth of the earth  
it is within us ... one drop of it  
saves our souls ... creates  
hope  
we volunteer happily  
to protect souls  
to save human lives  
for ever ... and ever blood  
banks  
open the doors of hope  
go ahead ... don't hesitate  
go ahead ... save lives  
donate your blood ... save  
lives

*extract by*  
Muna Hamzeh  
Head, Dept. of Health Education

sessions at all governates, as health education materials.

### Mass media events

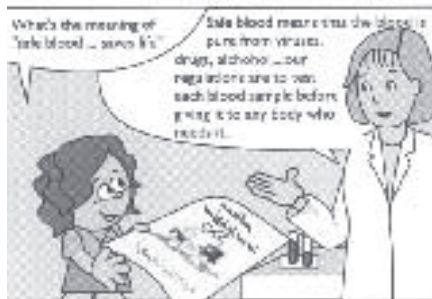
Thirty-six representatives from these media also participated in a **workshop** to sensitize them to safe blood issues, and in this way afford maximum impact of the blood safety media campaign.

Activities took place over a whole month on television, radio and in newspapers. In particular, 16 television spots were shown to raise awareness among the public of the need for their support in donating blood in an altruistic manner. The television and radio programmes included interviews with physicians, current blood donors and patients that have benefited from blood donation.

Of the dozens of newspaper articles that appeared in the Al-Rai, Al-Dustoor and Al-Aswaq newspapers, one was a comic strip that appeared on 6 April to sensitize youth to exactly what voluntary blood donation means. ▲

# Safe Blood

Written by: Munz Hamzeh  
 Illustrated by: Mervat Hammad  
 Health Education Department Ministry of Health



Comic strip on voluntary blood donation

For further information on blood safety activities in Jordan, contact:

**Dr Janiet Merza Niquir**  
**Director**  
**National Blood Bank**  
**Ministry of Health**  
**P.O.Box 10058**  
**Al Ashrafieh**  
**Tel: +962 64 749121/2/3**  
**Fax: +962 64 749123**  
**E-mail: nbbam@moh.gov.jo**

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## SAFE BLOOD STARTS WITH ME – BLOOD SAVES LIVES

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# Syria

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The following is a snapshot of activities undertaken under the auspices of the health authorities in Syria:

- The Ministry of Health and the General Blood Institute and Medical Industries translated and printed the WHO poster and distributed it to all Blood Transfusion Centres and health establishments in Syria.
- A television symposium was organized by the Ministry of



Preparing a blood donor

Information, led by the Minister of Health with physicians and specialists in blood transfusion medicine. The broad discussions on a variety of aspects of blood safety were put into context by the WHO official blood safety video that was shown during the symposium.

- The Ministry of Health prepared, printed and distributed several manuals describing the major topics related to blood transfusion. These were on Medical History and Physical Examination of Blood Donors, Voluntary Blood Donation, Blood Collection and Storage Principles and Blood Groups and Blood Group Testing.
- The National Committee of Blood Transfusion held three meetings during which key topics related to blood



Blood donor registration

- transfusion were discussed.
- The Committee on Information and Voluntary Blood Donation, and the Committee of Continuous Medical Education also took the opportunity to raise issues of mutual concern related to blood safety.
- Moreover, the Continuous Medical Education Committee is preparing multiple training activities for technical health assistants on various aspects of blood transfusion.
- Media coverage was assured. In particular, the local press

authorities interviewed Dr Emad Abo Khamis, Chairman of the Blood Transfusion Centre in El Moasat Hospital, Damascus University. His remarks focused on the importance of the quality and safety of the blood collected, and on the value of voluntary donation. The interview was published in the local El Ba'ath newspaper on 6 April. A further interview was published in the Techreen daily newspaper on 8 April, focusing broadly on all aspects of blood transfusion medicine. ▲

**For further information on blood safety activities in Syria, contact:**

**Dr A.S. Assa'edi**  
**The World Health Organization**  
**Representative**  
**Ministry of Health Building**  
**Salhieh Parliament Street**  
**Al Najmeh Sq., Damascus**  
**Tel: +963 11 332 9315**  
**Fax: 963 11 33 0298**  
**E-mail: who@net.sy**

# Tunisia

## Steering Group on Blood Safety in Tunisia

Tunisia joined all other countries to celebrate World Health Day under the theme “Safe Blood Starts With Me—Blood Saves Lives”. A Steering Group was formed on the decision of the Ministry of Health several months in advance. Members of the group included representatives of the Transfusion Unit, the National Blood Transfusion Centre, the Regional Centres, the Blood Transfusion Military Centre, the Red Crescent Association, the Health School Board and the Primary Health Care Board. The objective of the Steering Group was to propose activities that could take place on 7 and 8 April 2000.

## World Health Day joins National Blood Donation Day

World Health Day falls the day before National Blood Donation Day, which has been celebrated in Tunisia every 8 April since 1988. This year’s focus of WHD on safe blood made it a double celebration, and many activities were planned for these two days. Some of these are described in the following pages.

## Important Messages

A brochure was written in Arabic on World Health Day by members of the Steering Group. Using the information kit provided, the texts were adapted to the Tunisia context and carried the following messages:

— what is blood?

— what is safe blood?

— what is the government doing to provide safe blood? And finally,

— Tunisia needs more blood.



A noble gesture

This brochure was circulated extensively to the general public.

Promoting public awareness of the need for voluntary non-remunerated blood donation was another major message, passed through articles in Arabic and French in Tunisian newspapers, and through television and radio campaigns.

The media campaign could be seen as an *aide-mémoire* of the blood transfusion situation in Tunisia,

both in achievements and challenges. The successes included: national legislation on blood safety; a network comprising a newly built national blood transfusion centre with five regional centres that cover the entire country; national screening policies with directives updated to the end of 1996 and related to donor recruitment and selection; and laboratory testing including screening for the infectious agents HIV, hepatitis B and C, and syphilis. The challenges were perceived as the need to replace family donors with voluntary, non-



Mobile blood collection unit

remunerated donors and to increase the number of these altruistic donors.

### Blood collection

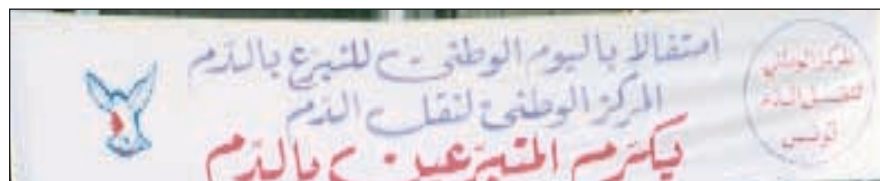
Planned mobile blood collection sessions were organized on 7 and 8 April 2000, in collaboration with the Red Crescent Association. It is important to note that a special blood collection session is organized every year in the Ministry of Health on this date.

### Promotional activities

Banners were suspended in the major thoroughfares of big cities, carrying slogans promoting blood



Annual blood donation at Ministry of Health



Safe blood banner

donation. An exhibition took place in the show room of the Ministry of Information in Tunis on 7 and 8 April, organized in collaboration with the Blood Transfusion Military Centre, the Red Crescent Association, the Transfusion Central Unit of the Ministry of Health and the Board of the Medical School. Posters reflected the accomplishments in the field of blood transfusion. These focused on the goals and evolution of blood donation and transfusion safety and included both general and specific information, such as the blood fractionation centre.

Tunisia participated in the drawing competition organized by the WHO Regional Office for the Eastern Mediterranean, and exhibited the best entries, including one that was awarded 6th place in the Region.

During the two days, documents were distributed and an aphaeresis machine displayed for visitors who received hands-on explanations as to its use. School health club members could also take advantage of guided visits to the different blood transfusion centres.

### The Presidential Award

In 1999, the President award was created to reward the region in Tunisia collecting the most blood donations and to promote competition between the 23 regions. This year, the award was won by the Jendouba region in the north-west of the country. However, due to the death of the former President of Tunisia, the official ceremony was postponed until later in the month. Similarly,

the current President Ben Ali, in deference to the circumstances, also made his annual blood donation later than usual.

### Blood Donor Award

In line with the legislation, a graduation ceremony took place in all regions on 7 April, except for Tunis where the ceremony was postponed to 23 May, World Donation Day.

### Transfusion in Tunisia: Lecture

In the afternoon of World Health Day, members of school health clubs in the Tunis region were invited to attend a meeting in the amphitheatre. Four lectures were given on blood and its functions, blood safety, transfusion in Tunisia, and on albumin production.

### Conclusion

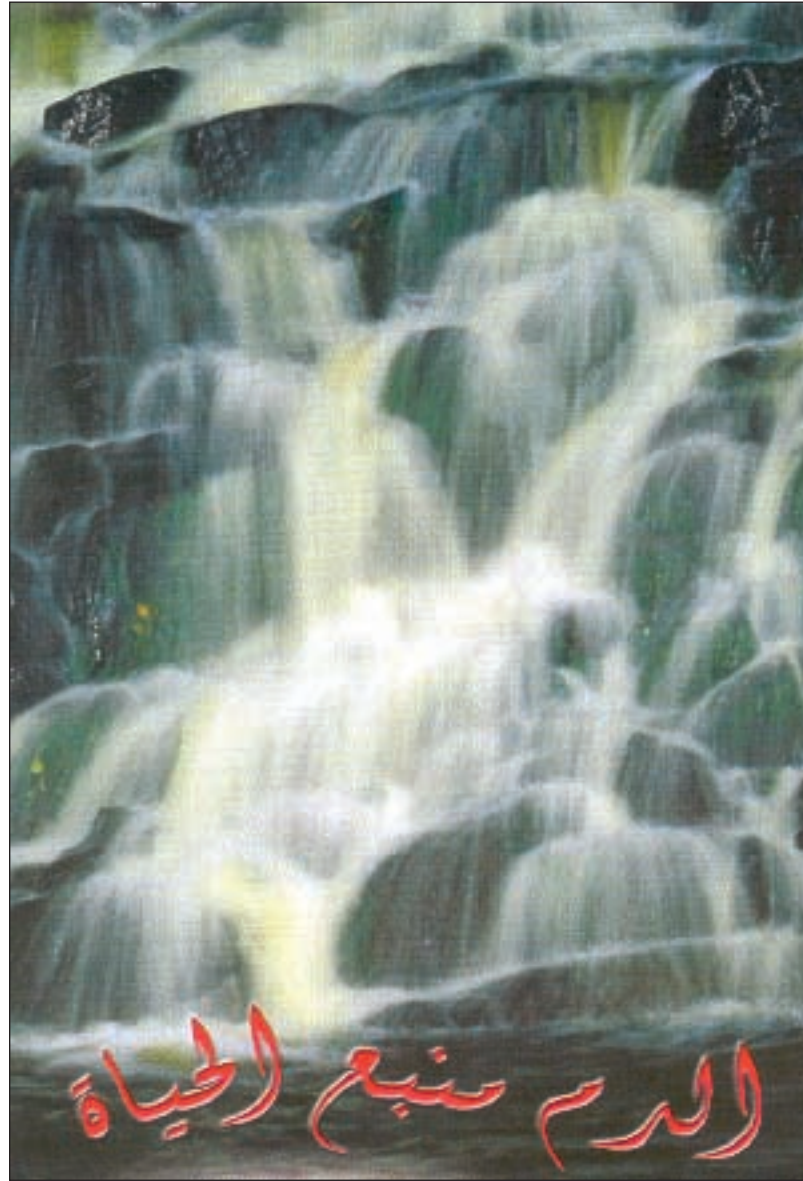
The celebration of World Health Day gave us the opportunity to

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launch a far-reaching media campaign to promote voluntary, non-remunerated blood donation, which remains an important challenge in Tunisia. ▲

**For further information on blood safety activities in Tunisia, contact:**

**Professor Dr Kamel Boukef**  
**Director**  
**National Blood Transfusion Centre**  
**13 Rue Djebel Lakhdar-Bab**  
**Saadoun, 1006 Tunis**  
**Tel: +216 1 562 957 1**  
**Fax: +216 1 562 957**  
**E -mail: kamel.boukef@rns.tn**



# Europe

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## **Safe blood, used safely, saves lives!**

Inadequate supplies of safe blood, the lure of cash payments for blood donation and the inappropriate use of available supplies are putting people's lives at risk, warned WHO in a series of reports issued in conjunction with World Health Day 2000.

"This year's World Health Day theme, 'Safe Blood Starts with Me', is about public health rights and responsibilities," said Dr Marc Danzon, WHO Regional Director for Europe. "People everywhere have the right to expect that their governments will take all steps necessary to ensure access to an adequate supply of safe blood when and where it is needed, and that their health professionals will be properly trained to use blood only when appropriate and when other



**Dr Marc Danzon**

alternatives will not answer. At the same time, WHO calls on all people to protect their own blood, to avoid high-risk behaviour, such as unsafe sex and intravenous drug use, and to come forth as voluntary, unpaid donors to contribute to the health of their fellow human beings."

"The key blood safety priority for WHO in the European Region is to assist countries, where necessary, to establish health policies that

will increase the number of low-risk, unpaid voluntary donors, especially in countries with high levels of HIV, hepatitis, syphilis and malaria, and to ensure mechanisms to improve the quality of care by reducing inappropriate blood transfusions and promoting the use of alternatives."

Most transfusions are given to people injured in accidents, children with severe anaemia, surgical and cancer patients and women who lose large quantities of blood as a complication of pregnancy.

Countries in the eastern half of the European Region have special problems. In many eastern European countries, the incidence of infectious diseases such as syphilis has risen twenty- to forty-fold during the last few years, reaching a rate of 150–300 cases per 100 000 population (in

western Europe the average rate is 1.5 per 100 000). These countries are also seeing many new cases of HIV. In some, donations of HIV-infected blood were up to 64 per 100 000 in 1998; in most other countries of the Region, the figure is 0.5 per 100 000 donations or below.

"Many of these countries still depend on paid blood donors. Financial and other 'rewards' for donation attract high-risk populations such as drug abusers and sex workers," noted Dr Alex Gromyko of the WHO Regional Office for Europe. "This means that screening out unusable blood uses up scarce and expensive blood-testing resources. Also, since donors may have acquired HIV but may not have developed the antibodies to the virus, the risk of undetected infections is great."

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Worldwide, 5–10% of cases of HIV infection are transmitted through the transfusion of infected blood and blood products. Other major diseases that can be transmitted include viral hepatitis B and C, syphilis, malaria and Chagas disease. Globally, each year unsafe transfusion and injection practices cause an estimated 8–16 million hepatitis virus B infections, 2.3–4.7 million hepatitis virus C infections and 80 000–160 000 HIV infections.

WHO is working with national authorities and clinicians to promote blood safety and to reduce the spread of HIV and other infections through blood transfusion in all countries, especially those most in need, by advocating and assisting in the development of policies and infrastructures and the training of personnel. For example, a new set of Russian-language distance-learning materials on blood safety and the clinical use of blood was introduced to high-level ministerial representatives in 14

of the newly independent states of the former USSR last month.

Transfusion medicine specialists and clinicians with an interest in transfusion practice from across Europe gathered on 6–7 April 2000 in London, United Kingdom, under the auspices of the WHO Collaborating Centre at the National Blood Service (Birmingham), to agree on and issue recommendations to assist all European Member States in developing their own policies, in line with WHO guidelines, to reduce inappropriate blood transfusions and to promote the use of alternatives.

“Encouraging physicians to stop and think whether a transfusion is the best option is fundamental,” said Dr Gamal Gabra, head of the WHO Collaborating Centre and the principal coordinator of the meeting. “We want to alert governments to the need to look carefully at using blood, to have a national policy in place and to monitor quality and outcomes on a regular basis, making sure that

the right product goes to the right patient at the right time without unnecessary overuse or underuse.”

“Experts discussed a variety of recommendations” noted Dr Isuf Kalo, WHO Regional Adviser for Quality of Care and Technology. “For example, the most senior person in the treatment team should make the decision to use blood and blood products. Clinicians should be encouraged to review and update their clinical principles on the use of blood, to minimize its use and to encourage alternatives or replacements, as part of a national policy on blood transfusion. Patients should be assessed carefully and on an individual basis, and all available alternative therapies explored before a decision is made. In addition, the experts made specific recommendations for transfusion practice during and after childbirth and in emergencies.”

The final recommendations of the expert group were forwarded to

the WHO Regional Committee for Europe which met in September 2000 in Copenhagen. ▲

(Adapted from WHO Press Release EURO 05/00, Copenhagen, 7 April 2000. Available in English, French, German and Russian.)

**For further information on blood safety activities in the European Region, contact:**

**Dr Isuf Kalo, Regional Adviser  
Quality of Care and Technologies  
WHO Regional Office for Europe  
Scherfigsvej 8, DK-2100  
Copenhagen ØDenmark  
Tel.: +45 39 17 12 65  
Fax: +45 39 17 18 80  
E-mail: [ika@who.dk](mailto:ika@who.dk)  
Internet: [www.who.dk/](http://www.who.dk/)**



# Croatia

## Landsteiner link

Transfusion medicine got underway in Croatia at the turn of the 20th century, shortly after the discovery by Karl Landsteiner of ABO blood typing. Landsteiner in fact co-published a number of scientific papers with Dr Prasek, a Croatian scholar of immuno-haematology and microbiology. Yet, attempts to institute a system of non-remunerated blood donation failed, and blood donors were largely limited to family members. Transfusion therapy remained rare until the end of World War II, when a transfusion team was established within the army, later to become a transfusion service.

**In 1998, as much as 92% of blood donations were non-remunerated**

## The transition from paid to non-remunerated donation

In 1945, the blood supply was insufficient to meet the great demand for blood components. The number of voluntary, non-remunerated blood donors grew steadily however until, in 1953, Parliament outlawed the sale of blood. On 25 October that year, the Red Cross organized the first ever blood donation campaign in Croatia, and this date has been dedicated to voluntary, non-remunerated blood donors ever since. The transition from paid, or family donors to voluntary, non-remunerated donors was not easy. By the end of the 1960s, paid donation was only tolerated in exceptional circumstances, such as emergencies and scarcities. The responsibility for blood donation remains with the Red

Cross, although blood collection and the preparation of components is under the care of the blood banks.

## Training

The first Croatian specialists in transfusion medicine were educated in Glasgow and Paris, at a time when transfusion therapy was only accessible at major hospitals. In 1958 Zagreb Medical School introduced the first three-year course in transfusion medicine, comprising laboratory and clinical practice and by the early 1960s, the first generation of Croatian specialists was born. This had a positive and immediate impact on the number of blood donations in Croatia.

