

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:

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

- 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 of 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

BLOOD PRODUCT	QUANTITY
RED BLOOD CELLS	1-5 UNITS
FRESH FROZEN PLASMA	1-5 UNITS
PLATELETPHERESIS	1 UNIT

- 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****

Revised July 2020



DESIGNATE ONE PERSON TO CALL BLOOD BANK

**EMERGENCY RELEASE BLOOD
REQUEST**

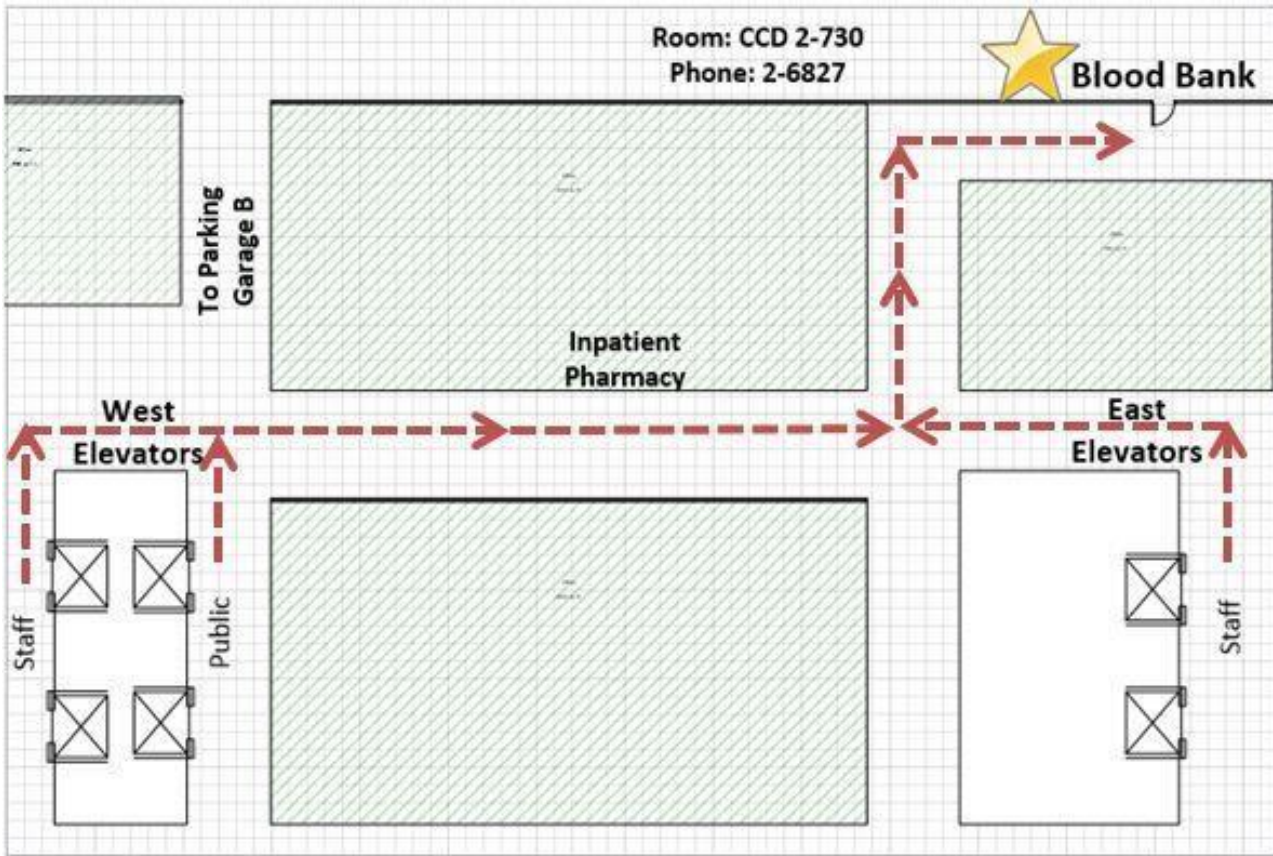
BLOOD BANK IS IN CCD EAST, 2ND FLOOR

ROOM: 2-2730

PHONE: 2-6827

TUBE: 400

Revised July 2020



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**

- a. "I am activating the Massive Transfusion Protocol."
- 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:

	RBCS	FFP	PLT ¹	CRYO POOL ²
ADULT	6	6	1	1 upon request
OBSTETRICS	6	6	1	1 starting with pack 2

1. One (1) plateletpheresis = Six (6) or more platelet units; each plateletpheresis 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

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5. CALL BLOOD BANK TO DEACTIVATE and return coolers and any unused blood products promptly.

