## How to save a life

# Blood donation,

Let's talk about it!



With the EDQM, Council of Europe





# Promoting the quality and safety of blood donations and transfusions through the Council of Europe and World Blood Donor Day on 14 June.



"Celebrating the gift of blood"

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

- mutual assistance between Council of Europe's member states
- 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. It has representatives from 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 of the CD-P-TS

For many years, the Council of Europe has been supporting World Blood Donor Day (WBDD), which is a worldwide event organised to honour and give thanks to those people who give the gift of life through blood donation. This yearly celebration also aims to create awareness of the need for safe blood for transfusion and to highlight the importance of blood donation, whilst giving thanks to current donors.

On 14 June each year, this global event is organised through the collaboration of organisations such as the World Health Organization (WHO), the International Federation of Red Cross and Red Crescent Societies (IFRC), the International Federation of Blood Donor Organisations (IFBDO) and the International Society of Blood Transfusion (ISBT).

For further information, please contact:

www.edgm.eu www.coe.int www.fiods.org www.ifrc.org

www.who.int www.isbtweb.org

#### **Every second of every day,** someone in the world needs 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.





#### Blood donation

# QUIZ: what do you know about blood donation?



- 1. One blood donation can save up to 3 lives.
- 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%.
- 4. Blood donors must be at least:
- ▲ 14 years old.
- 16 vears old.
- ♦ 18 years old.
- 5. Donors should not eat before donating blood.
- ▲ True. 

  ▲ False.
- 6. You cannot contract any transmissible infection 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.

## 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.
- 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 0.4% and 6.4% 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.

<sup>\*</sup> Blood donation in the WHO European Region, WHO, 2010.

### **♦** 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.



#### **Blood donation**

# How you can help

# A FEW STATISTICS IN EUROPE\*

- ♦ ON AVERAGE, while only 4 in 10 citizens say that they have given blood, 6 in 10 say that they are prepared to donate blood in the future.
- Men donate blood more frequently than women (39%), compared with 31% of women.
- Of those who donate blood the most often, the majority are people aged between 40 and 54 years (41%), compared with only 23% of those aged between 15 and 24 years.
- \* Special Eurobarometer 426 'Blood and Cell and Tissue donation' 2015

#### Get involved:

# choose to become a blood donor, GIVE THE GIFT OF LIFE

- ◆ 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**

### Stay connected in Europe

- Austria: www.roteskreuz.at
- Belgium: www.transfusion.be
- Bulgaria: www.redcross.bg
- ◆ Croatia: www.hck.hr www.hdm.hr www.hztm.hr
- ♦ Cyprus: www.moh.gov.cy
- ◆ Czech Republic: www.sukl.cz
- ◆ Denmark: www.sst.dk www.bloddonor.dk
- ◆ Estonia: www.verekeskus.ee www.kliinikum.ee
- Finland: www.veripalvelu.fi
- France: www.dondusang.net

- ► FYR of Macedonia: National Institute of Transfusion Medicine, Skopje
- Greece: www.yyka.gov.gr www.posea.gr www.moh.gov.gr
- Hungary: www.ovsz.hu
- Ireland: www.giveblood.ie
- Italy: www.centronazionalesangue.it
- ▲ Lithuania: www.krauiodonorvste.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.sanguin.nl
- Norway: www.rikshospitalet.no www.kunnskapssenteret.no www.giblod.no
- ◆ Poland: www.ihit.waw.pl www.pck.pl
- Portugal: www.ipsangue.org
- ♠ Romania: www.transfuzia.ro
- ♦ 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
- ◆ Turkey: www.kanver.org
- ◆ United Kingdom: www.blood.co.uk www.welsh-blood.org.uk www.scotblood.co.uk www.nibts.org

#### ANSWERS TO THE QUIZ 01: true 07: 6 to 8 weeks 02: man: 08: A and D 6 donations. 09: true woman: 4 donations 010: 4-6 litres 03: true 011: Dr K. Landsteiner **Q4:** 18 years old 012: 5-15 minutes 05: false 06: true

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The Council of Europe is the main organisation for the protection of human rights on the continent. 28 out of its 47 member states are also members of the European Union. All the member states of the Council of Europe have signed the European Convention on Human Rights, a treaty intended to protect human rights, democracy and the rule of law.



