



How to save a life **Blood donation, let's talk about it!**

with the EDQM, Council of Europe



B-

AB+

Save a life

How to save a life



Every minute of every day, hundreds of people need blood.

How many donations are needed to save a life?

- 🔴 **Adjuvant cancer therapy:** up to **8 donations/week.**
- 🔴 **Coronary bypass:** between **1 and 5 donations.**
- 🔴 **Transfusion following a traffic accident or bullet wound:** up to **50 donations.**
- 🔴 **Liver transplantation:** up to **100 donations.**
- 🔴 **Transplantation of other organs:** up to **10 donations.**
- 🔴 **Brain surgery:** between **4 and 10 donations.**
- 🔴 **Repair of a fractured hip or arthroplasty**
(replacement of a joint by a prosthesis): between **2 and 5 donations.**

European member states of the Council of Europe have been working **since the 1950s** to improve quality and safety standards in the area of blood transfusion, to deal with ethical issues such as the protection of donors' and recipients' rights, to improve organisational aspects and to promote blood donation and access to transfusions in Europe.





450 ml

AB+



Blood donation

QUIZ : what do you know about blood donation?

For the answers see page 11

1. One blood donation can save up to 3 lives.

- True.
- False.

2. Each year, a blood donor can give no more than:

- 2 blood donations.
- 4 blood donations.
- 6 blood donations.

3. The probability that a person will receive at least one blood transfusion in their lifetime is 20%.

- True.
- False.

4. Blood donors must be at least:

- 14 years old.
- 16 years old.
- 18 years old.

5. Donors should not eat before donating blood.

- True.
- False.

6. You cannot contract AIDS or another transmissible disease by donating blood?

- True.
- False.

7. How long does it take the body to replace donated blood (red blood cells)?

- 2 days.
- 10 days.
- 6 to 8 weeks.

8. Who can be a donor?

- A. A person weighing at least 50 kg.
- B. A person who has recently undergone surgery.
- C. A pregnant woman.
- D. Any person in good health.

9. There are at least 4 blood groups.

- True.
- False.

10. On average the human body contains:

- 1-2 litres of blood.
- 2-5 litres of blood.
- 4-6 litres of blood.
- 8-10 litres of blood.

11. Who received the Nobel Prize for the discovery of the ABO system of blood groups?

- Dr A. Hustin.
- Dr K. Landsteiner.
- Dr N. Bethune.
- none of the above!

12. A blood donation takes:

- 5-15 minutes.
- 16-25 minutes.
- 45 minutes to 1 hour.

Blood donation

the answers to a few questions

🔴 How is donated blood used?

Every year, tens of millions of blood bags are collected in Europe. Donated blood is used to provide many patients with blood components. They receive red blood cells, platelets or plasma, depending on their needs (whole blood is never transfused; patients receive only the component that they need, with the exception of auto-transfusion).

The transfusion of **red blood cells** and **platelets** are essential as an add-on therapy in the treatment of patients with cancer, such as leukaemia (50%), or to treat accidental haemorrhage (15%). They are, of course, valuable during surgery (27%) to replace blood lost during the operation. **Plasma** may be used in its initial form, in particular in the case of acute haemorrhage, or it may be fractionated to isolate some of its proteins (immunoglobulins, coagulation factors, albumin, etc.) for therapeutic use.

🔴 Can anyone be a donor?



In Europe, any healthy person aged between 18 and 65 years old can usually donate whole blood. Other age limits may apply to donations of plasma and platelets. Depending on the country, between 1% and 4% of the adult population gives blood regularly. For safety reasons, users of injectable drugs, carriers of transmissible infections (HIV, hepatitis C, etc.) and recipients of organ transplants or transfusions cannot be blood donors.



🔴 What types of donation are possible?

Blood services collect:

- 🔴 **Whole blood**, which is converted into blood components.
- 🔴 **Plasma** using a technique called plasmapheresis. (The donor's blood is processed through an apheresis machine that extracts only the plasma and returns the rest of the blood to the donor. Plasma may be transfused into a patient or further processed into therapeutic products).
- 🔴 **Platelets** using a technique called plateletpheresis. (The donor's blood is processed through an apheresis machine, much like in plasma donation. In this case, only the platelets are collected and the rest of the blood is returned to the donor).

Blood services also collect blood samples from donors who wish to join a haematopoietic stem cell and bone marrow database. These data enable donors to be matched with patients who need stem cell transplants.



🔴 How often can I donate?

As a rule, men may donate whole blood up to 6 times, and women up to 4 times, per year. Plasma and platelets may be donated more frequently. Donations can be made in mobile blood units or in a blood donor clinic run by the official organisation responsible for collecting blood.





