On The Scene

A Publication of the Colorado Emergency Medical and Trauma Services Section

Summer 2011

EMS Safety-Make it a Culture by Sean Caffrey

The 4th Annual Colorado EMS Safety Summit will be held Sept. 7-9, 2011, at the Embassy Suites in Loveland.

The goal of the summit is to provide the EMS community with access to the best experts in the field of safety in order to develop and improve safety programs throughout emergency medical care organizations.

The theme for the 2011 summit will be how EMS organizations can develop a safety culture that effectively identifies and mitigates errors.

Online registration is available at https://mhretac.wufoo.com/forms/registration-form/ and additional summit information is available at www.milehighretac.org/training.php.

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AT A GLANCE

Summer 2011

Colorado Department of Public Health and Environment

ON THE SCENE is a quarterly publication of the Emergency Medical and Trauma Services Section of the Health Facilities and Emergency Medical Services Division at the Colorado Department of Public Health and Environment and serves the emergency medical services and trauma communities of Colorado.

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New Milestone in Prehospital Data

by D. Randy Kuykendall

Over the last 30 years of trauma and EMS system development, the elusive goal of collecting call-level information regarding patient care and tracking patient outcomes from incident through rehabilitation and discharge has been one of much effort and energy. This has been especially true with regard to patient care data from the out-of-hospital environment. Many of us can still remember some of the efforts of the 1980's and 1990's, the most infamous of which was the "dot to dot" patient care report form. Although these efforts did not succeed, they laid the groundwork for today's successes in terms of collecting sufficient data to make more informed and scientifically based patient care decisions and improve our overall health care policy development process.

We are now very pleased to spotlight the most significant advancement in Colorado's prehospital data collection effort -- the implementation of a full service, gold compliant statewide EMS data collection system. In May, the Colorado Department of Public Health and Environment contracted with ImageTrend, Inc. to purchase the "State Bridge" software and data storage system that will replace the MATRIX system that has served as Colorado's prehospital data collection system since 2006. In addition, a statewide user license for agencies to use the ImageTrend "Field Bridge" software has been included in this upgrade. This software will allow any EMS agency to use this product as its electronic patient care record system, at no cost to the agency. However, EMS agencies can continue to use whatever commercial patient care report product they choose as long as the software can download to the state system. It will simply be local choice whether the agency uses the ImageTrend Field Bridge or some other data collection package.

Transition from the MATRIX to the new ImageTrend system will occur over the next year. Agencies that presently download their data to the department using third party vendor software will continue to do so using methods similar to those currently in place. Agencies that choose to use the ImageTrend Field Bridge system or the online data entry capability of this product will be offered training and be provided with any help necessary to make the transition as seamless as possible. We expect to maintain both the MATRIX and the ImageTrend systems in parallel during this transition period, thus ensuring that no data are lost. However, we do expect the online MATRIX will be closed by April 2012.

So, what does this mean in terms of patient care and EMTS system efficiency? Why is it essential to collect this information? It is important to remember that once the ImageTrend system is fully functional, it will support the collection of more detailed patient care information that can be used by the agency to track its performance, identify opportunities for improvement and support the continuous quality improvement process at the local level. Although all information submitted to the department is confidential, individual agencies can "benchmark" themselves against de-identified agencies and/or regions across Colorado. At the local EMS agency's discretion, receiving facilities can access the prehospital care report of patients delivered to them directly, thus improving the efficiency of transferring out-of-hospital information to the patient's medical record. From a statewide perspective these data can be used to support state-level continuous quality improvement programs, make policy decisions related to scope of practice and ensure that resources are ultimately directed to the areas of need within Colorado's trauma and EMS system.

Although we will do everything we can to make this transition as efficient as possible, there will be challenges and opportunities to enhance the system to meet our statewide needs. Input and feedback from those using this system will be critical. As the EMTS Section's EMS and Trauma Data Program manages this process, we hope that agencies and providers will offer regular comments and suggestions to ensure that we implement the most useful patient data collection system in the United States.

The implementation of this expanded data collection and analysis capability is truly a milestone in the development of our statewide trauma and EMS system. We hope this initiative, along with the other fine work so many are doing across the state, will continue to result in improvements in patient care and the health of many Coloradans. Let's keep up the great work!

