Montana Trauma System Legislative Report 2015-2017

Title: Montana Trauma System Report – Implementation of 50-6-402 (3) MCA

Abstract: This report describes trauma system strategies that are aimed at preventing and/or minimizing injury and death, as well as, improving outcomes of victims of traumatic injury. The report describes prevention and treatment activities including:

- Continual development of an inclusive, regionalized system which includes trauma educated healthcare providers and hospitals;
- Sustained implementation of rules which authorize designation of trauma centers and provides professional recognition of facilities that meet trauma standards of care; and
- Maintain solid data collection through a statewide trauma registry that is actively used for performance improvement.

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MONTANA TRAUMA SYSTEM

The Trauma System ensures high quality community resources are available to respond to individuals who are traumatically injured in Montana, by assuring an integrated statewide system of resources, establishment of trauma regions, and designation of trauma care hospitals.

The goals and objectives of a trauma care system include:

- Providing optimal care for the trauma victim;
- Preventing unnecessary death and disability from trauma and emergency illness; and
- Conducting trauma prevention activities to decrease the incidence of trauma

BURDEN OF TRAUMA

- Trauma is the leading cause of death for Americans under age 46 and accounts for almost half of the deaths for that age group.
- Trauma is the third leading cause of death overall.
- Trauma accounts for more years of potential life lost before age 75 than any other cause, including cancer or heart disease.
- Trauma accounts for over $670 billion in medical costs a year.
- There are nearly 150,000 trauma deaths annually. 20 percent of which could be prevented with optimal trauma care in a system.
- Trauma is a disease; it is preventable and is not an accident.

ACTIVITIES REPORT

STCC and RTACs - Administratively, Montana's trauma system is divided into a State Trauma Care Committee (STCC) and three regions (Western RTAC, Central RTAC and Eastern RTAC, each with a regional council.

Regional Trauma Advisory Committees each meet quarterly. The Trauma System Manager and Trauma System Coordinator attend each of the 12 meetings to provide State trauma reports. A key activity added this last biennium includes trauma staff querying the State Trauma Registry to pull individual patient cases that meet specified performance improvement indicators selected by each region. These cases are then discussed as a dynamic performance improvement strategy.

Fifteen persons appointed by the Governor also meet quarterly as the State Trauma Care Committee. Statewide reports as well as state level registry reports are presented at each meeting by Trauma Staff. Also coming together before each STCC meeting is the Designation/PI subcommittee to discuss trauma facility designation and recommendations and the Education subcommittee which plans a variety of trauma education projects.

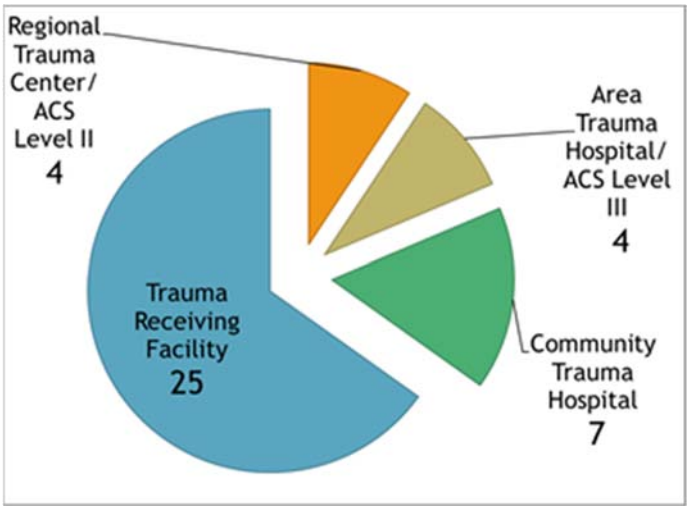
Air Medical Committee - Through the trauma program, EMSTS staff facilitates meetings of air medical providers around the state. While these services may be competitors, these meetings are about how to collaborate on medical and safety issues,

competition and business aside. Work began on updating air medical licensing rules pursuant to release of Air Medical Model Rules by the National Association of EMS Officials in 2016. The 2017 Legislative session included several air medical bills and the various services were very actively involved in attending and following the session. The 2017 Montana Legislature passed Senate Bill 44 that required health insurance and air ambulance companies to negotiate settlements of air ambulance bills, on a case-by-case basis if necessary, leaving patients 'harmless' from the worries of a balance bill during the process. The House also passed legislation that treats certain memberships sold by air ambulance companies as insurance.

