



Air Evac Lifeteam, a rural provider of air ambulance services, is seeking qualified aviation and medical professionals to help further its mission in southern Iowa.

Discover the excitement and challenge of being a part of a medical team aboard an EMS helicopter.

Great job opportunities for pilots, nurses and paramedics.

For information on qualifications and benefits, visit the Air Evac Lifeteam Career Center http://careers.lifeteam.net

1-800-793-0010 · www.lifeteam.net

OUTSTANDING pricing

RAPID delivery

SIMPLE web ordering

Recommended EMS products supplier of the IEMSA Group Purchasing Program.



800-TRI-ANIM (874-2646) | www.Tri-anim.com



IOWA EMERGENCY MEDICAL SERVICES ASSOCIATION

2600 VINE STREET, SUITE 400 WEST DES MOINES, IA 50265 NON-PROFIT ORG U.S. POSTAGE PAID Des Moines, IA Permit # 5481





First (1) The New Generation of Voice Emergency Training and Response

Gene Draper, owner • (641) 692-3540 • evss.frontiernet.net

- Interactive voice protocols for 23 emergencies
- Prepackaged first aid supplies organized by injury
- Just-in-time training for basic life support or HAZMAT response
- E-learning CEUs for 24/7/365 emergency readiness

Dedicated Voice Units, iPAQs, ResQR Software, and E-learning/Training
"The software is perfect for my Panasonic Toughbook!"

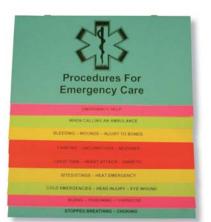
- Iowa EMT, 2005 IEMSA Conference

Compatible with Mobile, Pocket, and Personal PCs (Windows platform)

Go to **www.think-safe.com** and enter 10501

to receive your IEMSA discount!

Think Safe, Inc. 1105 Hawkeye Drive Hiawatha, IA 52233 888-473-1777



NCIEMS Develops First Aid Brochure

Procedures For Emergency Care -

a multi-color brochure/flip chart is available for \$0.50 each, plus shipping and handling. This Flip Chart includes basic First Aid procedures organized in a very practical, user-friendly format and would be handy for homes, schools and businesses. Order by calling Thomas Craighton at Franklin General Hospital 641-456-5015. You can also email him at craightt@mercyhealth.com.

HONORING OUR OWN.... AGAIN 2006

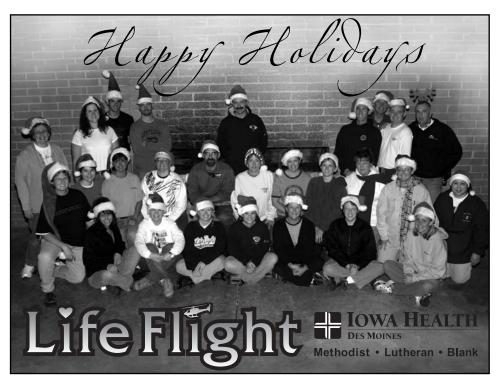
TOM SUMMITT,
COMMITTEE CHAIRMAN



hanks to all of you who have given us photos of your EMS co-workers and loved ones who have passed away to feature in our DVD presentation at the IEMSA Annual Conference. We have been honored and proud to present some of the finest individuals across Iowa who have represented EMS at its finest and sometimes at a very hefty price - their life. A very special "THANKS" to Burlington Fire Dept, Davenport Fire Dept, Clinton Fire Dept, Medic EMS, Muscatine Fire Dept, and to Gene Wilkerson for their past efforts and contributions to this presentation. We welcome any other honor guard, fire dept, or ambulance service to assist us. Please note the contact information below.

We will again offer you another chance to submit a picture of someone you have known, loved and lost who gave their life to Emergency Medical Services. Please submit decedent's full name, year of birth and death, name of service worked for, and please note if it was in the line of duty. Remember, it does NOT have to be a line of duty death to be included in the program. Please mail a photo and this information to Tom Summitt, Honoring Our Own, 1718 Timberline Drive, Muscatine, Iowa 52761. You may also scan and email the photo to: tcsummitt@machlink.com. Please note "Honor Our Own" in subject line. If you have any questions, please contact Tom @ 1-563-263-2125.

If you have never seen our presentation at the Iowa EMS Conference, please plan to attend the next one Nov 11, 2006. It is a beautiful remembrance of a precious life that once served Iowa EMS.



NEWS to SHARE

Are you working on an exciting program that needs to be shared with 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 21), May 2 (to be mailed by May 23), August 1 (to be mailed by August 18), November 17 (to be mailed by December 15).

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

Think Safe, Inc. Joins IEMSA as Corporate Sponsor.

Michelle LeCompte, Vice President of Think Safe, Inc. accepts the plaque commemorating Think Safe's Corporate Sponsorship from IEMSA President, Jeff Dumermuth. President Dumermuth is pleased to welcome this Hiawatha, Iowa business to IEMSA's membership.



Vol. 2005-04 • October – December, 2005

Iowa Emergency Medical Services Association Newsletter is Published Quarterly by:

IOWA EMERGENCY MEDICAL SERVICES ASSOCIATION

2600 Vine Street, Suite 400 • West Des Moines, IA 50265

2006 IEMSA MEETINGS

BOARD MEETINGS:

THE IEMSA BOARD OF DIRECTORS WILL MEET ON THE FOLLOWING DATES IN 2006. 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.

2006

- January 19
- February 16
- March 16
- April 20
- May 18
- June 15

NO JULY MEETING!

- August 17
- September 21
- October 19
- November 9 –
 ANNUAL MEETING
- December 21

ADDITIONAL Important Dates:

EMS DAY ON THE HILL February 1, 2006 7pm – 9pm in West Wing of the Capitol Building

Mark Your Calendar —
Annual Conference
& Trade Show
November 9 – 11, 2006
Des Moines, lowa

2006 LEGISLATIVE AGENDA

BY RIC JONES, EMT-PS, LEGISLATIVE COMMITTEE CHAIRMAN

Plan to join the IEMSA

Board of Directors at the

2006

EMS Day on the Hill

February 1, 2006,

7:00 a.m. - 9:00 a.m.

State Capitol Building,

Des Moines

(additional information will be

provided on the web and via

IEMSA's e-mail listserve)

The Iowa Emergency Medical Services Association unanimously approved the following agenda for 2006:

- 1. 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.
- 2. Protection of any and all current language on scope of practice and area of practice for EMS providers.
- 3. 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.

