

IEMSA CONFERENCE 2004



IOWA EMERGENCY MEDICAL SERVICES ASSOCIATION

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West Des Moines, IA 50265

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IEMSA

October - December 2004

VOICE



A VOICE FOR POSITIVE CHANGE IN IOWA EMS



2004 IEMSA Conference **6** | Awards **8** | New Board Members **11** | Continuing Education **12**

Iowa Emergency Medical Services Association

Can you live on an EMS paycheck?

That's the question Dr. Bryan Bledsoe asked in the March 2004 cover story for Emergency Medical Services magazine. His answer was a resounding No! Dr. Bledsoe's article points out that EMS is one of the 10 most underpaid jobs in the U.S.

What's a highly trained, life-saving professional like you to do?



Do what you do best!

Stay in the business of helping people save lives. Become a MEDIC FIRST AID Instructor and teach your community first aid, CPR, AED, and other health and safety skills.

MEDIC FIRST AID will provide you with an opportunity that allows you to stay in the field you love, gain valuable community recognition, and most important, supplement your income with real money that you'll feel proud to have earned.

In partnership with the Iowa EMS Association, MEDIC FIRST AID offers you a special, low-cost opportunity to get started as an independent instructor. Contact us or visit our Web site and let us show you how easy it is to get started and earn additional income.



Don't wait. Give us a call now!

Tell us you're with the Iowa EMS Association and we'll help you improve your financial security today

Call 800-800-7099
or visit our Web site at
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Working to be Your "VOICE"

BY JEFFERY D. DUMERMUTH,
PRESIDENT, IEMSA BOARD OF DIRECTORS



It truly has been a pleasure serving the past two years as president of this organization. Through the hard work and dedication of your board members, we have made great strides to establish ourselves as the "Voice" for EMS providers in Iowa.

Over the past year, we have achieved many milestones for our association. In cooperation with the Iowa Department of Public Health — Bureau of EMS, we distributed 163 automatic defibrillators to services throughout Iowa and, in the process of doing so, visited all six regions to get out the message of who IEMSA is and our commitment to you, our members. We have worked to increase the benefits that are available to our members. As a result, accidental death and dismemberment insurance benefits are available to each IEMSA member at no charge. In addition, AFLAC insurance can now be purchased at association rates. For our affiliate members, we negotiated a group purchasing plan for disposable EMS supplies and provided a resource CD. In addition, our corporate sponsorship has grown substantially.

We were forced to examine the position of our Executive Director and, after several discussions, the Executive Committee recommended not to renew the existing contract and to eliminate the position. The board approved this elimination with the understanding that,

as we continue to grow as an organization, we will re-examine the position in the future.

IEMSA also partnered with Iowa EMS training institutions to publish an EMS educational calendar. This calendar

was made available to our conference participants and will soon be mailed to all EMS services in Iowa.

Our 15th annual conference and trade show ended on November 13 and set record attendance levels for the second year in a row with over 1050 participants. We, no doubt, will need to look at another venue for next year's conference due to our ever-increasing growth. What a great problem to have!

IEMSA continues to maintain its financial strength as we enter into an exciting new year of challenge. We also have achieved record membership numbers far exceeding our goal of 2004 members in 2004.

I was excited to see that we had several candidates run for board seats. This proves the strength of our organization. I look forward to working with our new board members and am confident that those leaving the board will remain strong proponents of our organization.

We, the board of directors, commit to being your VOICE for EMS issues in Iowa. Feel free to contact myself or any of the board members to discuss issues that may come up. ■

BOARD MEETINGS:
THE IEMSA BOARD OF DIRECTORS WILL MEET ON THE FOLLOWING DATES IN 2005. EACH MEETING (WITH THE EXCEPTION OF THE ANNUAL MEETING) WILL BE HELD AT THE RACCOON RIVER NATURE LODGE, 2500 GRAND AVENUE, WEST DES MOINES. MEETING TIMES WILL BE POSTED TO THE WEB FOLLOWING THE DECEMBER, 2004 MEETING.

2005 IEMSA MEETINGS

- JANUARY 20
- FEBRUARY 17
- MARCH 17
- APRIL 21
- MAY 19
- JUNE 16
- NO JULY MEETING!
- AUGUST 18
- SEPTEMBER 15
- OCTOBER 20
- NOVEMBER 10
– ANNUAL MEETING
- DECEMBER 15

Additional IMPORTANT DATES:

FEBRUARY 3, 2005
EMS DAY ON THE HILL
7:00 – 9:00 a.m. in West Wing
of the Capitol Building

NOVEMBER 10 - 12, 2005
**ANNUAL CONFERENCE &
TRADE SHOW**
Des Moines, Iowa

News to SHARE

Are you working on an exciting program that needs to be shared with the membership of IEMSA? Do you know of an EMS-related educational program that needs to be showcased? Has your service won an award or done something outstanding? Do you want to honor a special member of your staff or of the community? If so, you can submit an article to be published in the IEMSA newsletter! In order to do this, just prepare a press release (and pictures, if appropriate) and e-mail it to iemsa911@netins.net by the following dates: February 1 (to be mailed February 20), May 1 (to be mailed by May 20), August 1 (to be mailed by August 20), November 17 (to be mailed by December 10).

The Newsletter Committee will review all articles submitted and reserves the right to edit the articles, if necessary.

CONFERENCE 2005

Save the dates!

November 10-12, 2005
Des Moines, Iowa



Iowa Emergency Medical Services Association VOICE Newsletter is Published Quarterly by:

Iowa Emergency Medical Services Association
2600 Vine Street, Suite 400
West Des Moines, IA 50265

**CALLING FOR
EMT'S IN ACTION:**
Please email your
EMT action photos to
www.iemsa.net.





Covenant
Health System



**Paramedic Services
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Covenant Medical Center 3421 West Ninth Street Waterloo, IA 50702 Business Office - (319) 272-7040 www.covhealth.com	Sartori Memorial Hospital 515 College Street Cedar Falls, IA 50613 Business Office - (319) 268-3169
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Board Member ELECTIONS

BY JEFFERY D. DUMERMUTH, PRESIDENT, IEMSA BOARD OF DIRECTORS

Several spirited elections occurred through the month of October for regional and at-large board seats. With the exception of the North Central and Northwest regions, there were contests in all other areas of the state which demonstrates the health of your Iowa EMS Association.

As a result of the elections, we must say goodbye to Bill Fish, SW Region and Brian Jacobsen, SE Region who were not re-elected. Kay Lucas, SW Region and Judy Rurup, NC Region did not run for re-election. Kirk Dighton, NE Region; Roger Heglund, SC Region; Tom Summitt, SE Region and Melissa Sally-Mueller, At Large Representative were re-elected for two more years. The new board members will be seated at our December meeting and are as follows:



Marianne Willenborg: Marianne has been the EMS Coordinator for Shelby County Emergency Services Association since 2003. She moved to Shelby County in 2002 and joined Irwin Fire & Rescue. Prior to that, Marianne was the on-campus instructor for SCC Fire Services Building; rescue captain and training officer for Weston; as well as an active member of NEMSA & NE Instructors Society. She also taught EMT-B classes in rural Nebraska communities, belonged to the Weston Volunteer Fire and Rescue and was a CNA at Saunders County Hospital in Wahoo, Nebraska. Marianne will represent the SW Region.

Volunteer Fire Department. Doug has worked in emergency services for 6 years starting while on active duty with the U.S. Army where he earned the Dept. of Defense Outstanding Volunteer Service Medal for volunteer work in Fire & EMS. Doug also sits on the steering committees for the SW Region (Reg. IV), HRSA and CDC, as well as the Medical Reserve Corps. Doug is dedicated to improving support and opportunities for our EMS services in Iowa, and specifically, with our numerous volunteer agencies that give so much to this state and our citizens. Doug will represent the SW Region.



Linda Frederiksen: Linda was recently named the Executive Director at MEDIC EMS in Davenport, formerly serving as this agency's Quality/Education Coordinator since 1995. A registered nurse and nationally registered paramedic, Linda has been involved in EMS in Iowa for 10 years, having been an active member of IEMSA for over 6 years. Linda was the original IEMSA representative for the state SEQIC Committee and also serves as Iowa Regional Faculty for ACLS and PALS. Linda was a presenter at the 2003 IEMSA conference, as well as nationally for the past several years at the JEMS "EMS Today" conference. Linda will represent the SE Region.



