

Level 2 Blood Conservation

This communication is from:

Director, Transfusion Services

Applicable to: OSUWMC, The James and East Hospitals Medical Staff, and University Reference Laboratory Clients

LEVEL 2 BLOOD CONSERVATION:

Effective today, we're implementing Level 2 blood conservation practices consistent with the regional blood shortage contingency plan developed in June 2021. This conservation plan was developed in conjunction with the Wexner Medical Center Allocation of Scarce Medical Resources Workgroup, the Central Ohio Trauma System and other hospitals across Zone 2.

The Wexner Medical Center has moved to a Level 2 blood conservation status due to recent decreases in blood product inventory over the past weeks. Currently, we're *critically low on type O RBCs* but expect possible shortages on all blood products during the next few weeks.

Ordering providers must be aware these steps are being taken to assist with conserving our regional blood supply:

General Transfusion Guidelines:

- Use the lowest safest transfusion thresholds in asymptomatic, hemodynamically stable patients:
 - RBC transfusions for Hgb < 7mg/dl
 - Platelet transfusion:
 - Maintain > 100,000/μl in neurosurgical patients only
 - Maintain > 50,000/μl in major surgery patients
 - All others > 10,000/μl
 - FFP transfusions limited to those patients with INR > 2.0
- Outpatient and hemodynamically stable inpatient transfusions should be limited to 1 unit per day (PRBC and platelets).
- Inpatient blood products will be released immediately prior imminent transfusion.
- Future transfusion orders will be canceled to encourage just-in-time assessments confirming necessity.

Massive Transfusion Protocol (MTP) for Trauma Patients:

- MTP will continue as per usual care.
- Continuation of MTP after 30 units are allocated will require the on-call trauma surgeon to contact the trauma medical director.
- If clinically indicated, the use of adjunct agents (e.g., activated coagulation factors, aminocaproic acid, tranexamic acid, vasopressin) should be considered early in the clinical course.
- Additional detail related to this MTP conservation process is included in [Conservation of Blood](#)



Products Policy.

Packed Red Blood Cells:

- Limit transfusions to 1 unit at a time in most clinical scenarios.
- Encourage early type and screen to avoid overuse of Group O products.
 - If supply becomes extremely low, Group O blood may **not** be available for emergency release for elective cases.
- Antigen negative RBCs will be provided only to patients who've formed an antibody.
- For patients with sickle cell:
 - RBC exchanges should be restricted to those with suspected stroke and Hb S level ~30% or any patient with sickle cell complications and Hb S 40-50%.
 - Consider simple transfusion in lieu of exchange transfusion to reduce blood utilization.

Platelets:

- For most patients, restrictions will be removed on ABO/Rh mismatched platelets.
- ABO-compatible platelet transfusions will be reserved for stem cell transplant recipients.
- Rhlg (Rhogam or Rhophylac) can be used to facilitate non-immunocompromised Rh-negative patients of childbearing potential receiving Rh positive platelets.

Plasma/Cryoprecipitate:

- Consider use of albumin as a replacement fluid for therapeutic apheresis procedures.
- Reduce pool size if possible.
- Consider using tranexamic acid or FDA-approved fibrinogen concentrate.
- Restrict use of AB plasma to patients only with AB blood type.

Evidence-Based Practice Guidelines:

- For other guidance related the effective use of blood products, please refer to the Wexner Medical Center clinical practice guideline, [**Transfusion Therapy: Indications for Ordering**](#).
 - Please ensure that you're familiar with appropriate clinical guidelines ([**Postpartum Hemorrhage**](#), [**Upper GI Bleeding**](#), [**Variceal Bleeding**](#)).

Please consider donating blood as your schedule allows in the near future. Increasing donation is a critical part of the solution. Please see the [**Versiti website**](#) to find a convenient date/time/location on campus or in the community.