4. 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.

- **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.** Provide liability protection for volunteer physician medical directors.
 - 10. Make it unlawful to tamper with medical devices such as public access defibrillators.
 - 11. Allow EMS service directors to sign off on eligibility for EMS license plates.

We believe that *job number one for every electe∂ 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. ■

You joined the Association.

Have you joined in on the savings?

Save on AAA membership – all because you belong to the association.

Enjoy 24-hour roadside assistance, exclusive *Show Your Card &Save®* discounts, and more...

For more information, call AAA at 1-800-222-1333



We always go further for you.

An Organization Without a Cause??

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

hat a fabulous job our conference committee did this year. I would like to personally recognize Chairman Brad Madsen and his group for a job very well done. As many of you know, we, again, set attendance records and continue to be the largest EMS conference in the State for you, the EMS providers. What a great opportunity to network; sharing best practices from your communities as well as receiving some excellent education.

We have already evaluated the surveys and have come up with some great ideas to improve your experience next year. Amazingly, as I write this article, our vendor hall for next year has already nearly been sold out. What a great problem to have.

There were several high points during the conference and over the last year as president of this great organization, but the low point for me was at the conference when one of the attendees told me that their boss had stated that he felt IEMSA was an "organization without a cause." I can't even imagine such a statement from an EMS professional. My initial reaction would be to tell that person to pull his head out of the sand, but then, after I though about it, decided that instead, it is a great opportunity for me to remind everyone what YOUR association has done and is committed to continue to do for EMS in Iowa and to challenge our board members to continue to get the word out over the next year.

IEMSA is committed to be the "Voice" for EMS in Iowa. We are committed to continual representation of both volunteer and career EMS providers in Iowa. Through representation, at many levels, your Board of Directors and other active Association members strongly advocate for EMS issues locally, in our state and nationally. The number of hours volunteered through our Association as your EMS Advocate is remarkable.

IEMSA also will continue to be your "Voice" at the legislative



level. It is through the great work of our lobbyist and legislative committee that several great strides have been made for Iowa EMS over the years. With the significant budget cuts over the past few years at the state level, we haven't achieved a great number of wins financially for our providers, but have impacted EMS in several ways; specifically, with the passing of HF232 allowing our providers to move out of the con-

fines of an ambulance to deliver care at their designated training level. We have also gotten EMS providers the ability to receive free liability insurance if they use their skills to practice in a free clinic. This year, we are trying to get some equity in the retirement system for municipal EMS providers as well as tax credits and incentives for our volunteers. In order to be successful in the legislative arena, it requires YOU to get involved with your legislators locally and push for EMS issues in Iowa. Visit our web page frequently to look for ways you can help.

We are also committed to continue to provide great education for the providers in Iowa. Our conference will be bigger and better than ever next year, and we are looking at some innovative ways to provide leadership training for our service directors.

I could go on with the list of services and representation that IEMSA provides for our members, but am sure that I have already exceeded my space limitations for this newsletter.

The Iowa EMS Association has seen nearly a 15% increase in our individual membership and a 41% increase in our affiliate memberships over the past year. Based on those numbers alone, I am confident that we are on the right path and indeed have a great "cause" that I, and all of the board, take very seriously. That cause is YOU, the Iowa Emergency Medical Care providers. Thanks for all you do for your communities.

Have a great holiday season, and a safe and prosperous New Year.

IOWA EMERGENCY MEDICAL SERVICES ASSOCIATION

Board of Directors 2006

PRESIDENT

Jeff Dumermuth

VICE PRESIDENT

John Hill

SECRETARY

Rosemary Adam

TREASURER

Bruce Thomas

IMMEDIATE PAST PRESIDENT

Jeff Messerole

NORTHWEST REGION

Jeff Messerole John Hill Julie Scaддen

SOUTHWEST REGION

Rod Robinson Doug Reed Bill Fish

NORTH CENTRAL REGION

Bruce Thomas Tammy Snow Matt Madson

SOUTH CENTRAL REGION

Jeff Dumermuth Brad Madsen Roger Heglund

NORTHEAST REGION

Ric Jones Lee Ridge Kirk Dighton

SOUTHEAST REGION

Tom Summitt Cindy Hewitt Linda Frederiksen

AT-LARGE

Rosemary Adam Tom Bryant

EDUCATION

Cheryl Blazek Lori Reeves

LOBBYIST

Cal Hultman

OFFICE ADMINISTRATOR

Karen Kreider

4 | www.iemsa.net | 5

Board Members

Elected |

hree individuals will begin their service as new IEMSA Board members at the December 15th, 2005 IEMSA Board of Directors Meeting. Six current board members will retain their seats on the Board, while we say a fond farewell to three retiring board members.

Cindy Hewitt (SE), John Hill (NE), Ric Jones (NE), Brad Madsen (SC), Lee Ridge (NE) and Rod Robinson (SW) will continue serving the board for additional two-year terms. John Copper is leaving the board after serving eleven years, Evan Bensley is leaving after serving seven years and Melissa Sally-Mueller, having moved to Kansas, served three years. Joining the board are: Tom Bryant (at-large), Matt Madson (NC) and Julie Scadden (NW).

Tom Bryant:

Tom is currently an EMT-I and Director of the Morning Sun Ambulance. He started his EMS career in 1986 as



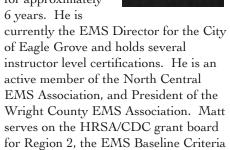
an EMT-A. Tom was the co-founder of the Morning Sun Ambulance when the local Funeral Home wanted to drop their service. He also served on the Morning Sun Fire Department for 33 yrs, 10 of

those years as Chief.

Tom and his wife Sue have been married for 37 yrs. and have a 28 yr old son Jim who also lives in Morning Sun. Tom owns and operate Bryant Construction with his brother. He also serves on the Morning Sun City Council and the Louisa County EMS Association. He loves to do digital photography in his

Matt Madson:

Matt began his EMS career in June of 1995 and has served as a full-time paramedic for approximately 6 years. He is



Matt, his wife and two children live north of Goldfield

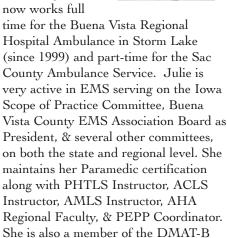
board, the Eagle Grove Police Reserve

and Wright County Search & Rescue.