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Golf, Dr. Art and Perspective

by Arthur Kanowitz

There are numerous life lessons of such importance that I have experienced over the years that I wanted to share them. These life lessons I consider to be very critical when dealing with relationships, whether those relationships are personal or professional. I always try to keep them in mind. They help to guide my interactions and when I am able to follow them, things usually turn out well.

It should not surprise anyone that my first life lesson is based on the game of golf. My daughter used to be a program director for Open Fairways, an organization that taught under-privileged children important "Life Lessons" such as honesty, respect, persistence and self confidence. The life lesson I believe is most important that comes out of golf deals with honesty. From the Oxford English Dictionary: **Honesty** refers to a facet of moral character and denotes positive, virtuous attributes such as integrity, truthfulness, and straightforwardness along with the absence of lying, cheating or theft.

Golf is a sport, unlike most other sports, that is known for honesty. In April 2010 at the Verizon Heritage Golf Tournament, Brian Davis, a professional golfer, was in the midst of a playoff with Jim Furyk. His second shot ended up in a designated hazard area just off the 18th green. Davis hit a nice shot from the hazard, landing his ball on the green. Both Davis and Furyk were now on the green in three shots. However, immediately after his shot, Davis called one of the officials over. He had noted, out of the corner of his eye, that during his backswing he had ever so slightly touched a small reed of grass, which Rule 13-4 in the Rules of Golf designates as a loose impediment that cannot be moved during the swing's takeaway while in a hazard.

The action wasn't noticed by anyone. Essentially it was invisible to the naked eye. It was only after Davis called the two-stroke penalty on himself that television slow-motion replay confirmed that the event had occurred. Instead of his score being three on the green, it was five. Davis knew when he self-pronounced the penalty that the playoff was over. By calling a penalty on himself, he forfeited the win and $1 million.

So why did he do it? Why did he call a penalty on himself for something that no one else could have possibly seen? Honesty is why. What Davis did is not uncommon in golf. Bobby Jones, in a similar incident in 1925, called a similar penalty on himself, stating, "You may as well praise a man for not robbing a bank."

As William Shakespeare once said, "Honesty is the best policy. If I lose mine honor, I lose myself."

Businesswoman Mary Kay Ash said, "Honesty is the cornerstone of all success, without which confidence and ability to perform shall cease to exist." Honesty should be the foundation of all our actions.

My second life lesson deals with ethics. DR ART is my mnemonic for a series of important ethical and business-related concepts I learned while working as the medical director for Pridemark Paramedics. Jeff Forster, Pridemark's founder and CEO, taught me many life lessons from which I developed my priority moral characteristics. They include **D**ignity, **R**espect, **A**ccountability, **R**esponsibility and **T**rust. Everyone deserves to be, and should be, treated with dignity and respect. Therefore, when dealing with patients, colleagues, employees, friends, family or even just acquaintances, we always should treat people with dignity and respect.

The other portion of this life lesson deals with responsibility, accountability and trust. Jeff would say, "Give your employees responsibility. Then trust, but verify." In other words, trust them with the responsibility, but hold them accountable by verifying their actions. I have seen the value of these ethical practices and try to incorporate them into daily life.

The final life lesson deals with perspective. As in all other aspects of life, when dealing with our patients, our colleagues or our employees, it is important to always maintain a balanced perspective. Perspective is defined in optics as the way in which objects appear to the eye. Cognitively, it is one's "point of view," the choice of a context for opinions, beliefs and experiences.

Psychologically, perspective is wisdom. The only way to maintain perspective is to be able to look at issues from more than just one point of view. The life lesson is to always remain open and try to see things from more than just our own point of view or perspective. If we always look at things from only one perspective, we may end up always looking at the donkey's hind end.

Through life experiences and applying life's lessons, we should live, experience, learn and grow. Honesty should be the foundation of all our actions. We should treat everyone with dignity and respect. We should empower people with responsibility, then trust them but verify their actions. By maintaining a diverse perspective and by being open to other people's point of view, we will foster growth and development, both cognitively and psychologically, and contribute to our creativity.

