Emergency Transfusion Guide
University of Chicago Medicine

**Step 1:** Administer emergency O Negative RBCs if stored on your unit.

**Step 2:** Select the appropriate emergency transfusion pathway.

A. **Emergency release:**
   - Patient needs 1-5 units of RBCs, 1-5 units of FFP, or 1 plateletpheresis emergently -

   **EMERGENCY RELEASE BLOOD REQUEST**
   **Adult, OB, Pediatric**

   Blood will be uncrossmatched unless the patient already has units crossed.

B. **Adult or Obstetrical Massive Transfusion Protocol (MTP):**
   - Patient needs ≥6 units RBCs in 4 hours, or
   - Replacement of total body volume (TBV) in 24 hours, or
   - Blood loss >150 mL/min
   - The first MTP pack will be uncrossmatched regardless of Type & Screen status

   **MASSIVE TRANSFUSION PROTOCOL**
   **Adult or Obstetrics Activation**

C. **Pediatric MTP indications:**
   - Patient age 0-17 years old
   - Replacement of >50% TBV in 3 hours, or
   - Replacement of >100% TBV in 24 hours, or
   - Blood loss >10% TBV/min
   - The first MTP pack will be uncrossmatched regardless of Type & Screen status

   **MASSIVE TRANSFUSION PROTOCOL**
   **Pediatric Activation**
Step 3: Follow the attached guide(s)

- ALWAYS call Blood Bank (2-6827) first to request emergency release or activate MTP
- Place Epic transfusion orders when time allows

Blood Bank turn-around-times:

<table>
<thead>
<tr>
<th>Task or Test</th>
<th>Turn-around-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stat Type &amp; Screen</td>
<td>60 min from receipt</td>
</tr>
<tr>
<td>Stat ABO Verification</td>
<td>15 min from receipt</td>
</tr>
<tr>
<td>Product thawing (frozen plasma, cryoprecipitate)</td>
<td>25-30 min</td>
</tr>
<tr>
<td>Extended crossmatch (for antibodies)</td>
<td>60+ min</td>
</tr>
<tr>
<td>Product preparation, Emergency release</td>
<td>&lt; 5 min</td>
</tr>
<tr>
<td>1st MTP pack (for patients age &gt;15)</td>
<td>10 min</td>
</tr>
<tr>
<td>Product prep, 2nd or greater MTP pack</td>
<td>10-20 min</td>
</tr>
</tbody>
</table>

- Do not send Blood Bank specimens to the main laboratory; send them directly to Blood Bank (tube #400). Sending Blood Bank specimens to the main laboratory results in delays of ≥30 minutes. Blood Bank tests include:
  - Type & Screen – pink top
  - ABO verification – tan top

- Blood Bank automatically prepares a keep-ahead MTP pack ahead of request to minimize delays.

- Patients ≤ 40 kg require group AB plasma. Processing time for group AB plasma may be 25-30 minutes during critical inventory shortages.
EMERGENCY RELEASE BLOOD REQUEST

1. GIVE O NEG RBCS FROM REFRIGERATOR IF AVAILABLE

2. CALL BLOOD BANK: 2-6827
   a. “I need to activate the emergency release protocol.”
   b. “The patient’s MRN is ________.”
   c. “The patient’s name is ________.”
   d. “The patient is a _____ (male or female).”
   e. “Patient is ___ years old.”
   f. (If Pediatric) “The patient weighs _____ kg.”
   g. “I need ___ (quantity) units of ______ (type of blood products required).”
   h. “Patient’s location is _____ (unit).”
   i. “Send the units to tube station______”
   j. “The physician requesting blood is ______.” (give full name)
   k. “My name is _____ and my call-back number is _______."

3. YOU MAY REQUEST

<table>
<thead>
<tr>
<th>BLOOD PRODUCT</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED BLOOD CELLS</td>
<td>1-5 UNITS</td>
</tr>
<tr>
<td>FRESH FROZEN PLASMA</td>
<td>1-5 UNITS</td>
</tr>
<tr>
<td>PLATELETRHERESIS</td>
<td>1 UNIT</td>
</tr>
</tbody>
</table>

   a. Allow up to 5 minutes to receive products
   b. Plasma may require up to 30 minutes if thawing is required

4. PLACE EPIC TRANSFUSION ORDER(S) WHEN TIME PERMITS
   a. Keyword search “emergency”, “transfuse”, or “release”

5. CALL BLOOD BANK FOR PRODUCTS OR MTP 2-6827

**ACTIVATE MTP IF ≥6 RBCS OR PLASMA NEEDED FOR ADULTS**
DESIGNATE ONE PERSON TO CALL BLOOD BANK

EMERGENCY RELEASE BLOOD REQUEST

BLOOD BANK IS IN CCD EAST, 2ND FLOOR
ROOM: 2-2730
PHONE: 2-6827
TUBE: 400
DESIGNATE ONE PERSON TO CALL THE BLOOD BANK
MASSIVE TRANSFUSION PROTOCOL