Julie Scadden: Julie started as a volunteer for Schaller Ambulance in 1992. She completed the EMT-I and then the

Paramedic Specialist programs. She completed her Paramedic training at Western Iowa Tech in Sioux City. She now works full

EMAC team.



Julie is the mother of 4 children. volunteering her spare time serving on a citizen's advisory group for the Schaller-Crestland Schools and Football Cheerleading coach until this past year. Julie continues to be a volunteer paramedic on the Schaller Ambulance squad, serving currently as the secretary on their board.

team and spent time in Florida in 2004

for hurricane relief for the State of Iowa

Membership Announcements:

GROUP PURCHASING

Don't forget to check out the discounts available through IEMSA's Group Purchasing program. Visit the Group Purchasing Page of www.iemsa.net to get connected with Alliance Medical Inc. and Tri-Anim Health Services, Inc.

MEMBERSHIP CARDS

We are experiencing a few growing pains with our new membership software. If you have renewed your

membership or become a new member and have not received your membership card, please contact Karen at the IEMSA office - iemsa911@netins.net or 515-225-8079

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 email), 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.

Welcome New IEMSA Members

AUGUST 2005 - OCTOBER 2005

CORPORATE SPONSORS: Think Safe, Inc.

AFFILIATES:

Ankeny Fire Department Cherokee Regional Medical Center Clutier 1st Responders Danbury Ambulance Service Earlville Fire & EMS Farley Fire Department Greene County Emergency Medical Services, Inc. Northeast IA Community College Griswold Rescue

Hartley Ambulance Holy Cross Volunteer Fire Department Iowa Western Community College Kinze Manufacturing Inc., QRS Maynard Fire Department Meservey Fire & Rescue Neola Fire & Rescue Norway Fire & Rescue

Oxford First Responders Oyens Fire & Rescue Pacific Junction Emergency Services Swea City Ambulance Department Tabor Rescue Walnut Fire & Rescue Westphalia Volunteer Fire Department Williamsburg QRS

Zach Nosbisch

Karen Olson

Amy Pardall

Amy Patrick

Ryan Patterson

Sam Patterson

Melanie Peel

Jeanne Peiffer

Mike Perkins

Chris Perrin

David Pettengill

Rose Pohlpeter

Marilyn Polito

Crystal K. Pote

Scott Poulsen

Josh Powers

Mary Reed

Julie Rhiner

Eilene Rolling

Jaime Ross

Todd Ross

Ron Samuels

Javier Sanchez

Michael Sander

Dennis Sanders

Cathy Schaefer

David J. Schick

Kevin Schmitt

Kelly Schwery

Ryan Shawver

Tammy Shipp

Kari Simmons

Mike Sloan

Heidi Smith

Steve Smith

J.D. Smith

Derrell Scott

Kevin Scott

Lisa Roti

Steve Ramirez

Timothy Reader

Jared Osterloh

INDIVIDUALS:

Al Abbott Martin Ahmann Rhea Allen Jodie Anderson Carla Archibald Paula Aunspach Cindi Babb Ronald Bahlmar Denise Bainter John Bainter Bonnie S. Baker **Dwight Barnes** John Barrett Pamela Barton Marjorie Becker Susan M. Becker Eileen Bell Tim Bell Heather Bergquist Melissa Beuthien Tim Black

Rob Blom Judy Boge Ashley L. Borland-Arruda Michael Bouma Jean Brackemyer Kristin Brady Kris Brass Shawn Britt Kristi Brockway Lisa Brown Michael W. Brown Jessica Buffington Erik Bullinger Julia Buman Ryan Buman Tim D. Burger Deb Burke Steve P. Buser Michael Bushnell Bradley E. Butler James E. Cain Fred Carlson Tim Carlson Annette Carter Allen Chapman David Clark Amy Clifton Joe Coen **Bobbie Conrad**

Kim Cordes Randy Gengler Robert Gengler Judy Cox Kerri A. Cox Michael Giles Michael Cox Consetta Goedken Jill Coy Gloria Goeke Jeff Goettel Ann Crain **Curt Crawford** Teresa Goodel Sandy Crecelius John Green Cheryl Cronin Chris Greenlee Dan Gubbins Dan Cronin Angela Cross Gordon Gymei Brett A. Cross Jeff Haler Christopher Cross Mike Hall Gregory Cross **Toby Hancock** Thomas Cummer Traci Handke Lee Dachenbach Teri Hanna Beth Davis Kenneth Harris **Babbs Dawster** Judy Harsha Michael DeSpain Jade Hart William Dinwiddie Christopher Havran Dawn Dominauez Michelle Heald Meegan Donahoe-Frye Dale Hefel Deborah Donahue Jess Heileman Kevin Dorr Rex Heisdorffer **Brian Dreyer** Norah Heitmann Ryan Hill Taryn Dugan Jon Dunham Henry Hinkel Catherine M. Durflinger Jayne K. Hintz Mirandi Leeann Paul Hoeger Dusenberry Tim Holt Barb Edmondson Sherry Hornbacher Scott Egerton Robert Hoskins Jon Ellstrom Lamar Hudson Charles B. Elmquist Ana Huerta Brian Huff Craig Enke **Bob Epperson** Joseph C. Hupp Kim Ethington Judy Hurley **Ethel Faust** Stan Jacobs Cory Fetch Jake James Rebecca Fetters Lynette Jester Michelle Feuring Kathy Jewell John Fiedler Heather Johnson Tina Finley Jim Johnson Deanna Fisher Keith Johnson Tamara Fleshner Leza Johnson Steve Flugrad Scott Johnson Melissa Juhl Jim Folkerts Michelle Fortune Sharon Katuin Cindi M. Fox Kris Kavanaugh Tracy Frahm Kimberly Keninger Elsie Franck Mayadene Kennedy Sue Francksen Deb Kephart

