

# Children receiving a blood transfusion

## A PARENTS' GUIDE

Dear Parent,

Having a child in hospital is a difficult time for everyone in the family. To try to help in a small way, these information booklets, originally created by the National Health Service in the UK, have been adapted for Australia and New Zealand. They aim to explain to both you and your child what to expect if your child needs to receive blood or blood products during their treatment.

This cover booklet 'Receiving a blood transfusion – A parents' guide', is for you and tells you in detail what is involved in receiving a blood transfusion.

There are also two additional booklets. 'Amazing You – Let's Learn About Blood' has been specifically designed with younger children in mind. In this booklet Billy Blood Drop explains, in simple story format, all about the importance of blood in the body and what your child can expect when receiving a blood transfusion.

The second booklet 'Voyages on the Microsub Discovery' has been designed for older children. Again it explains the vital role that blood plays in all of our bodies and what happens when you receive a blood transfusion. This booklet contains more facts and information and is designed for children to read and learn by themselves if they wish to.

Please look at the content of each booklet and feel free to decide, if at all, which booklet may help your child.

Kind regards,



Dr Joanne Pink  
Chief Medical Officer  
Australian Red Cross Blood Service  
(ARCBS)



Dr Peter Flanagan  
National Medical Director  
New Zealand Blood Service (NZBS)  
and President, Australian & New Zealand  
Society of Blood Transfusion (ANZSBT)



The **BloodSafe** Program, funded by the South Australian Department of Health, along with the ARCBS and NZBS are grateful to the UK National Health Service, Blood and Transplant Authority for granting permission to adapt and print these for families in Australia and New Zealand.

Thank you to ANZSBT for their expert review and endorsement of the content of these materials.



# Children receiving a blood transfusion

## A PARENTS' GUIDE

**Like all medical treatments, a blood transfusion should only be used when really necessary. The decision to give a blood transfusion to your child is made only after careful consideration. In making that decision, your child's doctor will balance the risk of your child having a blood transfusion against the risk of not having one. Ask your child's doctor to explain why your child needs a transfusion and if there are any alternative treatments available.**

### Why might my child need a blood transfusion?

Most people cope well with losing a moderate amount of blood. The lost volume of blood can be replaced immediately with salt solution. Over the next few weeks the body makes new red blood cells to replace those lost. Medicines such as iron can 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, and after accidents.
- Some operations or medical treatments (including many types of chemotherapy) cannot be carried out safely without using blood.
- Blood transfusions are used to treat anaemia (lack of red blood cells). Anaemia can be caused by many different things. Some information specifically for parents of children receiving transfusions as part of treatment for leukaemia or other cancers is included on the back page of this booklet.

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

- Encourage your child to eat a well-balanced diet in the weeks before the operation.
- Your child may need to have his/her iron levels boosted – ask your child's doctor for advice especially if you know that your child has suffered from low iron levels in the past.
- If your child is on warfarin or aspirin, stopping these drugs may reduce the amount of bleeding. Please ask your child's doctor whether these should stop before the operation. (Please remember, for your child's safety, only his/her doctor can make this decision.)
- Sometimes it is possible to collect blood that is lost during or after an operation and return it back to your child. You may want to ask if this method is possible in your child's case.



### Can I donate my blood to my child?

We sometimes get asked this question but there are reasons why this is strongly discouraged. Firstly, the risk with blood from unrelated donors provided by the Australian Red Cross Blood Service (ARCBS) and the New Zealand Blood Service (NZBS) is already extremely low. Secondly, there are increased risks of a number of types of transfusion reactions with blood from relatives, and it is better to avoid these.



## Are transfusions safe?

Almost always, yes. Thanks to ongoing advances in collection and testing, the blood supply in Australia and New Zealand 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 child's 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 your child receives the right blood, the clinical staff make careful identification checks before any transfusion. It is important that your child wears an identification band. The clinical staff will ask you or your child to state their full name and date of birth. They will then check the details on your child's identification band and the blood pack to ensure that your child receives the right blood. You can help by making sure this process happens.

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

- Each blood donor is an unpaid volunteer whose 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 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 or New Zealanders infected with vCJD and no reported cases transmitted by transfusion in these countries. A number of precautions to minimise this risk in both Australia and New Zealand have been put in place.