Tammy Snow: Tammy is a full-time Paramedic Specialist/Administrator for Algona Emergency Medical Service in Algona, Iowa. She is active with the Kossuth County EMS Association serving on the grant writing committee and assisting the local community college with EMS continuing education and EMT classes. Tammy will represent the NC Region.



Doug Reed: Doug is EMS Coordinator with the Pottawattamie County Emergency Management Agency. He is a Firefighter/EMT-I/Training Officer with the Oakland

Contact information will be updated on our web-site by the time of this publication for all of our current Board of Directors.

IEMSA CONFERENCE 2004

A huge success due to you

BY LORI REEVES, CONFERENCE PLANNING COMMITTEE CHAIR

With the numbers freshly tabulated, I'm happy to report that this year's conference attendance once again exceeded last year's record. Nearly 1,100 of you attended one part or another of the conference. All I can say is.....WOW!

As I sit back and reflect on the conference, my thoughts of its success do not go to thoughts about details of the conference – not the speakers, or the meals, or the exhibitors, etc. When I think about the conference, I think about how the growth and success of the conference reflects the growth and success of EMS in Iowa. This year's record attendance says not only a world of things about the

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quality of the conference itself, but also about the Iowa EMS Association and the advancement of EMS in Iowa. And to what is that success due? You!

You come to the conference because you want to be a better patient provider,

because you want to stay abreast of new developments, because you want to see new products, because you want to network with other EMS providers. Together, we are becoming bigger; we are becoming stronger. This year's records are recognized not only for conference attendance, but for IEMSA membership. EMS is becoming a group to be recognized in Iowa. Legislators are starting to listen, the media is listening, local governments are listening. We are gaining the "voice" we have strived to obtain.

Where do we have yet to go? Only up, I hope. I feel very proud to be a member of the EMS profession in Iowa. I am proud to be a member of IEMSA. I'm proud to be one of you.



MEDIC EMS NAMES *Linda Frederiksen Executive Director*

The MEDIC Emergency Medical Services Board of Directors named Linda Frederiksen as the Executive Director of MEDIC EMS. MEDIC EMS is the 911 emergency and non-emergency paramedic ambulance service provider for Davenport, Bettendorf, northern Scott County, and surrounding communities, and a non-emergency ambulance service provider for Clinton Iowa and the Illinois Quad Cities. MEDIC EMS runs approximately 20,000 ambulance calls per year. Ms. Frederiksen had been the interim Executive Director since June, 2004.

Linda Frederiksen has been with MEDIC EMS since 1995, and is a Nationally Registered Paramedic and Registered Nurse, holding a Bachelor of Science in Nursing from the University of



Illinois. Linda's background includes extensive experience in emergency nursing, quality assurance and Emergency Medical Services education. Involved with continuing education at local, state, and national levels, Linda has been a speaker at the annual

Iowa EMS Association Conference in addition to coordinating and presenting nationally at the past two Journal of Emergency Medical Services "EMS Today" National Advanced Life Support Core Content Programs. Linda has also completed the American Ambulance Association's Ambulance Service Management (ASM) Certification Program.

FOR MORE INFORMATION, CONTACT
JERRY WILLIAMS, COMMUNITY RELATIONS
MANAGER, MEDIC EMS.



Steve Mercer HONORED

Steve Mercer received the prestigious and well-deserved Scott Frame Memorial Award from the National Association of EMTs, Division on PHTLS at its annual meeting in October. Given to only the 3rd international PHTLS Instructor, this honor was awarded to Steve for his nearly 20 years as a State, Regional and International PHTLS Instructor, Author and National Committee member. Steve had been the Education Coordinator during the time that PHTLS had seen its most explosive growth. This growth was due, in part, to Steve's professional guidance in the development of the PHTLS text and ancillaries.

Since Steve couldn't attend the meeting in Atlanta, he was notified of the award by telephone from the National Convention, and the announcement and his comments were broadcast to the audience in attendance. Will Chapleau, Chair of the PHTLS Division recently traveled to the IEMSA Convention in Des Moines and brought the award to present in person to Steve at the Awards luncheon. ■

WEST DES MOINES EMS Re-Accredited by CAAS



The Commission on Accreditation of Ambulance Services (CAAS) Panel of Commissioners granted accreditation to eleven agencies at their July 6th meeting. Four agencies were accredited for the first time and seven, including West Des Moines EMS, were re-accredited. There are now 92 CAAS-accredited agencies in a total of 30 states across the country.

To obtain information about CAAS, visit their web site at www.caas.org.

Outstanding EMS Providers

BRUCE THOMAS, AWARDS COMMITTEE CHAIR

Each year at the annual convention, the Iowa Emergency Medical Services Association has an opportunity to recognize individuals and services that have made outstanding contributions to the EMS profession. Below is a recap of the awards presentations made at the Awards Luncheon on Friday, November 12th, 2004.

service to Northeast Iowa, Southwest Wisconsin and Northwest Illinois. Heartland EMS is active in training and education in the tri-state area. Individuals have completed the critical care paramedic program and assist members of the surrounding community in CPR re-certification, First Aid, child safety seat inspections and AED training.

Most recently, this service established a shuttle service to assist both ambulatory and wheelchair clients. Blood pressure clinics are routinely given to educate the public on risk factors. As an additional service to the community, a quarterly newsletter is distributed to assist with

EMT-I. During his early years, he was active in CPR training and instrumental in the 1980 University of Iowa Defibrillation study leading us to our current leading role in pre-hospital care. As a contractor by profession, Dick played a key role in the designing, supervising and construction of the current EMS facility. Dick has been quite active in providing aid at school athletic events and serves as a mentor for new members. Dick is always willing to help and always willing to serve.



Palo Alto County Ambulance

EMS education.

The 2004 Volunteer Service of the Year award was presented to Palo Alto County Ambulance Service. This organization of 80 volunteers provides transport service for the cities of West Bend, Emmetsburg, Graettinger and Ruthven. In addition to serving the citizens of the county, the volunteers have committed their time to community service. Unquestioned commitment to school and civic organizations identify this service as true volunteers. They serve as an example of the good things that can come from cooperation and coordination of services. Truly a progressive service positioned for the future. This Service is more than just someone waiting for a call. These members have committed themselves to individual improvement, community education and community involvement.

Heartland EMS Service of Dubuque, Iowa was presented with the Career Service of the Year award. This highly visible service provides non-emergency and advanced life support



Heartland EMS



Dick Bullard

The Individual Volunteer of the Year award was presented to Dick Bullard of the Durant Volunteer Ambulance Service. Dick began his tenure with EMS in 1978 as an EMT-A and eventually obtained his certification as an



Scott Gavin

Scott Gavin of the Dallas County EMS was presented with the Career EMS Provider of the Year award. As a Paramedic Specialist, Scott currently serves as assistant director of Dallas County EMS. His leadership and enthusiasm for EMS have benefited those who come in contact with him. His training allows him to give guidance and direction to others in the administration of services in the community. In addition to his full time duties, Scott volunteers with other services and maintains a strong foundation as a role model. A phrase in a nomination speaks volumes for Scott's ability and the respect of his peers. Simply put "Scott is the go to guy."

The Part-Time EMS Instructor of the Year award was presented to Dave Staner of Earlville, Iowa. Dave is a Paramedic Specialist and EMS Coordinator at Regional Medical Center in Manchester. It has been said that Dave is one of those rare instructors who has the gift to teach at his students' level. Whether in the classroom, emergency

room or the back of an ambulance, Dave is always ready and willing to share his knowledge in hopes that what his students do will make a difference in the lives of our family and friends. Flexibility, subject knowledge and compassion for EMS are traits that help Dave in his work today. The learning extends beyond the four walls of the classroom. According to his students, his "psych" counseling has made the difference. I am sure that each of us who have been in this business for an extended period of time can appreciate the special attention when conditions merit. Dave has the ability to motivate individuals to excel.



