NHS
Blood and Transplant

Reduced-Dose Apheresis Platelets - Information for hospital transfusion laboratory staff, quality managers and transfusion teams

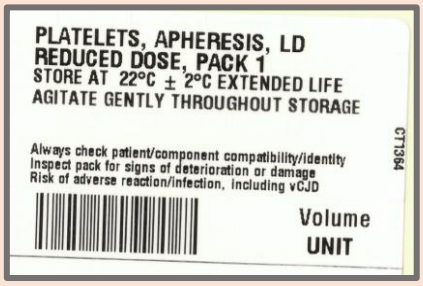
What are reduced-dose apheresis platelets?
Reduced-dose apheresis platelets are a new component. They contain 2/3 of the dose of standard apheresis platelets, with a platelet count specification of ≥ 150 x 10^9/unit, instead of ≥ 240 x 10^9/unit [the specification for a standard apheresis platelet unit].

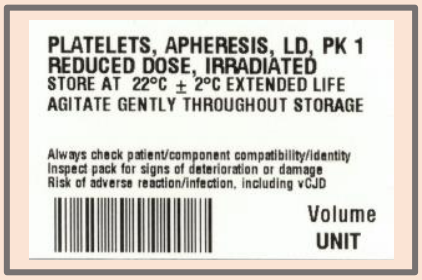
Why are NHSBT issuing reduced-dose apheresis platelets?
The introduction of a new reduced-dose apheresis platelet component will increase the platelet supply available. This will be a temporary measure during a severe shortage. It will be implemented when:

- 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 by **new** component barcodes and **Reduced Dose** is specified on the component label, as shown below.





Examples of the component labels that are affixed to reduced-dose apheresis platelets: non-irradiated and irradiated

The new component barcodes for these reduced dose apheresis platelets have been sent to hospital Transfusion Laboratories by the NHSBT Customer Services Team and can be found on the NHSBT Component Portfolio webpage. Hospital Transfusion Laboratory teams, should also consider any impact on any other relevant systems when implementing these new barcodes e.g. bedside elctronic tracking systems / remote blood fridges.

Will all types of apheresis platelets be impacted?

- **Neonatal platelets** - Neonatal platelets are not affected by this change.
- **HLA and HPA matched platelets**
  There will be very limited access to these components during a shortage situation. 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, please use ABO-matched random-donor platelet components instead. If HLA or HPA selected platelet components are available, they may be a standard or a reduced-dose component, depending on availability.
- **Washed platelets**
  Where stock allows, requests for washed platelets will be fulfilled with a standard dose component.

Will the process of ordering platelets change?
Yes, when implemented reduced-dose apheresis platelets will automatically be issued by NHSBT. This will enable Hospital Services to optimise supply of platelets to all hospitals. Hospital Services will issue oldest platelet components first, these could be standard-dose apheresis, reduced-dose apheresis, or pooled platelets.

For this change to be effective, pooled platelets, with no dose change, should only be ordered for patients who are bleeding or to meet demand for potential major haemorrhage / trauma patients e.g., for Major Haemorrhage packs. **When ordering please state requirement for pooled platelets in the line notes.**

When to use reduced-dose apheresis platelets?

Reduced-dose apheresis platelets will only be issued in a situation where there is a significant platelet shortage that is affecting patient care. 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.

Prophylaxis
Use preferentially for patients who are not bleeding and are given platelets as prophylaxis as per red alert platelet shortage guidelines for children and adults.

Prior to procedures
Only urgent or emergency procedures should be being performed when reduced-dose apheresis components are in use.

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

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).

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 per the Summary of Guidelines for the Use of Platelet Transfusions in a Platelet Shortage.

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.

Clinical staff should not be advised to undertake any additional tests to assess platelet count after transfusion, over and above routine practice. Increments should be checked the day after transfusion, except when the patient is actively bleeding.

Further support	**Component Selection**
For further information contact your NHSBT Customer Service Manager. For more comprehensive information refer to - Guidance Notes for Reduced-Dose Apheresis Platelets	Select ABO-matched platelets where possible. These will give the best increment. Irradiated reduced-dose apheresis platelets will be available to order for patients with this indication. Hospitals that irradiate locally should consider any impact on their processes.