

Will I need a blood transfusion?

Patient information



Will I need a blood transfusion?

Important information for all patients who may need a blood transfusion

Like all medical treatments, a blood transfusion should only be given if it is essential. Where possible, your doctor, nurse or midwife (or other healthcare professional) should discuss the risks and possible alternatives with you, before obtaining your consent for the procedure.

Why might I need a blood transfusion?

Blood contains many different cells. The red cells are essential for carrying oxygen around the body. A lack of these red blood cells is called anaemia.

A blood transfusion may be given because of a shortage of red blood cells in the blood, either because the body is not making enough of them or because of blood loss.

Sometimes the bone marrow, which produces blood cells, fails to work properly and is unable to make enough of them. This may be due to disease or as a result of treatments, such as chemotherapy. It may be temporary or longer term. In some cases anaemia can be treated with medicines such as iron; in other cases, a blood transfusion may be the best option.

Most people can cope with losing a moderate amount of blood without needing a blood transfusion, as this loss can be replaced with other fluids. However, if larger amounts of blood are lost, a blood transfusion may be the best way of replacing blood rapidly. A blood transfusion may be needed to treat severe bleeding, for example during an operation, during or after childbirth or after a serious accident.



Is a blood transfusion my only option?

Certain medical conditions causing anaemia may be managed by treating the cause rather than by giving a blood transfusion. If you are told that you might need a blood transfusion, you should ask why it is necessary and whether there are any alternative treatments such as iron therapy.

You have the right to refuse a blood transfusion but you need to fully understand the consequences of doing so. Some medical treatments or operations cannot be safely carried out without a blood transfusion.

Blood transfusion is only needed for a small number of patients having an operation. It may be possible to recycle your own blood during an operation, ask your healthcare professional if this is appropriate for you. Sometimes medicines which improve blood clotting, such as Tranexamic acid, can be used to reduce blood loss and the need for transfusion.

What can I do to reduce the need for a blood transfusion before an operation?

Low iron levels can cause anaemia therefore, it is important that you eat enough foods containing iron. A varied and balanced diet should normally provide an adequate iron intake. A leaflet called 'Iron in your diet' is available from NHS Blood and Transplant, which gives further advice on this. Please ask your healthcare professional for a copy of this.

Shohanna pictured here with her younger sister needed a blood transfusion when she had her liver transplant as she was born without a bile duct.




Depending upon the type of operation you are having, your healthcare professional will arrange for a blood sample to be taken several weeks before your operation to see if you are anaemic. A shortage of iron can cause anaemia and correcting this in good time, before your operation, may reduce the need for a blood transfusion.

Some medicines, such as warfarin, other anticoagulants, aspirin, clopidogrel and some anti-inflammatory drugs may increase the risk of bleeding during your operation. Always check with your healthcare professional to find out if you should stop taking these before your operation and if so, when you should restart them. Do not stop taking any medications without consulting a healthcare professional first.

Risks associated with a blood transfusion

The risk that a blood transfusion will cause severe harm or even death is very low but this should be discussed with your healthcare professional. One of the most important checks for a safe transfusion is to make sure you get the right blood. You can help reduce the small risk of being given the wrong blood by asking your healthcare professional to check that it is the right bag for you.

You must be correctly identified at each stage of the transfusion to make sure that you get the right blood, including when blood samples are taken before the transfusion. **If you are an in-patient, wearing an identification band with your correct details is essential.** You will be asked to state your full name and date of birth and this will be checked against your identification band. If you have your blood samples taken as an out-patient, you will not usually be given an identification band to wear, but it is still important that the staff ask you your full name and date of birth to confirm they are taking the samples from the right person. It is **alright** to remind the healthcare professional to ask you for this information.



If you have a card that states that you need to have blood of a specific type, please show it as soon as possible to your healthcare professional and ask them to tell the hospital transfusion laboratory.


Compared to other everyday risks, the likelihood of getting an infection from a blood transfusion is very low. All blood donors are unpaid volunteers and the risk of an infected unit entering the UK blood supply continues to decrease¹. Donors and blood donations are screened for a number of infections which can be transmitted through blood, but it is not practical or even possible to screen all donations for all infections, therefore, there will always be a small risk associated with having a blood transfusion.

The risk of getting variant Creutzfeldt-Jakob Disease (vCJD) from a blood transfusion is extremely low. Each year, approximately 2.6 million blood components are transfused in the United Kingdom and there have been only a handful of cases where patients are known to have become infected with vCJD. More information on vCJD can be found on the NHS Choices website:
www.nhs.uk/conditions/Creutzfeldt-Jakob-disease/Pages/Introduction.aspx

Further information on the risks of transfusion can be found at:
www.shotuk.org/home/

How will my blood transfusion be given and how will I feel?

