

International Pharmaceutical Students' Federation

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Donors FAQS Flash Cards





Suggested activity



- In this document, you have answers to many questions or doubts people often have regarding the blood donation process. You can print off these flashcards and challenge the audience with them. (You can, for example, place the cards on a table with the questions facing up so the public has an opportunity to read the explanations carefully). This allows for the audience to spot the questions that are most relevant to them. For example, if someone is taking medication, they will easily spot the question, "What if I am taking a medication? Can I donate?". Even if you aren't able to print them, you can pass this file to the volunteers who are helping you organizing the blood drive. It can help them reply to many concerns or doubts possible donors have, and help them recruit donors.
- Please note that this document has been produced in accordance with WHO and Red Cross international guidelines. Each national blood transfusion system, however, is responsible for defining their own guidelines and practices, thus some details about the blood donation process may differ from what is written here. In this case, you should adapt this document to your own context.



What is Blood Donor Counselling?



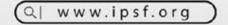




What is blood donor counselling?

It is a confidential dialogue between a blood donor and a trained staff member from the blood transfusion service (BTS). This consultation occurs before, during or after the donation. The counsellor has the responsibility to clarify any doubts the donor has regarding the blood donation process. In addition, it also allows the BTS counsellor to talk to the donor about his/her health so as to ascertain whether he/she fulfills the mandatory requirements to be a donor. This helps to uncover whether the donor has been exposed to any transfusion-transmissible infections or any other factors that could affect their suitability to donate.









Why is blood donor counselling so important?





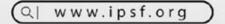


Why is blood donor counselling so important?

According to WHO, more than 92 million blood donations are collected annually. Of these, 1.5 million units are excluded due to the presence of transfusion-transmissible infections (TTI) markers (including HIV, hepatitis B (HBV), hepatitis C (HCV) and syphilis). It is also estimated that 13 million prospective donors are deferred from donating for reasons such as anemia or risks of transmitting a TTI.

Overall, blood donor counselling is extremely important in order to avoid collecting blood that may harm vulnerable patients. Some infections may be undetectable by the tests performed (also called the window period). Moreover, counselling can also help with the early diagnosis and treatment of conditions such as anemia and other infections. Above all, the health of the donor is also a priority. The basic medical check up ensures the donation process will not harm the health of the donor.









What if, after the donation, my blood is discarded?







What if, after the donation, my blood is discarded?

After your donation, your blood is tested, not only to define your blood group serology (ABO/RhD), but also for other markers of infections (e.g hepatitis B,C, HIV, syphilis,etc). When an unusual result is detected, the blood transfusion service (BTS) has the responsibility of calling the donor, to inform them of the results and to refer the donor to another healthcare professional or institution if necessary. The BTS may also require you take new tests in order to confirm the diagnosis.

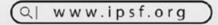








What possible reasons could there be behind a deferral?







What possible reasons could there be behind a deferral?

A deferral can occur temporarily or permanently. If that ever happens, you should be given a clear explanation as to why your donation was deferred.

Some examples include if you:

- -Are currently sick or have other chronic health conditions
- -Have travelled recently to a country that puts you at risk of a transfusion-transmissible infections (TTI)
- -Have engaged in behaviours that put you at high risk for a TTI
- -Have haemoglobin levels that are lower than normal
- -Gave blood recently, or if you don't fill other mandatory requirements (for example, weight)









What is haemoglobin? Why is it so important to measure haemoglobin levels before you give blood?





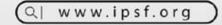




What is haemoglobin? Why is it so important to measure haemoglobin levels before you give blood?

One crucial step before you donate includes the measurement of haemoglobin by a simple prick test. Haemoglobin is a protein present in red blood cells with the main function of transporting oxygen in your body. Its levels differ depending on many factors such as gender, ethnicity and age. A haemoglobin cut-off level is defined, meaning that if your levels are lower than the cut-off level, you will not be able to donate blood. This is to ensure that your hemoglobin won't drop below normal levels after you have donated blood. A person with haemoglobin levels below the normal range, is by definition, anaemic. So in case your cut-off level is lower, you won't be able to donate until you have detailed tests that explain why you have lower levels of haemoglobin, and you are treated accordingly. The causes behind anaemia are diverse, but the most common is iron deficiency.



