CCOP -01: BLOOD ADMINISTRATION PROGRAM

Urgent Resuscitation Using Blood Products and Walking Blood Bank SOP

Original Release/Approval: 6 August 2024	Note: CCOP-01 requires an annual review
Reviewed: N/A	**Approved for Adult Use Only** (age 18-65)
Supersedes: Replaces Vampire SOP	Version 1.0: CCOP-01 with Appendices A-L (includes WBB SOP)
☐ Minor Changes (or)	■ New Document That Requires Thorough Reading
☐ Significant Changes	OCR: JBPO, CLINOPS OPR: CCSG

1. **PURPOSE**

To provide essential details on the appropriate management and administration of approved blood components for transfusion to adult casualties/patients (age 18-65) suffering major blood loss/massive hemorrhage during evacuation/movement from the point of injury (POI). Referred to as Blood Administration Program (BAP).

2. **APPLICABILITY**

This United States Central Command (USCENTCOM) Clinical Operating Protocol (CCOP-01), Blood Administration Program, applies to all USCENTCOM Service Components, Combined and other Joint Task Forces (CJTFs), and all U.S. military forces operating under Title 10 within the geographic area of responsibility (AOR) assigned or allocated to Commander, USCENTCOM by approved Global Force Management (GFM) processes (e.g., Command Plan) and Department of Defense (DoD) civilian medical employees deploying with U.S. Forces (hereafter referred to as "DoD personnel") consistent with DoD and Service specific guidance.

a. Medical and non-medical personnel assigned/attached or allocated to perform medical evacuation and/or patient movement duties that involve direct or indirect patient care (e.g., flight medic, crew chief, registered nurse, enlisted medical personnel, physician, nurse practitioner, or physician assistant).

3. **REFERENCES**

a. Armed Services Blood Program, *Joint Blood Program Handbook*, HQs Departments of the Army, Navy and the Air Force, (Army Technical Manual 8-227-12, NAVMED P-6530, AFH 44-152-IP), 1 December 2011.

b. Joint Trauma System Clinical Practice Guideline (JTS CPG), Damage Control Resuscitation (CPG ID: 18), Publication Date: 12 July 2019.

c. Joint Trauma System Clinical Practice Guideline (JTS CPG), Whole Blood Transfusion (CPG ID: 21), Publication Date: 15 May 2018.

d. Joint Trauma System Clinical Practice Guideline (JTS CPG), Prehospital Blood Transfusion (CPG ID: 82), Publication Date: 30 October 2020.

e. Tactical Combat Casualty Care (TCCC) Guidelines for Medical Personnel, Publication Date: 15 December 2021.

f. CCR 40-1, Medical Services Healthcare Operations, 28 February 2023.

g. CCR 40-4, Medical Logistics for Healthcare Operations, 19 July 2021.

4. **RESPONSIBILITIES**

a. USCENTCOM Command Surgeon (CCSG) establishes and maintains the USCENTCOM Joint Blood Program consistent with DoD directives, instructions, and policies.

b. USCENTCOM Joint Blood Program Office (JBPO) is the single manager for all blood products used within theater at treatment facilities and for patient evacuation/movement.

c. USCENTCOM Service Component and/or CJTF Command Surgeons have oversight of operational units performing pre-hospital blood/blood product transfusions. Command Surgeon approves the implementation of a BAP within USCENTCOM.

d. The unit Senior Medical Officer (SMO) / Flight Surgeon (FSO) provides documented evidence of individual and unit training; and confirmation all mandatory equipment and supplies have been acquired to implement a BAP.

e. The Command Surgeon Office, in conjunction with the JBPO, will evaluate all new blood product requests. A minimum allocation during steady-state operations is expected to be 6 units of Low Titer Type O Whole Blood (LTOWB) per operating bed.

5. **FOLLOW JTS CLINICAL PRACTICE GUIDELINES FOR CLINICAL INDICATIONS FOR TRANSFUSION OF BLOOD PRODUCTS AND HEMOSTATIC ADJUNCTS.**

6. **PROCEDURE**

a. **Blood Component Therapy Approved for Transfusion during Tactical Evacuation**

(1) Red blood cells (RBCs) increase the recipient's oxygen-carrying capacity by increasing the mass of circulating red cells. Plasma and platelets work together to improve blood clot formation and clot stability. On average a unit of whole blood contains a volume of 500-600 mL and a unit of RBCs contains a volume of 300-400ml. In an exsanguinating patient, a unit of blood can be given quickly. Ensure good blood flow through IV or IO access before initiating transfusion. Refer to Appendix B for Transfusion procedures.

CAUTION: Rapid infusion against resistance **CAN CAUSE** mechanical shearing of RBCs and should be avoided.

(a) Blood products will be administered to treat hemorrhagic shock in the following priority depending on availability and according to Tactical Combat Casualty Care guidelines:

1. Cold Stored appropriate Whole Blood (LTOWB or TS-SWB), or, if not available

2. Pre-screened Fresh Low Titer Group O Whole Blood (LTOWB), or, if not available

3. Pre-screened Type Specific Whole Blood, or, if not available

4. Plasma, RBCs, and platelets in a 1:1:1 ratio, or, if not available

(a) In the Role 2/3 environment, where balanced transfusion products may be available, this is preferred over FWB (i.e. Pre-screened LTOWB donated via a WBB)

(b) The remainder of the algorithm remains the same.

4. Plasma and RBCs in 1:1 ratio, or, if not available

5. Reconstituted dried plasma, liquid plasma, or thawed plasma alone or RBCs alone

6. Fresh group O (typed by Eldon card or equivalent) whole blood from unknown titer walking blood bank

NOTE: Low Titer Group O Whole Blood (LTOWB) has been screened for anti-A and anti-B antibodies; these units contain a low titer of anti-A and anti-B and are therefore considered a universal donor product that may be given to recipients of any blood type with a minimum risk for a minor ABO incompatibly (typically minor and most often subclinical consequences).

(b) O POS (either low titer O whole blood or Type O RBCs) is the standard for transfusion during evacuation.

CAUTION: Whole Blood collected in theater will NOT be supplied for use onboard MEDEVAC aircraft. The whole blood supplied to MEDEVAC units will be exclusively drawn in the United States from the ASBP approved sites and distributed in theater through the blood distribution system. The LTOWB units will be fully tested following FDA current guidelines.

NOTE: Patients requiring blood can safely receive uncrossmatched Low Titer O Whole Blood until type-specific products are available.

(c) If available, use O NEG on females of childbearing potential (age <50 years old). Inform receiving facility if female is given O POS blood for documentation in the medical record.

NOTE: If a minimal amount (just a few milliliters) is given, consider Rh Immune Globulin Therapy (ie. RhoGAM). The immunologic consequences of administration of an entire unit of OPOS whole blood or RBC to an O NEG female of child-bearing potential cannot safely be reversed with RhoGAM. T**reatment of exsanguination takes precedence over potential future pregnancy outcomes.**

(d) Monitor for signs of transfusion reaction, such as hypotension, flushed face, wheezing, fever, rigors, flank pain. If reaction is suspected – IMMEDIATELY discontinue transfusion; identify

type of reaction; follow specific transfusion reaction procedures outlined in Appendices C and D; DO NOT discard blood product/supplies; provide blood product, filter set, IV tubing/solution to the receiving MTF/Blood Bank.

(2) Plasma is recognized as an important component in preventing and treating coagulopathy in trauma. On average a unit contains a volume of 200-250 mL and is transfused rapidly.

(a) Type A or AB thawed plasma is the current standard for transfusion during evacuation.

(b) Thawed plasma only has a shelf life of 5 days and may not be available for the pre-hospital mission. Liquid plasma (never frozen) has a shelf life of 26 or 40 days. Check with issuing facility or blood supply unit for availability.

(3) The recommended mission loads for tactical evacuation are based on operations tempo and determined by the theater or Joint Task Force Surgeon. Specific missions may require additional blood products; units will refer to the JBPO.

(a) Golden Hour Container (GHC) maximum capacity is four (4) units RBC/LP or 2 units of whole blood.

(b) If LTOWB is UNAVAILABLE, evacuation personnel will fly with RBCs and LP exclusively.

(c) Product must finish infusion within 4 hours of spiking the bag. If not complete, then it needs to be stopped and the remainder of the product discarded. If the initiation of transfusion (spiking of the bag) is delayed, then the blood may be returned to storage if it has not exceeded appropriate transport temperature, which is a max of 10ºC. The only way this can be determined is with use of a Safe-T-Vue sticker on the actual blood bag.

(d) Unused blood products (i.e. WB and freeze-dried plasma [FDP]) furnished by forward U.S. or Coalition Forces will not be used by evacuation personnel. Recommend products be left with forward forces. Blood products (WB and FDP) spiked by forward forces and transfusing at time of pick up will be continued during evacuation.

NOTE: Emergency transfusion of pediatric patients relies on clinical assessment rather than specific vital signs since normal heart rate and blood pressure are age dependent. Clinical signs of shock are the same as in adults (cool, pale, weak or absent radial pulse, delayed capillary refill, decreased mental status). Pediatric fluid resuscitation related to trauma begins with 10 mL/kg of first blood product, then repeat as needed based on response.

b. **Walking Blood Bank Collections, Testing, and Product Usage**

(1) WBB is the emergency transfusion option that will be reserved for contingency planning (clinical judgement, combat, mass casualty events, and prolonged evacuation) where failure to act will likely result in death. Emergency whole blood considerations and order of product preference:

(a) Prescreened Low titer group O blood type (universal blood product) is the preferred product.

(b) ABO type-specific (donor and patient ABO match); in cases when Rh negative WB is preferred but unavailable, Rh-positive WB may be transfused; document in patient record as required.

(c) Type O WB not screened for titers.

1. Donors who were not pre-screened must have their ABO/Rh determined prior to donation using a rapid test kit (e.g. Eldon Card) or clinical laboratory test method.

2. To the extent that the clinical situation and resources permit, donors will be tested using specific rapid infectious disease tests (e.g., Malaria, HIV, HCV, Rapid Plasma Reagin and Hepatitis B Surface Antigen) prior to donation or product transfusion.

(2) CENTCOM units will train on Walking Blood Bank procedures, in line with Appendix L, CENTCOM Emergency Walking Blood Bank Standard Operating Procedures.

(a) WBB training/exercise will be conducted monthly and/or with each change in medical personnel.

(b) Training compliance will be reported to and tracked by the Joint Blood Program Officer.

(c) Training goal should be 28 minutes with a maximum acceptable time of 55 minutes from time the WBB is activated to the time transfusion of newly collected and tested unit begins.

(d) Training resources can be located at the following locations:

1. Theater Blood MilSuite Page: https://www.milsuite.mil/book/groups/theater-blood-support

2. Deployed Medicine Website: Search Walking Blood Bank; https://www.deployedmedicine.com/search/walking%20blood%20bank

c. **Receiving Blood Components from an Issuing Facility (U.S. and Coalition)**

(1) **U.S. issuing facility personnel from the Medical Detachment Blood Support (MDBS), MTF (Role 2/3) or Laboratory (LAB) will:**

(a) If requested and available, thaw frozen plasma according to local procedures and label products (A or AB) with 5-day expiration date. "Never frozen" liquid plasma has a shelf life of 26 or 40 days and may be more readily available. Check with the issuing facility for availability of thawed or liquid plasma.

(b) Ensure Golden Hour Container (GHC) is properly charged and removed from freezer 25-30 minutes prior to loading blood products.

(c) Ensure all blood products issued have a Safe-T-VUE (NSN 6515-08-T00-3056) attached and activated for temperature monitoring (Refer to Appendix K). Ensure thawed plasma is at refrigerated temperature (1 to 6ºC) before placing Safe-T-VUE on the unit.

(d) Evacuation personnel will follow Appendix K for Safe T-VUE procedures when required.

(e) Document in the Theater Medical Data Store (TMDS) the issuance of blood products to a medical evacuation/patient movement unit (e.g., MEDEVAC; PJ; Tactical Critical Care Team). If TMDS is not available coordinate with the USCENTCOM JBPO for documentation.

(f) Complete a *Standard Form (SF) 518 Shipping Blood or Blood Component Transfusion Record* for blood issue; sign under certification that products meet all applicable policies and testing as required; and provide a copy to the requesting unit (Refer to Appendix F and Appendix I).

(g) Verify the blood information on the SF518 against the blood product label (product type, donor identification number, ABO/Rh type, and expiration date) with receiving evacuation unit personnel.

(2) **Non-U.S. Issuing Facility**:

(a) When U.S. blood products are to be issued from a Coalition facility, send an email to the USCENTCOM JBPO to coordinate issuing requirements and document units received.

(3) **Receiving unit (Evacuation Unit) personnel will**:

(a) Prior to sealing GHC, ensure each blood product loaded into the GHC has an activated Safe-T-VUE (Appendix K) attached and an SF518 initiated appropriately (Refer to Appendix F).

(b) Accept blood products into receiving unit's TMDS inventory.

NOTE: If receiving unit is unable to access TMDS, the issuing facility will access account and receive the products under the receiving unit's TMDS inventory.

(c) Unit FSO/SMO will track and monitor unit's compliance with issuing and receiving requirements.

d. **Storage, Transportation and Monitoring of Blood Products**

(1) All blood and blood components must be maintained in a controlled environment and stored under appropriate conditions.

(2) Blood products carried outside a MDBS/MTF/Lab will only be transported in an approved storage container (e.g., Golden Hour Container NSN 6530-01-505-5301; OCP/5306; Desert) for a maximum of 48 hours.

(3) Units will monitor containers and document status (e.g., dry/no leak noted) at a minimum of every 24 hours.

(4) Once loaded and sealed, container will remain closed and intact at all times until blood product is required for patient care.

(5) Notify the issuing facility (MDBS/MTF/Lab) as soon as possible when blood products have been used.

(6) GHC is only approved for 48 hours use. Prior to expiration, end users will contact issuing

facility to coordinate the return and exchange of a reconditioned container and blood products per mission requirements.

WARNINGS:

- At no time will container or its contents (blood products) be placed in another refrigerator or other cooling device.

- Blood products will not be used if the container is leaking; or the temperature indicator (Safe-T VUE) on the blood products it out of standard (refer to Appendix K).

- Notify the issuing facility and return container and products for replacement.

e. **Individual and Unit Training Requirements**

(1) At a minimum, medical personnel who participate in the administration of blood products during evacuation will be trained in the following topics:

(a) Clinical Indications of Hemorrhagic Shock (Appendix A).

(b) Transfusion Procedures (Appendix B).

(c) Transfusion Reactions (Appendices C, D).

(d) PEARLS for transfusion (Appendix E).

(e) SF 518 documentation (Appendices F, H & I).

(f) Submission of a patient safety report when required.