Kerry Gramenz

Kerry Gramenz was presented with the Full-Time EMS Instructor of the Year. As an instructor with the Mercy School of EMS, Kerry manages the ACLS courses for Mercy Medical Center and is a widely recognized authority on cardiovascular care. Kerry's enthusiasm and dedication are clear in his commitment to EMS. His efforts as an instructor have advanced the science and standing of pre-hospital care in our state.



Terri Routier & Megan Norem Accepting the Part-Time Instructor of the Year Award for Dave Staner



Ellie Cadam

The "Friend of EMS" award was presented to Ellie Cadam of West Des Moines. Ellie spent a career assisting and caring for those of us in EMS. Prior to her retirement as an emergency department nurse at Iowa Methodist Medical Center, Ellie took an active role in EMS provider education by serving as preceptor and mentor. Her concern for patient care was reflected in her efforts to make a difference. Unfortunately, those of us involved in EMS recognize there are times when hospital and pre-hospital providers do not speak the same language. As a long-time EMS liaison, Ellie has made a difference in emergency care in Central Iowa by bridging the gap between pre-hospital care and those outside the controlled chaos.



Mark Frese

Mark Frese of the Davenport Fire Department was presented with the 2004 IEMSA Hall of Fame award. Mark has been a faithful servant of EMS for almost 30 years, serving in many capacities. During the infancy of IEMSA, Mark served as a member of the Board of Directors. More importantly, Mark has been a vital cog in the development and operation of the Davenport Fire Department. The transi-

tion from responding to resuscitator calls to a Paramedic non-transport service has not always been easy, but change was necessary in the growing Quad City area. Under Mark's leadership, the department expanded the scope of responsibility to the community by participation in the Quad City Safe Community injury prevention program. Responding to over 8000 calls for EMS, commitment to excellence is a way of life. Through the timeless efforts and unquestioned commitment, Mark has led EMS to new levels in Southeast Iowa.



Pat Raynor, wife of Kenneth C. Raynor and Traci Smith, East Poweshiek Ambulance Service Accepting the Star of Life Recognition in honor of Kenneth C. Raynor

The Star of Life is given to an individual who has made outstanding contributions to humanity in general and EMS in particular. It also recognizes the fact that EMS has lost someone special. The recipient's name, along with the previous award recipients, is engraved on a plaque that will be displayed at the IEMSA booth. This year, the Star of Life award recognized Kenneth C. Raynor of Brooklyn, Iowa. Ken passed away unexpectedly in December of 2003. Ken was the stabilizing force with the Poweshiek County EMS Association. For over twenty-five years, Ken was the person to call regarding questions and issues on all facets of EMS. His expertise ranged from education to patient care and from administration to interpersonal relationships. Ken was special in his commitment to others, donating countless hours to attend meetings, teach classes, and share with others. Ken will be forever missed and never replaced.

To nominate an individual or a service for one of the IEMSA Annual Awards, visit www.iemsa.net to obtain the nomination form or request one from the IEMSA office at 515-225-8079 or iemsa911@netins.net. Nominations for next year's awards will be accepted from now until September 24, 2005.

THE IEMSA MEMBER RING

In recognition of the men and women in EMS that service its citizens, the Iowa Emergency Medical Services Association proudly announces its new IEMSA member ring!

Throughout history, the ring has stood as a symbol of power, authority, commitment and prestige. In light of this, the IEMSA, in cooperation with premier ring manufacturer MTM Recognition, have developed an IEMSA member ring that all members can wear with pride and honor!

The IEMSA Member Ring is made in the same MTM Recognition plant that produces countless championship rings for the professional sports world. Master craftsmen transform precious gold into an IEMSA ring that is a work of art, with deeply detailed and modeled shanks, antiqued background and a specialized hand-polished finish. Your ring can also be personalized with initials engraved inside the ring.



ORDERING INSTRUCTIONS

Because each ring is custom manufactured, ALL INFORMATION MUST BE COMPLETED before your order can be processed.

Initials of Full Name _____
(Note: engraving accuracy is dependent on legible instructions)

Ring Size _____
(Note: accuracy is dependent on legible instructions)

METAL FINISH & STYLE

- | | | |
|------------------------|---|---|
| Titanium gold Finish | <input type="checkbox"/> Man's \$158.15 | <input type="checkbox"/> Woman's \$158.15 |
| Stainless Steel Silver | <input type="checkbox"/> Man's \$128.15 | <input type="checkbox"/> Woman's \$128.15 |
| 10-kt. White Gold | <input type="checkbox"/> Man's \$330.00 | <input type="checkbox"/> Woman's \$235.65 |
| 10-kt. Yellow Gold | <input type="checkbox"/> Man's \$330.00 | <input type="checkbox"/> Woman's \$235.65 |

PAYMENT OPTIONS

 Please choose ONE method only

- Cashier's Check made payable to MTM Recognition
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Card # _____ Expiration _____

Cardholder Name _____

Ring Price \$ _____

Your local sales tax \$ _____

Shipping/Insurance \$ 10.00

Total Due \$ _____

PURCHASER INFORMATION

Name _____

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Home Phone (with area code) _____

Signature _____

SHIPPING INFORMATION

 check if same as above

Name _____

Address (No P.O. Box) _____

City/State/Zip _____

SPECIAL INSTRUCTIONS

- Order Cancellation A cancellation charge of 50% of your total will be assessed for the cancellation of any order
- Delivery Allow 4-6 weeks from receipt of order
- Incomplete Order Forms Will be returned for clarification
- Multiple Orders Please order one ring per order form. You may copy or duplicate this form as necessary.

SEND COMPLETED ORDER FORM TO:

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Questions? Please call (515) 276-2722

Welcome New IEMSA Members

AUGUST - OCTOBER, 2004

CORPORATE:

Alliance Medical, Inc.
Covenant Ambulance

Sartori Paramedics
ZOLL Medical, Inc.

AFFILIATE:

Marshalltown Area Paramedic Service
Mercy Special Events Paramedics

Oakland Rescue
Pottawattamie County EMS Association

INDIVIDUALS:

Belinda Adkins
Windy Albert
Linda Albright
Payne A. Allen
Curt Ambrose
Eric Anderson
Doug Anderson
Michelle Andrews
Rick Anthofer
Debra Beach
Peggy Beavers
James W. Belden
Clifford Bell
Bryon Bellinger
Mike Bonser
Michell Bose
Ted Broman
Dave Bruce
Andrea L. Bryant
Bruce B. Bryant
Harry Burke
Angela Burmeister
Gary A. Burnison
Ronad Calhoun
Greg Carr
Chalet Carroll
Diane Cassady
Julie Chaloupka
Charles Cleveland
Gordon Conklin
Lisa Cooley
Corey Cooper
Becky Cornia
Vicky Coville
Cynthia L. Crawford
Wayne Crist, Jr.
Larry D'Abale
Chris Dahlstrom
Sara M. Davis
Robert E. Davison
Darren De Groot
Dwayne B. De Groot
Kevin DeGroot
Bobbie DeHart
Douglas DeHart
Leon DeJong
Julie A. Delzell
Dan Dentmeyer
Heidi Dentmeyer
James M. Diesburg

Gerald Dolf
Brian Donaldson
Deborah Dovel
Joseph E. Downing
Jerry Driscoll
Anthony Eblen
Kristina Eggleston
Roger A. Ericksen
Terry Erickson
Gina Esslinger
Doug Fahn
Kevin Fallis
Shane Matthew Farmer
Robert M. Farnum
Ronald Fink
Mark Fink
Kim Flemming
Julie Followill
Rena Frame
Shannon Frink
Ryan From
Connie Fuller
Christina Garr-Kime
Catherine Garron
Butch Gibbs
Susie Gibbs
Michael Gleoves
Liisa Gosch
Dave Green
Jason Griffin
John Grunwald
Glen Hammerstrom
Robin Hammill
James Handy
Matt Harman
Madelon Harms
Merlyn E. Harringa
Francis Harry
Amy Haus
Rita Heithoff
Mark J. Heitman
Jason Hernandez
Debra Herrick
Mark Heuer
Maureen Heuer
Ryan J Hoekstra
Dennis Hoffman
Kevin Holben
Lynda Holliday
Steve Hopkins

