


TRANSFUSION MEDICINE DEPARTMENT  
**PROCEDURE**

**CATEGORY:** System-Level Clinical  
**ISSUE DATE:** June 6, 2012  
**SUBJECT:** **MASSIVE HEMORRHAGE PROTOCOL (MHP)  
AND EMERGENCY RELEASED BLOOD  
AND BLOOD PRODUCTS**

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<b>Approval:</b>  Lisa Smith, Executive Sponsor Clinical Policy and Procedure Committee	<b>Date:</b> March 3, 2021

**PURPOSE**

The Transfusion Medicine Department (TMD or “blood bank”) will issue emergency release blood/blood product coolers to any patient area upon request to facilitate optimal and timely patient care.

**PROCEDURE**

**MHP Indications**

MHP can be initiated by the most responsible physician in the following situations:

- Known substantial blood loss (estimated 1500 mL or greater than six (6) units packed red blood cells) OR
- Uncontrolled hemorrhage and hemodynamic instability OR
- Ongoing bleeding after four (4) units of Group O packed red blood cells (PRBCs) OR
- For trauma patient: ABC score greater than or equal to two (2) OR
- Resuscitation intensity of greater or equal to four (4) units of fluid in the first thirty (30) minutes (fluid = one(1) unit PRBCs, one (1) unit plasma, 500mL colloid, or 1L or crystalloid)

**Obstetric MHP Criteria:**

- Blood loss of greater than 1000mL and uncontrolled bleeding

**Special Instructions**

- MHP is a Critical Care Response Team (CCRT) led protocol at HSN. The CCRT receive training and education specific to MHP.
- During a massive transfusion situation, various departments will work together to expedite the rapid response as per protocol described in this procedure.

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- The TMD will issue either Group O Positive or O Negative packed red blood cells in coolers depending on patient age, sex and availability of blood product. Once pre-transfusion testing is complete, group-specific crossmatched red cell units and group-specific blood components will be issues in coolers during a MHP.
- During a MHP, the TMD will continue with subsequent steps in the preparation of blood and blood products. **It is essential to notify the TMD immediately when deactivating the MHP.**
- Up to a limit of two (2) emergency released uncrossmatched Group O packed red blood cells may be issued via pneumatic tube upon phone request from a responsible physician (or designate). Further need for uncrossmatched blood or blood products must be retrieved in coolers from the TMD (contact porter or use other transport personnel).
- Refer to the “Blood Product Administration” corporate clinical policy for requirements involving the safe administration of blood and blood products.
- Blood coolers are to be kept closed at all times until ready to transfuse.

### Method

See **Appendix A** for the MHP Algorithm

See **Appendix B** for MHP Activation – Clinical Areas

See **Appendix C** for MHP Activation – Switchboard

See **Appendix D** for MHP Activation – Portering

### MHP - Completing the Transfusion Record

1. Prior to completion of pre-transfusion testing, products within the cooler will typically be tagged with one of the following:
  - Emergency Uncrossmatched Group O Issue Transfusion Record
  - Emergency Group AB Plasma Issue Transfusion Record
  - Emergency Platelet Issue Transfusion Record

**It is essential that all blanks on these forms are completed and contain the following information:**

  - Name (may be SRHUNIDENT, xxx , where xxx is a random generated first name)
  - SH #
  - ID check #1 and #2
  - Transfusion start and end time with signatures
2. When the transfusion is complete and all blanks are complete on the above forms, place the “yellow” copy in the cooler for return to the TMD and place the “white” copy on the patient chart.
3. Once pre-transfusion testing is complete, the cooler for MHP will contain group-specific crossmatched red cells or group-specific blood components. These products will be tagged and accompanied with a “Blood Product Issue Transfusion Record” which should be completed and placed on the patient record after transfusion.
4. The first cooler issued will contain the “Doctor’s Consent for the Release of Uncrossmatched Blood” form, which will require the signature of the requesting physician.
5. If red cell units in the cooler are not required, the cooler will be returned to the TMD by the ED cleaning and supply attendant, porters or other staff **as soon as possible (no longer than 4 hours)**.
6. The TMD will contact the ED charge nurse (in the case of ED patients) or the requesting location (for MHP patients or other patients requiring emergency release coolers) to request a return of the cooler(s) as soon as crossmatched packed red cells are available.

