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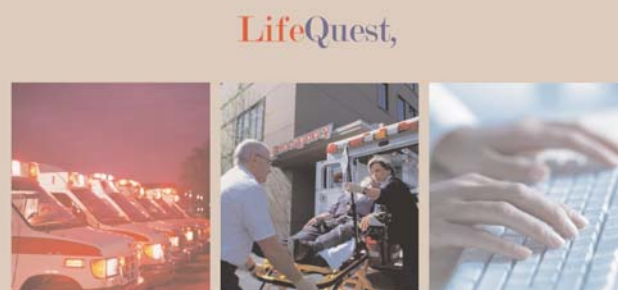
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IEMSA

April - June 2005

# VOICE



A VOICE FOR POSITIVE CHANGE IN IOWA EMS



2005 Governor's Conference **6** | Continuing Education **8** | 10 Ways To Get Connected **12**

I o w a E m e r g e n c y M e d i c a l S e r v i c e s A s s o c i a t i o n



# 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?**



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## 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](mailto:iemsa911@netins.net) by the following dates:

**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.

## ADVENTURELAND DISCOUNTS AVAILABLE

Have some fun at Adventureland Amusement Park, Inn and Campground in Des Moines. Discount tickets, saving IEMSA members \$3 - \$4 off the purchase price of admission, are available at the IEMSA office. Quantities are limited — first come, first served.

GET YOURS TODAY — CALL  
**515-225-8079.**

## CORRECTION:

January-March 2005 Newsletter; Continuing Education Article — It's All the Rave — Please note that the phone number listed for the Poison Control Center is incorrect. The correct phone number for the **Poison Control Center** is **1-800-222-1222.**

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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

## 2005 IEMSA MEETINGS

**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. ALL MEETINGS, WITH THE EXCEPTION OF THE ANNUAL MEETING WILL BE HELD AT 1:00 P.M.

- June 16
- **NO JULY MEETING!**
- August 18
- September 15
- October 20
- **November 10**  
— ANNUAL MEETING
- December 15

## ADDITIONAL Important Dates:

Mark Your Calendar —

## ANNUAL CONFERENCE

November 10 - 12, 2005  
**Annual Conference & Trade Show**  
Des Moines, Iowa



# IOWA CONTINUES TO LEAD

## “Ready Responsible Reliable”

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

I have had the opportunity over the past few weeks to travel to all six EMS regions in our great State and visit with EMS providers, delivering pediatric capable AEDs for their communities. Each and every time I have this opportunity I am revitalized and excited about the great commitment we have in our state — to provide Excellence in Emergency Medical Care to our communities.

On my desk sits a rock with the following inscription by Vince Lombardi. “The Quality of a Person’s Life is in Direct Proportion to Their Commitment to Excellence.” There is no question that there is a great Quality of Life in Iowa EMS demonstrated by the great commitment of our EMS personnel.

All throughout the state, agencies are involved in moving EMS forward. Whether volunteer or paid, it seems that Iowans are able to keep their focus on making sure that we remember we are all



here for the same goal and objective. Whether adding a pediatric capable AED to their rescue unit and redistributing their old defibrillator into their community; attending training and education on billing or administrative seminars; participating in EMS research or several other initiatives — EMS is alive and exciting in Iowa.

As we celebrate EMS week, let us remember all of those who help us to be successful in what we do. Our families, co-workers, dispatchers, fire fighters, law enforcement and hospital staff all contribute to our successes and ability to respond to our communities. Finally, take a moment to recognize yourself. Your community is blessed to have a dedicated, caring EMS professional who is “Ready, Responsible and Reliable” in providing their medical care.

*On behalf of the IEMSA Board of Directors, Happy EMS Week and Thanks for ALL you do. ■*

## Carroll County Ambulance Service

AFFILIATE MEMBER SINCE 1998

BY BILL FISH, SERVICE DIRECTOR

At midnight, January 1, 1974, Carroll County Ambulance Service began operations after funeral homes in the county relinquished responsibility for ambulance service. Each funeral home donated an ambulance to the county to help establish the new county-wide service — two Pontiacs and a Cadillac. Larry Cruchelow, director, and a crew member drove the two new ambulance vans to Fort Dodge to purchase all the equipment used at the time.

Since then, the Service has advanced to paramedic level transport in Carroll and Manning; non-transport in Halbur and Lanesboro; non-transport intermediate in Glidden and Templeton; transport intermediate in Coon Rapids and non-transport service in Carroll, Arcadia, Dedham, Willey, Ralston and Lidderdale. A total of 154 people at various levels make up the list of volunteer and full-time providers in Carroll County.

Carroll County Ambulance Service responds to approximately 1200 calls and transports each year from the four stations located in Breda, Coon Rapids, Manning and Carroll. Carroll paramedics also

provide transport for many hospitals in the area. The remainder of the staff is currently in the process of training to the Critical Care Paramedic level and will provide CCP transport soon.

The main fundraising effort for the volunteers is a drive-through Christmas Lights display at the local Swan Lake State Park. The animated displays and broadcast Christmas music is set-up each year in the



*Dr. Hansen and Bill Fish discuss the File of Life program. This program is sponsored by a local Carroll County Retired Senior Volunteer Program (RSVP). The “file” is a plastic pocket with a magnet to place on the outside of a refrigerator. It has a Star of Life insignia and holds sheets of information such as personal information, medical power of attorney forms, DNRs, current medications and allergies. RSVP calls the person every six months to remind them to update the File of Life information.*

campground as part of the area’s “A Christmas Carroll” theme. Many tour buses and multitudes of cars from all 99 counties drive through each year and donate to the EMS Association.

This year, the ambulance service joined with Community Safety Net to provide the five school districts with a safety awareness and education program for children in the third grade. A book, full of great safety information for the entire family, is presented to the children along with a short presentation by EMS personnel during EMS week. This will become a great annual community service event for all school districts in the county.

Carroll County has seen the great benefits of being an affiliate member of IEMSA. The information of current issues coming from the IEMSA is always valuable to our county members, and IEMSA’s efforts in forming and promoting EMS issues of legislative concern are important to all of us.