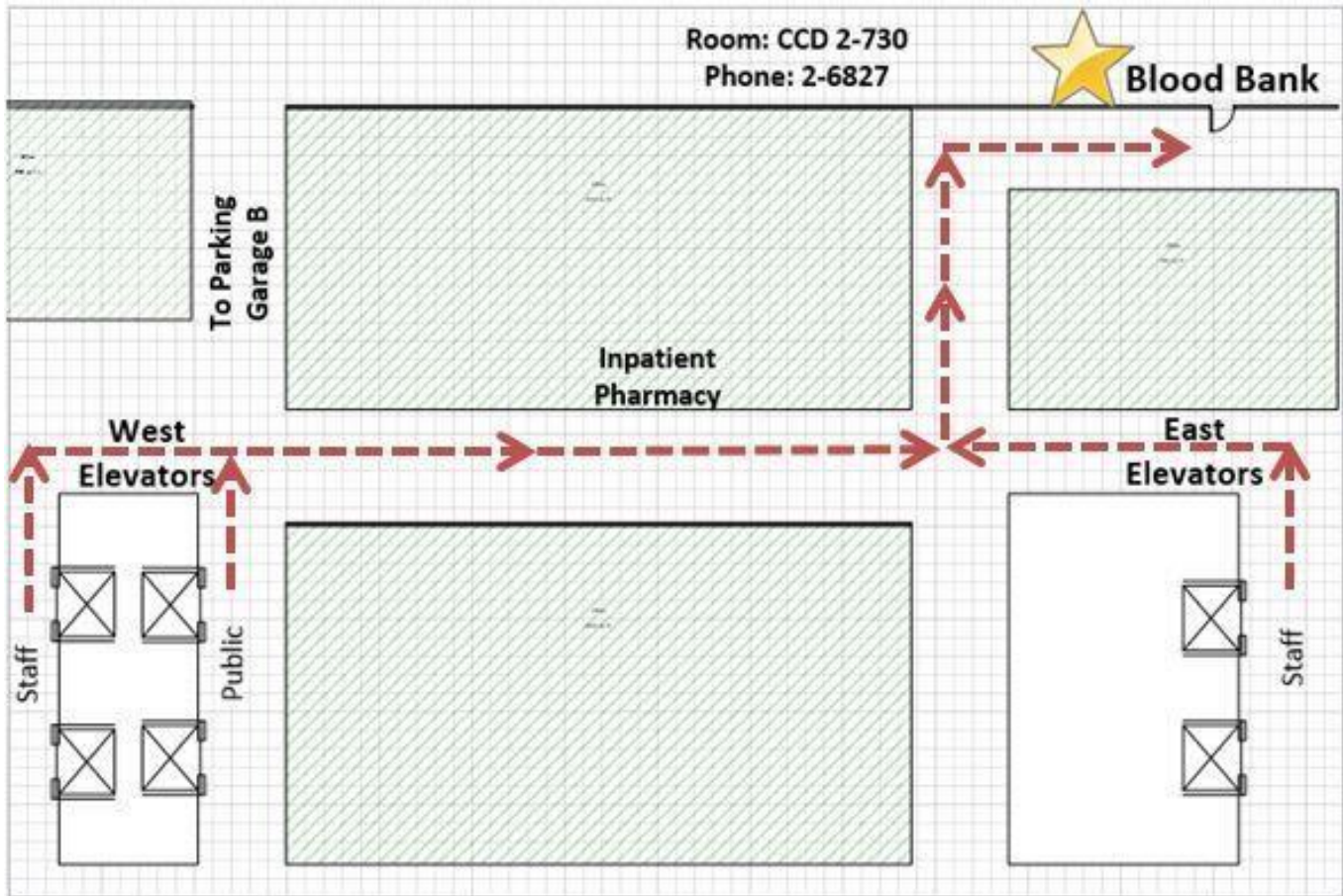
MASSIVE TRANSFUSION PROTOCOL

Adult or Obstetrics Activation

BLOOD BANK IS IN CCD EAST, 2ND FLOOR

ROOM: 2-2730

**PHONE: 2-6827 TUBE:
400**



1. Activate 2. Resuscitate 3. Communicate 4. Deactivate

DESIGNATE ONE PERSON TO CALL THE BLOOD BANK

MASSIVE TRANSFUSION PROTOCOL

Pediatric Activation

1. CALL BLOOD BANK TO ACTIVATE **Designate one person: 2-6827**

- a. "I am activating the Massive Transfusion Protocol."
- 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:

Products Sent with MTP Runner		Recommended Administration				
