

Blood donation: what you need to know

To read before donating



ACCORDING TO THE PRODUCT COLLECTED	WHOLE BLOOD	PLASMA by apheresis	PLATELETS by apheresis	WHITE BLOOD CELLS (granulocytes) by apheresis	COMBINED DONATION by apheresis
Approximate collection duration	10 to 15 min	45 min	75 min	90 min	25 to 90 min
Interval between donations	men: 56 days women: 84 days	6 days ¹	14 days ¹	10 days	Varies according to the products collected ^{1, 2}
Weight and height	50 kg/110 lb and more	50 kg/110 lb and more. The volume collected must be less than 18% of the donor's estimated blood volume based on height and weight.			
BEFORE DONATION					
Drink at least 500 ml of water or juice and make sure to eat well while avoiding fatty foods (e.g., bacon, fried foods, etc.).	✓	✓	✓	✓	✓
Answer questions about: ‣ health status; ‣ risky behaviors related to communicable diseases.	✓	✓	✓	✓	✓
Agree to have Héma-Québec check: ‣ blood pressure and temperature;	✓	✓	✓	✓	✓
‣ hemoglobin levels ³ ;	✓	✓	✓	✓	✓
‣ platelet levels;			✓	✓	✓
‣ protein levels;		✓ ⁴			✓ ⁵
‣ white blood cell levels.				✓	
Sign a consent to donation.	✓	✓	✓	✓	✓
AFTER DONATION					
Fluids are administered to the donor.		✓ ⁶		✓ ⁷	
An anticoagulant is added to the blood ⁸ .		✓	✓	✓	✓

¹ At the first plasma donation by apheresis, and every eight donations thereafter, Héma-Québec measures the concentration of proteins and certain antibodies (immunoglobulin G or IgG) in your blood. ² Examples of combined donations: double platelet and plasma donation, platelets and plasma. ³ Hemoglobin is a protein containing iron that is found in red blood cells. ⁴ For frequent donors. ⁵ For frequent donors making a combined donation of platelets and plasma or a double donation of platelets and plasma. ⁶ The fluids ensure optimal comfort through the replacement of lost blood volume. ⁷ A product is added to the blood that attaches to red blood cells and facilitates their separation from white blood cells. ⁸ To prevent the blood from clotting once outside the body. A portion of this substance is returned to the donor with the non-collected products.

FOR ALL TYPE OF DONATIONS



After the donation

- Rest and drink plenty of fluids such as water or juice. Avoid alcoholic beverages.
- Keep the bandage on the puncture site for six hours.
- Avoid any intense physical activity for six to eight hours. Blood donation can affect the performance of intense physical activity for a few days, particularly in the case of a red blood cell donation.
- In case of weakness: sit down with head between the knees or lay down with legs elevated for a few minutes. Depending on the donor's occupation or exercise practices, extra time may be needed before regular activities can be resumed (e.g., bus driver, heavy machinery operator, etc.).



Decrease of the iron reserve

For each donation, Héma-Québec verifies hemoglobin or hematocrit levels, but does not systematically do a ferritin test to verify the body's iron stores. Depending on the components collected, donating blood (including the collection of blood samples) may result in a loss of iron, and it can take several weeks for your body to replenish this loss. The donor should eat a diet rich in iron to make up for this. For more information, please visit Héma-Québec's Web site. Frequent whole blood donors (three donations or more for men and two donations or more for women) should:

- talk to their doctor about the possibility of checking their iron reserve through a ferritin test;
- consider using iron supplements, with advice from their doctor or pharmacist. A dosage of 18 mg elemental iron or more per day for 12 weeks following a donation may be sufficient.



Tests conducted

Héma-Québec analyzes all the blood donations it collects to detect blood-borne diseases:

- hepatitis A, B and C;
- human T-cell lymphotropic virus (HTLV I/II)⁹;
- syphilis⁹;
- human immunodeficiency virus (HIV);
- West Nile virus (WNV)⁹:
 - this test is conducted systematically during the epidemiologic season; outside of this period, it is only performed if the donor has travelled outside of Canada in the past 56 days;
- Chagas disease⁹:
 - this test will be conducted for donors if they, their mother and/or their maternal grandmother were born in a Latin-American country (including Mexico) or if they have spent 30 consecutive days or more in one.
- parvovirus;
- cytomegalovirus (CMV), as needed.

Any other necessary test related to Héma-Québec's mission could be carried out.

There may be situations in which these tests are not conducted (e.g., damaged sample). In this case, the blood donation is destroyed without further analysis.

In the event of an abnormal result:

- the donation is destroyed;
- the donor is notified and his or her results are kept confidential, but are shared with Canadian Blood Services to determine the length of time during which he or she cannot donate;
- the local Director of Public Health will be notified of a positive result in cases where the law requires it.

Other tests conducted:

- phenotypes (ABO, Rh and, if necessary, other blood groups);
- hemoglobin type, if applicable;
- bacterial culture of platelets.

⁹ These tests do not apply in the case of plasma donations to be used to manufacture medications.