### Emergency Release of Blood/Blood Product Coolers

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1. In an emergency situation when there is not sufficient time to perform necessary pre-transfusion patient testing, the TMD will issue coolers with uncrossmatched or emergency released products. Products available for emergency release include:
  - Emergency uncrossmatched Group O packed red cells
  - Emergency released Group AB frozen plasma (thawed)
  - Emergency released platelets
2. Emergency release of blood and blood products in coolers can occur in the following situations:
  - Where the ED requires in anticipation of (or during) a trauma situation, the ED will activate the primary trauma team via numeric pager # **0958** or by phoning the TMD at **ext. 3231 or 8615**. The TMD will automatically prepare two (2) units of Emergency Uncrossmatched Group O packed red cells in a cooler when notified by pager.
  - During a MHP
  - During other hemorrhagic events occurring in the hospital (i.e. Operating Room) by calling the TMD at **ext. 3231 or 8615**
3. Emergency released uncrossmatched packed red cells, platelets, Octaplex and Fibrinogen Concentrate should be ready within five (5) minutes of notification. Plasma (thawed) will typically be available within approximately 30 minutes of notification.
4. The requesting location will be responsible for dispatching personnel to retrieve the cooler from the TMD. **TMD staff will not transport coolers.**

## EDUCATION AND TRAINING

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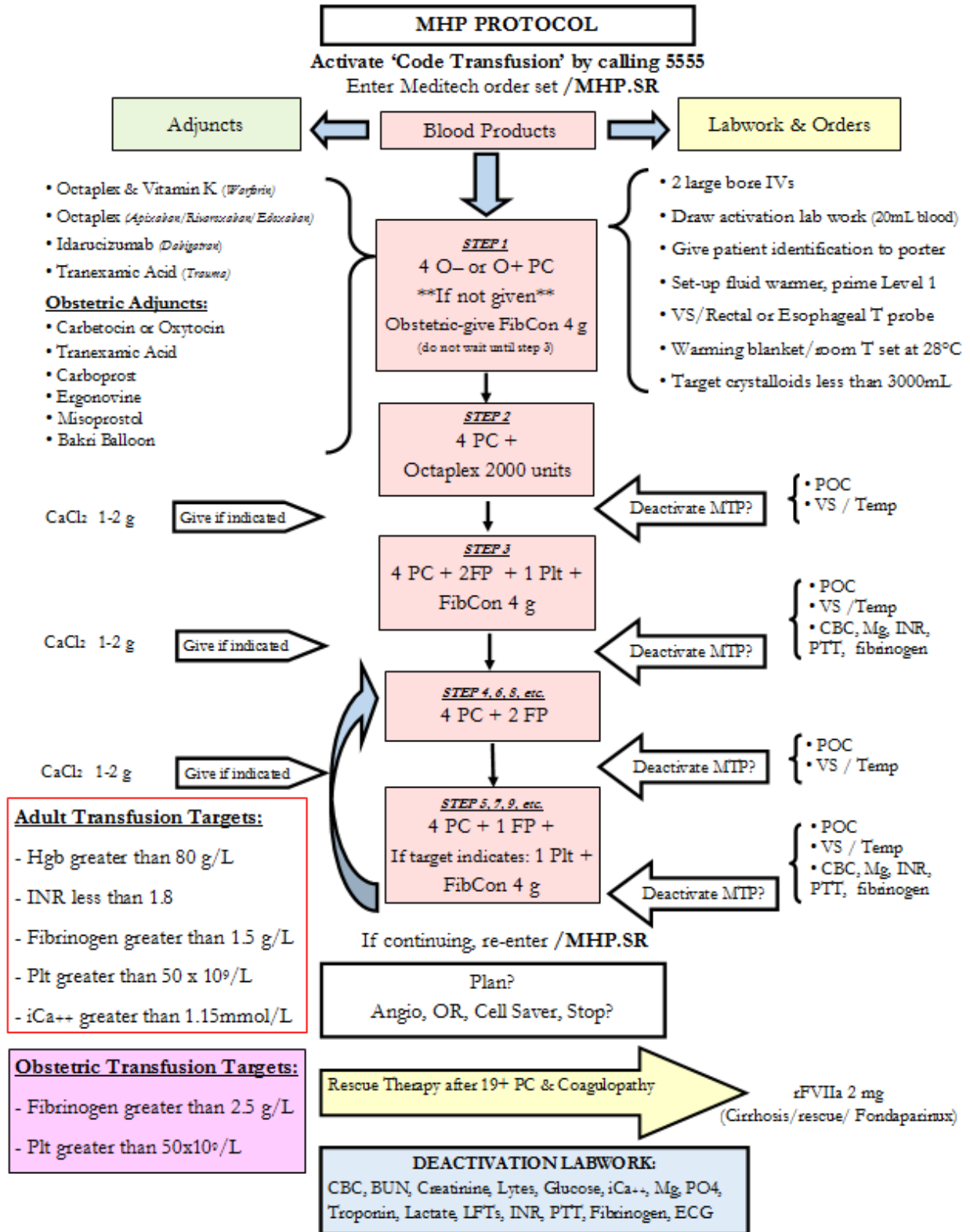
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**APPENDIX A**