(2) Units who implement this CCOP will train appropriate personnel on the following:

(a) Emergency Walking Blood Bank Procedures (Appendix L).

(b) Emergency procedures for in-flight complications.

(c) Storage container/blood product exchange requirements (Appendices H, J &K).

f. **Essential Items Required for Implementing a Blood Administration Program**

(1) Approved blood component transport container.

(a) Recommend between 4 and 6 of each GHC for a BAP (NSN 6530-01-505-5301 (OCP)/5306(Desert)).

(2) HemaCool (NSN 4110-01-506-0895) or other freezer with temp check to ensure a temperature ≤ to (-)18°C to support reconditioning of GHC.

(3) Safe-T-VUE (NSN 6515-08-T00-3056) for temperature monitoring (Refer to Appendix K).

(4) Theater Medical Data Store (TMDS) accounts for issuing and receiving facility; go to (https://tmds.health.mil/portal/) and select "Request Account". Notify the CENTCOM JBPO before requesting access.

g. **Warming Devices for Blood Transfusion**

(1) Use of infusion warming devices is highly recommended. These must be FDA approved for the actual use in transfusion of blood products (examples include Belmont® Buddy-lite™, EnFlow® or Thermal Angel).

(2) Units will ensure routine medical maintenance is performed on warming devices IAW CENTCOM Medical Logistics policies/procedures.

(3) All warming devices will have an airworthiness release (AWR) certification for use within rotary and/or fixed wing. Personnel will understand and adhere to all notes/cautions and warnings listed in the AWR.

WARNING: Warming devices will have safety mechanisms built in that prevents the output temperature from exceeding 42°C. Unit personnel will be familiar with safety mechanisms for the device used.

h. **Record Keeping and Documentation Requirements**

(1) Transfusions will be documented into TMDS.

NOTE: Issuing facility personnel may also enter transfusion into TMDS if evacuation unit lacks TMDS access.

(2) Personnel will refer to the Theater Blood Application Training Guide for directions on Inventory Management and for Transfused Products.

(3) Complete SF518 documentation and turn over at the destination MTF for placement in the patient's medical record.

7. The proponent for CCOP-01 is the USCENTCOM Command Surgeon.

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LARRY J. MCCORD
COL, MC, USA
COMMAND SURGEON

APPENDIX A: CLINICAL INDICATIONS OF HEMORRHAGIC SHOCK

Clinical Evidence Hemorrhagic Shock Is Present		
H	**Hypotension**	**Systolic blood pressure <100mmHg**
T	**Tachycardia**	**>100 BPM; Unresponsive to a 250-5000cc fluid bolus (NS/LR)**
R	**Respirations**	**Rapid/shallow**
P	**Pulse (poor character)**	**Weak and thread (ineffective)**
M	**Mental status**	**Decreased (excluding head injury)**
S	**Skin Color**	**Pale/cyanotic**
C	**Continued bleeding**	**From non-compressible wound**

APPENDIX B – TRANSFUSION PROCEDURES

TRANSFUSION PROCEDURES

MAINTAIN UNIVERSAL PRECAUTIONS (Gloves & Eye Protection)

STEP 1: ESSENTIAL BLOOD ADMINISTRATION ITEMS

1. "Y" Type Filtered Blood Administration Set (UNDER NO circumstances should non-filtered tubing be used) 2. Blood Product to Transfuse (Universal Donor is approved for Prehospital)	3. 0.9% NS (Dedicated Line Only for Blood Products) 4. Blood Pressure Cuff/Monitor 5. Blood Warmer Device 6. Pressure bag (if available)

STEP 2: PRE-TRANSFUSION TASK

Two Person Verification Process
Verify Blood Label. Complete SF 518 for 5 items below or transcribe items from Blood Label onto blank SF 518:
(1) Unit#; (2) Type of Product; (3) Donor ABO/Rh (Must be O for RBCs; and A or AB for Plasma);
(4) Expiration Date; and (5) Temperature Indicator (RED = NOT ACCEPTABLE)

1. CLOSE all 3 clamps on Y tubing
2. NOTE: When using blood/fluid warming device, attach line to fluid warmer cartridge and fluid warmer extension line.
a. Ensure warming device is functioning IAW manufacturers guidelines
3. Insert 1st spike into NS bag and hang; OPEN clamp and prime only the "Y" section; CLOSE clamp
4. Insert 2nd spike into blood product and hang; OPEN clamp and run the length of the tubing
5. Attach line to IV or IO sites **Ensure good flow through IV/ IO before initiating transfusion**
6. Ensure all clamps are CLOSED
7. Note/document pre-transfusion vitals - at a minimum BP and HR
8. Medical person will visually inspect blood product if possible for gas, discoloration, clots, foreign objects, or, sediment, and ensure no cracking of the plastic bag that has led to leaking.
a. Visually inspect the Temperature Indicator (RED = NOT ACCEPTABLE)
9. Non-Medical person can assist with documentation on the SF 518 for Pre and Post transfusion information

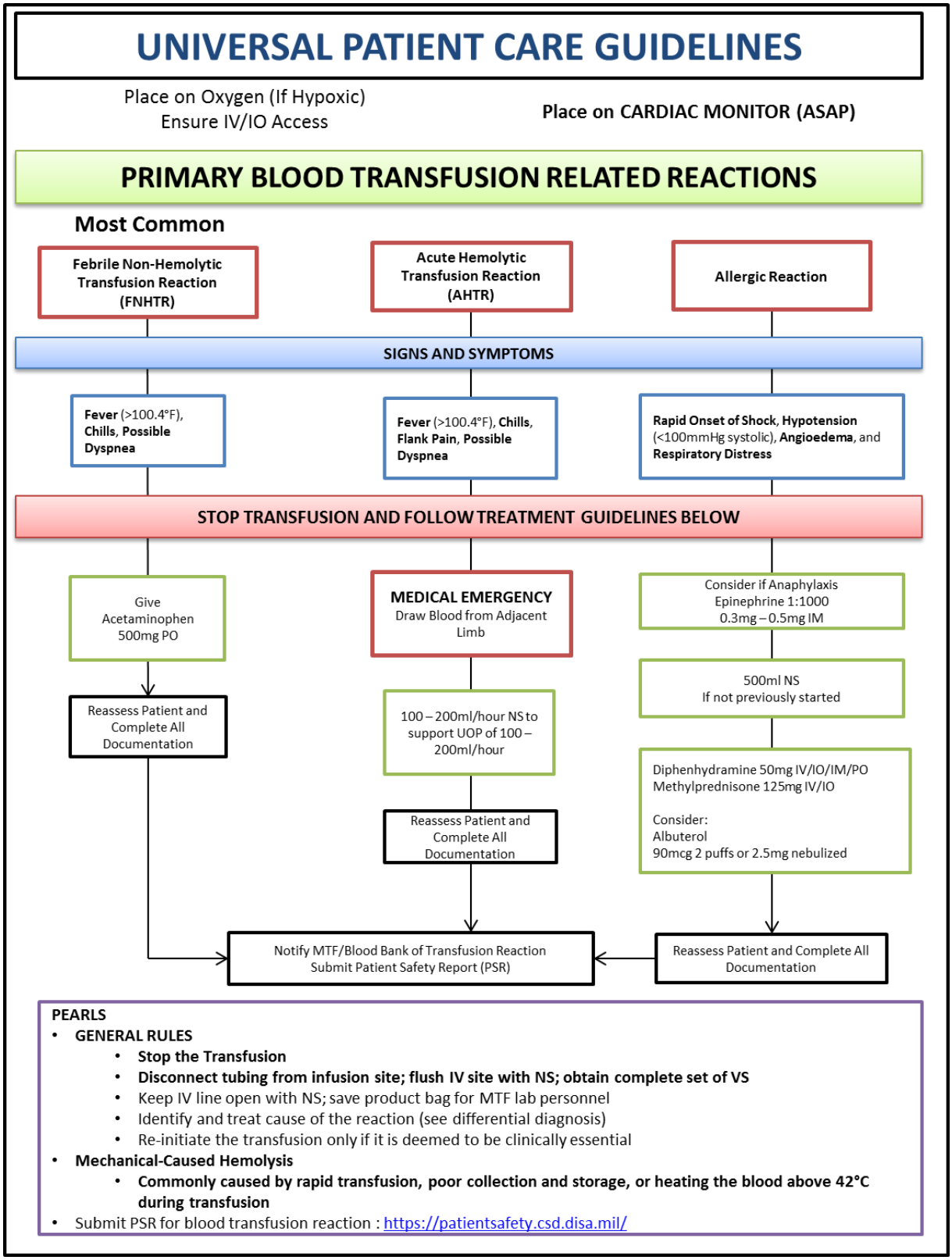
STEP 3: TRANSFUSION TASK

1. OPEN main line clamp for blood product to begin infusion.
   a. **ENSURE CLAMP to NS REMAINS CLOSED.**
   b. **UNDER NO CIRCUMSTANCES** will other medications or IV fluid (including 3%NS) be introduced through transfusion line. This will cause hemolysis/clotting of blood products.
2. **Blood products must be transfused within 4 hours of removal from a storage container** - if not, the product(s) will be returned to issuing facility or delivered with patient to MTF to be discarded.
3. If using pressure infuser set pressure to 300 mmHg.
4. Monitor vitals IAW TCCC Guidelines.
5. When blood product has been infused, CLAMP blood product line and OPEN NS line to deliver residual blood product.
6. If 2nd Unit required - CLOSE NS clamp.
7. Spike 2nd Unit - OPEN blood product and main line clamps to begin 2nd infusion.
8. Monitor closely and continue VS assessment.
9. VS goal: SBP >l00mmHg; and/or Pulse <100; MAP 70-80 mmHg

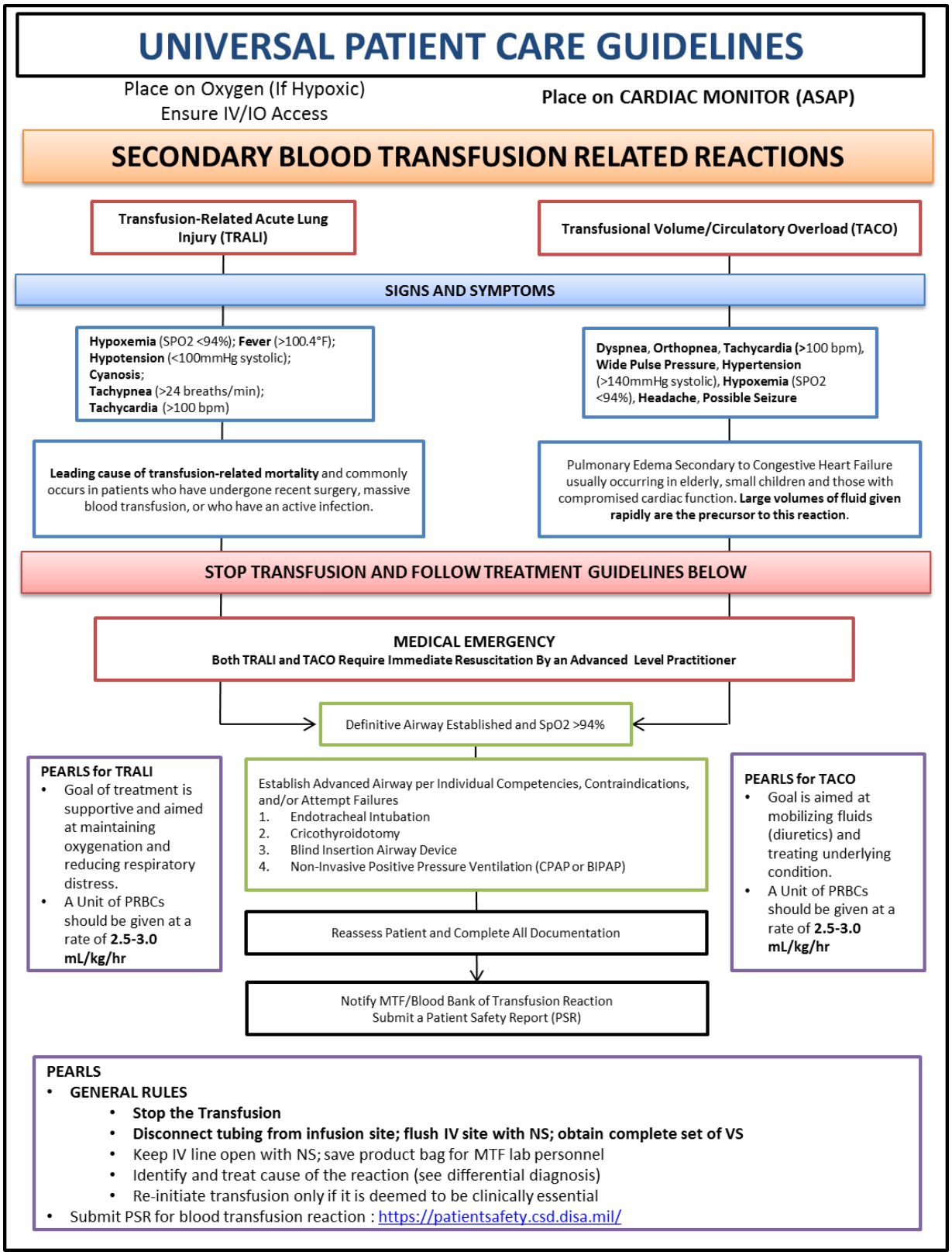
STEP 4: DOCUMENTATION TASK

1. Pre-transfusion Data **a. Unit Number** **b. Type of Blood Product (RBC/ Plasma)** **c. Donor ABO/Rh** **d. Expiration Date** **e. Vital Signs (HR and B/P)**	**2. Post Transfusion Data** **a. Vital Signs** **b. Date/Time started/completed** **c. Note if interrupted and reason for interruption** **d. Patient Identification (as much as possible)**

APPENDIX C – PRIMARY BLOOD TRANSFUSION RELATED REACTIONS



APPENDIX D – SECONDARY BLOOD TRANSFUSION RELATED REACTIONS



APPENDIX E – PEARLS FOR TRANSFUSIONS

PEARLS FOR TRANSFUSIONS

PRE-TRANSFUSION PEARLS

1. Use of 2% Lidocaine (2-3ml) with 0.9% NS is permitted to flush any IO site prior to blood product transfusion.
2. Consider pain control measures to reduce tachycardia resulting from uncontrolled pain.
3. Once removed from storage container blood products will be transfused in under 4 hours
4. ONLY USE "Y" filtered blood administration sets
5. If directly involved in patient care, 1st Verifier (Medical Person) can direct a non-medical person to be the 2nd Verifier and record data on the SF518
6. DO NOT use blood product if storage container is leaking or temperature indicator is RED
7. **If using enFLow® fluid warmer – add IV extension tubing
8. DO NOT allow blood warmer to be placed directly on patient's skin as this may cause burning
9. If Thawed plasma is available it should be given prior to RBC; normal ratio is 1:1

