

Blood Donation Frequently Asked Questions

Q: What do I need to do to donate blood?

A: Contact your local blood center and request an appointment to donate.

Q: What are the requirements for donating blood?

A: The national guidelines for blood donation are that a donor must be at least 17 years old, weigh over 110 pounds, and be in general good health. You should feel well on the day of your donation. If you feel symptoms of a cold or flu, contact your blood center and ask to reschedule your appointment for a few days later.

There are many other factors that can make a person ineligible to donate blood, but these can vary by blood center. If you have questions, you should speak with a blood center representative prior to your appointment date. Some factors that make a person ineligible to donate include taking certain medications, some medical conditions, travel to particular countries, and tattoo and body piercing (for a limited amount of time).

Q: What happens when I get to the blood center?

A: Upon check in at the blood center, you will need to present identification and complete a form that asks general questions about you, your health, and your lifestyle. A blood center representative will then take you into a private room, ask you a series of questions, and run a basic health screen on you. The health screen may include taking your blood pressure, your pulse, a blood sample for iron levels, and your temperature.

When this is complete, you will be brought into the donor room to give a pint of blood or a unit of blood components (red cells, platelets, or plasma).

Q: How frequently can I donate blood?

A: Frequency of blood donations varies by the blood component you are donating:

“Pint” whole blood donors – can donate every 56 days

Double red cell donors – can donate every 112 days

Red cell/plasma donors – can donate every 56 days

Plasma donors – can donate every 28 days (but more frequently when donating at a commercial plasma center)

Platelet donors – can donate every 2-3 days up to a total of 24 times a year

Q: What organizations collect blood, and where does collected blood go?

A: The principle organizations that collect blood include nationwide blood bank systems and community blood banks (which support the needs of patients in their community’s hospitals). Typically, blood collected in a geographic region is used within that region. However, blood banks that have a surplus of blood export their blood to regions suffering shortages.

Q: What are the components of blood and how are they used?

A: There are four components in blood: red blood cells, white blood cells, platelets and plasma. Red blood cells supply oxygen to various parts of the body. White blood cells fight against disease or infections. Plasma carries nutrients, clotting factors and enzymes. Platelets help clot the blood to prevent excessive bleeding. Today, doctors transfuse individual blood components based upon the patient’s needs. Major categories of patient needs include: cancer therapy, organ transplants, accident victims and people undergoing elective surgical

procedures. Whereas cancer patients, for example, may primarily need platelets, the vast majority of patients need red blood cells.

Q: What is an automated blood donation (also known as “apheresis”)?

A: Automated blood donation uses technology developed by Haemonetics Corporation (NYSE: HAE). During an automated procedure, a qualified blood donor donates specific blood components. Blood is collected via a single-use disposable kit and separated while a person is donating. It is spun until the heavier blood components – the red blood cells, are pushed to the outside of the centrifuge bowl and lighter products, such as plasma, remain near the middle. This separation process is more accurate than traditional whole blood collection, for which operators must manually separate blood components. It also allows for the collection of one or two complete units of blood components immediately ready for transfusion to a patient.

Q: What is the MCS®+ system?

A: In support of automated blood donation, Haemonetics manufactures a medical device called the MCS+ mobile collection system. There are two types of MCS+ devices:

1. The *MCS+ 8150* uses automated technology to collect two units of red blood cells (double red cells) from qualified donors. By collecting two units of red cells, blood banks can simultaneously double the donation amount and improve red blood cell availability to the community. In addition to collecting double red cells, the *MCS+ 8150* can also collect a single unit of red cells and a “jumbo unit” of plasma simultaneously. Also, a filter is now available with this system. The filter removes the white blood cells from the blood as part of the collection procedure. White blood cells may be harmful if transfused to patients.

2. The *MCS+ 9000* can collect either one unit or two units of platelets. This collection amount is significant, since one unit of apheresis platelets is equivalent to the number of platelets derived from six to 10 whole blood donors. This device also has a protocol which filters out white blood cells from the unit of platelets.