<40 kg	≥ 40 kg	5-9 kg	10-19 kg	20-29 kg	30-39 kg	≥ 40 kg
3 RBC	6 RBC	1 RBC	2 RBC	3 RBC	4 RBC	6 RBC
3 FFP	6 FFP	1 FFP	2 FFP	3 FFP	4 FFP	6 FFP
1 PLT ¹	1 PLT ¹	½ PLT	½ PLT	½ PLT	1 PLT	1 PLT
Cryo by request only		1 UNIT Cryo	1 UNIT Cryo	1 UNIT Cryo	1 POOL Cryo ²	1 POOL Cryo ²

1. ONE (1) PLATELETPHERESIS = 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)

- c. Patient transferred to new unit
- 4. **PLACE EPIC ORDER(S) WHEN TIME PERMITS**
- 5. **CALL BLOOD BANK TO DEACTIVATE** and return cooler and any unused blood products promptly.

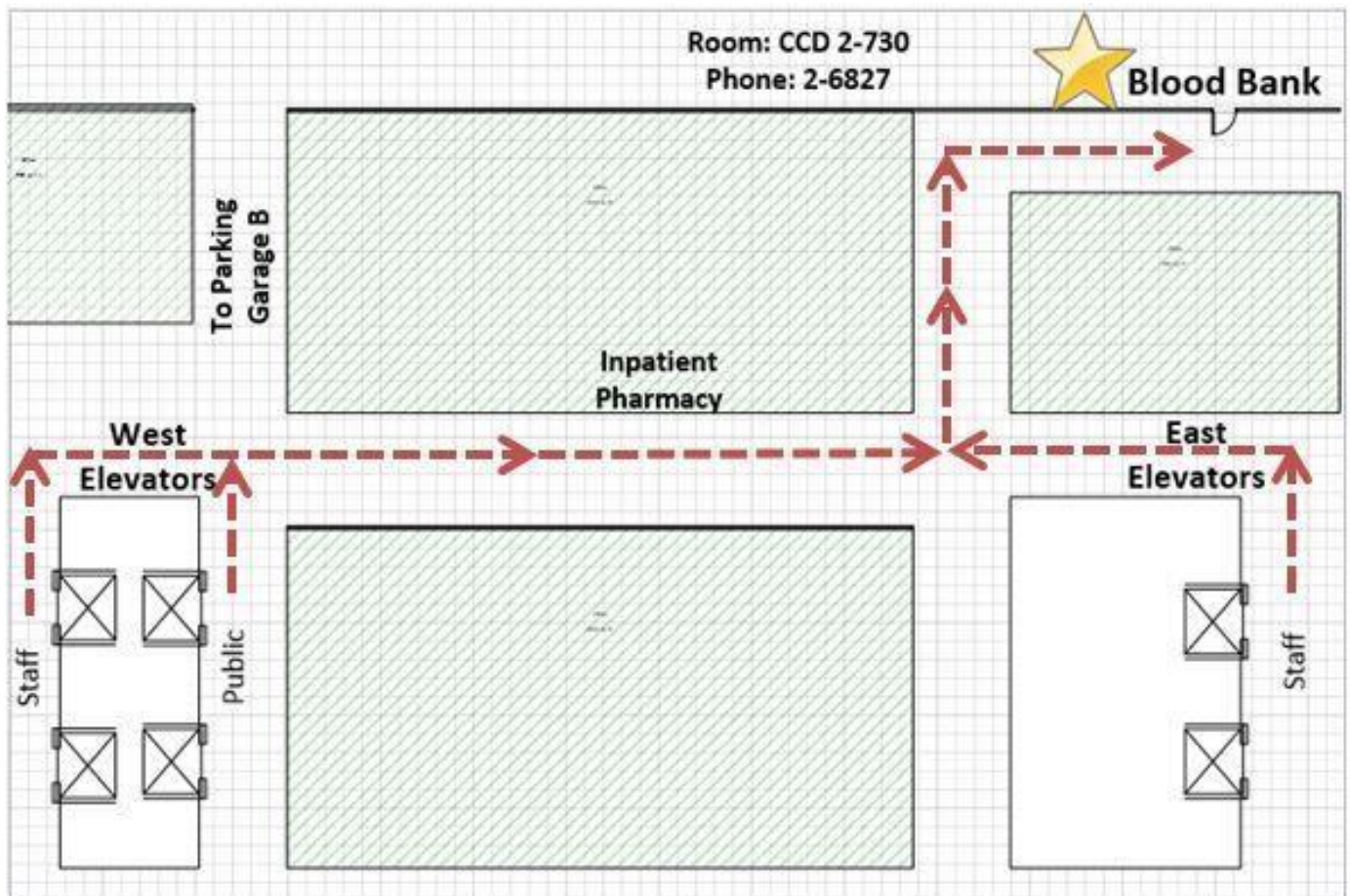
MASSIVE TRANSFUSION PROTOCOL Pediatric Activation