Arthur Kanowitz, MD, FACEP
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New EMS Rules

by Betsy Stephens

New rules governing both the certification and scope of practice for EMS providers went into effect on July 1. The primary purpose of the rule revisions was to add an AEMT certification level and scope of practice so as to align Colorado's education, provider certification and scope of practice with updated national standards. This included replacing the generic title of "emergency medical technician" with "EMS provider" as well as renaming the certification levels of EMS providers to those set forth in the National Emergency Medical Scope of Practice Model. So, in Colorado, we now have four EMS provider levels:

Emergency Medical Technician (EMT)
Advanced Emergency Medical Technician (AEMT)
Emergency Medical Technician-Intermediate (EMT-I)
Paramedic (Paramedic)

The Emergency Medical and Trauma Services Section, with input from stakeholders throughout the state, has designed a revised certification application to support the new rules. The new application and instruction guide are posted at www.coems.info. Please destroy previous versions of the application and proceed to use the new one. (Application version dates are listed in the lower left corner of each page of the application.)

Highlights of the new application include a check-off list at the front of the application (instead of the last page), revised directions for fingerprint requirements and easier-to-understand instructions for provisional certification. Also, the application has been shortened to four pages, not including the check list/instruction page, which no longer needs to be included.

Successful completion of an initial or renewal application hinges on a few key items:

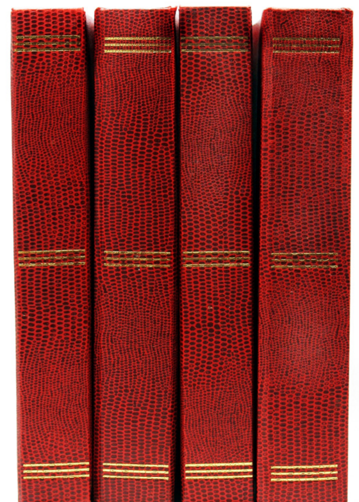
1. Complete, accurate and legible information is mandatory. Check your application completely before submitting it.
2. There is no charge for EMS provider certification in the state of Colorado. Do not include money unless you know you qualify for and are applying for provisional certification.
3. A fingerprint-based criminal history record check is required of all first-time applicants and any renewing applicants who have lived out of state within the past three years. If you are required to submit a fingerprint-based criminal history record check, please include the date the fingerprint card was submitted to the Colorado Bureau of Investigation as this will ensure the accurate and timely processing of your application.
4. Remember to attach photocopies (front and back) of your CPR card and ACLS card (if applicable) to the application. A letter or course completion certificate from your course director can be substituted for front and back copies of the CPR/ACLS card(s), but the letter must include the program and course names.
5. Include additional documentation, if applicable, as described on the check list/instruction page of the application.
6. You may submit your renewal application up to six months prior to your certification expiration date and still keep your original expiration date.

Please remember that only applicants awaiting the results of their fingerprint-based background checks qualify for provisional certification. If you are renewing your certification and you have lived in-state for the past three years, you do not need to be re-fingerprinted; therefore, you would not meet the requirements for provisional certification.

EMS provider certificates are printed once per week, generally on Wednesdays, and posted to the online verification system after 1p.m. You can check your certification status by going to the Emergency Medical and Trauma Services Section's homepage at www.coems.info and clicking on the link "verify EMT certification status online." Enter your last name, hit "search" and scroll down to search for your name. If your certification was completed in the previous seven days, your name should appear with your Colorado EMS provider ID number, your level of certification and the expiration date.

The certification team is happy to answer any additional questions you might have regarding these rule and process changes. Please feel free to contact Marilyn, Melanie, Mike or Betsy at 303-692-2980.

Betsy Stephens is the Operations program assistant and can be reached at betsy.stephens@state.co.us.



Regional Medical Direction

by Kevin Weber

I am the regional medical director for the Southern Colorado and the Southeastern Colorado RETACs, and this article outlines my experiences with this process. Maybe it's best to start from the beginning. I started my EMS career in Colorado in 1991 when I became the medical director of an emergency department in southeastern Colorado. I was told that part of my duties included being the physician advisor for several local EMS agencies. When I asked what the duties entailed, I was told that they put on an EMT class every year and if I could teach a class or two, that would be fine. I did try to do some other activities, including critical incident reviews and an occasional continuing medical education meeting.