A blood transfusion is usually given through a tiny tube directly into a vein in the arm. It may take up to four hours to give each bag of blood, but it can be safely given more quickly if needed. You may be given more than one bag of blood as part of your treatment.



Most people do not feel anything unusual during a blood transfusion. You will be observed before, during and after your blood transfusion; if you feel unwell during or after it you should inform your healthcare professional immediately. Some people may develop a temperature, chills, a rash or breathing difficulties. These reactions are usually mild and are easily treated with medicines such as paracetamol and antihistamines, or by slowing down or stopping the blood transfusion. Severe reactions to blood transfusions are extremely rare. If they do occur, staff are trained to recognise and treat them.

What if I have worries about receiving a blood transfusion?

If you are worried or have any questions, please talk to your healthcare professional. Many hospitals have a dedicated Hospital Transfusion Team and if appropriate, they may be able to come and discuss your concerns with you.

Patient Blood Management (PBM)

PBM is a standard of care that focuses on measures to reduce or avoid the need for a blood transfusion if possible. However, if a transfusion is needed, it makes sure that patients are given only what they really need and that the transfusion is given safely. There is a NHS Blood and Transplant (NHSBT) PBM Patient Information Leaflet available that explains things in more detail so please ask your nurse or doctor for a copy.

Recent studies suggest that if PBM is followed and transfusion is reduced or avoided, patients have fewer complications, faster recoveries and shorter stays in hospital.



During your treatment, a transfusion of platelets or other blood component such as fresh frozen plasma may be required. If so, there are other patient information leaflets available from NHSBT such as “Will I need a platelet transfusion?” that may help explain things for you. Please ask your healthcare professional for a copy of the other leaflets that are suitable for your proposed treatment pathway.

Additional Information

As a precautionary measure to reduce the risk of transmitting vCJD, people who have received a transfusion of blood or any blood component since 1980 are currently unable to donate blood or blood components.

Further information on Iron, Anaemia and Patient Blood Management is available in other patient information leaflets. Please ask your healthcare professional if you would like a copy of these.

You may also find the following websites useful:

NHS Choices:

www.nhs.uk/Conditions/Blood-transfusion/Pages/Introduction.aspx

NHS Blood and Transplant:

www.nhsbt.nhs.uk/what-we-do/blood-transfusion/

Reference

1. Public Health England (2014) Bloodborne infections in blood, tissue and organ donors (BIBD): guidance, data and analysis.

See: www.gov.uk/government/collections/bloodborne-infections-in-blood-and-tissue-donors-bibd-guidance-data-and-analysis



We would welcome your feedback and comments on this leaflet. You can contact us in the following ways:

By post to:

Customer Services, NHS Blood and Transplant
Part Academic Block – Level 2, John Radcliffe Hospital
Headley Way, Headington, Oxford, OX3 9BQ

By email to: nhsbt.customerservice@nhsbt.nhs.uk

Or by phone: 01865 381010

This leaflet was prepared by NHS Blood and Transplant in collaboration with the National Blood Transfusion Committee. Further supplies can be obtained by accessing <https://hospital.nhsbtleaflets.co.uk>

Individual copies of this leaflet can be obtained by calling **01865 381010**.

NHS Blood and Transplant (NHSBT) is a Special Health Authority within the NHS and provides the blood that patients receive. In order to plan for future blood demands, information about which patients receive blood needs to be gathered. We may ask a hospital or GP to provide limited medical information on a sample of patients who have received blood transfusions.

Any information that is passed on to NHSBT is held securely and the rights of these patients are protected under the Data Protection Act (1998).

NHS Blood and Transplant

NHS Blood and Transplant (NHSBT) saves and improves lives by providing a safe and reliable supply of blood components, organs, stem cells, tissues and related services to the NHS and other UK health services.

We manage the UK-wide voluntary donation system for blood, tissues, organs and stem cells, and turn these donations into products that can be used safely to save lives or radically improve the quality of people's lives.

We rely on thousands of members of the public who voluntarily donate their blood, organs, tissues and stem cells. Their generosity means each year we're able to supply around 2 million units of blood to hospitals in England and 7,500 organ and tissue donations within the UK, which save or improve thousands more people's lives.

For more information

Visit nhsbt.nhs.uk

Email enquiries@nhsbt.nhs.uk

Call **0300 123 23 23**