DURING TRANSFUSION PEARLS

1. Transfusion infusion rates can be titrated to slower rates if VS parameters improve to appropriate levels (SBP>100; HR<100; MAP 70-80).
2. Special attention should be paid to non-compressible injuries (chest; abdominal; and pelvis) to avoid raising the SBP over 90mmHg.
3. Once transfusion is initiated, decrease all other fluids to KVO rate.
4. In-flight emergencies:
a. Contact unit FS or tactical operation center for medical direction; or
b. Divert to nearest MTF (Do not delay divert waiting on medical direction)
5. If transfusion is interrupted, record date/time and reason for interruption on SF518 if not able to resume within 5 min
6. Under NO CIRCUMSTANCES will other medications or IV fluids (to include 3% NS) be introduced through transfusion line.
7. Blood output temperature from a warmer device WILL NOT EXCEED 42°C (107°F)

DURING TRANSFUSION PEARLS

1. Suspected /confirmed transfusion reaction: STOP TRANSFUSION 2. Disconnect tubing from infusion site; flush IV site with NS	3. Keep IV Line OPEN with NS 4. Re-initiate transfusion only if it is deemed clinically essential 5. Document on SF 518 date/time and actions taken **6. Provide all materials to Lab/Blood Bank for reaction work-up**

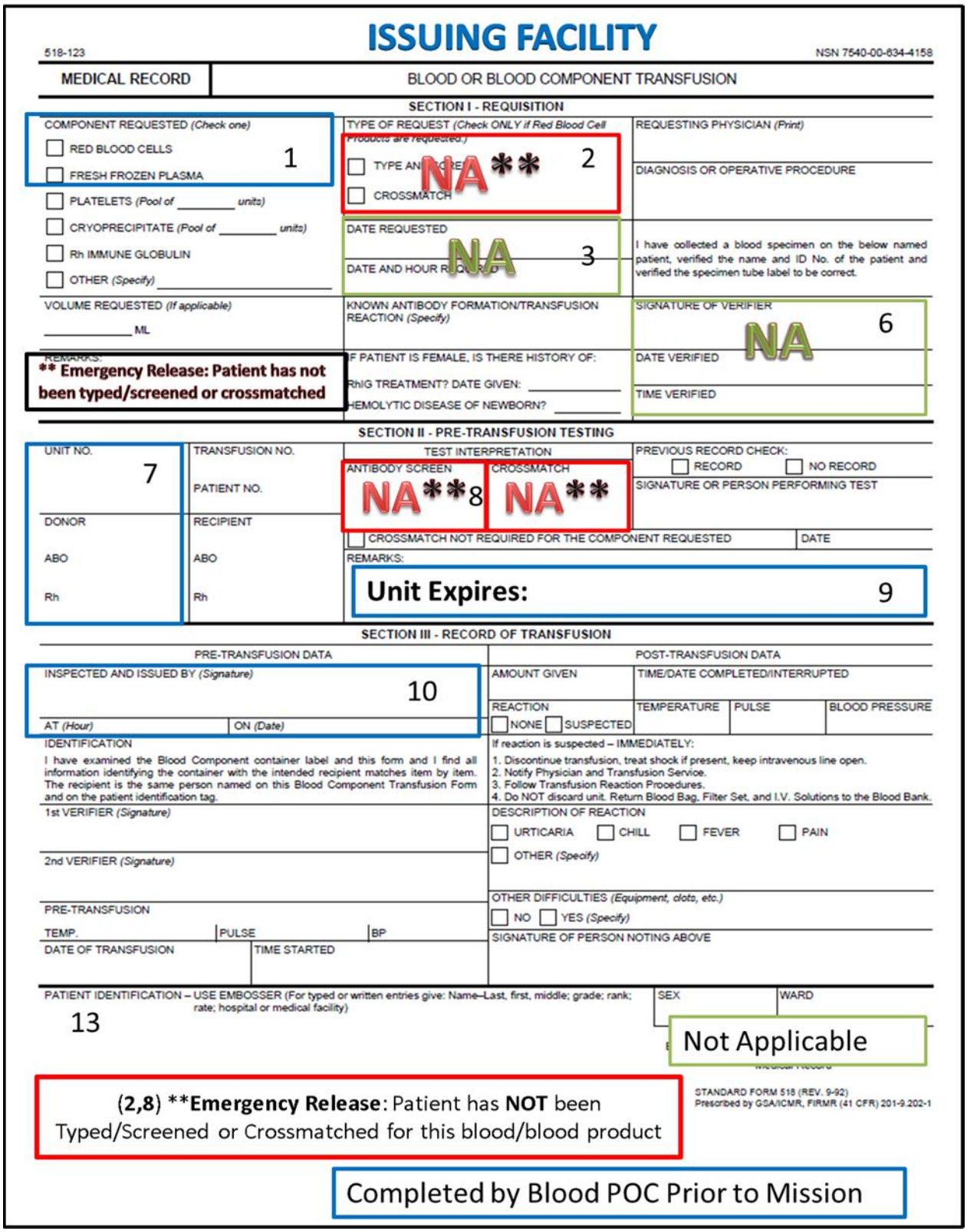
POLE TRANSFUSION PEARLS

1. After 1st transfusion, re-evaluate casualty and initiate 2nd unit ONLY if criteria is still met (Appendix A)
2. If 1st unit is initiated based on "Stand-Alone" injury (Multiple Amputation); subsequent units will be based on VS parameters
3. Complete documentation on SF518
4. Consider Tranexamic Acid (TXA) – follow TCCC Guidelines for Administration

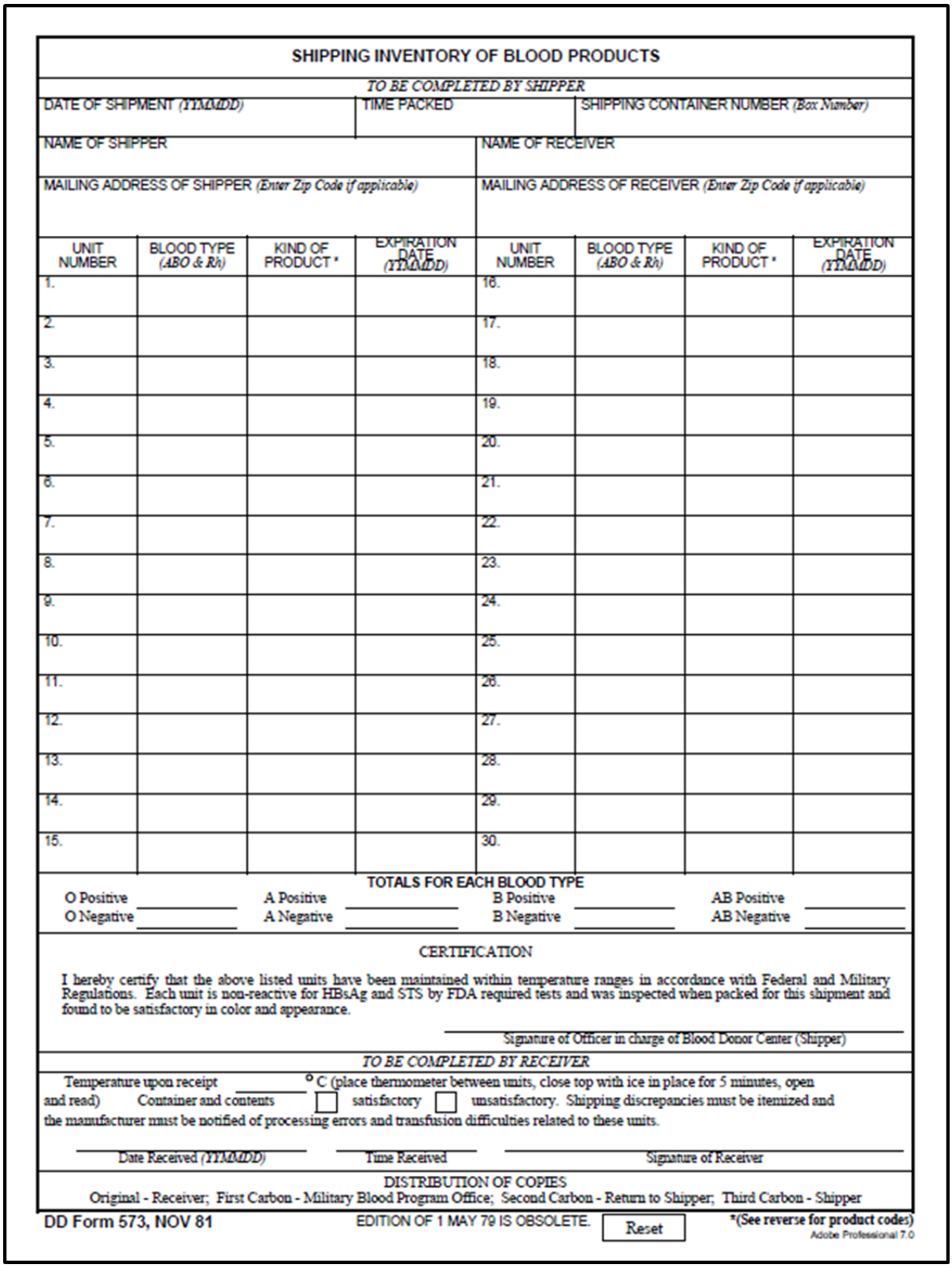
PATIENT HAND-OFF (COMMUNICATION)

1. Provide receiving MTF with completed SF 518s for patient's record
2. Report any adverse events; transfusion reactions; and actions taken enroute
3. Report interrupted transfusions and provide explanation
4. Report O POS blood given to female patients under the age of 50

APPENDIX F–ISSUING FACILITY SF518 DOCUMENTATION REQUIREMENT



APPENDIX G – ISSUING FACILITY DD573 DOCUMENTATION REQUIREMENTS



SHIPPING INVENTORY OF BLOOD PRODUCTS

TO BE COMPLETED BY SHIPPER

DATE OF SHIPMENT *(YYMMDD)*	TIME PACKED	SHIPPING CONTAINER NUMBER *(Box Number)*
NAME OF SHIPPER		NAME OF RECEIVER
MAILING ADDRESS OF SHIPPER *(Enter Zip Code if applicable)*		MAILING ADDRESS OF RECEIVER *(Enter Zip Code if applicable)*

UNIT NUMBER	BLOOD TYPE *(ABO & Rh)*	KIND OF PRODUCT *	EXPIRATION DATE *(YYMMDD)*	UNIT NUMBER	BLOOD TYPE *(ABO & Rh)*	KIND OF PRODUCT *	EXPIRATION DATE *(YYMMDD)*
1.				16.			
2.				17.			
3.				18.			
4.				19.			
5.				20.			
6.				21.			
7.				22.			
8.				23.			
9.				24.			
10.				25.			
11.				26.			
12.				27.			
13.				28.			
14.				29.			
15.				30.			

TOTALS FOR EACH BLOOD TYPE

O Positive _____ A Positive _____ B Positive _____ AB Positive _____

O Negative _____ A Negative _____ B Negative _____ AB Negative _____

CERTIFICATION

I hereby certify that the above listed units have been maintained within temperature ranges in accordance with Federal and Military Regulations. Each unit is non-reactive for HBsAg and STS by FDA required tests and was inspected when packed for this shipment and found to be satisfactory in color and appearance.

_____
Signature of Officer in charge of Blood Donor Center (Shipper)

TO BE COMPLETED BY RECEIVER

Temperature upon receipt _____ °C (place thermometer between units, close top with ice in place for 5 minutes, open and read) Container and contents ☐ satisfactory ☐ unsatisfactory. Shipping discrepancies must be itemized and the manufacturer must be notified of processing errors and transfusion difficulties related to these units.

_____	_____	_____
Date Received *(YYMMDD)*	Time Received	Signature of Receiver

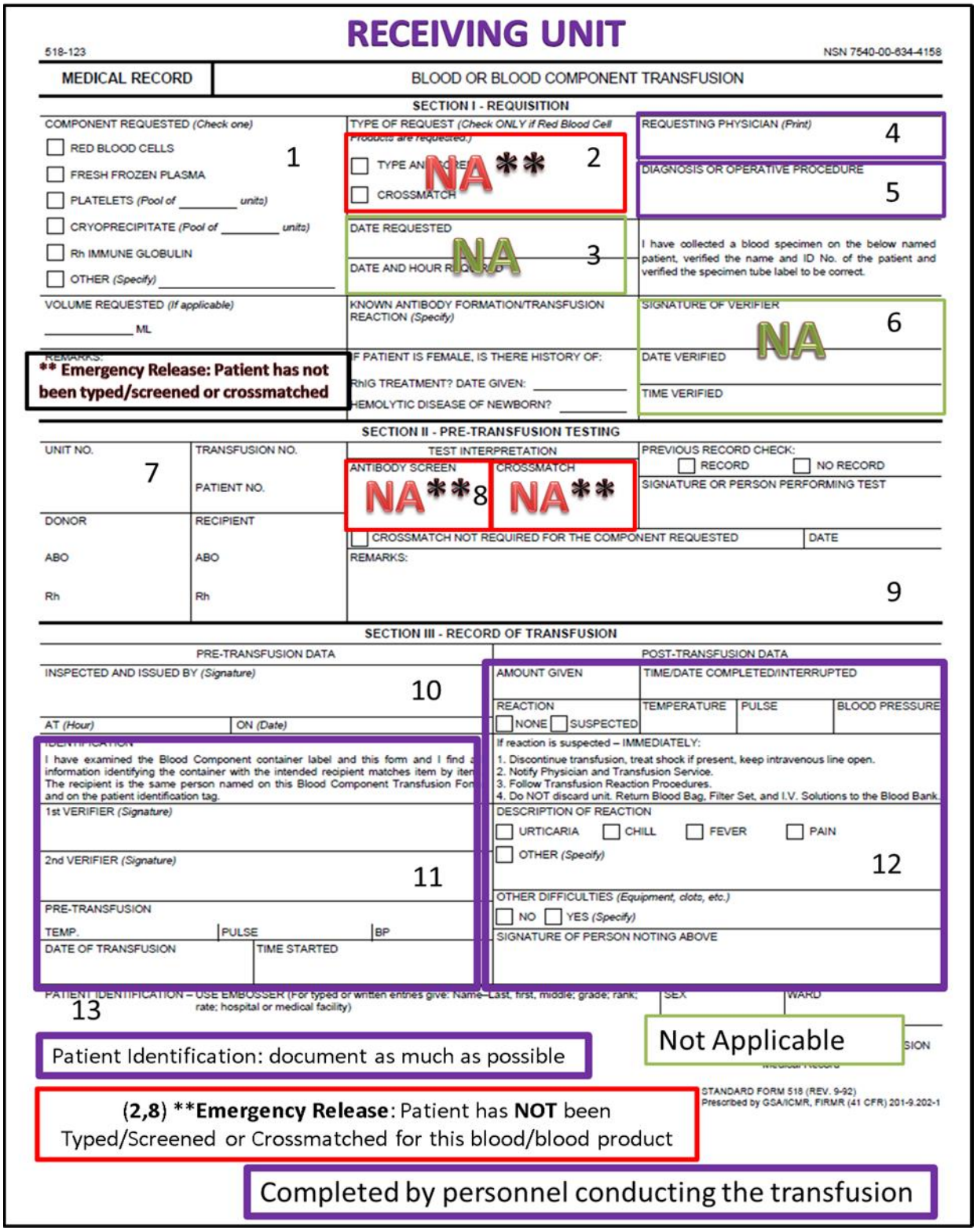
DISTRIBUTION OF COPIES

Original - Receiver; First Carbon - Military Blood Program Office; Second Carbon - Return to Shipper; Third Carbon - Shipper