I moved to a larger ED in 1993. When I started, I inherited my predecessor's EMS duties. Thankfully, dedicated EMS personnel in those agencies (many of whom I still work with today) walked me through the process. I learned about Rule 500, protocols, standing orders, scope of practice, etc. We developed methods for such things as trip sheet review, QA items, incident review, educational opportunities, ride along opportunities and protocol review and revision.

At this time, EMS was beginning to get more organized at the state level. The "physician advisor" label was changed to "medical director." Medical director duties were spelled out in the then Rule 500, but there was lax oversight. Every EMS agency is required to have a medical director, but involvement ranged from very involved to non-existent. I even heard the rumor that there was a registered medical director or two who were not even alive!

I believe the best medical direction comes from a local physician who knows EMS and is involved with the agency and the local medical community. This ideal seems to have been easier to obtain in the past. In today's environment, it is often impossible. I have had several EMS agencies ask me to be their medical director. I would first ask about possible local medical direction, and where this was impossible, I would consent. In this way, I have become the medical director for several agencies.

A little more than two years ago, I was asked to be the regional medical director for Southern Colorado RETAC. I was already the medical director for many of the EMS agencies in the area, and so I agreed. The position supports EMS agencies in the RETAC. There was some resistance voiced to the regional medical director concept at my first annual medical director meeting. This turned to acceptance and then to appreciation as I explained that, as the regional medical director, I had no authority over an individual agency, I was just there to help.

Each year we have a protocol review meeting. All the stakeholders are invited. We go over our protocols and update them to changes in EMS Chapter 2 rules (the old Rule 500), and changes in the medical field in general. Once the protocols are updated, they are posted on our website. These then may be used by each agency as they see fit. Most agencies adopt them with minor changes pertinent to their agency. After the protocol review meeting, we arrange our annual medical director meeting. At this meeting we cover several topics including protocol updates, literature review, national changes in the EMS practice and other topics of interest. I then try to visit each agency and present much of the same information.

Last year, there were a lot of changes to EMS Chapter 2 that affected the protocols. This year, the big item was adopting termination of resuscitation (TOR) guidelines for medical arrest in the field as promoted by the AHA. For BLS agencies, TOR may be considered if: the arrest was not witnessed by EMS; there is no return of spontaneous circulation (ROSC) after three full rounds of CPR and AED analysis; and no shocks were delivered. For ALS agencies, TOR may be considered if there is no ROSC after 20 minutes of ALS care. Adoption of these guidelines can decrease risks associated with "lights and sirens" return for EMS personnel and the public, reduces potential exposure to body fluids and also reduces cost of the family to ED care that is deemed futile.

At the start of this year, I accepted the position of regional medical director for Southeastern Colorado RETAC. Thankfully, there are some economies of scale and overlap of processes.

As directed by my RETACs, this year I hired Brandon Chambers to head regional CQI projects. This is still in the formative stages. The initial goals are to help ensure each agency is entering correct data into the state system, obtaining buy-in from each agency (participation in the program is voluntary) and developing a system to use. Brandon is well into the process, and I have high hopes the process will help improve our EMS system of care.

As I make my rounds to agencies, I am impressed with the knowledge and involvement of local medical directors. I always have been impressed with the commitment, dedication and organization of each EMS agency's management and providers. The EMS community has been wonderful to work with at every level. EMS at the state level has made great strides in organization, especially in the past few years. Support for the RETAC regional medical directors at the state level is one more step to provide the support the local medical directors need to adequately perform their duties.

Dr. Weber can be reached at kevinwebermd@yahoo.com.

Technical Rope Rescue

by Steve Fleming

Earlier this year, I had the opportunity to present a technical rope rescue training course to southeastern Colorado, as well as have the privilege and honor of working with the rescue team members. With the help from Chief Marshall Cook from Lamar Fire Department, we conducted this 22-hour training course hosted by the La Junta Fire Department.

To many, technical rope rescue means vertical rope rescue off a mountain cliff or rescues from mountainous ravines. Actually, technical rope rescue has many uses and applications for the community fire and rescue departments in all types of locations. With the technical aspect of any technique and concept, there is the concern of "high risk/low frequency." In other words, technical rope rescue, in many communities, is not often needed and, when needed, comes with high risk. With that in mind, it is critical training is conducted as often as possible and the techniques kept as simple as possible.

