



Important 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.

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 (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 (a type of white blood cell) dividing and causing harm.

Is all blood routinely irradiated?

No. Red cell 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 platelet and granulocyte (white cell) 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.

Please attach the stickers below to the patients notes.

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

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

Please inform your blood transfusion laboratory

FOR REFERENCE ONLY

Please detach the above card, complete the details on the reverse and hand to the patient. This card must be shown to the patient's team before each transfusion.

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 and Platelets) **MUST BE IRRADIATED**

Please inform your blood transfusion laboratory

FOR REFERENCE ONLY

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 and Platelets) **MUST BE IRRADIATED**

Please inform your blood transfusion laboratory

FOR REFERENCE ONLY

Name _____

DoB _____ Consultant _____

Hospital/NHS Number _____

Hospital for enquiries _____

Reason for irradiated _____

Irradiated _____ definitely

or use _____

card _____

Additional sources of Information
 Further information on blood transfusion is available in other patient information leaflets. These can be accessed at:
<https://portal.welsh-blood.org.uk/bht/>

If you have any further questions, please ask the medical team treating you. If you are interested in finding out more about blood transfusions and have access to the internet, you might find the following websites useful:

- NHS Choices**
www.nhs.uk/Conditions/Blood-transfusion/
- UK Transfusion Services**
www.transfusinguidelines.org.uk
- Welsh Blood Service**
www.welsh-blood.org.uk
- NHS Blood and Transplant**
www.nhsbt.nhs.uk/what-we-do/blood-transfusion/

As a precautionary measure to reduce the risk of transmitting vCJD, people who have received a blood transfusion since 1980 are not currently able to donate blood.

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 the WBS is held securely, with the rights of these patients protected under data protection legislation.

A print-friendly version of this leaflet can be accessed at:
<https://portal.welsh-blood.org.uk/bht/>

Healthcare professionals - additional copies of this leaflet can be ordered at:
<https://wbs-intranet.cymru.nhs.uk/bht/leaflet-order-form/>

Acknowledgements to NHS Blood and Transplant.



Welsh Blood Service
welsh-blood.org.uk