TITL E: EMERGENCY BLOOD TRANSFUSION

PURPOSE:

To ensure that uncross matched red blood cells (RBC’s) are available in the Emergency Center (EC), for use in situations where the need for blood transfusion has been determined to be so urgent that the time necessary for routine pre-transfusion testing might result in serious morbidity or mortality.

I. PROTOCOL STATEMENT:

1. Any patient primarily managed by the Trauma and Emergency service
2. Visible injury with external hemorrhage or significant burn(s)
3. Hemodynamic instability manifested by:
   a. Significant tachycardia or bradycardia
   b. Significant hypotension
   c. Significant tachypnea
   d. Significant alterations in mental status
   e. Cool, clammy extremities with significantly delayed capillary refill
4. Significant acid/base deficit as determined by arterial blood gas (ABG)
5. Significant hypoxemia as determined by arterial blood gas (ABG)
6. Anuria or significant decrease in urine output

Please note that decreased hemoglobin/hematocrit values alone are not considered sufficient reason for Emergency Blood Transfusion.
For such patients, the following inventory will be maintained in the EC Blood Bank refrigerator at all times.

1. Three (3) emergency RBC blocs (2 units of packed RBC’s each; 6 units total) consisting of:
   a. Two (2) blocs (4 total units) of O-negative, uncross matched RBC’s.
   b. One (1) bloc (2 total units) of O-positive, uncross matched RBC’s.

Use of O-negative bloc is primarily intended for female patients.

Use of O-positive bloc is primarily intended for male patients.

Additional blocs will be available upon request from the Blood Bank.

The Blood Bank will assign a bloc expiration date for all units so that unused units may be returned to inventory before expiration.

Use of Emergency units will be monitored by the Blood Bank, in conjunction with the Trauma and Emergency Services Department, in order to ensure that the policy is being followed appropriately.

Should the LIP determine that > 4 units of RBC’s will likely be required, initiation of the Massive Transfusion Protocol (MTP; Policy Number T3) is recommended.

II. DEFINITIONS:
   A. Licensed Independent Practitioner (LIP) Means any individual permitted by law and by Harris Health System to provide care and services, without relevant direction or supervision within the scope of the individual’s license and consistent with individually granted clinical privileges.
Guidelines and Protocols

1. Determines the need for emergent blood volume replacement as defined above.

2. Completes the appropriate Emergency Blood Request Form
   a. Patient Identification – name or unknown # and the medical record number.
   b. The number of units requested.
   c. Physician’s name and/or signature and ID number.
   d. Date.
   e. Diagnosis

3. Enters transfusion order in the EMR and includes:
   a. Type of blood component
   b. Amount of blood to be infused

B. REGISTERED NURSE

1. The Shock Room nurse will ensure that the blood products in the blood cooler are monitored and kept close to the intended blood transfusion recipient.

2. The nurse will collect and properly label a specimen of blood from the patient before the transfusion of donor blood. The labeled specimen will be sent to the Blood Bank as soon as possible.

3. Unused blood products must be returned within 4 hours to the Blood Bank.

4. Document blood transfusion in the EMR.

C. BLOOD BANK

1. Maintain 4 units of O-negative blood and 2 units of O-positive blood in the EC Blood Bank refrigerator at all times as described above.

2. Ensure prompt delivery of blood to the requesting unit.

4. Replace bloc(s) upon notification of usage.
5. Monitor usage of Emergency units in conjunction with Trauma and Emergency Services and work with Nursing Education to optimize utilization of units.

D. **Electronic Medical Record (EMR)** A computer-based record containing health care information, which meets provider needs for real-time data access and evaluation. This encompasses software applications that are used for but not limited to medication management, order entry, and documentation.

**REFERENCE / BIBLIOGRAPHY:**
HCHD Policy 4170 Blood/Blood Component Administration

**OFFICE OF PRIMARY RESPONSIBILITY:**
LYNDON B. JOHNSON HOSPITAL TRAUMA SERVICES

**REVIEW / REVISION HISTORY**

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