

Blood Transfusion Policy Overview

The Bridgeport Hospital Blood Transfusion Program is a collaborative initiative between the Bridgeport Hospital Department of EMS, Bridgeport Hospital Trauma Center, and the Bridgeport Hospital Blood Bank to ensure timely, safe, and effective prehospital administration of whole blood from the point of injury through arrival at definitive care. The program is supported by the SHCGB, helping enhance regional emergency response capabilities by enabling specially trained paramedics to deliver life-saving transfusions in the field.

Program Purpose & Structure

The program establishes a regional performance improvement system to support prehospital blood administration under standardized clinical guidelines. Participation requires agency sponsorship, approved training, strict competency maintenance, and adherence to SHCGB and Connecticut OEMS protocols.

Training & Credentialing

- **Initial Training:** Paramedics must complete an approved Initial Blood Transfusion Training Program, including hands-on skills demonstration, storage procedures, and simulation-based resuscitation scenarios.
- **Annual Recertification:** Authorized providers must complete yearly competency checks and training. Rosters of authorized transfusion paramedics are maintained jointly by EMS agencies and SHCGB Medical Control.

Clinical Protocols

- Prehospital whole blood administration must follow CT OEMS Protocol 4.3 and current BH MMC/SHCGB Prehospital Transfusion Guidelines.
- Paramedics are permitted to waive DMO requirements for specific indications (5, 6, 7 in CT OEMS 4.3) when physiological criteria are met.
- Use of Low-Titer Type O Whole Blood (LTOWB) is authorized; transfusion in women of childbearing potential requires extreme caution.

Contraindications

Transfusion is prohibited in cases of:

- Known transfusion reactions
- Patient refusal or guardian refusal
- Patients **<5 years old**
- Non-survivable traumatic injuries

- Conflicting medical control orders
- Patients meeting CT resuscitation termination guidelines

Blood Allocation, Storage & Transport

The BH Blood Bank supplies EMS units with O-positive LTOWB or RBC units, which must be stored in temperature-controlled, monitored coolers designed for safe blood handling.

Unused blood is rotated back into hospital inventory to support a zero-waste strategy.

Cloud-based alerts and strict return timelines minimize spoilage and maintain product integrity.

Transfusion Procedure & Documentation

Paramedics must follow all approved transfusion procedures and documentation requirements.

If blood is administered:

- EMS must notify the Blood Bank
- Emergency release forms and transfusion records must be submitted
- Storage and handling logs must be maintained daily

Quality Management

SHCGB EMS leadership conducts 100% review of all prehospital blood utilization events, assessing:

- Appropriateness of use
- Patient response and outcomes
- Temperature control
- Lab values (H&H)
- Compliance with policy and protocols

Both EMS and the Blood Bank provide continuous quality assessment, supporting data-driven performance improvement.

Questions regarding this program may be submitted to :

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