Shirley Kinney Diane Kirby Bev Kirchner Sharon Knoop Sara Koppelmar Rob Koppert Dan Kriese Phil Krohn Mary Kruse Jeff Kuehn Amy Kumagai Frank Lahey R. Curtis Lambirth Mick Langguth Sabrina Larski Ann Lazear Michelle Lecompte Mike Leavold Marion Lehman Michael Lenehar Kate Link Mary Lohse Nathan Long Charles Loterbour Mary Lubben Linda Lund Jason Mackey Patricia Malate Dave Mallinger Joe Malloy Jim Manson Wade Markley Mark McCulloch Marcus McFall Julie McMullen Jean A. McPherson Michelle Mefferd James Mehaffy Jerry Meredith Donnie Meseche Bradley Meyer Mark Miller Michael Miller Nicholas Miller William H. Mills William Mingles III Walter W. Miro Randy D. Mizaur Shannon D. Mizaur Patricia S. Moore Sandra Moyer Duane Murphy Kimberley A. Murra

Steven Spahn Shellie O'Brien-Perry Tonry Sparks Randy D. Staton Dawn Staudt Jinnie Stoll Lisa Stuart Julie Stuckle Phil Stukenholtz Jarrod Sturtz **Andrew Summitt** Raymond Surber David P. Surovy Christian Swanae Phillip Sweeney Rodney Temeyer Donna Jean Poulsen Terry Thompson Edwin Thomsen Martin Thyne Maile A. Timm **Thomas Tippins** Milton Ivan Trabal Vargas Carmen Trader Jerome A. Richter Matthew Trainum Jennifer J. Roberts Robert M. Treasure Michael Roberts Beth Trexel Matt Trexel Derek Trobaugh Maureen Roseland Scott Troupe Allan G. Vande Kamp Teri VanKooten Doug VanLangen Konni Vanlanaen Jason Lee Vore Mike Waddell Curtis Walser Kenneth Schaefe Gary Walther Janet L. Warner Lisa Warren Randy J. Schueller Joann Watson Richard Schwener Jim Wheat Eric Whipple Jason White Paula Wickham Wes Wiley Jerry Wilson Alan J. Wilwerding James F. Shipp, Jr. Joy Woodworth Drake Lorna Wuthrich Chuck Yeoman Latisha Yeoman Jody Zimple Laura L. Żirkle

Michael J. French Kitty Snakenburg Julie J. Conrad Cody Kimball Toni Cooling Thomas Snyder, D.O. Diane Fudge James Kinney **Bryan Myers** www.iemsa.net | 7 6 | www.iemsa.net

OBJECTIVES:

Upon completion of this reading assignment, each participant will be able to:

- discuss viral and bacterial pathogens and methods to avoid acquiring viral illnesses
- discuss how the influenza virus is structured, transmitted from animal to animal, and named
- list common antiviral management techniques
- discuss public health policies on the control and quarantine of disease.
- attain an 80% score on a 10-question quiz associated with the above objectives within the reading.

Case Study:

our volunteer ambulance service has responded to a residence during the Thanksgiving holiday for an out-of-state visitor who is in respiratory distress. He reports that he developed a low-grade fever and cough as he flew into Iowa 24-hours ago. He is now complaining of severe dyspnea, cough and high fever.

Headlines

One hot topic on the wire services and cable news channels is the new initiative by the White House to aggressively prepare for the spread of Avian Influenza (H5, N1) from southeast Asian countries. In order to start this containment, the EMS community needs to begin the quest for more information on what this virus is and how some organisms infect us.

Many EMS providers don't think it can happen here...

Pathoaens

Not all organisms in our environment are bad. In order to remain healthy, the body must have a normal "flora" of organisms in order to carry out biologic functions. For instance, digestion could not take place without certain organisms in

CONTINUING education

DON'T BE A VIRAL VICTIM

BY ROSEMARY ADAM

the bowel. Some organisms however, produce disease. These organisms are called pathogens.

How do we know if a patient has a viral or a bacterial pathogen causing their disease when they dial 911? It is clinically difficult to appreciate the difference between a viral and a bacterial illness in a pre-hospital environment. It depends upon the quantity of the pathogens present, what tissue they are accumulated in and the strength of the immune system in the host as to whether a disease develops once a pathogen is introduced in the body.

A bacteria is a living organism which is relatively small and, depending on the type, can grow in an environment with (aerobic) or without oxygen (anaerobic) and can be mobile or immobile. There are various shaped bacteria which can be identified in a lab, using culture medium and a test called gram staining.

Bacteria survive and grow, depending on the host's defenses and the bacterium's ability to resist these defenses. Some bacteria have a coating or capsule that surrounds it for special protection.

Antibiotics in the right doses and for the correct tissue can kill off bacteria because of its structured cell wall. Antibiotics cannot attack a virus in that nature because the virus has no structured cell wall.

A virus is actually a non-living parasite. It resembles a cluster of DNA inside a protein coat. The virus attacks living cells like a syringe — stuck into the host cell. The virus injects its genetic material inside the host cell and fools the cell into

transcribing the viral instructions into viral proteins. The cell reproduces and becomes a factory for that virus.

Viral diseases are the most common afflictions of humans and range from the common cold to several types of cancers.

Mutation and Naming the Influenza Virus

Each type of influenza virus has 2 proteins on the surface: Hemagglutinin (HA) and Neuraminidase (NA). Therefore, each influenza is named by the H and N proteins identified on the virus. There are 15 different H types and most affect animals. H-1, H-2 and H-3 affect humans. For instance, what we commonly call Human Influenza A and B are actually called H1N1, H1N2 and H3N2.

If most H-type influenzas affect animals — how does this virus cross over into the human population? The longer these bugs circulate in a bloodstream and in a population, the smarter they become. They mutate and develop a mechanism in which to cross over species. For instance, Avian Flu (H-5, N-1) was at one time only H5. It has already learned how to mutate just enough to identify the NA protein on its cell.

There are 16 different HA subtypes of influenza and 9 different NA subtypes of bird flu alone. These viruses are constantly learning and changing as they are mixed amongst different species.

Let's say that Influenza type H-1, H-2, H-3 and H-5 all invade a duck in your local park one bad day. Understand that H's 1 through 3 already affect humans and

have the genetic trade marks to do so. The virus exchanges genetic materials with the new H-5 and mutates itself. A few days later, as you are running through the park, you fall into some duck droppings — aerosolize it a bit and get a big whiff — bingo. Cross over may occur — from the duck to the human. And, because this new virus has developed a strong ability to transmit from human to human — the virus may then begin a new epidemic.

