OCTOBER/DECEMBER 2016 · ISSUE 4

A VOICE FOR POSITIVE CHANGE IN IOWA EMS





lowa Emergency Medical Services Association



PAGE A LOOK AT EMERGING TRENDS
-- FEBRUARY 9TH IN DSM WITH
NATIONALLY RENOWNED JAY FITCH

PAGE FEBRUARY 9TH, 2017

EMS DAY ON THE HILL

STAND UP FOR EMS--BE THERE!





BOUND TREE MEDICAL – IEMSA'S GROUP PURCHASING PARTNER

IEMSA's Board of Directors awarded the group purchasing contract to Bound Tree Medical. Bound Tree has entered into a two-year contract with IEMSA to provide our Affiliate Members with considerable discounts on their products.

As the leading EMS distributor in the United States, Bound Tree Medical has been providing emergency medical equipment, supplies and pharmaceuticals to fire departments, law enforcement agencies, military, and other EMS organizations for over 35 years. Bound Tree offers thousands of quality products from leading manufacturers paired with innovative service to help you save time and save lives.

Bound Tree offers an extensive product offering including valuepriced private label products, kitting

THE RIGHT PRODUCTS

solutions, recertified equipment and a full line of pharmaceuticals.

Private Label Products - With savings up to 20% off of name-brand medical supplies, Bound Tree's portfolio of private label products enables providers to deliver quality treatment at a better overall value.

Kitting Solutions - Bound Tree's pre-assembled kits provide a costeffective, convenient way to respond quickly, providing immediate care for emergency situations.

Recertified Equipment - Bound Tree's recertified equipment includes AEDs, monitor/defibrillators, infusion pumps, pulse oximeters, suction units, ventilators and vital sign monitors from top manufacturers.

Pharmaceuticals - Bound Tree offers a full line of EMS pharmaceuticals including Class II and Class IV drugs.

THE RIGHT SERVICES

Bound Tree offers valuable services to increase efficiency and accuracy, reduce liability and positively impact your bottom line.

Operative IQ - Maintain accurate inventory records, reduce overhead costs and eliminate costly mistakes.

UCapit Controlled Access Rx Dispenser - Monitor and track accountability for access to pharmaceuticals.

Bound Tree University - Maintain certification with more than 20 hours of FREE, accredited CEUs.

THE RIGHT INFRASTRUCTURE Bound Tree has the resources to offer convenient online ordering, timely deliveries and disaster support services.

Nationwide Distribution - Six distribution centers strategically positioned for operational efficiency and disaster response.

Disaster Support – A resource for agencies that encounter incidents that require immediate deployment of emergency medical.

THE RIGHT SUPPORT

Bound Tree's dedicated account managers offer valuable input on cost/quality tradeoffs, state/local requirements, industry changes and new product introduction.



Brooke Teeselink

Brooke has more than six years of experience in the EMS sales industry and is in her first year with Bound Tree. She is a committed Account Manager who was born and raised in northwest Iowa. Brooke strives to provide even more value to her customers with extraordinary service and a superior product offering.



Peter Lawrence

Going on three years with Bound Tree, Peter has over 15 years of Medical Sales experience. He is a dedicated Account Manager who works remotely and takes pride in treating his customers with great sincerity and the manner that he would like to be treated as a customer.

Visit Bound Tree Medical Today!



CONTENTS

The VOICE is published quarterly by the Iowa EMS Association covering state EMS issues for emergency medical services professionals serving in every capacity across lowa. Also available to members online.



FEBRUARY 8, 2017 - 6-7PM

ATTEND THE 2017 IEMSA ANNUAL **MEETING: TO BE HELD IN CONJUNCTION** WITH EMS DAY ON THE HILL ACTIVITIES AT THE MARRIOTT DOWNTOWN DSM



FEBRUARY 25, 2017-CORALVILLE, IOWA, FORMAL CES OFFERED. REGISTRATION OPEN -- REGISTER NOW-LIMITED SPACE!

OUR PURPOSE: To provide a voice and promote the highest quality and standards of Iowa's Emergency Medical Services.

BOARD OF DIRECTORS

> President : Mark McCulloch > Vice President : Jerry Ewers

> Secretary : Katy Hill

> Treasurer: Brandon Smith

> Immediate Past President : Linda Frederiksen

> Northwest Region :

John Jorgensen, LaDonna Crilly, Tracy Foltz

> Southwest Region :

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> North Central Region:

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> South Central Region

Mark McCulloch, Katy Hill, Brad VandeLune

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> Education :

Mary Briones, Brian Rechkemmer

> Medical Director : Dr. Josh Stilley

> Lobbyists : Michael Triplett, Eric Goranson & Karla Fultz McHenry

BOARD MEETINGS BOARD MEETINGS

> January 19, 2017 WDM Station 19- 1:00-3:00pm

> February 8th, 2017 **IEMSA Annual Member Meeting**

Marriott Downtown DSM -6:00p-7:00p

> March 16, 2017

Teleconference - 1:00-3:00pm

> April 18, 2017

Marriott DSM - 12:30-2:30pm

> June 22, 2017

WDM Station 19- 1:00-3:00pm

> July 20, 2017

Teleconference - 1:00-3:00pm

> September 21, 2017

WDM Station 19- 1:00-3:00pm

> October 19, 2017

WDM Station 19- 1:00-3:00pm

> December 21, 2017

Teleconference - 1:00-3:00pm

IEMSA OFFICE

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PRESIDENT'S NOTE: 04

An Exciting and Progressive 2017

LEGISLATIVE UPDATE: The elections are 05 over, IEMSA is evaluating the changing face of the Iowa Legislature.

EMS DAY ON THE HILL & EMERGING TRENDS CONFERENCE

(formerly the Leadership Conference) FEBRUARY 9, 2017: FEATURING NATIONALLY RENOWED JAY FITCH, PHD. REGISTRATION IS OPEN ONLINE AT IEMSA.NET

07 MISSION LIFELINE: EMS EDUCATION

2016 ANNUAL CONFERENCE WRAP-09 **UP:** A SUCCESSFUL YEAR FOR ALL THAT ATTENDED

SE EMS SATURDAY - JANUARY 14, 2017 AFFORDABLE CES - JUST \$20 11 FOR A FULL DAY OF EDUCATION. CE'S APPLIED FOR.

RECOGNIZING OUR OWN! 12 IEMSA AWARD WINNERS FEATURED

IEMSA Presents:

Uh-Oh! PEDs CONFERENCE— EMS TRAINING TO CARE FOR LITTLE BODIES

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FEBRUARY 25, 2017 ● CORALVILLE

RADISON Featuring a Basic and Advanced Hands-on Training Session. Registration is open--seats are limited.

CE TRAINING: Trauma Assessment-IEMSA Current Members earn an 20 optional CE for taking and passing the article test.

SPOTLIGHT ON TRAINING: 26

Hawkeye Community College

MEDICAL DIRECTOR UPDATE: 27

Double Sequential Defibrillation

SYSTEM STANDARDS:

WHAT CAN I DO?

AN EXCITING AND PROGRESSIVE 2017

BY LINDA FREDERIKSEN. Executive Director, MEDIC EMS. IEMSA President (2014-2016) / Board of Directors



The older I get, the faster time goes, and it's hard to believe that 2017

is already upon us. Let's work to position ourselves for an exciting and progressive year following the aftermath of all of the elections at local, county, state and national levels. Now, more than ever, we



have the momentum to make the positive changes that Emergency Medical Services in Iowa needs.

>2016 was a GREAT year! Although the lowa EMS Association has many priorities, we successfully achieved our top initiative, which was to increase membership across the board. Sincere thanks to past President Jerry Ewers and our Office Administrator, Lisa Arndt, for simply rolling their sleeves up to tackle this huge project; it has been fun to get to know our new members, as well as catch up with those who have returned to renew lapsed memberships.

>Legislatively, IEMSA scored victories in two of its main policy fights in 2016. IEMSA supported SF 2218, which allows for the legal administration of opioid antagonists by EMTs, other public safety officials and other "persons in a position to assist". The bill, which passed the Senate 48-0 and the House 93-2, was signed by Gov. Branstad and became effective on July 1.

>IEMSA also worked with a large coalition of health and public safety groups to stop a proposal to legalize the sale and possession of fireworks in Iowa. Although it remained alive until the last day, this bill is likely to return in 2017.

We also continued our discussions with legislators about the acute need for a new generation of EMS professionals to replace the coming wave of retirements, especially in rural Iowa. IEMSA believes that the township EMS loophole should be closed because rural lowans need someone to respond to the 911 call, which is NOT free. Without funding, EMS programs will continue to scrape by on fundraisers, leading to longer and longer response times.

>The November IEMSA Conference and Trade Show was nothing short of amazing. The speakers and presentations were excellent, and an attendee comment that seemed to resonate throughout the conference was. "There are so many great presentations and speakers that I'm having a tough time trying to decide which sessions to attend!" We also had the crew from A&E's "Nightwatch," whom our attendees enjoyed getting to know. Kudos to Katy Hill, our Conference Chair, our hardworking conference speaker committee, the Vendor Hall crew, as well as our Office Administrator Lisa Arndt for their efforts over the past year, which produced the best conference we've ever had.

>As we look forward to our 2017 EMS Day on the Hill which is scheduled on February 9th, we have an exciting change to announce; our IEMSA Annual Meeting will be moved from the November Annual Conference and Trade Show to the evening before EMS Day on the Hill! This date change to February 8, 2017 is intended to increase attendance at our Annual Meeting, something that we encourage each and every IEMSA member to strongly consider attending. Pairing this annual event with EMS Day on the Hill, followed by our "Emerging" Trends" (formerly known as the "Leadership") conference headlined by Dr. Jay Fitch will make February 8th and 9th, 2017 two days you simply don't want to miss...Mark your calendars!

In closing, I want to thank all of you for the honor of serving the Iowa EMS Association as your President over the past two years; this experience has truly been one of the greatest highlights of my career. IEMSA personifies the saying that, "EMS is a team sport," and I am humbled to be a small part of the greatest EMS team on the planet. Our new President, Mark McCulloch, has a few new ideas and plans up his sleeve, and will work hard to continue to strengthen and grow the lowa EMS Association, which is and will continue to be your "VOICE" in EMS!

Looking forward to a great 2017!





NOW THAT THE ELECTIONS ARE OVER, WE AT IEMSA ARE EVALUATING THE CHANGING FACE OF THE IOWA LEGISLATURE. With over 20 new members, it is important that we work with them and help make them aware of the issues facing EMS in lowa.

> YOUR REGIONAL BOARD MEMBERS WILL BE CONTACTING THEIR LEGISLATORS (new and old) to offer themselves as a resource for all emergency medical service issues.

As we gather with family and friends during this holiday season, rest assured that your IEMSA board of directors is prepared and ready for the challenges ahead this upcoming legislative session.