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**APPENDIX B**

## Activation of Massive Hemorrhage Protocol (MHP) – Clinical Areas

To **ACTIVATE MHP**, do the following:

1. Dial **5555** (Code Phone)
2. State:
  - a) **Initiate Massive Hemorrhage Protocol as per Dr. \_**
  - b) **State patient's name**
  - c) **Provide patient's SH number**
  - d) **Location of MTP:**
    - i) **Tower**
    - ii) **Level**
    - iii) **Room Number**

For Operating Room Staff Only: Call in perfusionist on call if required.
3. **Wait for Switchboard staff to repeat information for confirmation**
4. **If information is correct state, "Yes that is correct."**

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## APPENDIX C

## Activation of Massive Hemorrhage Protocol (MHP) – Switchboard

The call for **MHP ACTIVATION** will come in on the CODE PHONE.

- A. You will hear *"Initiate Massive Hemorrhage Protocol as per Dr. \_\_\_\_"*
- B. Document:
1. The patient's name
  2. SH number
  3. Location of the MHP
    - i. Tower
    - ii. Level
    - iii. Location of the MHP
- C. **Repeat back** the information. The caller will confirm information by stating, *"Yes that is correct."*
- D. Once confirmation received, you will immediately call overhead *"Attention all staff. Code Transfusion \_\_\_\_\_ (location)"* repeat 3 times.
- E. **FOLLOW WITH STAT CALLS TO:**
1. **Transfusion Medicine Department** at extension #3231 and repeat information given:
    - i. Massive Hemorrhage Protocol initiated by Dr. \_\_\_\_
    - ii. Provide patient name, SH number, location - tower/level/room #
  2. **Porter Dispatch**
    - i. Massive Hemorrhage Protocol initiated by Dr. \_\_\_\_
    - ii. Tower / level / room #
  3. **CCRT Nurse** voice pager # 0888 – Repeat information from **step 2**.
  4. **VCC Nurse** voice pager #0137 – Repeat information from **step 2**.
  5. **RRT** voice pager #0146 – Repeat information from **step 2**.
  6. **Intensivist on call** - Repeat information from **step 2**.
  7. **\*For Operating Room MHP only\*** - the Operating Room will identify if perfusion-on call is required at MHP

**NOTE:** If porter is delayed, advise CCRT by voice pager *"Porter is delayed by xx minutes"*.

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## APPENDIX D

## Activation of Massive Hemorrhage Protocol (MHP) – Porter

- 1. Respond immediately to location of MHP.**
2. Upon arrival, tell the team ***“My name is \_\_ I am the porter and need the patient’s full name, date of birth, SH number to obtain blood products”***.
  - a. The team may give you lab samples to take down to the main Laboratory window (Level 1 Centre Tower room 1340)
  - b. Get blood products from Transfusion Medicine Department (Level 1 Center Tower). Wait outside of the window until products are ready. You will be given a dolly to transport blood products.
- 3. Once product delivered to patient location, return to the Transfusion Medicine window (Level 1 Center Tower Room 1333) with the dolly and wait for more blood product.**
4. Repeat steps 2 and 3 until the MHP is terminated at which time you will be notified by the CCRT nurse. **Coolers must be returned to Transfusion Medicine after the MHP is deactivated.**

**Document Control:**

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