*a single donor
can save
several lives!*

Blood donation

How you can help

A FEW STATISTICS IN EUROPE*

- ◆ **ON AVERAGE**, less than 7 out of 10 citizens say that they have already given blood.
- ◆ **IN AUSTRIA**, over half of Austrians (51%) say that they have already given blood.
- ◆ **IN GREECE AND IN FINLAND**, 40% and 39% of citizens respectively have given blood.
- ◆ **IN CONTRAST, IN PORTUGAL AND BELGIUM** only 22% and 23% of citizens respectively have already donated blood.
- ◆ **62%** of persons surveyed believed that blood transfusions are safer than 10 years ago.
- ◆ Men give blood more frequently than women (36%, compared with 25% of women).
- ◆ Of those who donate blood the most often, the majority are people aged between 40 and 54 years (37%).
- ◆ This contrasts with only 18% of students and those aged between 15 and 24 years.

* Source: Eurobarometer 2002

Get involved:

choose to become a blood donor and tell those around you.

- ◆ Go to a **mobile blood unit** or **the nearest blood collection clinic** for a donor questionnaire and a medical evaluation to find out whether you can become a donor. Contact the authorities in your country or blood donor associations for specific information on eligibility conditions (addresses are listed on the following page).
- ◆ **Give regularly:** blood is needed all year round.
- ◆ **Young people, get involved:** become a life-long donor and try to give regularly. Today, the donors that give the most in Europe are over 40 years old.
- ◆ **Tell your family and friends** about your blood donation **to help promote this cause.**

Useful addresses and links in Europe

📍 Austria:

www.roteskreuz.at

📍 Belgium:

www.transfusion.be

📍 Bulgaria:

www.nsbalhz.bg

📍 Croatia:

www.hck.hr

www.hdm.hr

📍 Cyprus:

www.moh.gov.cy/phs

📍 Czech Republic:

www.sukl.cz

📍 Denmark:

www.sst.dk

📍 Estonia:

www.verekeskus.ee

www.kliinikum.ee

📍 Finland:

www.veripalvelu.fi

📍 France:

www.donusang.net

📍 FYR of Macedonia:

National Institute of Transfusion
Medicine, Skopje

📍 Germany:

www.blutspende.de

📍 Greece:

www.upatras.gr

📍 Hungary:

www.ovsz.hu

📍 Iceland:

www.bgfi.is

www.blodbankinn.is

📍 Ireland:

www.giveblood.ie

📍 Italy:

www.centronazionale sangue.it

📍 Latvia:

www.vadc.gov.lv

📍 Lithuania:

www.kraujodonoryste.lt

📍 Luxembourg:

www.croix-rouge.lu



🔥 **Malta:**
www.gov.mt

🔥 **Moldova:**
www.cnts.md

🔥 **Montenegro:**
Center for Blood Transfusion
Clinical Center of Montenegro,
Podgorica

🔥 **Netherlands:**
www.sanquin.nl

🔥 **Norway:**
www.rikshospitalet.no

🔥 **Poland:**
www.ihit.waw.pl
www.pck.pl

🔥 **Portugal:**
www.ipsangue.org

🔥 **Romania:**
Regional Blood Transfusion
Centre (Constanta)

🔥 **Serbia:**
www.nbti.org.rs

🔥 **Slovak Republic:**
www.ntssr.sk

🔥 **Slovenia:**
www.ztm.si

🔥 **Spain:**
www.cruzroja.es
www.donantesdesangre.net
www.msc.es

🔥 **Sweden:**
www.geblod.nu
www.sweba.se

🔥 **Switzerland:**
www.blutspende.ch

🔥 **United Kingdom:**
www.blood.co.uk

ANSWERS TO THE QUIZ

Q1: true

Q2: man:
6 donations,
woman:
4 donations

Q3: true

Q4: 18 years old

Q5: false

Q6: true

Q7: 6 to 8 weeks

Q8: A and D

Q9: true

Q10: 4-6 litres

Q11: Dr K. Landsteiner

Q12: 5-15 minutes

Quality and safety of blood donations and transfusions

The work of the Council of Europe

Photo © EDQM, Council of Europe



THE COUNCIL OF EUROPE PROMOTES 3 MAJOR PRINCIPLES IN THE AREA OF BLOOD TRANSFUSION:

- ◆ the achievement of self-sufficiency
- ◆ the protection of the health of blood donors and recipients
- ◆ the non-commercialisation of substances of human origin by voluntary and non-remunerated donation.

The European Committee on Blood Transfusion (CD-P-TS) is in charge of this work and represents 35 European countries and 9 observer states, as well as the World Health Organization (WHO) and the European Commission. The European Directorate for the Quality of Medicines & HealthCare (EDQM, Council of Europe) co-ordinates the activities. The Committee concentrates on the elaboration of strict ethical, quality and safety standards in this area. It produces consensus reports aimed at improving practices, international surveys and recommendations to member states to make improvements to national legislation. A technical work, the "Guide to the preparation, use and quality assurance of blood components" is published for professionals. The annual survey on the collection, testing and use of blood and blood components in Europe and the central database on stocks of frozen rare blood groups are other examples of work given a high priority.

For many years, the Council of Europe has been supporting World Blood Donor Day organised on 14 June each year, to promote this cause all over the world.

For further information, please contact:
www.edqm.eu www.coe.int