Doug Houghton
Daniel Howlett
Lynnette Hughes
Susan A. Ibeling
Judy Jacobsen
Jacqueline Jelsma (6/04)
Charles J. Johnson
Timothy L. Jurgens
Jolene Kahler
Kelly Kay
Chris Keller
Cynthia A. Kelley
Joni Kelley
Ron Kenkel
Mark Kime
Greg Kinsey
Skip Kirkwood
Sue C. Klenske-Mincks
Jason P. Kling
Carrie Klopfenstein
Jacqueline Kramer
Benjamin Kurka
Dennis Langguth
Dave Leach
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Collette M. Leduc
Wayne Lee
Dawn Lentz
Nels A. Lindquist
Cassandra Lippincott
William R. Livengood
Christina M. Ludwig
Joseph Ludwig
Sue Ludwig
Andrea Maassen
Heather Mace
Tom Mackey
Linda K. Maitlund
Jason R. Marrinan
Al Marshall
Mary Martin
Chris McCulley
Mark McCulley
Michael K. McElhinney
Jeremy McGrath
Heather McKimmin
Brad Meendering
Merrill Meese
Nancy Merges
RaeAnn Meyer

Jean Michelsen
Jeremy Milani
Brent Miller
Jennifer Miller
Lori Miller
Suzanne Miller
Cassie Miller
Becky Miller
Robbie Minnaert
Ruth Moore
Micah Morris
Noble Tommy Mothershead
Julie R. Munson
Robert Myers
Mike Naderman
Gillian Nebelsick
Vicki Nelson
Wendy R. Nevins
Alex Olson
Julie Olson
Reaff H. Ottesen
Jason Parlee
Tom Pauscher
Rich Pentico
Craig Peterson
Susan L. Peterson
Harold Peterson
Rick Pickering
Jeff Pierce
Laura Pierce
Kelly Pilling
Tim Pound
Connie Pugh
Joe Rawson
Denise Reavis
Jeff Recker
Doug Reed
Phil Reed
Jerome A Richter
Jeff Roberts
Jamey Robinson
Robert Rogers
Chase Roller
Taunya Schipper
Kelly Schreiner
Dennis L. Schroeder
Sara Schubert
Pam Schwabe
Michael Sellers
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Sheila Wenger
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James S. Wettestad
Melanie Whitehill
Matthew Whitis
Jason Whitten
Lisa Wilcox
Jacqueline Williams
John Williams
Donald Winkler

CONTINUING *education*

ANHYDROUS AMMONIA — THE BURNING TRUTH

LORI REEVES, BA, EMT-PS/ CCP,
*Lori is the EMS Training Program
Coordinator for Indian Hills Community
College in Ottumwa, a staff Paramedic
Specialist for Ottumwa Regional Mobile
Intensive Care Services, and one of the IEMSA
Board Members.*

ANHYDROUS AMMONIA THE BURNING TRUTH

OBJECTIVES:

Upon completion of the lesson the student will be able to:

- list at least two sources, legal or illegal, for anhydrous ammonia use
- identify the physical characteristics of anhydrous ammonia
- list effects of ammonia on the human body based on the concentration of the ammonia exposure
- define anhydrous
- understand the chemical make-up and reactive properties of anhydrous ammonia
- list body areas most susceptible to anhydrous ammonia injury
- recognize signs of anhydrous ammonia presence in the environment
- identify protective clothing needed when responding to an anhydrous ammonia exposure call
- identify appropriate treatment of a patient with an anhydrous ammonia exposure
- review the Palmar method for determining the % of body surface area burned

Anhydrous ammonia — we have all seen tanks of it either stored at co-ops or used in fields in the spring and fall. Here in Iowa anhydrous ammonia tanks are every day sites as farmers apply anhydrous ammonia to their fields, giving the soil a rich supply of nitrogen. Even though it is common, anhydrous has the potential to be one of the most dangerous chemicals used in agriculture today. Additionally, anhydrous ammonia is one of the key ingredients used in the manufacture of methamphetamines. Although most accidental exposures have previously involved improper handling or equipment failure when anhydrous was transferred from tank to tank for agricultural use, the theft of anhydrous ammonia for clandestine purposes is resulting in more frequent ammonia leaks and injury. When illegally transferring ammonia, individuals not trained in its usage have often placed ammonia in improper storage containers such as thermoses, insulated coolers, or portable propane cylinders. When placed in portable propane cylinders, the ammonia attacks the brass fittings and can cause leaks. In their haste, thieves have left valves open, broken locks and inadvertently ruptured hoses exposing themselves and others to the ammonia. As well, stolen ammonia is often transported in dangerous conditions, such as in the back seats and trunks of vehicles. Do you really know what ammonia is, or what it can do? Are you ready for your next ambulance call for a patient with an ammonia exposure?

At standard temperatures and pressure, anhydrous ammonia is a clear, colorless gas with a very characteristic odor. The odor is the strongest safety feature of the gas. When used as a fertilizer,

anhydrous ammonia has a concentration of about 1 million parts per million (ppm). A concentration of only 2,500-5,000 ppm can result in death. At levels of 5,000 ppm a person is paralyzed so that escape is impossible and suffocation results. Anhydrous ammonia's odor is its built-in safety factor — you can't stand to breathe it. At only 50 ppm concentration, one sniff alerts you as to what is in the air and normally, the odor will drive a person away from the area. No one able to move will voluntarily remain in a concentration of anhydrous ammonia gas. When people receive injury from the product, it is usually because of a sudden release of it where the patient was unprotected or unable to escape. The following table gives examples of the effects of various concentrations of anhydrous ammonia vapor on the human body.

(See Concentration of Anhydrous Ammonia chart to the right)

Anhydrous ammonia is a liquid when compressed or cooled. When used as an agricultural fertilizer, ammonia is commonly compressed into its liquid form resembling water. Normal above-ground storage of ammonia is accomplished through the usage of uninsulated pressure storage tanks (fixed) and nurse tanks (mobile). When anhydrous ammonia is released from compression in a storage tank and shifts from its liquid state to that of a gas, its temperature drops from 100° F to -28° F. At this temperature, ammonia will freeze-burn the skin on contact. It will cause burns similar to, but much more severe than those caused by dry ice. The sub-zero temperature of escaping anhydrous ammonia can literally freeze clothing to the body.

Anhydrous means “without water” (an = without, hydro = water). Ammonia

Concentration of
ANHYDROUS AMMONIA

VAPOR PPM (Parts Per Million)	EFFECTS ON THE HUMAN BODY
50	Detectable by almost all persons. Some people complain of nose irritation after 5 minutes of exposure.
135	Most people experience dryness and irritation of nose, throat and burning of the eyes.
700	Coughing. Severe eye irritation, if not treated, may lead to partial or total loss of sight.
1,700	Serious lung damage, death unless treated.
2,000	Burns and blisters skin after a few seconds of exposure.
5,000	Death by suffocation within minutes.

is a simple compound containing the elements of nitrogen and hydrogen. It is a hydroscopic compound, which means that it not only binds with water but it actually seeks water from the nearest source. Due to this affinity or “magnetic” attraction, it will literally suck or pull water from any available source, including human cells thus dehydrating them. Remember, the human body is 60% water — a ready water source. When anhydrous ammonia comes in contact with moist living tissue the cells are quickly dehydrated and the tissue destroyed.

As well, once ammonia comes in contact with water it rapidly combines

with it to form ammonium hydroxide, a caustic alkaline solution which is a component of lye. ($\text{NH}_3 + \text{H}_2\text{O} \rightarrow \text{NH}_4\text{OH}$). This resultant compound causes severe alkaline chemical burns. The skin is reduced to a soapy-feeling, sticky, gooey substance as the chemical burn progresses. Tissue damage from alkali solutions is caused by a process called liquefaction necrosis. In the case of ammonium hydroxide, the tissue breakdown liberates more water, thus perpetuating the conversion of ammonia to ammonium hydroxide and extending the injury farther into the tissues. These alkaline burns typically penetrate far deeper and are more severe than those of an equivalent acid. Anhydrous will attack any part of the body specifically the most moist areas - eyes, ears, nose, throat, bronchi, lungs, and skin which is damp from perspiration; arm pits, groin, forehead, scalp and feet.