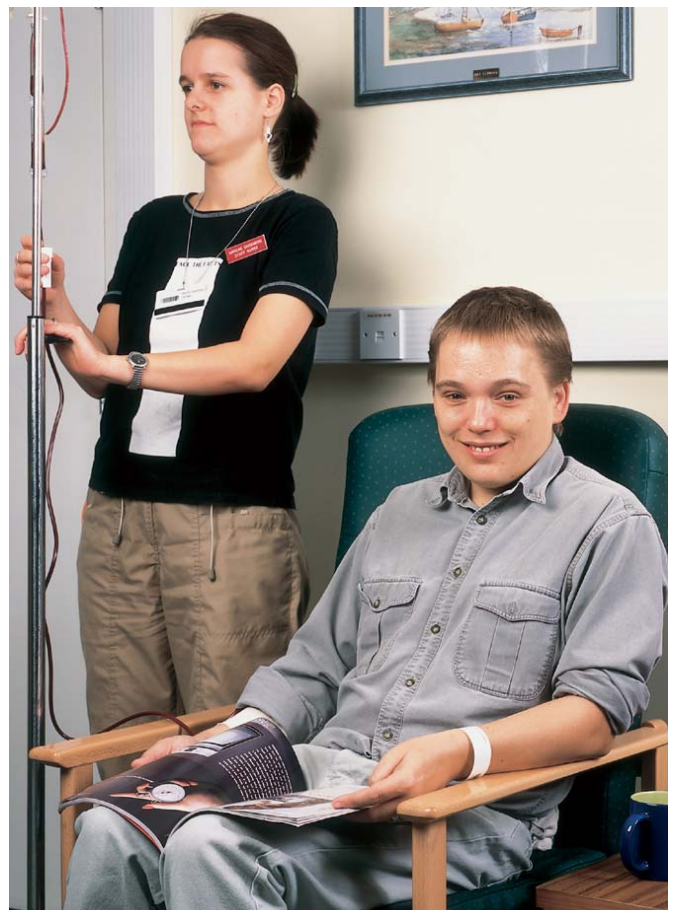
There are other serious risks of transfusion including a type of immune reaction in the lungs leading to breathing difficulties, which fortunately is uncommon. A pack of

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 child's 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. This is less common in children. If you know that your child has any special transfusion requirements, please discuss these with your child's doctor and ask the doctor to tell the hospital blood bank.

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 child's 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 extremely rare. But when they do occur, staff are trained to recognise and deal with them. ➤



## How is blood given?

- It is dripped into a vein, usually in your child's arm or hand, using a soft plastic tube.
- One pack of blood (a unit) takes about 2 hours to give (but can be given more quickly or more slowly if needed).

## How will my child feel during the blood transfusion?

Most children 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. Your child will be carefully monitored during the transfusion.

If during a transfusion, your child feels at all unwell, please call the nurse immediately.

## What if my child and I have other worries about blood transfusion?

Your child may be afraid of needles, worried about being squeamish at the sight of blood or have had a bad experience related to a previous blood transfusion. Please tell your doctor or nurse about any concerns you think your child or you may have, no matter how trivial you think they may be.

## OTHER INFORMATION

If you are interested in finding out more about blood transfusions and have access to the Internet, you might find the following web sites useful:

Australia - [www.transfusion.com.au](http://www.transfusion.com.au)

New Zealand - [www.nzblood.co.nz](http://www.nzblood.co.nz)

## BECOME A BLOOD DONOR

Many people today would not be alive if it wasn't for generous, volunteer blood donors who give blood regularly to help those in need. It's one of those things that we just expect to be there for us, but only a very small proportion (less than 5%) of people actually give blood.

If you would like to help others by becoming a blood donor, please call:

Australia - 13 14 95 or visit [www.donateblood.com.au](http://www.donateblood.com.au)

New Zealand - 0800GIVEBLOOD (0800 448 325) or visit [www.nzblood.co.nz](http://www.nzblood.co.nz)



## A special mention about children receiving transfusions as part of treatment for leukaemia or other cancers.

Children 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.

The news of a diagnosis of cancer is usually overwhelming. Children and parents are then faced with a lot of new information to take in and make sense of. Transfusion is just one part of many treatments that may be required. You can be sure that you will receive information and support from the hospital staff caring for your child on all aspects of the treatments needed. We hope that these booklets provide help for you, your child and other family members when you are ready to find out more about transfusion. In the meantime the doctors and nurses caring for your child will provide you with the information you need to help you take a day at a time. They will also go over things again and again if you need to as no one can be expected to take it all in at once!