Service Director, Bill Fish served on the IEMSA board of directors in 2004 and continues to participate on the legislative committee. ■



## Bellevue Ambulance Service

BY BOB BAUGH, EMT-B & JOE DEPPE, EMT-B

In 1972, The Bellevue Ambulance Service was chartered to provide timely and appropriate emergency medical treatment for patients with acute illness or traumatic injury. At that time, there were 47 members trained in basic first aid and cardiopulmonary resuscitation. In 1974, training was provided to certify members as Emergency Medical Technicians. Today, the service has 5 paramedics, 1 EMT-I, 26 EMT-B’s, 2 CPR instructors, 1 first responder and 5 members currently involved in earning their certification.

Service are involved in every facet of community service, including work and service groups, and medical care at our pro rodeo and football games. We have also served at two RAGBRAI events and the annual truck/tractor pull. Every other year, we join the fire department and law enforcement agencies to stage Operation Prom Night. We have been directly involved in funding and placing nine automatic defibrillators throughout the community. Members are also vital participants in public education and awareness activities throughout the year. Though a separate entity, many of our

volunteer members also volunteer and are actively involved in the Bellevue Fire Department, the Springbrook Fire Department and the Preston Fire Department.

In addition to providing timely and appropriate emergency medical treatment for patients with acute illness or injury, members of the Bellevue Ambulance recognize and actively support continual improvement

of emergency care in several ways:

- Providing resources
- Emphasizing training
- Promoting data collection and analysis
- Facilitating communication
- Promoting standardized medical protocols
- Promoting public education and injury prevention

2005 promises to be a busy and challenging year for this service. We joined IEMSA in January. A new ambulance is to arrive in May. Fundraising continues through an annual breakfast in April and Las Vegas steak fry in October.

The members of the Bellevue Ambulance Service are given positive financial and emotional support from the residents of this area. We are also blessed

with deeply understanding family members who endure the countless interrupted meals, holidays, sleepless nights and restrictive weekend shifts so that we may serve any person in this community in need of medical care at any time, night or day.

Why do we do it? Sometimes we question our abilities and skills, and we look to other members for support — it’s always there. We do it because when we roll up to an auto accident scene and in the midst of chaos, confusion, and panic, people see us as heroes because we can handle it, when by all rights, we should be cowering in a corner and running the other way. When a panic-stricken mother cries, not because her child is in trouble, but because we are there to help her child. When you look in the eyes of a patient and see relief and thankfulness because we were there when they needed us, or to feel the hand of an old woman pat our cheeks in thankfulness. To get a hug, the kind of hug reserved for family and loved ones, from a total stranger for helping their father, mother or child. When our kids tell us when they grow up, they want to be a paramedic and firefighter, just like their dad or mom. We come from all walks of life, all sorts of careers and degrees of education, yet we are blessed to share a common goal, the goal to be able to help our fellow man with care, compassion, and the trained skills needed to make a difference in our community. ■

### 2005 OFFICERS

**Lyn Medinger, Paramedic, President**

**Dar Wagner, Paramedic, Vice-President**

**Bob Baugh, EMT-B, Secretary**

**Theresa Weber, EMT-B, Treasurer**

**Dr Mark Sinksank, Medical Director**



2005 GOVERNOR'S CONFERENCE
on Public Health

BARN RAISING V
DON'T MISS CHANCE TO CELEBRATE 125 YEARS OF PUBLIC HEALTH FOR THE STATE OF IOWA

Mark your calendars now for July 28-29 and plan to attend the 2005 Governor's Conference on Public Health. The conference, "Barn Raising V: Building Iowa as a Healthy Community," will be held at Drake University and it coincides with the 125th anniversary of the founding of public health efforts in the state of Iowa. "Those who attend can expect to return to their communities revitalized and energized with new perspectives and information," said Mary Mincer Hansen, R.N., Ph.D., director of the Iowa Department of Public Health. "I encourage health professionals and others to join us as we celebrate our past and examine our present efforts so that we can set the course for building healthy communities in our future." The conference offers nearly 50 break-out and training sessions with respected leaders in the public health field and CEUs for attendees. This program has been approved for 14 CEHs by the Iowa Bureau of EMS. An additional two hours has been approved for the Mandatory Child Abuse Reporter Training and two hours for the Mandatory Adult Abuse Reporter Training. The complete list of CEUs available is on the Iowa Public Health Website (www.@idph.state.ia.us)

under conferences. The registration fee for the two-day event is \$50. Registration information is included in the brochure to be distributed in May. On-line registration is also available. For more information about the conference, contact Mary Weaver at maryweaver@prairienet.net or 515-360-8046. For more information about registration, contact Training Resources at www.trainingresources.org or 515-309-3315. Two special training sessions — one on depression and the other on mandatory reporting requirements — will be offered July 27 and 28 for registered conference participants. The registration fee is \$20 for each of the two sessions and covers training costs and materials, CEUs, and a light supper. "Beyond Depression: Best Practices for Treating Major Depression: Training for Medical and Community Providers" is offered from 2:30 to 8:00 p.m. on July 27. Joan Blundall, MCA, HCA, and Carol J. Hodne, Ph.D., MA, both of Higher Plain Inc. are the presenters for the session, which is designed to increase the knowledge of best practices in treating major depression. The target audience includes

physicians, physician assistants, nurse practitioners, nurses, and human service providers. For more information, contact Blundall at 319-643-5628 or at joan-blundall@higherplain.org. Kimberly Groves, LBSW, will conduct the session on child abuse reporter training, "Abuse Mandatory Reporter Training" from 6 to 8 p.m. on July 28. The session meets the state's requirement for training mandatory reporters who are required to report child abuse only. The Abuse Education Review Panel has approved this curriculum (#401) for child abuse mandatory reporter training. A dependent adult abuse mandatory reporter training is also offered by Diana Nicholls-Blomme, R.N., of the Iowa Department of Public Health from 8 to 10 p.m. on July 28. This workshop meets the state's requirement for training mandatory reporters who are required to report dependent adult abuse. The Abuse Education Review Panel has approved this curriculum (#163) for dependent adult abuse mandatory reporter training. For more information, contact Nicholls-Blomme at 515-281-3347 or dblomme@idph.state.ia.us.