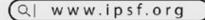






What is iron?







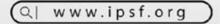


What is iron?

Iron, designated with the symbol Fe, is an essential element for blood production. In our body, 70% of iron is found in haemoglobin. Iron has low bioavailability so we need to have a regular supply which can be maintained by eating a balanced diet. When you are donating blood, you are also giving away your iron, thus eating iron-containing foods is essential to maintaining a normal iron supply. Iron depletion can be caused by blood loss (e.g. gastrointestinal bleed or genitourinary blood loss during menstruation) or other reasons. The main sources of iron are meat, cereals and vegetables. Here are some tips in order to get the most out of iron-containing foods:

- Tea can influence the absorption of iron, so avoid drinking it before/during/after a meal.
- Vitamin C helps with the absorption of iron so consume fruits and vegetables or drink a glass of orange juice with your meal
- Examples of good sources of iron include pulses, beans, lean red meat, turkey, chicken, sardines, salmon, pilchards, nuts, leafy green vegetables (broccoli, watercress) and dried fruit (raisins, apricots)









Is it possible that I can get a bruise after donating?



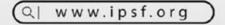




Is it possible that I can get a bruise after donating?

Even though preventive actions are taken in order to avoid bruising, sometimes it also might happen around the venipuncture area. There are small blood vessels under the skin and larger veins where the blood is obtained. Upon insertion of the needle during blood donation, one of these vessels can be injured, causing bleeding into the surrounding areas. It can also occur because of the inadequate pressure on the venipuncture site after the removal of the needle, or when you lift heavy objects after donating (as it allows the blood to leak to the circumjacent areas). Although at first it may look a little black or blue and cause some discomfort, it will eventually fade in the next few days or weeks (if it is a larger bruise) and is harmless. Follow the advice given before and after the donation for the best prevention and management of bruising! It is recommended that you wear clothes with loose sleeves when donating as a tight sleeve can act as a tourniquet.









What is informed consent?









What is informed consent?

Informed consent is a process whereby a document provided by the blood transfusion service is signed by voluntary blood donors before donating. This consent authorises the blood transfusion service to perform the donation process, test the blood for transfusion-transmissible infections (TTIs) and blood group serology or any additional purposes (for example, research). The ethical principles of autonomy and respect for the donor are also considered. The consent is signed during the blood donor counselling session where the donors have the opportunity to clarify any doubts or fears they may have.







What are the responsibilities and rights of blood donors?



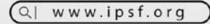




What are the responsibilities and rights of blood donors?

- Responsibility to provide the blood transfusion service with any relevant personal information about health conditions or behaviours that increase the risk of a transfusion-transmissible infection
- Responsibility to self-defer from donating if you do not meet the requirements to donate. No donor should use blood donation in exchange for free medical checkups or to check their status for HIV and other transfusion-transmissible infections.
- Right to withdraw from donating at any time during the procedure for any reason, without needing to explain why
- Right to any information about the blood donation process during blood donation counselling, including adverse donor reactions, tests to be performed on your blood or any other doubts
- Responsibility to inform the blood transfusion service if your health status has changed within 28 days after donating
- Right to confidentiality. Any personal information you provide to the blood transfusion service should not be given to any third parties or made public









Why should I donate?





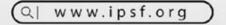




Why should I donate?

Blood cannot be produced. Therefore, constant donations are needed in order to maintain a sufficient blood supply. According to WHO, eight out of ten people need blood or blood-derived products at some point in their lives. One out of every ten patients in hospital requires a transfusion. Even though an average of 3 donations is transfused per patient, some require more, depending on their health conditions. Blood is constantly needed and the main recipients are patients who have suffered from accidents, patients with anaemia, malaria, cancer, bleeding disorders (e.g haemophilia), those who have undergone a surgical procedure or even women during pregnancy or following childbirth. The need for blood never stops.

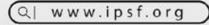






Can blood be replaced?





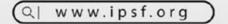




Can blood be replaced?