Trauma Facility Designations continue to be a key activity of the EMSTS trauma program. Designation verifies a significant hospital commitment to the trauma care they provide and the continual performance improvement to improve patient care over time. State staff, consultants and surgeons perform designation visits for 4 levels of trauma designation:

- Regional Trauma Centers (RTC) - Initiates and provides definitive care for all injured patients by serving as the lead trauma facility for a geographical area, which includes outreach to small facilities within the same service area
- Area Trauma Hospital (ATH) –Provides prompt assessment, resuscitation, surgery, intensive care and stabilization with most injured patients
- Community Trauma Facility (CTF) - Provides evaluation, stabilization, diagnostic capabilities and some surgical coverage for injured patients
- Trauma Receiving Facility (TRF) – Provides initial evaluation, stabilization and diagnostic capabilities prior to transfer to definitive care

In 2016, 43 (66%) out of 65 possible Montana facilities were designated in one of the four facility-level categories. By year-end 2017, 40 (61%) were currently designated. Several facilities lost their designation status due to the inability to meet criteria for remaining a designated center. All facilities, except two, have already requested future visits to reevaluate their programs for regaining designation.

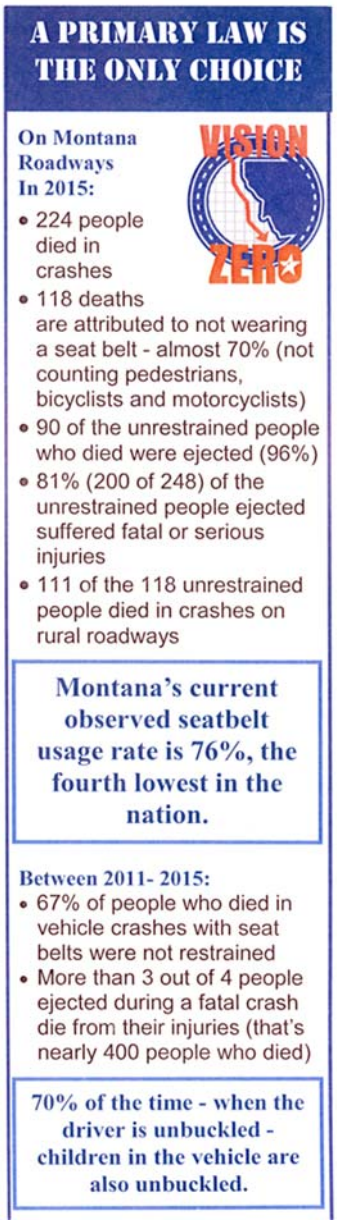


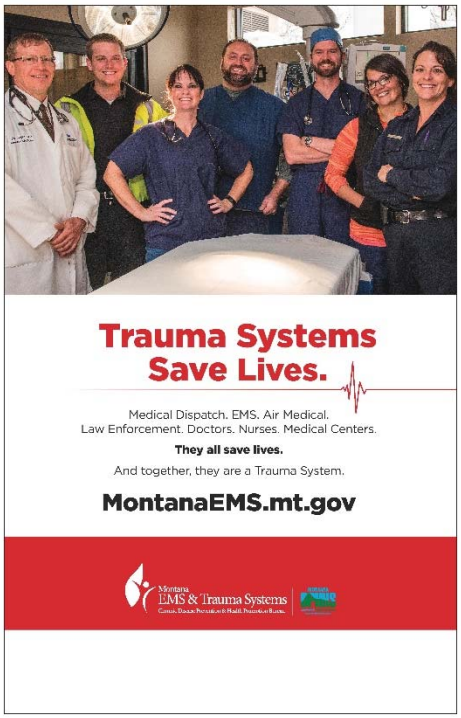
With the increase in reviews over the past years, EMSTS trauma staff are now supplemented by five in-state and one out-of-state surgeons and four nurse reviewers oriented to performing designation visits.

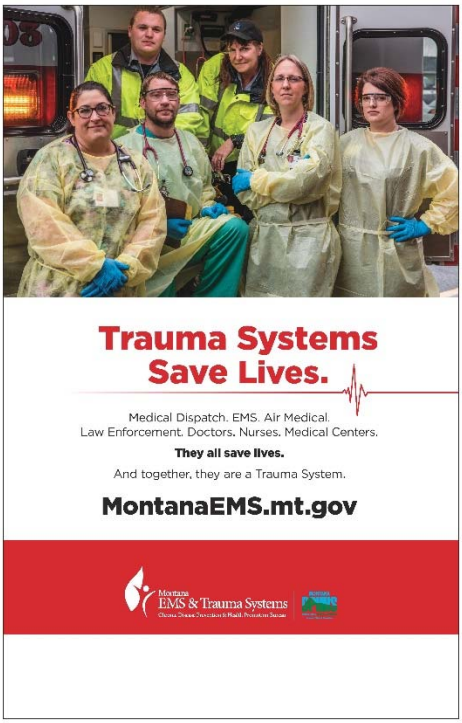
MDT / Highway Traffic Safety Collaboration – There has always been synergy among our trauma program and traffic safety program at the Montana Department of Transportation and their Highway Traffic Safety Program. This includes collaboration with MDT advisory committee, occupant protection, impaired driving, roadway departure emphasis areas and other meetings. MDT hosts a table at the annual Rocky Mountain Rural Trauma Symposium, providing statewide crash data maps and networking with trauma staff from across the state. Staff also attend the annual Comprehensive Highway Traffic Safety Plan meeting. The primary safety belt fact sheet at the right is but one example of collaboration to promote an important public health issue. Other examples of collaboration and funding include:

- Together Everyone Achieves More (TEAM) courses - Funding for the three RTACS to provide six TEAM courses annually in 2016 and 2017. This Montana-developed course helps a hospital to assess their preparedness as a trauma facility and their role in the trauma system.