DD Form 573, NOV 81 EDITION OF 1 MAY 79 IS OBSOLETE. Reset *(See reverse for product codes)

Adobe Professional 7.0

APPENDIX H – RECEIVING UNIT (MEDICAL EVACUATION/PATIENT MOVEMENT) SF518 DOCUMENTATION REQUIREMENTS



APPENDIX I – SF518 DOCUMENTATION INSTRUCTIONS

1. **Issuing Facility Releasing Blood Products**

   a. SECTION I – **Requisition**

      (**1**) Component Requested (**Check One – Ex. pRBC or FFP**)

      (**2**) Type of Request (**Mark NA**)

      (**3**) Date Requested/Date and Hour Requested (**Mark NA**)

      (**6**) Signature of Verifier (**Mark NA**)

   b. SECTION II – **Pre-Transfusion Testing**

      (**7**) Document Unit # and Donor ABO/Rh

      (**8**) Test Interpretation (**Mark NA in both**)

      (**9**) Remarks: Document Unit expiration date

   c. SECTION III – **Record of Transfusion**

      (**10**) Pre-Transfusion Data:

         1. Issuer will sign/date/time under *Inspected and Issued by*

2. **Receiving Personnel**

   a. SECTION I – **Requisition**

      (**4**) Requesting Physician (**Unit FS/Senior Medical Officer**)

      (**5**) Diagnosis (**Document type of Injury – GSW/Double Amputation, etc**.)

   c. SECTION III – **Record of Transfusion**

      (**11**) Pre-Transfusion Data

         1. Identification Statement: 1st Verifier Signature and 2nd Verifier Signature

         2. Pre-Transfusion vitals

         3. Date of Transfusion / Time Started

      (**12**) Post-Transfusion Data

         1. Date/Time (**Circle complete or interrupted**)

2. Reaction

3. Post transfusion vitals

4. Signature must be the medical person performing transfusion

NOTE: Section III **WILL** be completed on all SF518s by personnel performing the blood transfusion procedure unless blood continues to transfuse at arrival to MTF.

NOTE: Each SF518 document will be transferred over to the MTF with each unit of blood product given during evacuation/movement.

APPENDIX J – STORAGE CONTAINER PROCEDURES

1. Pre-Conditioning Golden Hour Container (GHC)

(a) Ensure the GHC is preconditioned properly before use.

CAUTION: The Vacuum Insulated Panel (VIP) cannot be used past recommended replacement date.

(1) Remove the thermal insulated container (TIC) from the storage container and place in a freezer below -18°C for a minimum of 8 hours, ensuring the lid is separated from the base during conditioning.

(2) Annotate date/time on the GHC Preconditioning Log when each TIC was placed in and removed from the freezer.

(3) Remove the TIC from freezer and let stand at room temperature for 25-30 minutes before loading RBCs, thawed FFPs or LP.

(4) Perform a visual inspection upon removing from the freezer to ensure there are no cracks or leaks.

(5) Shake TIC, if liquid can be heard, the TIC is not conditioned and must NOT be used.

(6) Place the conditioned TIC into the VIP of the storage container.

(7) Ensure each VIP is gripped tightly by the GHC.

(8) Loose skins may hinder or prevent the vacuum formation, which is essential in maintaining the appropriate temperature for transport.

APPENDIX K – SAFE-T-VUE TEMPERATURE INDICATOR

1. Safe-T-VUE® 10 is a temperature sensitive indicator that easily adheres directly to blood bags during transport and changes color from WHITE to RED when the 10°C indication temperature has been reached or exceeded.

(a) Safe-T-VUE is non-reversible and indicates that a high temperature condition existed, even if temperature returns to a lower level. As long as indicator remains WHITE, blood may be stored for future use.

2. Prepare the Safe-T-VUE temperature indicator by refrigerating for a minimum of 24 hours at 1-6°C.

3. Remove the blood product and one Safe-T-VUE indicator from the refrigerator at the same time and place on a clean dry surface. Remove excess moisture from the blood product bag by using a dry wipe/paper towel on the surface where the Safe-T-VUE is to be applied.

4. Use of a cold pack on the surface below the blood product will help to maintain temperature.

5. Hold Safe-T-VUE against the blood product with finger tips. Peel off the "REMOVE" label to expose the adhesive. Be careful to only handle around the edge of the indicator to expose RED DOT and WHITE DOT.

6. Attach Safe-T-VUE directly to the lower third of the blood product bag where there is a large volume of product and without obscuring any product information.

7. Be certain the Safe-T-VUE indicator is in complete contact with the blood product bag being monitored. No air pockets should be under the indicator (e.g., fold in the bag; over any labels; or any other obstruction).

8. Fold WHITE DOT onto the RED DOT and press firmly together to activate.

CAUTION: Be careful to ONLY press on the GREEN color-coded end to activate properly.

CAUTION: It is important to place pressure on the outer edge of the WHITE DOT, and not the center, when pressing onto the RED DOT to prevent false activation.

9. Complete documentation on SF518 for each blood product unit place inside GHC pocket and secure container.

10. Color change temperature indication:

(a) When WHITE DOT turns solid RED, temperature has reached ≥10°C

(1) Quarantine the units and request guidance from the CENTCOM JBPO

(b) Appearance of SMALL RED DOTS is an indication blood product requires cooling or immediate refrigeration.

(2) Return the product to the refrigerator for appropriate cooling/refrigeration.

(c) WHITE DOT – acceptable for use

APPENDIX L – CENTCOM EMERGENCY WALKING BLOOD BANK STANDARD OPERATING PROCEDURES

Emergency Walking Blood Bank SOP

Overview	Walking Blood Bank capability is required of all CENTCOM units. This document is a procedural guide for executing a Walking Blood Bank.
Facility Identification and Address	USCENTCOM Laboratory Services

Revised: April 2024

Emergency Walking Blood Bank SOP

Purpose

This operating procedure establishes guidelines for emergency fresh whole blood (FWB) collection, testing, transfusion, and documentation. The use of FWB is reserved for trauma victims who are anticipated to require massive transfusion (10 or more whole blood units in 24 hours) or for patients with clinically significant coagulopathy (bleeding with thrombocytopenia or INR>1.5). Due to the risk of infectious disease, the use of FWB is only authorized when blood product inventories are depleted or exhausted (i.e. MASCAL) as a life-saving option.

The decision to use FWB is a medical decision that must be made by a physician who has full knowledge of both the clinical situation and the availability of compatible blood components. FWB has not been tested for infectious agents in accordance with FDA requirements so the risks and benefits should be thoroughly considered.

FWB that is not Low-Titer O Whole Blood (LTOWB) must be an ABO type-specific match to the casualty. Type O whole blood, unless donor has been tested and established to be low titer, is NOT universal. If not matched, a fatal hemolytic reaction may occur. LTOWB will be given to patients with an unknown blood group. Once patient receives LTOWB, it is impossible to definitively identify blood group with field equipment. Every effort should be made to provide Rh negative FWB to females of child-bearing potential (age <50 years) who are Rh negative or of unknown blood type.

Donors who are fully pre-screened within the last 120 days and are identified as low-titer O donors must be used first for FWB donations. Next, consider fully pre-screened donors of other blood groups for group-specific transfusions (e.g., A to A). Donors who have not been pre-screened for Transfusion Transmitted Diseases (TTD) should be considered only when no other donors are available. FWB must be collected from male and never-pregnant female donors. Coalition Forces will only be used as a last resort.

Revised: April 2024

Emergency Walking Blood Bank SOP

Summary of Changes

Major Revision.

- Updated Purpose of SOP to reflect current operations and policies.
- Added 5 required supply items to Materials and Equipment.
- Updated the prescreen requirement from 90 days to 120 days IAW DODI. 6480.04.
- Updated Donor Area Preparation Step 1 with staffing recommendations and processing.
- Updated Donor Registration and Screening Step 1 and Step 11 to include deferral review requirements and added pregnancy check requirement to Step 5.
- Updated Whole Blood Collection Step 13 with collection and processing requirements.
- Revised Laboratory Testing Step 1 for clarity of rapid testing requirements.
- Added two new required sections with procedural steps: Creating FWB Units in TMDS Steps 1-6 and Lab Actions Post-MASCAL Steps 1-5.
- Updated and formatted all attachments.

Approval Signature

ARMSTRONG.BRACKEN.A.1270111196 Digitally signed by ARMSTRONG.BRACKEN.A.1270111196 Date: 2024.05.21 10:38:54 -04'00'

BRACKEN A. ARMSTRONG
Maj , MC
Trauma Medical Director

Revised: April 2024

Emergency Walking Blood Bank SOP

Principle	To provide instructions on how to collect whole blood units during an emergency blood drive (Walking Blood Bank).

Materials and Equipment	• Clip Boards
	• Prescreened Donor Database (preferably an Excel spreadsheet or similar)
	• HemoCue (or other method of Hgb determination) with lancets & microcuvettes
	• Blood Pressure Cuff
	• Donor phlebotomy chair
	• Rubber Tourniquets
	• Thermometer
	• Gloves
	• Testing Collection Set: pre-made bags with 2x2 gauze, two 5ml gold SST tops (or red tops), three 5ml pearl tops PPT (or white tops), one 3ml purple top tube (more tubes may be required if using short draw or small volume tubes), and multi-samples luer adapter.
	• Whole Blood Bag System
	• Hemostat Clamps
	• Hand Strippers
	• Venipuncture Needles
	• BD Vacutainer Hubs
	• Surgical Tape
	• Heat Sealer (if available)
	• Gauze
	• Coban
	• Sharps Containers and Trash Bags
	• Disposable Lab Coats
	• Cold Packs
	• ChloraPrep One Step
	• ABO/Rh test kit
	• Malaria test kit
	• HIV 1/2 Rapid AB test kit
	• HCV Rapid AB test kit
	• HBsAg test kit
	• RPR test kit (for Syphilis)
	• Blood Collection Mixer
	• Calibrated Timer
	• Assigned ISBT Labels, also called Donor Identification Numbers (DINs)
	  • Will be provided by the Blood Transshipment Center
	  • 100-series DINs used for collections; 500-series DINs for prescreens

Emergency Walking Blood Bank SOP

Forms	• Appendix A: Modified DD Form 572 (ASBP 572-EWB) (Emergency Whole Blood Donation Record) • Appendix B: Form 151 (Whole Blood Transfusion Checklist) • Appendix C: DA Form 4700 (Emergency Release of Blood Products) • Appendix D: Form 145 (Rapid Testing Worksheet) • Appendix E: Form 150a (Letter of Understanding for Emergency WB) • Appendix F: Form 150b (Letter of Understanding for Untested Emergency WB) • Appendix G: Form 147 (Eldon Card ABO/Rh Typing) • Appendix H: SF 518 (Blood or Blood Component Transfusion), if applicable **OTHER:** • Unit modified form 147 if using Tube Method, if applicable • Walking Blood Bank PPT, if available (overview only and not intended to be replace any CPGs or policies and procedures

Emergency Walking Blood Bank

	Step	Action
Announcing the Emergency Blood Drive/ Activating a Walking Blood Bank	1	The decision to execute an emergency blood drive will be made by the Deputy Commander for Clinical Services (or designee for Role 1/Role 2 activities) in conjunction with the Trauma Surgeon or attending physician, and the Laboratory OIC (or senior Medical Laboratory Technician) who have knowledge of both the clinical situation of the personnel impacted and the availability of compatible blood components. Once granted, proceed with the emergency blood drive alert. It is imperative that the Lab receive a blood sample from the patient as soon as possible so that type specific blood can be obtained. If no blood type is available, Low Titer O (Neg or Pos depending on patient), or appropriate component therapy will be requested.
	2	The DCCS will notify the Hospital Commander; the Lab OIC/NCOIC will notify S3 that a physician is requesting whole blood for transfusion. The S3 will notify appropriate channels for an internal announcement to all Hospital Staff as well as announcement over the Loud Speaker system. The Lab OIC (or designee) will contact the JBPO to initiate resupply. If Role 1/Role 2, the OIC will contact parent unit and work with the local Base Area Command Team for external announcement. The senior Medical Laboratory Technician will make contact with Lab OIC, if available, and JBPO to initiate resupply.
	3	Refer to the Prescreen Donor List to contact personnel that are eligible to donate compatible whole blood units. The recruited prescreened donors must meet the following criteria: • Low Titer O donors if no blood type is available or in the event of a MASCAL • Have the same ABO blood type as the recipient • Negative test results for all tested infectious diseases • Meet the health and vital requirements • Is not on a deferral list

Emergency Walking Blood Bank

Announcing the Emergency Blood Drive (Continued)	**Step**	**Action**
	4	Prioritize prescreened donors based on the following criteria: 1st: Donors prescreened within 120 days, with FDA-approved test panel completed 2nd: Donors prescreened over 120 days 3rd: Donors with prescreen testing enroute to FDA-approved test center
	5	Take measures to not deplete the supply of available donors. Collect only enough whole blood to sustain the trauma event until additional blood components can be delivered from JBPO.
Donor Area Preparation	**Step**	**Action**
	1	Set up the following stations (recommend at least two staff per section): • Check-in and Registration • Vitals • Interview/ DD 572 review/Bag Issue • Phlebotomy area/ Donor beds • Processing/ Labeling • Lab Testing • Recovery area
	2	Ensure the necessary equipment to perform donor screening and collection are made available (see material list).
	3	Perform QC on weighing device (i.e. Trip Scale) if available. • The target weight for a 450mL bag is 585g. • If scales are not available, use the line located adjacent to a notch in the upper left quadrant of the bag. Note: The final container must weigh 425g to 520g (405 to 495 ml) plus the weight of the primary blood bag with its anticoagulant (total weight of 555g to 650g).
	4	Perform QC on the HemoCue (or other Hgb monitor), Eldon Cards (or Tube Method if available), HIV, HCV, HBsAg, Malaria, and RPR kits if available.