Q: What is the PCS®2 system?

A: The PCS2 system is a Haemonetics automated blood donation system that collects one to two units of plasma from a donor.

Q: Why are some blood donors paid while others are not?

A: In the U.S., blood components for transfusion to patients must be donated by volunteer, unpaid donors. This is one way in which blood collectors can assure a safe blood supply. Paid blood donors can only donate plasma, and this plasma is then used by pharmaceutical companies to make drugs. This plasma goes through a great deal of processing to insure its safety. Blood for transfusion does not go through the same processing.

Q: How does paid plasma donation differ from volunteer blood donation?

A: A paid plasma donation is the same as any other automated donation process. Blood is drawn from the donor, that blood is separated during the donation process in a machine that sits next to the donor. The plasma is centrifuged from the blood and directed into a plasma collection bottle. The remaining portion of the blood is returned to the donor. This processing takes place within a closed circuit, disposable set, meaning that the donor’s blood is never exposed to air, contamination, or any other person’s blood. It is a safe process that has been in use for many years.

Paid plasma donors can donate much more frequently than volunteer blood donors. Plasma donors should contact their local donation center for specific donation guidelines.

Q: Who can donate using the MCS+ system?

A: To qualify to donate using the MCS+ system, donors must meet the same guidelines as they would to donate a pint of whole blood: be at least 17 years old, weigh more than 110 pounds, and be in good health. For donors who would like to donate two units of red blood cells using the MCS+ technology, male donors must be a minimum 5'1" tall and weigh 130 pounds and female donors must be at least 5' 5" tall and weigh 150 pounds. To ensure donors are in optimal condition to donate, they must wait about four months between double red blood cell donations. If potential donors do not meet the double red blood cell protocol height and weight requirements, they are still eligible to use automated technology to donate one unit red blood cells/one unit plasma or to donate platelets.

Q: How long has the MCS+ system been available for use in the U.S.?

A: The MCS+ system has been available for use in the U.S. since 1992 when Haemonetics received clearance from the FDA to market it for collection of platelets. Since that time the FDA has cleared the system for a number of other uses. In 1995, the FDA cleared the device for the collection of one unit of red cells and one unit of plasma, and in 1996, for the collection of two units of red blood cells from patients donating blood for their own surgeries. In 1997, Haemonetics received FDA clearance to use the MCS+ system to collect two units of red blood cells from volunteer blood donors, and in 2000, that same MCS+ system was cleared for the collection of two units of leukoreduced red cells.

Q: Why collect blood?

A: It is estimated that in the United States, every three seconds a patient needs blood for procedures ranging from emergencies to elective surgeries to cancer treatments. Sometimes the blood can be pre-donated by the patient (autologous donation). However, most of the blood used during transfusions comes from healthy volunteer blood donors (allogeneic donation). Unfortunately, the need for blood often outweighs the available supply.

Q: What are the ramifications of blood shortages?

A: Blood shortages can cause:

1. *Treatment delays for patients.* With a limited blood supply, the least critical surgeries are at risk of being canceled, since blood must be allocated to acute needs first.

2. *Economic strain on blood collection centers.* To help ensure an adequate blood supply, blood banks that cannot meet the demand in their region are compelled to import blood from other regions that have a surplus. Ironically, the funds used to purchase blood are often dollars reallocated from donor recruitment leading to a classic "catch-22", since a broader donor pool would decrease or eliminate the need to import blood. Importing blood is costly and strains a blood bank's limited budget. This is a serious problem because blood banks are typically community-based, not-for-profit organizations with limited resources.

Q: What is the status of blood supply in the United States?

A: The blood supply in the U.S. is consistently low. The demand for blood increases each year faster than the rate at which people are donating blood. Fewer than five percent of the eligible donors in the U.S. give whole blood. As a result of this limited volunteer donor base, the supply of red blood cells (the most used blood component) barely serves the growing demand. To put this need into context, currently more than 4,000 gallons of red blood cells are used in the U.S. every day — and the amount is increasing.