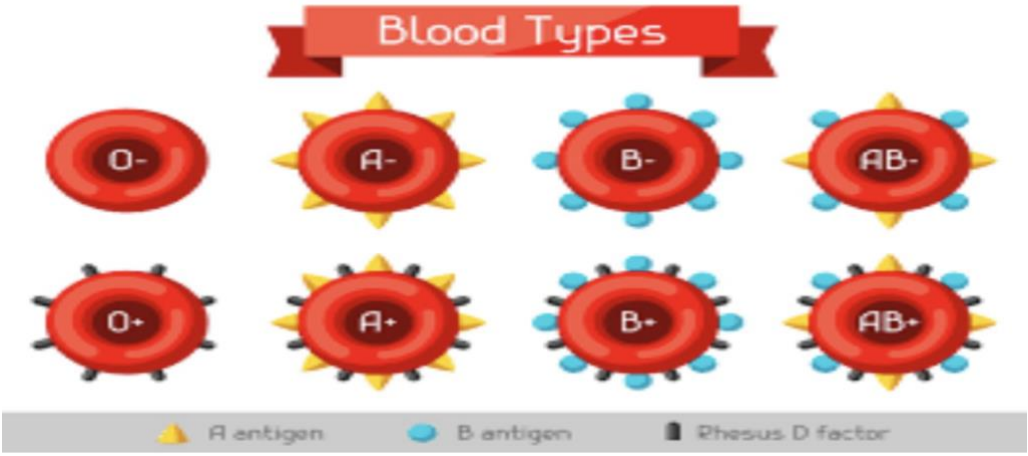
Blood type

What are blood types?

A blood type is a classification system that allows healthcare providers to determine whether your blood is compatible or incompatible with someone else's blood. There are four main blood types: A, B, AB and O. Blood bank specialists determine your blood type based on whether you have antigen A or B on your red blood cells. They also look for a protein called the Rh factor. They classify your blood type as positive (+) if you have this protein and negative (-) if you don't.



This makes for eight common blood types:

A positive (A+).

A negative (A-).

B positive (B+).

B negative (B-).

AB positive (AB+).

AB negative (AB-).

O positive (O+).

O negative (O-).

Knowing about blood types allows healthcare providers to safely transfuse donated blood from one person into another during a blood transfusion. Blood types also need to be compatible for organ transplants.

Type A: Red blood cells have the A antigen.

Type B: Red blood cells have the B antigen.

Type AB: Red blood cells have both A and B antigens.

Type O: Red blood cells have neither A nor B antigens.

Blood types are either "positive" or "negative," depending on the absence or presence of the Rh factor's D antigen, another marker. This is called the Rh system. Being RhD positive is more common than being RhD negative.

Positive (+): Red blood cells have the RhD antigen.

Negative (-): Red blood cells don't have the RhD antigen.

How do blood types get determined?

Blood bank specialists determine blood types based on whether there are particular antigens on your red blood cells. An antigen is a substance that can make your body's immune system react. Think of an antigen as a marker (like a nametag) that identifies a substance in your body as belonging or not belonging.

Your blood type is compatible with someone else's if your immune system recognizes the antigens in donated blood as belonging.

Slide Test

Procedure:-

1. Prick the thumb and but 3 drops from the blood on deferent site one the slide.

2. Put 1 drop of anti-A on the 1st blood sample and mix.

3. Put 1 drop of anti-B on the 2nd blood sample and mix

4. Put 1 drop of anti-D on the 3rd blood sample and mix.

5. Mix the cells and reagent using a clean stick

6. leave the test for 2 minutes at room temperature (22°- 24°C). Then look for agglutination.