- > SERVING AS LEGISLATIVE CHAIR. IT IS MY HONOR AND PRIVILEGE TO WORK WITH THE ENTIRE BOARD TO PROMOTE OUR **LEGISLATIVE AGENDA.** I can report to you that the board members you have selected continue to work very hard on your behalf. I am very grateful for their efforts and cannot wait to see what we can accomplish together in 2017!
- > I WOULD LIKE TO PERSONALLY INVITE YOU ALL TO JOIN US AT OUR EMS DAY ON THE HILL EVENT THIS FEBRUARY 9TH, 2017.

Registration information can be found on the next page.

IEMSA 2017 TALKING POINTS ARE:

- **TOWNSHIP TAXATION FOR FIRE/EMS:** lowa Code chapter 359 requires townships to provide fire protection, cemetery maintenance and fence line disputes. Those might have been great ideas in the 19th and 20th centuries but times have changed. Townships should be required to provide or help fund emergency medical service within their jurisdictions. IEMSA urges the Legislature to review how local governments provide public safety protection in the hopes of closing the gaps in coverage that predominately affect rural Iowa. IEMSA believes tax dollars should be distributed in a way which represents the current needs of rural lowans.
- **BEHAVIORAL HEALTH TRANSPORT:** lowa's system of helping patients with behavioral health issues in times of crisis is broken. IEMSA believes that the limited supply of available behavioral health beds and increasing demand for behavioral health services adversely affects patients and their families. When we transport these patients—often times at long distances from their homes we are unavailable to protect our local communities in their times of need. IEMSA urges the Legislature to help fix this problem by reviewing the system to make it more efficient for patients, providers and the communities that fund EMS for their taxpayers.
- VOLUNTEER INCOME TAX CREDIT: Volunteer EMS personnel can claim a \$100 credit against their personal income taxes due. IEMSA believes that this is an important tool in recruiting and retaining volunteers to help protect their communities, and it should be increased to a more generous level.
- INCENTIVES FOR EMS EDUCATION: In addition to facing shortages in qualified applicants for current positions, lowa's EMS programs will soon need to replace those who have been in the profession for 30 or more years. IEMSA urges the Legislature to review the current requirements to start and continue a career in EMS, and create incentives (such as tuition tax credits or a match program) that will allow our programs to replenish the supply of qualified EMS professionals for the next generation.
- **INCREASE MEDICAID REIMBURSEMENT FOR MILEAGE:** Iowa's Medicaid mileage reimbursement rate for ambulance service is significantly lower than most surrounding states. IEMSA urges the state to increase the Medicaid mileage reimbursement rate from \$2.61/mile to the Medicare rate (\$7.24/mile for urban, \$7.34/mile for rural) or a comparable private insurance rate.
- > NOTHING MOTIVATES LEGISLATORS MORE THAN TO HAVE THEIR CONSTITUENTS COME TO THE CAPITOL WITH ISSUES THAT ARE **IMPORTANT TO THEM.** It's a great time to see your board members in action working for you and with you!

In closing, I'd like to wish you and your families all the blessings this holiday season, a Merry Christmas and a Happy New Year!







JOIN US FOR THE IEMSA ANNUAL MEETING FEBRUARY 8TH FROM 6-7 PM AT THE MARRIOTT DSM!

FEBRUARY 8TH, 2017, 6-7p for Annual IEMSA

Member Meeting, with the IOWA EMS RALLY EVENT directly following on--Wednesday, February 8th from 7-9p at the Marriott

Des Moines. You will receive the IEMSA Talking Points and other important reference material for our morning on the hill. Pizza and beverages are complimentary.

THURSDAY, FEBRUARY 9, 2017 at the Marriott Downtown - Des Moines

IOWA EMS DAY-ON-THE-HILL FEBRUARY 9TH: 7AM-9AM!

EMERGING TRENDS CONFERENCE FEATURING JAY FITCH, PHD

Dr. Jay Fitch is internationally recognized for leadership as a

consultant, educator and innovator in the fields of EMS and public safety. His body of work, spanning nearly 40 years, includes the development and implementation of original operational and strategic solutions for individual organizations, as well as the broader systems in which they operate. Dr. Fitch is in demand as a speaker and author. Dr. Fitch's knowledge of the industry and his expertise in organizational development is built on real-world experience. He was among the first paramedics trained in the USA and was named EMS Director in St. Louis at the age of 24. He was responsible for the operational implementation of the Kansas City EMS system and served as president of a large

private ambulance service. Since creating Fitch & Associates, he has personally led numerous complex projects reflecting the entire public safety spectrum, with results that have transformed emergency care for those communities.

From these varied experiences, Dr. Fitch learned to value many perspectives-from patient to caregiver to public official-that go into creating exemplary EMS/public safety programs. Since 1984, he and the consulting team at Fitch & Associates have worked with small and large organizations throughout the world, helping make sense of their current situations and providing a path toward greater success. In recent years, additional business entities under the MedServ name have been created to meet evolving client needs.

SCHEDULE OF EVENTS FEBRUARY 9, 2017 —

IOWA EMS-DAY-ON-THE-HILL: All Aboard! Bus leaves the Marriott Des Moines to arrive at Capitol at 7:00am in the Rotunda 2nd Floor. OR just meet us there.

7-9:00am WE'RE ON THE HILL of course! It's Iowa EMS Day on the Hill!

EMERGING TRENDS CONFERENCE 5.0 Optional EMS CE's applied for.

REGISTER ONLINE --\$70 IEMSA Members/\$80 Non-Members **LUNCH INCLUDED**

<Click here> to log-in and register payment must be received prior to the event-you can pay securely online by credit card or register online and select "Mail My Check" at www.iemsa.net (registration is not confirmed until payment is received). OR print, complete and fax or email a registration form available online at http://www.iemsa.net/conference.htm - Click on "Emerging Trends Conference"

09:30-10:00 **REGISTRATION** (beverages provided)

BEYOND THE YELLOW BRICK ROAD: 10:30 - 11:45PM

Tornado-force changes in our profession are all around us. The "Wizard of Oz" story touches a chord in each of us but there is more to this tale for EMS leaders than just entertainment. In this era of change and transformation, what lessons can we take from the journey to Oz and back again? As founding partner of Fitch & Associates, Jay has been educating, mentoring and inspiring EMS leaders for more than three decades.

LUNCH PROVIDED: 11:45-1pm

DEFYING GRAVITY: 1-2:15pm

Gravity is a fundamental force of the universe. It also offers key leadership insights for emergency services. Dr. Fitch will describe how we often try to defy universal leadership truths associated with the forces of gravity. In his unique style, using case examples and personal experience, Jay will provide practical tools to keep your leadership grounded and increase your organization's success potential.

USING HIGH RELIABILITY ORGANIZATION (HRO) STRATEGIES IN EMS: 2:30pm - 3:45pm

Dr. Fitch will review contemporary research and draw a clear map of where emergency services organizations need to be focused in the years ahead. He will review contemporary research and outline practical ways leaders can use HRO principles to address key factors including reducing risk and improving trust in EMS organizations.

FREE to attend!







EMS Education

To date, almost 30 Mission: Lifeline EMS 12-Lead ECG classes have been taught. If your service would like to have a Mission: Lifeline instructor come to your service and present this 2-hour training, you can schedule through Mercy College of Health Sciences at www. MCHS.edu. This course if free of charge and offers 2.0 hours of continuing education. The course provides lecture and hands on practice with scenarios and resources to take home. The class can be held at your site. Schedule your class today!

Hospital Education

The Mission: Lifeline Hospital Class kicked off in August. 24 classes have been completed with great reviews. In the one-hour class, the Iowa Statewide STEMI guideline is reviewed in-depth, as well as use of medications and fibrinolytics. It offers a look at the system of care and provides opportunities for discussion around barriers and challenges faced in the region. Many of our referral hospital ED physicians have found it very helpful, as well. If you have not had your class yet, please contact Ngia Mua at Ngia.Mua@heart.org to have an instructor reach out to schedule your class.

Lesson plans and objectives are available to those hospitals wishing to apply for continuing education credit. One of our 7 in-state instructors will be happy to bring this informative and collaborative class to your site. To see which hospitals have completed the class, visit www.heart.org/missionlifelinelA.

EMS Funding

The Mission: Lifeline EMS Advisory Committee has completed its 4th and final round of EMS funding. The application closed in September with just shy of 300 applications being received from around the state. To see the list of awardees, please visit the website at www. heart.org/missionlifelineIA and click on the EMS tab at the bottom of the page. Nearly 100 services have received funding for 12-Lead ECG equipment.

Hospital Funding

Funding efforts continue with the critical access and non-PCI hospitals for the purchase of 12-Lead ECG receiving software. Please visit the website for a list of hospitals funded to date.

Mission: Lifeline Transition for Year 3

- > Mission: Lifeline is entering its third year in January. During 2017, EMS and hospital education will continue including STEMI conferences, the remainder of the funding opportunities for hospitals will be completed and the Task Force and subcommittees will move into a sustainability plan.
- > Gary Myers will be the main contact for Mission: Lifeline in Iowa after January 31st, 2017. Heather Maier relocated to North Carolina and will be transitioning the project over to Gary Myers for completion. Gary has overseen the EMS funding and EMS Advisory Committee operations all along. He has been involved in all the Task Force work and has worked with all of the PCI Centers in Iowa.
- > Gary's contact information can be found on the Mission: Lifeline website at www.heart.org/ missionlifelineIA.

HIPAA

- > Sharing Patient Health Outcome Information between Hospitals and EMS Agencies for Quality Improvement
- > If both the hospital and EMS provider are HIPAA covered entities, the hospital may share patient health outcome information with the EMS provider for certain health care operations activities of the EMS provider. such as quality improvement activities, as long as both entities have (or have had in the past) a relationship with the patient in question. The hospital may share the information without the patient's authorization, but must make reasonable efforts to disclose only the minimum amount of individually identifiable health information needed for the activity.

Definitions and Examples

> Covered entity: Includes a health care provider who transmits health information in electronic form in connection with a financial or administrative health care transaction for which the Department of Health and Human Services has developed HIPAA standards. If the EMS provider does not submit electronic claims to a health plan or government payer (such as Medicare or Medicaid) it may not be considered a "covered entity."

>>> CONTINUED ON PAGE 8





MISSION: STEMIIN IOWA

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Example: EMS and EDs are considered covered entities if they transmit health care claims to a health plan via electronic transactions for payment purposes.

- > Sources: HIPAA Rules at 45 CFR 160.103
- > Health care operations: Encompasses a number of activities to support health care treatment and payment functions, including quality assessment and improvement activities, (including outcomes evaluation and development of clinical guidelines), provided that the obtaining of generalizable knowledge is not the primary purpose of any studies resulting from such activities.
- > Source: HIPAA Privacy Rule at 45 CFR 164.501
- > Relationship: Includes a current or prior relationship between a patient and each covered entity.
- > Example: EMS rendered treatment to and transported patient X to an ED for health incident Y. The EMS and ED therefore both have a relationship with patient X for health incident Y.
- > Source: HIPAA Privacy Rule at 45 CFR 164.506(c)(4).

