

The global need for safe blood

Safe blood saves lives—but, for too many patients around the world whose survival depends on blood transfusion, blood transfusion is either not available or not safe.

Every second of every day, people around the world—of all ages and from all walks of life—need blood transfusions to survive. The reasons for transfusion vary but the demand for blood is ever-present and growing:

- The number of accidents and injuries requiring blood transfusion is growing worldwide.
- Developing countries face chronic shortages of blood which particularly affect children with severe anaemia due to malaria or malnutrition and women with complications of pregnancy or childbirth.
- As developing countries expand diagnostic and treatment options—for example, for cancers and blood disorders requiring transfusion—the demand for blood is rising.
- Technological advances in industrialized countries have led to new medical treatment regimens and procedures requiring transfusion.

The need for universal access...

While the need for blood is universal, access to blood for those who need it is sadly not. There is a major imbalance in access to safe blood between developing and industrialized countries:

- Only about 40% of the blood collected each year is donated in developing countries, which are home to over 80% of the world's population.
- The average number of blood donations per 1 000 population is 12 times higher in high-income countries than in low-income countries.
- An overwhelming 99% of the 500 000 women who die each year during pregnancy and childbirth live in developing countries, with haemorrhage—which invariably requires blood transfusion—the most common cause of maternal deaths.
- In Africa, approximately 70% of all blood transfusions are given to children with severe anaemia due to malaria, the leading cause of death among children under the age of five.
- The health-related Millennium Development Goals to reduce child mortality, improve maternal health and prevent HIV infection cannot be achieved without equitable and universal access to safe blood.

...to safe blood

Blood transfusion saves lives, but the transfusion of unsafe blood puts lives at risk because HIV, hepatitis B, hepatitis C, syphilis, Chagas disease, malaria and other infections can be transmitted to the recipients through transfusion. Blood that tests positive for any of these infections cannot be transfused and is discarded, resulting in additional financial costs. These issues are of particular concern in countries facing blood shortages.

- Globally, up to 4 million people have been infected with HIV by the transfusion of unsafe blood.
- The prevalence of hepatitis B, hepatitis C and syphilis in donated blood is still unacceptably high in many developing countries; the prevalence of Chagas disease in donated blood is a major problem in some South and Central American countries.
- Many countries lack policies, procedures or resources for ensuring the safety of blood, particularly in parts of Africa, Eastern Europe, Central Asia and South/Southeast Asia which are facing the HIV/AIDS pandemic.
- As some infections, such as HIV, cannot be detected in a person's blood during the "window period", laboratory testing of donated blood—no matter how sophisticated—is, alone, not enough to ensure a safe blood supply. The safest blood comes from the safest blood donors.

The key to safe blood: safe donors...

Voluntary unpaid blood donors—people who give blood of their own free will without receiving any form of cash or in-kind payment—are the key to ensuring that safe blood is available to every patient who needs it, wherever they may be.

Evidence from around the world shows that the prevalence of infection with HIV, hepatitis viruses and other transfusion-transmissible infections is invariably lowest among voluntary unpaid donors who give blood for purely altruistic reasons. Voluntary donors are more likely to be honest in answering the questions about their health and lifestyle that help to screen out those at risk of carrying these infections. They are also more likely to lead low-risk lifestyles, benefiting both themselves and the patients who receive their blood. In contrast, the prevalence of infection among family replacement blood donors and paid donors is generally the same as in the general population.

... regular donations ...

In every country, a reliable supply of safe blood from donors with different blood groups is needed throughout the year. It is therefore crucial that healthy, voluntary unpaid blood donors make a commitment to give blood regularly.

In addition to ensuring an adequate supply of blood at all times, regular voluntary blood donors are the safest donors because they have been educated about how to stay healthy and lead lifestyles that are free from the risk of acquiring serious infections.

... a strong national blood donor programme ...

Every person involved in donor recruitment should value voluntary unpaid blood donors as the source of a sustainable and safe blood supply. Regardless of the type of national blood programme—whether hospital-based or coordinated at national or regional levels—the common focus should be the recruitment and retention of voluntary unpaid donors. However, a well-organized national blood programme is key to effective communication with donors and good donor care.

Public awareness campaigns and donor education materials should be based on a well-researched assessment of the needs for information by the public and should address common fears or misconceptions that may deter people from donating blood. Healthy family replacement donors should be encouraged to become voluntary unpaid donors. By reminding them of how their loved ones have benefited from the gift of blood, they may recognize how regular voluntary blood donation will benefit other people's loved ones.

Particular attention should be given to youth donor retention strategies as these form the basis of a stable pool of blood donors for the future.

Professionalism in the handling and care of blood donors by staff will encourage the donor public to become regular blood donors as they will have confidence that the blood donation process is safe and their blood will be used appropriately. This will in turn attract new donors to come forward and donate blood.

... and effective partnerships

An effective blood donor programme involves mobilization at both the grassroots and national levels; support from community leaders is vital in attracting sufficient numbers of low-risk, voluntary, unpaid blood donors.

Broad partnerships can be built with the community through Red Cross and Red Crescent Societies and other nongovernmental organizations and national service organizations, such as Lions Clubs and Rotary Clubs. Schools, colleges and universities are natural partners in reaching young people and encouraging them to commit to becoming regular blood donors. Involving the private sector brings access to customers, staff and the families of staff members. Partnerships with community-based organizations will not only bring the message about voluntary blood donation to new audiences but also provide increased opportunities for blood donation sessions in the community at mobile and static sites.

Doctors and nurses are also key partners who can motivate the families and friends of patients who have received a transfusion to become regular voluntary blood donors. Professional organizations, such as national medical and nursing associations, can also play an important role in promoting awareness of the need for blood donors as well as encouraging the use of transfusion only when no alternative treatment is possible.