Note: Mandatory reporters for children and dependent adults will need to take both parts of the training.

First Responders
- Handbook of Humor -
Humor 911
Your Assistance is NEEDED!

Deputy Sheriff, Dan Jordan (LASD) and Firefighter/ Paramedic, John Hicks (LAFD) are teaming up to author a new book, titled "Handbook of Humor."

This cooperative book will feature humorous stories, poems, and touching acts of kindness from first responders as they experienced them throughout their careers. What we are looking for is YOUR stories. Please contribute your anecdote to us via the contacts below. If we use your contribution we will give you credit in the book, thus memorializing your name and career forever! Also, when the book is published, we will give you a free copy to share with your family and friends.

PLEASE FORWARD:

- Humorous, but true stories
- Funny things seen in the line of duty (bumper stickers, signs, human)
- Poems / prayers for first responders (Police, Fire, Emergency)
- Stories of random acts of kindness given by first responders
- Patriotic acts by first responders
- .....or anything you think first responders could find amusing, amazing, or appealing!



Dan Jordan
H (661) 296-9891 / Cell (661) 313-6255
email: Dan@InfoMagic.Biz
or
John Hicks
H (661) 288-2354 / Cell (661) 373-4886
email: JH1429@yahoo.com

Contributions can either be in writing, email or by appointment; we will audio tape.

TO CONTRIBUTE: Just jot down some notes outlining your story and submit! If we use your story we will rewrite your story in a publishable fashion that will work for our book and its readers. Then we will contact you for final approval on the story before publishing.

SUBMITTING DEADLINE: Please submit now, but no later than ASAP

Welcome New
IEMSA Members

FEBRUARY 2005 - APRIL 2005

AFFILIATES:

Anita Volunteer Fire Dept.
Buena Vista Cty. EMS Assoc.
Cherokee Cty. EMS Assoc.
Grimes Fire & Rescue
Medic EMS
Schaller Ambulance Squad
Windsor Heights Fire Dept.

INDIVIDUALS:

Lani M. Cook
Darwyn Hansen
Gary Ronfeldt
Jason Ronfeldt
Don Lucas
Doug Hepperle
Jeffery Ray Howard
John Ascherl
Janean Bierstedt
Christopher M. Davis
Ted Durfey
Gerrit Foreman
Jeff McClaran
Roger Thomas
Mark Vandelune
Nancy Luikart
Jason N. Andrews
Jason Norton
Shannon Crum
Kristina Hansen
Dan Hlas
Barb Lindgren
Michele Ronfeldt
Derek Wall
Michael J. Kuhn
Ronald J. Peirce
Darrell Dannen
David Miller
Don Lucas
Doug Hepperle
Jeffery Ray Howard
John Ascherl
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IOWA EMERGENCY MEDICAL SERVICES ASSOCIATION

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COMPLETE CONTACT INFORMATION IS AVAILABLE AT WWW.IEMSA.NET

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OFFICE ADMINISTRATOR

Karen Kreider

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

Organizations Interested in Honoring Our Own....

If your EMS group or agency would be interested in being featured in this year's Honoring Our Own DVD Presentation at the IEMSA Conference in Nov, please contact Tom Summitt at 563.263.2125, or by email at tsummitt@machlink.com. We would also like to feature honor guards from different agencies from around the state. If interested, please contact Tom at the email address above.





## MANAGING CARDIAC ARREST

**UPON COMPLETION OF THIS ONE HOUR OF INFORMAL CONTINUING EDUCATION, EACH PARTICIPANT WILL BE ABLE TO:**

- 1) **acquire knowledge in best rates and techniques of ventilation in the adult patient of cardiac arrest.**
- 2) **discuss current findings on the best way to do chest compressions in the adult cardiac arrest patient.**
- 3) **discuss current science in early defibrillation of the adult cardiac arrest patient, especially within the 3 phases of the arrest.**

## CASE STUDY

You are called as a First Responder to a small house on the edge of town for a nice lady you know. As you arrive, you find this 70-year-old who looks as though she is in full cardiac arrest in her garden. Her husband is shaking her to wake her up. He looks up at you and says, “I think she’s gone.”

An ALS unit will be on this scene in about 10 minutes. In the meantime, you begin assessing Mrs. Jones. She is not breathing and has no pulse. The husband reports that she called out his name as they were gardening and she crumpled into a heap in the new onions.

Her chest rises to each of the initial ventilations and your team begins chest compressions at 80-100/minute. The AED patches are applied and you pause to analyze. The AED automatically charges and advises you to “push to shock.” 3 shocks are delivered and then one minute of CPR is restarted. Things don’t look good.

# CONTINUING *education*

## MANAGING CARDIAC ARREST: BACK TO THE BASICS

BY ROSEMARY ADAM

CARDIAC ARREST  
MANAGEMENT SKILLS

How are you at doing CPR? Are you pretty good? Do you even teach it to the public in CPR courses for the Red Cross or the American Heart Association? EMS has the most opportunity to do CPR — over all other health care professionals. So, we should be good at it. Right?

Let’s break down the individual parts of CPR (pump and blow) and decide how we’re doing, what we can do to improve and what impact this may have on our patients.

ASSESSMENT OF THE POTENTIAL  
CARDIAC ARREST PATIENT

“Annie, Annie, are you OK?”

Many of us remember learning that as the first step in CPR education way back when. In fact, that was so ingrained into our heads that the first real cardiac arrest patient we encountered was probably asked exactly that question, even though the patient’s was probably named “Harry.”

We’re looking for a response. We’re told to “shake and shout”, as long as we don’t shake them too much. If no response — open airway appropriately and check for breathing.