- A grant was received through the Federal Highway Administration via Montana Dept. of Transportation to develop and implement a statewide trauma awareness campaign. Video shoots were done at two locations in November 2016: one rural (Hardin) and one urban (Billings). These materials were used to produce two 30-second TV spots, radio spots, billboard, print and still photos. TV, radio and billboards ran at various locations across the state from June-September 2017. Each spot included the Trauma Systems Save Lives tagline.







Trauma/Performance Improvement Network (PIN) – 2016 and 2017 were the first two years of this grant, funded with HRSA/Rural Flex funds, in which trauma partnered with Montana Hospital Association PIN Network. The focus of the project was to:

1. Assist facilities with Trauma Team Activation (TTA) fee and reimbursement from cases meeting appropriate criteria (i.e. pre-hospital activation)
2. Assist facilities with reimbursement for critical care billing/trauma activations arriving by private vehicle (POV) or walk-in and/or trauma patients meeting appropriate critical care billing requirements.

Over the course of the two years, 14 CAH facilities were visited. There were face to-face meetings in each region in which all involved individuals came to a Regional Trauma Center in their region where additional education and training was provided. The grant continues into 2018 with more emphasis on critical care education for providers.

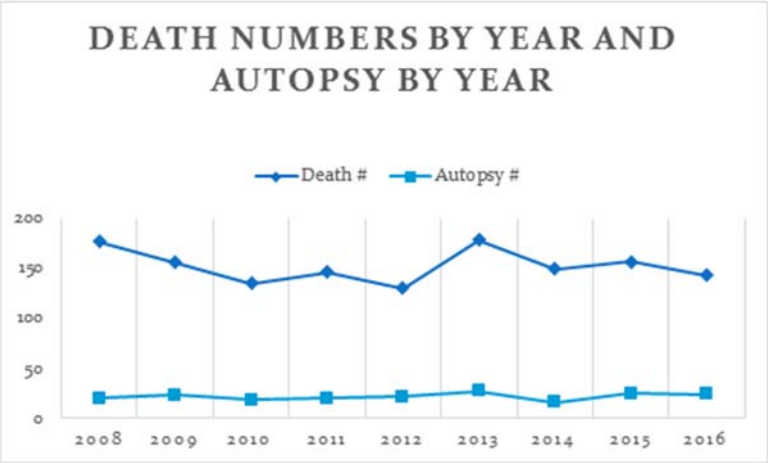
Online Trauma Medical Director Course –HRSA/Rural Flex funding in 2016 allowed for the development of a trauma facility Medical Director Course to meet the continued need to orient new directors. This online tool is the only one of its kind in the nation which addresses small, CAH facilities and will be another tool to help orient trauma physicians to their responsibilities and roles.

Rocky Mountain Rural Trauma Symposium (RMRTS) – Annually, EMSTS trauma staff coordinates the planning for the annual RMRTS which rotates to a different region each year. This two-day conference has become one of Montana's premier education offerings for hospital and pre-hospital staff. Over 300 attendees are present each year to receive education on various trauma related topics.

Montana Trauma Systems Conference (MTS) – Held the day before RMRTS, this one-day conference, specifically for trauma registrars, trauma coordinators and trauma medical directors is planned and conducted solely by trauma system staff to cover system and performance improvement issues specific to Montana.

Advanced Trauma Life Support (ATLS) – This American College of Surgeons foundational course on the care of trauma patients continues to be one of the most important education opportunities we provide. Five (5) Advanced Trauma Life Support courses for physicians and advanced practice clinicians are conducted annually to provide trauma education to approximately 300 providers. During the biennium, sixty-five (65%) of students received re-certification and thirty-five (35%) were providers who have never taken the course before. Initiated in 2015, the two Billings courses also provide an Advanced Trauma Care for Nurses (ATCN) course in conjunction with those ATLS courses.

Medical Examiner Office/Dept. of Justice— Historically, autopsy reports have been difficult to obtain from local coroners. In 2017, there was an increased effort to collaborate with the Montana Medical Examiner's office to streamline the process of providing reports to facilities for performance improvement.



