

## Apheresis Blood Donation

Robert Wood Johnson University Hospital Blood Services

### Automated Blood Donation

**AUTOMATED BLOOD COLLECTION** (also known as apheresis) allows a donor to give multiple blood components, such as red blood cells, platelets or plasma. During the procedure, all but the needed blood components are returned to the donor.

The most common type of blood donation is whole blood donation. Automated donation can save three lives simultaneously, unlike whole blood donation.

### Why is Blood Separated?

Patients need different types of blood components depending on their illness or injury.

Red blood cells are made in the marrow of bones, especially the vertebrae, ribs, hips, skull and sternum. These essential cells fight infection, carry oxygen and help control bleeding.

Platelets are blood cells that help control bleeding. When a blood vessel is damaged, platelets collect at the site of the injury and temporarily repair the tear. Platelets then activate substances in plasma which form a clot and allow the wound to heal.

Patients with cancer, blood disorders or severe injuries require platelet transfusions to survive. Because platelets can be stored for only five days, the need for donations is continuous.

Plasma is the fluid component of the blood that carries other blood cells, nutrients and clotting factors throughout our bodies.

By giving plasma, you will be providing life-giving transfusions to patients suffering from burns, traumas and bleeding disorders.

Six to eight whole blood donations must be separated and pooled to provide a single platelet transfusion. However, one automated donation provides enough platelets or plasma for one complete transfusion, providing a much safer product for our patients.

### Who Can Be an Automated Donor?

If you meet the requirements for donating blood, you probably can give platelets. Apheresis donors must:

- Be at least 17 years old
- Be in good health
- Weigh at least 110 pounds
- Not have taken aspirin, non-steroid anti-inflammatory drugs, Plavix or other products containing aspirin 48 hours prior to donation (for platelet donations)

### Is Automated Donation Safe?

Each donation is closely supervised throughout the procedure. A small percentage of your platelets or plasma are collected, so there is no risk of bleeding problems. Your body will replace the donated platelets and plasma within 2 to 3 days. Donation equipment is sterile and discarded after every use.

### How Does the Procedure Work?

Blood is drawn from your arm through sterile tubing into a centrifuge. The centrifuge spins the blood to separate the components. A port is opened along the spinning tubing at the level containing either the platelets or plasma to be donated. These platelets or plasma are drawn up into a collection bag, while the remaining blood components (red blood cells and plasma or platelets) are returned to you through the same arm.

Depending on your weight and height, the entire automated donation process may take up to two hours. You may watch television, listen to music or sit back and relax.

To learn more or to become a blood donor, call 732-235-8100 ext. 221 or 248 or 908-685-2926. If you are unable to donate blood, you can help by volunteering or by becoming a blood ambassador. Talk to us for information on how you can get involved!

## Donating Blood at Robert Wood Johnson University Hospital

There is an easy way to be someone's hero - simply by donating blood. In the United States, nine out of 10 people will need blood at some time in their lives. In fact, it is estimated that 85 percent of Americans will need a transfusion by age 75.

RWJUH Blood Services rely on the support of individuals and area service organizations to provide a significant amount of the blood used at the hospitals. However, the need for blood often is greater than the number of donors. Your donation can help save the life of someone in need.

All blood donated at RWJUH Blood Services is used for patients at RWJUH hospitals. There is no danger in donating blood, because sterile, disposable equipment always is used.

### Types of Donations

At RWJUH, blood donors have the option to donate in the following ways:

**General Blood Donations** also known as allogeneic (volunteer) blood donation can be used by any patient.

**Autologous Donations** offer patients the option of donating their own blood in anticipation of receiving blood during scheduled surgeries. With the coordination of a physician, a patient may give up to four units of blood within 35 days of the anticipated surgery.

**Designated Donations** allow loved ones to donate blood specifically for use by patients awaiting surgery. This type of donation must be made at least seven days prior to the scheduled surgery and is coordinated by the patient's physician. The donor must meet blood compatibility requirements or the blood will be used as part of the general inventory and used for another patient.

### Who Can Donate

#### Donors must:

- be at least 17 years old (16 years old with parental consent)
- weigh at least 110 pounds (120 pounds if 16 years old)
- present valid signature identification

#### You may not donate if you:

- have a history of viral hepatitis at age 11 or older
- are recovering from an infectious illness
- are in a high-risk group, such as those with AIDS
- recently had major surgery
- spent a total of three months or more in the United Kingdom between 1980 and 1996
- spent five years or more in Europe (including time spent in the United Kingdom between 1980 and 1996) since 1980
- served more than six months at a military base in certain European countries between 1980 and 1996

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