Montana Trauma System Updates Alyssa Johnson MSN, RN, CEN, TCRN October 2023



Trauma Rules Revision and Designation



Trauma Rules Revision

Amendment of ARM 37.104.3001, 37.104.3012, 37.104.3020, and 37.104.3022 pertaining to trauma facility designation

On September 28, 2023, at 11:00 a.m., the Department of Public Health and Human Services held a public hearing via remote conferencing to consider the proposed amendment of the above-stated rules.



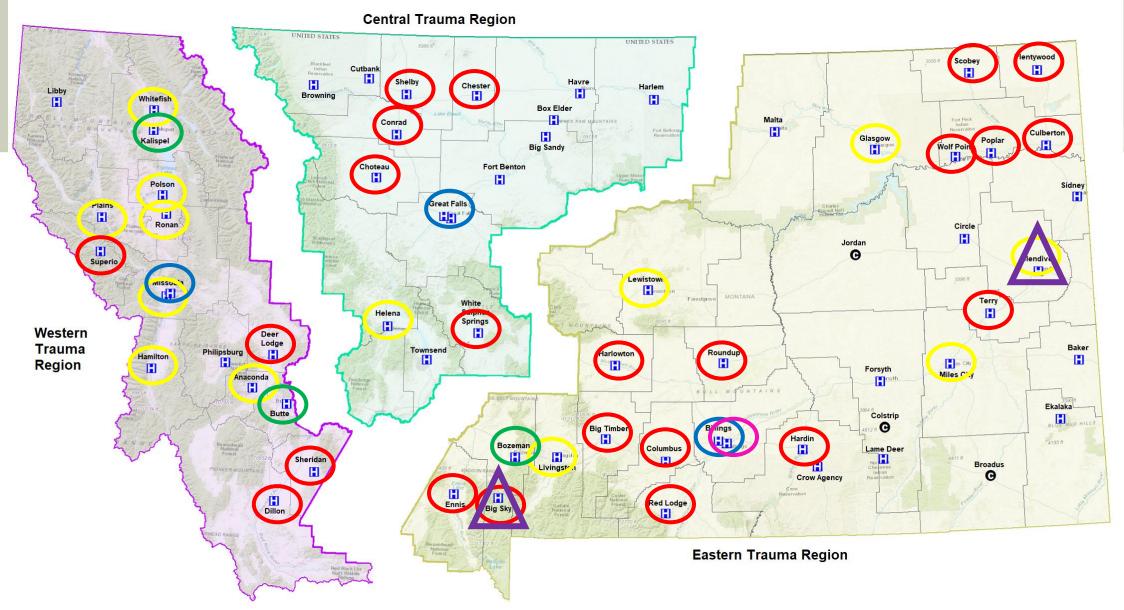
Trauma Rules Revision

DPHHS proposes to amend the rules pertaining to trauma facility designation. The proposed rule amendments are necessary to add a new trauma care designation level for trauma care centers seeking to serve as comprehensive trauma centers. The proposed rule amendments also update trauma facility designation criteria to reflect the continued advancement of medical practice and conform with best practices. The department is also proposing amendments to update vague and outdated language to improve clarity and readability of the rules.



The department intends for the proposed rule amendments to be effective January 1, 2024.







Green: Area Trauma Hospitals

Purple: Passed initial designation

Trauma Education, Assessment, & Management Courses



A 4-hour course which was originally developed in the late 1990's specifically for Montana rural communities. It continues to be offered through the Regional Trauma Advisory Committees (RTACs), with support from EMS & Trauma Services, with the goal of improving the quality of care in the rural community through an organized team-oriented approach to the management of trauma patients.

EMSTS applies for and receives grant monies to be able to provide funding to each RTAC to deliver courses to facilities free of charge.

Collaborating with MDT on trauma education for 10 years!!

A bit of history...

Montana TEAM Course vs.