In a true vertical environment, as a water tower or communication tower, a rope rescue technique referred to as a "pick off" has the rescuer rappel down to the victim, then with a strap, connect the victim to their rope rescue system, disconnect the victim and rappel down to safety.

In one of the most technical rope rescue situations, rescuers would be asked to set up a horizontal high-line system with a trolley and mechanical advantage system incorporated in the high-line allowing the rescuer to be lowered in the middle of the system to the patient, then raised back up, and finally, over to safety.

An example of a confined space rescue might be someone caught/trapped in a grain silo or trench collapse. In more than half of the confined space rescues conducted every year around the country, many require the use of vertical rope rescue techniques and often use basic mechanical advantage systems and overhead anchoring.

Low angle rescue often requires rope rescue for the safe lowering and raising of the rescuers and victims. Low angle differs from high angle rope rescue by definition: if the majority of the rescuer's weight is on the harness, it is a high angle rescue. In low angle, the majority of the rescuer's weight is on the rescuer's feet. Low angle rope rescue applications are available with very little equipment and the concepts are kept very simple.

Other possible applications for rope rescue in the community fire rescue service could include an ill or injured person in an empty swimming pool or basement of a house under construction, or an ill or injured person on a roof or elevated working platform.

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Technical Rope Rescue

by Steve Fleming

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Rope rescue techniques, in combination with a fire service ladder, have proven to be a very safe and effective tool to extricate the patient(s).

While conducting this technical rope rescue training course, it just so happened that as we were finishing up the low angle rope rescue portion of the course, an emergency call came in with a report of a vehicle crash into a ravine four miles east of La Junta on Highway 50. Needless to say, we all looked at each other and wondered if the low angle rope rescue techniques would be needed. Sure enough, within four minutes the scene commander asked for the rope rescue team to respond. We threw our equipment into the ambulance and drove to the scene. Upon arrival, we found a pickup approximately 80 feet down a ravine with four patients. The three children were extricated by foot up the incline. The adult patient, however, was loaded onto a backboard and Sked stretcher readied at the base of the ravine. We utilized the exact rope rescue technique we had just trained on some 30 minutes prior to the call.

All went very well, and the rope rescue proved to be an effective and quick way to extricate the patient. Additionally, it was reported later that all of the victims of the crash survived.

At the conclusion of this course, we had time to review the objectives and discuss the lessons learned. I was very pleased and proud to have worked with such devoted and professional individuals. I have had the pleasure of training fire and rescue teams for more than 25 years, and I can say the volunteers here are individuals who have a strong desire to learn. Their commitment and sacrifice for the safety of their community is outstanding. Again, it is a true honor to work with these teams.

Steve Fleming, a captain for the Poudre Fire Authority in Fort Collins, is a lead instructor with Technical Rescue Systems, Inc. and can be reached at gstevenfleming@gmail.com.

SAVIR Award

by Sallie Thoreson

The Society for the Advancement of Violence and Injury Research presented Holly Hedegaard, MD, MSPH, the Science Award at its March 2011 meeting. Holly is the EMTS data program manager at the Colorado Department of Public Health and Environment. The Science Award is presented to the individual "who gave the best oral science presentation at the conference." Dr. Hedegaard credits the hard work of Jesse Hawke, PhD, in performing the data analysis as a key factor in making the presentation noteworthy.

SAVIR Award recipient and the supporting data team from the EMTS Section. From left, Richard Leander, Steve Boylls, Holly Hedegaard and Jesse Hawke.

Dr. Hedegaard's talk was on *Improvements in Outcome for Adult Patients with Major Trauma: An Evaluation of the Colorado Trauma System*. The purpose of this study was to evaluate whether the maturation of Colorado's trauma system has led to changes in outcome for adult patients with major trauma. Drs. Hedegaard and Hawke analyzed data from the Colorado Trauma Registry for two time periods: 1998-1999 and 2008-2009. The study population included patients ages 15 years and older with major trauma [Injury Severity Score (ISS) of 16-75].