The eyes are continually bathed in moisture as well as being comprised of 80% water. Anhydrous ammonia will seek out this moisture. The ammonia extracts the fluid and destroys eye tissue within minutes. Liquefaction necrosis can lead to globe perforation. The burns can result in damage to the eyes causing disfigurement, cataracts, glaucoma, vision loss and possibly blindness. If the eyes have been exposed to anhydrous ammonia they must be immediately and continually flushed with water. Initially, it may be necessary to force the victim's eyelids open after the exposure. The ammonia trapped under the eyelids must be flushed out with water or it will continue to burn the eyeball and related tissues. Patients may present with edema, erythema (redness), lacrimation (tearing), burns, semi-dilated or fixed pupils.

Because of its high water affinity, when inhaled, ammonia has a tendency to be more absorbed by the water-rich mucosa of the upper respiratory tract. However, unlike most highly water-soluble irritant gases that tend to affect exclusively the upper respiratory tract, ammonia can damage proximally and distally in the lower respiratory tract. This results in the destruction of cilia and the mucosal barrier to infection. Furthermore, secretions, sloughed

epithelium, cellular debris, edema, and reactive bronchial smooth muscle contraction (bronchospasm) cause significant airway obstruction. Damage to the respiratory system is proportional to depth of inhalation, duration of exposure, and concentration.

When responding to an ammonia exposure call, scene safety must be the EMS provider's first concern. Knowing that anhydrous is present in the scene may not always be readily evident. There are clues however to watch for. The odor of ammonia may be the first indication of its presence, but remember high enough concentrations can paralyze and prevent escape. Additionally, as with all hazardous materials, if a responder is close enough to smell the material, they are already too close. Ammonia gas will quickly turn vegetation brown. If it's a time of year where the vegetation is expected to be green, then look for brown vegetation. Also be alert for any animal or bird kill, which may have resulted from exposure to the ammonia gas in a release. When concentrated ammonia is released into the atmosphere it forms a white smoke because it freezes the moisture in the air. EMS teams should scan the scene from a distance looking for these signs.

Firefighter turnout gear does not provide protection from ammonia gas or liquid, although SCBA will protect the respiratory system. Responders to incidents involving an active anhydrous ammonia leak who will be walking into the cloud of escaping ammonia will require Level A chemical protective clothing as well as SCBA to protect them. Even with such protective clothing, escaping ammonia will be very cold and no protective clothing protects responders from the severe cold and freezing capability of the liquid. A two-cartridge respirator is only effective for exposure levels of less than 300 parts per million. Canister type respirators may be effective for longer periods at higher concentrations, but without skin protection walking through an ammonia cloud is not advisable.

The key treatment for patients exposed to ammonia is to flush, flush and flush more with copious amounts of water. EMS providers should be prepared to

maintain a steady flow of water over the affected area(s) for up to 20-30 minutes or until the victim is delivered to the Emergency Department. Many EMS services do not carry a sufficient supply of water to do this. Five gallons of water flowing in a pencil-sized stream will last only approximately 7 minutes and a pencil-sized stream will flush only a very small area of tissue. By regulation, every mobile nurse tank of ammonia is required to carry a supply of water specifically for flushing. Even with this and only if available, it may not be enough. Also, remember that if the supply of water was open and in the vicinity of a leak, due to ammonia's high affinity for water it may have absorbed enough ammonia from the air to form a caustic aqueous ammonia solution. This could aggravate the damage if used in the eyes or for washing burns. Never reuse any water already used for flushing as it will have already absorbed anhydrous ammonia and have converted to ammonium hydroxide. EMS services should have pre-determined plans of how they will accommodate the amount of water potentially needed to treat a patient with an ammonia exposure.

Let's review what we have learned about ammonia and look at a plan of treatment for a patient with a pre-hospital exposure:

It is mid afternoon on a sunny, breezy Saturday. It is approximately 80 degrees outside. You are dispatched to a rural address for a patient sprayed with ammonia. Dispatch advises you will be responding to a field where a farmer applying ammonia was sprayed when a hose from the nurse tank ruptured. The farmer's 15 year-old son was with him at the time and called for help on his father's cell phone. The volunteer fire district covering that location has also been dispatched.

Enroute, you hear the fire department leave the fire station on your radio and know you will arrive prior to them. As you approach the location via gravel road, you note the direction the strong breeze is blowing the gravel dust behind you; this will place your approach upwind from the scene. You drive up to the field entrance and with binoculars; your partner surveys the scene. He reports that he sees an ammonia nurse

tank and a tractor at the end of the field. He can see one individual laying on the ground, and another, presumably the farmer's son, kneeling next to him waving madly for you to approach. He also sees a family dog anxiously barking and running around the individual on the ground. He sees no ammonia cloud in the vicinity. You roll the ambulance windows down and smell no ammonia.

NEVER REUSE ANY WATER
ALREADY USED FOR FLUSHING
AS IT WILL HAVE ALREADY
ABSORBED ANHYDROUS
AMMONIA AND HAVE
CONVERTED TO AMMONIUM
HYDROXIDE.

From your assessment of the scene you determine there is no active leak and it is safe to approach the scene. You continue to be alert for the odor of ammonia but detect none. Your response time to the scene has been 8 minutes from your dispatch. The farmer's son races to the ambulance. You ask him if there is still ammonia leaking and he says no, he used a valve to turn it off. What is your first consideration when caring for a patient exposed to anhydrous ammonia?

1) *Immediately remove the patient from the contaminated environment. If the patient is still in an ammonia rich environment, this must be done by someone with appropriate protective clothing and training.*

You determine the ammonia level at this time is safe to work in. You see this approximately 40 year old male lying on the ground writhing around, moaning. His hands are over his face. He is wearing jeans and a short sleeve button-up shirt. His clothes appear wet. You notice a large empty water container nearby. The son relates using the water that was on the tractor to pour on his father. The son relates his father was working with the tank when one of the hoses suddenly began to spray. He was sprayed in the face and chest area before he backed out of the stream. His clothes still smell of ammonia. You think

about the next consideration when dealing with an ammonia exposure.

2) *Remove all clothing. If clothing is frozen to the skin do not attempt to pull it loose. It must be thawed loose first or flushed with abundant water or skin and tissue may be pulled from the victim.*

You instruct your partner to cut the patient's clothes off, being careful not to pull any off that are stuck to the skin. Once removed, he is to double bag them in biohazard bags to contain the vapors. You will concentrate on the initial assessment and assessment of the patient's ABC's. You think onward to your next steps in this patient's management.

3) *Support airway, breathing, and circulation (ABCs) as needed. As with all burns, patients with facial or oral ammonia burns are at high risk for developing laryngeal swelling and possible airway closure. Bronchospasm should be treated with aerosolized bronchodilators. Airway intervention should be aggressive. Indications for endotracheal intubation include severe respiratory distress, stridor, brassy cough and hoarseness. If intubation is necessary, use a large ET tube to prevent plugging by sloughed tissues. To facilitate intubation you may consider conscious sedation preferable to rapid sequence intubation (RSI) because paralysis is risky when dealing with a difficult and edematous airway. Should intubation attempts fail, back-up ventilation of a paralyzed patient may not be possible if the airway occludes. Positive end expiratory pressure (PEEP) is generally useful (5 cm). Combitube insertion is contraindicated if the patient has ingested ammonia or otherwise is suspected of having esophageal damage from the exposure.*

The patient is conscious; he is moaning, but will speak to you when you question him. He coughs occasionally but his voice is clear. You pull his hands from his face and immediately notice burns to his face and neck. You know on a warm day like today ammonia would have quickly reacted with sweaty skin in those areas. His eyes are red and tearing. You look in his mouth, his lips show redness and edema but his airway is clear and he is maintaining his airway on his own. You see no signs of oral cavity or pharyngeal injuries, but realize you must closely mon-

itor these water rich areas. He is breathing spontaneously and does not seem to be having difficulty with inhalation or exhalation phases of respiration. His ventilatory rate appears a little fast but he currently moves adequate tidal volumes. You quickly palpate for a radial pulse and note it to be strong, regular and slightly tachycardic. You see no signs of bleeding. His peripheral skin appears wet (likely from the water his son poured on him) and is warm and pink. You quickly calculate his GCS to be 15. He continues to moan and writhe in pain. Your partner has cut his clothes loose, you instruct him to apply a NRB mask at 15 LPM. The patient relates a chief complaint of eye pain with additional complaints of burning discomfort in his nose and on his face and neck. The fire department has now arrived on scene. Now that your initial assessment is complete, you proceed with your care.