We’re only supposed to take about 10 seconds to assess for breathing. Many patients have agonal breathing (described as a pre-death, slow respiratory rate), but we may not be able to see that in our 10 second assessment. If the patient is breathing shallowly, we may not be able to discern that, either. As a matter of fact, most scientists say now (and it makes sense) that victims of cardiac arrest have a lung full of air just prior to collapsing from any cause and can safely go 15-20

minutes without a ventilation from us and be just fine.

In the 2000 Guidelines change for the American Heart Association, they showed us that we’re not very good at discerning whether or not another human being does or does not have a carotid pulse, especially within 10 seconds. Studies were done in operating rooms, emergency rooms and in the pre-hospital setting — no one was very good at checking a pulse in 10 seconds. Instead, we are to look for signs of circulation: coughing, moving or breathing.

Initial assessment in a stressful situation, most scientists now are advocating a “gut instinct” assessment. If you think the victim is dead — then they are. How do we teach that to the general public? Health care personnel would probably have the ability to assess that victim as “looking dead” but many people have never seen the victim of cardiac arrest and don’t know dead from fainted.

If we’re so poor at assessing for the presence of breathing and a pulse — how do we know when to stop CPR? One expert recently answered this question by responding, “when the patient pushes our hands off their chests, we know to stop.” He was being a little facetious, but I think you understand what a dilemma this is.

## PROVIDING VENTILATIONS

Wow — we are bad at this!

We have a ventilation performance problem. First — the general public and their ability to perform rescue breathing: It’s not good. They spend 1/3 of the time giving 2 ventilations or about 8 seconds/breath (in a 15:2 ratio) until we arrive IF they even begin CPR at all. Only 1/3 of the general public will attempt CPR (especially ventilations) and

only 15% of them do it correctly. In order for them to deliver mouth-to-mouth ventilation effectively, they can personally suffer from hyperventilation syndrome with subsequent weakness and dizziness.

We have been teaching an option for quite some time now that advocates “compression-only CPR” for those without barrier protection vs. the victim’s mouth. Dr. P. Safar, the physician credited with developing modern CPR, found that the victim has no body chemistry changes when you go as long as 20 minutes without ventilation.

Dr. Aufderheide out of Wisconsin published an excellent report just recently. His group found out that we have a behavioral problem with ventilation. We do not ventilate victims of respiratory and/or cardiac arrest very well at all. Let’s look at why.

Of the many victims of cardiac arrest they observed, they found that health care providers ventilate victims of cardiac arrest at approximately 30 breaths per minute on average. Way too much!

In a 15:2 CPR ratio, with 4 sets delivered in 1 minute, we are to ventilate the patient only about 8 times. Once the patient’s airway is secured with an endotracheal tube, we are encouraged to deliver a ventilation (just enough to make the chest rise) once every 5 seconds or about 12 per minute.

Health care workers, even very experienced Respiratory Therapists and Anesthesiologists deliver as many as 30-40 breaths per minute without thought. If the observer points out how fast they are going, the ventilator always seems surprised. We are usually distracted from performing our ventilation task by talking to others, observing what else is going on, or trying to solve problems. We automatically begin to deliver a ventilation (without looking) as soon as the bag fills up again after a squeeze. Hence, a rate of 30-40 per minute.

What does that do to the patient? It does several very nasty things. If the patient is not intubated adequately or at all, it will fill the esophagus and then stomach with air — creating a quick rise of stomach contents into the airway and the lungs. Even if you get the patient’s cardiac rhythm to return to normal, aspi-

ration of very acidic liquid into the lungs will probably end their life in the ICU later on.

The second, and most important nasty consequence of over-ventilating a victim of cardiac arrest, is squeezing the heart. The Wisconsin research team found that cardiac output decreases significantly with higher ventilation rates. The heart cannot fill with blood, nor release it.



Because this is a behavior problem, a team of people needs to be responsible for delivering ventilations at the correct rate. Everyone watches everyone else. When someone is going too fast — please correct them nicely.

Everyone must stop thinking about hyperventilating the patient in cardiac arrest intentionally, as well as unintentionally. Do not do it. Do not teach it to others. It causes harm. The false assumption is that the patient will benefit from increased levels of oxygen. Actually, slower rates of ventilation create a hyper-oxygenated state AND increasing rates of ventilation causes the harm we’ve mentioned along with de-oxygenation.

So — do we need to ventilate at all? That is still being debated. We do know that when EMS and other health care personnel take over ventilation with appropriate equipment, we OVER-ventilate the patient. Now that we know this is incorrect — we all must take responsibility to ventilate at an appropriate rate. Ventilation is a team effort.

## COMPRESSIONS

OK. We now know that we over venti-

late patients and we’re going to try harder and do better. How are we at compressions? Uh oh — we’re pretty bad at this, too. Here are the problems: We go too slow, don’t deliver enough by the minute, we pause too long for other activities and we get tired pretty easily and don’t “recoil” completely — creating poor cardiac output.

For a while in the 90’s, we thought CPR was fairly ineffective in “saving” a patient’s life. We are now finding a very real need in providing good and fast compressions in the 3 phases of cardiac arrest.

The first phase of cardiac arrest is the electrical phase. In the pre-hospital setting, in adult cardiac arrests, we know that 80-90% are ventricular fibrillation or pulseless ventricular tachycardia — shockable rhythms for our AEDs and manual defibrillators. Early defibrillation is key to a good outcome for the patient. We’ll talk more about that a little later.

The second phase of cardiac arrest is “cardiac.” The heart muscle itself is in dire need of good and fast compressions so it can fill and empty, fill and empty at 100/minute. The heart may even be resistant to defibrillation during this phase because it needs compressions first. The third phase of cardiac arrest is the metabolic phase when major chemical changes have occurred in the body and another need for very good compressions has been found.

One study team found that we pause for long periods of time just for the AEDs to analyze. This may present a challenge for our AED manufacturers — can they build a future AED that analyzes in just 5 seconds? This also raises the question to ALS providers, “Should we switch to the manual defibrillators sooner when we arrive so that the long period of analysis is eliminated?” This poses another question for the future.