American College of Surgeons Rural Trauma Team Development Course (RTTDC)

- RTTDC idea originated in a 1998 ad hoc Rural Trauma Meeting and was first presented by the Ad Hoc Rural Trauma Subcommittee of the ACS COT in 2004.
- When developing the RTTDC course Dr.
 Doug Schmitz, Dr. Jim Kessel and Dr. Tom
 Foley requested Kim Todd, MT Trauma
 System Manager to present the MT TEAM
 course to them. Based on this meeting,
 many concepts, ideas and topics were
 adopted into RTTDC.

What is a TEAM Course?

Objectives

- Describe Montana Trauma System
- Identify local system resources and communication strategies essential for prehospital notification
- Discuss organization and mobilization of local resources for trauma care and disasters
- Describe effective clinical team approaches in the triage, assessment, management and transfer of the trauma patient
- Practice team roles and responses utilizing a trauma patient scenario

EXCELLENCE IN PREHOSPITAL INJURY CARE (EPIC) for Traumatic Brain Injury



Traumatic Brain Injury (TBI) in Montana

- Each year, over 300 Montanans die from TBI and another 800 are hospitalized.
- Nationally, TBI leads to 2.2 million emergency department visits, 280,000 hospitalizations, and 52,000 deaths.
- Montana has an elevated injury and death rate from TBI compared to the nation.



What is EPIC-MT?

- EPIC is an evidence-based treatment protocol and quality improvement initiative for treatment of patients with TBI. Starts prehospital and continues into the hospital
- Demonstrated that care can dramatically improve survival.
- In adults, implementation of the EPIC Guidelines was independently associated with a doubling of the adjusted odds of survival in severe TBI and a tripling in survival with severe, intubated TBI.
- In pediatric patients, use of EPIC was associated with a five-fold increase in adjusted odds of survival in severe TBI (whether or not intubated) and a seven-fold increase in survival for patients receiving positive pressure ventilation.



The Plan: STOP the 3 H-Bombs









The EPIC-MT Plan

Train EMS & Hospital Providers Across the State

Develop a cadre of EPIC-MT Trainers

- Master Trainer Course
- Train-the-Trainer Courses
- Provider-level Courses
- Provide opportunities for refresher training

Recognize Participating Agencies & Hospitals

An "EPIC-MT Participating Agency" (EMS or hospital) is committing to:

- Medical Director authorization to use protocol
- •Ensure initial training requirements are met
- •Use appropriate equipment
- Submit EMS and/or hospital outcome data to EMSTS

CQI & Evaluation

The EMS and hospital outcome data will be used to drive CQI effort and evaluate the effectiveness of the protocol within Montana.



Montana Interfacility Blood Network



Montana Interfacility Blood Network

The MT IBN is an unparalleled concept whereby an intermediary facility will "hand-off" lifesaving blood to transporting personnel on their way to definitive care.

With the MT IBN, the ambulance will be able to pick up uncrossmatched, emergent blood products at the intermediate facility and administer them to the patient during the remainder of the transport to the Regional Center.