Some of the results are:

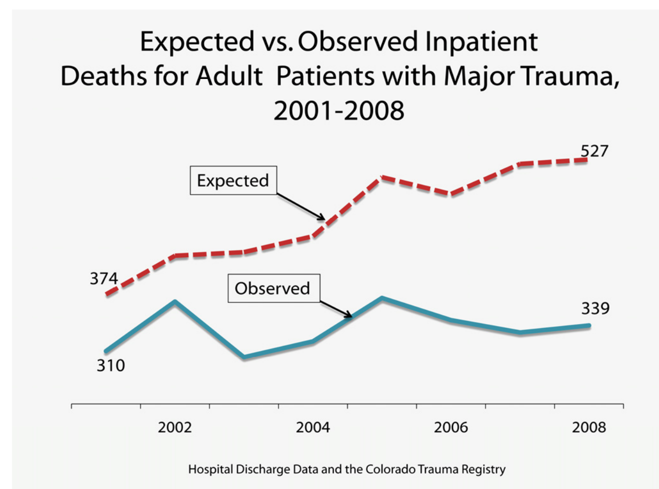
- The average age of adult patients with major trauma has increased from 42.3 years in 1998-1999 to 48.6 years in 2008-2009.
- Penetrating trauma has decreased from 6.9% of cases in 1998-1999 to 4.2% in 2008-2009.
- In 2008-2009, a significantly higher percent of adult patients with major trauma were transferred from the ED of the first facility to a higher level of care.
- A significantly higher percentage of patients were initially admitted to a Level I trauma center (from 35.8% in 1998-1999 to 38.9% in 2008-2009).
- Median inpatient length of stay was significantly less in 2008-2009 than in 1998-1999 (5.1 days vs. 6.7 days).

During the two time periods, inpatient mortality rates significantly declined for adult patients with major trauma, particularly those with:

- Hypotension in the field or on ED arrival
- Major liver lacerations
- Flail chest
- Severe head/neck injuries
- Severe abdominal injuries

"One of the questions we wanted to examine," said Dr. Hedegaard, "was whether the survivability of adult trauma patients with severe injuries had improved over time."

To do this, a logistic regression model was created using data from 2000. Factors such as patient age, ISS, trauma type (blunt vs. penetrating trauma) and designation level of the facility where the patient was hospitalized were used to create a model to predict the probability of survival. The prediction model was applied to the data from 2001-2008 to determine the "expected" number of deaths. By comparing the "observed" (actual number of deaths) to the "expected" number of deaths, one can determine whether outcomes are better or worse than expected.



The figure above shows the observed vs. expected number of inpatient deaths for adult patients with major trauma. For all years, the observed number of deaths was lower than expected, based on the model from 2000.

These results suggest certain subgroups of adult patients with major trauma have benefited from changes in trauma care, including the establishment of an organized statewide trauma system.

Sallie Thoreson is an injury prevention specialist at the Colorado Department of Public Health and Environment and can be reached at sallie.thoreson@state.co.us.

National EMS Memorial Service by D. Randy Kuykendall

This year's National EMS Memorial Service was held at the First Presbyterian Church in Colorado Springs and attended by more than 500 family members, EMS and fire service professionals and community members.

Forty-three of our fellow EMS providers who lost their lives in the line of duty over the past year were honored. Their families received an American Flag, hero's medal and a white rose in commemoration of the ultimate sacrifice made by their loved one.

This is the official national ceremony honoring the memory of those of our profession who willingly lay down their lives for others in need.

Next year's National EMS Memorial will be held in Colorado Springs at 6 p.m. on June 23, 2012. This is one of the most significant national events hosted in Colorado for the national emergency medical services community. Please make plans now to attend.

EMS Safety Summit by Sean Caffrey

Continued from the Cover

The main conference begins Sept. 8 with Paul Lasage, a retired flight paramedic, deputy fire chief and communications center director in Oregon, who will be discussing the principles of "High Reliability Organizations" applied to the EMS context.

Following Paul will be a two-part session facilitated by Fiona Lawton of Outcome Engineering, Inc., who will be discussing the basic principles of "Just Culture," a system that originated in the aviation community to effectively deal with the spectrum of human error from simple mistakes through reckless behavior. The culmination of the day will be former SEMTAC Chairman Scott Bourn and Dr. Ed Racht, American Medical Response's National Medical Director, discussing how to understand and mitigate errors in the clinical environment.