The main blood components include red cells (responsible for carrying oxygen and removing carbon dioxide, platelets and coagulation factors). Nowadays, although haemoglobin solutions produced from cattles' blood exists that also carries oxygen, these solutions aren't easily accessible and only circulate in the bloodstream for a limited time. In other situations, blood loss can be replaced with synthetic solutions such as normal saline. Once again, these are just temporary options, as they do not have the ability to carry oxygen. They are used as emergency treatments (for example, in an ambulance) until the patient receives a blood transfusion. Therefore, blood can't ever be replaced, so we rely on generous donors to fulfill the needs of many patients.







What are the different blood types that exist?







What are the different blood types that exist?

ABO blood type system: blood type is classified by the presence or absence of antigens that trigger an immune response if they are foreign to the body. The ABO system consists of the following four major groups:

ABO Blood Group System				
Group	Α	В	АВ	0
Red Blood Cell Type				
Antigens Present	Antigen A	Antigen B	Antigen A & B	None
Antibodies Present	Anti-B	Anti-A	None	Anti-A & Anti-B

Rh system: blood type is determined by the presence (Rh+) or absence (Rh-) of Rh factor.

Together, the ABO and Rh system classify the eight common blood types (A+, A-, B+, B-, O+, O-, AB+, AB-).

It is possible for there to be variants to this classification as there are many other antigens present in the structure of red blood cells. For example, there could be people that have unusual red cell antigens or others that lack antigens which are common to most people. These cases are even more rare and makes it harder to find a suitable donor.









What is blood type compatibility?



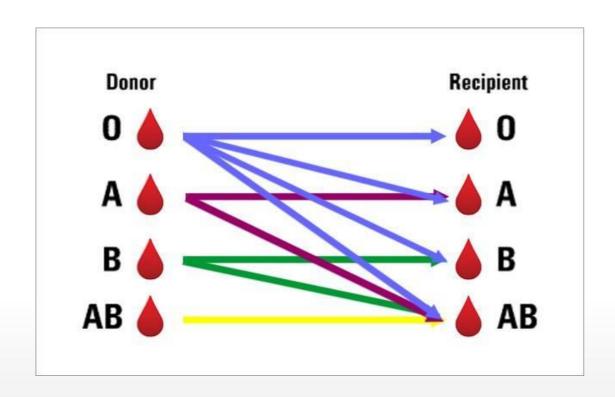


What is blood type compatibility?

For a safe blood transfusion, each patient is compatible to one or more types of blood.

Health Public He

ABO:



Rh system:

- Rh- blood can be given to Rh- patients
- Rh- or Rh+ blood can be given to Rh+ patients

The universal donor is therefore 0-









Why can't I take any aspirin, ibuprofen or other anti-inflammatory drugs before I donate?







Why can't I take any aspirin, ibuprofen or other anti-inflammatory drugs before I donate?

The mechanisms of action of these drugs influence the function of blood platelets. Aspirin and NSAIDs (nonsteroidal anti-inflammatory medications) irreversibly inhibit platelet aggregation. When you donate blood, it can be used as a whole, or separated into other components (red cell concentrates, platelet concentrates, plasma and cryoprecipitate) that can be utilized for different patients according to their needs. Platelets are responsible for the clotting process and may need to be transferred to patients who, for example, are subjected to chemotherapy. If you take these drugs, the function of the platelets could be compromised.







What are the steps involved in the blood donation process?







What are the steps involved in the blood donation process?

- During the registration process, you may be asked to provide personal information such as age, weight, ID number and date of birth
- You may also be required to fill in a medical history survey that assesses whether you fulfill all the requirements to donate
- Blood donor counselling involves a confidential dialogue between a blood donor and a trained staff member from the blood transfusion service. Personal questions may be asked in order to evaluate the risk of transmitting any transfusion-transmissible infections. It is also an opportunity for you to ask any questions you may have. You will also sign an informed consent form.
- The finger prick test measures your haemoglobin levels to ensure they are in the acceptable range that allows you to donate. Other vital signs such as blood pressure and pulse may be measured as well.
- The donation is performed by a professional and usually takes 15-20 minutes. Afterwards, you are asked to remain behind for a few more minutes to see if you have any problems after the donation.
- Refreshments such as a soft drink and a snack are usually provided
- The entire process usually takes one hour









Does the needle hurt?