EMTALA

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Please use the link below to read through the rules around EMTALA and stopping vs. bypassing a local hospital to take a patient to the most appropriate facility.

- > "(3) Is in a ground or air ambulance owned and operated by the hospital for purposes of examination and treatment for a medical condition at a hospital's dedicated emergency department, even if the ambulance is not on hospital grounds. However, an individual in an ambulance owned and operated by the hospital is not considered to have "come to the hospital's emergency department"
- → if— (i) The ambulance is operated under communitywide emergency medical service (EMS) protocols that direct it to transport the individual to a hospital other than the hospital that owns the ambulance; for example, to the closest appropriate facility. In this case, the individual is considered to

have come to the emergency department of the hospital to which the individual is transported, at the time the individual is brought onto hospital property"

When researching EMTALA, you'll find much more info by searching for the rule, not the violation. The rule is CFR 489.24. Here is a good link that I use (page 53256 third column).

https://www.gpo.gov/fdsvs/pkg/CFR-2011-title42vol5/pdf/CFR-2011-title42-vol5-sec489-24.pdf http://www.emtala.com/law/

Mission: Lifeline has developed a statewide guideline to provide consistency of care to STEMI patients that go to a Non-PCI Hospitals first. These hospitals are a valuable asset to the STEMI system of care and the role is clearly defined in Mission: Lifeline.

With STEMI patients being a smaller number of patients, but some of our most "time critical" patients, it warrants the conversation of every Non-PCI hospital as to when, if and how a STEMI patient could potentially bypass and go straight to a PCI facility. There will be locations and times where this is not possible. When the situation necessitates use of a referral hospital, it is optimal to use evidence-based practice guidelines and expedite ALS transport to the PCI Hospital.

MISSION: LIFELINE WISHES YOU ALL A SAFE AND HAPPY HOLIDAY SEASON AND AN **INSPIRATIONAL NEW YEAR!**

It has been an extraordinary year working with all of the great champions in Iowa. The residents and visitors to this great state are in the care of so many exceptional and dedicated people. We would like to take the opportunity to thank you for your service to our communities, for your selflessness and for going above and beyond to ensure that the care you provide is second to none. You are the driving force that inspires organizations like the American Heart Association to provide funding for research, best practice guidelines and equipment where it is needed and will do the most good....in your hands!





OUR 27TH ANNUAL IEMSA CONFERENCE AND TRADE SHOW TOOK PLACE IN DES MOINES ON NOVEMBER 10-12, 2016. Each year our conference committee strives to provide great continuing education that reaches each and every level of EMS provider. This year, over 1000 attendees chose from a full schedule of general and specialized topics (40 in all).

Some speakers came from the national stage starting with the cast from the hit A&E drama "NightWatch" joining us for sessions in vendor hall as well as a key note lecture that left everyone waiting with anticipation for their upcoming 3rd season.



We also brought in one of today's popular national



courses to teach the SAVE program.-Safely addressing Violent Encounters. This was a great topic in light of challenges **Emergency Medical Providers are** facing these days.

Dr. Ray Fowler and Dr. Jeff Beeson from Texas joined us this year bringing a wealth of knowledge and entertaining topics. We invited Dr. Chris Wistrom back along with his colleague Dr. Todd Daniello. Both were highly rated as speakers in your survey feedback last year. With evaluations still pouring in, the overall rating of presenters was 4.15 out of 5 in what many evaluations stated "There were so many good topics, I had a hard time choosing which class to attend!" EMS providers, emergency communications specialists, law enforcement as well as nurses and physicians attended.

We thank each of you for your time and dedication, and know that it is not easy to get away from work, family and community to attend a multi-day event like this.

We hope participants enjoyed not only the educational content but the networking and social aspects provided by attending this conference. So far we have an overall conference satisfaction rating of 4.30 on scale of 1 to 5! Entertainment options ranged from Vendor hall opening reception to live music and dancing at our Thursday night Gathering, sponsored by KEV & Lifeline Emergency Vehicles on Court Avenue. In addition, Unity Point LifeFlight sponsored the Firday Night Event with a crazy hat theme and the very popular Johnny Holm band. Moving our Friday night event to the Marriott so attendees could be closer to their hotels and enjoy the party in a smaller venue was very well received.









Saturday morning attendees started their conference day bright and early with IEMSA's Honoring our Own ceremony. It was such a moving tribute to EMS providers no longer with us and their families and friends who remembered their lives of service and sacrifice.



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Vendor Hall was open from Thursday afternoon until after lunch on Saturday and remains an exciting and important part of our conference experience. We hope to expand our vendor hall next year in response to excellent feedback from both attendees and vendors.



We know that each of you attend our conference in the hopes of taking home something different. You may be looking for up to date evidence based research. new protocols, ways to improve your patient care or department morale. We strive each year to bring a large variety of classes and pre-conference offerings so that your choices are many and your overall experience is valuable.

Keep the comments coming and check our IEMSA website regularly for other upcoming educational opportunities throughout the state. Your feedback is important to us as we plan for next year's conference!

So mark your calendars now and we will see you November 9-11, 2017 for our 28th Annual Conference and Trade Show!

Check out some peer review comments:

- "Very good conference always come away with new ideas and techniques!"
- "Awesome conference. Appropriate topics and informed speakers."
- "It was a valuable learning experience and I'm looking forward to next year."
- "Even though some topics are not super interesting-small volunteer services NEED to hear this stuff! Thank you!
- "I found the National speakers very informative. Thank you for bringing them to lowa!"
- "Wonderful knowledgeable speakers hitting a very hard topic"
- "Great to hear data and statistics and new technology to support positive change"
- "Enjoyed how the speakers broke things down. It was like they were having a conversation with us, not lecturing us."

Stay safe and enjoy your holiday season!

-Katy Hill, IEMSA Conference Chair





> EXHIBIT HALL: HYVEE HALL C

LARGE DISPLAY OF THE TOOLS OF YOUR TRADE

EXHIBIT HALL HOURS:

- THURSDAY, NOVEMBER 9[™] VENDOR HALL WELCOMING RECEPTION 4:30PM-7PM
- FRIDAY, NOVEMBER 10TH: 9AM-5:40PM GIVE-AWAY WINNERS ANNOUNCED IN EXHIBIT HALL DRAWINGS BE HELD DURING THE AM/PM BREAKS MUST BE PRESENT TO WIN.
- SATURDAY, NOVEMBER 11TH: 9:10AM-1:40PM GIVE-AWAY WINNERS ANNOUNCED IN EXHIBIT HALL DRAWINGS HELD DURING A.M. BREAK. MUST BE PRESENT TO WIN.

HONORING OUR OWN:

Saturday, Nov. 11th, 0730-0815 Please join us in honoring those no longer with us at this moving ceremony.

AWARDS CEREMONY: Saturday, Nov. 11th, 1200-1300, during lunch. Awards given for EMS Service - Career and Volunteer, EMS Individual - Career and Volunteer, EMS Instructor, Dispatcher, Friend of EMS, and Hall of Fame.

Go to www.iemsa.net to nominate someone today!

LUNCHES: Again this year, we have elected to allow you the option and convenience of purchasing lunch during the conference. Our venue is a little farther away from the usual lunch sites, and with the short lunch break, we are encouraging you to include our plated hot lunch in your registration.

CONFERENCE HOTEL GROUP RATES:

-WILL BE AT THE MARRIOTT, OUALITY INN, HOLIDAY INN AND HAMPTON INN THIS YEAR. RESERVE YOUR ROOM EARLY--THEY SELL OUT EVERY YEAR.



ATTENTION ALL EMS PROVIDERS! YOUR OPPORTUNITY TO PICK UP SOME CES

We are proud to present the 8th Annual SE EMS Saturday Conference. The Agenda is set with a full day of training. The agenda is outlined below. **Formal CEHs have been applied for.**

NON-IEMSA MEMBERS registering for this conference you will receive a 1-year membership to IEMSA. Many benefits are included with this membership, such as discounted educational opportunities to pick up CE's (including at the Annual Conference in November), a free \$ 10,000 accidental or Line of Duty Death/Dismemberment insurance policy, E-News, and a subscription to the IEMSA Newsletter- The Voice.

MORNING AGENDA:

7:30AM- 8:00AM	Registration
8:00AM- 8:05AM	Introduction Welcome —IEMSA Board Member
8:05AM- 8:55AM	Situational Awareness —Rick Sywassink
9:00AM- 9:50AM	Kinetics of Trauma —Chuck Gipson
9:50AM- 10:00AM	Break
10:05 AM- 10:55AM	Field Assessments/Triage —Chuck Gipson
11:00 AM- 11:50AM	Perfect Storm —Jules Scadden
11:50 AM- 12:50 PM	Lunch (on your own)

AFTERNOON AGENDA:

1:00PM 1:50PM	Hot or Cold-It's ALL Sepsis —Jules Scadden
2:00PM 2:50PM	Diabetic Emergencies —Matt Fults
2:50PM 3:00PM	Break
3:00PM 3:50PM	Crime Scene Preservation —Kenny Hora, Detective
4:00PM 4:50PM	Transforming Lives through Organ, Tissue, & Eye Donation — Iowa Donor Network
4:50PM 5:00PM	Closing —IEMSA Board Member



To Register for this 1-Day Conference

COMPLETE THE ONLINE REGISTRATION FORM BY CLICKING HERE

CLICK HERE AND Follow the log-in Instructions--Payment must accompany all registrations-you can pay securely online by credit card or select "Mail my Check" --your registration is not confirmed until payment is received. No Refunds after January 13th, 2017. Cancellations prior to the 1/13/2017 are subject to a \$50 cancellation fee.

Walk-in registrations are welcome--with payment by check. However, you must first, register online--so we know to expect you. Just click the "<u>Mail my Check</u>" button on the payment page.

If you have any questions, please call our office at 515-225-8079. We look forward to seeing you on Saturday, January14th.







EMS INDIVIDUAL VOLUNTEER PROVIDER

TODD HECK, Louisa County/Columbus Junction



Todd was my EMS instructor when I was still trying to decide what to do with my life, he not only pushed me to look into healthcare but made me love every minute of it. Todd is one of the most amazing people I have ever had the privilege to know. He is a cornerstone of our

community. Todd was one of the first paramedics in our county and is looked up too by many, including myself. Todd is an educator and has taught many EMS providers to not only provide care to others, but more importantly compassion. Todd tragically lost his oldest son in a motor vehicle accident in which he was a first responder. Todd could have easily given up EMS after something like this, but instead has embedded himself wholeheartedly in our emergency response system. Todd has stepped up and became the fire chief of Columbus Junction and still is a mainstay of the ambulance service. It is without reservation, I nominate Todd Heck for EMS provider of the year. I can think of no one more deserving. Respectfully submitted, Abby White, Flight RN, AirCare1, UIHC.