4) *If the patient is sufficiently stable and ABC's are assured, begin copious skin and eye irrigation to affected areas. Continue tissue irrigation for at least 20 minutes. Eyes should be irrigated for 30 minutes or until the pH can be measured and found to have returned to normal.*

You have assessed your patient as stable at this point and decide to stay on scene to irrigate the patient as you do not believe you have sufficient water to irrigate his injured areas enroute. You and your partner assist the patient to your cot placing him supine with the head of the cot elevated slightly. You instruct the fire personnel to provide a hose with low water pressure to flush the patient and ask one fireman to hold the NRB mask slightly off his face to allow flushing of the area under it. You take a liter bag of NS from your supply attaching it to and flushing a set of large IV tubing. To the end of the IV tubing you attach a nasal cannula, also flushing it with fluid. You position the prongs of the nasal cannula one on each side of the bridge of the patient's nose. You place the cannula tubing around the patient's head and tighten and tape the slide to assure it won't slip. You open the IV tubing and let solution flow, flushing the patient's eyes. You direct your partner to hold the

patient's eyelids open and direct a firefighter to hold up a towel shading the sunlight from the patient's eyes. You glance at your watch for the current time.

BY REGULATION, EVERY
MOBILE NURSE TANK OF
AMMONIA IS REQUIRED TO
CARRY A SUPPLY OF WATER
SPECIFICALLY FOR FLUSHING.

As your patient is being flushed, you obtain the following vitals and additional information from the patient's son: BP 140/88, ventilations 28/min., pulse 104, SaO₂ 98%, The patient has NKA, takes no medications, has no previous medical history. He last ate a full breakfast at 7 a.m.

You begin your physical exam at the patient's head. As you palpate his face you note the characteristic "soapy" feeling to his skin you know occurs with alkaline burns. Examining the patient's eyes you note severe redness to the conjunctiva of both eyes. His left eye appears to have some tissue damage extending below the surface of the conjunctiva but you do not note a disruption in the globe of his eye. You alert your partner to pay particular attention to not apply pressure to the patient's eyes as he holds his eyelids open. The patient's pupils appear reactive and slightly dilated at 3-4 mm in the sunlight. You note a combination of superficial and partial thickness burns to the patient's face, neck and upper chest. Using the Palmar method to estimate % of body surface area (BSA) burned, you know the size of the patient's hand is approximately equal to 1% of his BSA. You use this size comparison to estimate this patient has 7% BSA burned. You re-examine the patient's mouth, knowing you need to closely monitor his airway.

You continue your exam noting additional burns to the patient's right forearm where you suspect he tried to block the ammonia spray from hitting his face. The burns extend from his wrist where a distinct glove line is noted, to his elbow on the anterior side. You estimate this

area to be an additional 2% BSA. Except for the eye injuries and areas of chemical burns, the remainder of his physical exam is within normal limits.

Midway through flushing, you again examine the patient's airway. You do not note any new redness or edema. The patient's voice is clear without brassiness or stridor but he continues to cough. You reauscultate lungs and note some fine wheezes. You begin administration of an Albuterol updraft treatment per protocol and make mental preparations in case you need to intubate the patient. You know you will need to use medications to facilitate the intubation since the patient is conscious. You can choose to use either a sedative like Valium or Versed or you can use a paralytic. Your service carries succinylcholine for your RSI protocol. You realize that in this case, succinylcholine may not be your best option. Succinylcholine is contraindicated in patients with eye injuries as it increases intraocular pressure. Additionally, this drug should be used with extreme caution in the burn patient at greater than 12-24 hours post injury due to the ability to increase potassium levels.

You radio your report to your transferring hospital, requesting morphine sulfate to relieve the patient's pain. He rates the pain in his eyes and on his face and chest as an 8 on a 1-10 scale. You receive orders to establish an IV of NS at a TKO rate and administer 2 mg increments of morphine every 5 minutes up to 10 mg total as long as his BP remains adequate. His vitals are reassessed as a baseline prior to the administration of the morphine. You establish an IV in his unaffected arm and administer 2 mg of morphine. You note the time on your watch when you administered the morphine and note that you have now flushed the patient's skin for approximately 20 minutes. You prepare the patient for transport, continuing to irrigate his eyes enroute.

You reassess your patient. His airway remains patent, wheezes have improved and breathing otherwise appears adequate. Vitals are re-assessed. His pain is now 7 on a 1-10 scale and you administer another 2 mg of morphine IV. You have covered his burned areas with dry dressings.

Quiz

POST-ARTICLE

You do note that he occasionally shivers, you cover him with a blanket even though it is a warm day.

5) Remember that copious flushing of the body with room temperature water (70° F), which is almost 50° colder than body temperature (98.6° F), can result in development of hypothermia. Monitor the patient's core temperature. Use tepid water if available or be prepared to re-warm the patient following irrigation.

Before arrival at the emergency department, you administer one more dose of morphine with the patient's pain level a "4" upon arrival. You have to irrigate his eyes enroute, hanging more NS as necessary. Upon arrival, you give additional patient report and release your patient's care. You speak to the emergency room physician a few days later about the patient. He relates that, although the patient will have a lengthy healing process, due to your actions as well as the patient's son's quick thinking, the patient will likely retain his vision.

- 1) "Anhydrous" means:
 - A) with water
 - B) without water
 - C) containing water
 - D) water repelling
- 2) Which is NOT a physical property of anhydrous ammonia?
 - A) colorless
 - B) odorless
 - C) clear
 - D) alkaline
- 3) At a concentration of only 700 PPM ammonia will cause:
 - A) simple nose irritation
 - B) dryness and irritation of the nose, throat and eyes
 - C) coughing, severe eye irritation and if not treated, blindness
 - D) burns and blistered skin
- 4) If exposed, which body area is most susceptible to anhydrous burns?
 - A) eyes
 - B) hands
 - C) face
 - D) armpits
- 5) Anhydrous ammonia has a very high affinity for water meaning it:
 - A) repels water
 - B) separates from water
 - C) attracts water
 - D) vaporizes water
- 6) If walking into a vapor cloud of ammonia, necessary protective clothing includes:
 - A) a two-cartridge respirator
 - B) a canister respirator
 - C) fire turnout and SCBA
 - D) level A chemical protective suit and SCBA
- 7) Anhydrous exposure to the airway can cause all but:
 - A) swelling and edema of respiratory tissues
 - B) sloughing of tissue due to liquefaction necrosis
 - C) reactive bronchial smooth muscle contraction (bronchospasm)
 - D) drying and cracking of the respiratory mucosa
- 8) You are dispatched to an anhydrous ammonia leak at your local agri-coop. As you approach, you note a white vapor cloud and notice nearby weeds appear brown and dead. You should:
 - A) approach as long as the ammonia vapor odor is not too strong
 - B) approach only if you see viable victims
 - C) retreat and alert a trained HazMat team to respond
 - D) put on Hepa masks and tight fitting goggles and proceed
- 9) Skin exposed to anhydrous ammonia should be flushed with water:
 - A) until the patient feels relief
 - B) until your water supply runs out
 - C) for a minimum of 20 minutes
 - D) for a minimum of 30 minutes
- 10) When using the Palmar method to determine % BSA, the patient's palm is approximately equivalent to:
 - A) 1% BSA
 - B) 2% BSA
 - C) 5% BSA
 - D) 9% BSA

ITEMSA

CONTINUING EDUCATION

answer form

CLIP AND RETURN

(Please print legibly.)