Adult or Obstetrics Activation

1. CALL BLOOD BANK TO ACTIVATE Designate one person: 2-6827
   b. “The patient’s MRN ______.”
   c. “The patient’s name is ______.”
   d. “Patient is ___ years old.”
   e. “Patient is a ____.” (male or female)
   f. “Patient’s location is _____ (unit).”
   g. “We need a _____ (single or continuous) pack.”
   h. “My name is _____ and my call-back number is _______.”
   i. “The physician requesting MTP is ______.” (give full name)

2. CARE TEAM RUNNER WILL TRANSPORT:

<table>
<thead>
<tr>
<th></th>
<th>RBCS</th>
<th>FFP</th>
<th>PLT</th>
<th>CRYO POOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADULT</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>1 upon request</td>
</tr>
<tr>
<td>OBSTETRICS</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>1 starting with pack 2</td>
</tr>
</tbody>
</table>

1. One (1) platelethpheresis = Six (6) or more platelet units; each platelethpheresis is one (1) dose.
2. One (1) cryoprecipitate pool = Five (5) cryoprecipitate units.

   a. Cryoprecipitate pool only available by request for non-OB patients
   b. Allow up to 10 minutes to receive first MTP pack
   c. Allow up to 30 minutes to receive cryoprecipitate or plasma requiring thaw

3. CALL BLOOD BANK IF: 2-6827
   a. Additional MTP pack needed (single-pack MTP only)
   b. Different MTP needed (e.g. from continuous to a single-pack)
   c. Patient transferred to new unit

4. PLACE EPIC ORDER(S) WHEN TIME PERMITS
5. CALL BLOOD BANK TO DEACTIVATE and return coolers and any unused blood products promptly.

MASSIVE TRANSFUSION PROTOCOL

Adult or Obstetrics Activation

BLOOD BANK IS IN CCD EAST, 2ND FLOOR

ROOM: 2-2730
PHONE: 2-6827 TUBE: 400

DESIGNATE ONE PERSON TO CALL THE BLOOD BANK
MASSIVE TRANSFUSION PROTOCOL
Pediatric Activation

1. CALL BLOOD BANK TO ACTIVATE  Designate one person: 2-6827
   b. “The patient’s MRN is ________.”
   c. “The patient’s name is ______.”
   d. “Patient is ___ years/months old.”
   e. “The patient weighs ______ kg.”
   f. “Patient is a ____.” (male or female)
   g. “Patient’s location is _____ (unit).”
   h. “We need a _____ (single or continuous) pack.”
   i. “The physician requesting the MTP is ______.” (give full name)
   j. “My name is _____ and my call-back number is ______.”

2. CARE TEAM RUNNER WILL TRANSPORT:

<table>
<thead>
<tr>
<th>Products Sent with MTP Runner</th>
<th>Recommended Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5-9 kg</td>
</tr>
<tr>
<td>&lt;40 kg</td>
<td></td>
</tr>
<tr>
<td>3 RBC</td>
<td>1 RBC</td>
</tr>
<tr>
<td>3 FFP</td>
<td>1 FFP</td>
</tr>
<tr>
<td>1 PLT¹</td>
<td>½ PLT</td>
</tr>
<tr>
<td>Cryo by request only</td>
<td>1 UNIT</td>
</tr>
<tr>
<td></td>
<td>Cryo</td>
</tr>
<tr>
<td>≥ 40 kg</td>
<td></td>
</tr>
<tr>
<td>6 RBC</td>
<td></td>
</tr>
<tr>
<td>6 FFP</td>
<td></td>
</tr>
<tr>
<td>1 PLT¹</td>
<td></td>
</tr>
<tr>
<td>Cryo by request only</td>
<td></td>
</tr>
</tbody>
</table>

1. ONE (1) PLATELETHERESIS = SIX (6) OR MORE PLATELET UNITS.
2. ONE (1) CRYOPRECIPITATE POOL = FIVE (5) CRYOPRECIPITATE UNITS.
   a. May request cryoprecipitate if needed
   b. Allow up to 10 minutes to receive first MTP pack
   c. Allow up to 30 minutes to receive cryoprecipitate

3. CALL BLOOD BANK IF: 2-6827
   a. Additional MTP pack needed
   b. Different MTP needed (e.g. from continuous to a single-pack)
MASSIVE TRANSFUSION PROTOCOL
Pediatric Activation