I came upon this quote and automatically think of Todd Heck. "The thing about a hero, is even when it doesn't look like there's a light at the end of the tunnel, he's going to keep digging, he's going to keep trying to do right and make up for what's gone before, just because that's who he is." -- Joss Whedon



INDIVIDUAL CAREER PROVIDER OF THE YEAR

CINDY SMALL Wapello Community Ambullance

Often times the ones that work the hardest behind the scenes to make the rest of the service look good are the ones that deserve the recognition, Cindy is one of those people,



if you looked up hard worker in the dictionary, you should find Cindy's picture, she is one of the hardest working people that I know and she does it for the pride of her community ambulance service and strives to be one of the best services in the state. You will often find Cindy at work before the sun comes up in the morning and her light in her office is still on late at night, she puts in the hours necessary, which is

nowhere close to the normal 40 hour work week, to make sure our ambulance service meets all the requirements set forth by the State of Iowa and also ensuring that the service gets reimbursed from insurance companies and Medicare.

Cindy started out as an EMT in 1997 and worked her way through the certifications until she received her Paramedic Certification a few years later. Prior to starting her career as a practicing EMT, Cindy managed the billing and operations of the Wapello Community Ambulance beginning in 1989 in the basement of her home while working full time for the Postal Service. EMS became a family affair for Cindy's family and still is today. Cindy and her daughter are Paramedics, her husband is an advanced EMT and her son is an EMT all working for the Wapello Community Ambulance, so she takes great pride in knowing that the Wapello Community Ambulance delivers excellent patient care to the residents that they serve. After leaving her job with the Postal Service she began working full time as a Paramedic and Operations Director for the Wapello Community Ambulance. What started out with a couple of used ambulances and enough equipment to get the service started has flourished under her direction into a service that runs with two late model ambulances, has top notch equipment, and a state of the art facility that is paid for in full due to Cindy's hard work and determination to make the Wapello Community Ambulance one of the best in Southeast lowa and the entire state of lowa.

Cindy continues to take call for a minimum of 60 hours per week in addition to running the day to day operations of the service. She also picks up shifts when there are gaps in the schedule to make sure the service has adequate staffing. She sacrifices personal time and time that she could be spending watching her grandkids in sporting events, or working in her yard, or one of her more favorite hobbies, to be sewing

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or quilting, to ensure that the service is covered and staffed efficiently. She very rarely will tell another provider no when asked if she can cover a shift. She has served on advisory committees at the local and state level to ensure that rural EMS has a voice in the future of EMS for the providers in her area. With the changes that we have seen in EMS in the past few years, Cindy makes sure that her service is on top of those changes, that we have the very best training and continuing education opportunities to ensure that the members of the Wapello Community Ambulance Service are prepared to respond to any type of emergency. Without the hard work and determination of Cindy for the past 27 years as a director and a Paramedic for the Wapello Community Ambulance Service, we would not be where we are at today. When the day comes that Cindy retires and turns off her pager for the final time. there will need to be multiple people step in to take her place and to do it as efficiently as she does.

I would put Cindy's hard work ethic, her skills as a practicing Paramedic, up against anyone in the state of Iowa and would feel confident knowing that I have one of the best Paramedics in the state right here in my home town. I would like to formally nominate Cindy Small as Career EMS Provider of the Year for IEMSA.



EMS DISPATCHER OF THE YEAR COLIN CHINERY, Story Co. Sheriffs Office Dispatch



Colin started his career many moons ago out of state. He migrated east to the central plains and continued his career here in the Heart of Iowa. Colin has served in all roles of public safety from being a reserve deputy, to being an active EMT (volunteer and paid) within his community. Colin brings a plethora of knowl-

edge to the public safety world with his experience. Colin has saved many lives without physically being there. His calm voice and expertise in stressful situations has shown to provide a positive outcome for the patients and family members experiencing a medical emergency. Colin has successfully made bad, stressful situations better more times than one can count. Colin has shown to be very proficient with the county layout, you feel as if some days he may have drawn the map and named the streets himself. Colin is my personal GPS when I am unable to connect the dots as to where

we are going. Some might find it a little scary when he comes across the radio and says "you missed your turn, go this way" even when there is no GPS or some sort of tracking device in the ambulance. Colin has been the calm clear voice we have heard far too many times calling end of watch. The strength, composure, and clarity that Colin dispatches with helps keep responders calm and clear headed when responding to emergencies. Colin is also that "Good morning" voice on the radio welcoming you to another day of service when he dispatches you on the first run of the day. Colin is also very aware of everything going on in the dispatch center making sure that he always knows what his partner is doing and even dispatching an ambulance to critical time sensitive calls before his partner has finished taking down the information. Colin Chinery should win dispatcher of the year award because not only is he a rock for Story County EMS, Fire and Sheriff's departments but he is also a great friend.



EMS INSTRUCTOR OF THE YEAR LYNN KROPF, Louisa Co. EMS/Columbus Junction



This educator would give the shirt off their back for their students. This educator had a huge desire to offer an EMT Course in their community and reached out to me shortly after I accepted the Program Director position at the University of Iowa EMSLRC. This educator was interested in working with our team to offer an outreach EMT Course. Because I was transi-

tioning into my role and working to identify the vision for our department, I told her we couldn't offer a class at the present time but we should stay in touch. She was persistent to say the least. She contacted me on a regular basis to see if she could offer this course to meet her community's needs and I continued to reiterate to her that we were re-evaluating and revising our EMT outreach curriculum. When she would come to the EMSLRC to complete her updates for AHA and NAEMT courses, she always offered to assist in any way that she could. Finally, in the Spring of 2015 after ensuring we had developed a sound curriculum to support an outreach program, I agreed to offer an outreach EMT course in Columbus Junction. Lynn, was excited and wanted to make sure her students would be successful, ensuring she was always available to support her students. Although this course met only two nights per week from August until March, the entire cohort of five students that completed the course passed National Registry on their first attempt!

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EMS CAREER SERVICE OF THE YEAR STORY COUNTY MEDICAL CENTER Nevada



This service is more than deserving of recognition for the progressive patient protocols that have been formed within the last few years; some that may be first in the state for a paramedic level ground ambulance. Towards the latter part of 2015, Story County Medical Center adopted a new patient

protocol for the out-of-hospital ST elevation myocardial infarction (STEMI) patient. This protocol was adopted from a guideline that was released by Mercy Medical Center Des Moines and Unity Point Cardiologists for transferring a patient from an outlying ED to one of their facilities when the patient is experiencing a myocardial infarction. The new protocol allows the paramedics in the back of the ambulance to administer Brilinta, an anticoagulation medicine. This medication was created specifically for patients experiencing a myocardial infarction and it comes with the added the added benefit of being reversible which Plavix is not. This medicine was chosen by a group of Des Moines cardiologists from both Mercy Medical Center and Unity Point. Story County Medical Center realized the benefit of administering this medication in the prehospital setting due to the potentially long transport times to a catherization lab as they provide paramedic level care in the rural setting. Paramedics are also able to give a bolus dose of heparin, another lifesaving drug for someone experiencing a myocardial infarction. By administering Brilinta, prehospital studies have shown that it greatly reduces the risk of stent thrombosis. Studies have also shown that administration of pre-hospital heparin has increased survivability of myocardial infarction patients. Story County Medical Center put this protocol in place to not only serve the residence of Story County and its surrounding areas better but to also help improve patient outcomes.



EMS VOLUNTEER SERVICE OF THE YEAR REMSEN AMBULANCE Remsen

Remsen ambulance is a service in NW lowa providing a coverage area of 152 square miles. They are a provisional Paramedic service that has a paramedic



on 85% of the calls. This is exceptional as they have only 2 paramedics. They handle over 250 calls a year, from 10-50's, to the nursing home transfers and doing P-assists from neighboring communities! They are an outstanding crew consisting of 10 EMT's and 2 paramedics. They also have 3 CPR instructors that teach many classes for the local community. They also teach EMT classes for the community colleges in the area. Remsen ambulance was one of the first services to do 12 lead EKG's in the field and transmit to local hospitals. They also have time to do fund raising by having street dances, hamburger frys, chamber coffees and EMT week breakfasts. This is a very dedicated crew that works hard at keeping their community that they live and work in safe! Remsen Ambulance truly deserves to be considered as the volunteer service of the year.



HALL OF FAME INDUCTEE **ROSEMARY ADAM** University of Iowa EMSLRC



Rosemary Adam has been a nurse since 1975, and a paramedic in Iowa since 1980. With over 30 years of experience in both rural and urbansized hospitals' primarily in Emergency Departments, and ambulance companies (ground and rotor wing), Rosie has become a coordinator and an instructor or

faculty member for many emergency medicine courses for physicians, nurses and EMS personnel.

Rosemary retired from the University of Iowa's Hospitals and Clinics on October 7, 2016 after over 20 years of services where she had the primary responsibilities throughout her tenure as the paramedic course instructor, EMT Course Coordinator, Advanced Trauma Care Nursing, Trauma Nursing Core Course and Emergency Nursing Pediatric Course director and instructor for Emergency Department nurses, Advanced Medical Life Support and Geriatric Emergency Medical Services course director and instructor, and lead instructor for the critical care paramedic courses. Rosie has served on numerous local, regional, state, and national associations in the Emergency Medical and Emergency Nursing associations.



HALL OF FAME INDUCTEE SUSAN GIBBS Humeston First Responders



Susan served as an RN & FMT as an original member and President since 2002. She also served on the Lucas County Ambulance and Lucas County Hospital ER from 1982-2015. She currently is still active with the Humeston First Responders. She puts in many

hours on her own with all the paperwork and red tape the state requires and in mentoring young EMS members. She was nominated as one of 10 CPR instructors in 2009 as a finalist for National CPR Instructor Hall of Fame. Susie has received two life-saving awards for the same CPR "save." She started CPR on me in 2004 and began the chain of survival on my life. She has taught numerous CPR, both certified and Hands-Only classes since then and we have been Volunteers for the American Heart Association in CPR/AED/SCA activities. Most of the time she puts in is unnoticed by anyone because she does not like recognition, but can attest to the time she puts in.



HALL OF FAME INDUCTEE ANITA BAILEY Retired / Milford, Iowa



Anita's career spanned over 30 years of helping people, developing EMS services and systems. She believed that helping people was her life's mission.

She began her career as a first responder with the Peterson Community Response Unit in Peterson, Iowa. Over the

years she worked as an EMT, EMT-Intermediate and Paramedic for the Spencer Municipal Hospital Ambulance Service and as an EMS Coordinator with the Iowa Department of Public Health, Bureau of EMS. Always a believer that EMS was a "lifetime of learning". She became a BLS Instructor with the American Heart Association and certified as an Iowa EMS Instructor. Countless Iowans completed her CPR, EMT and EMS continuing education classes. She was instrumental in the development of Public Access Defibrillation in Iowa and served many years on the Emergency Cardiac Care Committee for the American Heart Association.

In 1984 she helped form the Clay County EMS Association in NW Iowa. This association helped develop the successful EMS response system that is present in Clay County today. This system became a model for others to develop from. Anita was also instrumental in developing the popular Two Wheel Trauma program with lifelong friends Dick "Slider" Gilmore and Frank Prowant. She continues to teach in this program today.