The Friday lineup has a number of speakers including Dr. Mark Kurz of Richmond, VA, who will discuss innovative research performed in the Richmond area that analyzed CPR effectiveness during transport utilizing data from Zoll / Road Safety vehicle monitoring systems. Also presenting will be Jim Green of the National Institute for Occupational Safety and Health (NIOSH) who will discuss the latest information on ambulance vehicle crashworthiness. Mike Langello of South Metro Fire and Rescue will discuss a recent analysis of lights and siren returns to the hospital in Colorado. The EMS for Children program is pleased to present Dr. Marilyn Bull from the Riley Children's Hospital in Indiana to discuss the development of current best practice in the safe transportation of children in ambulances.

This year's registration fee for Colorado residents is $149. Limited scholarships may be available to support attendance through the eleven RETACs.

In addition to the main conference, a preconference day will be held on Sept. 7. We are pleased to once again be offering the new EMS Safety Course sponsored by the National Association of EMTs. A half-day preconference also will present the specific techniques for the safe transportation of children in ambulances. This session will utilize the Riley Children's Hospital curriculum that will be presented by The Children's Hospital of Denver team. Finally, we once again are hosting a user group session on Wednesday afternoon for the Zoll/Road Safety driver monitoring system. Preconference sessions may require an additional fee.

In addition to the educational content, the Safety Summit will offer an exhibit hall featuring vendors of safety-related products. Exhibit space still is available for companies interested in taking advantage of the unique opportunity to connect with EMS leaders throughout Colorado in a small-group setting. Exhibition inquiries can be directed to Shirley Terry at shirleyterry@comcast.net. We are also excited to be hosting the exhibition of the latest edition of the AMR Safety Concept Vehicle, a Type III Mercedes Sprinter.

This event is produced by the Mile-High Regional Emergency Medical and Trauma Advisory Council in conjunction with the EMS Safety Task Force of the State Emergency Medical and Trauma Services Advisory Council. We hope you will consider joining us for the 4th Annual Colorado EMS Safety Summit , an event unique to our state, an established leader in EMS Safety practices.

Online registration is available at https://mhretac.wufoo.com/forms/registration-form/ Additional information is available at the Mile-High RETAC website at http://www.milehighretac.org/training.php.

Sean Caffrey is the system improvement coordinator with the Emergency Medical and Trauma Services Section and can be reached at sean.caffrey@state.co.us.

New Leadership and Staff Join the Team

The Colorado Department of Public Health and Environment is pleased to introduce Nancy McDonald, director of the Health Facilities and Emergency Medical Services Division.

Nancy joins the department from Denver Health and Hospitals where she served as nurse program manager in the adult psychiatric inpatient service (2004-07) and had been serving as lean facilitator and assistant director of Lean Systems Improvement since 2007.

She is a nurse with previous experience as clinical faculty for the nursing program at the University of Phoenix, as director of adolescent services at West Pines Hospital in Wheat Ridge, and in private practice.

The Health Facilities and Emergency Medical Services Division's responsibilities include licensing and/or certifying approximately 2,300 hospitals, ambulatory surgical centers, nursing homes, hospices, assisted living residences, home care agencies, dialysis centers, mental health clinics and group homes for people with developmental disabilities; certifying approximately 16,000 EMS providers; overseeing the statewide emergency medical and trauma services program; and designating trauma centers.

Please welcome Nancy McDonald and Joe Darmofal.

Joe Darmofal joins the division as the EMS for Children coordinator and brings 18 years of EMS experience to the Emergency Medical and Trauma Services Section. While in college, he worked summers outside of Yellowstone National Park as a guide, got interested in EMS and became an EMT. After working as a volunteer firefighter and EMT, he advanced his training by attending paramedic school at St. Anthony's.

Since becoming a paramedic, Joe has served as both a field and flight paramedic and spent the past six years as director of clinical medicine for Pridemark Paramedics. During this time, his team successfully advanced the standard of care while simultaneously improving financial performance during rough economic times. Joe has served as the EMS for Children Program's family representative and on the state's Pediatric Emergency Care Committee, is training center faculty for The American Heart Association and a course director for ACLS and PALS, and was awarded the American Ambulance Association's Star of Life Award in Washington D.C. this past year for his dedication to EMS and advocacy for children.

Joe is married to Laurie whom he met while working at Flight for Life. They have a six-year-old daughter, Christa, and enjoy traveling and spending time outdoors.