

Blood Donation

Information about blood groups and types



American Red Cross

Although blood is made up of the same basic elements, not all blood is alike.

Most people have one of the four common blood groups: O, A, B or AB. Blood groups further classified as Rh-positive or Rh-negative are called blood types.

There are hundreds of additional blood types that are much less common. These rare blood types occur in less than 1 out of 1,000 people. They are more complex variations on the common ABO blood types.

Inheritance

Blood groups, like eye color, is an inherited trait passed genetically from your biological parents.

Compatibility

Each blood type is only compatible with specific other blood types, so a donor's blood type and the recipient's blood type must be matched prior to transfusion.

Type O negative is the universal blood type and can be transfused to patients with any blood type.

Other parts of the blood have different compatibility. Type AB plasma and type AB platelets can be safely transfused to any patient, regardless of blood type.

The American Red Cross encourages donors of all blood types to donate. Blood of every type is always in demand for patients in need of blood transfusions.

For more information or to schedule your appointment to donate blood, visit or call: 1-800-RED CROSS (1-800-733-2767) or visit redcrossblood.org.

Blood type distribution

Blood Type	Caucasian	African American	Hispanic	Asian
O+	37%	47%	53%	39%
O-	8%	4%	4%	1%
A+	33%	24%	29%	27%
A-	7%	2%	4%	0.5%
B+	9%	18%	9%	25%
B-	2%	1%	2%	0.4%
AB+	3%	4%	2%	7%
AB-	1%	0.3%	0.2%	0.1%

Blood group inheritance

Parent 1	AB	AB	AB	AB	B	A	A	O	O	O
Parent 2	AB	B	A	O	B	B	A	B	A	O

CHILD's possible blood groups

O					●	●	●	●	●	●
A	●	●	●	●		●	●		●	
B	●	●	●	●	●	●		●		
AB	●	●	●			●				

Blood type compatibility

		Recipient's blood type			
		O	A	B	AB
Donor's blood type	O	● ●	●	●	●
	A	●	● ●		●
	B	●		● ●	●
	AB	●	●	●	● ●

Red blood cells
 Plasma/platelets