NHS
Blood and Transplant

Information for patients who need irradiated blood components

Including important patient card and patient record stickers

Important information for patients needing irradiated blood components

Your healthcare team have identified that you require irradiated blood components. This information should have been added to your patient record, but as an extra precaution always show the attached card to the healthcare team caring for you. This is especially important if you are not attending your usual hospital.

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

What are irradiated blood components?

Irradiated blood components, such as red cells or platelets, have been treated with radiation to prevent a condition called Transfusion-Associated Graft-versus-Host Disease (TA-GvHD).

Why is irradiation needed?

If there are any white blood cells in the blood component, irradiation stops the white blood cells dividing and producing more. Only certain patients are at risk of TA-GvHD, so not all blood components need to be irradiated.

What is TA-GvHD?

TA-GvHD is a rare but serious complication of blood transfusion caused by white blood cells in the transfused blood component. In at-risk patients, these cells may recognise the patient receiving the blood component as 'different' and even a very small number of them may cause a severe illness and possibly death.

Which patients are at increased risk of TA-GvHD?

Patients at risk of TA-GvHD include:

- Patients with Hodgkin Lymphoma.
- Patients who have received a particular treatment or certain drugs e.g. a bone marrow/stem cell transplant or having chimeric antigen receptor T-cell (CAR-T) therapy.
- Patients with certain inherited immune system disorders.
- Unborn babies and newborn babies needing exchange transfusions.
- Patients receiving transfusions from family members, tissue type matched donations or granulocytes (a type of white blood cell).

For some patients the risk of TA-GvHD lasts only a short time. For others, the risks remain life-long. This includes patients with an immune system disorder and those with Hodgkin Lymphoma. In some situations, the period of risk is not known, and the recommendation may be tailored for each individual.

Your healthcare team will advise if you, your child, or relative need irradiated blood and for how long.

Are all blood components routinely irradiated?

Red cell transfusions are not routinely irradiated. They need to be irradiated 'on demand' for patients at risk of TA-GvHD. Irradiated red cells have a shorter shelf life.

It is important your healthcare team know about your need for irradiated blood components as these may have to be ordered specially. You can help by reminding them, or by showing them your patient card.

In Northern Ireland, Scotland, and Wales, platelet transfusions are routinely irradiated, but in England they are only irradiated when needed.

Fresh frozen plasma, cryoprecipitate, and plasma products, e.g., albumin and anti-D do not contain white blood cells. They cannot cause TA-GvHD, so they do not need to be irradiated.

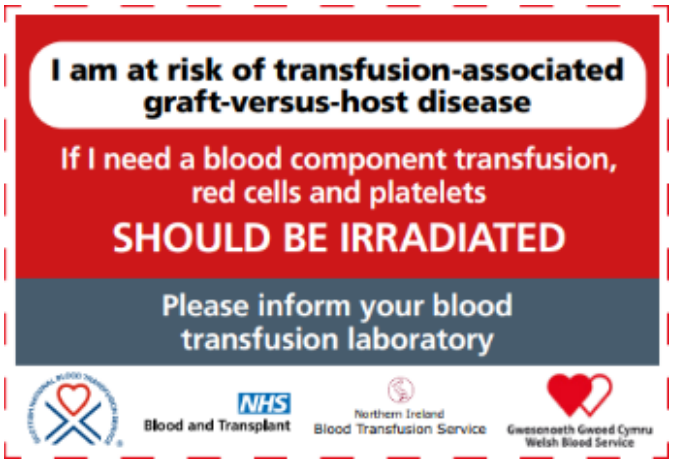
Blood components that are irradiated have this clearly stated on the blood pack label at the front of the unit.

Does irradiation damage the blood components?

Irradiation does not have a significant effect on red cells or platelets, and irradiated transfusions are as effective as those that have not been irradiated. The blood donation does not become radioactive and is not a hazard to you or anyone around you.

What if blood components are needed in an emergency?

In an emergency, there may not be enough time to arrange for irradiated blood components. Although they are recommended for you, it may be more important to supply blood components quickly. The healthcare team treating you at the time will assess the balance of these risks: if you wish to know more about what this would involve, discuss with the consultant in charge of your care.



Name _____

DoB __/__/__ Consultant _____

CHI/Hospital number _____

Hospital for enquiries _____

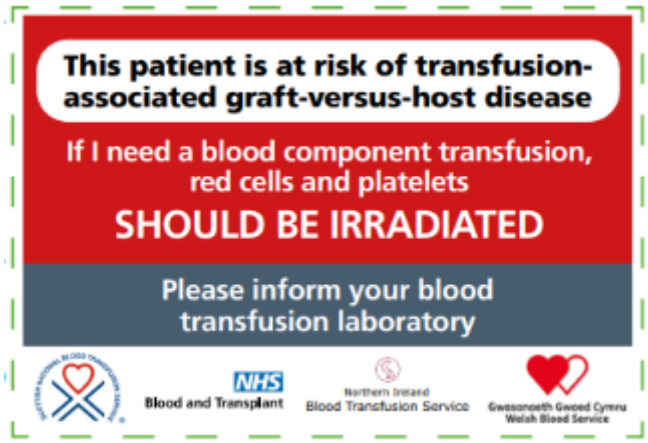
Reason for irradiated blood _____

_____

Irradiated blood needed indefinitely or until

___/___/___

Date of issue of card ___/___/___



Duty of Candour

The UK Blood Transfusion Services practise Duty of Candour. This means we will act in an open and transparent manner where an unexpected or unintended event has occurred, which appears to have caused harm or death in direct relation to transfusion. In England, Wales and Scotland this is covered specifically in the law by Duty of Candour legislation. Please ask your healthcare team for further information or access the

following website: https://www. gov.uk/government/publications/nhs-screening-programmes-duty-of-candour/duty-of-candour

Before any healthcare provider examines or treats you, they must seek your consent or permission. In order to make a decision, you need to have information from healthcare providers about your care, including the alternatives available to you and whether it carries risks as well as benefits. Please ask your healthcare provider more questions for clarification or further information.

Contact us

This leaflet was prepared by the UK and Ireland Blood Transfusion Network on behalf of the 4 UK Blood Services.

By email to: PBM.team@nhsbt.nhs.uk

By phone: 01865 381010

By post to:

Patient Blood Management
NHS Blood and Transplant
500 North Bristol Park
Northway
Filton
Bristol
BS34 7QH

For re-ordering: https://hospital.nhsbtleaflets.co.uk

For information on how to access the Serious Hazards of Transfusion (SHOT) My Transfusion App, please go to https://www.shotuk.org/news/download-the-my-transfusion-app/

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