BLOOD BANK IS IN CCD EAST, 2ND FLOOR

ROOM: 2-2730

PHONE: 2-6827

TUBE: 400



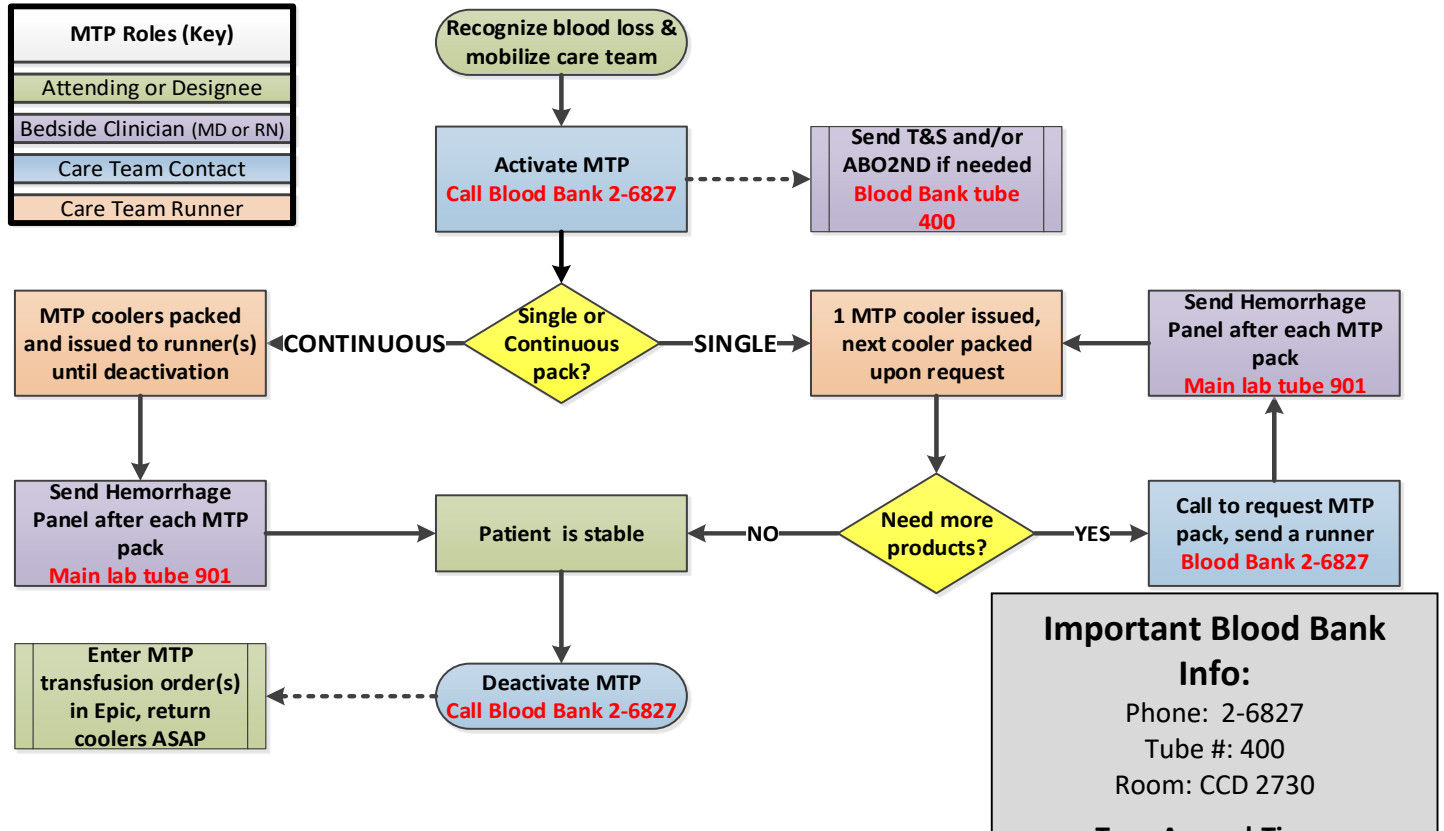
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1. Activate 2. Resuscitate 3. Communicate 4. Deactivate