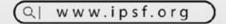




Does the needle hurt?

No. At the beginning, it is normal to feel a small sting but you should not feel any pain during the rest of the process. In case you do, please let the staff member know.



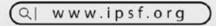






How much time will it take for the body to recover the volume of blood I donate?









How much time will it take for the body to recover the volume of blood I donate?

Your body replenishes the blood volume within the next 24 hours. New blood cells are also replaced within the next 3-4 weeks. As for the iron, it usually takes around 6-8 weeks.









What are the side effects of donating?



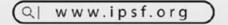




What are the side effects of donating?

There may be no side effects. Generally, people feel great and don't experience any problems. Follow the advice of the blood transfusion service before and after donating so as to minimize any possible discomforts. On the other hand, there are people who may feel light-headed or could faint after donating. That's why you are advised to stay for a few more minutes after the process! You can also develop a bruise around the venipuncture area, but it's usually harmless!









Can I donate during my menstrual period?







Can I donate during my menstrual period?

Usually yes! In case you have cramps or feel unwell, you could be advised to self-defer.







Can I exercise after donating?







Can I exercise after donating?

It is advised that within 4 hours after donating to eat and drink plenty of fluids. If you are feeling well, you can participate in any sport activities, but avoid extreme sports or lifting heavy objects. If you are participating in an important sports event such as a marathon or a competitive match where you need to perform at your highest level, it is better to postpone your donation to another time. Alternatively, it is possible to donate only platelets instead of whole blood. This process enables the red blood cells to return to your bloodstream without compromising your performance.







I only want to donate platelets. Is the process different from blood donations?



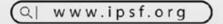




I only want to donate platelets. Is the process different from blood donations?

Although the requirements for donating platelets are the same as for blood donation, the process is a bit different. It requires a different machine for the process that extracts only platelets. You need both arms for the donation; one where the blood is taken from and the other that receives back the rest of the blood components (after the platelets have been extracted). Another difference is the time needed for the whole process. Platelet donation usually requires 3 hours (as it takes longer to separate the platelets). Many people read or watch a movie while donating, so it doesn't seem to take as long. The needle used is also smaller which some donors might find more comfortable. Lastly, you can also donate platelets more frequently compared to blood. The need for platelets is constant, as they must be used within five days of donating.







How often can I donate?



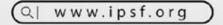




How often can I donate?

Generally, in a whole blood donation, the minimum interval is between 16 weeks for women and 12 weeks for men. On the other hand, if you donate platelets for example, you can donate more often.









What are the age requirements?



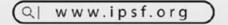




What are the age requirements?

Generally, in most countries, you are able to donate if you are 18 years and above. It is also a possibility in some countries, that you can donate below the minimum age (at 16 or 17 years old for example) as long as you have fulfilled all other requirements and have a specific consent allowance to do so. As for the age limit, the national blood transfusion system should consider the life expectancy of the population. Usually, the limit is 65 years old. It is recommended though, that a first-time donor over the age of 60 years, should make their first donation when a doctor is available on-site.







I have recently been sick. Can I still donate?



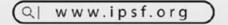




I have recently been sick. Can I still donate?

If you have been feeling any non-specific symptoms (for example, general malaise, pain, fever, headache, cough, diarrhoea), it could be an indicator of an acute infection that may be transmitted via your blood. That is why you are asked whether you have been sick in the weeks leading up to the donation. People who are currently sick are also asked to defer (although there is no evidence that common upper respiratory infections can be transmitted via a transfusion, precautions are made to erase that possibility). So according to WHO guidelines, individuals with a recent record of infection are asked to defer for 14 days, following a full recovery and cessation of any therapy including antibiotics.



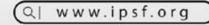




How long after giving birth can I donate?





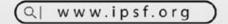




How long after giving birth can I donate?

During pregnancy, women may need an extra amount of iron (approximately 350-500 mg). Due to this increased demand for iron, women should defer donating blood during pregnancy and for a sufficient time after giving birth (minimum of 6 months). The same criteria applies to women who have recently gone through an abortion. Women cannot donate during the lactation period either.









