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## Haematology Department

# Your questions about blood transfusion answered

## A leaflet for patients and their relatives

### Why might I need a blood transfusion?

Blood transfusions are given to replace blood lost in surgery, major accidents, childbirth, or to treat anaemia (lack of red blood cells).

If you have surgery, you may lose some blood during the operation. If this is a small amount, the loss can be replaced with other fluids. Your body will make new red blood cells (essential for carrying oxygen throughout the body) over the following few weeks.

However if you lose a significant amount of blood, then the doctors will want to replace it as quickly as possible by blood transfusion. This is so you do not suffer any of the weakening effects of blood loss.

Significant loss from a major accident or during childbirth may also need to be replaced rapidly as advised by the doctors.

If you have anaemia your body does not have enough red cells to carry the oxygen you need. You may feel tired or breathless. Blood transfusion is an effective treatment when a speedy improvement is needed. Treatment by medicines and iron or vitamins is just as effective when treatment is less urgent. Your doctor will only recommend that you have a blood transfusion if you really need it.

Ask your doctor, nurse or midwife to explain why you might need a blood transfusion.

## Can my own blood be used for my operation?

For some operations it may be possible to use your own blood. This is called autologous blood transfusion. There are several methods of doing this and Addenbrooke's offer the most useful ones:

- 1) Intraoperative cell salvage. Blood lost at the time of your operation is collected via a suction device and then returned to you during your time in theatre.
- 2) Post operative cell salvage. Blood lost after surgery has been completed, is collected into a drain and returned to you. This method is particularly useful following total/revision knee replacement.
- 3) Acute normovolaemic haemodilution. Blood is collected from you at the start of the operation and replaced by salt or glucose solution. The collected blood is then returned to you at the end of the operation.

Your doctor will decide which of the above methods could be used, or is best for you, depending on the type of operation and your general health. Despite these methods, some patients may still need donor blood, but the likelihood is reduced.

If you would like more information about these procedures or to find out if autologous blood is appropriate for you, please speak to your doctor.

## Are blood transfusions safe?

In the United Kingdom all blood donors are unpaid volunteers who go through a strict screening process about their health. Before donation, every effort is made to identify and exclude all those whose blood may carry a risk of passing on infections.

In addition, every unit of donated blood is **individually** tested. Any blood which fails these rigorous tests is discarded and the donor advised. The testing process is regularly monitored to ensure that the highest standards are maintained.

The chance of contracting hepatitis from a blood transfusion is currently about one in 500,000 for hepatitis B and one in 30 million for hepatitis C. The chance of contracting HIV or HTLV infection is one in five million.

The level of risk of contracting variant Creutzfeldt-Jakob Disease (vCJD) is not known, but is likely to be extremely low. Each year approximately two million units of blood are transfused in England and there have been just a handful of cases where patients are known to have become infected with vCJD from a blood transfusion. The National Blood Service actively reviews research into vCJD and, based on this, puts into place strategies to further reduce this potential risk.

In considering the risks of transfusion, it may be helpful to know that common activities (for example smoking or driving a car) carry a far greater risk than the likelihood of getting an infection from a blood transfusion.

The risks of having a blood transfusion must always be balanced against the risk to your health of not having a blood transfusion.

## **Can I have a reaction to someone else's blood?**

There are many blood groups which differ from person to person. Before a blood transfusion is given, a sample of your blood will be taken to match it with a suitable donor. Blood is matched for the two most important blood groups, ABO and Rhesus D.

If you have previously been given a card which states that you need to have blood of a specific type, please show it as soon as possible to your doctor, nurse or midwife and ask them to tell the hospital transfusion laboratory.

Occasionally a transfusion will make you feel shivery or achy. These reactions are usually not serious and are easily treated. The nurses will ask you to tell them if you feel unwell during a transfusion.

Some months after a transfusion, a few people (about 8 to 10%) may develop antibodies to minor blood groups in donor blood. These antibodies will not make the person feel ill in any way, but will help influence what sort of blood should be given next time around.

## **Can I be given the wrong blood?**

Care is taken at every stage to ensure that you get the right blood transfusion, in order to achieve this it is important for you to be correctly identified. Wearing an identification band with your correct details is essential.

You will be asked to state your full name and date of birth and the details on your identification band will be checked before each bag of blood is given.

At Addenbrooke's we use an electronic blood tracking system, so staff will both visually check your identification and make an electronic check using a hand held scanner.

## What can I do to make sure that a safe supply of blood is available should I, my friends, family or members of my community need it?

It is very important that as many healthy people as possible volunteer to donate blood. This will guarantee that a safe, adequate blood supply is available for all patients. Thousands of lives are saved each year in the UK by volunteer blood donors.

To enrol as a blood donor simply telephone the National Blood Service on 08457 711 711 or visit the website [www.blood.co.uk](http://www.blood.co.uk).

## Where can I get further information?

If you require further information, please ask the doctors or nurses on the ward or your GP. Alternatively you can contact the Transfusion Practitioners at Addenbrooke's Hospital by dialling 01223 245151 and asking them to bleep 152 766 or 152 518.



We are currently working towards a smoke-free site. Smoking is only permitted in the designated smoking areas.

For advice and support in quitting, contact your GP or the free NHS Stop Smoking helpline on 0800 169 0 169

### Help with this leaflet:



If you would like this information in another language, large print or audio format, please ask the department to contact Patient Information: 01223 216032 or [patient.information@addenbrookes.nhs.uk](mailto:patient.information@addenbrookes.nhs.uk)



### Document history

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