DESIGNATE ONE PERSON TO CALL THE BLOOD BANK

Massive Transfusion Protocol (MTP) Algorithm Adult, Obstetrics, Pediatrics



Important Blood Bank Info:

Phone: 2-6827
Tube #: 400
Room: CCD 2730

Turn-Around-Times

1 st 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.

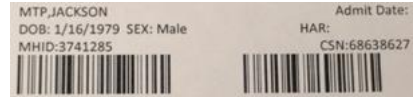
	RBCS	FFP	PLT	CRYO POOL
Adult	6	6	1	1 on request
Obstetrics	6	6	1	1 starting with 2 nd pack

Products Sent with MTP Runner		Recommended Administration				
<40 kg	≥ 40 kg	5-9 kg	10-19 kg	20-29 kg	30-39 kg	≥ 40 kg
3 RBC	6 RBC	1 RBC	2 RBC	3 RBC	4 RBC	6 RBC
3 FFP	6 FFP	1 FFP	2 FFP	3 FFP	4 FFP	6 FFP
1 PLT ¹	1 PLT ¹	½ PLT	½ PLT	½ PLT	1 PLT	1 PLT
Cryo by request only		1 UNIT Cryo	1 UNIT Cryo	1 UNIT Cryo	1 POOL Cryo ²	1 POOL Cryo ²

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

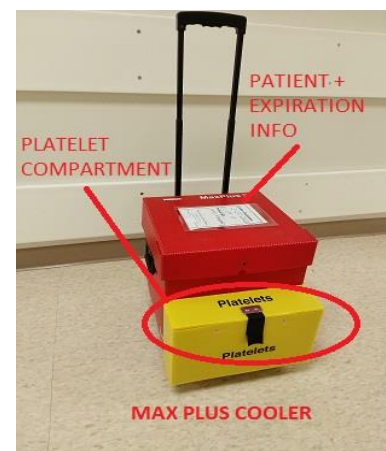
- Follow way-finding signs to blood bank or use map from Emergency Transfusion Guide on crash cart. (CCD East Employee Elevators are closest-2nd Floor)



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)