



Information for patients

Information for patients needing irradiated blood

Your medical team have requested that you should receive irradiated blood. This information has been added to your medical record at this hospital, but as an extra precaution you should always show the attached card to the team responsible for your care, particularly if attending a different hospital.

Always ask if the blood you are receiving is irradiated before it is transfused.

What is irradiated blood and why is it needed?

Irradiated blood is blood that has been treated with radiation (by x-rays or other forms of radioactivity) to prevent Transfusion-Associated Graft-versus-Host Disease (TA-GvHD).

What is TA-GvHD?

TA-GvHD is a rare but serious complication of blood transfusion caused by white blood cells called lymphocytes in the transfused blood. Even a very small number of these cells may recognise the patient receiving the blood as 'different' and cause a severe illness or even death.

Which patients are at increased risk of TA-GvHD?

Some patients are at particular risk of TA-GvHD. These include:

- Patients receiving transfusions from family members, tissue type matched donors or granulocyte (a type of white blood cell) donors
- Patients with an inherited immune system disorder
- Patients who have developed an immune system disorder, such as Hodgkin's disease; or due to treatment with certain drugs; or because of a bone marrow/stem cell transplant
- Unborn babies and babies needing exchange transfusions.

For some patients the risk of TA-GvHD lasts only a short time. For others the risks remain life-long, e.g. patients with an immune system disorder and patients with Hodgkin's disease. In some situations, the period of risk is not known and hospitals may make different recommendations for some groups of patients.

Your medical team will advise whether you, your child or relative needs irradiated blood and for how long.

How does irradiation work?

Irradiation of blood prevents lymphocytes dividing and causing harm.

Is all blood routinely irradiated?

Red cell and platelet transfusions are not routinely irradiated and need to be irradiated 'on demand' for patients at risk of TA-GvHD.

It is important that you remind your medical team of your need for irradiated blood as they have to order it specially.

All granulocyte and tissue type matched transfusions are routinely irradiated. Fresh frozen plasma and plasma products e.g. anti-D, albumin and immunoglobulin do not contain lymphocytes or cause TA-GvHD and therefore do not need to be irradiated.

Does irradiation damage the blood?

Irradiation does not cause any significant damage. The blood does not become 'radioactive' and will not harm you or anyone around you.

What if blood is needed in an emergency?

Although irradiated blood is recommended for you, if you receive non-irradiated blood the risk of TA-GvHD is very small. In emergencies, there may not be enough time to arrange for irradiated blood to be provided as it may be more important to provide blood quickly. The medical team treating you will judge the balance of these risks. If you have any further questions, please ask the medical team treating you.

The page below has details of a card you can cut out and use

A healthcare professional should complete the details on the back of the card and give it to you. Please remind them if they forget. This card must be shown to a healthcare professional looking after you before each transfusion.



NHS
Blood and Transplant

I am at risk of transfusion-associated graft-versus-host disease

If I need to have a blood transfusion, cellular blood components (Red Cells, Platelets and Granulocytes) **MUST BE IRRADIATED**
Please inform the blood transfusion laboratory

Name _____
DoB __/__/__ Consultant _____
Hospital/NHS Number _____
Hospital for enquiries _____
Reason for irradiated blood _____

Irradiated blood needed indefinitely
or until __/__/__
Date of issue of card __/__/__

This card must be shown to the patient's medical team before each transfusion.

The following can be attached to your medical notes to remind the staff that you need irradiated blood.



NHS
Blood and Transplant

This patient is at risk of transfusion-associated graft-versus-host disease

If this patient needs to have a blood transfusion, cellular blood components (Red Cells, Platelets and Granulocytes) **MUST BE IRRADIATED**
Please inform the blood transfusion laboratory

Additional Information

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

If you are interested in finding out more about blood transfusion please ask your healthcare professional for a copy of our leaflet 'Will I need a blood transfusion?'.

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/

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

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