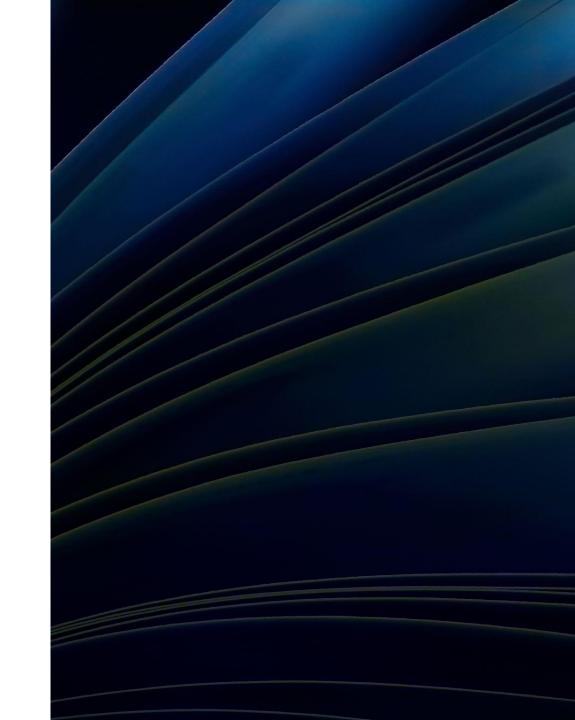


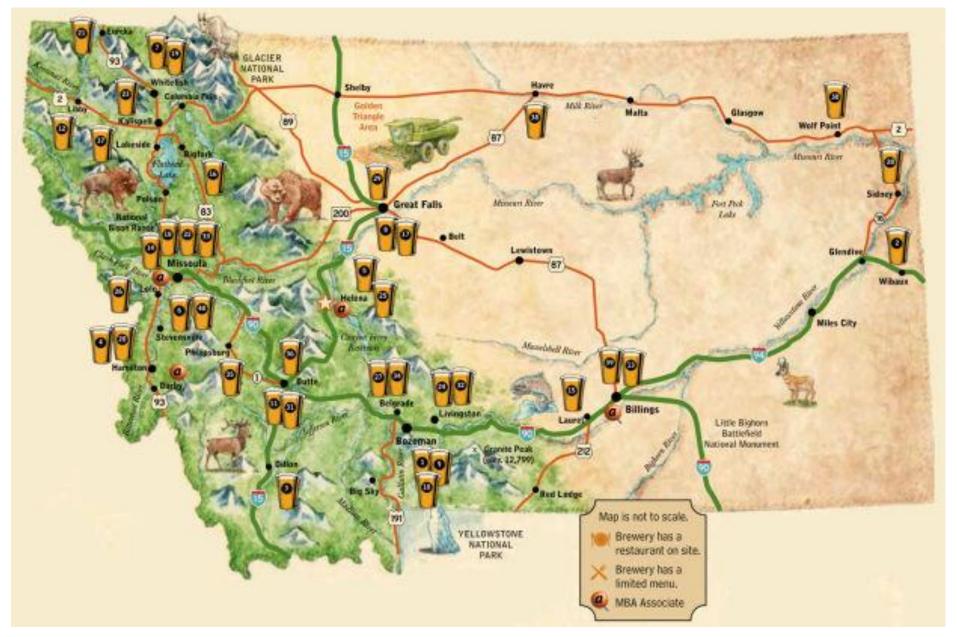
STCC Blood Subcommittee

Met twice in 2019/2020

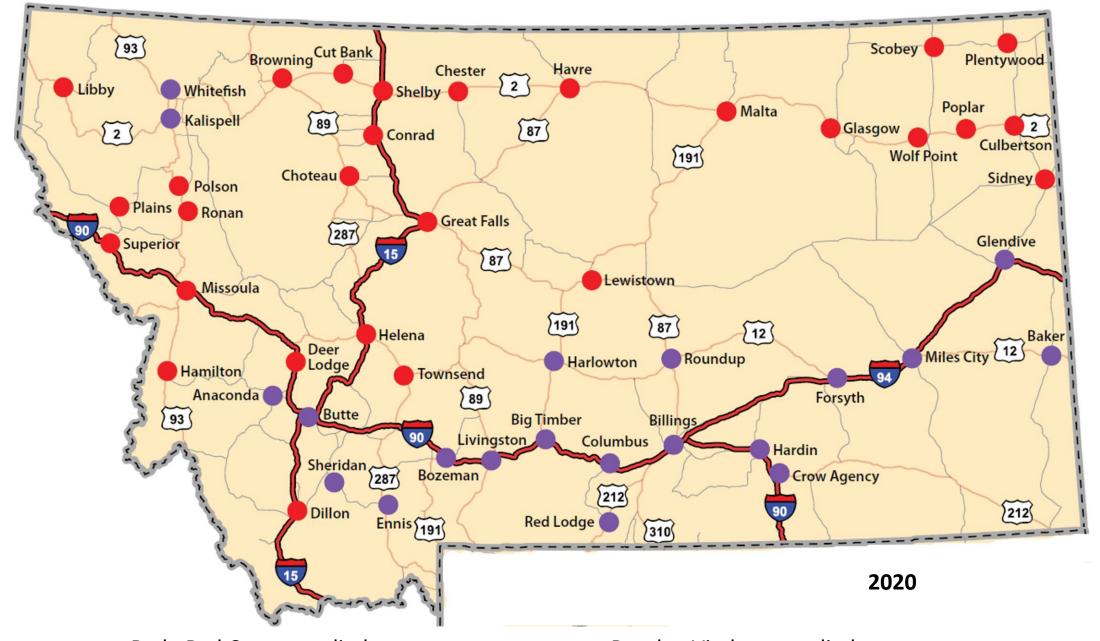
Reviewed blood map & developed blood procedure draft

