**Purpose:**

To describe the process used by the Harborview Medical Center (HMC) Transfusion Service to maintain the inventory of Stock Trauma Packs that are utilized during trauma response.

**Policy:**

HMC Transfusion Service will maintain a minimum inventory of stock universal donor type blood products to be the initial blood products as part of a trauma response. Stock Trauma Packs comprise a full “round” of blood products as defined by the Massive Transfusion Protocol.

**Procedure:**

|  |  |  |
| --- | --- | --- |
| **Step** | **Action** | **Related Documents** |
| **Stock Trauma Pack Supplies and Inventory** | | |
| 1 | **Stock RBC Trauma Packs**  A total of 4 Stock Trauma RBC Packs shall be maintained as follows:   * Two O Pos Adult packs containing 6 units O POS RBC * One O Neg Adult pack containing 6 units O NEG RBC * One O Neg Pediatric pack (patient <1 yr old), containing 3 units leukoreduced O NEG RBCs that are <7 days old.   The materials needed for each Stock Trauma RBC Pack are:   * Trauma Pack container * Small zip-lock bag for segments * Request for Urgent Blood Products Release form * UW Medicine Transfusion Record for each unit * Uncrossmatched stickers * Portable Refrigerator Response Log |  |
| 2 | **Stock Low Titer Whole Blood (LTWB)Trauma Packs**   * O pos or O neg LTWB trauma packs will be prepared when inventory allows * Each LTWB Trauma Packs should contain 2-3 units of O pos or O neg LTWB * Do not mix O pos and O neg in the same trauma pack   The materials needed for each Stock Trauma RBC Pack are:   * Large Zip Lock Bag * Small zip-lock bag for segments * Request for Urgent Blood Products Release form * UW Medicine Transfusion Record for each unit * Uncrossmatched stickers * Portable Refrigerator Response Log |  |
| 3 | **Stock Plasma Trauma Packs**  1 Stock Trauma Plasma Packs shall be maintained containing:   * 3 units of Low Titer Plasma (LTP)   1 Stock Trauma Plasma Pack shall be maintained containing:   * 3 units of group AB liquid or thawed plasma   The materials needed for each Stock Trauma Plasma Pack are   * Large Zip Lock Bag * UW Medicine Transfusion Record for each unit * Low Titer Plasma stickers * Portable Refrigerator Response Log   *Note: For inventory control purposes, LTP and AB can be in the same pack.* | Receiving and Processing Low Titer Plasma  Receiving and Processing Liquid Plasma |
| 4 | **Stock Trauma Platelet**  1 group A, B, AB, or Low Titer Group O platelet will be maintained.   * + Irradiation is not required   The materials needed for each trauma Platelet are   * UW Medicine Transfusion Record * Mini storage box with temperature stabilizers * Do Not Refrigerate sticker * Portable Refrigerator Response Log | Selection of Platelets, Plasma and Cryoprecipitate  Receiving and Processing Low Titer Platelets |
| **Step** | **Action** | **Related Documents** |
| **Stock Trauma Pack Preparation** | | |
| 1 | Select appropriate RBCs from the general inventory:   * Adult Sets: RBCs ≥ 15 days residual shelf life * Pediatric Set: Leukoreduced RBCs < 7 days old   *NOTE: Do not select apheresis RBCs from the same donor for the same trauma pack, if possible.* |  |
| 2 | In order to best utilize inventory, select plasma with ≥ 3 days residual shelf life for trauma packs in the following order:   1. Low Titer Plasma (LTP) 2. Liquid plasma: Group AB or Low Titer Plasma 3. Thawed group AB plasma   *NOTE: Do not select apheresis plasma from the same donor for the same trauma pack, if possible.* |  |
| 3 | Select appropriate Platelet from general inventory:   * + Group A, B, AB or Low Titer Group O   + Single bag apheresis   + Platelet age is irrelevant |  |
| 4 | Remove a segment for compatibility testing:   * Apply a unit number sticker to the terminal segment * Remove the segment and place in the zip lock bag. |  |
| 5 | Complete the UW Medicine Transfusion Record as follows for each product.  Apply red **UNCROSSMATCHED BLOOD** sticker to Whole Blood and RBC units and Transfusion Tag (do not apply to Thawed Plasma or Platelet units) | Using TAG for Emergency Release  UW Medicine Transfusion Record Form (UH3363) |
| 6 | Rubber band the UW Medicine Transfusion Record to the back of the unit.  *Note: a removable adhesive label is not required for trauma pack units as there is no pertinent patient information to be verified.* |  |
| 7 | **Portable Refrigerator Response Log:**   * Begin a new log any time units have been removed and/or replaced. * Place unit number sticker on Portable Refrigerator Response Log by product type * Document component Ecode including division * Place an LTP sticker to the left of the LTP plasma unit numbers, or write down “LTP” next to each LTP unit numbers. * Circle or place a Low Titer Whole Blood sticker to the left of the LTWB unit numbers. * Two Person verification must be used to confirm units, paperwork, and segments before placing the trauma pack into use. * Record tech ID of preparer and verifier at the bottom of the log. | Portable Refrigerator Response Log |
| **Step** | **Action** | **Related Documents** |
| 8 | **Request for Urgent Blood Products Release form:**  **RBC and whole blood only**   * Check the “Life threatening blood loss” boxes, i.e. the uncrossmatched group O RBC, and uncrossmatched type specific RBCs boxes. | Request for Urgent Release of Blood Products Form |
| 9 | **RBCs**   * Place the following into the Stock Trauma RBC Pack container: * Units labeled with Transfusion Record Form in the order they appear on the Portable Refrigerator Response Log * Place in a large Zip Lock Bag * Labeled segments * Request for Urgent Blood Product Release form * Original and photocopy of Portable Refrigerator Response Log   **Whole Blood**   * Place in a large Zip Lock Bag * Units labeled with Transfusion Record Form * Labeled segments * Request for Urgent Blood Product Release form * Original and photocopy of Portable Refrigerator Response Log   **Plasma**   * Place in a large zip lock bag: * Units labeled with Transfusion Record Form * Original and photocopy of Portable Refrigerator Response Log |  |
| 10 | Store RBC, Whole Blood, and Plasma packs in the designated storage area.  Place the Platelet, Transfusion Record, and Portable Refrigerator Response Log on the top shelf of the Platelet Storage Unit.  ***Note:*** *Paperwork should be on top or to the side of the platelet in order to allow for sufficient air flow around the bag.* |  |
| **Stock Trauma Pack Return into Inventory** | | |
| 1 | When the Stock Trauma Packs are returned with a Portable Blood Refrigerator:   * Determine if any units in the Stock Trauma Pack were issued. * Replace any missing Trauma Pack components with new stock and new paperwork following steps 1-10 above.   Return Stock Trauma products to appropriate storage.  Transfused Products:   * + Forward Portable Refrigerator Response Log (with RBC segments, if applicable) to an MLS. |  |
| **Stock Trauma Pack Rotation** | | |
| 1 | Adult Stock Trauma RBC Packs:   * Remove RBC units with < 15 remaining shelf life & replace.   Pediatric Stock Trauma RBC Packs:   * Remove units > 7 days old and replace.   Stock Trauma Plasma Packs   * Remove plasma with ≤ 2 days remaining shelf life and replace.   Stock Trauma Platelet   * Replace platelet with 1 day.   ***Note:*** *Short date trauma packs may be made/kept for inventory purposes.* | SQ Using Blood Bank Inquiry |

**References:**

Standards for Blood Banks and Transfusion Services, Current Edition. AABB Press, Bethesda, MD.