We also pause for way too long in a 15:2 ratio to deliver the 2 ventilations. Once the victim is intubated, we are to go to asynchronous CPR (no pause for ventilation). We continue to pause our compressions when we perform procedures, move the patient, check a pulse (which we’re lousy at), or check for a rhythm. Every time we pause compressions to

(Continued to page 10)

(Continued from page 9)

deliver a ventilation, the brain and heart actually suffer from reduced blood flow.

Every time we pause our compressions — we create a huge hurdle for that heart that’s in extreme need for oxygenation. When we are rhythmically compressing at 1-1/2 to 2 inches in depth with complete recoil, the heart fills and releases blood well enough to perfuse itself, the lungs and a few other major organs. Every time we pause for any reason, it takes a long time to re-perfuse the heart. Experts equate this to a very heavy semi coming down the hill and gaining speed, then encountering a steep uphill grade as it nearly comes to a stop. While these pauses seem innocent, it actually creates real ischemic events for the heart and has shown a major difference in whether or not our patients survive.

Over the past 1-2 years, the experts have been debating whether or not to create a higher compression vs. ventilation ratio. Numbers as high as 100:2 have been proposed. The main purpose of which is to perfuse that heart with very few damaging pauses. But, how long can we go with our continuous compressions before we tire out, creating an incomplete recoil and poor cardiac filling?

A study was done with hundreds of young medical students on the old-fashioned recording CPR manikins. They recorded their compressions as they asked them to go as long as they could before they physically tired. At about 200 compressions on average, the students began showing incomplete recoil on the chest. This meant that their hand pressure did not allow the thorax to completely recoil back to normal. They were maintaining some pressure on the sternum, even on supposed relaxation phase. This does not allow for those good, filling compressions we’ve described.

Think about how we do compressions? We usually place a student on the chest or, if in the hospital, one of the nursing assistants or students. They feel as though this is a challenge and will continue to do chest compressions, sometimes for as long as 10 minutes without relief. Its like a badge of courage. This needs to stop.

To provide these compressions the way they should be in order to perfuse the heart and major organs at the right rate, we need a team of compressors. Possibly as many

as 3-4 people to take turns every 2-3 minutes so that good, fast compressions may be delivered with complete recoil.

Providing these types of fast, good compressions will make a difference in our patient’s outcome.

CPR compressions are a team effort, just like maintaining correct ventilation rates.

EARLY DEFIBRILLATION

Where will the technology end in our ability to defibrillate a patient in ventricular fibrillation – our nemesis? This ever-changing technology seems as though it is partially ours – we Iowans. We’ve been there since the beginning. The first early defibrillation study in rural Iowa from the 1970’s and 80’s began with a monophasic defibrillator the size of a large suitcase and is now the size of a clutch purse and uses biphasic technology. There are now studies being conducted in triphasic and quadriphasic technology. They are also investigating the possibility that the machine will be able to tell us which phase of cardiac arrest the patient is in and will advise us what to do from that wave analysis.

Numerous studies have been done to compare biphasic defibrillation waveforms vs. monophasic (as is in some of our older manual defibrillators). Did you know that biphasic defibrillators (AEDs and newer manuals) convert ventricular fibrillation about 90% of the time on the first shock? The biphasic waveform also allows us to use less energy which is better for the patient.

Once the AED is done analyzing and shocking – quickly begin CPR again. Those fast and good compressions are integral in aiding that sad and deflated heart.

Watch for changes in the future.

SCENARIO OF THE NEAR FUTURE

You are called to a known residence on the edge of town for a female who has collapsed in her garden. Her husband is present and reports that she called out then collapsed into the soft garden. He cannot rouse her.

Your assessment reveals no visible breathing and no coughing, moving or breathing as you give 2 initial ventilations with your bag-valve-mask (just barely making the chest rise). Your partners are

performing quick and efficient compressions and there are 2 rescuers waiting nearby to take over compressions within 1-2 minutes.

You apply your biphasic AED pads while the good and quick compressions continue and pause while you allow it to analyze (one in the future that only takes 5 seconds). A quick charge is created and one biphasic shock is delivered with converts this lady’s rhythm to asystole (a non-shockable rhythm). You quickly resume your team compressions while ALS arrives on the scene to intubate the patient. Once the endotracheal tube is in, uninterrupted compressions begin with your team, exchanging rescuers every 2-3 minutes without pause. The team is watching for “slow and low” ventilations at a rate of only 12/minute.

Within 3 minutes, the patient is moving around under your hands. CPR is stopped and the patient’s hand comes up to pull out the endotracheal tube. You gently reassure her. She is treated at the local Cardiac Center and 2 months later delivers a contribution to your local EMS service. ■

REFERENCES:

• website — *www.americanheart.org*  
Go to ECC, C2005 worksheets

• Thierbach, A.R., et al. (2005). “Artificial ventilation for basic life support leads to hyperventilation in first aid providers.” *Resuscitation* 57(5): 269-77

• Berg RA, Hilwig RW, Kern KB, Ewy GA. (2000). “Bystander” chest compressions and assisted ventilation independently improve outcome from piglet asphyxial pulseless cardiac arrest.” *Circulation* 101 (14): 1745-1748

• Aufderheide, T.P., G. Sigurdsson, et al. (2004). “Hyperventilation-induced hypotension during cardiopulmonary resuscitation.” *Circulation* 109(16): 1960-5.

• Berg, R.A., A. B. Sanders, et al. (2001). “Adverse hemodynamic effects of interrupting chest compressions for rescue breathing during cardiopulmonary resuscitation for ventricular fibrillation cardiac arrest.” *Circulation* 104(20): 2465-70.

• Berg, R.A., K. B. Kern, et al (1997). “Assisted ventilation during ‘bystander’ CPR in a swine acute myocardial infarction model does not improve outcome.” *Circulation* 906(12):4564-4571.

