**General Pediatric Guidelines for Lab Based Blood Component Replacement**

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>THRESHOLD</th>
<th>DOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBCs</td>
<td>Aim for Hgb ≥ 100 in bleeding coagulopathic patient</td>
<td>Hgb ≥ 70 is sufficient in most stable non-bleeding patients</td>
</tr>
<tr>
<td>FFP</td>
<td>If INR greater than 1.5</td>
<td>Give 10-15 mL/kg</td>
</tr>
<tr>
<td>Platelets</td>
<td>If less than 50 x 10⁹/L or projected to be soon less than 50 x 10⁹/L</td>
<td>Give 5-10 mL/kg Platelets should drip freely and not be transfused using a warmer or pressurized infuser.</td>
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<tr>
<td>Cryoprecipitate</td>
<td>Fibrinogen less than 1g/L OR evidence of microvascular bleeding</td>
<td>Give 1U/5 kg NOTE: 4 U FFP contains equivalent fibrinogen to 10 U cryo</td>
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</table>

**Identify & Manage Bleeding**

Collect Type & Screen, CBC and Coagulation Samples – Deliver STAT

**Anticipate replacement of 50% of blood volume (40 mL/kg) in 3 hours OR Estimated blood loss exceeding 0.5 mL/kg/min**

**MD ORDERS MTP ACTIVATION**

Recommend Tranexamic Acid within 3 hours of injury²,³

ASSIGN a clinical team member to activate MTP (MUST be a Nurse – not a Unit Clerk)

PHONE Transfusion Medicine (TM) at 52332

PROVIDE Patient name and sex, RHRN, weight, location, ordering physician

ARRANGE for pick up of pack (page STAT porter for expedited pick up at 04678)

**Standard MTP Pack**

- √ 3U RBCs
- √ 2U FFP
- √ 1 dose Platelets

**OR at clinician discretion**

PACK IS TO FOLLOW PATIENT

**Q30 Minutes**

_Hemostasis & resolution of coagulopathy?_

- **No**
  - **Stop MTP**
    - Notify TM & return any unused blood ASAP
    - STAT hand delivery of samples is best
    - Repeat ABG, lytes, ionized Ca, serum magnesium and K+ q30 min
  - REPEAT CBC, INR, PTT & fibrinogen q1h

- **Yes**
  - Clinical Team member calls TM at 52332 for another MTP pack MD can adjust pack based on labs prn

**There is NO order in SCM to activate MTP.**

**Post MTP**: enter Clinical Communication: MD to Nurse: list all Blood products transfused during MTP.

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1. Massive Transfusion Definitions: Replacement of 50% of blood volume in 3 hours (40 mL/kg) or blood loss > 2 mL/kg/min or replacement of a blood volume (80 mL/kg) in 24 hours
2. Royal College of Paediatrics and Child Health Evidence Statement: Major trauma and the use of tranexamic acid in children, November 2012