

**WHAT MAKES OUR BLOOD
DIFFERENT FROM OTHERS?**



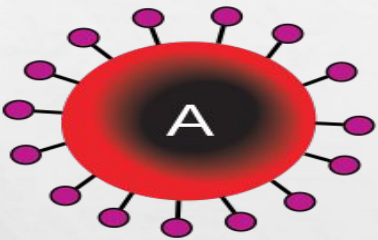
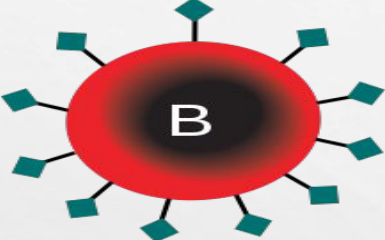
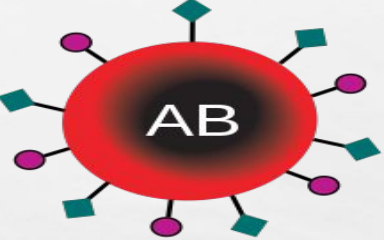
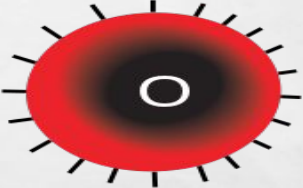
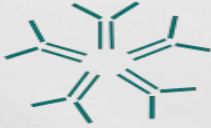

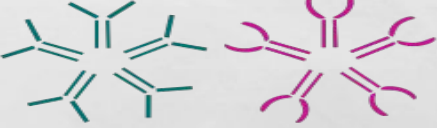



BLOOD TYPES



ABO SYSTEM BLOOD TYPES

- **MICROSCOPIC MARKERS (ANTIGENS) MAKES ONE BLOOD TYPE DIFFER FROM ANOTHER**
- **OUR BODY USES ANTIGENS TO KNOW IF THE BLOOD CELL OURS OR NOT**

THERE ARE 4 MAIN BLOOD GROUP

	Group A	Group B	Group AB	Group O
Red blood cell type	 <p>A</p>	 <p>B</p>	 <p>AB</p>	 <p>O</p>
Antibodies in Plasma	 <p>Anti-B</p>	 <p>Anti-A</p>	None	 <p>Anti-A and Anti-B</p>
Antigens in Red Blood Cell	 <p>A antigen</p>	 <p>B antigen</p>	 <p>A and B antigens</p>	None

RH FACTOR

- SOME PEOPLE HAVE ANOTHER MARKER ON THEIR RED BLOOD CELL
- MARKER D OR RH FACTOR
- PEOPLE WHO HAVE THE RH FACTOR ARE **RH-POSITIVE**
- PEOPLE WHO DON'T HAVE THE RH FACTOR ARE **RH-NEGATIVE**

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

BLOOD TRANSFUSION

- **IF A PATIENT WITH A BLOOD TYPE IS GIVEN B BLOOD TYPE, PATIENT IMMUNE SYSTEM WILL RECOGNIZE B BLOOD AS ENEMY, AND PRODUCE ANTIBODIES AGAINST B ANTIGENS**
- **THIS PROCESS CAUSES AGGLUTINATION OF RED BLOOD CELLS**
- **AGGLUTINATION CAN BLOCK BLOOD VESSELS, AND THIS LEADS TO ORGAN DAMAGE OR DEATH**

RELATIONSHIPS BETWEEN BLOOD TYPES AND ANTIBODIES

Blood Type	Antigens on Red Blood Cell	Can Donate Blood To	Antibodies in Cerum	Can Recieve Blood From
A	A	A, AB	Anti-B	A, O
B	B	B, AB	Anti-A	B, O
AB	A and B	AB	None	AB, O
O	None	A, B, AB, O	Anti-A and Anti-B	O

- **WHAT IS THE UNIVERSAL DONOR OR RECIPIENT?**
- **WHY ITS SO DANGEROUS TO GIVE WRONG BLOOD TYPE TO APERSON?**
- **WHAT IS YOUR BLOOD TYPE?**