• Sanders, A.B., K. B. Kern, et al. (2002). “Survival and neurologic outcome after cardiopulmonary resuscitation with four different chest compression-ventilation ratios.” *Ann Emerg Med* 40(6): 555-62

10 QUESTION POST-ARTICLE

Quiz

- 1) You are assessing a potential victim of cardiac arrest. So far, you’ve been unable to detect any respiratory effort and have delivered 2 slow, low ventilations with a bag-valve-mask. Your next step is to:
- A) deliver 5 abdominal thrusts then sweep the pharynx.

B) check the carotid pulse

C) assess for signs of circulation

D) begin chest compressions at 15:2 ratio
- 2) Our current Biphasic AEDs successfully convert a shockable rhythm about 90% of the time on the first shock.
- A) True

B) False
- 3) In the non-intubated victim of cardiac arrest who receives excessive ventilations (depth or rate):
- A) the esophagus inflates and can create a portal for gastric secretions to rise

B) the heart is squeezed to a very small size and cannot fill adequately

C) the chances of aspiration of gastric contents into the lungs is very high

D) all the above
- 4) Select the true statement about chest compressions:
- A) they do not work and should be kept at a minimum

B) should be done at 100/minute with complete recoil

C) should be done at a ratio of 15:2 in the intubated patient

D) should be done at a ratio of 5:1 in the intubated patient, pausing for each ventilation
- 5) Choose the correct statement about ventilations:
- A) from recent behavioral and performance studies, we have found that we spend as much as 8 seconds per rescue breath (about 1/3 of our 15:2 ratio)

B) pausing for ventilations in our 15:2 ratio creates a negative effect on the heart and brain.

C) ventilations should be a team effort — watching for appropriate rates and depth amongst the code team

D) all the above
- 6) Choose the correct statement about chest compressions in the adult patient:
- A) pausing from compressions must be kept to a minimum

B) compressions are best performed by teams of people, switching every 2-3 minutes

C) when rescuers get tired (after about 100-200 compressions) they don’t allow the chest to recoil back to the normal.

D) all the above

- 7) Intentional hyperventilation:
- A) should not be performed at any time in EMS

B) is the only way to oxygenate a cardiac arrest victim adequately

C) should not be performed on the cardiac arrest victim

D) Improves survival in the adult cardiac arrest victim
- 8) The 3 phases of the cardiac arrest are:
- A) electrical, cardiac and metabolic

B) cardiac, metabolic and physiologic

C) electrical, metabolic and physiologic

D) none of the above

- 9) The second phase of the cardiac arrest might be resistant to defibrillation without doing compressions first.
- A) True

B) False
- 10) Agonal respirations:
- A) are those associated with death and are hard to evaluate.

B) are associated with hyperventilation

C) can easily be detected by the rescuer and are reported.

D) none of the above

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 answer form

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(Please print legibly.)

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IEMSA 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 **AUGUST 1, 2005.**



# GET CONNECTED!

## *The top ten ways to be an EMS playa!*

BY BRAD MADSEN, EMT-PS, CCP,  
IEMSA BOARD OF DIRECTORS, CLIVE FIRE DEPARTMENT

I am by no means an EMS insider; I've only been in this field since 1990 so I'm a relative youngster. I'm nothing "special" (though a few people I know would say that I need "special" help.) By all accounts, I'm your ordinary average guy except for one thing — I am connected. And, being connected in EMS has helped me immensely in my career. Now, I'm not insinuating anything nefarious here; I've never been hired for a job because I knew a secret handshake. I'm not immune from a Bureau of EMS audit because I've got friends "downtown" and I've never gotten a free ambulance ride because of anyone I know in the business.

I understand that saying that "I'm connected" sounds arrogant, but that certainly is not my intent. Just the same though, being connected has made my life way easier. My medical director recently asked me to draft and implement a protocol for intranasal delivery of Narcan and Versed. Being connected to people who know tons about pharmacology and education made the job a cinch. I threw out a few e-mails and voila ... valid research cited, protocol drafted, education done, protocol implemented. Without being connected, this would have taken me weeks...literature search after literature search, reinventing the wheel and then maybe (just maybe) getting it right. Being connected in EMS pays off and becoming connected is ridiculously simple. Are you ready for this? All you have to do to become "connected" is to get involved as a positive force in EMS. If you are not sure how to get involved, I've got some ideas that may help you. The following is my top ten list of ways to get involved in EMS. This list is not necessarily in order or all-inclusive, but I think it's a great start.

### #10 JOIN

You can't connect with others if all you do is sit in front of the TV waiting for change to happen. If you want to get involved, reach out. There are numerous groups that one can join with varying degrees of benefits. I'd be remiss in my duties as an IEMSA Board

Member if I didn't extol the virtues of an IEMSA membership. For \$25.00 you get this awesome newsletter, \$10,000 in accidental death and disability insurance, a price break for the annual conference, discounts on merchandise and much more. It's money well spent, and being a member also makes you eligible to run for election to the board of directors. But that's just IEMSA, Other groups to join include the NAEMT (National Association of EMTs), NAEMSE (National Association of EMS Educators) and numerous local and regional groups. Joining gets your name out there and makes it easier for you to connect with peers from all over. Make no mistake though, these are not mere social organizations. These organizations have legislative agendas, goals and missions that all involve advancing EMS.

### #9 READ

Turn off the noon reruns of COPS and pick up a trade journal (then don't just look at the help wanted section, actually read it cover-to-cover.) This may be painful at times, I know, but the more you read the more you learn about our field. The more you learn, the better suited you are to connect with others and understand differing points of view. If you are like me and have the attention span of a three year old, this may be especially tough. But, at the very least, make an effort to read one or two articles a month that you would otherwise skip after reading the title. Read newsletters (like this one). Log on to websites like emsvillage.com, medscape.com, americanheart.org, withthecommand.com, naemt.org, iemsa.net, and others. Re-Read textbooks, sharpen up on the things you don't see daily. If you studied from a textbook with black and white photos of long-haired guys in white smocks and no gloves, pick up a new textbook and read about what has changed...it'll be a trip! Take time to learn as much as you can about EMS as a whole and understand that the world is bigger than your experience and even bigger than your service or department. If a day



goes by and you haven't learned something new, the day was wasted.