Emergency Walking Blood Bank

Donor Registration and Screening	Step	Action
	1	Upon arrival to the emergency blood drive, verify that the donor has a valid form of ID, has been prescreened and is not on the deferral list. Ensure potential donors are not on antibiotics, have not had cold or flu symptoms in past 72 hours, and are feeling well & healthy.
	2	Have the potential donor fill out a new ASBP 572-EWB, if pre-screen 572-EWB is not available. If available, instruct them to complete Group B Questions. If pre-screen 572-EWB >1 year, recomplete entire form.
	3	Prior to sending donor to Station 1, Vitals, review ASBP 572-EWB. • Ensure that the donor's information and demographic is complete and correct • If the donor answers *YES* to any question, annotate on the ASBP 572-EWB their reason and DEFER** • Refer any donors to Laboratory on the following day for concerns or for pre-screening
	4	Measure the donor's vitals. The donor must meet the following criteria: • Weight ≥ 110 pounds • Temperature ≤ 99.5 °F • Blood Pressure 90-180 systolic / 50-100 diastolic • Heart Rate 50-100 BPM Measure the donors Hemoglobin concentration using the STAT Site M, HemoCue or other device. • Hemoglobin concentration must be ≥12.5 g/dL for Females; ≥13.0 g/dL for Males.
	5	If donor meets the criteria, send to Station 2 for Interview/Bag Issue/QA: Review ASBP 572-EWB: • Ensure that the donor's information and demographic is complete and correct • Verify that the donor cannot be deferred based the answers provided in the questionnaire section • Double check to ensure females have not EVER been pregnant • If the donor answers *YES* to any question, annotate on the ASBP 572-EWB their reason and DEFER**
	6	Bag Issue: If the donor is eligible to donate, place a large ISBT/ DIN (100 Series) on the upper right of the ASBP 572-EWB in the **Blood Unit Number** box.

Emergency Walking Blood Bank

	Step	Action
Donor Registration and Screening (Continued)	7	Blood Tube Issue: All required blood tubes are properly labeled with the required DIN labels provided.
	8	Perform a final review of ASBP 572-EWB to ensure: • Donor's identity is confirmed with ID card • Check for completeness and correctness • Ensure donor cannot be deferred based on answers provided** • Check that the ASBP 572-EWB has been signed and dated • An ISBT/ DIN has been placed on the form and blood tubes • Donor is physically able to donate based on vitals
	9	Place a larger ISBT/ DIN label on the front of the whole blood bag and record the collection date on the unit. Place the remaining ISBT/ DIN labels on the back of the bag.
	10	Annotate the bag lot number and segment number on ASBP 572-EWB.
	11	Issue whole blood bag with tubes to the donor and direct them towards the phlebotomy area. **If Donor is deferred for any reason, explain in a confidential setting the reason for the deferral, duration of the deferral, and date of eligibility (if applicable.) Give the donor an opportunity to ask questions. Thank and release the donor.
Whole Blood Collection	**Step**	**Action**
	1	Verify the donor with the information on ASBP 572-EWB.
	2	Apply a blood pressure cuff to the arm that will be used for phlebotomy. • Inflate the cuff to 40 - 60 mmHg • Have donor grip a squeezable object • Palpate the antecubital area of the arm in order to locate a suitable vein • Deflate the cuff ***Note:*** *The vein of choice must be large enough for venipuncture using a 16-gauge needle and straight enough to accommodate at least one-fourth of the needle length.*
	3	Sterilize the venipuncture site using ChloraPrep. Apply the ChloraPrep starting at the center of the site and move outward in a circular motion, moving outward at least 1.5 inches for 60 seconds.
	4	While allowing the sterilized site to dry, cover it with sterile gauze for at least a minute to prevent any possible contamination.

Emergency Walking Blood Bank

<table>
<tr><th>Whole Blood Collection (Continued)</th><th>Step</th><th>Action</th></tr>
<tr><td></td><td>5</td><td>Set up the whole blood collection bag.
Ensure the ISBT/ DIN on the bag matches that on the ASBP 572-EWB
Inspect for cuts, kinks, discoloration or any kind of damage
Place a hemostat clamp on the tubing below the Y-junction
Crack the glass ampule at the Y-junction
Place the bag on the trip scale or use a plastic bin if scales are not available</td></tr>
<tr><td></td><td>6</td><td>If not already labeled, label the following test tubes with the same ISBT/ DIN label used on the collection bag and ASBP 572-EWB:
2 Gold Top (Or 2 Red Top)
1 Lavender Top
3 Pearl Top (Or 3 White Top)</td></tr>
<tr><td></td><td>7</td><td>Re-inflate the blood pressure cuff to 40 - 60 mmHg. Do not re-palpate the vein. Advise the donor to alternately squeeze and relax the grip on a squeezable object with the final squeeze held firmly.</td></tr>
<tr><td></td><td>8</td><td>Perform phlebotomy using the 16-gauge needle attached to the collection bag:
Uncap the needle and inspect it for rust, spurs or barbs
Orient the needle so that the bevel side is up
Enter the vein at a shallow angle (below 30°)
Thread the needle at least ½ inch into the vein
Secure the hub of the needle with tape and cover the site with gauze
Release the hemostat clamp
Annotate the start time of phlebotomy on the ASBP 572-EWB
<table>
<tr><th>If</th><th>Then</th></tr>
<tr><td>Blood flow is impeded</td><td>Try adjusting the needle with least discomfort without hurting the donor.</td></tr>
<tr><td>If blood flow is still impeded</td><td>Seek assistance from another phlebotomist before discontinuing the phlebotomy.</td></tr>
</table></td></tr>
</table>

Emergency Walking Blood Bank

Whole Blood Collection (Continued)	Step	Action
	9	Deflate the cuff to 20 - 40 mmHg and instruct the donor relax grip.
	10	Continue to monitor the donor. The gauze dressing may be lifted occasionally to monitor the evidence of a hematoma. Discontinue phlebotomy if any of the following is observed: • Formation of a hematoma • Donor reaction • Donation time exceeds 15 minutes (see note on page 13 for explanation) ***Note:*** *For signs and symptoms of donor reactions, refer to Adverse Donor Reactions SOP.*
	11	A second venipuncture may be performed if: • There was an unsuccessful collection (No blood collected in the primary bag.) **AND** • Donor agrees to a second venipuncture • **An acceptable vein is available on opposite arm**
	12	If second venipuncture is performed: • Note the initial failure on the ASBP 572-EWB • Assign the donor a new DIN. Place the new DIN on all forms, tubes, and bag. • Obtain a new collection bag. This will require documenting bag, anticoagulant, and segment again. • Ensure new start time is recorded on the ASBP 572-EWB
	13	Fill the blood collection pouch. Once the desired volume is reached, apply two grommets on the line to the collection pouch and crimp them thereby sealing off the collection pouch from the rest of the unit. The collection pouch must be sealed off from the rest of the unit before filling the tubes. Break the clamp on the sample tubing line, connect Multi-Sample Luer Adapter with the female Luer and collect the following samples (in the listed order) required for blood typing and infectious disease testing: • 2 Gold Top (Or 2 Red Top) • 1 Lavender Top • 3 Pearl Top (Or 3 White Top) ***Note:*** *Be sure to label the sample tubes with the same ISBT/ DIN on the collection bag and hand the specimens to personnel in the testing area ASAP to begin rapid testing.*

Emergency Walking Blood Bank

Whole Blood Collection (Continued)	Step	Action
	14	Watch for the signal of a filled unit by monitoring the shutoff mechanism on the balance system, the completion indicator of a weighing device, or if sufficient volume is collected (as whole blood is filled up to the volume marker on the collection bag). Note the time that the phlebotomy procedure is complete. **Note: Please refer to collection bag volume marker for sufficient whole blood fill.** **Note: If using a Field Blood Collection Kit, 550 Cord can be used. Follow directions using package insert.**
	15	Seal the tubing 1 to 2 inches below the "Y" segment of the tubing using a heat sealer (metal clamps can be used if heat sealer is not available).
	16	Grasp the tubing on the donor side of the seal and press to remove a portion of blood in the tubing. Seal the tubing at this spot. Cut the tubing between the two seals.
	17	Remove tourniquet or blood pressure cuff and tape strips from donor's arm.
	18	Place the fingers of one hand gently over the sterile gauze. DO NOT APPLY PRESSURE OVER THE NEEDLE. With the other hand, smoothly and quickly withdraw the needle. Apply firm pressure to the phlebotomy site. Dispose of the needle in a sharps container.
	19	While maintaining pressure on phlebotomy site, have donor extend arm vertically, instructing donor not to bend the arm at the elbow, thus reducing the chances of a hematoma.
	20	Instruct donor to apply firm pressure over the gauze. Encourage donor to maintain a relaxed elevated position. This precaution will minimize the bleeding into the venipuncture area.
	21	Immediately after collecting the unit, use a hand stripper to mix the blood in the tubing with that in the collection bag. • Strip all blood from the tubing into the primary collection bag • Mix contents in the primary collection bag • Release the stripper and allow the anticoagulated blood to reenter the tubing • Repeat the procedure two more times

Emergency Walking Blood Bank

Whole Blood Collection (Continued)	22	Enter the time the phlebotomy was completed in appropriate block of ASBP 572-EWB. Complete "Donation Status" and "Reaction" on the ASBP 572-EWB using appropriate blocks or comments section. • Codes for "Donation Status": ○ Complete (555g – 650g = 405 to 495 mL of WB) ○ Incomplete (less than 555g total to include bag weight) ○ Unsuccessful (no blood collected in primary collection bag) ○ Overfill (greater than 650g total to include bag weight) • Reaction classification for "Reaction" (See *Adverse Donor Reactions* SOP for definitions of reaction and procedures to follow): ○ Slight reaction ○ Moderate reaction ○ Severe reaction ○ No reaction
	23	Take the whole blood unit and ASBP 572-EWB to the specimen processing area.
	24	Inspect the venipuncture site by lifting the gauze to inspect site. Reapply with pressure if a stable clot has not formed. Apply fresh sterile gauze as needed. Secure the dressing with coban or similar bandage wrap.
	25	Ensure the donor has written instructions pertaining to post-donation activities (See *Adverse Donor Reactions* SOP or PowerPoint presentation, if available, for instructions).
	26	Observe donor for signs of a reaction and ask donor how he/she feels. Do not release any donor until the donor feels fine. Do not leave donor unattended (See *Adverse Donor Reactions* SOP or PowerPoint presentation, if available, for instructions).
	27	Direct donor to the refreshment area and instruct them to remain in the refreshment area for 10 to 15 minutes before departing.

Emergency Walking Blood Bank

Laboratory Testing	Step	Action
	1	Perform the following test on the whole blood or serum samples collected: • ABO/Rh (Eldon Card or Tube Method if available) • Malaria (if applicable) • HIV 1/2 Rapid AB test • HCV Rapid AB test • HBsAg • RPR (for Syphilis) Refer to respective SOPs or packet inserts for testing and resulting procedures. ***Note: At a minimum, ABO/Rh will be tested prior to releasing unit from laboratory. If the DCCS (or designee) waives rapid IDT, Form 150b must also be signed by the attending physician. All rapid testing will still be performed even if the unit will be transfused before completion of testing. Additionally, all sample tubes must be sent Lackland AFB for confirmatory IDT.***
	2	Record results on Form 145 and Form 147, if applicable.
	3	Have a second trained team member verify results.
	4	Place the correct ABO/Rh blood group sticker (or use permanent marker) on the whole blood unit.
	5	Attach a tag or label to the unit containing the name of the intended recipient.
	6	For the procedure on how to process samples collected in the gold and pearl top (red or white top) tubes see *ASBBC-SA Specimen Submission Guidelines.*
Terminating the Emergency Blood Drive	1	A determination will be made by the Trauma Surgeon/Attending Physician along with the Lab OIC and the DCCS for how many units to collect for the receiving patient. Whole blood collected during the emergency blood drive should only be used for a single specific recipient. It is not intended for contingency operations. The Laboratory will contact the JBPO for resupply and guidance for any resupply concerns.
	2	The DCCS along with the Trauma Surgeon/Attending Physician and Lab OIC will make the final decision for when to end the WBB.

Emergency Walking Blood Bank

Creating FWB units in TMDS	Step	Action
	1	Create product in TMDS while Rapid Testing is being performed.
	2	From the Manage Donation tab, select Donate Product.
	3	Enter the donor SSN, first name, last name in appropriate fields and click NEXT.
	4	In Demographic information area, enter donor's ABRO/RH, nationality, and branch.
	5	Enter product code E0053V00 for whole blood collected in CPDA-1 anticoagulant or E0009V00 for whole blood collected in CPD anticoagulant.
	6	Enter the expiration date of the unit, which is 24 hours from collection if stored at room temperature. If placed into refrigerated storage within 8 hours of collection, the unit may be stored for 21 or 35 days depending on the anticoagulant used. JBPO approval is required for storage of whole blood unit for longer than 24 hours. CPDA-1 units have a 35-expiration, and CPD unit have a 21-day expiration.
Lab Actions Post-MASCAL	1	Once all testing is completed and the unit is found to be acceptable, laboratory personnel will add blood products to the TMDS inventory.
	2	Laboratory personnel will update the rapid disease testing results for each donation ID number in TMDS, which is the bag number on the product (i.e.: W0025 24 100013), and ABO/Rh.
	3	Clinical laboratory staff will be responsible for ensuring all transfused blood products derived from the WBB are appropriately documented within TMDS. This includes marking products as transfused within the receiving patient's TMDS profile.
	4	Laboratory staff will process and ship samples to reference laboratory for confirmation testing.
	5	It is the responsibility of the laboratory to check TMDS for confirmation testing and verify all infectious disease results. Only a health care provider can counsel a donor on positive results.
	6	After confirmatory testing results are back, **AND** with approval from the JBPO, unused FWB units may be converted into Stored Whole Blood (SWB) after 24 hours up to the expiration date of the anticoagulant.