Survey Monkey developed and distributed.





Subcommittee noted while there was a "microbrew' map there was not a map of facilities with blood available for ground transport.



Red= Red Cross supplied

Purple= Vitalant supplied

Please read the following scenario for the next questions: A patient presents at a facility that either has no blood products available or a limited supply. This patient requires blood to save his/her life. Flight is unable to fly and bring blood due to weather. The patient is being ground transported to the Regional Center and must pass another hospital with blood products available. Should the ambulance be able to pick up blood products at the intermediary facility and administer them to the patient during the remainder of transport to Regional Center?

MT IBN





MT IBN Quick-start Guide

Reason to share resource identified

The sending provider deems it necessary that the patient requires lifesaving blood products.

- Sending provider responsible for notifying accepting provider when this is initiated
- · Sending provider contacts intermediary donating facility to arrange product release

Resource must be available

Identification is necessary for all products and personnel. Resources must be tracked and updated appropriately to ensure access at any time in response to the need for blood.

- Facility Resource Guide gives a detailed inventory of blood product availability.
 - https://mtdphhs.maps.arcgis.com/apps/instant/interactivelegend/index.html?appid=35
 https://mtdphhs.maps.arcgis.com/apps/instant/interactivelegend/index.html?appid=35
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 https://mttps.arcgis.com/apps/insta
- · Laboratory Guide for Blood Product Sharing within this packet
- · Emergent blood release
 - o O negative: Use for females < 50 years of age
 - o O positive: Use for all males and females age 50 and older
 - o ONLY type O blood can be given
 - Historical blood types or verbal blood types are not able to be honored in these situations
- Blood tubing
- Personnel to transfer blood products from hospital to patient/EMS
 - o Intermediary facility personnel, local dispatch
 - o Montana Highway Patrol: 406-841-7000

Proper packaging

There is a basic standard for packaging of blood, and the process should be shared and trained to ensure proper packaging and handling is done in a consistent manner.

- Blood Products must be appropriately packaged to be received into inventory at another facility in the event they are <u>not</u> used enroute.
- Package blood and blood products according to your blood suppliers' guidelines:
 - American Red Cross: Appendix B
 - o Vitalant: Appendix D

Paperwork for transfer

Paperwork/forms for transfer process will be filled out by the appropriate donation/intermediary or transfer facility and will accompany all blood products being transported.

- · A filled-out transfer document must accompany any blood products being transported
 - American Red Cross: Appendix A
 - Vitalant: Appendix C
- The Sending/Intermediary and Receiving blood banks should stay in communication and complete the transfer paperwork accordingly.
- Transfer of product will be to receiving facility, NOT the patient, EMS, or Flight Service.

Resupply and Billing

The responsibility for resupply relies on the facilities to immediately notify their primary donor center of any need for re-supply. Each donor center will re-supply in accordance with their current policies and priorities.

- Notify your supplier that have you used these units so they will be able to resupply you per your current procedures.
 - Process can be started as soon as products leave your facility.
- When blood/blood products are transferred to the receiving facility and have been packaged appropriately, billing occurs at the receiving facility.
- If blood products were transfused enroute, compatibility testing and charging occurs at the receiving facility.