### #8 GET LISTED

One of the fastest ways to get connected with EMS in Iowa is to sign up for the Bureau of EMS's list serve. This service e-mails you on a fairly regular basis with news from the Bureau of EMS. To sign up for the bureau's list serve, you can do so at [www.idph.state.ia.us/ems](http://www.idph.state.ia.us/ems). There are also a number of other regional and national list serves available. Go surfing on the net and find them.

### #7 WISE UP

To grasp the idea of being connected, consider the "pebble in the pond analogy." If you throw a pebble into a still pond, the concentric rings start at the middle and move out until they reach the banks. Then, eventually, if enough energy was put forth, the rings come back toward the center from all sides. Well, in order to become truly connected with others you must first take a look at yourself and ask some tough questions. Are you someone with whom others would want to connect? Generally, humans will accept connection with people similar to themselves, but humans seek and desire to connect with those they respect. "Wising up" means ensuring competence and striving for excellence — in other words, being someone that people want to connect with. Learn as much as you can and become a positive force, and the rings will come back to you just as smoothly as they radiated from where the pebble was thrown. Stagnate or be generally disengaged from others and they will not want to connect with you. The rippled waves merely disperse — You will reap only what you sew. Wow! Deep huh?

### #6 BROADEN YOUR HORIZONS

This encompasses "wising up" but goes a step further. Broadening your horizons means not only competence and striving for excellence in EMS but learning new things to apply to

your life and career. Some EMS providers have broadened their horizons to learn fire-fighting. Some have gone on to nursing school, some have studied leadership and management, and still others have studied philosophy in order to apply it to life and EMS. Don't let an EMS certificate signal the end of learning, but rather make it be the beginning of learning. Once you are comfortable with it, start learning new things and don't ever stop.

I'm not saying that learning Exercise Physiology or getting a Masters in Public Administration will make you a better EMS provider, but (among other things) it will give you more connections and connections can make you better at EMS. A perfect example of this is my own educational endeavors outside of EMS. Closing in on a Psychology degree, I've met great professors who have provided invaluable guidance with regard to leadership and motivation, professors whom I have called upon many times for advice. Having studied in nursing school, I met a pharmacology professor whom I consider a mentor, a friend and someone I can go to with the really tough questions that the textbooks can't answer. As a side note, this man with a PhD in pharmacology completed his EMT-Basic a little over a year ago. Connections, everybody needs them. I never would have met these people had it not been for my desire to broaden my horizons.

### #5 CHECK YOUR EGO

We humans are an egocentric bunch. It's completely normal for people to tend to believe that their service is better than another. It's called "in-group bias" and sociologists have studied it for years. Basically people (especially those who work closely together under stressful circumstances like EMS folks) tend to stick with their group and shun those from other groups and shun those who don't put the group first. The group is seldom an entire service but typically groups of cliques within services. Introspect for a moment; do you belong to a clique? We all do. It's our old dinosaur brain telling us that there is strength in numbers, so we must defend the pack. Core groups are necessary, but don't allow yourself to be part of a self-destructive core group. We become who we hang out with and if you are eating lunch every day with a group of malcontents, guess what...

It's fine to be proud of yourself and your service, but when you let that pride dictate your behavior toward others without due regard for the greater mission of EMS, you are making a grave mistake. Look around at our industry's leaders, mentors and teachers. They have gotten to where they are by working with others and seeing the big picture, not by letting egocentrism rule their thoughts and actions. If you want to be involved in the EMS system, check your ego and learn to play well with others even if you don't particularly like them.

Whatever you do, don't be rude or disrespectful behind someone else's back...that only makes you look bad. If some jerk tries to drag you down to his or her level, don't allow it. It's a game you lose just by virtue of playing. Like my dad always said; "Son, never wrestle with a pig, the pig will enjoy it and you will end up smelling like crap."

### #4 SHOW UP

There are ample opportunities to attend different events throughout the year. At last year's IEMSA conference, there were over 1000 EMS providers from all parts of Iowa, and even some from surrounding states. If each of the attendees had been in EMS for only 5 years, that's roughly 5000 years of combined experience from which to draw. (Good math, huh?) Not only is there much to learn from the speakers at all of the conferences in the state, the attendees often have just as much to share with one another.

Can't make it to the IEMSA conference because it's in the middle of harvest or something? OK...there are dozens of smaller conferences in Iowa each year. Not to mention things like The Leadership Conference, The Service Directors Workshop sponsored by IEMSA and a veritable plethora of open meetings you can attend. The IEMSA Board of Directors gathers monthly in a meeting open to all members. Do you know how many individual members show up to connect and get involved? Usually only a handful and often none! That's a shame. There is a lot to be learned by merely showing up. IEMSA meetings not your cup of tea? OK...How about Scope of Practice, QUASP or Advisory Council meetings held quarterly? Great information, a chance to hob-knob with state leaders and make your voice heard. Again, not a lot of people show up so the primo seats are

easy to get! Come on, you can sit by me! (Then you can buy me lunch).

### #3 NETWORK

This is a fun one. Networking fits nicely with #4. Come to the meetings and stay afterward to visit a little bit with those who represent your geographic area or particular interests in EMS. Go to one of the many conferences around the state, pop your head out of your shell and make a friend or two. I've been going to the IEMSA conference for years now not only for the education but to visit with old friends I've made over the years and to make new ones. Take a walk around the vendor hall and watch as people go in search of friends they have made. I've made a lot of good friends in EMS, and many have grown up to be service directors, training officers, flight medics, educators and a couple are even doctors now. It's nice to see a buddy of yours step off the helicopter to take care of the patient you started working on. It's also good to have an old paramedic buddy who is now a PA when you need a Z-Pack at o'dark thirty.

### #2 VOLUNTEER

I'm not talking about volunteering on your department; the vast majority of the state already does that. I'm talking about committees. Once you have started attending meetings and conferences and you've established a nice little network of contacts, volunteer for committees and projects. A lot of working EMS committees in Iowa have the same people on them, not because there's a good ol' boy network in EMS, but because these are the only people who step up and volunteer. Too many people avoid volunteering or speaking up because they subconsciously fear rejection from the group. This fear is baseless...speak up!