What if I am taking medication? Can I still donate?





What if I am taking medication? Can I still donate?



That depends not only on the type of medications you are on, but also the reason why you are taking them. So when you are donating, make sure to tell the blood transfusion service staff member about any treatments you are on. Although the plasma concentrations of the drug you take may be below 10% of the therapeutic level, there are however, some precautions regarding some drugs:

- Aspirin defer for 5 days
- Other NSAIDs defer for 48 hours
- Teratogenic and fetotoxic drugs retinoids (acitretin defer for 3 years; isotretinoin defer for 28 days), benign prostatic hypertrophy treatments (dutasteride defer for 6 months; finasteride defer for 28 days). The deferral criteria relies on the possibility of the blood being transfused into a pregnant woman.
- Injected medications defer
- Individuals treated with human pituitary-derived growth hormone unable to donate permanently
- Antibiotics used for acute infections defer for 14 days after completion of treatment and without any symptoms
 of infection









I am taking antibiotics for acne. Can I still donate?



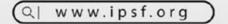




I am taking antibiotics for acne. Can I still donate?

Yes, you can because acne treatments are usually lower-dose antibiotics. On the other hand, when antibiotics are being used to treat acute infections, you are asked to defer for 14 days after completion of treatment. Why? The reason behind this is the infection itself and the possibility of transmitting pathogenic agents through transfusion, not the antibiotics.









I have tattoos and piercings. Can I donate?







I have tattoos and piercings. Can I donate?

Some cosmetic treatments and rituals such as tattoos or piercings require the penetration of the skin and an increased risk of infections such as HIV, HBV and HCV, unless performed in controlled sterile conditions. So after evaluating your risk of transfusion-transmissible infections (TTIs), the blood transfusion service staff member will ask you when, where and by whom you underwent such a procedure. Depending on factors such as the sterility and safety of the procedure, it might be possible that you are asked to donate another time. WHO guidelines state that, "individuals who have had acupuncture, piercing, tattoos, ritual scarification or any other invasive cosmetic procedures (injections with collagen or botulinum toxoid (botox), electrolysis and semi-permanent make-up) should defer for 12 months following the last procedure."







I was vaccinated recently, can I donate?







I was vaccinated recently, can I donate?

This depends also on which type of vaccine you received. For <u>live attenuated viral and bacterial vaccines</u> (hepatitis A, Japanese encephalitis, influenza, measles, mumps, rubella, polio (oral), smallpox, yellow fever, BCG, cholera and typhoid) it is recommended to defer for 28 days after being vaccinated. Although these attenuated agents aren't harmful to the donor, we have to consider the possibility that the blood could be transfused to an immunocompromised patient (which could theoretically affect his/her health).

For inactivated vaccines and toxoids (cholera, diphtheria toxoid, hepatitis B, human papillomavirus (HPV), influenza, meningococcal meningitis, pertussis, pneumococcal, polio (injected), rabies, tetanus toxoid, tick-borne encephalitis and typhoid), there is no risk of causing an infection in an immunocompromised patient. The only exception is the HBV vaccine which requires the person to defer for 14 days.









I was diagnosed with hypertension and take medication for it. Can I donate?



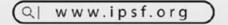




I was diagnosed with hypertension and take medication for it. Can I donate?

There is currently no evidence that individuals who have hypertension are at greater risk of experiencing blood donation adverse reactions. In addition, anti-hypertensive drugs are not known to cause any harm to the recipient of your blood. So generally, you can donate as long as you are well-controlled by a medication. An exception applies to individuals who have started taking medications recently or whose dosage was just adjusted (the recommendation is to defer for 28 days after the stabilization of blood pressure).







I have diabetes and I take medication for it. Can I donate?



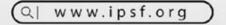




I have diabetes and I take medication for it. Can I donate?[5]

As for now, there is no evidence that individuals who have diabetes are at greater risk of experiencing blood donation adverse reactions. You may donate, given that you don't require insulin, have any other organ complications and your disease is under control (either through diet or oral hypoglycemic medications).







References



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