The 1960s also saw many other transitions. For example, glass bottles to collect blood were



BTS staff

replaced with plastic bags; and plasma was first locally produced, then lyophilized for later use. The volume of fractionated plasma and the number of products increased over the years and today the country produces albumins, intramuscular and intravenous gammaglobulins and various specific gammaglobulins. From

1987 to the mid 1990s, cryoprecipitate virally inactivated at 60° for 62 hours was used for the treatment of haemophiliacs. This explains the relatively low rate of HIV infections in this population (2%), which is attributed to the non-inactivated factor VIII concentrates imported at that time.

### **Solidarity in adversity**

Strangely enough, it was the Homeland War in the 1990s that gave blood donation a big boost: in one year, the number of blood donors increased by over 20%, ending the blood component shortages at the time. People just came and offered their blood as a gesture of goodwill and support to their fellow citizens in times of conflict. The fact that—even during war times—no blood product is transfused without testing for viral markers, is a great achievement of the blood transfusion services, and the Croatian health system in general.

### **Testing**

Blood transfusion safety has always been a priority for the Red Cross and transfusion services as witnessed by mandatory testing in the country. Testing for syphilis was introduced at the end of the 1940s, for hepatitis B in 1972, HIV in 1987 and hepatitis C in 1992. And by the end of 1998, small-pool RNA-HCV NAT testing became mandatory. Only tests approved by the Paul Ehrlich Institute or the Agence française du Sang are authorized in Croatia.

### **Quality control**

The fast growth of the transfusion services in the 1990s led specialists to focus on the setting of standards and quality control. External Quality Control was then initiated for immunohaematology and viral serology. A reorganization of the blood transfusion services will also allow greater quality and safety control measures, through more centralized production and testing facilities. Implementation of this decision, however, has been

delayed due to a lack of financing and a concern over the implications of such restructuring, particularly for blood transfusion personnel. Nonetheless, it is hoped that the reorganization will be completed within five years.

### **Challenges facing the transfusion services**

For a population of around four and a half million, Croatia has four regional Blood Transfusion Centres and 20 hospital-based blood banks. In 1999, an average blood bank collected 7,000 units of whole blood and prepared 15,000 blood components. The disproportionate number of blood banks in Croatia performing laboratory donor screening and producing relatively small quantities of blood means that it is difficult and expensive to introduce a new test and to comply with current GMP.



One of Croatia's many blood donors on World Health Day

## World Health Day 2000

In promoting blood transfusion services, Croatia's message was to focus on the fact that many patients need treatment based on blood products. It was important to refute the unjustified stigma that blood transfusion was not safe, although no modern medicine could be guaranteed 100% risk-free.

Most events were planned to take place on or around 7 April. Newspaper articles explained the basic concepts of blood transfusion and responded to frequently asked questions: is blood tested? how often can you give blood? what are the greatest risks?



A drop of blood to save a life

WHO promotional literature were displayed everywhere that blood was collected. The responsibility of the donor was emphasized to minimize risks.



Safe blood messages

Blood transfusion staff took part in a series of phone-in programmes. The central event was a one-hour television show, in which the Minister of Health, and the Directors of the Red Cross and Croatian Institute of Transfusion Medicine discussed transfusion therapy, blood donors, safety measures and the reorganization of the Transfusion Services. In between answering questions from viewers, a film showed—vein to vein—all phases of the preparation of blood components from the arrival of the blood donor, the

donation, testing of the blood, preparation of the components to the transfusion of a patient. A second film showed the introduction of quality control in a hospital.

The aim of this campaign was to sensitize the public to the fact that, although absolute safety was wishful thinking, blood safety can be increased through the joint efforts of all involved in the process: the donor, the technicians collecting and labelling blood, and the health worker administering the transfusion.

The key message was that voluntary, non-remunerated blood donors are an extremely valuable group in our society, and that they are recognized as such. At the same time, the responsibilities of blood donors are changing as they are asked to provide more



Blood transfusion staff and donors

information, solidarity and cooperation.

The campaign was considered a great success, judging from the number of callers to the phone-in television programme. The number of spontaneous donors also exceeded all expectations. ▲

**For more information on blood safety activities in Croatia, contact:**

**Damir Grgicevic, MD, PhD, FRCP**  
**Edin, Director**  
**Croatian Institute of Transfusion**  
**Medicine**  
**Petrova ul 3, 10000 Zagreb**  
**Tel: +385 1 46 00 333**  
**Fax: +385 1 46 33 286**  
**E-mail: damir.grgicevic@hztm.tel.hr**  
**Internet: www.hztm.hr**

# Estonia

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## Estonia in Europe

Estonia's integration into the European Union reflects the nation's firm commitment to the values and principles of democracy, the rule of law, respect for human rights, security and a market economy. The reforms underway are an active attempt to build a stable and prosperous society based on these values.

## The cost of non-remuneration

WHO, the European Union and other authorities rightly place high standards on blood donations and blood products. Countries applying for integration into Europe must have appropriate legislation and a national blood programme compliant with quality standards. One of these blood safety measures recommends that blood

donations should be voluntary and non-remunerated.

Estonia likes to keep in step with our world and, in 1996–1997, moved from donations which were mostly paid, towards the promotion of non-remunerated



Coffee offered to blood donors and staff by a local sponsor

blood donations. This was a very difficult change in people's beliefs. On the good side, 92% of blood donations were non-remunerated in 1998, rising to over 98% at the turn of the century. But this success had its negative side, and the number of donations plummeted, falling from over 70 000 in 1996 to only 44 000 a year later. Luckily this trend was then reversed and, in 1998, 47 000 blood donations were collected followed by 50 300 in 1999.

## A spring day

The 7 April 2000, in Springtime Europe, Estonia celebrated safe blood donations. A small exhibition was opened in the Estonian Healthcare Museum in Tallinn, comprising materials and photos from earlier years and contemporary times alike, which allowed a review of the developments in

the national blood service, and an opportunity to advocate for voluntary, non-remunerated blood donations. The opening of the exhibition was attended by councillors of the donation department, the Chairman of the Board of the Estonian Blood Donors Association, and the Head of the Donation Department of the North Estonian Blood Centre.

Earlier in the day, 31 donations of blood were collected at the Museum, which is more than twice the usual collection. School children and teachers were particularly excited to witness first-hand a "live" blood donation. Every donor received a small souvenir to remember the day, and fresh coffee was offered to all by the sponsor of the Day, "Löfbergs Lila".

In addition, 43 donors attended the North Estonian Blood Centre,

and the mobile-team session recorded 102 visits. This was considered an excellent result!

### Avian advocacy

Estonia's two biggest newspapers—"Postimees" and "Eesti Päevaleht"—published articles on voluntary, non-remunerated donations and expressed gratitude to blood donors for their regular and safe donations.

Blood donors were introduced to the legend, virtually unknown in the country, of the first donor in the world—a pelican! For the uninitiated, mediaeval legend has it that the pelican pecked her



The first blood donor ... a pelican



Blood donation counsellors Mare Kaarus, Monika Huum and Olga Kala

breast to feed her starving offspring with her own blood. In days long past, an example of motherly love and unselfishness, the pelican nowadays symbolizes the altruism of voluntary blood donation in Estonia.

### Altruism—the safest way

Donated blood is only considered safe in Estonia once the "window" period—during which infectious diseases may be transmitted to the recipient—has passed.

Notwithstanding, potential donors fill in a questionnaire, and it is felt

that provided donations are non-remunerated and voluntary, there is no reason that the information would not be as honest and accurate as possible, and the risk of unsafe blood at its lowest. ▲

**For more information on blood safety activities in Estonia, contact:**

**The Manager, Donation Department  
North Estonian Blood Centre  
Adala 2, EE0006, Tallinn  
Tel: +372 697 40 22  
Fax: +372 697 40 03  
E-mail: doonor@nebc.ee**

# Poland

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## **Polish policies**

Blood Transfusion Services (BTS) have been an integral part of Polish public health services since 1 January 1999, when a law adopted by Parliament came into effect. The National Centre for Transfusion Medicine in cooperation with the Institute of Haematology and Blood Transfusion is responsible for the BTS and all issues related to transfusion medicine.

For a population of 38 million, Poland has 21 Regional Blood Transfusion Centres (RBC) and 253 blood banks located in hospitals. About 1 million units of blood and plasma are collected every year, equivalent to over 26 donations per 1000 inhabitants. The policy in Poland is based on voluntary, non-remunerated donors, and the number of donors recruited by the Polish Red Cross,

in conjunction with the BTS, has been constant over the last five years. Mobile units, used for the first time in some Polish cities on World Health Day 2000, will be used increasingly to collect blood.

## **Facts and figures**

Since 1991 blood has been collected in plastic bags. Poland is self-sufficient in red blood cell concentrates and platelets and is consistently improving the handling of blood: in 10 years, the percentage of blood discarded was reduced from 18% to just 6% in 1999. Over the same period, the production of fresh frozen plasma increased significantly from 56 000 litres to 241 000 litres in 1999 through implementation of manual and automatic plasmapheresis.

## **Standard operating procedures**

Mandatory procedures for blood transfusion are issued in manuals edited by the National Centre for Transfusion Medicine and the Institute of Haematology and Blood Transfusion. These procedures are periodically revised following the recommendations of the Council of Europe and WHO. A Quality Assurance System, for example, was implemented based on these recommendations in 1995, and an AABB manual translated into Polish in order to raise the level of knowledge on current transfusion medicine.

These same two Polish institutions organize several individual and group training courses for personnel in blood transfusion centres each year. RBCs are responsible for the training and

education of blood bank staff, as well as for blood grouping and carrying out all pre-transfusion tests in blood banks and hospital laboratories.

## **Safety measures**

Adverse transfusion reactions are registered and analysed by the RBC and the supervisory organization. External audits are carried out yearly by experts in blood collection and processing, quality assurance, immuno-haematology and viral marker diagnostics. BTS is involved in the serological diagnosis of foeto-maternal incompatibility and in RhD prophylactics. Serological tests are performed on every blood and plasma collection. In 1999 the prevalence of HIV antibodies was 0.016%; 0.13% for HCV and 0.04% for the HBs

antigen. Six post-transfusion HIV infections in the window period have been detected since 1987.

### Plasma

In line with European recommendations, HCV-RNA NAT testing for plasma for fractionation was introduced in April 2000. At present Poland is not self-sufficient in plasma derivatives. In 1999 there was 1.1 units of Factor VIII per capita in Poland, obtained from two sources: the Polish plasma fractionation programme in ZLB (Switzerland), and the central programme funded by the Ministry of Health.

### “World Health Day 2000” in Poland: regional focus

The National Centre for Transfusion Medicine briefed all Regional Blood Centres about the need to organize events to educate, motivate, recruit and retain safe blood donors on the occasion of World Health Day 2000. They all received the WHO

poster “Safe Blood Starts with Me” in Polish to support their safe blood activities around 7 April, which focused on young people, and the message that blood donation is fast, safe and easy.

Many and varied events took place in all corners of the country, including organized tours of BTS facilities for students, lectures on safe blood collection, processing and storage and media awareness campaigns. Notable events include:

Kielce unveiled its first ever blood-collecting ambulance, commissioned to commemorate this day and complement the Regional Blood Centre where high-school students also donated



Poster display



Katowice Regional Blood Centre

blood. In Poznan (the old heart-land of Poland), 99 university students donated blood. The city transit commission of Opole kindly lent one of its buses for the collection of blood from the local population, and candy factories from the surrounding area provided small gifts for the—mainly young—donors.

In Katowice and the entire coal mining region of Slask, the celebrations spanned three days. A well-organized media campaign

meant that citizens of Slask joined in numerous events promoting voluntary, non-remunerated blood donations. For example:

- 182 persons had their haemoglobin levels tested free of charge
- 312 persons discovered their blood group type
- Over 300 people got free medical advice.

Also on offer were first-aid training sessions, and lectures and demonstrations in the

marquee on “how do we test blood?”, “how do we collect blood?” and “who can be a blood or bone marrow donor?” In all, 817 donors gave blood in Katowice and its regional blood banks with excellent press, radio and TV coverage.

In downtown Lodz, citizens gave blood in an ambulance and learnt from talks and flyers the importance of safe blood. Blood donations in the Radom area were filmed by local TV stations and broadcast in the afternoon news. In Cracow, the Red Cross



Demonstrations in the marquee

organized a press conference with the RBC employees, the voluntary blood donors club, journalists, high school students and the general public.

Employees of Polish public television gave blood at the National Centre for Transfusion Medicine/Institute of Haematology and Blood Transfusion, which naturally got good coverage.

Before the event, the RBC in Lublin asked all local radio and TV stations and newspapers to support campaigns to promote voluntary blood donation and BTS

activities. The messages were gleaned from an official letter from WHO's Director-General to the late Mrs Franciszka Cegielska, Poland's Minister of Health. Editorials on the subject were therefore prepared,

interviews with the employees of the RBC broadcast, and on 6 April, Lublin TV transmitted “Talk of the Day” with the Managing Director of the Regional Centre.

During the whole month of April the RBC in Kalisz ran a competition for 40 high schools called “The Vampiriade”, during which 835 students donated blood. The project aimed to promote “voluntary blood donation” and spread awareness of how unique and irreplaceable blood is, and how safe it is to donate blood in Poland. Local businesses provided valuable prizes (TVs, CD players, sporting equipment), and the event led to many students becoming regular blood donors.

Cracow organized 13 mobile collections under the banners “Safe Blood Starts with Me” and “Blood Saves Life” which attracted 419 donations. Two collections organized in high schools for the first time saw 154 graduating students give blood. At the end of April, the RBC employees took part in a two-hour live radio

programme on safe blood, answering many calls from the public.

The success of the mobile blood collections in Bialystok—as elsewhere in Poland—can be attributed in part to media support and lectures given prior to the event advertising voluntary blood donation. Together with the hospital blood banks, information materials were distributed and blood collection sessions held at universities, high schools, manufacturing companies, etc. by the RBC and a lecture on “Safe blood and modern transfusion medicine” delivered to nurses. In small towns visited by Regional Centre employees for the first time, special posters were displayed.

### In town

The National Blood Transfusion Centre/Institute of Haematology and Blood Transfusion in Warsaw joined with a city business sponsor to organize a blood



collection on 5 April on the premises of the Polish Radio. This event tied in with the press conference described below. Activities spanned from 3 to 16 April, and included mobile blood collections at the University of Warsaw and other colleges.

### Media coverage

The afternoon and evening news of all the central radio and TV stations, and newspapers carried information on safe practices for the collection, processing and transfusion of blood and blood components.

The highlight of the day was a press conference organized by the Polish Ministry of Health, extracts of which were used by radio stations, news announcements and other broadcasts throughout the day. Among the participants were: Maciej Pirog, Deputy Health Minister, Jan Sablinski, Managing Director of the National Centre for Transfusion Medicine, Dr Magdalena Letowska from the Institute of Haematology, Dr

Hanna Skalisz, Managing Director of the Regional Blood Centre in Poznan and Mrs Wieslawa Kaczorowska, a transfusion medicine specialist from the Ministry of Health.

### Conclusion

Polish citizens across the whole country got involved in World Health Day 2000—and learnt all the whys and wherefores of safe blood—thanks to the National Centre for Transfusion Medicine in cooperation with the Institute of Haematology and Blood Transfusion, and the Regional Blood Centres. ▲

**For more information on blood safety activities in Poland, contact:**  
**Institute of Haematology and Blood Transfusion**  
**ul. Chocimska 5, 00957 Warsaw**  
**Tel: +48 22 849 57 81**  
**Fax: +48 22 848 89 70**  
**E-mail: letowska@cdit-aids.med.pl**



Regions of Poland

# Romania

## Background

World Health Day 2000 was a timely opportunity for Romania to focus on blood transfusion as a quality process that depends primarily on individual awareness and civic sense. Sustained efforts to implement the National Programme of Blood Transfusion, initiated in 1991, have concentrated on improving the entire blood safety network, including organization, testing and budgeting, to align the country's blood transfusion services with international recommendations. The success of these efforts—the result of dedicated people, blood donors and medical professionals—was celebrated on 7 April 2000.

## World Health Day activities

### Blood donation at the Ministry of Health

First and foremost, the Minister of Health himself gave blood as a clear statement of support to voluntary blood donation, declaring this to be “a noble gesture and the first prerequisite for safe transfusion practice”. Other members of the Ministry joined him, reiterating that giving blood is both a moral duty and a social right. The early morning event was featured on radio and television and in the press.

### Press conference at the House of Parliament

High level officials from the government and invited nongovernmental organizations were present at a well mediated

press conference at the House of the Parliament. Here it was unanimously declared that safe blood plays an integral part of our overall state of well-being, and not just a tool to reduce the mortality or morbidity of a given disease.

**Safe blood is vital to overall health, not just the absence of disease**

Romania is pursuing constant efforts to comply with WHO recommendations in terms of blood safety and stresses the importance of individual commitment in this debate.

A healthy society leads to a safe blood supply, but the appropriate use of this blood supply must also be considered. The therapeutic

use of blood products requires consideration of alternatives, where possible, and a commitment to quality which has full governmental support. The goals of the National Programme of Blood Transfusion are to increase blood safety and reduce transfusion risk through voluntary blood donation (from low-risk donor populations), compliance with international recommendations for donor selection and deferral, blood testing, and distribution and appropriate



Microbiology laboratory at the Blood Transfusion Centre

clinical use of blood products. Special attention has been given to continuous training, access to up-to-date information and guidelines. Accurate standard operating procedures and good manufacturing practices at every level of the blood transfusion chain will make blood safer.

### National debate focuses on quality

The National Institute of Transfusion Haematology in conjunction with the Blood Transfusion Centre of Bucharest organized a special event on “Safe blood starts with me”. Public acknowledgement and diplomas honoured the efforts of each Blood Transfusion Centre for its work over the last 50 years. This was followed by an open and friendly scientific discussion on issues related to blood transfusion.

Participants, in recognizing Romania’s progress, agreed to focus in the future on the unmet agenda: self-sufficiency in blood products; increased resources;



Step-by-step explanation of the blood transfusion chain in Romania

and sustained and well-defined responsibilities in the blood transfusion system. Safe blood for transfusion is now an essential prerequisite of human and medical nature—quality people leading to quality results—rather than of a technical and economic nature. In other words, the more involved the players, the more performant and rapid the results.

Participants received a booklet of the presentations, covering each step of the blood transfusion chain.

The voluntary, non-remunerated blood donor—cornerstone of blood

transfusion safety—needs to be made aware from early childhood of the impact of his gesture. Extensive mass media campaigns and raising a positive image of Blood Transfusion Services are important ways to increase the number of low-risk, regular donors.

### Distribution of materials

WHO “safe blood starts with me” materials were distributed all over the country through the blood transfusion network and young volunteers, spreading the message that donating blood is a moral obligation and a civic right. Special teams visited schools to instil the fact that giving blood must be an altruistic gesture, an expression of commitment to mankind.