Adverse reactions

ADVERSE REACTIONS	SIGNS AND SYMPTOMS (non-exhaustive)	FREQUENCY	WHOLE BLOOD DONATION	APHERESIS DONATION
Ecchymosis (bruise) at the puncture site		Occasionnal	✓	✓
Pain or numbness in arm	Usually short term	Occasionnal	✓	✓
Nausea, vomiting, fainting		Occasionnal	✓	✓
Fatigue the day after donation		Occasionnal	✓	✓
Inflammation of a vein in the arm (superficial phlebitis)	Pain, warmth, redness	Very rare	✓	✓
Reduced iron reserve (ferritin)	Abnormal taste of certain substances such as ice, fatigue, reduced stamina, memory and mood problems	More likely to occur in frequent donors	✓	✓
Destruction of red blood cells (hemolysis) ¹	Pink- or red-tinged urine after the procedure	Very rare		✓
Reaction to sodium citrate (anticoagulant)	Numbness or tingling of the lips, face or fingertips	Frequent (5% of donors)		✓
	Presence of a metallic taste	Frequent (5% of donors)		✓
Chills		Occasionnal		✓
Other ²		Very rare		✓

¹ There is a risk of hemolysis during the procedure, although this is very low. If not treated, hemolysis can have serious, even fatal, consequences. For the donor's protection, Héma Québec's staff ensures close monitoring to detect hemolysis. If need be, the procedure is stopped immediately. ² Cases of pulmonary or gas embolism have been observed in the past with less sophisticated collection equipment. The modern collection equipment used by Héma-Québec prevents the risk of embolism.



Risky activities and screening tests

Sexual relations¹ or the sharing of needles or syringes can contribute to the spread of blood-borne viruses. Despite the effectiveness of screening tests, there is a period during which, even if the donor feels well and tests negative for HIV and hepatitis B and C, he or she may have recently been infected and may therefore transmit these

viruses to a person receiving a product made from his or her donation. The donor must notify Héma-Québec immediately if he/she believes, for any reason whatsoever, that his/her blood should not be transfused to a patient. A blood drive is not the proper place for a health exam or to be screened for HIV or hepatitis B and C.

¹ The term "sexual relations" refers to the following acts with or without the use of a condom or other protection method: vaginal penetration (contact of the penis and the vagina), oral sex (contact of the mouth or the tongue and the vagina, the penis or the anus) and anal penetration (contact of the penis and the anus).



Are you a trans or non-binary person?

If so, please take the time to read about the risks associated with blood donation that could affect your health:

- › on the Héma-Québec website by scanning the QR code; or
- › during your selection interview by asking the staff for a flyer on that subject.



Héma-Québec staff can also record personal information in your file, on a strictly confidential basis, for the sole purpose of providing any follow-up required should you experience an adverse reaction during or after a donation. Your decision to disclose information is voluntary and will not affect your eligibility to donate blood.



Research project : pre donation blood pressure

By consenting to donate blood, you also consent to participate to a research project aimed to assess the effectiveness of the pre donation blood pressure measure. Before the COVID-19 pandemic, donors with high or low blood pressure were deferred to prevent donor adverse reactions, although few data support this practice. To enhance the sanitary measures, pre donation blood pressure has been temporarily lifted and no increase related to adverse reactions was observed. To confirm this observation, we will measure your blood pressure and you will be eligible even if your result is out of range. Your result will be communicated to you, and if needed, we may advise you to consult a physician.



Use of donations and personal information

The products collected are used for transfusions or drug manufacturing. On rare occasions, they may also be used for teaching purposes, specialized laboratory analysis (transfusion medicine), product quality control or international assistance.

Héma-Québec collects personal information from donors through their interactions with staff and via completed questionnaires. This information is required in order to make a blood donation. This information, including test results, is used to determine eligibility for blood donation, manage donations and communicate with donors.

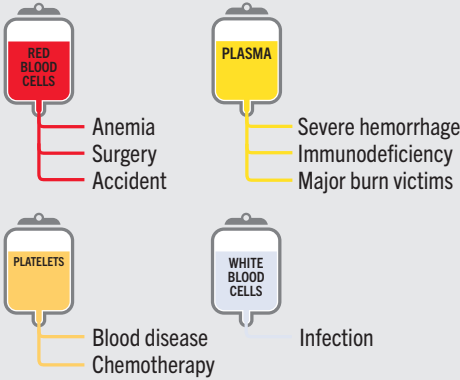
Héma-Québec may disclose information to Canadian Blood Services and to hospitals or other blood transfusion centres, some of which are located outside Quebec, for blood recipient safety purposes.

Donors can view their personal information and have it corrected by contacting the person responsible for access to documents and protection of personal information at responsable.acces@hema-quebec.qc.ca

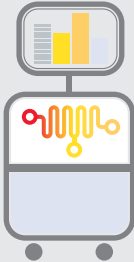
At any time, the donor may change his or her mind and decide not to donate.

Did you know?

› Different transfused products are used depending on the patient's condition



› A technology called apheresis makes it possible to collect only the desired blood components



Apheresis

During a donation by **apheresis**, the blood is separated as the collection takes place by a machine that collects only the desired blood components (plasma, platelets or white blood cells) and returns the others to the donor.

This type of donation is done in a GLOBULE Blood Donor Centre or a PLASMAVIE Plasma Donor Lounge.

Original text in French. In the event of a discrepancy between the English and French versions, the latter will prevail.

