

reasons to **give** all about blood groups

What are blood groups?

All people belong to one of four inherited blood groups: A, B, AB and O. The letters A and B refer to the kind of antigens found on a person's red blood cells. An antigen is a protein or carbohydrate on the cell that triggers an immune response, such as the formation of antibodies. You inherit your blood type from your biological parents.

What are the four major groups in the ABO system?

- **Group A**--Blood has A antigen on red cells, and anti-B antibody on the plasma
- **Group B**--Blood has B antigen on red cells, and anti-B antibody in the plasma
- **Group AB**--Blood has both A and B antigens on red cells, but neither anti-A antibody nor anti-B antibody in the plasma. Since they lack anti-A and anti-B, people with AB blood are called **universal donors for plasma**.
- **Group O**--Blood has neither A nor B antigens on red cells, but anti-A and anti-B antibodies are in the plasma. Since their red cells lack A and B antigens, people with type O are called **universal donors for red blood cells**.

What is Rh?

Most people have an inherited antigen on their red blood cells known as RH, or D antigen. When the D antigen is present, a person's blood is Rh positive. When the D antigen is missing, the blood type is Rh negative. In general, Rh negative blood is given to Rh negative patients, and Rh positive blood or Rh negative blood may be given to Rh positive patients.

Do blood groups differ between ethnic groups?

Yes. For example, about 60 percent of the Hispanic population is group O. Only about 45 percent of the population of other ethnic groups is type O. Many African-Americans have group O or B blood. Nearly 20 percent of all African-Americans have group B blood, compared to 11 percent of Caucasians.

Why is Type O so needed?

Type O negative donors are called **universal donors** because their red blood cells can be transfused to people of all blood types. Blood from O positive donors can be transfused to people with positive blood types. The Red Cross is constantly recruiting donors who are O negative or O positive to meet patient need.

You can receive . . .

	O-	O+	B-	B+	A-	A+	AB-	AB+
AB+	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
AB-	🔴		🔴		🔴		🔴	
A+	🔴	🔴			🔴	🔴		
A-	🔴				🔴			
B+	🔴	🔴	🔴	🔴				
B-	🔴		🔴					
O+	🔴	🔴						
O-	🔴							

If your blood type is . . .

	Average	White	Black	Hispanic	Asian
O+	40%	37	47	53	39
A+	32%	33	24	29	27
B+	11%	9	18	9	25
O-	7%	8	4	4	1
A-	5%	7	2	4	0.5
AB+	3%	3	4	2	7
B-	1.5%	2	1	2	0.4
AB-	0.5%	1	0.3	0.2	0.1



American Red Cross

Please **give blood**

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