Emergency Walking Blood Bank

Procedural Notes

- Whole blood collected during the emergency blood drive should only be used for a single specific recipient. Be sure to place a tag or label on the unit indicating who the intended recipient is.
- Do not exceed 15 minutes for whole blood collection time. If collection exceeds 15 minutes, the product is at risk for clots and must be discarded.
- Document any transfused whole blood units on the Whole Blood Transfusion Checklist and DA 4700 (or use of SF 518 depending on Laboratory requirements).
- Have the responsible physician sign the DA Form 4700, Form 150a and Form 150b to acknowledge accountability for the transfused units.
- Have a second trained team member verify the ABO/Rh, and if possible, infectious disease testing for each unit prior to release.
- Whole blood units can be stored at room temperature for up to 8 hours. Thereafter, they must be stored in a refrigerator capable of maintaining a temperature of 1 to 6ºC and are only good for 24 hours. The JBPO is the only approval authority for extending this expiration date.
- Whole blood collected during the emergency blood drive should be disposed of following the conclusion of the trauma episode or when additional blood resources become available.
- Although individual blood components collected in the United States are considered safer for transfusion as opposed to whole blood collected in an emergency blood drive, whole blood contains certain components (i.e. platelets) that may not be readily available at each facility. Therefore, the decision to continue transfusing whole blood units as opposed to blood components should be at the physician's discretion.

References

- AABB Standards, current edition.
- AABB Technical Manual, current edition.
- Joint Theater Trauma System Clinical Practice Guidelines: Whole Blood Transfusion (CPG ID: 21), 15 May 2018
- CCR 40-1, Medical Services Healthcare Operations, 28 February 2023

Emergency Walking Blood Bank SOP

Appendix A
Modified ASBP 572-EWB (Emergency Whole Blood Donation Record)

Approximate Redeployment Date:_____

PRE-SCREEN / EMERGENCY WHOLE BLOOD DONATION RECORD

Form is only to be used for pre-screening or collecting donors in support of contingency / deployed operations.

DONATION IDENTIFICATION NUMBER (DIN)
(Use Donor SSN if ISBT # Not Available)

TODAY'S DATE	NAME (Last, First, Middle Initial)	RANK/RATE	USA USAF USN USMC CIV	SSN: DoD ID:
UNIT	UNIT LOCATION (Base and State)	AOR BASE & TENT# (If deployed)	DOB (DDMMMYYYY)	SEX: M F / ABO/Rh (Blood Type)
CURRENT MAILING ADDRESS		EMAIL ADDRESS		BEST CONTACT PHONE NUMBER

Group A Questions (ALL DONORS Must Complete)

1	Have you read and do you understand the educational materials provided to you?	Y	N	5	Have you ever received money, drugs, or other payment for sex?	Y	N
2	Have you ever used needles to take drugs, steroids, or anything not prescribed by your doctor?	Y	N	6	Have you ever had cancer, heart problems, bleeding conditions, or lung disease?	Y	N
3	Have you taken any of the medications listed on the back of this form within the timeframes shown? If Yes, write medications here: _____	Y	N	7	Have you ever had hepatitis, or have you ever taken medication for treatment or exposure to hepatitis?	Y	N
4	Have you ever had a positive test for the HIV/AIDS virus?	Y	N	8	Have you ever had Malaria, Chagas or Babesiosis?	Y	N

Interviewer: Document review and eligibility below for walking blood bank (WBB) and/or low titer group O whole blood (LTOWB) donor program.

DONORS: If you are being **prescreened** for a WBB or LTOWB program, **STOP!!** Answer no more questions and sign at the bottom.
If you are here to donate a unit of blood, proceed to **Group B Supplemental Questions** and then sign at the bottom.

Group A responses acceptable (all no except Q1)? Y N ***Interviewer (initials):	All disease tests negative? Y N	Eligible for WBB? Y N	Titer Result (If group O): (accept if ≤ 256)	Eligible for LTOWB? Y N	Approving Official	Low Titer ID Issued? Y N NA

Comments:

Group B Supplemental Questions (Complete if Donating a Unit of Blood Today)

9	Are you feeling healthy and well today?	Y	N	18	In the past 12 months, have you lived with or had sex with a person who has hepatitis?	Y	N
10	Female donors: Have you ever been pregnant or are you pregnant now?	Y	N	19	In the past 12 months, have you had a transplant (such as organ, tissue, or bone marrow) or graft (such as bone or skin)?	Y	N
11	Female donors: Have you had sexual contact with a male who had sexual contact with another male in the past 12 months?	Y	N	20	In the past 12 months, have you had sexual contact with anyone who has HIV/AIDS or has had a positive test for the HIV/AIDS virus?	Y	N
12	Male donors: In the past 12 months, have you had sexual contact with another male?	Y	N	21	In the past 12 months, have you come into contact with someone else's blood?	Y	N
13	Are you currently taking malaria prophylaxis?	Y	N	22	In the past 12 months, have you had an accidental needle-stick?	Y	N
14	Are you currently taking any medications for an infection?	Y	N	23	In the past 12 months, have you had a blood transfusion?	Y	N
15	Have you had physical contact with someone who was vaccinated for smallpox in the past 8 weeks?	Y	N	24	In the past 12 months, have you had sexual contact with anyone who takes money or drugs or other payment for sex?	Y	N
16	In the past 48 hours, have you taken aspirin or anything that has aspirin in it?	Y	N	25	In the past 12 months, have you had or been treated for syphilis or gonorrhea?	Y	N
17	In the past 8 weeks, have you donated blood, platelets, or plasma?	Y	N	26	In the past 12 months, have you had sexual contact with anyone who has ever used needles to take drugs or steroids, or anything not prescribed by their doctor?	Y	N

Comments:

Today's Date:	Temperature: _____ °F/°C (≤ 99.5°F/37.5°C)	Blood Pressure: _____/_____ Systolic: 90-180 Diastolic: 50-100	Pulse: _____ (50-100 bpm)	Hemoglobin: _____ Male: ≥ 13.0 g/dL Female: ≥12.5 g/dL	Weight: _____ (≥ 110 pounds/50kg)	Vital Signs Tech:

Does Donor Qualify? Y N ***Reviewer (initials):	Phlebotomist	Start Time	Stop Time (~15 mins)	Bag Manufacturer	Lot #	Expiration Date:	Segment #

I verify that I have answered the questions honestly. I had an opportunity to ask questions, I consent to donating blood today, and I feel my blood is safe to be transfused. If I am donating a unit of whole blood today, my blood will **NOT** be tested for viral diseases prior to transfusion due to the emergency situation. If for any reason I feel that my blood may not be safe, I will not donate today.

_____ _____
Donor's Signature *Date*

ASBP 572-EWB (Emergency Whole Blood), 5 Apr 2018

Check Deferral Status (initials):_____ Date: _____ Entered into Blood Management System by (initials)_____ Date:_____

Emergency Walking Blood Bank SOP

Appendix A Continued
Modified ASBP 572-EWB (Emergency Whole Blood Donation Record)

DONOR EDUCATIONAL MATERIAL

Blood donation is a voluntary process requiring the collection of approximately 450-500 mL of blood. The usual collection time ranges from 5 to 10 minutes. Complications at the venipuncture site may include, but are not limited to: discomfort, bruising, swelling, or infection. Other complications could occur during or after your donation such as: fatigue, light-headedness, dizziness, nausea, vomiting, and/or fainting. On very rare occasions, a more severe reaction may occur.

MEDICATION LIST: Donors **SHOULD NOT** discontinue medications prescribed by their physician in order to donate blood. Certain medications in your system can cause harm to some patients if your blood is transfused. If your last dose of the following medications was taken within the timeframe listed, you should not donate today nor should you participate in a walking blood bank program because the medication has not cleared from your system.

Prescreen or Donating Blood Today:

Erivedge, Odomzo	Soriatane	Bovine Insulin, Human Growth Hormone, Tegison
2 years	3 years	**EVER** in your life

Donating Blood Today (must screen donor for drugs below AND list above if donating whole blood):

Eliquis, Feldene, Fragmin, Lovenox, Pradaxa, Savaysa, Xarelto		Arixtra, Brilinta, Coumadin, Effient, LMW Heparin, Jantoven, Warfilone	
2 days		7 days	
Plavix, Ticlid, Zontivity	Absorica, Accutane, Amnesteem, Claravis, Myorisan, Propecia, Proscar, Sotret, Zenatane	Avodart, Jalyn	Experimental Meds/Vaccines
14 days	1 month	6 months	1 year

Your signature on the other side of this form acknowledges that you understand the questions and this educational material and that you agree to not donate any blood products if you are at risk of transmitting Human Immunodeficiency Virus (HIV) or any other virus. We know that you would not donate unless you think your blood is safe. However, in order for us to assess all risks that may affect you or a patient receiving a transfusion, it is essential that you answer each question completely and accurately on the other side of this form. If you do not understand a question, ask a staff member. All information you provide is confidential. It is critical that you alert your unit provider or medic if any of your responses change or if you have any concerns about the safety of your blood. This will facilitate notification and follow up testing for the recipient if needed.

Your blood will be tested for several types of viral markers including Hepatitis B, Hepatitis C, HIV, syphilis and other infections. You will be notified about any positive test result which may disqualify you from donating in the future, and your name will be entered onto a list of permanently deferred donors. If testing does not occur (due to specimen acceptability) or if testing results are not clearly negative or positive, your name may be placed on a deferral list without you being informed until the results are further clarified. For active duty personnel and reservists, positive screening and confirmatory results will be forwarded to appropriate medical personnel for further evaluation and "fitness for duty" determination (if required).

HIGH RISK BEHAVIORS:

Certain diseases such as HIV/AIDS and hepatitis can be spread through sexual contact OR by sharing drug needles/syringes. These viruses can enter your blood stream and can be transmitted to another person who is transfused with your blood, plasma, or platelets. Sexual contact includes: Vaginal contact (contact between penis and vagina), oral sex (mouth or tongue on someone's vagina, penis, or anus), and/or anal sex (contact between penis and anus). **YOUR BLOOD CAN TRANSMIT DISEASES**, including HIV/AIDS, even if you feel well and all your tests are normal. This is because even the best tests cannot detect the virus for a period of time after you are infected.

DO NOT DONATE IF YOU:

- Have AIDS or have ever had a positive HIV test
- Have ever used needles to take any drugs not prescribed by your doctor
- Are a male who has had sexual contact with another male in the past 12 months
- Have ever taken money, drugs or other payment for sex
- Have had sexual contact in the past 12 months with anyone described above
- Have had syphilis or gonorrhea in the past 12 months
- Have been in juvenile detention, lockup, jail or prison for more than 72 consecutive hours in the past 12 months

DO NOT DONATE TO GET A TEST! If you think you may be at risk for HIV/AIDS or any other infection, do not donate simply to get a test. See your medical provider to obtain an HIV/AIDS test. The following symptoms can be present before an HIV test turns positive: fever, enlarged lymph glands, sore throat, and/or rash.

NOTIFY YOUR UNIT MEDIC OR UNIT PROVIDER IF:

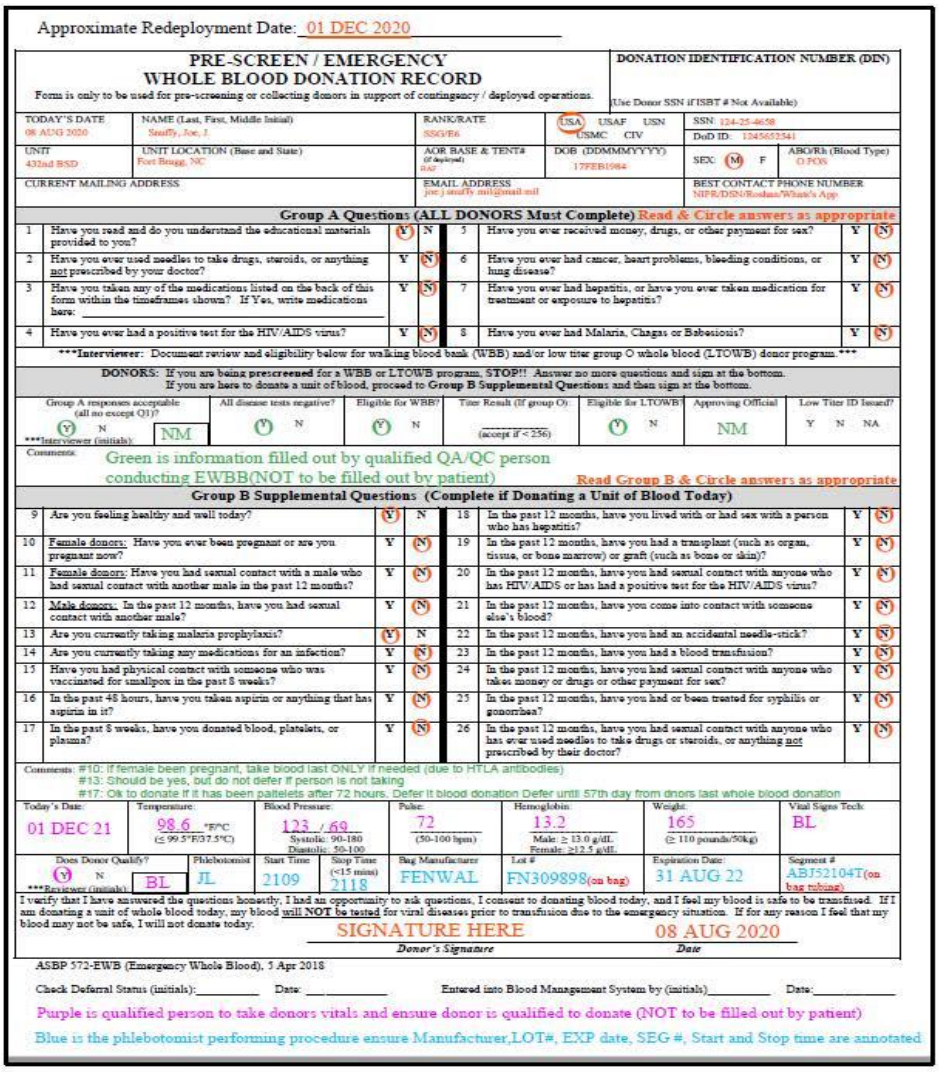
- Anything changes that would cause a different response to a question
- If you think your blood may not be safe for another person to receive
- If you become sick within 14 days after donating a unit of blood

THANK YOU FOR DONATING BLOOD!

ASBP 572-EWB (Emergency Whole Blood), 5 Apr 2018

Emergency Walking Blood Bank SOP

Appendix A Continued
Modified ASBP 572-EWB EXAMPLE (Emergency Whole Blood Donation Record)



Approximate Redeployment Date: 01 DEC 2020

PRE-SCREEN / EMERGENCY WHOLE BLOOD DONATION RECORD
Form is only to be used for pre-screening or collecting donors in support of contingency / deployed operations.