Name _____

Address _____

City _____ State _____ ZIP _____ - _____

Daytime Phone Number _____ / _____ - _____

Iowa EMS Association Member # _____ EMS Level _____

E-mail _____

- | | | | | | | | | |
|-----|----|--------------------------|----|--------------------------|----|--------------------------|----|--------------------------|
| 1. | A. | <input type="checkbox"/> | B. | <input type="checkbox"/> | C. | <input type="checkbox"/> | D. | <input type="checkbox"/> |
| 2. | A. | <input type="checkbox"/> | B. | <input type="checkbox"/> | C. | <input type="checkbox"/> | D. | <input type="checkbox"/> |
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| 10. | A. | <input type="checkbox"/> | B. | <input type="checkbox"/> | C. | <input type="checkbox"/> | D. | <input type="checkbox"/> |

ITEMSA Members completing this informal continuing education activity should complete all questions, one through ten, and achieve at least an 80% score in order to receive the one hour of continuing education through The University of Iowa Hospitals' EMSLRC, Provider #18.

For those who have access to email, please email the above information, along with your answers to: adamr@uihc.uiowa.edu

Otherwise, mail this completed test to: Rosemary Adam, University of IA Hospitals and Clinics, 200 Hawkins Drive, EMSLRC So. 608GH, Iowa City, IA 52242-1009

THE DEADLINE TO SUBMIT THIS POST TEST IS **FEBRUARY 1, 2005.**

REFERENCES:

- Agency for Toxic Substances and Disease Registry (5/24/2004) Medical Management Guidelines for Ammonia. Atlanta, GA www.atzdr.cdc.gov/MHMI/mmg126.html
- Baker, D. (1995) National Ag Safety Database Using Agriculture Anhydrous Ammonia Safety. University of Missouri Extension, www.cdc.gov/nasod/docs/0000801-0000900/0000875/0000875.html
- Burke, R. (5/2002) Handling Anhydrous Ammonia Emergencies. Firehouse.com, www.firehouse.com/training/bazmat/studies/2002/05_ammonia.html
- Grieso, R., Morgan, D., Schnieder, R., University of Nebraska Cooperative Extension (8/1998) Using Anhydrous Ammonia Safely. University of Nebraska, Lincoln, Nebraska
- Iowa State University Extension Service. (4/1995) Safe Farm, Promoting Agricultural Health & Safety. Ames, Iowa
- Isley, S. (6/5/2001) Ammonia Toxicity. E-medicine.com, www.emedicine.com/emerg/topic846.htm
- Maher, G. (8/1998) Anhydrous Ammonia, Managing the Risks. North Dakota State University Extension Service, www.ext.nodak.edu/extpubs/ageng/safety/ae1149-1.htm
- Shutske, J. (2002) Using Anhydrous Ammonia Safely on the Farm. University of Minnesota Extension Service, www.extension.umn.edu/distribution/crop_systems/DC2526.html
- United States Environmental Protection Agency. (5/2000) Anhydrous Ammonia Theft. Washington, D.C.

GAME ON

The 81st Iowa General Assembly Convenes

1 | 10 | 05

BY RIC JONES, EMT-PS, LEGISLATIVE CHAIR

IEMSA HAS UNANIMOUSLY APPROVED THIS AGENDA FOR 2005:

The Iowa Emergency Medical Services Association will work for the following public policy measures:

- 1) protection of any and all current language on scope of practice and area of practice for EMS providers;
- 2) provide a permanent funding stream for the provision of emergency medical services for all Iowans. This includes fully funding the Bureau of EMS as well as providing money for training and equipment for individual EMS services in the State;
- 3) provide a system to reward volunteerism in public safety. This might take the form of an Iowa income tax credit or the ability to earn a pension for volunteer service in EMS, Fire or Law Enforcement;
- 4) provide for equity of pensions for public employees in EMS. Currently fire fighters and law enforcement officers under the Iowa Public Employment Retirement System (IPERS) receive a higher retirement benefit earned with fewer years of service than EMS providers;
- 5) provide support for other initiatives and organizations working to improve the health and safety of Iowans;

- 6) require that township trustees provide for EMS in their townships;
- 7) allow the EMS Bureau and EMS Service Directors access to any and all criminal records of any EMS student or provider;
- 8) mandate that Automatic External Defibrillators and trained staff be available at fitness centers and similar facilities in the State of Iowa;
- 9) make it unlawful to sell, own or use traffic signal pre-emption devices unless approved by proper governmental authority; and
- 10) make it unlawful to tamper with medical devices such as public access defibrillators.

We believe that job number one for every elected official is to keep Iowans safe and healthy in their homes, at work, at leisure and in transit. This includes fully funded, well trained and dedicated law enforcement, fire and EMERGENCY MEDICAL SERVICES resources throughout the state.

This is a hefty list of things to accomplish. Here's how we can succeed — each of us has to:

- be politically active;
- attend cracker barrel sessions with your lawmakers when they are home for weekends;
- tell them about your involvement in EMS and the things you and your service need to do a good job;
- tell them that you belong to IEMSA and support their agenda;
- gang up on them (in a nice way – more on that later);
- write, telephone or e-mail your senator

and representatives and share your story. The General Assembly Website-<http://www.legis.state.ia.us/> will help you find the people that represent you; and

- support your local legislators who support us via contributions (every campaign costs money and every campaign contribution is greatly appreciated) and volunteerism (help out with their next campaign).

HERE'S WHAT THE BOARD OF DIRECTORS IS DOING:

- The Legislative Committee has drafted the agenda and the general membership adopted it unanimously at our annual meeting in November. We have again retained the services of Cal Hultman and Associates as our lobbyist.
- We are building synergistic relationships with other interest groups. The Iowa Firemen's Association, 15,500 members strong (contrasted to IEMSA with just over 2,000 members) will be voting to support the IEMSA agenda at their annual meeting. We also adopted a resolution to support theirs. We will work with them to move these issues forward. Our lobbyists will work together as well.

THE REALITY: the State still has serious fiscal woes, and most people feel that though good government costs good money, the government they've got is good enough, especially if better government will cost them more money. There's no easy answer and some of our legislative needs are going to cost real money. Lawmakers will ask you how you think they should pay for our agenda items. Sorry, but that is theirs to fix. It is their job to keep the public safe,

and a good, solid EMS system is a major factor in public safety.

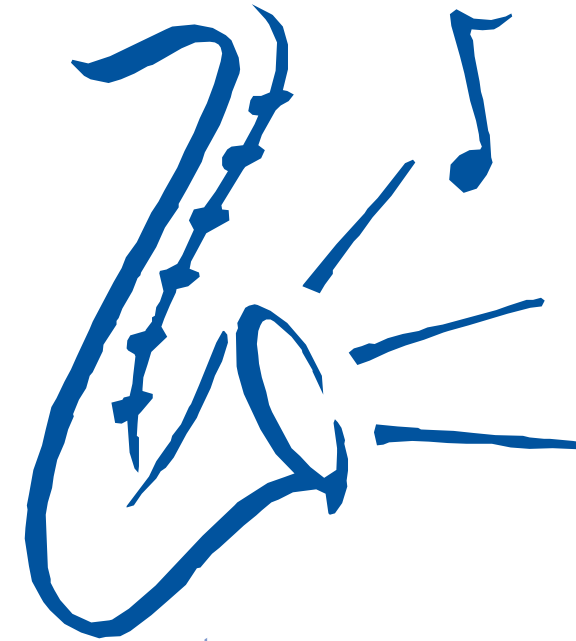
We have a great opportunity to get our message out next February. We can gang up on the General Assembly (very nicely) on February 3, 2005 by being in uniform at the State Capitol Building for our "EMS Day on the Hill" Reception. We will be in the rotunda outside the House and Senate Chambers serving coffee, juice and donuts and meeting with our lawmakers beginning at 7:00 AM. Any providers who would like to bring any items (equipment, print or multi-media material) for this important "show and tell" event are invited to do so.

