

# Fact Sheet

## My guide to blood transfusions



NATIONAL BLOOD AUTHORITY  
AUSTRALIA

Blood transfusions are life saving for some patients but transfusions do carry risks of other medical problems. This fact sheet outlines what you need to know if you do need one, and what you and your GP can do to avoid a blood transfusion. Avoiding transfusion avoids the risks.

### Why might I need a blood transfusion?

Your body needs a certain amount of red blood cells in order to effectively transport oxygen and nutrients. Sometimes you may need a transfusion of donor blood to replace blood that has been lost too rapidly during surgery or after a traumatic event.

### What should I expect during a blood transfusion?

Before the transfusion begins, an identification check should be done to ensure you're being given the correct blood. You may feel a prick or a sting when the needle is inserted into your vein, and some pressure as the blood is transfused, but most patients will not feel any pain or discomfort. A nurse will monitor you throughout the procedure.

The time it takes for a blood transfusion varies depending on how much blood you need, but is usually less than 4 hours, and can be as short as an hour.

### What alternatives are available?

There are medicines available that minimise blood loss and others that stop clots from being dissolved, as well as anaesthetic and surgical techniques to minimise blood loss.

### How can I reduce the chance of needing a transfusion?

Iron deficiency and anaemia are conditions that mean you have low levels of red blood cells, which significantly increases the risk of needing a red blood cell transfusion during and/or after surgery.

By treating these conditions before surgery, you may avoid the need for a blood transfusion. A blood transfusion after surgery may mean your recovery time is slower. Ask your GP to have your iron levels checked if you are planning an elective surgery. Your GP may prescribe iron supplements to increase your blood count before surgery.

## How safe is blood?

Australia has one of the safest blood supplies in the world.

- ▶ Your blood will be tested before a transfusion to determine whether your blood type and the donated blood used for your transfusion are compatible.
- ▶ Donor blood is tested for certain viruses, including HIV/AIDS, Hepatitis B, Hepatitis C and human T-lymphotropic virus. The chance of contracting one of these viruses from a blood transfusion is less than 1 in 1 million.
- ▶ Sterile, single-use equipment is used and other precautions are taken that reduce the chance of complications and ensure all blood products are free of contamination.

## What are the risks?

People who have blood transfusions during surgery may be more likely to experience negative outcomes such as wound infections and delayed recovery.

Because the donor blood is not your own blood, your body's immune system responds to the foreign blood much in the same way it would respond to an organ transplant.

Reactions can include:

- ▶ Fever and chills: These are more common in platelet transfusions than red blood cell transfusions.
- ▶ Mild allergy: About 1% – 3% of patients experience some form of treatable allergic reaction, such as a rash.
- ▶ Severe allergic reaction: This can include loss of consciousness, shock and cardiac arrest among other symptoms. This type of severe reaction is much more rare, occurring in less than one in 20,000 blood transfusions.

- ▶ Acute or delayed haemolytic reaction: This is very rare since it occurs if the donor blood type doesn't match your blood type, or if you receive the wrong blood. For this reason you should always be asked to confirm your identity before receiving a transfusion. This type of reaction is more common in people who have had a previous transfusion.
- ▶ Lung injury: An acute reaction that occurs in about 1 in 10,000 transfusions.
- ▶ Too much iron: This is more likely if you have had many blood transfusions.
- ▶ Septic reaction: these reactions are very rare but can be serious. Septic reactions occur when blood components have been contaminated with bacteria.

## What are the signs of a reaction?

**If you experience any of these symptoms during or after the transfusion let a nurse or doctor know immediately.**

- Fever, chills, hives, or cold clammy skin
- Breathing difficulty, wheezing, cough
- Nausea, vomiting or abdominal cramps
- Diarrhoea
- Rash
- Very low blood pressure
- Chest or back pain
- Fast heartbeat

Some reactions may occur up to 14 days after a transfusion.

You may also need further blood testing to see how your body is responding to the donor blood and to check if your red blood cells have reached an appropriate level.

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Level 7/418A Elizabeth St  
Surry Hills NSW 2010  
PO Box 1147  
Strawberry Hills NSW 2012

02 8217 8700  
02 9211 7578  
info@nps.org.au  
[www.nps.org.au](http://www.nps.org.au)

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