

# Receiving a blood transfusion: Important information

The decision to give a blood transfusion to a patient is made only after careful consideration.

In making that decision, your doctor will balance the risk of you having a blood transfusion against the risk of not having one. Ask your doctor to explain why you need a transfusion and if there are any alternative treatments available. You do have the right to refuse a blood transfusion, but you need to fully understand the consequences of this before doing so. If you have any reason for not accepting a blood transfusion please let your doctor know now.

## Why might I need a blood transfusion?

Most people cope well with losing a moderate amount of blood and this loss can easily be replaced with other fluids. Over the next few weeks the body makes new red blood cells (which carry oxygen around the body) to replace those lost. Medicines such as iron can also help compensate for blood loss. However, if larger amounts are lost, a blood transfusion is the best way of replacing the blood quickly.

- > Blood transfusions are given to replace blood lost in surgery, childbirth or after major accidents.
- > Some operations or medical treatments (including many types of chemotherapy) cannot be carried out safely without using blood.
- > Blood transfusions may be used to treat anaemia (lack of red blood cells). Anaemia can be caused by many different things and in some cases is treatable with iron or vitamins alone.

People with cancers of the blood (leukaemia) and those having treatment for other types of cancers may not be able to make enough healthy new blood cells. In these situations repeated transfusions of red blood cells or platelets (special blood cells that help to stop bleeding) may be required.

## What can be done to reduce my need for blood before an operation?

- > It is important to eat a well-balanced diet in the weeks before the operation.
- > You may need to have your iron or vitamin levels boosted – ask your doctor for advice especially if you know that you have suffered from low iron, vitamin B12 or folate levels in the past.
- > Blood tests done at least a few weeks or more before your operation are important to identify if you have anaemia which can be treated in advance of surgery.

- > If you are on blood thinning medication (such as aspirin, warfarin, clopidogrel) stopping these may reduce the amount of bleeding. Ask your doctor whether these should stop before the operation. (Please remember, for your safety, only your doctor can make this decision because the risks of stopping may be greater than the benefits). Inform your doctor of ALL the medications that you take including those available over the counter (without a prescription) as some of these can also thin the blood (such as anti-inflammatory and some herbal medicines).
- > Sometimes it is possible to collect blood that is lost during or after an operation and return it back to you. You may want to ask if this method is possible in your case.

## Are transfusions safe?

Thanks to ongoing advances in collection and testing, the blood supply in Australia is safer than ever before and one of the safest in the world. The decision to transfuse however must still be made with great care because transfusion is not (and never will be) risk-free. Your doctor will explain to you how they have weighed up the risks and benefits of transfusion in your case. The risks of not having a transfusion and the risks and benefits of any alternatives will also be explained.

The most avoidable risk of transfusion is being given blood of the wrong blood group (meant for someone else). To ensure you receive the right blood, the clinical staff make careful identification checks before any transfusion. It is important that you wear an identification band. The clinical staff will ask you to state your full name and date of birth. They will then check the details on your identification band and the blood pack to ensure that you receive the right blood. You can help by making sure this process happens.



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## Are transfusions safe? *cont...*

In Australia many precautions are taken to ensure blood is as safe as possible:

- > Each blood donor is an unpaid volunteer and their health is carefully checked.
- > Each donor is asked a number of questions to help rule out anyone who may pass on an infection.
- > Every blood donation is tested for the presence of certain infections.
- > Any unit that fails the test is discarded.
- > The testing process is continuously monitored to make sure that it meets very high standards.

The tests are to detect viral infections that can be carried by blood including hepatitis B, hepatitis C and HIV (the virus that causes AIDS). The risk of catching one of these viruses from a blood transfusion is very low. The risk of catching HIV, for example is less than 1 in a million (less than the risk of being struck by lightning).

There have been a small number of cases in the UK where it is possible that transfusion has passed on the human form of "mad cow disease" known as variant Creutzfeldt-Jakob Disease (vCJD). To date there have been no reports of Australians infected with vCJD and no reported cases transmitted by transfusion in Australia. A number of precautions to minimise this risk in Australia have been put in place.

## Other risks of transfusion

There are other serious risks of transfusion including a type of immune reaction in the lungs leading to breathing difficulties, which fortunately is uncommon. A pack of blood may contain bacteria, which on rare occasions can cause a serious infection in the blood stream of the person receiving it.

Donated blood will be specially selected to match your blood for the most important blood groups such as ABO and Rh(D) (Rhesus). But, because red blood cells carry over 100 different blood groups, an exact match for every blood group is not possible. About 1 in every 15-20 adult patients develops an antibody to a blood group in the donor blood, and will need to have especially matched blood. If you know that you have any special transfusion requirements, please discuss these with your doctor and ask the doctor to tell the hospital blood bank.

Sometimes in older people or those with heart problems, the extra volume of blood given can overload the body and cause breathing difficulties (fluid on the lungs). Medication (diuretics) can be given to treat this and to help prevent it happening again.

Careful patient identification checks are also essential when a blood sample is taken for blood group testing before transfusion (as is the case for all other tests and procedures in health care). Ask the staff if you can check that your details (full name, date of birth, spelling) on the blood tube(s) and paperwork are 100% correct. If they are not, it is essential to tell the staff.

Fortunately, severe reactions to blood transfusions are rare. But when they do occur, staff are trained to recognise and deal with them.

## Are there different types of blood products?

Blood donations are separated into different parts and stored in special bags or bottles. The 3 main parts include red blood cells which carry oxygen to the tissues, platelets which help stop bleeding (if the platelets numbers are low or they don't work properly) and plasma which contains blood clotting factors (to help stop bleeding) and also other proteins and antibodies.

## How is blood given?

- > It is dripped into a vein, usually in your arm or hand, using a soft plastic tube.
- > Each pack of blood (a unit) can take up to four hours, but can be safely given more quickly if needed.

## How will I feel during the blood transfusion?

Most people feel no different at all during their transfusion. However, some develop a slight fever, chills or a rash. These are usually due to a mild reaction or allergy and are easily treated with medication to reduce their temperature, or by giving the blood more slowly.

You will be carefully monitored during the transfusion. If during a transfusion, you feel at all unwell, please call the nurse immediately.

## What if I have other worries about blood transfusion?

If you have any concerns, no matter how trivial you think they may be, you should discuss these with your doctor, nurse or midwife.

## For more information

If you are interested in finding out more about transfusion and have access to the Internet, you might find the following web site useful: [www.transfusion.com.au](http://www.transfusion.com.au)

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