Following this, the Bureau of EMS is hosting their annual EMS Leadership Conference at the Adventureland Palace in Altoona, just east of Des Moines at 10:00 AM. Though the agenda is not yet set for this one-day conference, Dr. Broeslow (of Broeslow Tape fame) will be the featured speaker. There will also be a session on the legislative process and its impact on the services we provide.

So, mark your calendars: THURSDAY, FEBRUARY 3, 2005 -7:00 a.m., EMS Day on the Hill, followed by the EMS Leadership Conference at 10:00. We promise you an interesting day. ■

If you have any concerns or ideas for us, please let us know.

2005 IEMSA Legislative Committee:
Ric Jones, Chair
Kirk Dighton
Brian Jacobson
Bill Fish



Are There Any MUSICIANS In The House?

Kirk Dighton and Ric Jones are pretty sure that our membership contains sufficient talent to stage a small band of EMS providers to entertain at the 2005 IEMSA Conference dance. Kirk is a steel guitarist and Ric is a drummer. They'd like to hear from you. Style isn't a huge issue as Kirk plays with a country show band and Ric plays with a jazz band. It could be fun and the start of something really big . . . well it could be fun.

Contact Kirk (319-398-6622) or Ric (563-589-4194) if you are interested.

I E M S A M E M B E R I N F O R M A T I O N

F . Y . I .

NEW MEMBER BENEFIT AVAILABLE!

AFLAC Insurance products are now available to Active, Individual members of IEMSA at discounted rates. If you are interesting in finding out more about these products, please visit the IEMSA web site at www.iemsa.net.

ATTENTION IEMSA MEMBERS

Members do not need to submit beneficiary forms for the Accidental Death and Dismemberment Insurance policy annually, unless changes must be made. To update beneficiary information please visit www.iemsa.net, download the beneficiary form from the home page and mail it to IEMSA at 2600 Vine Street, Ste. 400, West Des Moines, IA, 50265.

NOTE TO MEMBERS:

Occasionally, we make our membership list available to carefully screened companies and organizations whose products and organizations may interest you, as well as board candidates who wish to solicit your vote. Many members find these mailings valuable. However, if you do not wish to receive these mailings (via postal service or e-mail), just send a note saying "do not release my name for mailings" to the IEMSA office via fax (515-225-9080) or e-mail (iemsa911@netins.net) or regular mail (2600 Vine St., Ste. 400, West Des Moines, IA 50265). In order to ensure the correct adjustment to our data base, please include your name, address and membership number.

Honoring Our Own...

This year's conference has come and gone, and what a success! Every year this conference seems to get bigger and better. This year a special, new element was added - something that has been a long time in coming. We "Honored Our Own." Before the last day of the conference began, we paid homage to some of our peers who are no longer with us. It was a beautiful tribute which began with our members who are honor guards (Burlington Fire Dept, Clinton Fire Dept and Davenport Fire Dept) presenting the colors along with Gene Wilkerson performing on his bagpipe. A DVD presentation was then shown on the large screen recognizing Iowa members who have died, and then the "last alarm" was rung. The honor guard then proceeded out of the room, with the beautiful song, "Amazing Grace," being played on the bagpipe - a very fitting and moving tribute to our Iowa First Responders, EMTs and Paramedics. Special thanks go out to the Durant Ambulance, Medic EMS and the Muscatine Fire Dept for their assistance with this presentation. To get a copy of this DVD presentation, please e-mail Tom Summitt at thomass@iemsanet.net.

Response to this program has been so positive that "Honoring Our Own" will be repeated during next year's conference

OVER THE YEARS, MANY EMS PROVIDERS HAVE GIVEN COUNTLESS HOURS OF THEIR DEDICATED SERVICE TO MANY IOWANS. SOME HAVE EVEN GIVEN THEIR LIFE AS A RESULT OF THEIR COMMITMENT TO IOWA EMS.

Please join IEMSA in honoring our own... EMS Providers who are no longer with us. These honorees may be volunteer or career individuals who have died in the last ten years.

Please send a photo along with the following information:

Decedent's Name _____

Date of birth/Date of Death _____

Died in the line of duty YES NO

Years of service/Service name _____

Also include your name, address, and phone number should we need to contact you.

Please send a stamped, self-addressed envelope if you would like your photo returned.



SEND TO:
Mr. Thomas Summitt
IEMSA
1718 Timberline Drive
Muscatine, Iowa 52761-2502

The Scoop on Scope:

What's Happening With EMS Scope of Practice?

BY ROSEMARY ADAM

This quarterly update on Iowa's EMS scope of practice will review:

- 1) the difference between a needle cricothyrotomy and a surgical airway;
- 2) which advanced EMS levels may perform the above; and
- 3) when can the Critical Care Paramedic perform the surgical airway?

There has been much discussion over the years about the difference between using a needle to gain emergency access to the airway at the cricothyroid membrane (that which can be done by the Iowa Paramedic and Paramedic Specialist) and the surgical airway (which has been reserved for those who have been endorsed as the Critical Care Paramedic).

There are 2-3 devices marketed to the advanced EMS provider that begin this cricothyrotomy procedure with a needle. One or two of them then include a small scalpel, used to allow an obturator/dilator

entrance into the cricothyroid membrane after the needle. Are these needle cricothyrotomy kits or surgical airway kits?

The Scope of Practice Committee took this important question into consideration during the July meeting: What is the difference between the "needle" cricothyrotomy and the "surgical" airway?

The simple answer (as discussed by most medical communities) is: When a scalpel is used — it is a surgical procedure.

If a cricothyrotomy system or kit includes a scalpel AND the procedure requires use of that scalpel for successful completion of the procedure, then it is considered a surgical airway (even if it started out with a needle). All cricothyrotomy kits that include a scalpel are reserved for the endorsed Critical Care Paramedic in Iowa.

This definition of the surgical airway may make many Paramedic ambulance companies rethink the cricothyrotomy kits they purchase and carry.

The next question at the endorsed Critical Care Paramedic level is: Can I only perform a surgical airway during a critical care "transfer" from one hospital to another? Or, if I am credentialed to perform this skill (with a protocol to support),

can I use it in all situations where it is warranted, including 911 calls?

Where to use the skills for the critical care level have been a subject of great debate and yet to be discussed by the Scope of Practice Committee. Because of the wording in the advanced care rules, the Paramedic Specialist, endorsed at the critical care level, may only use those skills during a critical care "transfer."

Some would argue that if trained, credentialed and have the Medical Director's protocol to support it — wouldn't the CCP be remiss if they have a situation during a 911 call where a surgical airway would be warranted and NOT use it? This may be the subject for debate at an upcoming meeting...

SO — for the Paramedic-level ambulance services out there (Iowa Paramedic or Paramedic Specialist staffed), be aware of the new thoughts on the type of needle cricothyrotomy kit you purchase for your staff. For the Paramedic Specialist who is endorsed as a Critical Care Paramedic, be aware that the surgical airway may only be performed while on a critical care transfer and operating from those special protocols. ■

Notice to all EMS providers who are public employees under IPERS

The legislative committee is trying to get a handle on how many EMS employees are under the Iowa Public Employees Retirement System (IPERS). We have a legislative initiative to improve these pensions. We'd like to know which EMS services have such employees and how many employees they have. Anyone with any information is urged to contact Ric Jones at ricj@iemsanet.net

A STUDENT'S PERSPECTIVE

MIKELLE WORTMAN
CENTRAL CAMPUS EMT-B PROGRAM



In the EMT class, many high school students, including myself, have the opportunity of fulfilling their dreams as EMT-Bs by getting started very early in this important health care career. Already this year, our class has had many awesome experiences. Every week, our class goes to Mercy Campus to be with the paramedics from Mercy School of EMS to apply the knowledge we have learned in class as we get hands-on experience learning skills from the instructors. Some students are already starting their clinical at Mercy and in the ambulance.

Our class was also fortunate to be able to attend the Friday segment of the IEMSA Annual Conference and Trade Show. We assisted with registration, and then were able to sit in on the educational sessions. This was very informational and eye-opening. I highly enjoyed the presentations.

IOWA EMERGENCY MEDICAL SERVICES ASSOCIATION

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WHAT'S SO SPECIAL ABOUT SUMNER, IOWA?



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