DONATION IDENTIFICATION NUMBER (DIN) (Use Donor SSN if ISBT # Not Available)

TODAY'S DATE	NAME (Last, First, Middle Initial)	RANK/RATE	(USA) USAF USN USMC CIV	SSN: 124-25-4658
08 AUG 2020	Smiffy, Joe, J	SSG/E6		DoD ID: 1245652541
UNIT: 432nd BSD	UNIT LOCATION (Base and State): Fort Bragg, NC	AOR BASE & TENT# (if deployed): BAF	DOB (DDMMMYYYY): 17FEB1984	SEX: (M) F; ABO/Rh (Blood Type): O POS
CURRENT MAILING ADDRESS		EMAIL ADDRESS: joe.j.smiffy.mil@mail.mil		BEST CONTACT PHONE NUMBER: NIPR/DSN/Roshan/Whats App

Group A Questions (ALL DONORS Must Complete) Read & Circle answers as appropriate

1	Have you read and do you understand the educational materials provided to you?	(Y)	N	5	Have you ever received money, drugs, or other payment for sex?	Y	(N)
2	Have you ever used needles to take drugs, steroids, or anything not prescribed by your doctor?	Y	(N)	6	Have you ever had cancer, heart problems, bleeding conditions, or lung disease?	Y	(N)
3	Have you taken any of the medications listed on the back of this form within the timeframes shown? If Yes, write medications here: ____	Y	(N)	7	Have you ever had hepatitis, or have you ever taken medication for treatment or exposure to hepatitis?	Y	(N)
4	Have you ever had a positive test for the HIV/AIDS virus?	Y	(N)	8	Have you ever had Malaria, Chagas or Babesiosis?	Y	(N)

Interviewer: Document review and eligibility below for walking blood bank (WBB) and/or low titer group O whole blood (LTOWB) donor program.

DONORS: If you are being prescreened for a WBB or LTOWB program, **STOP!!** Answer no more questions and sign at the bottom.
If you are here to donate a unit of blood, proceed to **Group B Supplemental Questions** and then sign at the bottom.

Group A responses acceptable (all no except Q1)?	All disease tests negative?	Eligible for WBB?	Titer Result (If group O)	Eligible for LTOWB?	Approving Official	Low Titer ID Issued?
(Y) N	(Y) N	(Y) N	(accept if < 256)	(Y) N	NM	Y N NA
***Interviewer (initials): NM						

Comments: Green is information filled out by qualified QA/QC person conducting EWBB(NOT to be filled out by patient)

Read Group B & Circle answers as appropriate

Group B Supplemental Questions (Complete if Donating a Unit of Blood Today)

9	Are you feeling healthy and well today?	(Y)	N	18	In the past 12 months, have you lived with or had sex with a person who has hepatitis?	Y	(N)
10	Female donors: Have you ever been pregnant or are you pregnant now?	Y	(N)	19	In the past 12 months, have you had a transplant (such as organ, tissue, or bone marrow) or graft (such as bone or skin)?	Y	(N)
11	Female donors: Have you had sexual contact with a male who had sexual contact with another male in the past 12 months?	Y	(N)	20	In the past 12 months, have you had sexual contact with anyone who has HIV/AIDS or has had a positive test for the HIV/AIDS virus?	Y	(N)
12	Male donors: In the past 12 months, have you had sexual contact with another male?	Y	(N)	21	In the past 12 months, have you come into contact with someone else's blood?	Y	(N)
13	Are you currently taking malaria prophylaxis?	(Y)	N	22	In the past 12 months, have you had an accidental needle-stick?	Y	(N)
14	Are you currently taking any medications for an infection?	Y	(N)	23	In the past 12 months, have you had a blood transfusion?	Y	(N)
15	Have you had physical contact with someone who was vaccinated for smallpox in the past 8 weeks?	Y	(N)	24	In the past 12 months, have you had sexual contact with anyone who takes money or drugs or other payment for sex?	Y	(N)
16	In the past 48 hours, have you taken aspirin or anything that has aspirin in it?	Y	(N)	25	In the past 12 months, have you had or been treated for syphilis or gonorrhea?	Y	(N)
17	In the past 8 weeks, have you donated blood, platelets, or plasma?	Y	(N)	26	In the past 12 months, have you had sexual contact with anyone who has ever used needles to take drugs or steroids, or anything not prescribed by their doctor?	Y	(N)

Comments: #10: If female been pregnant, take blood last ONLY if needed (due to HTLA antibodies)
#13: Should be yes, but do not defer if person is not taking
#17: Ok to donate if it has been patelets after 72 hours. Defer it blood donation Defer until 57th day from dnors last whole blood donation

Today's Date:	Temperature:	Blood Pressure:	Pulse:	Hemoglobin:	Weight:	Vital Signs Tech:
01 DEC 21	98.6 °F/°C (≤ 99.5°F/37.5°C)	123 / 69 Systolic: 90-180 Diastolic: 50-100	72 (50-100 bpm)	13.2 Male: ≥ 13.0 g/dL Female: ≥12.5 g/dL	165 (≥ 110 pounds/50kg)	BL

Does Donor Qualify?	Phlebotomist	Start Time:	Stop Time: (<15 mins)	Bag Manufacturer:	Lot #:	Expiration Date:	Segment #:
(Y) N	JL	2109	2118	FENWAL	FN309898 (on bag)	31 AUG 22	ABJ52104T (on bag tubing)
***Reviewer (initials): BL							

I verify that I have answered the questions honestly, I had an opportunity to ask questions, I consent to donating blood today, and I feel my blood is safe to be transfused. If I am donating a unit of whole blood today, my blood will NOT be tested for viral diseases prior to transfusion due to the emergency situation. If for any reason I feel that my blood may not be safe, I will not donate today.

SIGNATURE HERE — *Donor's Signature*
08 AUG 2020 — *Date*

ASBP 572-EWB (Emergency Whole Blood), 5 Apr 2018

Check Deferral Status (initials):_____ Date: _____ Entered into Blood Management System by (initials)_____ Date:_____

Purple is qualified person to take donors vitals and ensure donor is qualified to donate (NOT to be filled out by patient)

Blue is the phlebotomist performing procedure ensure Manufacturer,LOT#, EXP date, SEG #, Start and Stop time are annotated

Emergency Walking Blood Bank SOP

Appendix B
Form 151 (Whole Blood Transfusion Checklist)

WHOLE BLOOD TRANSFUSION CHECKLIST

*COMPLETE THIS CHECKLIST FOR EACH UNIT **TRANSFUSED** POST EVENT*

LOCATION OF TRANSFUSION:	DATE:
WHOLE BLOOD UNIT #	

1. DONOR PRESCREENED FOR TRANSFUSION TRANSMITTED DISEASE (TTD) MARKERS WITH FDA APPROVED TESTS WITHIN LAST 90 DAYS?

YES_____ NO_____

2. DONORS SCREENED AT TIME OF COLLECTION USING RAPID TESTS FOR:

MALARIA YES_____ NO_____
HIV YES_____ NO_____
HBV YES_____ NO_____
HCV YES_____ NO_____
RPR YES_____ NO_____

3. RAPID TEST RESULTS AVAILABLE PRIOR TO PRODUCT RELEASE?

YES_____ NO_____

4. DONORS SCREENED USING **DD572** & CURRENT SOP ? YES_____ NO_____

5. BLOOD TUBES COLLECTED AT THE TIME OF COLLECTION FOR FOLLOW UP WITH FDA TTD TESTING YES_____ NO_____

6. INTERNATIONAL SOCIETY FOR BLOOD TRANSFUSION (ISBT) LABELS USED YES_____ NO_____

7. TUBES AND A COPY OF **DD572** FORWARDED TO BSD? YES_____ NO_____

8. UNIT ACCOUNTED FOR IN TMDS? YES_____ NO_____

9. WAS COMPONENT THERAPY AVAILABLE WHEN FWB WAS GIVEN YES_____NO_____

10. PLEASE PROVIDE ANY INFLUENCING FACTORS THAT PREVENTED YOU FROM FOLLOWING THE SOP FOR THIS TRANSFUSION EVENT (IF APPLICABLE):

_____

_____

_____

_____

INDIVIDUAL COMPLETING CHECKLIST

Print Name	**Signature**

This checklist is to be kept on file for a minimum of one (1) year. Forward a copy to BSD with corresponding samples for Every unit of Whole Blood transfused.

Form 151

Emergency Walking Blood Bank SOP

Appendix C
DA Form 4700 (Emergency Release of Blood Products)

MEDICAL RECORD-SUPPLEMENTAL MEDICAL DATA
CENTCOM TRANSFUSION SERVICES Form Dated 04 June 2022

EMERGENCY RELEASE OF BLOOD PRODUCTS DURING CONTINGENCY

COMPONENT REQUESTED (Specify amount)
_____LOW TITER O WHOLE BLOOD (FDA Approved)
_____RED BLOOD CELLS (crossmatch NOT performed)
_____OTHER (SPECIFY): FFP (30-45MIN), Cryo (20-35MIN), Platelets, WBB WB (NOT FDA Approved) _____

DUE TO THE CRITICAL CONDITION OF BELOW NAMED PATIENT, I REQUEST THE IMMEDIATE RELEASE OF THESE BLOOD PRODUCTS FOR TRANSFUSION WITHOUT COMPLETE TESTING. I UNDERSTAND THE INCREASED RISK TO THE PATIENT AND ACCEPT RESPONSIBILITY FOR THE ADMINISTRATION OF THIS TRANSFUSION.

PHYSICIAN'S NAME & SIGNATURE	DATE

TRANSFUSION or TRAUMA NUMBER	RECIPIENT ABO/Rh	INSPECTED AND ISSUED BY (Signature) _____ Date/Time _____	INDIVIDUAL ACCEPTING COMPONENTS: WARD/DEPT:

UNIT NUMBER	ABO/Rh	EXP DATE	1ST VERIFIER	2ND VERIFIER	DATE/TIME STARTED	DATE/TIME COMPLETED	AMOUNT GIVEN	REACTION YES / NO

IDENTIFICATION VERIFICATION
The transfusionist (1st VERIFIER) must examine the blood bag, tag and emergency release form to ensure that it matches the patient's name and Transfusion Trauma Number. He/she must sign the block above to indicate that correct patient identification was made and to document who started the transfusion. A SECOND individual (2nd VERIFIER) must confirm that positive identification was made by the transfusionist and sign this form.

TRANSFUSION REACTION
If reaction is **SUSPECTED – IMMEDIATELY**:
- Discontinue transfusion, treat shock if present, keep intravenous line open
- Notify Physician and the Blood Bank
- Follow local Transfusion Reaction Procedures
- **DO NOT** discard unit. Return blood bag, filter set, and IV solutions to the Blood Bank

PRE-TRANSFUSION			POST-TRANSFUSION		
Temp	Pulse	B/P	Temp	Pulse	B/P

DESCRIPTION
___ Urticaria ___ Chill ___ Fever ___ Pain
OTHER: _____

SIGNATURE OF PERSON NOTING ABOVE PATIENT VITALS	OTHER DIFFICULTIES (Equipment, clots, etc) _____ No ____ YES (specify)

REVIEWED BY (Signature & Title)	DEPARTMENT/WARD	DATE

PATIENT'S IDENTIFICATION (Name-last, first, middle; social security number; grade; trauma number when applicable)	**HOSPITAL or MEDICAL FACILITY** NAME and LOCATION

DA FORM 4700, JUN 2022 EDITION OF MAY 78 IS OBSOLETE **MEDICAL RECORD COPY**

Emergency Walking Blood Bank SOP

Appendix C Continued
DA Form 4700 (Emergency Release of Blood Products)

EXAMPLE OF WHAT THE UNIT NEEDS TO FILL OUT:
INITIAL REQUEST = RED BLOCKS;
COMPLETION OF TRANSFUSION = GOLD BLOCKS

MEDICAL RECORD-SUPPLEMENTAL MEDICAL DATA
CENTCOM TRANSFUSION SERVICES Form Dated 04 June 2022

EMERGENCY RELEASE OF BLOOD PRODUCTS DURING CONTINGENCY

COMPONENT REQUESTED (Specify amount)
_____LOW TITER O WHOLE BLOOD (FDA Approved)
_____RED BLOOD CELLS (crossmatch NOT performed)
_____OTHER (SPECIFY): FFP (30-45MIN), Cryo (20-35MIN), Platelets, WBB WB (NOT FDA Approved) _____

DUE TO THE CRITICAL CONDITION OF BELOW NAMED PATIENT I REQUEST THE IMMEDIATE RELEASE OF THESE BLOOD PRODUCTS FOR TRANSFUSION WITHOUT COMPLETE TESTING. I UNDERSTAND THE INCREASED RISK TO THE PATIENT AND ACCEPT RESPONSIBILITY FOR THE ADMINISTRATION OF THIS TRANSFUSION

PHYSICIAN'S NAME & SIGNATURE	DATE

TRANSFUSION or TRAUMA NUMBER	RECIPIENT ABO/Rh	INSPECTED AND ISSUED BY (Signature) _____ Date/Time _____	INDIVIDUAL ACCEPTING COMPONENTS: WARD/DEPT:

UNIT NUMBER	ABO/Rh	EXP DATE	1ST VERIFIER	2ND VERIFIER	DATE/TIME STARTED	DATE/TIME COMPLETED	AMOUNT GIVEN	REACTION YES / NO

IDENTIFICATION VERIFICATION
The transfusionist (1st VERIFIER) must examine the blood bag, tag and emergency release form to ensure that it matches the patient's name and Transfusion Trauma Number. He/she must sign the block above to indicate that correct patient identification was made and to document who started the transfusion. A SECOND individual (2nd VERIFIER) must confirm that positive identification was made by the transfusionist and sign this form.