As an EMS Coordinator with the Bureau Anita was a proponent of EMS service development throughout her region. EMS Service Directors throughout her region never thought of her as a regulator, but as a friend to their service who helped improve the quality of care they provided. Anita has recently retired from EMS after a 30 plus year career in emergency medical services. After many nights and weekends spent away from home for various EMS activities, she now is enjoying her time with her family as a wife, mother and grandmother. Anita Bailey truly is lowa EMS and is deserving of the Hall of Fame Award.



HALL OF FAME INDUCTEE PAULA MERFELD Urbandale Fire Department



Paula worked as a paramedic for over 25 years at the Urbandale Fire Department (UFD). She was one of the first paramedics to join the department in 1988 as a volunteer. During her tenure on the department, she received the Part-time Provider of the Year

Award in 2010, The Mike Mecurio "Character" Award in 2011, and despite not being a firefighter, she received the department's highest honor of Firefighter of the Year in 2012. These accolades speak to Paula's commitment to the department and each award is fitting of the most loyal career employee so it is worthy to note, she won these awards as a part time employee. These honors are certainly noble and provide for a very worthy nominee; however, I think the true reason Paula should be introduced into the Hall of Fame is her advocacy for her patients and crew.

Paula truly understands the concerns and needs of her patients. She was dedicated to her role as paramedic on the ambulance, and no matter how many reports she had to write or little sleep she got the night before, she was always willing and ready to take the next patient with a smile. The department receives many thank you

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cards from grateful patients and appreciative citizens and many times they do not remember the EMT or paramedic that cared for them, but if Paula provided them care, they seemed to always remember her calm demeanor and gentle smile. No matter the patient's criticality, she would provide a reassuring voice and outstanding attention to detail. What I will remember the most about working with Paula is her equal concern and attention provided to each patient. Spending this much time in the City of Urbandale, Paula got to know many patients, some because of their severe illness or injury and others because of their perceived severe illnesses. If it was the patient's first time in an ambulance or the patient's thirtieth, they would be greeted with a helpful attitude and a paramedic devoted to providing the care she would like her loved ones to receive.

Besides providing quality care, Paula was dedicated to making the department a family. She was instrumental in the annual appreciation dinner and always wanted to be involved in the shift's dinner. As I mentioned, Paula was a part time employee but worked more hours per month than most of the full time staff, and it was generally known, if Paula was on, it would be a good shift. The UFD allows crew members to watch TV during their lunch hour and everyday Paula was working, unless interrupted by calls, the crew would join Paula in watching her favorite soap opera. Walking into a fire station and watching five guys laughing during a soap opera is not a likely occurrence in most cities but when Paula was working that was what was going to happen. It was not because she demanded it or got to the remote first; it was because the crews respected her years of experience and knew that is what she enjoyed doing over the lunch hour.

I am humbled to have worked with Paula and to have learned what true patient care and patient advocacy look like. Positively representing Iowa EMS and caring for thousands of citizens for over 25 years is a worthy honor of any person but doing so in the manner Paula did is worthy of recognition. I sincerely appreciate your time and consideration of this nomination and if I can provide any further insight, please let me know.



Roger Thomas is a longtime servant to EMS in Iowa. Roger became a volunteer firefighter and EMT after returning home from the Untied States Air Force in 1975.



He volunteered with the Wadena Fire Service where he eventually becoming fire chief. When we moved to his parents farm near Elkader in 1980 he joined the Central Ambulance Service. While there he eventuality attained his paramedic certification. He was very involved in serving the commu-

nity and other organization. He was a member of the Northeast Iowa Regional EMS Council, helped start the National AG Safety Center in Peosta, taught many EMT classes and helped certified EMT students for Northeast Iowa Community College. Roger helped establish the Clayton County EMS Council, manned the ambulance for many years at various functions all over Clayton County, taught CPR clases and much, much more. Roger served in the Iowa Legislature for 16 years. He passed legislation to create the EMS license plate and to allow EMTs to serve in the emergency rooms. He also help advocate for the current standard of care enacted by the Department of Public Health. Roger also responded to emergences at the capitol during session. Roger is now retired from EMS after serving 35 years helping the citizens of his community, county, region and the state of lowa. I feel Roger is deserving of this recognition for all his dedicated years of service.



FRIEND OF EMS

JOHN HALFERTY Jasper Co. Sheriffs Office/Newton



As with many communities in lowa, the services in Jasper County have been facing an uphill battle to both find people to join and make the most of the people that they already have. Enter Sheriff John Halferty. As a 20+ year member of the Mingo Fire Department, he has seen firsthand the

issues facing small rural departments. He was not content to watch these issues mount. Instead he opted to take action. As Sheriff, he is a steadfast supporter of EMS and a strong advocate for EMS whenever the chance presents itself. Sheriff Halferty, and a group of his deputies took EMT training and equipped themselves as EMTs becoming nontransport EMS service in jasper County. This action has put more EMS providers in the field in Jasper County that are able to both respond to calls and assist with transports.

I would like to nominate Sheriff John Halferty as a FRIEND of EMS, Sheriff Halferty exemplifies commitment to public safety. He has taken his agency and made them more than just "cops". I am proud to work with him.

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NORTH CENTRAL REGION: TERRY EVANS

Before Terry Evans, the emergency medical services supervisor at UnityPoint Health - Trinity Regional Medical Center, became a paramedic, he found himself in a situation in which he needed one. He had a heart attack in 1998. Terry was only 23 at the time and was very impressed with the care he received from a calm, comforting and capable paramedic.

At that time Terry committed to himself to help and be that person that stands in the gap. He's doing just that as a paramedic and now serving as the IEMSA regional representative for the North Central Region. This seat was vacated by Jeff Eastman. We appreciate his willingness to step in and serve the Iowa EMS Community.

THANK YOU

IT IS WITH A GRATEFUL HEART that we say

"thank you" to one outgoing board member this year, who served so faithfully on the IEMSA Board. Jeff

Eastman served one and a half terms as one of the North



Central Board Members. He jumped in quickly and served actively on several committees. He accomplished much in his his short time on the IEMSA Board. He had to resign just one year into his second term to pursue an oppportunity to serve as the EMS Coordinator for the EMS Bureau/ IDPH.

Without board members like him, with selfless dedication and giving spirit, Iowa EMS would not be what it is today. Watching board members in action has been both inspiring and mind-boggling. For those who have not been an active part of the IEMSA meetings or activities, you cannot imagine how much work and time goes into supporting lowa EMS. The monthly meetings always have a full agenda and tackle critical issues facing our EMS family. The activities of IEMSA impact everything from Iowa law to the local volunteer. (And you thought IEMSA was just an awesome conference that you can't wait to attend each year!) The members of the IEMSA Board make that happen on a daily basis. So join us when we say, "Our hats are off to you, all the IEMSA Board Members who have serve and continue to serve so well!"

THANK YOU

OVER \$2500 COLLECTED FOR THE FALLEN POLICE OFFICERS AT THIS YEAR'S ANNUAL CONFERENCE.



It's been a tough year for public safety and especially for our fellow police officers. The loss of Des Moines Police Officer, Sgt. Tony Bemimo and Urbandale Police Officer, Justin Martin hit our entire community hard.



In an effort to help, the Iowa EMS Association decided to collect donations (special stickers or armbands given to each donor). In just a few short days, over \$2500 was raised. The NightWatch Crew got in on the effort donating all the funds raised from autographed pictures as well. Miss Iowa, Izabella Arndt, (pictured left) also attended the event to

assist in this effort as well.

The donations were presented to a representative of the Des Moines Police Department (pictured above) at the IEMSA Awards Ceremony and Luncheon on Saturday, November 12, 2016.

Thank you for all who donated.

2016 IEMSA SCHOLARSHIP RECIPIENTS ANNOUNCED

RACHEL ARMINTROUT -- Rachel attended Willam Penn University for 4 years as a pre-med student, and



Des Moines Osteo. for Pathology for 3 years before enrolling in the EMT program at EMSLRC in August of 2016. Rachel is an avid volunteer and was inspired to get involved in EMS after watching her mother die of cancer. She has served in

many roles --all in the medical field. She currently resides in Muscatine. Iowa.



BRADY GREUFE -- Brady is currently enrolled in the Eastern Iowa Community College Paramedic Program. She is an avid volunteer and works for MEDIC EMS in Davenport when she graduates. Her dream is work in an EMS leadership capacity to use her

Non-Profit experience. She is pursuing a career in EMS because she, like all EMS providers feels a special calling to serve those in need in the pre-hospital area.

KIRKWOOD COMMUNITY COLLEGE received the first EMS Training Center Scholarship-The EMS Department at Kirkwood Community College in Cedar Rapids, Iowa would like to thank the IEMSA Board for the scholarship awarded to Kirkwood to be disseminated to a student of our choosing. On December 8th, 2016, that \$500.00 scholarship was awarded to Justin Gilbertson. Justin is an EMT Student at Kirkwood Community College. Justin is looking at furthering his education to the Paramedic Program. He lives in Marion, is a single parent, and just finished his EMT training, The scholarship monies awarded will enable Justin to take his EMT test, he otherwise would not be able to afford this testing. He was very appreciative of the scholarship and how IEMSA is

The Iowa Emergency Medical Services Association is proud to offer annual scholarship opportunities in 2017. Funds are intended to assist those hoping to enter the emergency medical services job force or for established members of the EMS community looking to advance their education and certification level. Emergency Medical Services personnel are essential features of any disaster management effort. Whether paid or volunteer, EMS is often the first to arrive at accident scenes, making splitsecond life-saving decisions during every shift. Quality education and comprehensive training is essential for EMS providers and paramedics, because no two disasters, emergencies or accidents are alike. The goal of the IEMSA annual scholarship fund is to encourage continued improvement and advancement for our state's providers. Initial certification requires schooling, and continuing education, and it also plays an important role in keeping EMS personnel on the cutting edge of life-saving first responder protocols. College level programs exist at two

and four-year colleges. Whether basic or advanced -

EMT, school can be costly. IEMSA would like to assist individuals with scholarship funding to help achieve or

IEMSA SCHOLARSHIP SELECTION PROCESS:

1. Only those applications which are complete, accurate and received by the deadline will be considered. (Current Scholarship Application **Deadline**: June 1, 2017)

supportive of the training programs across the state.

- 2. IEMSA will notify all applicants by email of the status of their application.
- 3. EMS scholarships are not awarded for course work already taken.
- 4. Scholarship payments are made directly to the recipient of the scholarship.
- 5. The following criteria will be used in the scholarship selection process:
 - Dedication to the profession
 - Financial need
 - Dedication to the community
 - Service as a positive ambassador for IEMSA

Please consider applying for one of these scholarships or forward information on to other potential recipients.

Click Here to print the scholarship application: http://iemsa.net/pdfs/Scholarship_Application.pdf

further career goals.