Avian Flu (H5, N1)

Bird flu occurs naturally amongst wild birds as it is carried in their intestines. The virus is very contagious amongst domesticated birds. Since 1997, this new bird bug has had some limited spread to humans — mostly in those who work in large bird farms.

Infected birds shed this virus through their saliva, nasal secretions and feces. Susceptible domesticated birds pick it up on contaminated surfaces and then humans can get it from contact with infected poultry or contaminated surfaces. The risk is relatively low in the US right now but during an outbreak — the world becomes very small.

H5, N1 has still not learned how to mutate enough to allow strong human-to-human contamination but a few cases of human transmission have already appeared.

History of Avian Flu

The first case of bird flu was identified in Hong Kong in 1997, where 18 humans were infected and 6 of those people died. All of these first cases were in humans that cared for large populations of birds. In late 2003, early 2004, H5N1 was in 8 southeast Asian countries. 100 million birds were destroyed. By March of 2004, China reported that the pandemic was under control and no longer a threat. In June of 2004, new outbreaks were identified in the same area.

In their investigation, the World Health Organization (WHO), found that most bird to human infection occurred through butchering fowl, plucking and preparing of diseased birds, playing with poultry and consumption of undercooked or raw poultry. This transmission to other animals has occurred in world zoos where raw poultry has been fed to lions

and other carnivorous species.

Human-to-human transmission has been suggested in several household clusters where intimate contact was found. No transmission has occurred through social contact. Only one case of a hospital-acquired, human-to-human transmission has occurred in a nurse exposed to an infected patient in Vietnam.

In the United States, no cases have been reported as yet. The Centers for Disease Control (CDC) is quite concerned about this developing disease and the Health Alert Network (HAN) (www.phppo.cdc.gov/han/) issues warnings to health care communities in the US. Our Veterinarian friends are assisting us in this surveillance, watching for large populations of bird illness and death. This is an historical venture — animal doctors and human doctors watching for the development of the next human flu epidemic.



Let's Revisit our Case Study

As your EMS crew walks into this house for this patient with cough, fever and respiratory distress... Are you wearing a mask? While reading this piece, you say, "sure, I'd wear a mask." Would you really?

Let's say that your crew forgets to wear a mask while taking care of this sick visitor who, just 24 hours ago, flew into Iowa from Thailand for a visit with his family.

Your crew treats the patient appropriately and transports him to a local hospital. 24-hours later, all 3 of the personnel who had close contact with this patient are sick with cough and fever. 2 members of the EMS workers' families are also sick.

Within 3 days, 15 people are sick in your community. Some are from the house where the first victim was visiting but, 7 are EMS workers who have been transporting these sick people all over Iowa.

Now — your community has no EMS workers for the ambulances. Neighboring communities are trying to help out by responding. Now — everyone is wearing masks.

Smart EMS Practice

EMS providers are such hard-working and proud health care workers that we practice our skills and chastise ourselves when we "miss" an IV. We have become complacent in our infection control practices, however.

Complacency in these skills not only places us at risk — it places our family and our community at risk. Remember our case study?

Simple handwashing is the single most important skill that we can learn and religiously use in our patient care practice. For droplet infections, like the flu, EMS providers need to wear a mask when within 3 feet of the victim and whenever suctioning or providing airway management. Smart glove use while caring for the victim also provides a barrier against contaminated surfaces but the EMS provider MUST wash hands immediately after taking the gloves off. Yes, I know. No running water in an ambulance. No excuses anymore! These new hand cleansers are touted to be even better than running water. You should have a hand cleanser in the back of each ambulance.

Flu viruses spread in respiratory droplets caused by coughing and sneezing. Person-to-person spread is common but remember that you may also pick up the flu virus through a contaminated object like a Kleenex or a surface, and then touch your mucous membranes (nose, mouth, eyes). Most healthy adults may be able to infect others beginning 1 day BEFORE symptoms appear and up to 5 days AFTER becoming sick. This vulnerable time span noted above is an incubation period. An incubation period is the interval between exposure to infection and the appearance of the first symptom. Recent reports indicate that the Avian Flu (Contrinued to page 10)

8 | www.iemsa.net | 9

(Contrinued from page 9)

may actually have a longer incubation period — up to 8 days.

Initial Symptoms and Course

H5N1 (Avian A) Influenza creates initial symptoms of high fever (typically > 38 deg. C or 100.4 deg. F) and an influenza-like illness with lower respiratory tract symptoms. Patients with H5N1 rarely have the upper respiratory symptoms of red eyes, and cold-like symptoms. Diarrhea, vomiting, abdominal pain, pleuritic pain, and bleeding from the nose and gums have also been reported early in the illness.

This illness goes on to develop shortness of breath about 5 days into the disease. Respiratory distress, tachypnea and inspiratory crackles are common. Sputum production is sometimes bloody. Chest xrays appear as a pneumonia with patchy infiltrates. Progression to respiratory failure may occur as Acute Respiratory Distress Syndrome (ARDS) develops. The median time from onset to ARDS is 6 days.

The fatality rate among hospitalized patients is high with the highest rates in infants and children and death at approximately 9 to 10 days after symptom onset. Laboratories are working furiously to develop a quick test for the identification of this new flu. The current nasal swabs used in this country may pick up this disease at anywhere from 4-8 days once symptoms begin.

Most Avian Flu patients have become ventilator-dependent within 48 hours after quarantine laws. admission to hospitals. EMS providers must be vigilant about differentiating between those flu-like patients with respiratory distress vs. those with impending respiratory failure.

Containment and Treatment

No influenza A(H5) vaccines are currently commercially available for humans. Many drug companies and researchers are close to developing a vaccine for injection and nasal administration.

Once a case of Avian Flu is identified, the WHO and the CDC have structured guidelines for household contacts and healthcare workers who may be exposed to the infected human. These include rigorous surveillance for symptoms, including checking for temperature twice daily and immediate isolation in the home. Those with high-risk exposures should receive an Antiviral agent.

Isolation is separation and restricted movement of ILL persons with contagious disease, often in a hospital setting. This is usually for individuals. What happens when the human population develops a new infectious disease without previous immunity (like Avian Flu)? Quarantine may then be instituted. What is quarantine?