TRANSFUSION REACTION
If reaction is **SUSPECTED – IMMEDIATELY**:
- Discontinue transfusion, treat shock if present, keep intravenous line open
- Notify Physician and the Blood Bank
- Follow local Transfusion Reaction Procedures
- **DO NOT** discard unit. Return blood bag, filter set, and IV solutions to the Blood Bank

PRE-TRANSFUSION Temp	Pulse	B/P	POST-TRANSFUSION Temp	Pulse	B/P

DESCRIPTION
___ Urticaria ___ Chill ___ Fever ___ Pain
OTHER: _____

SIGNATURE OF PERSON NOTING ABOVE PATIENT VITALS

OTHER DIFFICULTIES (Equipment, clots, etc)
____ No ____ YES (specify)

REVIEWED BY (Signature & Title)	DEPARTMENT/WARD	DATE

PATIENT'S IDENTIFICATION (Name-last, first, middle; social security number; grade; trauma number when applicable)	HOSPITAL or MEDICAL FACILITY NAME and LOCATION

DA FORM 4700, JUN 2022 EDITION OF MAY 78 IS OBSOLETE MEDICAL RECORD COPY

Emergency Walking Blood Bank SOP

Appendix D
Form 145 (Rapid Testing Worksheet)

Facility:______________
Blood Product Rapid Test

Date:________
Tech:________

Room Temp (20-27 C) _______
Stored at 5-30 C? Y/N

	Rapid Tests												RPR	
	Malaria			HIV 1/2			HCV			HBsAg			Rotator (100 +/- 5 rpm):100	
	Lot #:			Lot #:			Lot #:			Lot #:			Lot #:	
	Exp:			Exp:			Exp:			Exp:			Exp:	
Assigned Unit #	Sample results		IQC OK?	Sample results		IQC OK?	Sample results		IQC OK?	Sample results		IQC OK?	"R" Reactive	"NR" Non-Reactive
POS EQC	Line	NR		R	NR		R	NR		R	NR			
NEG EQC	R	Clearing		R	NR		R	NR		R	NR			
	R	NR		R	NR		R	NR		R	NR		R	NR
	R	NR		R	NR		R	NR		R	NR		R	NR
	R	NR		R	NR		R	NR		R	NR		R	NR
	R	NR		R	NR		R	NR		R	NR		R	NR
	R	NR		R	NR		R	NR		R	NR		R	NR
	R	NR		R	NR		R	NR		R	NR		R	NR
	R	NR		R	NR		R	NR		R	NR		R	NR
	R	NR		R	NR		R	NR		R	NR		R	NR
	R	NR		R	NR		R	NR		R	NR		R	NR
	R	NR		R	NR		R	NR		R	NR		R	NR
	R	NR		R	NR		R	NR		R	NR		R	NR

Supervisor Review: ______________ Date: _____________

Form 145
V: 07 Sep 2015

QA/QC Review: ______________ Date: _____________

Emergency Walking Blood Bank SOP

Appendix E
Form 150a (Letter of Understanding for Emergency WB)

Provider Letter of Understanding for Emergency (Non-FDA) Whole Blood Units

I understand that Emergency Whole Blood Units are NOT FDA approved and transfusion of these units may result in unintended disease and/or transfusion reactions. I accept full responsibility for the units and the consequences that may follow transfusion.

Print	Sign	Date
_____	_____	_____
Provider		

Form 150a
V: 11 SEP 15

Emergency Walking Blood Bank SOP

Appendix F
Form 150b (Letter of Understanding for Untested Emergency WB)

Provider Letter of Understanding for Untested Emergency Whole Blood Units

I understand that these Emergency Whole Blood Units have not had complete Rapid Testing prior to transfusion and transfusion of these units may result in an increased risk of unintended disease and/or transfusion reactions. I accept full responsibility for the units and the consequences that may follow transfusion.

Print	Sign	Date
_____	_____	_____
Provider		

Form 150b

Emergency Walking Blood Bank SOP

Appendix G
Form 147 (Eldon Card ABO/Rh Typing or Tube Method if not modified)

Facility:____________________

Date:________
Tech:________

ABO/RhTesting QC

Room Temp (20-27 C) _______
Stored at 5-30 C? Y/N

	Eldon Card ABO/Rh Typing						
	Lot #						
	Exp:					Tech	
Assigned Unit #	Anti-A	Anti-B	Anti-D	Control	Interpretation	Initials	
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
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	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			
	+ =	+ =	+ =	+ =			

Supervisor Review: ________________ Date: ______________

Form 147
V: 07 Sep 2015

QA/QC Review: Date:

Emergency Walking Blood Bank SOP

Appendix H
SF 518 Blood or Blood Component Transfusion

518-123 NSN 7540-00-634-4168

MEDICAL RECORD — BLOOD OR BLOOD COMPONENT TRANSFUSION

SECTION I - REQUISITION

COMPONENT REQUESTED (Check one)
- RED BLOOD CELLS
- FRESH FROZEN PLASMA
- PLATELETS (Pool of _____ units)
- CRYOPRECIPITATE (Pool of _____ units)
- Rh IMMUNE GLOBULIN
- OTHER (Specify)

TYPE OF REQUEST (Check ONLY if Red Blood Cell Products are requested.)
- TYPE AND SCREEN
- CROSSMATCH

DATE REQUESTED

DATE AND HOUR REQUIRED

REQUESTING PHYSICIAN (Print)

DIAGNOSIS OR OPERATIVE PROCEDURE

I have collected a blood specimen on the below named patient, verified the name and ID No. of the patient and verified the specimen tube label to be correct.

VOLUME REQUESTED (If applicable) _____ ML

KNOWN ANTIBODY FORMATION/TRANSFUSION REACTION (Specify)

SIGNATURE OF VERIFIER

REMARKS:

IF PATIENT ID FEMALE, ID THERE HISTORY OF:
RhIG TREATMENT? DATE GIVEN: _____
HEMOLYTIC DISEASE OF NEWBORN? _____

DATE VERIFIED

TIME VERIFIED

SECTION II - PRE-TRANSFUSION TESTING

UNIT NO. | TRANSFUSION NO. | PATIENT NO.

TEST INTERPRETATION: ANTIBODY SCREEN | CROSSMATCH

PREVIOUS RECORD CHECK: RECORD | NO RECORD

SIGNATURE OF PERSON PERFORMING TEST

DONOR: ABO | Rh

RECIPIENT: ABO | Rh

CROSSMATCH NOT REQUIRED FOR THE COMPONENT REQUESTED | DATE

REMARKS:

SECTION III - RECORD OF TRANSFUSION

PRE-TRANSFUSION DATA

INSPECTED AND ISSUED BY (Signature)

AT (Hour) | ON (Date)

IDENTIFICATION
I have examined the Blood Component container label and this form and I find all information identifying the container with the intended recipient matches item by item. The recipient is the same person named on this Blood Component Transfusion Form and on the patient identification tag.

1st VERIFIER (Signature)

2nd VERIFIER (Signature)

PRE-TRANSFUSION
TEMP | PULSE | BP

DATE OF TRANSFUSION | TIME STARTED

POST-TRANSFUSION DATA

AMOUNT GIVEN | TIME/DATE COMPLETED/INTERRUPTED

REACTION: NONE | SUSPECTED

TEMPERATURE | PULSE | BLOOD PRESSURE

If reaction is suspected – IMMEDIATELY:
1. Discontinue transfusion, treat shock if present, keep intravenous line open.
2. Notify Physician and Transfusion Service.
3. Follow Transfusion Reaction Procedures.
4. Do NOT discard unit. Return Blood Bag, Filter Set, and I.V. Solutions to the Blood Bank.

DESCRIPTION OF REACTION
- URTICARIA
- CHILL
- FEVER
- PAIN
- OTHER (Specify)

OTHER DIFFICULTIES (Equipment, clots, etc.)
- NO
- YES (Specify)

SIGNATURE OF PERSON NOTING ABOVE

PATIENT IDENTIFICATION – USE EMBOSSER (For typed or written entries give: Name–Last, first, middle; grade; rank; rate; hospital or medical facility)

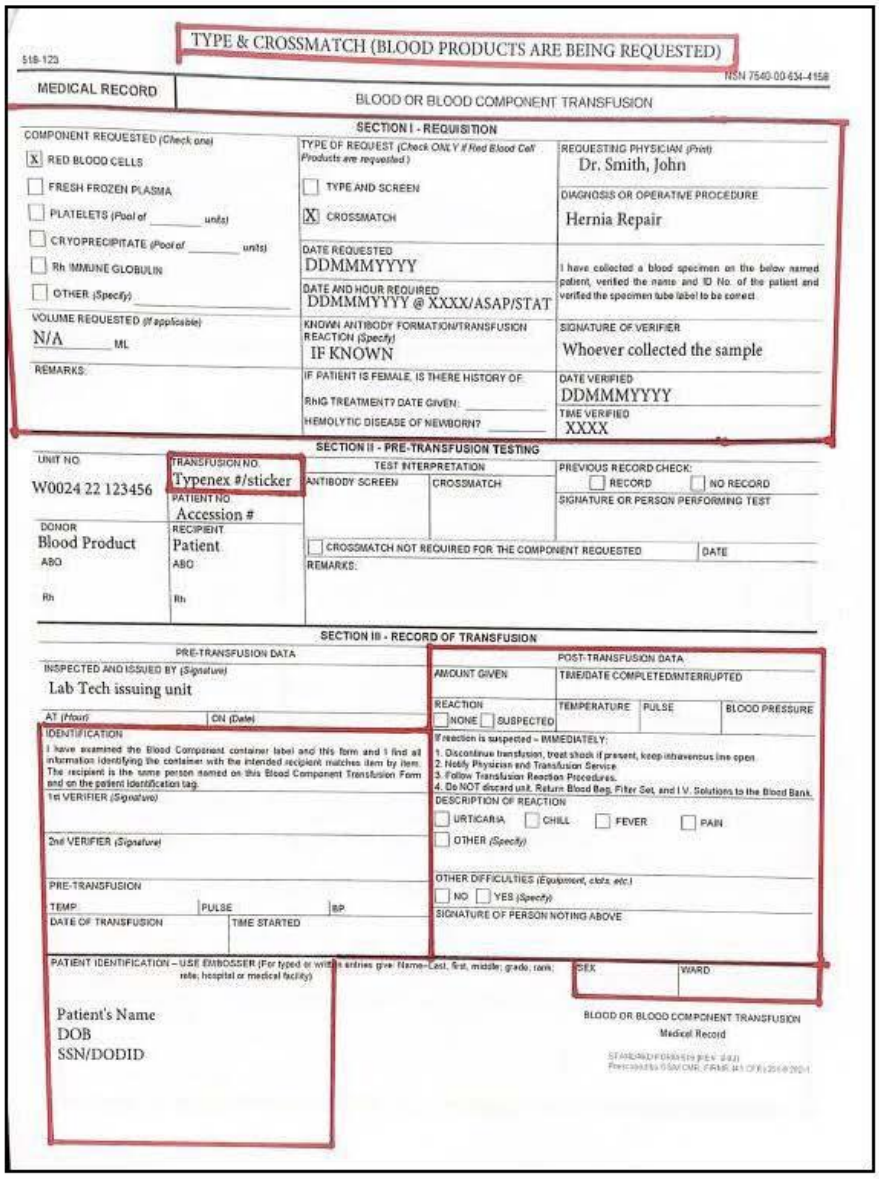
SEX | WARD

BLOOD OR BLOOD COMPONENT TRANSFUSION
Medical Record

STANDARD FORM 518 (REV. 9-92)
Prescribed by GSA/ICMR, FIRMR (41 CFR) 201-6.202-1

Emergency Walking Blood Bank SOP

Appendix H Continued
SF 518 Blood or Blood Component Transfusion EXAMPLE



TYPE & CROSSMATCH (BLOOD PRODUCTS ARE BEING REQUESTED)

518-123 NSN 7540-00-634-4168

MEDICAL RECORD — BLOOD OR BLOOD COMPONENT TRANSFUSION

SECTION I - REQUISITION

COMPONENT REQUESTED (Check one)
- [X] RED BLOOD CELLS
- [ ] FRESH FROZEN PLASMA
- [ ] PLATELETS (Pool of ____ units)
- [ ] CRYOPRECIPITATE (Pool of ____ units)
- [ ] Rh IMMUNE GLOBULIN
- [ ] OTHER (Specify)

VOLUME REQUESTED (If applicable): N/A ML

REMARKS:

TYPE OF REQUEST (Check ONLY if Red Blood Cell Products are requested)
- [ ] TYPE AND SCREEN
- [X] CROSSMATCH

DATE REQUESTED: DDMMMYYYY

DATE AND HOUR REQUIRED: DDMMMYYYY @ XXXX/ASAP/STAT

KNOWN ANTIBODY FORMATION/TRANSFUSION REACTION (Specify): IF KNOWN

IF PATIENT IS FEMALE, IS THERE HISTORY OF:
RhIG TREATMENT? DATE GIVEN: ____
HEMOLYTIC DISEASE OF NEWBORN? ____

REQUESTING PHYSICIAN (Print): Dr. Smith, John

DIAGNOSIS OR OPERATIVE PROCEDURE: Hernia Repair

I have collected a blood specimen on the below named patient, verified the name and ID No. of the patient and verified the specimen tube label to be correct.

SIGNATURE OF VERIFIER: Whoever collected the sample

DATE VERIFIED: DDMMMYYYY

TIME VERIFIED: XXXX

SECTION II - PRE-TRANSFUSION TESTING

UNIT NO.: W0024 22 123456

TRANSFUSION NO.: Typenex #/sticker

PATIENT NO.: Accession #

DONOR: Blood Product — ABO: — Rh:

RECIPIENT: Patient — ABO: — Rh:

TEST INTERPRETATION: ANTIBODY SCREEN | CROSSMATCH

PREVIOUS RECORD CHECK: [ ] RECORD [ ] NO RECORD

SIGNATURE OR PERSON PERFORMING TEST

[ ] CROSSMATCH NOT REQUIRED FOR THE COMPONENT REQUESTED — DATE

REMARKS:

SECTION III - RECORD OF TRANSFUSION

PRE-TRANSFUSION DATA

INSPECTED AND ISSUED BY (Signature): Lab Tech issuing unit

AT (Hour) — ON (Date)

IDENTIFICATION
I have examined the Blood Component container label and this form and I find all information identifying the container with the intended recipient matches item by item. The recipient is the same person named on this Blood Component Transfusion Form and on the patient identification tag.

1st VERIFIER (Signature)

2nd VERIFIER (Signature)

PRE-TRANSFUSION: TEMP — PULSE — BP

DATE OF TRANSFUSION — TIME STARTED

POST-TRANSFUSION DATA

AMOUNT GIVEN — TIME/DATE COMPLETED/INTERRUPTED

REACTION: [ ] NONE [ ] SUSPECTED — TEMPERATURE — PULSE — BLOOD PRESSURE

If reaction is suspected – IMMEDIATELY:
1. Discontinue transfusion, treat shock if present, keep intravenous line open.
2. Notify Physician and Transfusion Service.
3. Follow Transfusion Reaction Procedures.
4. Do NOT discard unit. Return Blood Bag, Filter Set, and I.V. Solutions to the Blood Bank.

DESCRIPTION OF REACTION
[ ] URTICARIA [ ] CHILL [ ] FEVER [ ] PAIN
[ ] OTHER (Specify)

OTHER DIFFICULTIES (Equipment, clots, etc.)
[ ] NO [ ] YES (Specify)

SIGNATURE OF PERSON NOTING ABOVE

PATIENT IDENTIFICATION – USE EMBOSSER (For typed or written entries give Name–Last, first, middle; grade, rank; rate; hospital or medical facility)

Patient's Name
DOB
SSN/DODID

SEX — WARD

BLOOD OR BLOOD COMPONENT TRANSFUSION
Medical Record

Emergency Walking Blood Bank SOP

By signing below, I am stating that I have read and understand all standard operating procedures in **Emergency Walking Blood Bank**. I will review the procedures annually, as well as if there is a significant change.

Print Name	Signature	Date	Initial/Date	Initial/Date (if updated)