### One-to-one broadcast on national radio

A live programme on Radio Romania gave listeners nationwide the opportunity to ask questions

on the safety of procedures in the blood chain. They thereby learnt all the basic why-when-how information on blood donation and transfusion, and heard first-hand from regular, voluntary blood donors who shared their experiences and explained their intrinsic motivation to help those in need. A retired Red Cross assistant, for example, related her memories of the Second World War and the powerful feeling of human solidarity in the blood transfusion services in the face of adversity. Many young people, moved by her story, turned up the following day to donate blood.

### Benevolent Blood Donor Foundation

This recently created foundation organized a special event for honorary voluntary, non-remunerated, regular blood donors (those who have given blood for more than five years). Their gesture of human solidarity and civic sense and their personal contribution to health were

publicly recognized with diplomas of merit and a pin, representing a simple, single drop of blood. A bus trip took participants to the outskirts of Bucharest for a well-deserved picnic.

### Romanian Red Cross

Representatives of the Romanian Red Cross were active at the community level in a campaign to attract and educate voluntary blood donors, armed with the information kit produced by WHO.

### Beyond World Health Day

A series of activities were programmed to ensure that blood safety remained a priority well beyond World Health Day, 7 April 2000.

### Educating blood donors

Leaflets on blood donation and transfusion will be distributed at all blood donation sites. Videotapes presenting the blood transfusion chain as well as

apheresis collection procedures will be available for donor information. Extensive work is underway to improve existing facilities so that blood collection takes place in a pleasant atmosphere, in convenient surroundings and under the supervision of attentive staff.

### Regular blood donor recognition

Activities to publicly recognize donors will continue. Sustained advocacy and active education will be focused on moral awareness, the notion of solidarity between individuals and a sense of social pride, in order to increase the number and commitment of existing and potential blood donors.

### Increasing public awareness and information

Mass media support is vital to get clear and updated information to the public on what blood safety means. National Television is



**Blood Transfusion Centre  
Production Unit**

preparing a hands-on tape showing the steps involved in blood donation. Two panel discussions dedicated to blood transfusion have already been presented. Given the impact of the radio programme on World Health Day, several radio stations are collaborating in a plan to continue live broadcasts on blood safety and low-risk donors to generate an active dialogue with immediate impact. Major journals will publish short information texts underlining the importance of voluntary regular blood donation, quality management and the optimum use of blood.

Activities in schools and the work place will be carried out in

parallel to the media campaign. A series of health education conferences is already underway to explain the basic notions related to viral transmissible disease, the significance and necessity of voluntary blood donation and low-risk donors.

Leaflets, booklets and posters containing information on blood donation and transfusion will be crafted from both local experiences and data from the WHO information kit.

### Transfusion medicine course for Blood Transfusion Service staff and clinicians

Continuous training programmes have now been organized on a modular basis to enable specialists to focus on their particular field of interest. Transfusion medicine courses and workshops on the clinical use of blood, targeting clinicians and general practitioners, are made available periodically by the National Institute of Transfusion Haematology.

## Conclusion

The national authorities in Romania are committed to attaining the maximum international standards of quality in transfusion medicine. With this governmental support and a legal framework in place, the blood transfusion services can be assured of a healthy development. Sustained collaboration with national and international organizations is an essential prerequisite to such integrated development for blood safety. ▲

**For more information on blood safety activities in Romania, contact:**

**Director, National Institute of Transfusion Hematology  
Blood Transfusion Centre of Bucharest  
Str. Constantin Caracas Nr 2-8  
Sector 1, 78156-Bucharest  
Tel +401 650 7410  
Fax: +401 659 6990  
E-mail: vhafner@dial.kappa.ro.**

## Vector-borne diseases, parasites and blood

Many parasites and viruses which affect hundreds of millions of people worldwide are transmitted from person to person by bloodsucking insects (vectors), and are then transported in the body via the blood. These diseases include malaria, filariasis, dengue fever, Chagas disease, leishmaniasis and African sleeping sickness. Some of these diseases cause severe anaemia or blood loss and may require the use of blood products or transfusion in order to save lives. Malaria, which affects some 300 million people a year, may cause miscarriages, stillbirths or underweight, anaemic children.

Simple preventive measures such as sleeping under a bed net can provide protection against night-biting malaria mosquitos and from carriers of certain other insect-transmitted diseases. Appropriate insecticides, good environmental sanitation to reduce vector breeding places, and biological control methods are commonly used to combat these diseases.

Schistosomiasis and the hookworms are worm infections, affecting some 1400 million people worldwide. Both diseases cause blood loss, resulting in damage to tissues and anaemia. Cost-effective drugs exist to treat these infections effectively and safely, thereby reducing the need for blood and blood products. It has been demonstrated that regular treatment of women and children with anthelmintic drugs in endemic areas increases their haemoglobin levels. ▲

# Slovenia

## A young country

Slovenia is a small, new European country with an ethnically homogenous population, 90% of whom are Slovenes. The population growth is expected to stagnate over the coming years, with the proportion of children continuing to decrease, and the percentage of people over 65 on the increase. Soon after its independence in 1991, Slovenia was granted international recognition by the European Community and admitted to leading international organizations such as WHO. The country has a well-developed, mandatory health insurance

system and, although health indicators place it somewhat

**The typical Slovenian blood donor is a 35- to 45-year-old male.**

behind the leaders, Slovenia remains ahead of most other countries in the central and eastern European region.

## History of the Blood Transfusion Services in Slovenia

The first bottles of blood were collected in the new Blood Transfusion Services of Slovenia at the end of World War II. Blood donors were paid with oil, sugar etc., in line with local custom. In 1953, blood donation became non-remunerative and voluntary and the number of blood donors grew under the direction of the Slovenian Red Cross, reaching 125,000 in 1984—5.6% of the population.

Today, the National Blood Transfusion Centre (NBTC), closely connected with the Clinical

Hospital in Ljubljana, has eight departments located in regional hospitals under the supervision of a transfusionist. The NBTC collects nearly half of the 100,000 units of blood donated each year. Mobile units operate 170 days a year at different places in Slovenia and on the remaining days, blood is collected at the Transfusion Centre or other Transfusion departments. Blood donors are also called in daily for the plasmapheresis programme and for collecting fresh whole blood for the citopheresis programme. Whether voluntary or targeted donors, no-one gets remunerated.



My blood—safe blood. For me, for you, for everyone.

## The processing of blood

Blood is mainly collected by mobile units in triple bags with SAGM and processed into red blood concentrate, fresh frozen plasma or platelet concentrate. A small amount is used as whole blood for open-heart surgery, liver transplants or bone marrow for example, for which there is a special transplantation team. Plasma and platelets are additionally collected by aphaeresis from voluntary, unremunerated donors.

Given the relatively short storage life for all blood cell components—from six weeks for red blood cells down to only one day for granulocytes—it is important to focus on quality control and cost benefit when choosing a preparation method. Some special components are prepared only in the larger Blood Transfusion Centres before delivery to the smaller hospitals.

Slovenia is still developing its policy on self-sufficiency for blood derivatives. The country has no economic reason to have its own fractionation plant since its partners fractionate the great majority of collected plasma for albumin, Factor VIII, IX concentrate and gamma globulin. Slovenia is, however, self-sufficient for all blood components and products with the exception of Factor VIII, for which half of the 6 million units used per year are imported.

## Screening

All units are tested for syphilis, HIV 1/2, hepatitis B and C, the latter using PCR. Testing, grouping and cross matching of donated blood is carried out before transfusion. The functions of the Blood Transfusion Service also include antenatal screening and coordination of anti-D protection, a tissue typing laboratory and an auto transfusion unit for outpatients.



Manual for blood donor and recruitment personnel

## Quality Management Programme

To reinforce a strong Research and Development team, the priority is to introduce effective quality control and build a unique quality assurance system for the whole country.

Training in the field of blood transfusion is high on the agenda. Administrative errors are one of the most common sources in the blood transfusion service which is why fifteen years ago, Slovenia adopted a special automated programme to make routine decisions, guide procedures and produce reports, statistics and analyses, all of which has made blood transfusion safer. A network connects all transfusion departments to the Slovenian register of blood donors, although a datalink between clinics and blood transfusion services would improve supervision of the clinical use of blood and blood derivatives, and also form the basis for an effective haemovigilance system.

## World Health Day—A Red Flag

World Health Day, with its slogan “Safe blood starts with me—blood saves lives” was a challenge to this nation, in the midst of transition and reorganization of its blood transfusion and donor recruitment system. The challenge was to increase public awareness and understanding of blood safety through voluntary, non-remunerated blood donation from low risk populations. Gaining information on the behavioural characteristics of present and potential donors was considered a vital starting point.

Several manifestations and activities took place on 7 April focusing on donor recruitment and health professionals. Key players in the public information campaign for safe transfusion were the President of Slovenia, the Minister of Health, representatives of the Red Cross and health care personnel.

## Health Care Council

The Health Care Council is the highest scientific body in Slovenia and advises the Minister of Health on health policy. A meeting of the Council coincided with the safe blood campaign, presided by the Minister of Health. Major outcomes of the meeting were:

- the Law on Blood Supply, compatible with European guidelines, will be key to transforming the current system into modern blood transfusion medicine.
- there were many reasons to be content: 5% of the population are blood donors, and the blood programme itself is largely self-sufficient. Yet the occasional blood shortage or surplus still need to be addressed.
- further development of the existing quality assurance system means new investment and more expensive blood and blood derivatives, so the first priority is to prepare strict directives for the rational clinical use of blood. The decision to transfuse must be

based on a careful assessment of the clinical situation supported by laboratory data, with a clear indication that the transfusion will save a life or reduce morbidity.

- the automated network provides good support, but should be linked to the clinical systems. The aim is to have a unique patient identification number in every hospital, like a social security number, to enable the rapid management of data and decision-making.
- practical experience should be shared regularly between hospital transfusion committees. Following up on the results of transfusion therapy—positive as well negative—is crucial.

## Dedicated to donors

Of special note was the presentation of a book written especially for blood donors and recruitment personnel. The President of Slovenia—a blood donor himself—along with the President of the Red Cross and the Director of the Blood Transfusion Centre, each wrote a preface. Twenty-six

articles by different authors address all issues related to donation from the past to present, and answer the most frequently asked questions.

## Illustrative activities

An exhibition was opened combining WHO materials with Slovenian data. Future exhibitions and promotional activities will



Artwork from the fifth Slovenian secondary medical scholars contest

benefit from the remarkable pictures, articles and other material gleaned from the medical school scholars on “safe blood starts with me”.

## Donor profile survey

A public survey was carried out by telephone to collect data using a specially designed questionnaire. The main goals were:

- i) to verify the motivation of the population to give blood; and
- ii) improve understanding of the typical blood donor profile.

Results showed that a staggering two-thirds of the Slovenian population are potential donors and that the most frequent reason for people not to donate is related to health. At least 25% of the population has had some personal experience with giving blood.

## Media support

Several public media, including radio and television companies, supported the campaign. A half-



**... a staggering two-thirds of the Slovenian population are potential donors.**

page article in the main national newspaper compared blood safety in Slovenia to that in other European countries.

### **Conclusion**

The decision to devote World Health Day 2000 to blood safety offered this budding nation the perfect opportunity to consolidate and build on its blood transfusion services. ▲

**For more information on blood safety activities in Slovenia, contact:**

**The Blood Transfusion Centre  
Slajmerjeva 6, 1105 Ljubljana  
Tel: +386 1 5438 110  
Fax: +386 1 2302 224  
E-mail: Ljubisa.lukic@mf.uni-lj.si  
Internet: www.zrs-tk.si**

## **Genetically determined diseases and blood**

**S**ome genetic diseases affect the blood, such as haemophilia, thalassaemia and sickle-cell disorder. Persons with these diseases require supplies of safe blood to replace their deficient blood.

Haemophilia, which affects mainly men and occurs in about 1 in 5000 male births, is caused by shortage of clotting factors: when a person is injured, there is a risk of bleeding. Accurate identification of haemophilia is made by measuring the levels of specific clotting factors in the blood. Blood tests need to be carried out in a laboratory which has appropriate facilities and experience with these tests. To date, with comprehensive care and by using products containing the missing clotting factors, made from blood donations or biotechnology, even people with severe haemophilia lead nearly normal lives. In most developing countries, blood is the only source of treatment available.

In sickle-cell disorder and thalassaemia the red blood cells are unable to carry enough oxygen. Thalassaemia may lead to mild or severe anaemia and premature death. Blood transfusion is currently the main treatment for thalassaemia, which gives the person optimal chances of survival; blood is also needed for patients with sickle-cell disorder.

A strong health service infrastructure is essential to ensure continued monitoring of populations for the early detection and treatment of these diseases. If every capillary, vein and artery in a person's body were lined up end to end, they would cover a distance of 150 000 kilometres. All the iron in a average person's blood could make a 5-centimetre nail; two-thirds of this iron is in the red blood cells. ▲

# South-East Asia



Dr Uton Muchtar Rafei

## Message from the Regional Director

The Regional Director for WHO's South-East Asian Region (SEARO), Dr Uton Muchtar Rafei passed a special message to member countries on the occasion of World Health Day 2000 highlighting an urgent need to develop national strategies for safe blood transfusion and to ensure their efficient implementation. His message covered the importance of phasing out replacement and professional blood donors in all

countries in the region besides screening of all donated blood and its rational use.

The example set by his message, the extensive materials developed and shared within the South-East Asia Region, and the activities that took place, are summarized below.

## Preparation of information kits

Kits containing two booklets were prepared by SEARO, namely

- a booklet on information and answers to basic questions for potential blood donors; and
- a booklet on information for clinicians on appropriate use of blood.

**Car sticker and a poster** on "Safe blood starts with me" were included in these kits, that were distributed to all Member

Countries much ahead of 7 April for translation into regional languages.

**New Year greeting cards** were printed and distributed to all Member Countries well in advance.

**A calendar** on the theme was prepared, printed and distributed to all Member Countries.

**Posters** depicting various strategies on blood safety were prepared and displayed in the lobby of the SEARO building.

**A website** on safe blood was created which covered all technical publications and activities on World Health Day and beyond.



Dr Uton Muchtar Rafei, Regional Director SEARO and Dr Geoffrey Dennis, Representative of the IFRCCRS, addressing press conference

## Press conference

A press conference was held on the eve of World Health Day on 6 April 2000 at WHO House, New Delhi.

Dr Uton Muchtar Rafei addressed the large gathering of media personnel from different newspapers and television channels. The representative of the International Federation of Red Cross and Red Crescent Societies (IFRCRCS), Dr Geoffrey Dennis, Dr P. Abeykoon, Director of Health Technology and Pharmaceuticals, SEARO and Dr Neelam Dhingra, Medical Officer from WHO/HQ, took part in the press conference.

The Regional Director highlighted that 80% of the global population living in the developing world has access to 20% of the global supply of safe blood. The requirement for blood in the region is 15 million units whereas the total number of blood units donated is about one half of that.

He stressed the need to take urgent action on two crucial

issues related to blood transfusion: the lack of availability of blood when needed, and the associated risk of transmission of infection. He pointed out three principles to ensure blood safety. Firstly, ensuring that 100% of blood for transfusion is obtained from voluntary, non-remunerated low risk donors. It has been calculated that 1% of the eligible



Safe blood poster

population of any country needs to regularly donate blood to meet the needs of that country. It is important to inform people, particularly the youth, about the importance of blood safety and the need to become regular blood donors. Secondly, to formulate national blood policies and regulations to ensure screening of all blood before transfusion with reliable quality reagents; and thirdly, to educate the clinicians to use blood judiciously and appropriately.

Dr Neelam Dhingra emphasized the role of WHO to assist countries to strengthen their national blood programmes through advocacy and technical assistance, through well-formulated national blood policies and plans, effective regulatory mechanisms, training and education.

Dr Geoffrey Dennis, Head of the IFRCRCS for the South East Asia Region, stated that they were involved in blood services in 113 countries, ranging from recruitment of blood donors to the

provision of blood services, in global partnership with WHO.

News highlights of World Health Day were carried in all national newspapers and covered by television on 6 and 7 April 2000.

## Cocktail and reception

A reception was hosted by WHO on 7 April 2000 inviting representatives from the press, the Ministry of Health and Family Welfare of India, blood programme managers, the Indian Red Cross Society and the IFRCRCS. ▲

**For more information on blood safety activities in the WHO Regional Office for South-East Asia, contact:**

**Dr Sudarshan Kumari**  
**Blood Safety and Clinical Technology**  
**SEARO, Indraprastha Estate**  
**Mahatma Gandhi Road**  
**New Delhi 110002**  
**Tel: 91 11 337 0804**  
**Fax: 91 11 337 9507**  
**E-mail [kumaris@whosea.org](mailto:kumaris@whosea.org)**  
**Internet: [www.whosea.org](http://www.whosea.org)**

# Bangladesh

## Setting the scene

Bangladesh observes World Health Day each year with due solemnity and enthusiasm, expressing in this way its political commitment to the health and well-being of mankind. The theme for the year 2000 “Safe Blood Starts With Me” was welcomed by the world at large, the South-East Asian region



H.E. Minister for Health and Family Welfare Mr Fazlul Karim Selim addressing the press conference

and, of course, the Bangladeshi authorities, in particular through the following activities.

A **press conference** was arranged on 6 April at the Hotel Sheraton to spread the theme of safe blood with the media. All city-based newspapers were invited, as well as foreign news agencies and television. The Minister for Health and Family Welfare Mr Fazlul Karim Selim and the State Minister Dr M. Amanullah attended the event, which was given good coverage on Bangladesh Television.

**Bangladesh Television and Radio** actively

took part by airing interviews from the eminent Minister of Health, the State Minister for Health and Family Welfare, the Chairman of the Bangladesh Red Crescent Society, the WHO Representative, the Director

General of Health Services and the Director General of Family Planning. Topics illuminated the public on a variety of vital issues related to blood transfusion safety.

The 25-minute programme was broadcast live on television and simultaneously on radio on 7 April.

A colourful **walkathon** was held on 7 April, starting from the



View of the Walkathon

National Museum and ending at the National Press Club. Numerous organizations—the Nursing College, Boy Scouts and Girl Guides, Swanirvar Bangladesh, Bangladesh Probin Hitoishi Sangha, Pre-Cadet School, Directorate of Health Services, Directorate of Family Planning, Dhaka Medical College, among others—all participated displaying banners and festoons

with messages on the theme of the day. Health messages highlighting the prevention and control of blood related diseases were consistently announced over the megaphone.

