

Blood Types



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What is blood typing?

Blood typing refers to the presence or absence of antigens, or protein substances found on the surface of red cells. Blood groups (A, B, AB, and O) and Rh types are descriptions of certain antigens. In the following chart the ✓ indicates the antigen is present.

BLOOD TYPE	A Antigen	B Antigen	Rh Antigen
A-	✓		
A+	✓		✓
B-		✓	
B+		✓	✓
O-			
O+			✓
AB-	✓	✓	
AB+	✓	✓	✓

For example, donors who lack the A and B antigens and the Rh antigen are O negative donors. Donors who have a type B antigen and an Rh antigen are B positive donors.

How did I inherit my blood type?

Your blood type is determined by the blood types of your parents. The following chart illustrates the possibilities for children who have parents with certain blood type combinations.

FATHER	MOTHER	O	B	A	AB
O	O	✓			
O	A	✓		✓	
O	B	✓	✓		
A	A	✓		✓	
A	B	✓	✓	✓	✓
B	B	✓	✓		
AB	O		✓	✓	
AB	A		✓	✓	✓
AB	B		✓	✓	✓
AB	AB		✓	✓	✓

Who can receive my blood?

YOUR BLOOD TYPE	% OF POPULATION WITH BLOOD TYPE	PATIENTS WHO CAN RECEIVE YOUR RED CELLS	PATIENTS WHO CAN RECEIVE YOUR PLATELETS	PATIENTS WHO CAN RECEIVE YOUR PLASMA
O+	38%	O+, A+, B+, AB+ (84%)	ALL TYPES (100%)*	O+, O- (45%)
O-	7%	ALL TYPES (100%)*	ALL TYPES (100%)*	O+, O- (45%)
A+	34%	A+, AB+ (37%)	ALL TYPES (100%)*	A+, A-, O+, O- (85%)
A-	6%	A+, AB+, A-, AB- (44%)	ALL TYPES (100%)*	A+, A-, O+, O- (85%)
B+	9%	B+, AB+ (12%)	ALL TYPES (100%)*	B+, B-, O+, O- (56%)
B-	2%	B+, AB+, B-, AB- (15%)	ALL TYPES (100%)*	B+, B-, O+, O- (56%)
AB+	3%	AB+ (3%)	ALL TYPES (100%)*	ALL TYPES (100%)*
AB-	1%	AB+, AB- (4%)	ALL TYPES (100%)*	ALL TYPES (100%)*

* Depending on the patient's condition, type-matched blood products are often better for the patient and are transfused at the physician's discretion.