### #1 GET A LIFE

The number one thing any EMSer can do to connect is to take EMS in healthy doses. It's OK to turn off the pager once in a while. If you are living, breathing and eating EMS 24/7, you are traversing a dangerous path and networking won't help you. Let down your hair and relax. Take up a hobby - give the scanner a rest and focus on something else. Hang out with your non-EMS friends and talk about non-EMS things. If you are able to get away from EMS for a while, you will return with a renewed vigor. ■



# THE STATE OF EMS

## *Data Collection*

BY MARK MCMAMAHON, EMS DATA COODINATOR, IDPH

The Iowa Department of Public Health, Bureau of EMS unveiled a new data collection system in August of 2003 as Med-Media was awarded a contract to maintain the EMS Patient Registry data warehouse. The system went live January 2004. It should be noted that EMS Services are not required to use any particular software, but their data must be organized in a format that can be accepted by the data warehouse. Instead of prescribing software, the Bureau determined that the best option is to give EMS services the ability to choose how they want to submit their data. Services may choose to enter directly via WebCUR or they may select an EMS data collection software package. There are a variety of applications to choose from.

Prices and application vary greatly. Services not using a desktop application other than the Med Media product may submit their data via the WebCUR 'uploader.' It has taken some vendors longer than others to design their data in a way that it can be uploaded, but progress is being made. Services should contact their respective software vendors if they have any questions.

### DATA COLLECTION: WHAT'S THE POINT?

The most important point that can be made is, if you submit EMS data it is being used. The Bureau of EMS is using the data in a variety of ways. The Bureau has committed to participate in the National EMS Information System, a national version of the EMS patient registry. The System Evaluation Quality Improvement Committee (SEQIC) is using EMS data along with trauma patient registry data to evaluate the structure, process and patient outcomes of Iowa's EMS system. SEQIC evaluates structure by monitoring hospitals, ambulance services and overall resource availability of the system. They evaluate process by looking at patient triage and transfers, transport times, appropriateness of receiving facilities, over and under triage of trauma patients, and examining how all of the components of the EMS system work together. SEQIC evaluates patient outcomes by tracking morbidity, mortality, disability, hospital charges and monitoring the effectiveness of the entire system. Another example of how data is being used is the Iowa Resuscitation Outcome Consortium [IROC] — it has been using EMS data to make a case for Iowa to participate in a National Institute of Health grant.

### WHO IS SUBMITTING DATA?

Thus far, over 260 services have submitted data via WebCUR, Med-Media's desk-top version, or another desk-top application to the Bureau of EMS. The overwhelming majority of data being received is coming from services that identify themselves as volunteer or mainly volunteer. Approximately 65% of the EMS ambulance services are submitting data electronically. It is unclear how many services are using data collection software with a format that is not compliant with the WebCUR up-loader. It is the goal of the Bureau to have all EMS ambulance services submitting data electronically using a format that can be accepted by the data warehouse, and it is hoped that this goal may be achieved by July 2006.

The Bureau of EMS is committed to ensuring the best possible EMS system exists in the State of Iowa. Data collection is critical to evaluating the system and making changes as needed. ■



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## RESCUE TRAILER

### *Enhances Patient Care for Algona EMS*

BY TAMMY SNOW, IEMSA BOARD MEMBER  
ALGONA EMS, ADMINISTRATOR

July, 2005 will be a busy month for the volunteer emergency medical personnel in and around the Algona EMS area. On July 1-3, ABATE Freedom Rally brings 10,000 motorcycle enthusiasts into the area. July 8-10 is Founders Day, attracting approximately 5,000 school alumni and visitors. Additionally, July 16th marks the 30th anniversary for Ernie Williams Harley Davidson, with an anticipated 4,000 guests. And finally, on July 26th, Algona is an overnight venue for RAGBRAI with 10,000 bicycles and support personnel expected.

Since 2002, Algona Emergency Medical Service has worked with ABATE of Iowa in a collaborative effort to provide emergency medical care to the citizens and visitors to the city of Algona.

When the Freedom Rally first moved to Algona from Humboldt, there was a great deal of anticipation and speculation regarding health care: What type of injuries or illnesses will be most prevalent? How many emergencies should the emergency service team expect? How do we staff and pay for personnel for such an event? One question not

anticipated as a potential problem: How do we transport patients inside the park? The ABATE Freedom Park is over 160 acres, with an extensive road network within the park. The challenge comes when motorcycles park on the roads and the ambulances are not able to drive on the roads.

After two years, EMT John Penton, came up with a solution to the problem. Along with Terry Wagner and Derik Householder (Terry's Welding and Repair), a rescue trailer was designed and built to maneuver the roads within the park and transport patients to the ambulance or first aid building. The trailer is pulled behind an all-terrain vehicle. Terry's Welding and Repair donated a great deal of material and labor to facilitate the manufacturing of this project. The rescue trailer proved to be a great success when it was utilized at different times during the 2004 ABATE Freedom Rally.

Thank you, John, Terry, and Derik for your ingenuity and expertise. Your efforts have enhanced the emergency medical care at the Freedom Park, Founders Day and RAGBRAI 2005!

## MEMBERSHIP ANNOUNCEMENTS:

### GROUP PURCHASING

Affiliate Members — Don't forget to check out the discounts available through IEMSA's Group Purchasing program. Visit the Group Purchasing Page of [www.iemsa.net](http://www.iemsa.net) to get connected with Alliance Medical, Inc. and Tri-Anim Health Services, Inc.

### ANNUAL MEETING MINUTES

The minutes of the 2004 Annual Meeting are posted on the Publications Page of [www.iemsa.net](http://www.iemsa.net).

### LEGISLATIVE UPDATES

IEMSA's Legislative Agenda and "Talking Points" can be found at [www.iemsa.blogspot.com](http://www.iemsa.blogspot.com).

### MEMBERSHIP DATABASE

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](mailto: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.



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