An **essay competition** was widely advertised in important daily newspapers and announced on radio and television to ensure maximum participation. Nine prizes were distributed among the national winners, that included certificates, prize bonds and a crest.



Honourable Minister congratulating winners of painting competition



World Health Day function in the district

A **painting competition** was arranged on 30 March 2000 in the Shishu Academy for 500 children aged 6–18 years, presided by many notable dignitaries including the State Minister for Health and Family Welfare Dr Amanullah, many other important dignitaries and a large number of parents.

An **inaugural ceremony** was held on 7 April in the auditorium of the Bangladesh College of Physicians and Surgeons. The Minister for Health and Family Welfare was the guest of honour, accompanied by the State Minister

and Chairman of the Bangladesh Red Crescent Society. The Additional Secretary, Health and Family Welfare, presided over the function. The major focus of the discussion was the importance of blood safety and the need to strengthen transfusion services in the country.

The Government underlined its commitment to implement appropriate programmes at different levels of health care to ensure safe blood transfusion.

## Health Education Exhibition

A colourful and attractive health education exhibition was mounted in the Bangladesh College Physicians and Surgeons lobby on 7 April, during which various materials were displayed and distributed. The exhibition was inaugurated by the Minister for Health and Family Welfare, among other distinguished guests.

## Road Island Decoration

To publicize the theme of the World Health Day, 20 road islands and three bridges in Dhaka City were decorated with framed wood, hardboards and attractive cloths.

## Activities at districts and Upazila

The national authorities gave the green light for Deputy Commissioners and Civil Surgeons of all districts to observe World Health Day in a befitting manner. Guidelines were provided as to



Health Education Exhibition

potential programmes, that were subsequently elaborated with the support of the Bureau of Health Education in the form of posters, leaflets, stickers and caps. ▲

**For more information on blood safety activities in Bangladesh, contact:**

**Programme Coordinator  
National Blood Transfusion Centre  
Dhaka Medical College Hospital  
Annex Building, Dhaka  
Tel: +88 02 966 8781  
Fax: +88 02 988 6415**

## Emergency, conflict and health

**T**he need for an effective health service is felt most during emergencies of any kind, whether war, natural disasters, large-scale accidents or human conflicts. Yet it is at such times that the system often breaks down, being unable to cope with the magnitude of the demand. Internal conflicts or war may destroy hospitals and clinics, while power shortage often disrupt their work and can ruin medical stocks that require refrigeration, including blood. Caring for large numbers of wounded people puts an added burden on already strained systems.

Whenever such events occur the need for blood donation and transfusion services increases. Many people spontaneously donate blood during a crisis, but when the crisis is over, the countries are left without a sustainable blood supply. Such situations can be avoided by setting up systematic efficient blood services with lists of regular donors. ▲

# Bhutan

## An Organized Affair

Bhutan joined all other Member States of the United Nations in observing World Health Day (WHD) on 7 April 2000. The theme “donate blood—save life” was used by this nation to raise awareness of the need and importance of altruism in donating blood and saving lives.

The Royal Institute of Management (RIM) was invited by the Information, Education and Communication for Health (IECH)



Royal Institute of Management celebrates World Health Day 2000

Division of the Health Department to develop a programme of activities for the occasion. In collaboration with a multitude of partners (see end), the following activities were implemented.



## Seminar on “donate blood—save life”

The guest speaker at this important seminar, Dr Orapin Singadheji, WHO Representative, highlighted the significance of

WHD 2000 dedicated to blood safety, and the need for the youth of Bhutan to get involved in the voluntary blood donation

Chief Guest addressing the audience during Symposium on Safe Blood

programme. The WHO Representative, faculty and staff from the RIM, personnel from the Royal Bhutan Police and all other participants agreed to lend their support to this plea.

## Fun run

A fun run was organized by the Royal Institute of Management. All the trainees and interested faculty staff members of the Institute participated, starting from the RIM campus, Semtokha, to the



Fun Run

Jigmi Dorji Wangchuck National Referral Hospital (JDWNRH) Campus, about 5km away. The first three men and women were awarded T-shirts printed with the theme of World Health Day 2000. Those who fell behind decided to form a group and walk through the streets of Thimphu shouting anti-tobacco slogans.

## Recognition award

The prize for the donor who had given the most units of blood in

Bhutan was awarded to Mr Kesang Jigme, a laboratory technician at JDWNRH. The Minister of Health and Education, Lyonpo Sangay Ngedup,

awarded him a certificate of appreciation from the Health Department for his 32 donations.

### Debate

A debate was organized for the trainees of the Royal Institute of Health Sciences in support of a safe blood campaign, under the slogan “*Donate blood—Save life*”. Certificates and prizes were awarded to the best speaker and the team that won the debate.



Donors lined up to donate blood

### Cultural programme

Cultural programmes were put on in schools and institutes, spreading the “*Donate Blood—Save Life*” message. Short skits

were followed by songs and dances in the evening.

### Guest lecture

The Chief Guest Speaker for Dechenphodrang Monastic School was a senior Buddhist Lama. He highlighted the importance of donating blood voluntarily, and the involvement of the whole community in such a noble cause. In his speech he made several references to the sacrifices of the Lord Buddha in order to help others.

### Symposium

A symposium on safe blood was held at JDWNRH on 8 April as part of the WHD 2000 celebrations, and included the following topics:

- Safe blood transfusion
- Blood usage in JDWNRH statistics
- Medical indication of blood transfusion
- Blood transfusion in the

operating theatre/intensive care unit

- Use of blood in obstetrics/gynaecological practice
- Transfusion-transmitted infections
- Rational use of blood and blood products.

Participants of the symposium included doctors from Indo-Bhutan Friendship Hospital, Lungtenphu army hospital and doctors, Assistant Clinical Officers, ward in-charges and laboratory technicians of JDWNRH.

### Blood donor enrolment

A blood donor enrolment and mobile blood banking camp was held on 8 April 2000. Fifty donors gave blood and many more were registered after confirming their blood groups.

### Video show “Donate blood—Save a life”

The IECH Bureau prepared two video films of 20 minutes each on

safe blood, which were shown to the RIM trainees and other participants in the Institute’s auditorium.

### Acknowledgements

Groups that carried out activities on WHD 2000 included: the Royal Institute of Management (RIM), the Institute for Language and Cultural Studies Semtokha, the Royal Institute of Health Sciences, Dratsang Lentshog (Secretariat for Monk Body), Motithang High School, the Police, Dechencholing Junior High School, Changangkha Junior High School, Choden Junior High School, JDWNRH and Chukha Dzongkhag. The IECH Bureau and the WHO Country Office were the key coordinators. ▲

**For more information on blood safety activities in Bhutan, contact:**

**Dr Krishna Prasad Sharma**  
**Pathologist**  
**Jigme Dorji Wangchuck National Referral Hospital**

**Thimphu**

**Tel: +975 2 322497/322 496**

**Fax: +975 2 323 812**

**E-mail: DRKPSharma@yahoo.com.**



# India

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## Setting the Tone

Dr Uton Muchtar Rafei, Regional Director of WHO's South-East Asia Regional Office (SEARO), highlighted an urgent need to develop national strategies for safe blood transfusion and to ensure their efficient implementation. His message set the tone for activities in the Region, and this article provides just a glimpse of the wealth of activities carried out to address blood safety issues in States and cities all over India.



Inaugural function of Seminar

## Delhi

A **Seminar on the Rational Use of Blood** was organized by the All India Institute of Medical Sciences on 7 April 2000 at the India Habitat Convention Centre. The objectives of the seminar were to train clinicians in Government and private hospitals on the risks of blood transfusion, the need for safe, voluntary blood donations and judicious use of blood and blood components.

Around 150 clinicians from different specialities, i.e. gynaecology and obstetrics, anaesthesia, surgery, paediatrics, cardiothoracic and vascular surgery, physicians, and orthopaedic surgery hospital administration, participated in the seminar.

The Minister of Information and Broadcasting, Shri Arun Jaitely, inaugurated the event, that was



Miss World on the podium

chaired by the Dean of the All India Institute of Medical Sciences. Topics covered by the eminent speakers from different specialities were:

- red cell conservation in cardiac surgeries
- autologous blood transfusion
- blood component use: current needs
- ensuring blood safety: WHO strategies

A panel discussion on blood safety included distinguished guests from the media, the blood regulatory authority, transfusion services, general surgery and microbiology.

Participants left the seminar stimulated to reflect carefully on how to make blood transfusion as safe as possible.

**A public function in honour of voluntary blood donors** was organized in the auditorium of the

All India Institute of Medical Sciences to honour voluntary blood donors from Delhi who had donated blood at least 50 times. This tribute was reinforced with an entertainment programme for the youth that had come to watch the function. Fourteen blood donors who had donated more than 50 times (range between 50–150 times) were given mementoes based on the World Health Day 2000 logo. These souvenirs were presented by the reigning Miss World, Ms Yukta Mookhey who was the special guest of the occasion. The Chief Guest of the occasion was the

Union Minister of State for Health and Family Welfare, Mr N. T. Shanmugham. Many other senior officials were also present to honour Delhi's prolific blood donors.

After the felicitation ceremony, a cultural function was staged, during which popular artists like Ms Shivani Kashyap and Vipin Aneja and the Bhangra Pop Star "Jassi", gave star performances.

The Nehru Yuva Kendra Sangathana organized a **massive blood donor enrolment drive** in 500 districts of the country. On this day, the organization enrolled

100 000 potential blood donors in 500 camps after offering them the services of blood group determination.

On 8 March, a seminar entitled "*Steps Towards a Safe Blood Transfusion Service*" was held to mark World Health Day 2000.

It was inaugurated by the Delhi State Health Minister Mr A.K. Walia. SEARO's Regional Adviser on Health Laboratory Services, Dr Sudarshan Kumari, addressed the gathering. The seminar was well attended by blood bank experts, hospital administrators, personnel from the drugs control authority and technical staff members.

## Mumbai

As part of the World Health Day celebrations, the Federation of Bombay Blood Banks focused on



Blood collection at Governor's bungalow

the vital role of voluntary blood donors and organized the following activities:

A *Seminar on Safe Blood Transfusion Practices* was held at the Grant Medical College and Sir JJ Group of Hospitals on 6 April. It was inaugurated by the Maharashtra State Health Minister and was well attended by more than 100 clinicians, blood bankers and administrators.

On 7 April, the city offered:

— a **blood collection drive** at Raj Bhavan, the Governor's



State Minister for Health & Family Welfare with WHO Adviser

bungalow. Six blood banks collected 981 units of blood;

- a World Health Day function at the Y.B. Chavan auditorium to applaud “**100-time**” **voluntary donors**. The Chief Minister, Health Ministers and other Government officials were present, along with a large gathering of voluntary blood donors, youths from colleges and social organizations;

- a **poster competition** and **seminar** by the Seth G.S. Medical College at K.E.M. Hospital;
- an **information booklet** on blood donation for distribution to various colleges, schools and the general public.

An event was held to announce **information systems** for supply of safe blood to the citizens of Mumbai from member blood banks. The Honourable Minister of Health, Government of

Maharashtra was the Chief Guest. The Health Secretary, Chairman of the Maharashtra State Blood Transfusion Council and the FDA Commissioner of Maharashtra, were guests of honour.

A **cricket tournament** with a view to motivating voluntary blood donors was held from 9 to 16 April. Twenty teams comprising voluntary blood donors from different organizations in Mumbai participated in the tournament, supported by film starts and other personalities. All participants received a T-shirt, a cap, a bag and a Certificate of Participation.

between the supply and demand of the life saving fluid in West Bengal.

The AVBD believes that the most effective way to fill the blood banks is to bring the bank to the donors, rather than wait for them to come forward. To this end, many activities were organized on WHD 2000, including a colourful **Cycle Rally** of 500 young voluntary blood donors from Raktadan Bhawan, Barasat to the Central Blood Bank in Calcutta and back. A **Year Long State Level Programme on Safe Donor Motivation** was also launched amid seminars and lectures on issues related to the rational use of blood.

Distinguished guests were cordially invited to make the events a success.

The Indian Society of Blood Transfusion and Immunohaematology (ISBTI) also cheered the occasion in a befitting manner. All State Level Chapters of the organization, invited to celebrate “Safe Blood Starts With Me”, produced thousands of posters



Voluntary blood donor cricket tournament

## West Bengal

The **Association of Voluntary Blood Donors, West Bengal** (AVBD) is a collaborative effort of those who are not only willing to give their blood, but also their sweat and tears for the cause. Established in 1980, the Association today has a fraternity of over 5 million blood donors from all walks of life. Their shared mission: to bridge the woeful gap

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and information leaflets that were distributed at all ends of the country. Of particular note is the Special Issue of ISBTI News in honour of World Health Day 2000 and the All India Voluntary Blood Donation Day Celebration 2000 illustrating the enthusiasm and commitment of Government officials and the general public alike to a safe and sufficient blood supply. The poem below is reproduced from this Newsletter. ▲

**For more information on blood safety activities in India, contact:**  
**Dr P. Salil**  
**Jt. Director (BS)**  
**National AIDS Control Organization**  
**(NACO)**  
**9th Floor, Chanderlok Building**  
**Janpath Lane**  
**New Delhi 110 001**  
**Tel: +91 11 373 1805**  
**Fax: +91 11 373 1746**  
**E-mail:**  
**salilpanakadan@hotmail.com**

## Safe blood starts with me...

I want to help others whatever it be  
But show me the path, listen to me thee.  
Suddenly a voice came "Safe blood starts with me"  
And I realised what God wanted of me.  
From each one of us he wants the same:  
Donate blood and save the bodies which may be put to flame.  
So come forward and stretch out your hand  
No one is taking out your organ or gland  
Just sit and give a thought for a while  
Your donated blood may save a smile  
For want of blood we see many people dying  
They leave their families mourned and children crying.  
I hope you understand what I mean  
Come forward and help WHO and ISBTI in improving this scene.

**Megha Gupta**

# Indonesia

## Organizing Committee

The Directorate General of Medical Care was the focal point for activities related to World Health Day 2000, supported by an Organizing Committee of members from the International Federation of Red Cross and the Red Crescent Societies, the Ministry of Health, the Indonesian Red Cross Society and NGOs. Highlights were as follows.



Minister of Health Dr Achmad Sujudi, mingling with the community

## Press conference

A press conference was held on 30 March 2000 chaired by the Minister of Health, Dr Achmad Sujudi, President of the International Red Cross, Mar'ie Muhammad, Director General of Environmental Health, Prof. Dr Umar Fahmi and Director General of Medical Services, as well as the WHO Health Promotion Officer for Indonesia.

The Minister of Health advocated safe blood policies as an integral part of a successful health delivery service from both a governmental and community perspective. The Minister pointed in particular to Government Decree. No. 18/1980 whereby blood transfusion activities are to be executed by the Indonesian Red Cross Transfusion Unit, including the selection, safety, processing, storing and distribution of blood. A

statistical description was given to the press by the President of the Red Cross on the demand and supply of blood.

The information kit provided by the WHO Regional Office for South-East Asia, and a press release from WHO Indonesia was distributed to the mass media. The Regional Director's Message for World Health Day was shared with Radio Republic Indonesia and other private stations.

## Workshop

The Ministry of Health organized a workshop on 7 April on "Safe blood comes from a healthy body" for participants from different sectors of

society, including laboratory technicians and paramedical trainees. Given that national awareness of the need for safe, voluntary blood donation is weak, the workshop included a questionnaire survey based on perception of voluntary blood donation in local communities. It highlighted the need to change the



WHO Representative addressing the audience

prevailing system of replacement blood donation by voluntary blood donation in a phased manner.

### Blood donation

Blood donation camps were set up by the Ministry of Health in collaboration with the Jakarta Blood Transfusion Service on the same day, attracting an estimated 150 donors. The Minister of Health awarded recognition certificates to blood donors who had donation 100 times. Prof. Dr S. Musilihan expressed concern that the high number of haemophiliacs in the country did not have adequate access to Factor VIII, and were also at high risk of transmissible infections.

A special workshop was held on World Haemophiliacs Day, 17 April 2000.

### Medical devices

An exhibition of medical instruments and devices used in blood transfusion was also



Local community invited to participate in Roll-back Malaria launch

organized by the Ministry of Health.

### Safe Blood and Roll Back Malaria in East Timor-Kupang

The Minister of Health, on 8 April 2000, in declaring the official launch of Roll Back Malaria in East Timor, essentially linked it to the theme of safe blood and the need to improve quality assurance programmes for blood banks. The Minister reassured the audience

of his strong commitment to support measures to ensure blood safety, and highlighted the need to screen each and every unit of blood for HIV, Hepatitis, malaria, and syphilis. ▲

**For more information on blood safety activities in Indonesia, contact:**

**Director  
General Blood Transfusion Service  
Tel: +62-21 781 5464  
Fax: +62-21 781 5470.**

# Sri Lanka

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## **The Seat of a Special Regional Impetus**

The Ministry of Health and Indigenous Medicine of the Government of Sri Lanka in collaboration with the National Blood Transfusion Service

commemorated World Health Day 2000 by convening an inter-regional conference on the theme of “Safe Blood Transfusion Practices—Year 2000”. This major event took place on 7 and 8 April at Bandaranayake Memorial International Conference Hall in

Colombo. Participants included delegates from India, Pakistan, Bhutan and Bangladesh and 150 staff members of National Blood Transfusion Services from all over Sri Lanka. Consultants (blood users), haematologists, media personnel, blood donors, donor organizations, clergymen and students also participated.

Technical sessions were held on strategies for safe blood which included:

- organization and management of blood programmes
- motivation and recruitment of voluntary blood donors
- screening blood for infectious markers
- appropriate clinical use of blood; and
- quality assurance programmes in transfusion services.

During the World Health Day commemoration, the contribution of voluntary non-remunerated blood donors was acknowledged by awarding gold medals and certificates to those who donated blood more than fifty times. Organizers of annual blood donation campaigns were also awarded certificates and their contribution to the National Blood Programme was appreciated by the Hon. Minister of Health. Safe blood pins sent from WHO/HQ were awarded to donors who had donated more than ten times.

## **Workshop**

In the scientific session, various international experts covered different technical aspects of blood banking such as blood group serology, blood component preparations and infectious



Minister of Health and Indigenous Medicine, Mr Sirpala de Silva

markers screening. Around 150 staff of the National Blood Transfusion Services—including medical officers, public health inspectors, nurses and medical laboratory technicians—participated in this scientific session. A post conference workshop was held at the Medical Research Institute of Colombo for postgraduate students in transfusion medicine and medical technologists of the NBTS.

