

# Blood transfusion

## Have all your questions been answered?

March 2015

### Why would I need a blood transfusion?

Some people may need a single or emergency transfusion after major surgery, childbirth or a major accident. Others may have an illness where blood products are needed often during treatment, e.g. patients with blood diseases, kidney disease or having treatment for cancer.

### What is a blood component/product?

This is any part of the blood that is transfused or given to a patient. A blood donor can donate whole blood, plasma or platelets. Whole blood is divided into different parts or components. Not all people who require a blood transfusion require the red cells.

### What do these different blood components/products do?



**Red blood cells** – carry haemoglobin that delivers oxygen to your tissues and organs. Red cells are usually given if haemoglobin levels are low (anaemia) or if a lot of blood is lost.



**Platelets** – are given to prevent or stop bleeding. Some diseases, medications or treatments can lower the number of platelets or they may not work properly. This product is yellow in colour.



**Fresh frozen plasma and Cryoprecipitate** – contain clotting factors that work with platelets to seal wounds. Some clotting factors can be manufactured. If these are not available then fresh frozen plasma and/or cryoprecipitate may be needed. These products are also yellow in colour.

Plasma is also sent to CSL Behring to make products such as Albumin (filling fluid), Intragam P (for patients with poor immune systems) and other products containing antibodies for vaccinations.

### Is the blood safe?

All fresh blood products transfused in Australia come from voluntary unpaid donors.

The Australian Red Cross Blood Service has many safeguards to ensure a safe blood supply for patients. Before donating blood, all donors must complete a confidential interview, donor declaration and a health check.

In Australia all donations are tested for:

- Blood group
- Five different infectious diseases, including HIV, Hepatitis B and Hepatitis C

Any collection that fails the testing is discarded.

#### Other risks are:

Hepatitis C:	less than 1 in 1 million
Hepatitis B:	1 in 721,000
HIV [AIDS]:	less than 1 in 1 million

(Data Ref: The Blood Service, 2015)

#### Potential risks

Despite testing, there is a very small risk of infection or other side effects from transfusion.

A harmful reaction to blood transfusion can be caused by the transfusion of blood that is not matched to the patient's blood. This risk is reduced by strict patient identification and checking actions along with strict checking in the laboratory.

The risks along with the benefits of having a transfusion should be discussed with your doctor.

## Are there any alternatives to blood transfusion?

Some alternatives to blood do exist and are used wherever possible. Medications such as iron can be used in some cases and should be discussed with your doctor to see if these treatments are suitable for you. Your doctor will also consider ways to reduce your need for blood. This could include improved surgical techniques for people undergoing surgical procedures.

If you are a Jehovah's Witness or have other objections to blood transfusion, it is extremely important to discuss this with your doctor.

## How do I receive a blood transfusion?

Before you receive a transfusion your blood group must be known, this may require a blood test. To ensure the accuracy of the test the person taking your blood will ask you for your name and date of birth to make sure they have the right person for testing.

If you need a red cell transfusion the blood to be given to you needs to be matched with your blood (known as a cross match) to ensure they are compatible i.e. suitable for you. This may take some time to complete.

You will also be asked to consent to the transfusion; usually this will include the signing of a consent form after discussion with your doctor about the risks and benefits for you.

Blood transfusions are given intravenously i.e. through a needle into a vein, usually in your arm. If you already have an intravenous needle inserted you may be able to have your transfusion through it, but occasionally a second needle may be needed. Other than the insertion of the needle the process should be painless.

One unit of red cells usually takes two to three hours to infuse and a platelet transfusion takes 30-60 minutes. The number and type of units given depends on your specific case.

During the transfusion you will be closely observed. Your temperature, heart rate, breathing rate, blood pressure, and general condition will be monitored by the nurse.

## Is there anything I need to do during the transfusion?

Report to the nurse as soon as possible if you notice any chills, fever, problems with breathing, rash, if you are worried or feeling unwell in any way during the transfusion.

### Answering these questions will help you make sure you have received enough information.

- 1.** Do you understand why you need the blood product transfusion/s?  
Blood transfusion is used in a range of settings; ask your doctor about the need for transfusion in your specific case.
- 2.** Have the possible risks been explained to you in your particular condition?  
Transfusion is not without risk. It is important that the risk in your setting be talked about.
- 3.** Have any alternatives been explained to you?  
In some cases alternatives to blood product transfusion may be suitable. Ask your doctor if this may be so in your case.
- 4.** Have all your questions been answered?

The Blood Matters Advisory Committee, which includes consumer representation, has reviewed this information.

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