

What Type Are You?

We all have the same basic parts to our blood. However, we have different chemicals within our blood. One kind of chemical is called an **antigen**. Antigens are found on red blood cells. There are two basic kinds of antigens: A and B. Scientists have found that there are four types of human blood, depending on what kind of antigens are found in a person's blood.

If a person has type A blood, that person has antigen A on their red blood cells.

If a person has type B blood, that person has antigen B on their red blood cells.

If a person has both A and B antigen on their red blood cells, that person has type AB blood.

Some people do not have antigen A or B on their red blood cells. Those people have type O blood.

We said that a person can only lose about $1\frac{1}{2}$ or 2 liters of blood. If a person loses more than that, the person might die. Doctors may be able to add more blood to a person's body in a procedure called a **blood transfusion**. It is very important for the doctors to give the person the right kind of blood. If different blood types mix together, the red blood cells may clump. The blood will not be able to travel through the blood vessels properly, and the person may die. Let's see what kinds of blood can be used in a blood transfusion.

<u>Blood Type</u>	<u>Can Recieve Blood From</u>	<u>Can Donate Blood To</u>
AB	AB, A, B, O	AB
A	A, O	A, AB
B	B, O	B, AB
O	O	AB, A, B, O

Most people will have either type O or Type A blood. Scientists believe more than 85 percent of all people will have one of those two types of blood. That means that less than 15 percent of all people would have type B or type AB blood. Do you know your blood type? It might be very useful information in case you or someone in your family needs to have a blood transfusion.

Name: _____ Date: _____

Activity

There has been a terrible accident and several people have been injured. You are working in the hospital, taking care of the blood supply. You are low on blood, so you need some volunteers to give their blood. You check on your list of people who have given blood in the past. You find the following information.

Susan has type A blood.

Nan has type B blood.

Alan has type AB blood.

Barb has type O blood.

The injured people are rushed into the emergency room. The doctors quickly test their blood to find out what type of blood they will need. They rush the results to you.

Joanne has type O blood.

Karen has type AB blood.

Who can give blood to Karen?

Susan	<input type="checkbox"/> yes	<input type="checkbox"/> no
Nan	<input type="checkbox"/> yes	<input type="checkbox"/> no
Alan	<input type="checkbox"/> yes	<input type="checkbox"/> no
Barb	<input type="checkbox"/> yes	<input type="checkbox"/> no

Who can give blood to Joanne?

Susan	<input type="checkbox"/> yes	<input type="checkbox"/> no
Nan	<input type="checkbox"/> yes	<input type="checkbox"/> no
Alan	<input type="checkbox"/> yes	<input type="checkbox"/> no
Barb	<input type="checkbox"/> yes	<input type="checkbox"/> no