Quarantine is the separation and restricted movement of WELL patients



presumed exposed to the infectious disease, often at home, and can be applied to a household or an entire community. This may be voluntary or mandated by public health law. Complete quarantine is a legal withdrawal from freedom of movement of healthy persons or domestic animals, exposed for the incubation period of the disease. Check with your town or county

Once quarantine has been instituted, there is passive or active monitoring of the patients within. Passive monitoring means that the exposed patients voluntarily report any symptoms to the public health officers. Active monitoring means that health care workers routinely examine those quarantined for signs of the disease.

Certain Antiviral agents may be given to patients suspected of having H5N1 or who are at high risk of exposure to the disease. Two drugs are on the market at this time that might combat the bird flu: Oseltamivir (Tamiflu®) and Zanamivir (Relenza®). This does not work like an antibiotic. These drugs are considered to be neuraminidase inhibitors. Big words, but do you remember how this flu virus is made up? There are 2 proteins on the

outside of the virus: H and N. The N stands for the neuraminidase. These antiviral agents attack the N protein on the virus in order to disrupt it.

One More Look at our Case Study

H5N1 finally mutated into a strong human-to-human virus and has invaded your community and your ambulance company from one patient. The simple mistake of not wearing a mask anytime you care for a patient with cough and fever has started a crisis in your ambulance service and you are no longer able to be on-call for your community. The Sheriff has slapped a sign on the door of all EMS volunteers in your town, placing your houses under quarantine for 10 days. The County has spent thousands of dollars on Tamiflu® for all service personnel and their families. The budget is in the toilet.

Our Future with Avian Flu

In order to have a pandemic, you need 3 ingredients: 1) A new H & N mutation that creates a strong human-to-human transmission; 2) a population of humans whose immune systems have not experienced the new virus; and, 3) the new disease must have a high morbidity (disease) and mortality rates. We already have 2 out of the 3 present for Avian Flu.

Please follow smart self-protection practices to combat the spread of infection every day and with every patient. Make it a routine to put a mask on yourself whenever you are taking care of a patient with cough and fever and wash hands (water or chemical) as you've been taught by your mother and by your EMS Instructor.

REFERENCES:

- S. Huether, K. McCance; (2000); Understanding Pathophysiology, 2nd Edition,
- CDC Key Facts; "Information About Avian Influenza (Bird Flu) and Avian Influenza (H-5. N-1) Virus" Visit: www.cdc.gov/flu
- CBC News Online; "Indepth: Avian Flu" Avian Influenza FAQS, March 8, 2005. Visit: http://cbc.ca/news/background/avianflu/avianfags
- J. Beigel, et al; World Health Organization, "Avian Influenza A (H5N1) Infection Humans", New England Journal of Medicine, 2005;
- CDC Fact Sheet, "Information About Influenza Pandemics"; Visit: www.cdc.gov/flu

10 QUESTION POST-ARTICLE

1) Please choose the correct statement(s) about antiviral therapy and influenza:

- A) Antibiotics may be used to kill viruses because of their cell wall.
- B) Neuraminidase inhibitors may disrupt the N of the H&N virus proteins.
- C) Antiviral agents are not useful in influenza.
- **D)** A, B, and C are all correct statements.

2) Your city and county have laws on the use of quarantine. What is included in a quarantine?

- A) Only ill individuals are legally isolated within their home.
- B) An exposed, but potentially healthy, person is isolated in a hospital
- C) An exposed, but potentially healthy, person is quarantined in his/her
- **D)** All ill persons are guarantined within homes a minimum of 2 days.

3) Choose the correct statement(s) about Avian Flu (H5, N1):

- A) All Avian Flu victims suffer from cold symptoms first.
- B) This infectious disease always begins with respiratory distress.
- C) Fever and cough progress to death in just 2 days.
- D) Fever and cough progress to respiratory distress on about day 5.

4) An incubation period is calculated:

- A) from exposure to onset of symptoms.
- B) from the first moment of symptoms to the end of the disease.
- C) from the onset of high fever (>38°C) to mortality of the patient.
- D) the same in all infectious diseases so that incubation periods can be calculated for laws

5) H1, N1 and H1, N2 are:

- A) examples of Human Influenza A and
- B) examples of mutated strains of different bird flus.
- C) both examples of the Spanish Flu.
- D) unknown viruses, yet to be identified by the CDC and the WHO.

Pathogens are:

- A) normal flora that live on and inside healthy human beings.
- B) viral organisms that infect humans.
- C) disease-producing organisms.
- **D)** bacterial organisms that infect both humans and other species.

7) In order to have a pandemic:

- A) a new strain of an infectious disease must develop with strong human-tohuman transmission traits.
- B) the infectious disease must have a high morbidity and mortality.
- C) the human immune system must have no previous history with the infectious disease (therefore no immunity)
- **D)** A, B, and C must be present.

8) Choose the correct statement about preventing the spread of influenza:

- A) All influenza victims must be in strict isolation: gowns, gloves, shoe covers and masks during healthcare procedures.
- **B)** Simple handwashing is the single most important prevention method
- C) Since this is a respiratory disease (droplet spread), EMS workers only need to wear a mask.
- D) Since this is a viral disease, contact isolation (gloves only) is needed.

9) How does a new strain of influenza mutate from certain animals to other species?

- A) Thorough cooking and eating of an infected animal can cause crossover.
- B) Social contact with the infected animal.
- C) That process of mutation is not possible
- D) Close contact with infected animal excretions then bloodstream mixing of viral agents.

10) A virus is a non-living parasite that acts like a syringe and injects living cells with genetic material for replication.

- A) True.
- B) False

IEMSA answer form

CLIP	AND KE	IUKN			
(Please print legibly.)					
Name					
Address					
City					
State ZIP					
Daytime Phone Number/					
lowa EMS Association Member #					
EMS Level					
E-mail					
1.	A.	В.	C.	D.	
2.	A.	В.	C.	D.	
3.	A.	В.	C.	D.	
4.	A.	В.	C.	D.	
5.	A.	В.	C.	D.	
6.	A.	В.	C.	D.	
7.	Α.	В.	C.	D.	

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.

В.

10. A.

C.

C.

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 lowa City, IA 52242-1009

The deadline to submit this post test is **FEBRUARY 21, 2006.**

IEMSA Award Nominations

BY BRUCE THOMAS, AWARDS COMMITTEE CHAIRMAN

The awards presented at the 16th Annual Conference & Trade Show Awards luncheon November 11, 2005, were presented in recognition of individual and service contributions in the field of EMS. Below are highlights of the individuals and services that have made outstanding contributions to EMS and were highly deserving of the recognition bestowed upon them.