### Press conference

A press conference, presided by the Honourable Minister of Health



Audience at press conference

and Indigenous Medicine and attended by other officials of the Ministry, alerted media personnel from a wide range of print and electronic media of the virtues of voluntary blood donation. Information on the inter-regional conference was also accessible to delegates on web site pages.

### Television programmes

A television programme on blood safety was prepared in which the Minister of Health and Indigenous Medicine, the Director General of Health Services and the Additional Secretary, Ministry of Health participated. This programme was telecast several times.

### Press coverage

Two of the largest circulating newspapers in the country carried a full-page supplement on World Health Day 2000.



Hon. Minister inaugurating workshop for media personnel

### Workshop for media personnel

A workshop was held for media personnel on 5 April 2000 with the assistance of the Health Education Bureau, on the theme “Safe Blood Starts With Me”. The Minister of Health, Director General Health Services, inaugurated the workshop, which included a technical session on blood transfusion services in Sri Lanka. A draft of a national policy on blood transfusion was released to the media on this occasion.

### Donor organizers meet

A gathering of the various organizations involved in motivating blood donors and holding blood donation camps was held on 3 April at Suwa Medura, Narahenpita. It was addressed by the Minister of Health and attended by the Additional Secretary to the Ministry of Health, the Director of the NBTS and members of various religious organizations.

The aim of the meet was to



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express gratitude to the organizers and persons involved in promoting the role of voluntary blood donation and at the same time to encourage more organizations to get involved in the noble cause. The need for 100% voluntary blood donation was highlighted, and the important contribution of Buddhist monks in Sri Lanka in the promotion of the voluntary blood donation movement was recognized.

As a new step to improve the system for voluntary blood donation, the Lions Club of Sri Lanka donated a multimedia projector for the donor awareness programme, and five computers to update the donor database.

A conference souvenir was published by the NBTS, comprising articles prepared by the staff on their experiences in the field of blood transfusion.

## Conclusion

The inter-regional conference significantly increased awareness among the public on the importance of government commitment for a National Blood Programme in order to ensure blood safety in Sri Lanka. This also opened the way for all SAARC (South Asian Association for Regional Cooperation) countries to share resources for blood safety throughout the region. The following outcomes of the conference were welcomed :

- SAARC Association of Transfusion Medicine formulated
- National Blood Programme for voluntary donation formulated
- Draft National Blood Policy forwarded for approval
- Project identified to establish database for voluntary donors.

For the development of blood transfusion services in Sri Lanka, it was considered appropriate to place immediate focus on the following:

- introduce a postgraduate degree course (MD in Transfusion Medicine)
- rigid enforcement of voluntary, non-remunerated blood donation programmes across the country
- no privatization of blood services by nursing homes
- disaster management and computerized links between all centres. ▲

**For more information on blood safety activities in Sri Lanka, contact:**

**Dr (Mrs) R.M. Bindusara  
Director  
National Blood Transfusion Services  
Kynsey Road  
Colombo 8.  
Tel/Fax: + 94 1692 317**

# Western Pacific

## Synopsis of Message from the Regional Director

Blood saves lives. However, many people do not have access to safe blood. Studies show that only 20% to 30% of the world's health systems are able to provide safe and adequate blood supplies. Many people therefore run the risk of receiving contaminated blood.

To raise awareness of the need for safe blood, WHO dedicated World Health Day 2000, on 7 April, to



Dr Shigeru Omi

blood safety. The theme, "Safe Blood starts with me", urges people to look after their health by caring for that precious life source: their blood. It also emphasizes the blood donor's responsibility towards the recipient.

Although over 75 million blood units are collected from blood donors every year, millions more are needed to meet the global requirements for safe blood. To save more lives, we need to ensure the availability of safe blood when and where it is needed.

WHO seeks to work closely with Member States to ensure adequate supplies of blood through voluntary, non-remunerated donations. In the Western Pacific Region, the target of 100% voluntary unpaid donors has been reached in Australia,

Hong Kong (China), Japan, Malaysia, New Zealand, Republic of Korea and Singapore. However, many countries in the Region still rely on paid donors, who sometimes give blood for money to support unhealthy habits, such as taking drugs. Others are undernourished and therefore at risk of passing on infections through blood transfusions. WHO therefore seeks to promote blood donations from voluntary, non-paid donors who are at low risk.

Moreover, there is also a need to ensure the effective clinical use of blood and blood products. In health facilities, alternative treatments should be sought when blood transfusion is not the most appropriate choice.

WHO encourages Member States to support national blood programmes to ensure the availability of safe blood. Strong

**"perhaps the most important reason is that most people have probably never been asked to donate blood"**

government commitment is necessary to ensure a safe and adequate supply of blood, which includes screening of blood for certain viruses.

"People are often reluctant to give blood. Some people do not realize how their blood could save others' lives. Perhaps the most important reason is that most people have probably never been asked to donate blood", said Dr Omi in a video interview.

"People need to be given positive encouragement to give blood. Education is a crucial part of any donor recruitment strategy. Before

**“we owe it to ourselves to have healthy blood”**

people can be motivated to donate blood for the benefit of others, they must understand how they, as individuals, can play an important part in contributing to the health of others.”

Help save a life. Give safe blood.

**Dr Shigeru Omi**  
Regional Director

### **Activities in the Western Pacific Region**

The WHO Regional Office for the Western Pacific published colourful articles in Volume 1, Nos. 3 and 4 of its newsletter “WHO In Action” (see [www.who.wpro.int/](http://www.who.wpro.int/)).

A NewsBrief in the March 2000 Issue No. 3 announced the theme and slogan of WHD 2000 “Safe blood starts with me”, and invited the global community to care

about this common life source and donate voluntarily this precious product. The message was brought home that we owe it to ourselves to have healthy blood. Good nutrition, a clean and healthy lifestyle, proper prevention and early treatment of disease, all contribute to this.

The WHO Western Pacific Region organized an exhibit at Robinson’s Place in Manila (see photo), encouraging healthy lifestyles for safe blood. Member States of the



Exhibition organized by WPRO in popular shopping mall

Western Pacific Region prepared activities to raise public awareness on the importance of safe blood based on information contained in press releases, video messages and other public relations materials from WHO. These materials were either used on WHD 2000 or incorporated into other notable events, such as the Health Expo (6-7 May 2000) in Papua New Guinea, where thousands of young people witnessed the theme of safe blood on TV.

Other examples included the Solomon Islands, where there is no television station, but where the video recording of Dr Omi was played on VHS at the Honiara Central Market to a large gathering on 7 April. Audiovisual material prepared by WHO/HQ was used by the Red Cross in their activities throughout the year 2000.

In the next issue of NewsBrief (July 2000) a dozen full colour photographs illustrated other national events in commemoration of World Health Day 2000. These included the Papua New Guinea

Minister of Health honouring veteran blood donors in a rural setting, a Philippine Red Cross ceremony in a local shopping mall, school children visiting a haematological laboratory in Vanuatu, a blood safety seminar in Laos chaired by the Vice-Minister of Labour and Social Welfare and student poster displays from Bokona Primary School in the Solomon Islands. ▲

**For further information on blood safety activities at the WHO Regional Office for the Western Pacific, contact:**

**Dr Ken Chen, Medical Officer  
Traditional Medicine, or  
Dr Oscar Barreneche  
Blood Safety  
World Health Organization  
Regional Office for the Western  
Pacific**

**United Nations Avenue  
P.O. Box 2932, 1000 Manila  
Tel: +63 2 528 8001  
Fax: 63 2 521 1036**

**E-mail:  
barrenecheo@cam.wpro.who.int  
Internet: [www.who.org.ph](http://www.who.org.ph)**

# Cambodia

## Introduction

In Cambodia, World Health Day 2000 celebrations were a unique opportunity to raise general awareness of blood safety issues. It was also an opportunity to acknowledge the efforts of the Ministry of Health (MoH) and the National Blood Transfusion Services (NBTS) to address daily challenges such as the shortage of blood due to very low levels of voluntary donation. WHD 2000 was therefore an important



Safe blood seminar

stimulus to create a blood donor recruitment programme, in partnership with the Cambodian Red Cross (CRC). This article describes activities developed for the occasion.

## Historical setting

Before the fall of Phnom Penh in 1975 to the Khmer Rouge regime, the blood transfusion services were the responsibility of the CRC. The system was completely disrupted during the war, and only became functional again in 1980, under the supervision of the MoH, with partial and temporary support from external sources, including the ICRC and the International Federation of the Red Cross and Red Crescent Societies. During this period, hospitals collected most of the blood needed from paid donors

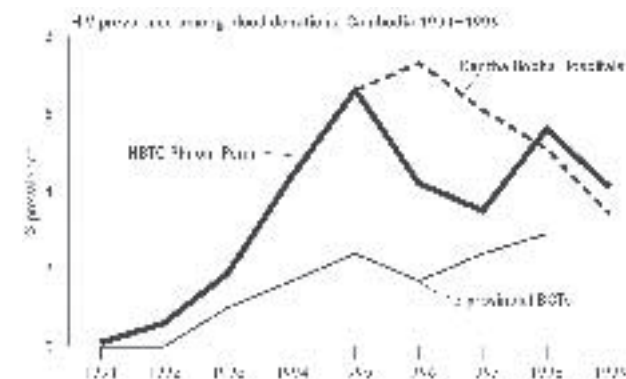
and only basic compatibility testing was regularly carried out. No screening for communicable diseases was performed.

In 1991, a decree issued by the MoH reinvested the NBTS with official responsibility for organising and supervising the collection and supply of blood throughout the country. At the same time, also by government decree, payment for blood donation was prohibited.

Over the next seven years, the NBTS was completely reorganized, to become largely how it exists today, covering approximately 80% of the population. This included physical rehabilitation of the NBTC in Phnom Penh and 13 provincial transfusion centres,

with the relevant financial and technical support and training needed to operate the centres. Voluntary blood donation and the organization of external blood collections were also heavily promoted.

However, with the withdrawal of ICRC support in December 1997, activities developed to increase voluntary blood donations fell to a basic level. Spontaneous voluntary donors almost disappeared, and replacement “family” donors



(which in reality includes a proportion of “professional” illegal donors) passed from 66% to 90% of total of blood donors. Stocks of blood fell to critically low levels, exacerbating the illegal trade of blood. As a consequence of more paid donors, during the same period, the prevalence of units of blood collected in Phnom Penh testing HIV positive rose from 3.5% to 5.6%, the highest prevalence in the Asian and Western Pacific Region (see graph).

Partnerships were needed to develop a sustainable programme for the recruitment of safe blood donors. The CRC, with its national network of volunteers, was perceived as an ideal partner, but subject to lengthy negotiations, and in August 1999 WHO’s Western Pacific Regional Office (WPRO) initiated an assessment of the situation to try to solve priority problems, especially the recruitment of voluntary blood donors and the critical shortage of blood. This collaboration provided immediate results, with the

percentage of voluntary donations through mobile blood collections increasing substantially during the latter half of the year, and a marked reduction in the prevalence of HIV among blood donations (especially in Phnom Penh).

### World Health Day

Within this context, the celebration of World Health Day was particularly opportune to strengthen visibility of these efforts, especially among officials at the MoH, policy makers and potential partners like CRC.

A mass campaign was designed and launched at the end of 1999.



Safe Blood Started With Dr Hong Sun Huot, Minister of Health of Cambodia

A special working group with staff of the NBTC participated in all phases of the campaign, the priority objectives of which were:

- To prepare the celebration of World Health Day 2000;
- To increase the number of blood units collected from voluntary donors at the NBTC;
- To raise awareness among decision and policy makers at the MoH and other ministries of the importance of blood safety issues in the provision of good quality health services;
- To raise awareness among the general population of issues related to the lack of blood, voluntary blood donations, and the risks linked with the utilization of paid donors;
- To promote voluntary blood donation among identified low-risk populations;
- To re-open negotiations with the IFRC and the CRC in a partnership programme for blood donor recruitment.



Minister awards safe blood donor

In February 2000, the IFRC and the CRC joined the working group, which was a huge boost for the NBTC team and enlarged the scope of potential activities. The following summarizes some of the major events that spanned WHD and well beyond.

A **ceremony** held on 7 April at the Ministry of Health was presided by His Excellency Dr Hung Sun Huot, Minister of Health and attended by high ranking government officials. In their presentations, WHO, IFRC and CRC representatives stressed the urgency of blood safety. For the first time in Cambodia, regular voluntary blood donors were publicly congratulated and issued with a certificate signed by the Minister of Health. These

voluntary donors represented the first step towards the creation of the Association of Voluntary Blood Donors. A video documentary produced in Cambodia on blood safety, entitled “blood and life” was shown during this ceremony.

With the active support of Médecins Sans Frontières, other NGOs and the local health authorities, a **regional event** was held the same day in the northern Province of Battambang, which has the second largest Regional Transfusion Centre after the NBTC in Phnom Penh.

Local and foreign journalists wrote **newspaper articles** concerning blood safety issues in Cambodia. published in two local newspapers in French and in Khmer in late November 1999. The article raised issues related to the lack of blood and the imbalance in donor types, especially the dependency on replacement/family donors and the lack of voluntary donations. This drew attention to the issue of safe blood at an early stage of the campaign. Several articles were also

published in national circulation newspapers in the days preceding WHD. The message of the Regional Director for WPRO, Dr Shigueru Omi, also appeared in Khmer.

Two **Karaoke** video clips featuring different aspects of blood safety and voluntary blood donations were produced starring well-known Cambodian celebrities and students getting together for external blood collections. Moreover, the sound track of these karaokes was very successful on local radio.

Two **spots** were broadcast on national television in February 2000, and were still being broadcast months later.

- The first spot features students reticent to give blood. A heated conversation on buying blood is gradually cooled down by the doctor of an external blood collection team, who underlines the risks linked with paid donors and teaches them about voluntary blood donation.
- Spot number 2 shows fishermen in a rice paddy,

having received a leaflet from the mobile van and arguing over whether they should give blood. The daughter of the fisherman opposed to giving blood announces that his wife is in hospital with post-delivery complications and urgently needs blood, leaving him faced with his lack of altruism.

A special budget was allocated to produce a 26-minute **documentary** on the activities of the NBTC and safe blood issues in Cambodia, timed for the opening ceremony on 7 April. 50 copies of the film were distributed to the CRC and Provincial Transfusion Centres.

The documentary was supported by an additional set of 200 **video covers and 200 educational posters**, using the film’s backdrop of images and the educational message “Blood is Life—Go give Blood”.



Official Safe Blood Poster

The introduction of the TV documentary served to produce an extra one-minute **Public Service Announcement** spot on the serious need for blood in relation to traffic accidents. The spot features the emergency rescue ambulance and an interview with one of its doctors.

Using the TV scripts, two **radio spots** were distributed to local broadcasting stations, emphasizing WHD 2000 and accompanied by supporting press releases.

Two thousand **T-shirts** featuring the NBTC and WHD 2000 logos were widely distributed

throughout the campaign, either as gifts for voluntary and spontaneous blood donors, or those from mobile teams.

Based on the need to target youth as a low-risk group of blood donors, a high quality **poster** was produced featuring a group of smiling students in front of the Royal University of Phnom Penh. With the slogan “To give blood is an honour for youth—become a regular voluntary blood donor at the NBTC”, the poster was so successful in high schools and faculties that reprints are foreseen.

Drawing directly on official WHD 2000 graphics, thousands of posters were also printed and distributed to all provincial transfusion centres, different departments and ministries, high schools and pagodas.

A third, **large-scale poster** was also produced and framed in 500 copies for distribution to all hospitals in the country. This poster describes the basic functions of blood centres and the

ethics and altruism of blood donation, and aims to warn the families of patients in need of blood of the risks inherent in using paid blood donors.

A **brochure** was printed in Khmer, adapting information produced by WHO/HQ to the Cambodian blood safety context and using local photos. This high quality document, along with the Youth Poster, is one of the major achievements of the campaign. Copies of the brochure were distributed among MoH officials and other ministries, as well as

religious authorities and representatives of the Cambodian civil society.

Two different **stickers** were produced for the campaign, the first representing the campaign logo with the educational message “thank you for your blood donation”, and the second with the WHD logo and message “safe blood starts with me—blood saves lives”.

A **quiz show** was broadcast on 6 April featuring competing students from three different high schools, and famous Cambodian stars. NBTC doctors acted as the jury. The quiz show is always a success formula to reach family audiences and was therefore repeated at peak family viewing time passing key messages on blood safety.

In honour of WHD

2000, a series of **workshops** on the rational use of blood were organized in Phnom Penh throughout the year for clinicians from public and private hospitals.

## Conclusions

World Health Day 2000 was successful in Cambodia. The ceremony held at the MoH was an important opportunity to congratulate the small group of regular voluntary blood donors and initiate a Blood Donors Association in Cambodia. Similar ceremonies should be held every year.

The mass campaign was very useful in raising awareness and preparing the ground for the celebration of WHD 2000.

The initial concrete outcome of the campaign is the increased number of donated blood among safe blood donor groups. The number of blood bags was tripled, probably due to the efficient mobile blood collection activities. The impact of IEC activities on blood donors will need a longer period to evaluate.



Safe blood stickers

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An undeniable impact of the media campaign can be observed among government officials and policy makers, who are starting to understand that blood safety is not only a laboratory issue. The MoH expressed its interest in putting blood safety high on the policy agenda, and a draft National Policy on Blood Transfusion Services was submitted by the NBTC for approbation.

One of the major successes of WHD 2000 was the creation of a partnership between the MoH/ NBTC and the IFRC/CRC. This partnership is an encouraging step towards the greater involvement of the CRC in a voluntary blood donor recruitment programme and, thereby, new hope for improved transfusion services and availability of safe blood and blood products in Cambodia. ▲



Blood donor recognition

**For more information on blood safety activities in Cambodia, contact:**

**Medical Officer  
International Committee of the Red Cross  
81 Boulevard Sothea-Ros  
(ex Boulevard Lenine)  
Phnom Penh  
Tel: (855 23) 426 160/ 360 071  
Fax: (855 23) 362 071/ 426 275  
E-mail: icrcphnkh@pactok**



# People's Republic of China

## **More donors mean safer supply**

Heading an article published by the China Daily on 8 April 2000, a photograph shows the Minister of Health and the WHO Representative in China visiting a mobile blood donation unit in Beijing, supporting the theme of this year's World Health Day dedicated to blood safety. The essence of this article is related below.

## **People urged to donate blood**

**(China Daily, 8 April 2000)**

China needs more voluntary blood donors to ensure a safe blood supply, it was reported by top officials at a seminar in Beijing to mark World Health Day 2000.

Everyone can donate blood, and everyone may need a blood

donation, said the WHO Representative in China. Everyone should therefore be concerned about the safety of blood supplies.

The Minister of Health expressed his appreciation to all blood donors and said that a large number of blood donors is needed if China is to have a safe and adequate blood supply.

