

Reduced-Dose Apheresis Platelets - Information for hospital clinical teams.

What are reduced-dose apheresis platelets?

There are two main types of platelet components:

Apheresis platelets, which are collected from one donor using an apheresis machine.

Pooled platelets, which are made from 4 whole blood donations.

The type of platelet [apheresis or pooled] is stated on the component label affixed to front of the unit.

Reduced-dose apheresis platelets are a new component. They contain 2/3 of the dose of standard apheresis platelets, with a platelet count specification of $\geq 150 \times 10^9/\text{unit}$, instead of $\geq 240 \times 10^9/\text{unit}$ [the specification for a standard apheresis platelet unit].

Why are NHSBT issuing reduced-dose apheresis platelets?

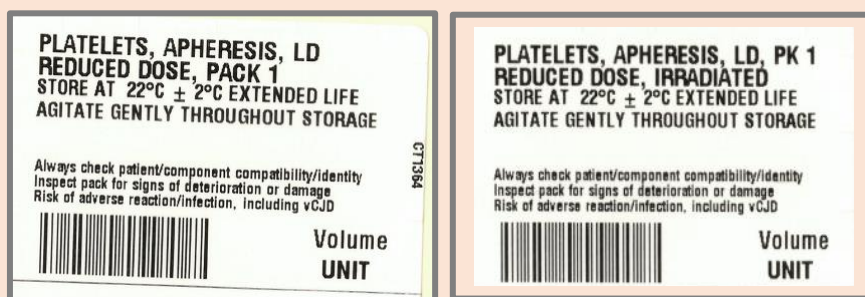
The introduction of a new reduced-dose apheresis platelet component will increase the platelet supply available. This will be a temporary measure during a severe shortage. It will be implemented when:

- a red alert for platelets has been called,
- without this measure being implemented a red alert level for platelet shortage would be called within 7 days.

This change will increase the platelet supply by approximately 18% and optimise the supply of available platelets for as many patients as possible.

How do we distinguish between reduced and standard dose platelets?

Reduced dose platelets are **only produced from apheresis collections**. Therefore, pooled platelets will always be standard-dose components. Reduced-dose apheresis platelets will be identifiable as this will be stated on the component label. A unique barcode will also enable your hospital transfusion laboratory to identify and record these reduced dose platelets on the Laboratory Information Management System (LIMS).



Examples of the component labels that are affixed to reduced-dose apheresis platelets – Non-Irradiated and Irradiated

Note: When this measure is first being introduced, and when these contingency reduced dose apheresis platelets are being withdrawn [when red alert has been stood down], your hospital transfusion laboratory may have both standard-dose and reduced dose apheresis platelets in stock, for a short period of time

When to use reduced-dose apheresis platelets?

Reduced-dose apheresis platelets will only be used when there is a significant platelet shortage that is affecting patient care. For detailed guidance see - [Guidance Notes for Reduced-Dose Apheresis Platelets](#) and the National Blood Transfusion Committee [NBTC] [Platelet Shortage Plan](#).

During a red alert, patients who should not be transfused platelets at this time [as set out in [Red Alert platelet shortage guidance](#)], should not receive this component.

Research and work by NHSBT show that it is acceptable to use a [reduced-dose apheresis platelet component](#) instead of a [standard-dose apheresis platelet component](#) in a severe platelet shortage, for older children and adults requiring prophylactic platelet transfusions.

Prophylaxis

Use reduced dose-apheresis platelets preferentially for patients who are not bleeding and are given platelets as prophylaxis as per [red alert platelet shortage guidelines](#) for children and adults.

When are standard-dose platelets still required?

Bleeding

Compatible standard-dose platelets should be used for major haemorrhage/ patients with bleeding due to low platelets (either pooled or standard apheresis platelets).

If standard dose platelets are not available, where indicated, 3 units of reduced- dose apheresis platelets are comparable to 2 units of standard dose platelets. Use the minimum number of platelet units to reach the required increment

Prior to an urgent, emergency, or major procedure with a moderate or high risk of bleeding

If an urgent or emergency procedure cannot be delayed, and no alternatives to platelet transfusion are available then use the platelet count thresholds as set out in the [Red Alert platelet shortage guidance](#), in line with the NBTC [Platelet Shortage Plan](#).

Do not use these components if it is a procedure with a low risk of bleeding –proceed without any platelet support and give platelets if bleeding occurs.

What about patients with special requirements & platelets for neonates?

- **Irradiated reduced-dose apheresis platelets** will be available for patients who have this requirement
- **Neonatal platelets** will not be affected by this change.
- **HLA / HPA selected platelets** There will be very limited access to these components during a severe shortage. All requests will need to be approved by a consultant haematologist at your organisation. If HLA or HPA selected components are not available despite an appropriate request, use ABO-matched random-donor platelet components instead. If HLA or HPA selected platelet components are available, they may be either a standard or a reduced-dose apheresis component, depending on availability.
- **Washed platelets** Where stock allows, requests for washed platelets will be fulfilled with a standard dose component

What do you need to think about in practice?

- Familiarise yourself with your organisation’s Emergency Blood Management Arrangements.
- Clear communication to the transfusion laboratory of the indication for the platelet transfusion is vital (prophylaxis, prior to procedure (state procedure), bleeding (severity of bleeding). This ensures the patient gets the most appropriate component.
- Document in the patient’s record, and on the prescription chart whether a reduced or standard-dose component is required.
- You do not need to re-check platelet count post transfusion, over and above routine practice.
- Incorporate a check for the type of platelet component [reduced or standard dose] at the point of transfusion and document in the patients record.
- Report any incidents, delays, or patient adverse events/ reactions related to this change to your Hospital Transfusion Team.

What do we need to tell patients?

For patients having a one-off platelet transfusion, the information needed will not vary from the information that patients should be receiving prior to transfusion. Information on the risks, benefits and any alternatives to transfusion, being standard elements of the consent process. Patients requiring regular prophylactic transfusions should, where possible, be informed of this change and the reason for it. This change may increase the number and/ or frequency of platelet transfusions required, if the platelet increment is insufficient or the platelet count not maintained due to reduced dose transfusion.

Your Hospital Transfusion Team can provide more information on this new component and other measures in place during the platelet shortage.