Mike DeSpain - Individual Volunteer EMS Provider of the Year - Mike has

been with the Danville Fire & Rescue since 1980 and is currently serving as Assistant Fire Chief and coordinator of the department's EMS activities. Mike was instrumental in establishing one of the first Paramedic level services in the state. Mike currently spends his time providing ALS care,



securing grants, conducting and coordinating fundraisers, expanding public awareness within the Danville community of 1000 residents. He is always willing to give of his time and talents to promote and encourage EMS providers. As a mentor and role model for others, he continues to push for excellence in pre-hospital care.

David Wilson - Career Individual EMS Provider of the Year - Dave has been in EMS since 1987, working as an



EMT and Paramedic for Lee County Ambulance in Fort Madison, Area Ambulance Service and Lifeguard Air Ambulance in Cedar Rapids, Hiawatha Ambulance Service, and Johnson County Ambulance Service in Iowa City. As president of the Linn County EMS Association, he has been instrumental in developing

and implementing Mass Casualty programs. Although his accomplishments are many, Dave recently lent his EMS experience and expertise to the victims of Hurricane Katrina. Serving as Commander of Iowa's Federal Disaster Medical Assist Team, he assisted in establishing a field hospital to relieve fatigued staff and eventually commanded strike teams who extended care deep into southern Mississippi. Their work was recognized for the over 4,000 patients treated during their two week deployment. Dave's enthusiasm, professionalism, passion and commitment to advance the cause of EMS in the state of Iowa are cause for recognition.



Wapello Ambulance Service - EMS Volunteer Service of the Year - Located in Louisa County, Wapello

Ambulance Service over the last 16 years, (one of the few without a hospital within its borders), has evolved into a volunteer service that provides paramedic level coverage to the citizens of Southeast Iowa. As in most small towns, their presence is evident at community events, fire calls, parades, school functions and other celebrations providing a sense of security and protection to the public. The members are trained CPR instructors for staff and civic groups and provide tiered response to surrounding services; this is in addition to serving the functions necessary in the re-supply, education and support of others in the surrounding communities. Each member of this service carries with them a commitment to make a difference in the life of someone. However, it has been stated that without the volunteers of the Wapello Community Ambulance Service and their dedication to the community, the citizens would be without a vital

Area Ambulance Service - Career EMS Service Provider of the Year - Established in 1971, the Area

Ambulance Service has recently set ambitious goals in performance,

staffing and governance. A recently installed CAD software system, monitoring geographic deployment and response time, has



48% improvement in response time, dramatically improving patient care and survival rates. Under a cooperative agreement between Cedar Rapids hospitals and communities served by the service, a new governance structure has moved the service to a stand-alone entity managed by the interested parties. The service image and visibility has been enhanced through new standards and procedures. The Area Ambulance Service's long-standing commitment to the community and strong relationship with the local entities form a partnership vital to EMS care in Southeast Iowa.

Dan Glandon - Part-Time Instructor of the

Year (Photo unavailable at press time) - Dan's high standards and expectations challenge his students to be all they can be. When combined with his skills and knowledge, his professional and personable approach to teaching finds a way into the hearts and minds of his students. Motivated by the successes of his students, Dan continues to bring energy and excitement to the classroom. According to one of his students, "Dan facilitates and inspires us to want to succeed and make a difference in EMS." I think that statement states volumes about this individual's commitment. Serving as an instructor for First Responders, EMT-B, Iowa EMT Intermediates, Paramedic Specialists, BLS, ACLS, PALS, AMLS, PHTLS, TBI, and EVOC, Dan is advocate for EMS in Iowa. Dan's willingness to make personal sacrifices to assist his students makes him a logical choice for this year's Part-Time EMS Instructor of the Year.

Rita Pierson - Friend of EMS - Many of

our successes today are dependant on the relationships that are formed with those outside our area of expertise. Where would we be today without these friends? Rita is one of those important and pivotal people so vital to EMS providers.

Having served area hospitals in Southwest Iowa for nearly 40 years, Rita has been the all-important individual who acted as the



buffer between EMS and health care professionals. Not afraid to support and defend pre-hospital care in the hospital setting, Rita has devoted thousands of hours to ensure that training, vaccines and tests are available to all EMS providers. The list of Rita's involvements is lengthy but includes: organized the Southwest Iowa EMS Association in 1987, served as the contact person for multiple organizations, the liaison for local, state, and regional EMS Associations, served as a grant writer and assisted in the establishment of a county EMS coordinator to aid all EMS services in the area. As stated on one of the nominations received, "Rita's wonderful spirit, full of ambition, love, can ing and devotion to helping others" is today a reason to congratulate Rita Pierson as this year's recipient of the Friend of EMS.

The EMS Hall of Fame Award is given annually to an individual or individuals who, through their dedication and commitment to others, have made personal sacrifices in the promotion of EMS. Their efforts have a lasting effect and a life long impression on many. IEMSA is bonored to have recognized Jim Carthey, Jerry Kahler and Larry Rossman.



Jim Carthey - Hall of Fame Award - Retired

Captain, member of the Davenport Fire Department of 23 years, Jim was a devoted firefighter and healthcare professional. He was always eager to teach and quick to share his thoughts regarding a variety of topics but specifically EMS. Jim was an early visionary. Known for his strong commitment to organization, Jim was one

of the early cornerstones of the Iowa EMS Association and assisted with the move of the organization from Southeast Iowa to a more central location in Des Moines. As a special side note, Jim was responsible for the design and purchase of the first "Conference Shirt." For those of us who are long-time attendees, you will remember it as a take off of the California Raisins song. It was titled "I Heard It from the Corn Fields." Jim was known for preaching the mission, goals and objectives of the Association whenever and wherever the opportunity presented itself. It has been said that his heart and soul were given to pre-hospital care and all the issues that came with it.