Blood transfusions can save lives, but contaminated blood can also transmit diseases such as hepatitis and HIV/AIDS. In developing nations, as much as 5% of all cases of the HIV virus are transmitted through blood transfusions.

Voluntary blood donations where the donor is not paid substantially reduce the risks of transfusion transmissible infections, said the WHO Representative. Three million people have donated their

blood voluntarily since the Blood Donation Law took effect on 1 October 1998. This law eliminated the practice of paying for blood donations and instituted a system of unpaid, voluntary donation.

China still needs to build a non-remunerated blood donation system, said State Councillor Peng Peiyun. Many people still have misgivings about donating blood, believing blood loss can damage their own health. But blood donation is not harmful, states Dr Lu Daopei as blood is always regenerating.

Health workers were on several Beijing streets to encourage blood donation. "Our station received hundreds of people this morning" said a health worker at a blood education station of Wangfujing Street.



**Mr Wang Bin, champion blood donor**

The Number One blood donor, 50 year-old Mr Wang Bin, a cadre at the Health Division of the Central Party School of the Communist Party of China, donated a total of 11 200 millilitres of blood between 1988 and 1999. He was awarded "the Golden Cup for Voluntary Blood Donation" and "the Medal for the Advancement of the Capital's Spiritual Civilization" (see photo).

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## Let's Participate in Safe Blood Action

### Ministerial meeting on World Health Day 2000 (extract from Chinese Health Pictorial)

On 7 April 2000, a meeting on the theme of this year's World Health Day—"Safe blood starts with me"—was organized by the Ministry of Health in the People's Great Hall of Beijing. The meeting called upon society to support the movement for increased blood donations from voluntary, non-remunerated donors, and urged the general public to participate actively in this challenge.

Madam Peng Peiyun, Vice Chair of the Standing Committee of the People's Congress and President of the Chinese Red Cross said that since the establishment of the Blood Donation Law, initial progress had been made in increasing the numbers of voluntary, non-remunerated blood donors. However, arduous efforts need to be made to establish a mechanism for promoting such

donations throughout China. She called on government leaders at all levels to raise awareness of the need to implement the Blood Donation Law with a sense of responsibility and urgency.

Madam Peng said that the People's Congress at all levels would play their role in this endeavour, and that the Red Cross should be closely involved in mobilizing healthy, eligible people to participate, voluntarily, in the blood donation movement. It was important, she concluded, to incorporate the concept of altruistic blood donation within the context of health education for adolescents.

In his speech, Health Minister Zhang Wenkang invited the health sector nation wide to respond actively to WHO's appeal, to educate the public on blood-related knowledge, and build up a new concept that safe blood donation does you no harm. The Minister added his support to increasing the numbers of voluntary, non-remunerated blood

donors in China. Meanwhile, the legislation and regulations for safe blood management, blood testing capacity, and the scientific and rational use of blood for clinical purposes, still needed to be perfected.

Many other presentations were made at the meeting, which was chaired by Dr Wang Longde, Vice Minister for Health.

Following the meeting, government leaders and the WHO Representative visited the counselling and advocacy activities taking place in the commercial streets of Wang Fujing and Xidan in Beijing. ▲

#### **For further information on blood safety activities in China, contact:**

**Dr Feng Gao**  
**Vice Director**  
**Shanghai Blood Centre (WHO**  
**Collaborating Centre)**  
**1191, Hong Qiao Road**  
**Shanghai 200051**  
**Tel: +86 21 6278 1789**  
**Fax: +86 21 62958414**  
**E-mail: shblood@public.sta.net.cn**  
**Internet: www.sbc.org.cn**

# Japan

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## **Altruism starts at home**

The Japanese authorities supported World Health Day 2000 in many ways, not least in providing financial and technical support that enabled other, less fortunate countries to commemorate blood safety as well.

## **Safe Blood Symposium: nucleic acid amplification test**

The main activity of the Day was a symposium organized in Tokyo on “Safe Blood”. Mr Shoichi Fujimori, President of the Japanese Red Cross Society, welcomed the distinguished speakers. He proudly noted that, through the close collaboration of all stakeholders—especially volunteers—100% of the blood needed for transfusion has been obtained from voluntary, non-

remunerated sources since 1974, although this target has yet to be reached for plasma derived products.

Japan has a proud history of keeping abreast of medical science and social needs. Since 1997, nucleic acid amplification tests (NAT) have been used to screen for hepatitis B and C virus and HIV-1 for source plasma of plasma derived products, and all voluntary blood donations are now screened before transfusion in three NAT centres. Today, concern focuses naturally on the health of blood donors themselves. Japan’s blood programmes took the theme “Safe Blood Starts With Me” as a start, and continue efforts to promote this message, with the hope that as many people as possible will think about their own health and realize that donating blood is an altruistic act.

Mr Fujimori paid special thanks to Dr Brundtland for her message for blood programmes in Japan.

Dr Omi, Director of WHO’s Regional Office for the Western Pacific, recalled his days in Dr Mayumi’s laboratory in Japan when the PCR technique was

introduced, which has since progressed from the experimental stage to become routine for screening, enhancing the safety of blood transfusions. On the other hand, he lamented that most Asian countries still rely on a paid donor system with the concomitant high risk of post-transfusion HBV, HCV and HIV-1. He hoped that these countries



Tokyo NAT Centre and host to memorial meeting

may be able to benefit from collaboration with Japan.

Dr Nakajima of the Ministry of Health and Welfare concurred with the previous speakers and assured the congregation of the full cooperation of the Japanese Red Cross Society in contributing to the improvement of global blood safety.



Inside NAT Centre

### **NAT Tour**

After the symposium, where many international and national perspectives were debated, delegates were treated to a tour of the pristine NAT centre laboratory in Tokyo. Between November 1997 and November 1999, 5.6 million donations, screened serologically negative, were tested manually by NAT with a view to reducing the viral load from source plasma for plasma derived products. 78 positive donations were found for HBV (1:72,000), 10 for HCV

(1:560,000) and 2 for HIV-1 (1:2,800,000), the highest window donation risk being HBV. These data show that blood transfusion in Japan has become safer than ever through 100% voluntary blood donations and serological screening, although a residual risk may still occur in later stages with virus mutants or viral load with an undetectable level of current serological screening.

Because of the need to contain costs, tests are currently carried out on pool, as rapidly as possible

to enable transfusion of cellular components. As HBV genomes were quantified in 6 hepatitis B seroconversion panels in the early stages of infection, the virus growth curve showed an exponential straight line against the date of bleeding. Doubling time was 2 days and log time was 6.5 days. Therefore, a highly sensitive NAT assay with the appropriate pool size could narrow the window period of HBV resulting in exponential reduction of the virus load not detected in the present serological screening.

In late 1998, a highly sensitive multiplex HBV/HCV/HIV-1 (MPX) reagent was developed for NAT that can reduce the test cost and time as compared to the reagents for individual viruses. In July 1999, thanks to technological advances, nationwide serological NAT screening of negative voluntary donated blood was initiated. After resolution of MPX positive samples into individual virus, each blood centre informed donors of the results and followed up NAT-positive cases to

differentiate between transient or chronic infections, with the aim of reducing positive donors and improving the health care of voluntary blood donors. Over two million units were tested by 500 pools and 19 HBV and 8 HCV cases were identified. Since February 2000, NAT screening has identified 18 HBC, 5 HCV and 2 HIV-positive cases from the 1.3 million units tested.

### **Cost-benefit analysis**

Blood donations must be voluntary, yet funds are still required to maintain an organized system and to research and benefit from technology to assure safety. A cost-benefit analysis should therefore not be based alone on the cost of an individual transfused patient, since unsafe blood transfusion results in health care expenditure and, more seriously, a threatened life. So investment in technology such as NAT screening, if expensive, becomes cost-effective and to be encouraged.

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## An altruistic Issue

It is not only in donating blood that we must think of others. Japan realizes that helping others involves training, blood safety practices and technology transfer. Moreover, international standardization needs to take the developing world's epidemiological and socio-economical situation into account if it is to fulfil real international harmonization.

## The Japanese challenge

As stated above, self-sufficiency may have been achieved for blood transfusion, but remains an unmet target for plasma-derived products emanating from voluntary, non-remunerated donors. To achieve this safety level, increased efforts will be put to recruiting and retaining such donors at the individual, social and governmental level. This multi-tiered approach is based on the premise that, although safe blood **starts** with me, it cannot be the sole responsibility of the individual to assure the success of

a safe blood system. Together, however, we can succeed.

In conclusion, Japan has identified four clear areas of focus over the next five years:

- clarify the roles and accountability of central government, local authorities and the Japanese Red Cross
- elucidate the policy of self sufficiency of blood products for the general public
- set up a concrete strategy to ensure blood safety and



Dr Nishioka reads message from WHO Director-General

implement national blood legislation

- take administrative measures for compensation for unavoidable accidents in blood transfusion.

As Dr Brundtland states in her message, this is but the beginning, and Japan stands ready to collaborate in the WHO five-year plan to reinforce global blood safety. ▲

**For more information on blood safety activities in Japan, contact:**

**The Director  
Central Blood Centre  
Japanese Red Cross Society  
1-31 Hiroo, 4-Chome, Shibuya-ku  
Tokyo 150 0012  
Tel: +813 343 81311  
Fax: +813 3343 58509  
E-mail: rcjpn@ppp.bekkoame.or.jp  
Internet: www.jrc.or.jp/english**

# Mongolia

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## **Mongolia pays considerable attention to blood safety**

The provision and safety of blood and blood products is of great public health concern to the Government of Mongolia. The theme of World Health Day 2000 “Safe Blood Starts With Me—Blood Saves Lives” followed immediately the adoption of the Law on Donors, an initiative developed by President N. Bagabandi. This contributed in no small way to the success of the



President Bagabandi (second from right) visiting the Blood Centre

public promotion campaign and improvement in the quality of blood and blood products in Mongolia.

On receiving the official letter of Dr Gro Harlem Brundtland, Director-General of WHO, the President issued an appeal to the citizens of Mongolia. The Ministry of Health and Social Welfare with the Red Cross Society of Mongolia developed an action plan in support of this appeal.

The initiative of the President gained the full support of the nation, especially from university students, high schools and colleges. For instance, the Mongolian National Medical University, the key educational institution that prepares Mongolian doctors and health-related professionals, keenly accepted this challenge.

**In the central aimak, the entire local government staff donated blood**

## **Donate blood: setting an example**

Dr Sh. Batbayar, Parliament Member, Dr S. Sonin, Minister of Health and Social Welfare and Dr R. Salmela, Acting WHO Representative, took part in a special meeting on blood safety. At this meeting, students of the Mongolian National Medical University donated their blood, appealing to all students of Mongolia to participate actively in the movement for voluntary, non-remunerated blood donor recruitment. Many students followed the example of the WHO Representative in publicly donating blood.

Efforts to promote blood donation were not only initiated in Ulaanbaatar, capital city of Mongolia with one third of the total population, but in all aimaks (provinces). For example, in the central aimak, the entire staff of the local government and organization of citizens representative meeting donated their blood.

## **Information, education and communication**

An important aspect of WHD 2000 was that very broad activities related to information, education and communication were undertaken. The brochure and posters provided by WHO were translated into the Mongolian language and printed and distributed to all aimaks and soums (villages). The Ministry of Health also translated into the

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Mongolian language and distributed, with WHO support, several manuals on blood safety and the appropriate use of blood products to all hospitals.

Various advertisements on the provision and safety of blood and blood products were broadcast through television and radio channels. The biggest channel of Mongolian TV prepared a special programme entitled “Sacred deeds of blood donors and blood safety”. In this programme, the WHO Representative and the Minister of Health and Social Welfare addressed the Mongolian people. The greeting from Dr Omi, WHO Director for the Western Pacific, as well as a programme about blood safety, were presented.

Doctors and specialists of the Blood Centre played a key role in all activities organized on the

**students worked in trolley buses, distributing leaflets and the President’s appeal**

occasion of WHD 2000. They delivered lectures and highlighted their own actions at more than 10 organizations involving around 2000 people. Students of universities, high schools and colleges also participated in promoting World Health Day by working in buses and trolleybuses and distributing leaflets and the President’s appeal.

### **Press conference**

The press conference was an important event to promote the Law on Donors, World Health Day 2000 and the President’s appeal. Dr P. Nyamdawa, Social Policy Adviser to the President, Mr L. Odonchimed, President of the Mongolian Red Cross Society, Mrs B. Tsetsegdari, Chief of the Health Division of the Ministry of Health and Dr D. Ulaankhuu, Director of the Blood Centre, took part in the press conference. They delivered speeches and gave detailed answers to questions from the media on the provision and safety of blood and blood products.

### **Scientific seminars**

Two seminars, one on the “Rational use of blood and blood products” and another on the “Provision of blood safety” were conducted with support from WHO. The first involved directors and deputy directors of cities and aimaks clinical and joint hospitals, whilst the second was conducted with the participation of laboratory doctors of all aimaks.

**The training of doctors and the renewal of basic equipment were also high on the President’s agenda.**

### **Presidential support**

The presidential visit to the Blood Centre with state and governmental high level officials was a significant event in support of World Health Day. The President, familiar with the activities of the Blood Centre, addressed the staff and awarded

Honoured Donors with certificates and badges. In his speech, he expressed deep thanks to all citizens of Mongolia for their active and broad acceptance of his appeal. He also emphasized the importance of the adequate provision and safety of blood and blood products, especially in emergency cases during natural disasters, certain accidents and serious diseases that could affect large groups.

Improvement in production technologies of blood and blood products through the training of doctors and production specialists and the renewal of basic equipment were also high on his agenda, as was the need for financial assistance to develop blood transfusion services in this country.

### **Conclusion**

“Safe blood starts with me. Blood saves lives”—initiative of WHO and the International Federation of the Red Cross and Red Crescent Societies—was an important step

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## Brief introduction to the Mongolian Humane Association of Blood

**T**he MHAB is a nongovernmental humane organization that services the interests of blood donors. The association was registered by the Ministry of Law in May 1999 with the objective to protect people's health during national health care reform. The association unites 25,000 members including 200 veterans of donor movements and 1,850 honourable donors. Our supreme goal is to develop the life saving charitable activity of blood donors in Mongolia and to supply hospitals with guaranteed safe blood from certified donors.

### Message from the Association to WHO Director-General

"We should like to congratulate you on behalf of thousands of Mongolian donors, and inform you that the Mongolian Humane Association of Blood is sustaining its activities in the blood service field of health care. World Health Day 2000 was widely observed in our country this year. And on that day, the Mongolian President N. Bagabandi visited the Blood Centre in Ulaanbaatar. In his speech he advised us to extend cooperation with similar external organizations and recruit more people into our donor movement through acknowledgement of the importance of this movement.

We are using this material in health education programmes. There are 15,300 voluntary donors in Ulaanbaatar, who donate 5,216 litres of blood which produce 12 kinds of blood products each year. But that amount supplies only 60% of necessary blood products in hospitals. And only 0,5% of citizens are involved in donor movement, therefore we should put more effort to fulfil blood requirements. On World Health Day we opened a donor education cabinet at the Blood Centre in Ulaanbaatar.

Further we hope to participate in international events on donor movement and want to seek support from WHO.

in the development of blood transfusion services in Mongolia. Our doctors and specialists of blood transfusion services are committed to supporting a national programme that would provide blood and blood products, and guarantee blood safety. ▲

**For further information on blood safety activities in Mongolia, contact:**

**Dr D. Ulaankhuu**  
**Director of the Blood Centre**  
**Ministry of Health and Social Welfare**  
**Ulaanbaatar**  
**Tel: +976 11 324871**  
**Fax: +976 11 372857**  
**E-mail: [bloodcenter@mongol.net](mailto:bloodcenter@mongol.net).**



# Viet Nam

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## **World Health Day 2000 communications campaign**

The Ministry of Health's Centre for Health Education joined with the Therapy Department, the Haematology and Blood Transfusion Institute and the Hanoi Health Service to organize a communications campaign with the message "Safe blood begins with each of us". With support from WHO, the ten-day campaign around World Health Day focused on the following major objectives:

- raise public awareness of the significance of voluntary, non-remunerated blood donation;
- increase the number of safe blood donors.

To achieve these objectives, the following activities were implemented.

## **National television broadcasts**

A three-minute official message from the Director of the WHO Regional Office for the Western Pacific was broadcast on prime time on World News in Vietnamese and on VTV1 in English and French.

Two reports were filmed on the same television channels, one on "Blood donation to save lives" filmed at the Haematology and Blood Transfusion Institute, and another showing an interview with the WHO Representative during a meeting dedicated to World Health Day 2000.

**Only 20% of Viet Nam's requirements for blood are met**

In addition, a television spot was commissioned to explain the significance of voluntary, non-remunerated blood donation and self-screening for blood safety.

A second television spot urging people to give blood spanned six days at targeted viewing times (health, cultural and sports programmes) on the Voice of Viet Nam.

## **Blood drive in advance of World Health Day 2000**

More than 300 students and young people from the capital city donated blood in preparation for WHD 2000. The donations were made at a meeting organized by the Steering Board of the Humanitarian Blood Donation Movement of Hanoi. Launched in 1994, the movement had collected, by 1999, 14,000 litres



**Vice-President**

of blood from 54,000 donors. According to the Haematology and Blood Transfusion Institute, voluntary donations account for only 25% of the country's blood reserves.

## **Meeting on voluntary, non-remunerated blood donation**

A meeting was held at the Ministry of Health on 6 April 2000, with a view to reviewing the importance of voluntary, non-remunerated blood donation, the

achievements made by the health sector in this direction and the strategy for blood transfusion services for the next twenty years. Key participants among the 150-strong audience included the Deputy President, the Minister of Health, the representative of WHO in Viet Nam, senior experts, correspondents from the media and students from various universities.

### Media impact

Many articles appeared in the national and local press during March and April 2000, covering different aspects of safe blood, e.g. blood safety as a global health issue, the need for safe blood, strategies to increase voluntary donation, perspectives from students, the science behind safe blood transfusion and, of course, safe blood activities to celebrate World Health Day 2000. An article that appeared in the Viet Nam News on Saturday 8 April provides an overview of the blood donation

situation in the country, an extract of which is reproduced below:

### National blood programme needs more effective management

The chronic shortage of safe blood supplies and healthy blood donors are matters sparking considerable interest and challenge in Viet Nam's health care industry, particularly in connection with rural, mountainous and island areas.

Addressing the topic at a meeting commemorating World Health Day in Hà Nội, the Minister of Health



Minister of Health

Do Nguyễn Phương said that the nation's health sector needed to place more emphasis on effective management of the national blood programme and improving blood safety screening.