≥ uh-oh! Peds! CONFERENCE

EMS TRAINING TO CARE FOR LITTLE BODIES

FEBRUARY 25, 2017

AT THE RADISSON . CORALVILLE

(Previously the Holiday Inn) **located at** 1220 1st Ave., Coralville : Formal EMS CEHs and Nursing CEUs applied for.



7:30AM- 8:00AM Registration/Welcome 8:05AM- 9:00AM Pediatric Pain Management

-Dr. Joshua Stilley

9:00AM-10:00AM Traumatic Injury

- Stephanie Haley-Andrews

10:00AM-11:00AM Pediatric Septic Shock: A Case Study

-Laurie Gehrke / Eli Landry

11:00 AM-NOON Case Study: Pediatric GSW

-Stephanie Haley-Andrews

NOON- 1:00PM Lunch (provided)



AFTERNOON AGENDA:

1:00PM-2:00PM Hands-On Skills Training

- BLS and ALS tracks for all providers.

-EMSLRC Faculty & Stephanie Haley-Andrews

2:00PM-3:00PM Acute Life Threatening Events

-Stephanie Haley-Andrews

3:00PM-4:00PM Pediatric Mass Casualty Events

-Michael Kaduce

4:00PM-5:00PM Mass Casualty Exercise

-EMSLRC Faculty



RegistrationTuition: JUST \$80 for IEMSA Members and \$110 for Non-Members (includes an IEMSA Membership). Lunch is included in your Registration Fees.

REGISTER ONLINE--Click Here or call 515-225-8079 You will be prompted to log-in to your IEMSA Account to register--Usernames are set to the email address on file and everyone's temporary password is set to IEMSA2014 which is case sensitive and contains no spaces. Passwords can be reset at the time of initial login. Once logged in—go to the "Online Store" tab at the top of your screen, click on the "Uh-oh! Peds!" icon, complete the registration, process payment and you're registered! You can PAY BY CREDIT CARD OR register online and check the "MAIL MY CHECK" option and send the check to: IEMSA, 5550 Wild Rose Lane, Ste. 400, West Des Moines, IA 50266 - No refunds after January 29th. All refunds prior to January 29th will be subject to a \$50 cancellation fee.

OR print and complete the REGISTRATION FORM (PDF Flyer/Registration Form available online at www.iemsa.net/conference.htm, click on "Uh-Oh Peds! Conference", to find the PDF link), **fax it to 877-478-0926 or email/scan it to administration@iemsa.net**.

NEED HOTEL RESERVATIONS? Radioson Coralville--we have a room block for \$84/nt.++ You can reserve by calling 319-351-5049 Check in is at 3pm, check out is at 11am and cancellations need to be made prior to 6pm the day of the reservation.

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Trauma Assessment

Mechanism of Injury, and Best Practices

BY Johnathan Cockrell, EMS/ Fire Science Program Coordinator, HawkeyeCommunity College

INTRODUCTION

Trauma is a disease that affects people of all ages, races, socioeconomic classes, and genders. It is the leading cause of death for persons between ages 1 and 44 years of age. Due to the wide range of severity encountered in the prehospital setting, traumatic injuries can pose significant challenges for EMS providers. More than 90% of trauma patients have simple injuries that involve only one system. However, trauma accounts for 41 million emergency department visits and 2.3 million hospital admissions across the nation annually.

A key factor in the survival of a trauma patient is accurate and timely assessment, and rapid transport to appropriate trauma care facilities. Assessment is the foundation in which all management and transport decisions of the trauma patient will be based. To provide the best possible care for trauma patients, EMS providers must possess excellent assessment skills. This article reviews the components of trauma assessment, and identifies some best practices in the effective and accurate assessment of trauma patients in the prehospital setting.

Patient Assessment

In a trauma patient, injuries may have occurred in multiple body systems simultaneously, such as a serious head injury in addition to a serious burn. This is known as multi-system trauma, which can pose a significant challenge for a thorough and accurate assessment. Injuries may be hidden, especially in unresponsive patients. A standardized approach to assessment is especially important in these cases, to avoid missing lifethreatening effects of injuries.

Patient assessment is a dynamic process in which the EMS provider obtains data, interprets that data, and uses it to make treatment and transport decisions. The patient assessment process is made up of several components.

These components include:

- 1. Scene Size-Up
- 2. General Impression
- 3. Mechanism of Injury

- 4. Primary Survey
- 5. Secondary Survey
- 6. Reassessment

The EMS provider must use a combination of critical thinking, sensory input, experience, and a systematic **approach** to perform effective patient assessment. Protocols, standing orders, and patient care algorithms help to promote a standardized approach to patient assessment.

It is crucial for EMS responders to understand that patient assessment is not a linear process, but a tool that can be adapted to accommodate each patient encounter. Some patient encounters will not encompass all components of the standardized patient assessment approach. Some examples include when a provider is unable to obtain a SAMPLE history from an unresponsive trauma patient, or when a provider doesn't have time during a short transport to perform a secondary assessment or reassessment. In addition, paramedics providing a tiered response to trauma patient may not see the scene and must rely on the hand-off crew to provide details of the scene.

The NHSTA National Emergency Medical Services Paramedic Instructional Guidelines (2009) provide a systematic approach to the trauma assessment. The following major components of patient assessment are:

- 1. Standard precautions
- 2. Scene size-up
- 3. General impression
- 4. Mechanism of injury
- 5. Primary assessment



The EMS provider must use a combination of critical thinking, sensory input, experience, and a systematic approach to perform effective patient assessment.

- Baseline vital signs
- 7. History
- 8. Secondary assessment
- 9. Re-assessment.

Standard Precautions

Standard precautions are based on the principle that all blood, body fluid secretions, excretions (except sweat), non-intact skin, and mucous membranes may contain infectious organisms.

Implementation of standard precautions is the primary strategy preventing healthcare-associated transmission of infectious agents among patients and healthcare personnel. Gloves and eye protection are the minimum standard precautions for trauma assessment. EMS providers should consider a gown if the possibility of exposure to blood or body fluids is likely.

Best Practices for Standard Precautions

- Eye protection is needed for every patient contact. and providers should carry several extra pairs of gloves.
- A gown should be kept within quick access for trauma patients who may have lots of blood or body fluids present.

Scene Size-up

Trauma scenes can involve many different environments, many of which pose hazards to the EMS responder. The scene size-up is essential to identify possible hazards and evaluate the need for additional units. or specialized resources such as rescue and hazmat teams. First arriving units should perform a circle check of the scene to identify any hazards, such as traffic, downed electrical lines and fires. EMS providers who are not trained to render identified hazards safe should wait until help arrives before entering the scene. Providers should determine what will be needed to make it safe and implement a plan for making it safe to enter.

Scene safety is always the main priority of every scene. The EMS providers' safety and that of other responders always takes precedence over patient care. The EMS provider must maintain situational awareness at all times. and be prepared to a take action in the event that the scene becomes unsafe. Discuss concerns with other responders and the incident commander, and formulate a plan that would address possible hazards.

Another aspect of the scene size-up is to consider the environment the incident has occurred in, and consider the impact the environment may have on patient care (i.e., weather conditions, noise, and geography). Also consider how the environment may affect other responders, and communicate with any other responding units.

Crime scenes, potential acts of terrorism, or active shooter events pose challenges for the response and care of the trauma patient. It is important that the EMS provider understand their roles in response to scenes such as these. Active participation in drills, planning, and system-wide responses to acts of terrorism are important ways that the EMS provider may be prepared to respond to these types of scenes.

Best Practices for Scene Size-up

- It's best to pay attention to the weather forecast. Being aware of upcoming weather changes can make a difference in patient care at prolonged scenes. It will also provide guidance on which extra clothing or gear may be needed in the ambulance in the event of outdoor calls during inclement weather
- It's suggested that providers perform the scene size-up in the same order every time, and talk with their partner as they do it. For example, start from left to right, top to bottom, and front to back. Communicating what is seen on arrival can help assure both providers in the ambulance are aware of potential hazards.
- Providers should follow their agency's policies for radio transmissions and pay close attention to radio traffic as they respond to the scene. Law enforcement officers will often be first to arrive, and they may give valuable information via the radio about the scene that can provide clues about the nature of the patient's injuries. The first responders to arrive on scene can help other responders by broadcasting a scene size-up on the radio, which communicates important information to other responding units.
- It's best for providers to follow their agency's policies for incident command and scene management when needed.
- Due to the nature of events that cause traumatic injuries, an incident management system should be used at every trauma scene. Annual review and training of incident management system and agency policies are necessary to maintain competency in the command system.

Trauma Assessment

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Good observation, perception, and communication are the best tools the EMS provider can use to effectively perform scene size-up.

General Impression

When approaching a patient from a distance, form a quick general impression of the patient's sex, weight, age, activity, and position (SWAAP). The general impression will help the EMS responder determine the patient's level of consciousness and decide whether they are in apparent distress or have any obvious life threats. While determining the patient's level of consciousness, the Glasgow Coma Score is calculated.

This general impression can help the EMS provider decide if immediate actions are needed, such as hemorrhage control.

Best Practices for General Impression

- Experience as an EMS responder will help providers develop memory of patients who were in severe distress and how they appeared during the general impression. EMS providers should consider their "gut feeling" when approaching a patient and determining the priority, then use a validated scoring tool to determine priority and transport destination.
- It's important for providers to quickly identify patients with a poor general impression as high priority. Some examples of poor general impression include altered mental status, major bleeding or other life threats, obvious multi-system trauma, or devastating singlesystem trauma.
- Stabilize life-threatening problems before initiating transport. It is better to perform high-risk ALS procedures, such as endotracheal intubation, prior to the initiation transport. Trying to perform highrisk ALS procedures in a moving vehicle can be detrimental to patient care.
- Evidence from recent trauma research suggests that recognition and treatment of trauma patients in hemorrhagic shock may have the most positive effect on morbidity and mortality. It is imperative that hemorrhagic shock is recognized early in trauma assessment. Recognition of shock can begin during the general impression phase of patient assessment. Look for key indicators of shock. These include

confusion, anxiety, skin pallor, increased respirations, and severe blood loss. Treatment of shock should begin immediately upon discovery or suspicion of shock. Treatment options (based on local protocols) may include:

- Warming the patient
- Oxygen administration
- Warm IV fluid administration
- Pharmacological agents such as tranexamic acid (TXA)

Mechanism of Injury

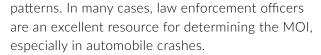
It is important to consider the effects the mechanism of injury (MOI) may have on the trauma patient. During this phase, the information gathered by the EMS responder will be used to form an index of suspicion about potential injuries, or look for injury patterns associated with the mechanism. An example is an adult pedestrian hit in a crash involving a motor vehicle and a motorcycle.

Note: The Centers for Disease Control defines "significant" mechanisms of injury, in which the EMS provider should consider transport to the highest level of trauma care available at www.cdc.gov/mmwr/preview/ mmwrhtml/rr6101a1.htm.

