Who can be an apheresis donor?

The requirements are similar to whole blood donations. Apheresis donors must:

- Be at least 18 years old.
- Be in good health.
- Weigh at least 120 pounds.
- Male donors and female donors who have never been pregnant are preferred for platelet and plasma donations. Women who have been pregnant must have additional, special testing.
- There are also government regulations to protect your safety and the safety of the patient who will receive your donated blood. These are related to some health conditions, pregnancy, and travel outside of the United States or Canada and other things. Staff members at the UCHealth Garth Englund Blood Center will give you more details.

Are apheresis donations safe?

Yes! Donor safety is our top priority—automated blood collections are very safe. During the donation, blood is taken from your arm using a sterile needle and channeled through single-use tubing into a single-use collection kit within the apheresis machine. The machine spins the blood to separate it, collects the most-needed parts and safely returns the remaining blood through the same sterile needle that was used for collection.

To make sure that only a safe amount of blood is taken, the collection process is customized based on the donor's physical size and how often they donate, and several other factors. During platelet collections, only a small percentage of your platelets are collected, so there is no risk to you of bleeding problems. Your body will replace the donated platelets within 72 hours.

Each donation is supervised by trained staff who watch the donor during the whole process. Before your first donation, the staff member who interviews you will also talk with you about the risks involved with apheresis donation.

To prevent clotting during the procedure, your blood is mixed in the machine with a liquid called an "anticoagulant." When the blood is returned to you during the procedure, the anticoagulant can sometimes cause numbness and tingling of the fingertips or around the mouth. If you feel numbness and tingling, you should tell the operator running the machine right away. These symptoms are easily treated by slowing down the collection process to make you comfortable. The anticoagulant is quickly metabolized (processed) within your body after it is returned to you and is not a danger to you after your donation.

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Apheresis Donation

A special kind of blood donation.

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Do something extraordinary today and make a platelet donation.

What is apheresis and how does it work?

Apheresis (ay-fur-ee-sis) is a special kind of blood donation. We use an automated process that lets a donor give blood, and then separates the whole blood into its 3 basic parts—platelets, red cells and plasma. During apheresis donation, we only keep the specific part of the blood that is needed. The rest of your blood is then safely and comfortably returned to you. The needle, tubing and kit we use in this process are all sterile and disposable. Your blood stays in a closed system the entire time it is being processed.

Platelet donation:

Platelets are tiny cells in your blood that help control bleeding. When a blood vessel is damaged, platelets collect at the area that is injured and temporarily repair the tear. Platelets then activate the parts of the plasma which form a clot and help the wound to heal.

In a platelet donation, an apheresis machine collects your platelets along with some plasma, returning your red cells and most of the plasma back to you. A single donation of platelets can give us several transfusable units to use. In comparison, it would take the platelets from about 5 whole blood donations mixed together to make up 1 single transfusable unit of platelets.

Who it helps: Platelets are a very important part of cancer treatments, trauma situations, heart surgery, and other surgical procedures.

How long it takes: About 1.5 to 2.5 hours.

The best blood types are: All blood types.

How often you can donate: Every 14 days, up to 24 times per year.

Medicines: Aspirin and antiplatelet medications have an effect on donated platelets, so you will be asked when you took your most recent dose. The times are different for each medicine, but you must not take aspirin within 2 days of your donation.

Why is there always a need for platelets? Platelets are only usable for 5- to 7-days after donation.

Double red cell donation:

During a double red cell donation, you give a concentrated dose of red cells. This is the part of your blood that is needed every day to help people who need a transfusion as part of their care. This type of donation uses an automated process that separates your red blood cells from the other parts of your blood, and then returns your plasma and platelets back to you.

With just a little extra time at your appointments, you can donate twice as many red cells as you would with a whole blood donation. This increases how much you can help patients in need.

Who it helps: Red cells are usually given to trauma patients, newborn babies, emergency transfusions during birth, and anyone suffering from blood loss.

How long it takes: About 1 to 1.5 hours.

The best blood types are: O positive and O negative

How often you can donate: Every 112 days, up to 3 times per year.

Plasma donation:

During a plasma donation, you give the part of your blood that is used to treat patients in emergency situations. Type AB plasma may be given to anyone, no matter what blood type they have. Plasma is collected through an automated process that separates plasma from the other parts of your blood, and then returns your red blood cells and platelets back to you. Plasma donation maximizes your donation and takes just a few minutes longer than the regular way of donating blood.

Who it helps: AB and A plasma is used in emergency and trauma situations to help stop bleeding.

How long it takes: About 1 to 1.5 hours.

The best blood types are: AB positive, AB negative, A positive and A negative.

How often you can donate: Every 28 days, up to 13 times per year.