Approximately 14.2 percent of trauma related deaths received an autopsy from 2008-2016. In conjunction with the State Medical Examiner, the Trauma Program Manager provided education at the Basic Coroner Course on the role autopsies play in trauma performance improvement and peer review.

Stop the Bleed/Bleeding Control (B-CON) Course – Stop the Bleed is a national effort to save lives by teaching the civilian population to provide vital initial response to stop uncontrolled bleeding in emergency situations. Montana's 'Stop the Bleed' campaign was initiated with several instructor and provider courses being taught statewide. This training s kicked off in 2017 and included over 75 trauma coordinators/trauma medical directors participating and obtaining instructor recognition. These instructors have now returned to their individual communities and are offering Bleeding Control Courses to various providers and sectors. The EMSTS website now hosts a Montana Stop the Bleed website link, as well as, a link to an interactive map which shows where instructors are located across the state.

TRAUMA DATA SYSTEM

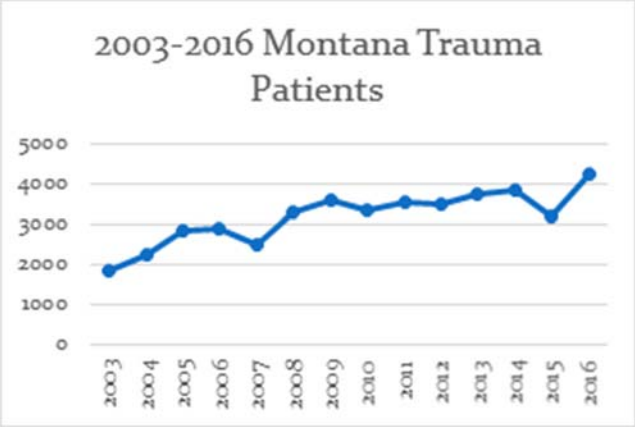
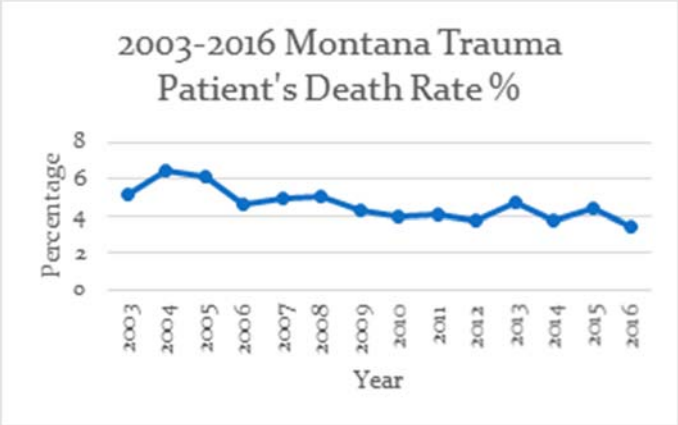
A critical element of a trauma system is the collection of data to support evaluation of the system and ongoing performance improvement at the local, regional and state levels. EMSTS maintains a central trauma registry that is a repository of data collected at the local level by software provided to them for that purpose. A total of cases 4339 were submitted to the State Trauma Registry in 2016 with 3313 of those cases being submitted utilizing software. Data from 2017 equals, 4568 total cases have been submitted, 3557 of those from software-based users.
The version provided to larger facilities enables data collection and advanced reporting and PI on their local data servers. Until recently smaller facilities extracted their data to paper which was sent to the State for data entry. EMSTS has now invested in a web-based system that enable smaller hospitals to enter their data directly. In 2016, 1026 cases were entered and in 2017, 1011 cases were entered.

Trauma Registry Support – Implementing an evidence-based trauma system cannot be accomplished without data, therefore collecting data is a significant investment in time and resources at all levels. As such, EMSTS commits considerable resources to assure data collected is accurate, complete and timely. EMSTS staff trend this data,

identify issues and provide performance-based individual feedback regarding local care processes. Issues are trended among the trauma regions and state-wide with performance improvement activities implemented to address issues.

Registry Staff:

- State Trauma Nurse Coordinator assists hospitals with education and technical assistance with the trauma registry, statistical reports and performance improvement on their trauma patients. She provides smaller facilities quarterly reviews of the trauma cases they have entered concerning data accuracy, completeness, and identifying opportunities for case reviews and performance improvement
- A new epidemiologist was added to the staff in 2017 to assist in data abstraction and understanding.

Trends in Montana Trauma Registry Data: Analysis of the trauma registry data allows EMSTS, the STCC and the RTACs to understand if statewide efforts being made in our trauma system are making a difference and to identify trends and opportunities for improvement. Examples include: Montana Trauma Patient Crude Death Rate

The number of trauma cases being submitted to the Montana trauma registry has been steadily increasing, while the crude death rate from trauma related injury has steadily decreased from a peak of 6.5 percent to 3.4 percent. This diagram summarizes almost 50,000 records submitted during this period.