Follow local protocols regarding transport decision criteria, and transport to the most appropriate facility. The EMS provider should be intimately familiar with the resources available for trauma patients in the system. Take into considerations the availability of air medical transportation for trauma patients with life threatening conditions or those with a significant MOI. The early decision to request air medical transport for the trauma patient can save a great deal of time in delivery to definitive care.

Best Practices for Determining the Mechanism of Injury

- Mentally recreating events is often helpful to providers when determining the possible forces their patient may have encountered.
- Providers shouldn't delay patient care or transport of high-priority patients to investigate the mechanism of injury (MOI).
- The EMS team should use their best judgment, scene clues, the physical exam, and resources available to quickly asses the MOI. If the MOI is undeterminable at the time of patient contact, it's best to ask other responders or law enforcement officers to gather that information while the providers the providers focus on physically examining the patient for possible injury



When in doubt about the severity of an injury, transport to the highest level of trauma center available.

Primary Assessment

The primary assessment is also known as the primary survey. It includes the making the following evaluations:

- 1. Level of consciousness (LOC) including the Glascow Coma Score (GCS);
- 2. Airway, breathing, and circulatory (ABC) status;
- 3. Disability (obtained through a brief neurological assessment):
- 4. Exposure by removal of patient's clothing for accurate physical examination;
- 5. Identification of life threats, and
- 6. Assessment of vital functions.

Based on these findings, the EMS provider will assign a priority to the patient and progress into the secondary assessment.

The first priority of the primary assessment is to determine patient's LOC and ABC status. The most effective way to determine the LOC is to ask the patient a question during the approach, such as, "Can you tell me what happened?" The patient's response and ability to speak will help providers determine airway patency, whether the patient is are alert and oriented to their surroundings, and their chief complaint.

If the patient is found to be unresponsive or have an airway obstruction, the airway must be opened and cleared. Ways to do this include positioning through a jaw-thrust maneuver, suctioning the airway, and placing an airway adjunct, such as an oropharyngeal or nasopharyngeal airway device. Some signs of partial airway obstruction include stridor, snoring, or gurgling sounds. The EMS provider must take care to protect the C-spine while manually opening the airway if cervical spine injury is suspected. Consider any patient with a significant mechanism of injury to have possible cervical spine injury until it is conclusively ruled out. Limit the movement of the cervical spine and apply cervical motion restriction devices according to protocols.

As airway patency is assessed, ventilatory (breathing) status can be also determined. The chest should be exposed to look for signs of adequate breathing, such as equal chest rise, adequate rate and depth. Lung sounds should be auscultated during this phase of the primary assessment, and the EMS provider should palpate the chest. The EMS provider should carefully and quickly

look for signs of inadequate breathing. These may include unequal chest rise, accessary muscle use, inadequate rate or depth of ventilations, and abnormal or absent lung sounds. Any abnormal findings during palpation of the chest should give high index of suspicion that the patient may need ventilatory support. These findings include paradoxical movement, crepitus, flail segments, and open chest wounds.

Any abnormal findings or signs of inadequate ventilation must be corrected and managed as they are discovered. Ventilatory support with a bag-valve mask, airway adjuncts, suctioning, and stabilizing chest wounds that impair ventilations are life-saving procedures that may be performed during the primary assessment. Advanced life support providers should be prepared to perform advanced airway management procedures such as intubation, needle thoracotomy, and possible needle cricothyrotomy.

Circulatory status is assessed by palpating a radial pulse, assessing capillary refill, rapidly scanning from head to toe for major bleeding, and assessing the skin condition. Signs of inadequate circulation should lead the EMS provider to suspect shock. Any major bleeding should be managed with direct pressure, pressure dressings, and tourniquets as necessary and allowed by protocols. The EMS provider should initiate shock management for patients who have signs of shock or circulatory deficiency. This may include oxygen administration, warming the patient, fluid resuscitation, and rapid transport. It's important that EMS providers follow their agencies' treatment protocols for fluid resuscitation in the trauma patient.

Consider any patient with an airway, breathing, or circulation compromise a high priority and plan for immediate transport if a compromise or problem with the patient's airway, breathing, and circulation (ABCs) cannot be managed or corrected at the scene.

A brief neurological exam should be conducted during the primary assessment. This exam should include level of consciousness, pupil size and reactivity, speech, and motor function. EMS providers should be proficient in the use of the Glasgow Coma Scale (GCS) and assign a score after performing this brief neurological exam.

Assessment of vital functions is the final component of the primary assessment. The vital functions that should be assessed include pulse, respirations, and blood pressure. These are the baseline vital signs, and they should be obtained as soon as practical during the assessment. In many cases, vital functions are obtained by an EMS team

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Trauma Assessment

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member while the assessment is underway. Other vital functions that may be obtained include ECG rhythm, capnography, pulse oximetry reading, and temperature. This information should be recorded and easily accessible to the patient care provider to monitor changes and trends in vital functions.

After completion of the primary assessment, the EMS provider should re-evaluate the transport priority, and assign a level of acuity. Several systems of patient triage/ priority designation are available, according to system protocols and policies. In most cases, a patient will be determined to be high or low priority and classified as stable, unstable, potentially unstable (e.g., Level 1, 2, or 3). It is important to classify patient acuity using the patient classification system the receiving trauma facility uses; this ensures the patient acuity is clear to the receiving facility. In most trauma systems, a Revised Trauma Score is assigned to a patient based on such parameters as GCS, systolic blood pressure, respirations, and pulse. The revised trauma score system was originally used for triage but has subsequently been used for research and prediction of patient outcome following traumatic injury.

Best Practices for Primary Assessment

Many times, a trauma scene will involve multiple agencies and numerous responders. Uncoordinated efforts between responders can be detrimental to the patient, increase responders' stress, and cause safety risks. Responders must use effective communication and clearly established roles (e.g., incident commander and patient team leader). The patient team leader should lead the assessment and delegate tasks to other team members as necessary. This is because having more than one provider commences assessment can overwhelm the patient and lead to errors in the task.

The same team member assigned to obtain initial vital signs should remain responsible for that task throughout the encounter, if possible. This can create consistency, and trends or changes in vital functions can be more readily recognized. Obtaining vital signs the same way throughout the patient encounter can also create more accurate and consistent trends. For example, if blood pressure is first obtained manually, best practice is to obtain all other blood pressures manually.

Keeping a trauma patient warm is a high priority,

especially those in or suspected of having hypovolemic shock. Moving the patient to a warmer environment before exposing the body is beneficial. Even mild hypothermia in a trauma patient can result in devastating physiologic consequences. Of particular concern is the effect of hypothermia on the coagulation system. The coagulation system is a temperature- and pH-dependent series of complex enzymatic reactions that result in the formation of blood clots to stop internal and external hemorrhage. Simply remembering the phrase "cold blood does not clot" can help providers remember to keep the trauma patient warm. Turning the heat on in the patient compartment early, and limiting the opening of ambulance doors in cold weather are essential to maintain the ambient temperature, and help keep the patient warm. Whenever possible, all fluids and blood given to a trauma patient should be warmed using commercially available fluid and blood warmers. Additionally, a dramatic drop in core temperature can occur when a patient's skin is exposed to ambient temperature for a prolonged time during evaluation.

Distracting injuries, such as gross deformities or **amputations,** can cause the EMS provider to focus primarily on one injury. This can lead to tunnel vision, and cause critical errors in patient assessment. For patients with distracting injuries, assign a team member to provide care to the injury, freeing the team leader to focus on the entire assessment. Airway issues or less obvious life threats are easily overlooked when tunnel vision ensues from a distracting injury.

Conclusion

Trauma is the leading cause of death for persons between ages 1 and 44 years of age, affecting not only people all ages, but also of all races, socioeconomic classes, and genders. Trauma can be simple, affecting only one system, or it can be complex, causing critical multi-system injuries. Due to this wide range of severity and incidence, traumatic injuries can pose prehospital challenges.

A key factor in the survival of a trauma patient is rapid assessment and transport to appropriate trauma care facilities, where trauma patients can get the definitive care. The assessment of trauma patients is not a "one size fits all", and EMS providers must use critical thinking, a standard approach.

The EMS provider should have intimate knowledge of the trauma system in which they provide patient care. Life threatening emergencies such as airway problems or major bleeding should be addressed as they are discovered during the assessment process.



Trauma Assessment

Continuing Education Quiz

IEMSA Current members can earn 1 hour (1CEH) of optional continuing education credit by taking this informal continuing education quiz. You must answer questions 1 through 6 and achieve at least an 80% score.

Deadline: March 31, 2017 Complete this Quiz and:

- mail to IEMSA (CE Test) 5550 WILD ROSE LANE, STE. 400 WEST DES MOINES. IA 50266
- fax to (877) 478-0926
- or email to administration@iemsa.net
- 1. Trauma is the leading cause of death for persons age 1-44.
 - a) True
- b) False
- 2. Multi-system trauma can cause significant challenges for EMS providers.
 - a) True
- b) False
- 2. A systematic approach to assessment of the trauma patient is the best method for EMS providers.
 - a) True
- b) False
- **3.** The GCS is calculated during the secondary survey.
 - a) True
- b) False
- 4. All of the following are appropriate for management of a patient in shock except
 - a. Warm IV Fluid
 - b. Keeping the patient warm
 - c. Pharmacologial agents succh as TXA
 - d. Elevating the feet at 90 degree angle

- **5.** Which of the following would be the EMS provider's priority during the primary assessment?
 - a. Determining what hospital to transport to
 - b. Determining the patient's level of consciousness
 - c. Obtaining vital signs
 - d. SAMPLE History
- 6. Which of the following conditions make a patient high priority?
 - a. Airway compromise
 - b. Breathing compromise
 - c. Major bleeding
 - d. All of the above

NOT A MEMBER--but would like to earn this CE? Join our voice for positive change in EMS by joining IEMSA today. Visit www.iemsa.net, go to our membership page and apply online today at http://iemsa.net/member_account.htm --just \$30/year.

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SPOTLIGHT ON



HAWKEYE COMMUNITY COLLEGE EMS EDUCATION PROGRAM

> Hawkeye Community College is located in Waterloo, Iowa and offers EMS education courses for all levels of EMS providers. The EMS education program was reorganized in 2013 and developed by John Cockrell, who holds a Master's Degree in Adult Education and Training from Colorado State University. John has extensive experience as a critical care flight paramedic and firefighter, and 10 years in EMS education. John is an Iowa native, and his experiences as an ALS provider include Burlington Fire Department, West Des Moines EMS, Lifeguard Air Ambulance, and Med Force Aeromedical.

College credit is given for all EMS education courses at Hawkeye, and students can earn an Associate's Degree in Emergency Medical Services. The paramedic program is full-time, 11-months in length with all credits transferable into the EMS AAS Degree. Students may complete firefighter certification courses for electives in the degree program.

Hawkeye's EMS Club is very active in the community, and at EMS events. The club worked the registration booth at IEMSA in 2015, and at the National EMS conferences in Baltimore, MD and New Orleans, LA in 2016. Paramedic students from Hawkeye competed in the JEMS Games in Baltimore, MD in 2016. They will be working registration at EMS Expo in Las Vegas, Nevada in 2017.