Viet Nam's health care sector requires some 400,000 litres of blood annually, but according to the Director of the National Institute for Haematology and Blood Transfusion, Do Trung Phán, only about 20% of the demand is met.

Participants at the meeting also heard that although the move toward voluntary blood donation has been operating for years, a large number of local hospitals still have to rely on paid donors and on family donations.

Last year saw the national health sector collect 55,000 litres of blood with the proportion of blood donated by paid donors accounting for more

than 70% (and up to 90% in some provinces).

Most paid donors come from provinces across the country, resulting in difficulties in supervising sources of blood donations, as well as blood quality.

Viet Nam's target is to increase the proportion of voluntary donors to between 25% and 40% of total donors by the end of the year 2000, while ensuring that all blood donations are screened for HIV, hepatitis B and other epidemic diseases.

The Minister of Health admitted that not enough patients are receiving necessary blood transfusions as a result of a failure to attract donors. Most of the country's hospitals lack stocks of blood, meaning that patients needing transfusions in emergency situations frequently have to wait until supplies can be obtained from city hospitals. This often results in unnecessary deaths.

Another major problem facing health experts is the inadequacy

of effective blood screening measures. The result is that some health units engaged in blood transfusions do not yet fully conduct blood screening to avoid the risks of infection from HIV/AIDS, hepatitis B and C, syphilis and malaria.

### **Extract of a Presentation by the WHO Representative**

On 7 April 2000, 52 years exactly after the foundation of the World Health Organization, everywhere in the world from Buenos Aires to Moscow and from Hanoi to Montreal, it will be World Health Day.

This Day is the annual occasion to highlight an important health problem, and in 2000, WHO has selected blood safety. Why is blood safety an important issue for WHO?

— Because each year tens of thousands of people die in the world for lack of a blood transfusion; and

### **There are simply not enough blood donors**

— Because these deaths are avoidable if hospitals have a few bottles of blood which have been collected, tested and stored according to internationally agreed procedures.

In Viet Nam every year, hundreds of people die from heavy loss of blood, with women often the first victims of this situation. Post partum haemorrhage, retained placentas and ectopic pregnancy are among the main causes of maternal mortality and claim the lives of around 2,700 young women annually in this country. Between 400 to 600 of them may have been saved had blood been available.

Traffic accidents, killing 7,000 people and seriously injuring 24,000 others last year, are on the increase. The availability of safe

blood in emergency wards would save many of these lives too.

Finally, to cite but one other example among many, countless lives are lost during surgery in many hospitals due to a lack of safe blood.

Today, Viet Nam is confronted in this area with two main problems:

1. the lack of blood—there are simply not enough donors; and
2. the quality of the available blood.

Global experience clearly shows that, in order to have sufficient quantities of safe blood, we must increase the number of voluntary, non-remunerated donors from low-risk populations.

A media campaign should be launched in Viet Nam to sensitize the public around the simple idea “Giving your blood will save lives. Even your own if you need blood one day.”

There are of course obstacles that prevent more widespread voluntary donations, such as the perception that giving blood makes

you weak. These beliefs can in fact serve as the basis for effective strategies. Several Asian countries have shown how voluntary blood donations can become part of the local culture, integrated as a practice of solidarity. In China, for example, donating blood is seen as a citizen’s moral obligation.

But it is not enough to collect blood. To address point two above, this blood must meet international standards for quality, and be used appropriately. Laboratories should be in place to test all donated blood systematically and eliminate blood containing viruses such as HIV/AIDS or hepatitis B which can be transmitted through transfusion. It was estimated that in 1997, 100 people contracted HIV infection in Viet Nam through transfusion.

**Blood transfusion in many cases may not be the most appropriate, cost-effective or safe intervention**

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**blood is a precious product ...  
a cause worth fighting for**

Another key element is to use blood only when needed. Blood transfusion in many cases may not be the most appropriate, cost-effective or safe intervention.

Viet Nam has certainly made progress to ensure safe blood for its population. Yet there is still a long road before reaching blood safety. National authorities from the highest level should commit themselves to developing a comprehensive blood programme and well-organized blood transfusion services. WHO will continue to support the Government of Viet Nam in its efforts to ensure blood safety for as long as this government commitment is there.

Blood is a precious product, it is our common source of life. It should be available to all women and men when needed and it

should be safe. This is a cause worth fighting for. It is why WHO decided to devote World Health Day 2000 to blood safety. ▲

**For further information on blood safety activities in Viet Nam, contact:**

**Prof Do Trung Phan  
Director, National Institute of  
Haematology and Blood Transfusion  
Bach Mai Hospital  
10 Giai Phong Street  
Ha Noi  
Tel: (84 4) 868 7007/868 5582  
Fax: (84 4) 869 6250/869 1607**

## ANNEX 1

# Pledge 25—blood donor club with a difference

**Zimbabwe's youth realized that their future was in their own hands. This is why, some years ago, a project was launched by youth themselves which has significantly contributed to the success of the nation's safe blood supply. The project, already being emulated in neighbouring countries, is called "Pledge 25".**

HIV caused Blood Transfusion Services across the world to rethink seriously their blood donor

**"... and we have about 1,000 Pledge 25 Club members who have already reached their certificate, so that's how successful the programme has been".**

Dr T.J. Stamps  
Minister of Health and Child Welfare,  
Zimbabwe during an interview for  
World Health Day 2000 on  
Safe Blood Starts With Me

recruitment strategies and, in 1989, Zimbabwe started targeting an as yet untapped pool of low-risk donors: school-children aged 16-19. However, history proved that—successful as the programme was—most school blood donors ceased to donate regularly upon leaving school. The Pledge 25 Club was therefore created by and for school leavers, who pledge to make at least 25 donations of blood. Members also actively share information and knowledge with other current and prospective donors and, in this way, help to promote healthy lifestyles, and reduce the level of HIV prevalence in peer groups and the amount of infected blood collected. Club members were honoured on World Health Day in April 2000, and the first group of Club members had their graduation ceremony—to mark their 25th donation—at the Annual General Meeting of the National Blood Transfusion Service (NBTS) on 6 September 2000. Many of the pioneers are considering the formation of a "Pledge 50" division.

The Club elects national and provincial administrative committees

to ensure the running of their affairs. Selected Peer Donor Promoters now assist the NBTS with the recruitment of voluntary, non-remunerated, regular donors from low-risk groups and in turn, the NBTS supervises and counsels the Club.

It is critical to reiterate the self-motivated commitment of the pupils themselves that has led to a window of hope for the national blood bank. It is thanks to the students, who instituted a National Youth Blood Donors Day, that the availability of safe blood at peak times of the year such as Christmas, has gone from 50% to 80% and is still rising. Other

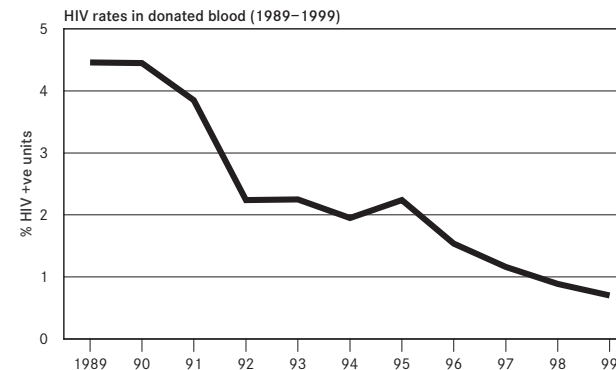
statistics speak for themselves: HIV sero positivity among blood donors has fallen from an average of 4.45% in 1989 to 0.7% in 1999 (compared to sero prevalence in the sexually active population in general: 25.8%); 99.3% of all blood collected in 1999 was HIV-negative; and nearly 70% of the 82,365 units collected in this same year were donated by pupils. ▲

**For more information, contact:**

**The National Blood Transfusion Service**

**Harare, Zimbabwe**

**E-mail: [zimbnts@africaonline.co.zw](mailto:zimbnts@africaonline.co.zw)**



# Questions and answers about donating blood

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**“To give blood is a privilege  
To receive blood is a right”**

## Thank you for thinking about blood donation

Donation of blood is a gesture of goodwill and care for the fellow human beings. There is no gift more valuable than a Gift of Blood, as it is actually a Gift of Life for the person who receives it.

Safe blood is blood that does not harm the donor, is free from infection or other harmful agents, that neither harms the recipient, and is used for the benefit of the patient's health and well being.

The slogan **Safe Blood Starts With Me** denotes that it is me who is the donor of safe blood. This unit of your blood will save the life of more than one patient. As a member of society, it is your responsibility to donate blood. You can go to the nearest government approved blood centre, which is based on voluntary, non-remunerated blood donation, and

make your significant contribution to saving the life of a patient. Your contribution is extremely valuable.

The following is a list of frequently asked questions with comprehensive answers about donating blood.

## Why should people donate blood?

Safe blood saves lives. Every day, thousands of people would die if others did not donate their blood. Many people know someone who might have died unless another person had given them the gift of life—safe blood. Most transfusions are given to:

- women to treat haemorrhage as a complication of pregnancy
- children with severe anaemia
- accident victims
- surgical and cancer patients.

Worldwide, about 600,000 women die of pregnancy-related causes every year. Approximately 25% of these

maternal deaths are associated with the loss of blood. Many of these lives could be saved if enough safe blood was available.

## What is blood and what is it used for?

The red liquid called blood is composed of several different elements, each of which fulfils a particular function. Blood can be used whole or can be separated into its individual components. These can be used for specific purposes so that each unit of donated blood can be used for more than one patient.

Whole blood is commonly used in some countries to treat the majority of life-saving transfusion requirements.

## Blood components

**Red cells** are widely used to replace blood loss caused by haemorrhage in childbirth, during surgery and in accidents. Red cell transfusion can

also be life-saving in certain types of severe anaemia.

**Platelets** are very small cells that are essential to blood clotting. If a person's platelet count is low, this may lead to easy bruising and major bleeding. Patients who have leukaemia or bone marrow failure usually have very low platelet counts and need platelets to preserve their blood clotting function.

**Plasma**, the yellowish liquid in which blood cells are suspended, is usually processed to produce vital blood products:

- Clotting factors, such as Factor VIII which enables haemophiliacs to lead virtually normal lives
- Immunoglobulins:
  - non-specific immunoglobulin, which is used to treat abnormal functions of the immune system and to prevent hepatitis A
  - specific immunoglobulins, such as anti-D immunoglobulin which is used to prevent Rhesus disease of the newborn

— Albumin, which is an important protein of the blood and is sometimes used for critically ill patients who have lost large volumes of body fluids.

### Is there any alternative to blood?

The need for transfusion can often be avoided by the prevention, early diagnosis and treatment of conditions, such as anaemia and malaria, that might otherwise lead to the need for transfusion. It can also often be avoided by the use of intravenous replacement fluids to replace blood volume or pharmaceuticals or medical devices to minimize blood loss.

But there will always be many patients whose lives depend on the availability of safe blood. Many others, such as haemophiliacs, rely on blood products that are made from donated blood.

Scientists are working to develop artificial blood, but it will not be available in the foreseeable future.

### Which blood groups are needed?

There are four main blood groups: O, A, B and AB.

Blood from donors of all blood groups is always needed, but group O blood is usually in greatest demand because it is the most common group and can also be given to patients of other blood groups.

### What is safe blood?

Safe blood is blood that does no harm to the person who receives it. Safe blood can be life-saving, but unsafe blood can cause serious illness or even death to the recipient.

Blood is unsafe if, at the time of donation, any infection is present in the donor's blood that can be transmitted by transfusion or through any blood products that have been manufactured from the blood. Infections that can be transmitted by blood include:

- HIV, which leads to AIDS
- Hepatitis B
- Hepatitis C
- Syphilis
- Chagas disease
- Malaria.

### Who can give blood?

Blood can be donated by most people who are healthy and do not have an infection that can be transmitted through their blood.

The age at which people are eligible to give blood varies between countries, but is commonly between the ages of 17 and 65.

Provided that the criteria for safe donors are met, many centres will accept donations from people from the age of 16 and will also extend the upper age limit beyond 65 years.

### Who should not give blood?

**You should not give blood if your own health might suffer as a result.** The first concern of the blood transfusion service is to ensure that blood donation does no harm to the donor. You should not give blood if:

- you are feeling unwell
- you are pregnant or have been pregnant within the last year
- you have certain medical conditions, such as heart disease, high or low blood pressure, diabetes, epilepsy
- you are taking certain medications.

You may be able to donate blood at a later time. In some cases, however, you will be permanently excluded from donating blood in order to protect your own health.

**You should not give blood if it might cause harm to the recipient.** Blood can transmit life-threatening infections to the patients who receive it. You should not give blood if:

- you have or may have recently contracted a sexually-transmitted disease, such as HIV or syphilis, that can be passed on to a patient through your blood
- your lifestyle puts you at risk of contracting an infection that can be transmitted through your blood: for example, if you have more than one sexual partner or have sexual contact with prostitutes
- you have ever injected drugs
- if you have recently had a tattoo, skin scarification or ear or body piercing
- you have had sexual contact with anyone in the above categories.

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## Who are the safest blood donors?

Voluntary non-remunerated (unpaid) donors who give blood regularly are the safest blood donors. Research from many countries shows that people who give blood freely and without any financial reward have little reason to conceal information about their health and lifestyle that may make them unsuitable to give blood, either temporarily or permanently. Their primary motivation is to help other people and not to obtain any personal benefit, except the satisfaction of knowing they have helped to save someone's life.

'Family' or 'replacement' donors give blood only when blood is required by a member of their own family or community. Their blood has been proven to be less safe than that of voluntary non-remunerated donors because they may be under pressure to donate when they are unsuitable to do so because of the risk of transmitting infection to the patient.

Where it is not possible to find a member of the family to donate blood, relatives may pay another person to give blood. This constitutes a 'hidden' paid system as, very often, there are insufficient relatives present when the demand to provide blood is made.

People who give blood for payment are usually motivated by what they will receive for their blood rather than by the wish to help other people. They may harm their own health by donating blood more frequently than is recommended. They are also more likely to endanger the lives of the recipients of their blood by concealing information about why they should not give blood.

The life of every patient who receives blood depends on the openness and honesty of the individual donors who have given their blood.

## What will happen when I give blood?

Whether it is the first time you give blood or you are a regular blood donor, the blood transfusion service must make sure that you will come to no harm by giving blood. It must also check that your blood will be safe for the person who receives it.

So before you give blood, you will be asked some questions about your medical history, current health and lifestyle. You may also be asked questions about recent travel; for example, if you live in a region where there is no malaria, you will be asked whether you have recently visited a tropical country.

These questions will be asked only to safeguard your own health and the health of the person receiving your blood. Any personal information that you are asked to give will be kept confidential and will not be used for any other purpose.

You will be told whether you are eligible to give blood and, if not, whether you may be able to donate blood in the future. If required, you may be referred to a health facility or a counselling service for further advice and care.

You will also be given a brief medical examination to check your pulse, blood pressure and weight. A drop of blood will then be taken from your fingertip to check that giving blood will not make you anaemic. Your health is very important to the blood transfusion service and blood will not be taken unless you can safely make a donation that day.

Donating blood is simple. You will be made as comfortable as possible, usually in a special chair or on a bed. The area inside one of your elbows will be cleaned with an antiseptic solution before a trained health worker inserts a sterile needle, connected to a special blood bag, into your vein. It usually takes about 10 minutes to give a unit of blood.

After resting for 10 or 15 minutes and taking some refreshment, you will be able to return to your normal activities although you should avoid strenuous activity for the rest of the day. You should drink plenty of fluids for the next 24 hours.

Very occasionally, some people may faint after donating blood. If this happens, you should rest for a sufficient time before returning to your normal daily routine. If you are in an occupation where this could endanger yourself or others, you should consider not returning to work that day.

## How much blood will be taken?

In most countries, the volume taken is 450 millilitres, less than 10% of your total blood volume (the average adult has 4.5 to 5.5 litres of blood). In some countries, 250 millilitres is taken.

Your body will replace the lost fluid in about 36 hours and your red cell count will return to normal within 21 days.



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## Are there any risks in giving blood?

There is no risk of acquiring any disease, such as HIV, hepatitis B or C, through donating blood if new, sterile and disposable equipment is used for each donation.

Remember that you will only be accepted as a blood donor if you are fit and well. Your health and well-being are important to the blood transfusion service. Blood donation is very safe and few donors suffer any discomfort or problems during or after donating.

## How often can I give blood?

Healthy adults can give blood regularly. In most countries, men can give blood every 3 months and women can donate every 4 months.

## Why should I give blood regularly?

A regular supply of blood is vital—red cells normally last 35 days and platelets 5 days after blood donation before they can no longer be used.

When people donate blood regularly, the blood transfusion service can plan the collection of blood so that there

are normally enough units of each blood group available to meet the country's needs. Without regular blood donors, many people would die because there would be insufficient blood available.

Regular voluntary blood donors are safer than other blood donors, including first-time voluntary donors, because they understand the importance of safe blood. Regular donors are also more likely to respond to appeals for blood donors in emergencies, when large volumes of blood may be needed, or when stocks are low, such as during holiday periods.

## What tests are performed on donated blood before transfusion?

WHO recommends that all donated blood should be tested for the following infections that can be transmitted by transfusion:

- HIV
- Hepatitis B
- Syphilis

WHO also recommends that, where appropriate and possible, donated blood should be tested for other infections, including:

- Hepatitis C
- Chagas disease
- Malaria

In some countries, blood is still not yet tested for all infections that can be transmitted by transfusion, particularly outside the main urban centres. This is why it is so important to be truthful about any reasons why your blood might not be safe.

Although blood is donated voluntarily, it costs at least \$50 to test and process it before it can be released for transfusion. If blood has to be discarded because tests show the presence of infectious agents, it is a huge waste of financial and human resources.

Blood is also tested to identify the donor's blood group and any antibodies in the blood before transfusion. This is to make sure it is compatible with the blood of the patient who will receive it in order to avoid serious immune transfusion reactions.

## Why does safe blood start with me?

Blood is the most precious gift that anyone can give to another person - the gift of life. A decision to donate

your blood can save the life of one or even several people.

But patients who need blood have the right to receive blood that is as safe as possible and that will cause them no harm.

If you think that your blood may be unsafe, another person's life may depend on your decision not to donate blood.

Remember, you or a member of your family may need the gift of blood one day. You would expect to receive safe blood others have an equal right to know that the blood they are given is safe. ▲

# Information for National Blood Programmes

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## **WHO strategy for blood safety**

The HIV/AIDS pandemic has focused particular attention on the importance of preventing transfusion-transmitted infection.

