

Patient Fact Sheet

Special Blood Requirement - Irradiated Blood

What is irradiated blood?

Irradiation of blood results in changes to the white blood cells (WBCs) in the donated blood. Irradiation does not make the blood less beneficial to you. The blood does not become 'radioactive' and will not harm anyone around you.

Why is irradiated blood needed?

Irradiated blood is given to prevent a rare but serious transfusion reaction called transfusion-associated graft-versus-host disease (TA-GvHD).

What is TA-GvHD?

TA-GvHD is a rare complication of blood transfusion caused by WBCs found in the donated blood that can cause severe illness in certain patients at risk.

Which patients are at increased risk of TA-GvHD?

Patients:

- With certain immune system disorders
- Who have received treatment with certain drugs (for example fludarabine)
- Who have received Bone marrow/stem cell transplantation
- Who receive blood from a close relative or blood matched for HLA

Is all blood routinely irradiated?

No. Red blood cell and platelet transfusions are not routinely irradiated and need to be irradiated 'on demand'. It is important that you tell your medical team if you need irradiated blood.

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 balance these risks and discuss with you.

- Please carry the attached card with you and show it to your physician or nurse if a blood transfusion is being considered.
- Consider registering with a medical alert program (such as MedicAlert®) to help first responders and emergency physicians in identifying your need for irradiated blood components.