

Northern Virginia EMS Council

Regional Protocol Guidelines

Whole Blood Storage

BACKGROUND

The Northern Virginia EMS Council has an agreement with Inova Blood Donor Services (IBDS) to allow member EMS agencies to store whole blood in the field for immediate use by paramedics trained and authorized by their operational medical director (OMD) to administer blood.

PURPOSE

The purpose of this document is to outline the regional approach for storing and exchanging whole blood owned by Inova Blood Donor Services. It will not address specific patient care protocols for administering blood, which are agency specific and may vary.

REGIONAL GUIDELINE

Storage Procedure

1. Whole blood must be stored in a secure manner with access restricted to authorized personnel only. All blood stored by EMS agencies will be housed in an approved cooler and maintained at a storage temperature between 1° - 10° Celsius and in accordance with applicable FDA regulations.
2. Coolers will be validated by IBDS and continual temperature logs will be maintained by EMS agencies at no less than 5 minute intervals. An alarm/notification threshold will be set at less than 2 and greater than 6 degrees to allow corrective action prior to exceeding the 1-10 degree(C°) threshold. Temperature logs will meet any additional requirements set forth by IBDS and made available to IBDS upon request or during return of a blood product for exchange.
3. No food or drink should be stored in any containers near the blood cooler. Food or drink coolers should be kept in a separate compartment in the vehicle.
4. In addition to utilizing an approved system to continually monitor temperature, EMS agencies will also inspect the temperature dot on each unit of blood to ensure the temperature dot is intact and indicating appropriate temperature at the beginning of each shift and before any transfusion.
5. If the temperature monitoring system shows blood deviated from the 1-10 degree(C°) storage range for greater than 30 minutes the EMS agency will contact their Operational Medical Director and make arrangements to return the blood to INOVA Blood Donor Services for immediate exchange.
6. If the temperature dot on the unit indicates the blood is outside the proper temperature, the EMS agency will contact their Operational Medical Director and make arrangements to return the blood to INOVA Blood Donor Services for immediate exchange.
7. Whole blood products will be stored in the field for 14 days and returned to IBDS promptly on day 14 during normal business hours as directed by IBDS.

8. The Northern Virginia EMS Council will receive all invoices from IBDS for used or discarded blood and will subsequently invoice the EMS Agency involved.

Rotation/Resupply/Exchange Procedure

This section details the blood exchange process at the IBDS Loudoun facility. The same process will take place regardless of the reason for exchange.

EMS agencies will maintain an exchange process in their protocols that meets the following minimum requirements.

The three common reasons for exchange:

1. The blood unit has been deployed in the field for 14 days and needs to be rotated.
2. The blood unit was transfused in the field on a patient (and needs to be replaced).
3. The blood unit has been out of temperature range, either per the approved continual temperature monitoring device or the temperature monitoring device located on the blood product indicates the product is outside the proper temperature range.

The location of blood exchange

1. Blood will be exchanged with Inova Blood Donor Services.

Their address is:

Inova Blood Donor Services
45745 Nokes Boulevard
Sterling, VA 20165

The timing and method of used or damaged blood exchange

1. Replacement blood for a unit that was used (or damaged) may be done after hours when required. The EMS provider or Agency OMD will contact the IBDS shipping department at (571) 434-3614 to coordinate replacement.
2. After exchanges will occur using the back door of IBDS as shown here by ringing the bell on arrival.



The timing and method of unused blood rotation/exchange

1. Unused blood will be rotated/exchanged with IBDS every 14 days. An expiration date marked on the product will identify the date on which the exchange will occur. Blood will be exchanged at a predetermined time and day for each agency; in extenuating circumstances, alternative blood exchange will be arranged through coordination with the agency OMD and the IBDS leadership. Utilize the rear entrance shown above for access.

Post Administration Support

Following the administration of blood, all required information will be supplied to IBDS by the EMS agency. This would routinely include the patient demographics and any other required notifications such as suspected transfusion reaction. Additional information required by IBDS such as “lookbacks” will be provided in coordination with the receiving hospital facility and the EMS agency OMD. All incidents involving blood administration or damage/loss of blood will be reviewed by the OMD for quality assurance purposes.