Massive Transfusion Protocol (MTP)  
Revised May, 2010

1. **PURPOSE**  
To provide standardized component therapy to avoid coagulopathy associated with massive blood loss. To provide instruction regarding the massive transfusion protocol (MTP).

2. **SCOPE**  
This protocol applies to all VUH MTP activations.

3. **PROCESS**  
3.1. Initiation of Protocol:

3.1.1. **An MTP can be called for a patient in the VUH, OR, ED, SICU, or 10 Trauma Unit by a surgical or anesthesia attending.**

3.1.2. **The protocol has not been approved for a patient in any other location. The blood bank is prepared to provide all necessary components (trauma blood, FFP, etc.) to other locations outside of the context of an MTP.**

3.1.3. The physician must provide the Transfusion Service with the following information that is documented on the Massive Transfusion Protocol form.
   - Attending name
   - Patient Name
   - Patient MR#
   - Location (or OR room#)
   - Patient age
   - Patient sex

3.1.4. The initial dose will consist of:
   - 6 RBCs:
     - If trauma units are used:
       - Rh pos for males & females with expected age > 50
       - Rh neg for females with expected age < 50
   - 4 FFP
     - If trauma units are used select AB FFP
   - 1 platelet dose

3.1.5. Products are sent together as complete doses as described above:
   - Only the number and type of products as outlined in this protocol can be issued.
   - Requests for additional numbers or type of product must be pre-approved by the BB resident or BB attending.
   - RBCs, FFP and platelets must be issued together for each cycle. RBC and platelets will not be sent without the FFP.
   - Exception: If FFPs are not thawed and ready at the initiation of the MTP, RBCs If requested, cryoprecipitate can be issued.
• Given the high ratio of plasma infused for each cycle, cryoprecipitate is not necessary. If MTP is started late in the resuscitation and the clinical team feels that fibrinogen may have been low from the beginning, then cryo may be considered.

3.1.6. An Emergency Release form is issued with any uncrossmatched units.

3.1.7. RBCs and FFP are packed in a cooler with ice.
• Platelets are placed in a plastic ziplock bag, labeled with “Do Not Place Platelets in Cooler” sticker.

3.1.8. When the cycle is ready, the patient location is called to notify the staff that the cooler is ready for pick up, and asked if the MTP is to continue.
• If an OR room telephone line is busy, it is permissible to call the OR Board to tell them the cooler is ready, but the OR room must be called to ask if the MTP is to continue.

3.1.9. If the protocol is to continue, additional coolers will be supplied as soon as all products in the cycle are ready. This is approximately every 30 minutes.

3.1.10. The 2nd and subsequent doses will consist of:
• 6 RBCs
• 4 FFP
• 1 platelet dose

3.1.11. When each dose is ready, the patient location is called to notify them that the cooler is ready. At this time, BB asks if the protocol is to continue.

3.1.12. This process is continued until the attending surgeon tells the BB to discontinue.
• It is the responsibility of the attending surgeon to call the BB and let them know when the protocol will be discontinued.

3.1.13. At the completion of the case, the attending surgeon will be responsible for the return of all coolers to the blood bank.

3.1.14. Any products returned and not acceptable for reissue will be discarded.

References:


---

### 4. REVIEW AND REVISION HISTORY

<table>
<thead>
<tr>
<th>Approved</th>
<th>Title/Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

 Approved  

<table>
<thead>
<tr>
<th>Approved</th>
<th>Title/Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>