BLOOD BANK IS IN CCD EAST, 2ND FLOOR
ROOM: 2-2730
PHONE: 2-6827
TUBE: 400

DESIGNATE ONE PERSON TO CALL THE BLOOD BANK
Recognize blood loss & mobilize care team

Activate MTP
Call Blood Bank 2-6827

Send T&S and/or ABO2ND if needed
Blood Bank tube 400

MTP coolers packed and issued to runner(s) until deactivation

Send Hemorrhage Panel after each MTP pack
Main lab tube 901

Enter MTP transfusion order(s) in Epic, return coolers ASAP

Patient is stable

Deactivate MTP
Call Blood Bank 2-6827

Important Blood Bank Info:
Phone: 2-6827
Tube #: 400
Room: CCD 2730

Turn-Around-Times
1st MTP pack: 10 min
Thaw time (Frozen plasma or cryo): 25-30 min
Stat Type & Screen (T&S): 60 min from receipt
Stat ABO verification (ABO2ND): 15 min from receipt

MTP Pack Contents: NOTE – OB Continuous MTP comes standard with Pooled Cryo starting with the second (2nd) pack.

<table>
<thead>
<tr>
<th></th>
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<td>6</td>
<td>6</td>
<td>1</td>
<td>1 on request</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>1 starting with 2nd pack</td>
</tr>
</tbody>
</table>

Recommended Administration

<table>
<thead>
<tr>
<th>Weight Range</th>
<th>3 RBC</th>
<th>6 RBC</th>
<th>1 RBC</th>
<th>2 RBC</th>
<th>3 RBC</th>
<th>4 RBC</th>
<th>6 RBC</th>
<th>3 FFP</th>
<th>6 FFP</th>
<th>1 FFP</th>
<th>2 FFP</th>
<th>3 FFP</th>
<th>4 FFP</th>
<th>6 FFP</th>
<th>1 PLT</th>
<th>½ PLT</th>
<th>½ PLT</th>
<th>½ PLT</th>
<th>1 PLT</th>
<th>1 PLT</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;40 kg</td>
<td>6 RBC</td>
<td>6 RBC</td>
<td>1 RBC</td>
<td>2 RBC</td>
<td>3 RBC</td>
<td>4 RBC</td>
<td>6 RBC</td>
<td>3 FFP</td>
<td>6 FFP</td>
<td>1 FFP</td>
<td>2 FFP</td>
<td>3 FFP</td>
<td>4 FFP</td>
<td>6 FFP</td>
<td>1 PLT</td>
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<td>½ PLT</td>
<td>1 PLT</td>
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<tr>
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<td>1 RBC</td>
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<td>3 RBC</td>
<td>4 RBC</td>
<td>6 RBC</td>
<td>3 FFP</td>
<td>6 FFP</td>
<td>1 FFP</td>
<td>2 FFP</td>
<td>3 FFP</td>
<td>4 FFP</td>
<td>6 FFP</td>
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<td>½ PLT</td>
<td>½ PLT</td>
<td>½ PLT</td>
<td>1 PLT</td>
<td>1 PLT</td>
</tr>
</tbody>
</table>

Cryo by request only

1 UNIT Cryo | 1 UNIT Cryo | 1 UNIT Cryo | 1 POOL Cryo | 1 POOL Cryo
Massive Transfusion Protocol (MTP)  
Care Team Runners

1. Take a patient demographic sticker or other form of patient ID (name & MRN) with you.
   - Patient name and MRN needed to pick up cooler.

2. Take the MTP Card from your unit for emergency elevator access
   - Double tap MTP card to recall the elevator
   - Take elevator to 2nd floor of CCD building
   - Return card to your unit after each use
   - Card use is monitored by Public Safety and Blood Bank QA

3. Go to the Blood Bank, CCD East, room 2-730. Ring Doorbell at Service window
   - Follow way-finding signs to blood bank or use map from Emergency Transfusion Guide on crash cart. (CCD East Employee Elevators are closest-2nd Floor)

4. Obtain MTP cooler from Blood Bank. Transport the cooler directly to the care team

5. Keep the MTP Cooler at the Patient’s bedside until the MTP is deactivated, the cooler is empty, or the cooler is about to expire
   - Cooler expiration date/time and patient ID will be on top of the cooler lid
   - Keep cooler lid closed except for when retrieving blood products for patient
   - DO NOT place platelets or cryoprecipitate inside the cooler
   - Platelets and Cryoprecipitate are stored in the attached yellow compartment labeled Platelets

6. Return Cooler(s) to blood bank upon:
   - MTP Deactivation
   - 15 minutes BEFORE cooler expiration
   - Cooler is empty (swap out for new cooler at Blood Bank if Continuous MTP)