Hawkeye Community College's Paramedic Program is accredited by Letter of Review by the Committee on Accreditation of EMS Programs (COAEMSP). The site visit for full accreditation was completed in June of 2016, with full accreditation anticipated in December of 2016.

Greg Helmuth BA; PM, is the program's full-time faculty and clinical coordinator. Greg has 16 years' experience as an EMS provider, and is also the director of North Benton EMS in Vinton, Iowa.

Other EMS Faculty for the program include: Lee Ridge- Mercy Ambulance; Steve Carey-Air Care 2 and Waterloo Fire; Greg Stewart- Waterloo Fire; Chris Ward- HCHC EMS and Air Care 2; Kristin Eggleston-Waverly EMS; Joe Bonewitz- Altoona Fire; Amber Heller - Allen Hospital; Jason Hernandez- Waterloo Fire; Dave Meiser- Waterloo Fire; Amy Gehrke- Air Care 3; Crystal Shramek- U of Iowa Hospital; Ben Andersen- CARE Ambulance; Mike McElmeel- Iowa County EMS

The medical director is Jeff Wilkins, D.O., Director of Emergency Medicine at Unity Point - Allen Hospital in Waterloo.

Hawkeye offers the Iowa Critical Care paramedic provider program, as well as numerous continuing education opportunities.

> FOR MORE INFORMATION, visit www. hawkeyecollege.edu/go/ems or Contact Greg Helmuth at Gregory.helmuth@hawkeyecollege.edu







MEDICAL DIRECTOR **UPDATE**

DOUBLE SEQUENTIAL DEFIBRILLATION

What a fantastic number of IEMSA members who were able to attend and some outstanding nationally-known speakers who joined us this year at the IEMSA conference. I always get a kick out of seeing some of my old street partners from 15 years ago as well as meeting new people. This year Holly Monteleone, Nick Manning, Titus Tero, and Dan Flynn spoke on Double Sequential Defibrillation (DSD) and the experiences they have had through their work at New Orleans EMS. I think this talk caught the attention of quite a few attendees so I thought now would be a good time to delve into it a little further.

History

Electrical cardioversion or defibrillation in practical use did not start until the 1950s and 60s. The first standard was the monophasic current where the current runs in one direction. The biphasic wave was developed next, in this mode the current runs from one patch to the other for the first half of the cycle, and then back in the opposite direction for the second half of the cycle. Multiple studies in the 1960s found that using a biphasic wave may allow for good effect with a lower current¹. Some of these studies noted that a brief pause in between the pulses may be beneficial, but this was not ultimately incorporated into commercial defibrillators^{2,3}. Chang et al found that not only did separation of a second electrical charge by one millisecond reduce the energy needed for cardioversion, but sending that current through a different pathway (vector) also was important⁴. In 1994 a case series by Hoch et al showed that DSD was successful in defibrillating five patients in whom 7 to 20 standard single shocks were unsuccessful⁵. This case series occurred in patients put into ventricular tachycardia (VT) or ventricular fibrillation (VF) electively in the electrophysiology lab.

Pathophysiology

So why might DSD be beneficial? As was

hypothesized by Chang et al it could be a vector issue. Having the electricity travel in a slightly different pathway during the second shock may stimulate additional cardiac muscle and terminate the fibrillation. It may also be a duration issue where the first shock "primes" the muscle and the second shock then is able to do the work of cardioversion. An alternative theory may just be that more electricity is better. If that were the case, then we would expect that simultaneous defibrillation with higher joule discharges would be all that is needed. However, from some of the earlier studies I mentioned above, total energy delivered seemed to be less important.

Evidence

The first case report demonstrating the application of DSD in out-of-hospital cardiac arrest with neuro-intact survival came from Dr Benjamin Leacock in St Louis in 20146. In this case an obese male had an MI then arrested in front of paramedics. He received excellent compressions, timely airway control and medications, but did not convert with standard electrical defibrillation doses. However, with the application of 2 biphasic 200 J shocks delivered at the same time, the patient defibrillated. A second case report in 2015 notes ROSC after the second dose of DSD with successful delivery of the patient to the cath lab but with subsequent determination of anoxic brain injury⁷. A third case report, also from 2015, demonstrates successful application of DSD after 7 ED attempts of defibrillation with success8. This patient had a prolonged ICU stay but discharged home nearly intact.

So this works great, right? Well, not really. While there have been some case reports demonstrating success as above, there have been several studies looking at refractory VF/VT with application of DSD in out-of-hospital cardiac arrest (OHCA). Cabanas et al reported on a case series of 10 patients in whom DSD was attempted. DSD successfully broke refractory VF/

VT in 7 patients, ROSC was achieved in 3, but none of the patients survived to discharge9. Ross et al reported on 3,470 cases of OHCA in San Antonio¹⁰. In this series there were 302 patients with refractory VF. 23 cases were removed for incomplete data, but of the 279 remaining cases 50 received DSD. When looking at neurologically intact survival, the rate was no different between the DSD group and the standard defibrillation group. Cortez et al reported on 12 patients treated with DSD out of the 2428 episodes of OHCA in Columbus Ohio. Of the 499 cases of VF/VT, 12 were treated with DSD, 9 had successful cardioversion, and 3 attained ROSC¹¹. Two patients had neurologically intact survival. The methodology of these studies is good but when we look at types of research we cannot yet definitively say based on the above data if DSD is beneficial or not nor when it is best implemented. It is also important to remember that a patient who has resistant VT/VF is by default much sicker, so we need studies that give us an apples to apples comparison. Since we do not have that type of study yet, we have to use the best information we have available. It is unlikely that DSD is harmful to the patient, so that is at least one good take-away from these studies.

Method/Steps

So if you want to implement DSD for your patients, what do you do? First, you absolutely need medical director approval and then an order either via protocol or medical control. The delivery of DSD is off-label for your defibrillator and not a part of ACLS guidelines, so this is definitely not standard of care. When you begin patient care, start with high-quality CPR and follow standard ACLS treatment. If you have shocked VT/VF at least three to four times, then you can consider DSD. For the actual mechanics of DSD, you need two monitors. I would recommend placing one set of defibrillator patches Apex-Sternum and one Anterior-Posterior.

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This will allow for two completely different energy vectors. Next charge both devices to their maximum power. Then have one person push both shock delivery buttons at the same time. There will be a slight delay between the machines so the shocks in actuality will be given one right after the other.

If you choose to not use DSD or it is ineffective, there are still other things that can be tried. Continuing standard therapy is the first step. Medications like procainamide do show promise in this setting, although its adoption in the pre-clinical setting is not yet high. This category of patient may also be one in whom transport to a cath lab for intervention with continued compressions is reasonable depending on your location and regional practice patterns.

Take-away

So will I use DSD in the field or ED?

Maybe, if the situation arises where I think it could be beneficial. Should you use DSD? Again, maybe but if you do not use it I don't think you are doing anything wrong. To me this is not a magic fix because we do not have data that shows a benefit, but it is another tool in my toolbox. I do sometimes employ the kitchen sink method of ACLS (take everything including the kitchen sink and throw it at the patient), so when I have a patient with resistant VT/VF I am likely to do everything I can. Just remember the cornerstone of ACLS remains good BLS with high-quality CPR and early defibrillation. As always, please feel free to email me if you have questions about my article or have suggestions for future topics.

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BUREAU OF EMERGENY AND TRAUMA SERVICES

UPDAIL

BY REBECCA CURTISS: BUREAU CHIEF-EMERGENCY & TRAUMA SERVICES

RFP REMINDER

BETS reminds coalitions and interested applicants for RFP 58817011: All-Hazard Emergency Preparedness and Response System Development Grant that any inquiries related to the RFP must be submitted through the Q&A process identified in the RFP. Because this is a competitive process, IDPH staff cannot discuss the RFP with any potential applicants outside of the Q&A process.

NOTICE TO ALL IOWA EMS PROGRAMS AND EMS PROVIDERS

As the Bureau begins the transition to our new registry program, AMANDA, the current System Registry used to access EMS program and individual records will be shut down beginning at 5:00 p.m. Monday December 12, 2016. The system will be unavailable until 1:00 p.m. Monday December 19, 2016. Once AMANDA is available, each EMS program and provider will need to complete a one-time information screen before accessing records. Instructions for accessing accounts will be posted on the Bureau's web page once available.

The EMT-P to Paramedic transition period ends on March 31, 2018.

To transition to the Paramedic level, providers must complete

and submit the Iowa EMT-P to Paramedic Documentation form available at: http://idph.iowa.gov/bets/ems/transition. The EMT-P must complete the training requirements through initial training, continuing education, on the job training or other educational processes and successfully complete the NREMT Paramedic examination prior to the March 31, 2018 deadline.

On April 1, 2018, any active EMT-P certifications will be automatically transitioned to the AEMT level.

EMT-P providers may renew in 2017 at the EMT-P level during this certification cycle. When renewing, the certification will be issued a March 31, 2019 expiration date. However, on April 1, 2018, if the provider has not transitioned to the Paramedic level, the certification will automatically transition to the Advanced EMT (AEMT) level with an expiration date of March 31, 2019

EMT-P providers may transition to the EMR, EMT or AEMT level at any time by submitting a Change of Iowa EMS

Status Application (available at: http://idph.iowa.gov/bets/ems/certification). The new level will become effective when BETS receives and processes the application. Providers who transition to the EMR, EMT or AEMT level prior to renewing will only need to meet the renewal requirements and pay the certification fee, if applicable, of the new level.



BY KERRIE HULL: RN, EMERGENCY SERVICE COORDINATOR-CALHOUN COUNTY



Has this ever happened to a service near you? A page is sent out for XYZ Ambulance; "An ambulance is needed for a patient to be transported for unknown medical." Five minutes lapse and a second page is sent to XYZ Ambulance "an ambulance is needed for unknown medical." Five minutes later a third page is sent "ambulance is needed for unknown medical, anyone available please respond."

Meanwhile your service is 10 minutes away in a neighboring community with a crew able to respond. Do you get the call for mutual aid 15 - 20 minutes after the first call for assistance? When you arrive, the patient and family are angry, "why did it take you so long?" How do you respond?

We have been doing EMS the same way for so long are we not willing to change? Is it such a bad thing to work with your neighboring services to see who has daytime

coverage, who has trouble at night, who can't do weekends and see if agreements can be made with each other to provide a necessary ambulance to the citizens in your communities? Why are some so afraid to work together? We need to change how we do business if we want to keep EMS in our communities. All it takes is getting people to the table to discuss the strengths, weakness and areas where change can happen. It takes people who are not afraid of change and want to continue to make a difference. It doesn't mean giving up your local service it means working together to make several services function even better together.

Start the talk, let's move EMS forward. Work together in the new service areas and show how important EMS is to the health care system.

If you have questions on system standards, system development, or you would like assistance from a member of the Iowa EMS System Standards Committee, please contact Kerrie Hull, khull@ calhouncountyiowa.com or 712-297-8619.