WHO estimates that between 5% and 10% of HIV infections worldwide are transmitted through the transfusion of infected blood and blood products, while many thousands more recipients of blood products are infected with hepatitis B and C viruses, syphilis and other infectious agents, such as Chagas disease and malaria.

In the past, strategies to promote blood safety tended to focus primarily on screening donated blood for transfusion-transmissible infections (TTIs). However, while systematic screening is essential, it is insufficient in itself to ensure the safety of the blood supply.

Evidence from all regions of the world indicates that the absence of a nationally-coordinated blood programme, lack of safe blood donors

and the unnecessary clinical use of transfusion are equally important contributory factors to the transmission of infection by transfusion.

The WHO strategy for blood safety emphasizes an integrated four-fold approach. Effective quality assurance should form an essential part of this approach.

1. The establishment of a coordinated blood transfusion service that can provide adequate and timely supplies of safe blood for all patients in need.
2. The collection of blood only from voluntary non-remunerated blood donors from low-risk populations and the use of stringent donor selection procedures.
3. The screening of all donated blood for transfusion-transmissible infections, including HIV, hepatitis viruses, syphilis and other infectious agents, and blood grouping, compatibility testing and processing of blood.

4. A reduction in unnecessary transfusions through the appropriate clinical use of blood, including the use of intravenous replacement fluids and other simple alternatives to transfusion, wherever possible.

## **Blood transfusion service**

A coordinated blood transfusion service (BTS) is a prerequisite for an adequate supply of safe blood. The national health authority may delegate responsibility for the blood supply to a non-profit non-governmental organization, but the BTS should be developed within the framework of the country's health care infrastructure.

The BTS should be established in accordance with an agreed national blood policy and plan and within a legislative framework. It should be responsible for establishing and maintaining a national quality system, including the development of guidelines and standard operating procedures, staff training, an

information management system and a system for monitoring and evaluation.

The BTS requires formal government commitment, support and recognition as a separate, identifiable programme with a budgeting and finance system that can ensure a sustainable blood programme through cost recovery and/or annual budget allocation. The BTS should be managed by an Executive Committee and assisted, where necessary, by specialist advisory groups. BTS personnel should include a medical director, a quality manager and staff who have been adequately trained in all aspects of management, quality systems, blood donor recruitment, blood collection, screening, processing and the storage and distribution of blood and blood products.

## **Low-risk blood donors**

The safer the source of donated blood, the safer the final product is likely to be.

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Voluntary non-remunerated blood donors from low-risk populations who give blood regularly are the foundation of a safe and adequate supply of blood.

In all regions of the world, a higher incidence and prevalence of transfusion-transmissible infections are reported among family/replacement donors and, in particular, paid donors. Furthermore, the use of family/replacement donors may constitute a hidden system of paid donation. These donors may not reliably respond to questions regarding risk behaviour and their suitability as blood donors.

A system of voluntary, regular non-remunerated donation is therefore not only safer than the use of family/replacement donors or paid donors. It also enables more cost-effective use to be made of limited resources by reducing the volume of donated blood that has to be discarded because of evidence of infectious disease markers.

Worldwide, more than 75 million units of blood are collected annually. In developed countries, the blood supply comes from voluntary non-remunerated blood donors. Globally, developing countries contribute only 16% of the voluntary non-remunerated blood donors which

shows that the blood supply depends on a very high proportion of family/replacement/paid donors in these countries. High priority should therefore be given to eliminating the use of paid blood donors, converting replacement donors to voluntary non-remunerated donors and motivating them to donate regularly.

Many countries have introduced legislation requiring blood donation only by voluntary non-remunerated donors. In practice, this can only be achieved through the establishment of an effective programme of blood donor recruitment and retention, staffed by trained personnel, with an efficient donor information, education and motivation programme.

It also requires strict criteria for donor selection and screening to identify donors for deferral or exclusion, and efficient blood donor record systems. The identification of donor populations at low risk for transfusion-transmissible infections and the monitoring of transfusion-transmissible infections in both the general population and the donor population are also key elements of a strategy for blood safety.

## The screening and processing of blood

WHO recommends that, before transfusion, all donated blood should be tested for:

- HIV
- Hepatitis B
- Syphilis

WHO also recommends that, where possible and appropriate, donated blood should be tested for other infectious agents, including hepatitis C, Chagas disease and malaria.

Nevertheless, each year, more than 13 million units of donated blood are not tested for all transfusion-transmissible infections. Testing is also sometimes unreliable, particularly when performed by inadequately trained staff or when there are shortages of suitable equipment or erratic supplies of test kits.

Each country should therefore develop a national policy and strategy to ensure the systematic and effective screening of blood for transfusion-transmissible infections. This requires:

- the development of protocols for the testing, selection and evaluation of the most appropriate

and effective screening assays to be used at each site

- the development of quality systems for screening, blood grouping, compatibility testing and component preparation
- the training, updating and continuing education of laboratory technical staff in BTSs and hospital blood banks
- the central procurement, storage and distribution of reagents and materials to ensure continuity in screening at all sites
- an adequate budget.

All donated blood units should also be routinely tested for ABO and Rh (D) blood grouping and red cell antibody screening.

Good laboratory practice using standard operating procedures and the maintenance of an effective blood cold chain for the storage and transportation of blood and blood products is equally important.

## Reducing unnecessary transfusions

The primary responsibility for ensuring the appropriate clinical use of blood lies with clinicians. However, the BTS has a key role in promoting

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effective transfusion practice by contributing to the development of a national policy and guidelines on the clinical use of blood.

It can also play an important part in the implementation of the policy and guidelines by participating in a National Committee on the Clinical Use of Blood and promoting the establishment of hospital transfusion committees.

The BTS should also assist in the development of a standard blood request form and standard operating procedures for each stage of the clinical transfusion process, for adaptation by hospitals at all levels of the health care system. These should include procedures for monitoring the transfused patient and the investigation and management of transfusion reactions. ▲

## Give safe blood and save a life

Anyone may need blood at any time. A serious illness or accident can happen anywhere in the world, in the course of daily routine or while travelling, with the loss of blood in life-threatening quantities. It is therefore in everyone's interest to have safe blood supplies available worldwide.

Thanks to the people who give safe blood anonymously, lives are saved. All blood donors must know that they can save lives only if the blood given is safe (that is, free of infection). Likewise, each person should understand that when giving unsafe blood (disease-carrying) he or she will be responsible for transmitting potentially life-threatening infection to, and even killing, another person.

Experience has shown that the safest donor is one who gives blood at least twice a year without receiving money or goods in exchange, understands the principle of altruism, answers questions for donor selection honestly, and will defer or exclude him/herself from donation if there is any risk to the recipient.

Governments and health authorities must put into place systems for the proper selection and deferral/exclusion of potential donors so that only safe blood is collected, and for the testing of all donated blood. These systems will include effective infrastructures to collect, process and store the blood; training for health care workers to deliver blood in sterile conditions; and promotion and implementation of appropriate clinical use of blood.

An individual in need of blood should receive blood that is as safe as possible; it is the privilege of an individual to give safe blood. ▲

# Information for Clinicians

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### The appropriate use of blood and blood products

Blood transfusion is an essential part of modern health care and has also demonstrated its efficacy in secondary health care in developing countries.



Used appropriately, transfusion can save life and improve health. However, it always carries potential risks for the recipient and should be prescribed only for conditions with significant potential for morbidity or mortality that cannot be prevented or managed effectively by other means.

Transfusion is often unnecessary for the following reasons.

1. The need for transfusion can often be avoided or minimized by the prevention or early diagnosis and treatment of anaemia and conditions that cause anaemia. The patient's haemoglobin level can often be raised by iron and vitamin supplementation without the need for transfusion. Red cell

transfusion is needed only if the effects of chronic anaemia are severe enough to require rapid raising of the haemoglobin level.

2. Blood is often unnecessarily given to raise a patient's haemoglobin level before surgery or to allow earlier discharge from hospital. Where possible, anaemia should be corrected and depleted iron stores replaced before planned surgery.
3. Transfusions of whole blood, red cells or plasma are often given when other treatments, such as the infusion of normal saline or other intravenous replacement fluids would be safer, less expensive and equally effective for the treatment of acute blood loss.
4. Patients' transfusion requirements can often be minimized by good anaesthetic and surgical management, including:
  - using the best anaesthetic and surgical techniques to minimize blood loss during surgery

- stopping anticoagulants and anti-platelet drugs before planned surgery, where it is safe to do so
- minimizing the blood taken for laboratory use, particularly in children
- salvaging and reinfusing surgical blood losses
- using alternative approaches such as desmopressin, aprotinin or erythropoietin.

### Safe blood transfusion

Before prescribing blood or blood products for a patient, it is always essential to weigh up the risks of transfusion against the risks of not transfusing.

The transfusion of red cell products carries a risk of serious transfusion reactions and the transmission of infections, such as HIV, hepatitis B, hepatitis C, syphilis, malaria and Chagas disease.

Plasma can transmit most of the infections present in whole blood and can also cause transfusion reactions; there are very few indications for its transfusion and the risks very often outweigh any possible benefit to the patient.

Any blood product can become contaminated with bacteria and is very dangerous if it is manufactured or stored incorrectly.

The risks associated with blood transfusion depend on:

- the incidence and prevalence of transfusion-transmissible infections (TTIs) in the blood donor population
- the effectiveness of procedures for blood donor recruitment, selection, screening, deferral and exclusion: blood donated by regular voluntary non-remunerated donors carries a lower risk of transfusion-transmissible infection than blood donated by family/replacement donors while paid blood donors

generally have the highest incidence and prevalence of TTIs

- the quality of screening of all donated blood for TTIs
- the quality of blood grouping, compatibility testing and component preparation
- the efficiency of the blood cold chain for the storage and transportation of blood products
- the reliability of the system for ensuring that patients receive blood that is compatible with their blood group, red cell antibodies and other special requirements
- the clinical use of blood and blood products only when no alternatives to transfusion are available.

Every prescriber of blood should be familiar with the local system for the collection, screening and processing of blood and understand any limitations that it may impose on its safety or availability. In particular, knowledge of the occurrence, distribution and spread of transfusion-transmissible infections is essential to informed judgements about the risks and benefits of transfusion.

## Prescribing blood: a checklist for clinicians

**Always ask yourself the following questions before prescribing blood or blood products for a patient**

- 1 What improvement in the patient's clinical condition am I aiming to achieve?
- 2 Can I minimize blood loss to reduce this patient's need for transfusion?
- 3 Are there any other treatments I should give before making the decision to transfuse, such as intravenous replacement fluids or oxygen?
- 4 What are the specific clinical or laboratory indications for transfusion for this patient?
- 5 What are the risks of transmitting HIV, hepatitis, syphilis or other infectious agents through the blood products that are available for this patient?
- 6 Do the benefits of transfusion outweigh the risks for this particular patient?
- 7 What other options are there if no blood is available in time?
- 8 Will a trained person monitor this patient and respond immediately if any acute transfusion reactions occur?
- 9 Have I recorded my decision and reasons for transfusion on the patient's chart and the blood request form?

**Finally, if in doubt, ask yourself the following question.**

- 10 If this blood was for myself or my child, would I accept the transfusion in these circumstances? ▲

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Other than in the most exceptional life-threatening situations, blood should not be transfused unless it has been obtained from appropriately selected donors, has been screened for TTIs and has been tested for compatibility between the donor's red cells and antibodies in the patient's plasma.

All patients should be monitored before, during and after transfusion.

### **Prescribing blood and blood products**

Prescribing decisions should be based on national guidelines on the clinical use of blood, taking individual patient needs into account. However, responsibility for the decision to transfuse must ultimately rest with individual clinicians.

The key principle of clinical transfusion practice is that transfusion is only one part of the patient's management. The decision to transfuse blood or blood products should always be based on a careful assessment of clinical and laboratory indications that transfusion is necessary to save life or prevent significant morbidity. It should also be based on knowledge of the resources available for managing patients and

the safety of the blood and blood products available.

The extent to which blood is used appropriately depends on a range of factors, such as the effectiveness of programmes to reduce nutritional anaemia and the availability of intravenous replacement fluids. Many of these factors are beyond the immediate control of prescribers of blood. However, it is the responsibility of individual clinicians to ensure that their own clinical decisions on transfusion are appropriate for their patient.

Remember that, when used correctly, blood can be life-saving. Inappropriate use can endanger life and may cause a shortage of blood for other patients who require it. ▲

# Information for National Health Authorities

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## Blood safety

Blood transfusion is a vital component of every country's health care delivery system. It can be a life-saving intervention, but it may also result in acute or delayed complications and carries the risk of the transmission of infections.



Between 5% and 10% of HIV infections worldwide are transmitted through the transfusion of infected blood and blood products. Many more recipients of blood products are infected by hepatitis B and C viruses, syphilis and Chagas disease.

More than 75 million units of blood are donated each year throughout the world. A significant proportion of these expose recipients of blood and blood products to unnecessary risk.

In developed countries, the blood supply comes from voluntary non-remunerated blood donors. Globally, developing countries contribute only 16% of the voluntary non-remunerated blood donors which

shows that the blood supply depends on a very high proportion of family/replacement/paid donors in these countries. Voluntary non-remunerated blood donors are at significantly lower risk for transfusion-transmissible infections than family/replacement donors and paid donors. More than 13 million units of blood are not screened for transfusion-transmissible infections.

In addition, many transfusions are clinically unnecessary, providing little or no benefit to the patients who receive them and wasting a scarce resource that may result in a shortage of blood products for patients in real need.

## The costs of unsafe blood

Blood is a national resource. It is the responsibility of governments to ensure that the blood supply is safe, adequate to meet the needs of patient populations and available to all who require it.

It is also the responsibility of governments to ensure that all clinicians are trained to prescribe blood and blood products only when clinically necessary.

This cannot be achieved without cost. However, an unsafe or inadequate blood supply is ultimately even more costly—in both human and economic terms.

The human costs of unsafe blood are incalculable—morbidity and mortality resulting from the transfusion of infected blood have far-reaching consequences, not only for the recipients themselves, but also their families, their communities and the wider society. Since a person can transmit the infection during the asymptomatic phase, it can contribute to an ever-widening pool of infection in the wider population.

The economic costs of a failure to control the transmission of infection have already been graphically demonstrated in countries with a high incidence and prevalence of HIV and AIDS—increased requirements for

medical care, higher levels of dependency and the loss of productive labour place heavy burdens on overstretched health and social services and on the national economy.

While not the main route of transmission, blood transfusion is almost 100% effective in transmitting HIV and other infectious agents. The incidence of transfusion-transmitted infection—and its associated costs—will almost certainly increase in countries that do not take stringent measures to ensure the safety of their blood supplies.

An investment in safe and adequate supplies of blood is a cost-effective investment in the health and economic wealth of every nation.

## National blood policy and plan

A national blood policy and plan are essential components of an efficient, cost-effective and sustainable national blood programme. They



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should define the measures that will be taken to meet the transfusion requirements of the patient population, equitably and when required, at minimum cost, with minimum wastage and with optimum safety and efficacy.

The policy should include an appropriate regulatory and legislative framework, including the development of new legislation or regulations, where necessary. It should also define national principles in relation to:

- quality systems and initial and ongoing training
- the selection of blood donors
- screening for transfusion-transmissible infections
- red cell serology testing
- the preparation of blood components and plasma derivatives
- the clinical use of blood
- records and information systems.

The national blood plan should define the functions, organization and management of a national blood transfusion service (BTS) and the delegation of responsibilities, where appropriate, to institutions, hospitals and non-profit, non-governmental

organizations, such as the national Red Cross or Red Crescent Society or blood donor organizations.

The policy should define the role and membership of a National Blood Transfusion Service Executive Committee, including taking executive decisions within the mandate of the national blood policy and taking overall responsibility for the management of the BTS in accordance with the national blood plan.

### **Nationally-coordinated blood transfusion service**

In 1975, Resolution WHA 28.72 of the Twenty-eighth World Health Assembly urged Member States to promote the development of national blood services based on voluntary non-remunerated blood donation. Because of a lack of national coordination and the fragmentation of services, only 35% of the 192 Member States have a national blood policy, relevant legislation and one specific organization responsible for the national blood programme.

The national coordination of the blood programme remains an essential component of the WHO strategy for blood safety because it is a prerequisite for the preparation of

blood and blood products to optimal standards of quality and safety, including:

- the implementation of a national quality system for all aspects of the transfusion process
- the collection of blood only from voluntary non-remunerated blood donors from low-risk populations
- the screening of all donated blood for transfusion-transmissible infections, including HIV, hepatitis viruses, syphilis and other infectious agents, such as Chagas disease and malaria
- good laboratory practice in blood grouping, compatibility testing, component preparation and the storage and transportation of blood products.

A nationally-organized or coordinated blood transfusion service requires formal government commitment, support and recognition as a separate, identifiable programme. It also requires a budgeting and finance system that can ensure a sustainable blood programme through cost recovery and/or annual budget allocation.

A well-organized blood transfusion service is safer and more cost-effective than a hospital-based

system. The coordination of services promotes adherence to quality standards, minimizes duplication and achieves economies of scale through national systems for blood donor recruitment, blood screening and processing, and the central bulk purchasing of essential consumables and other supplies.

A national programme for the education, motivation, recruitment and retention of low-risk blood donors, for instance, can achieve substantial cost savings in the collection and screening of blood compared with systems of family/replacement or paid donation. This is because a significantly lower proportion of donated blood from regular voluntary non-remunerated donors needs to be discarded because of evidence of transfusion-transmissible infection.

### **The appropriate clinical use of blood**

Responsibility for the decision to transfuse ultimately rests with individual clinicians, but prescribers of blood do not work in isolation.

A reduction in unnecessary transfusions is dependent on the availability of simple alternatives to transfusion, including intravenous

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replacement fluids for the correction of hypovolaemia, and pharmaceuticals and medical devices to minimize the need for transfusion.

It also requires effective public health and primary health care programmes that enable the prevention, early diagnosis and treatment of conditions, such as anaemia and malaria, that might otherwise lead to the need for transfusion.

Each national health authority should develop a national policy and guidelines on the clinical use of blood, with appropriate supportive regulations, and ensure that all clinical staff and BTS staff involved in the transfusion process receive appropriate training, based on the national guidelines.

A National Committee on the Clinical Use of Blood and, at local level, hospital transfusion committees should also be established to monitor and audit the implementation of the policy and guidelines. ▲





**Department of Blood Safety and Clinical Technology**  
**World Health Organization**  
**1211 Geneva 27, Switzerland**  
**Fax: +41-22 791 4836**  
**E-mail: [blood\\_safety@who.int](mailto:blood_safety@who.int)**  
**[www.who.int/bct](http://www.who.int/bct)**