Jerry Kahler - Hall of Fame Award - Jerry was

serving North Iowa EMS even before we knew what EMS was. For 47 and 1/2 years, Jerry has been a witness to and an inspiration for change in EMS. His adaptability was surpassed only by his willingness to assist others. During Jerry's career, it is estimated that he worked with well over 200 partners, over 100



different EMS, Fire and Law enforcement agencies, and numerous hospitals and care facilities. His impact in EMS has been so great that during his early years, he was called to respond to a plane crash in Clear Lake Iowa that resulted in the death of some people you may remember: Buddy Holly, Ritchie Valens and "Big Bopper" Richardson. As a

(Contrinued to page 14)

12 I www.iemsa.net www.iemsa.net | 13 (Contrinued from page 13)



role model, mentor, teacher and counselor, Jerry was always there at the right time to do the right thing. In January of this year, Jerry's employer ceased business operations in Mason City. It was finally time to retire and may we all say a job well done.

Larry Rossman -Hall of Fame Award

— Occasionally, we are each blessed to know an individual who by their actions and involvement, their enthusiasm and commitment, gives us the feeling that this is a great profession. Larry began his career in Dallas County and later moved



to Mary Greeley Hospital in Ames and became the guiding force behind the development of the emergency responder unit at the hospital. Because of his passion for life and desire to make a difference, Larry became an EMS instructor and mentor for others in the profession. Larry used his off duty hours to champion a number of EMS health issues. As a result of the death of his daughter, Cassidy, Larry was an advocate of the SIDS Alliance promoting and educating whenever possible. Larry assisted in developing the Infant Death Scene Investigation Protocol and served on the Department of Human Service's Major Case Review Team, addressing abuse-related child deaths. Larry's co-workers have called him a paramedic's paramedic, a consummate professional, admired and respected by all, a skilled and compassionate caregiver, motivated to improve his abilities and one who motivated others to improve theirs. In a letter from Governor Tom Vilsack, Larry was personally thanked on behalf of all Iowans for his caring and selflessness as an inspiration and example for all Iowans and an example of the good that one person can accomplish. Late last year, Larry lost his personal battle with cancer. His obituary stated that those of us who knew him would say, "There are no perfect endings. There is a perfect beginning when you are born and a perfect beginning when you die." I feel confident that Larry's next perfect beginning is the formation of an EMS service where there is no trauma; there is no pain, only the opportunity to care for others and offer friendly words of assurance. Larry's family accepted this award on his behalf.

Final Thoughts — The good news is that this year we were fortunate by having a multitude of nominations submitted. The bad news is that there are so many other people in this industry that have yet gone unnoticed by their peers. I would encourage each of you to think of individuals or services that may be deserving of recognition. Please take the time to consider nominating someone. The necessary forms are available online.

Scholarship Fund Established!

BY CHERYL BLAZEK

EMSA recently developed an EMS Educational Scholarship fund. This scholarship is available for any current IEMSA member seeking to further their EMS education, or to any parent, spouse or child of a current IEMSA member, who would like to enroll in an EMS course.

The following scholarship amounts are available:

First Responder: \$150.00 EMT-Basic \$250.00 EMT-Intermediate \$150.00 EMT-Paramedic \$750.00 Paramedic Specialist \$1000.00

Applications are due January 2, 2006 and can be obtained by contacting the IEMSA office. Look for links on our website in the near future.

Realizing the limited availability and importance of EMS tuition assistance, IEMSA would like to make this scholarship award an annual event. A "pass the hat" request was made at the noon awards luncheon at the IEMSA conference on November 11th, which raised over \$350.00 towards the scholarship fund.

If you would like to donate towards this scholarship fund, please contact the IEMSA office or Cheryl Blazek at 641-782-1332 or blazek@swcciowa.edu. IEMSA is a non-profit entity and your donations are tax deductible. Watch for future fundraising events and please consider donating towards this worthwhile project.

Another Successful Conference

BY BRAD MADSEN,
CONFERENCE PLANNING COMMITTEE CHAIRMAN

n behalf of the IEMSA Board of Directors and the Conference Planning Committee, I'd like to thank those of you who made time in your hectic lives to attend this year's IEMSA conference. We're very proud to have been able to offer you a conference unlike any other in the area. You may have noticed some big changes this year, and judging from the feedback we received in the evaluations, most changes were good ones. To date, 32% of you have filled out the post conference on-line evaluation, and while the feedback is as diverse as the 1141 of you who attended this year (another record incidentally), there are some common themes; some things we should leave alone and some things we need to continue to work on. This feedback is so vital to us because, even though we track attendance, our goal has never been to be the "biggest" conference in Iowa, but rather to make sure that this conference gets better each year. We don't do it for us, we do it for you, and it's an honor for me to have served as the 2005 Conference Planning Chairperson for IEMSA. All signs are pointing to another banner year for the IEMSA conference in 2006, over two thirds of the vendor hall is already reserved and we have already had several national speakers come to us asking to speak here; believe me this is a change from a couple of years ago!

I've been coming to this conference in

hundred attendees into what it is today. Lots of things have changed but one thing has remained constant...People generally leave the IEMSA conference carrying more than they came with. People take home tangible items such as CEHs and handouts to share with their services, as well as items like product literature and tshirts from the vendor hall. People also leave the IEMSA conference with intangible things like new and renewed friendships, connections and ideas. We all leave with different things; I left on Saturday evening (exhausted and with sore feet) with a deep appreciation for the diversity and dedication of each and every one of you. I left with a feeling of satisfaction of having offered a great conference, and I left with lots of ideas to make next year's conference even better. By the time you read this, the 2005 IEMSA conference will be merely a memory, but hopefully, what you took home with you will stay with you for a long time to come. I have read and will continue to read

one role or another for a long time now

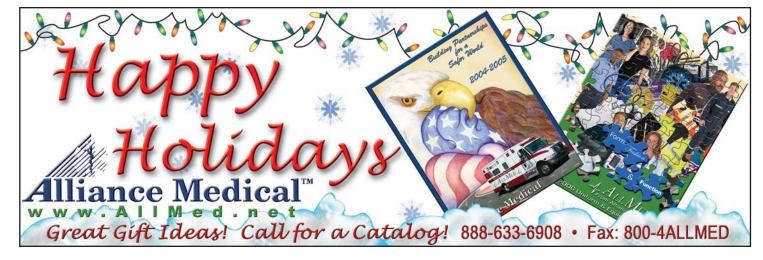
and have seen it evolve from just a few

I have read and will continue to read the conference evaluations, but if you'd like to offer direct comments or feedback, or if you have questions about the conference or any other IEMSA issue, please email me at bradm@iemsa.net, and I'll do my best to answer your questions.

Thanks for coming and we hope to see you again in 2006. ■







14 | www.iemsa.net | 15