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FEATURES

7 NREMT to require accreditation

In November, the NREMT board of directors voted to require paramedics who want to be nationally certified to have graduated from an accredited educational program. The decision takes effect n 2012.

8 Local Projects grants announced

What could you do with another \$3,000? See what these grant winners are doing with the money they were awarded from the Local Projects grants program.

14 GETAC Recap

Here's a summary of what happened at the GETAC meetings in Houston November 17-19.

16 Award winners honored at conference

If you missed the news, here's who took top honors for 2007

in EMS and trauma systems. 20 **Texas EMS Conference**

Texas EMS Conference wrap-up

If your idea of a good time is to get elbow deep in pig tracheas while you practice intubation, we hope you got to attend Texas EMS Conference 2007 in Houston. Workshops led by favorite instructors, hands-on workshops and one huge exhibit hall – the conference had it all. Turn to page 20 for the story in photos.

24 Photo contest winners

With more than 100 photos to choose from, who did you vote for? Here are the winners and the story behind the photos.

30 Education program passing rates

Yep, it's back – a listing of the passing rates for education programs around the state. Except this time, it's the National Registry exam students are taking.

34 Heart matters

Take an in-depth look at ventricular fibrillation while you earn 1.5 hours of medical CE. *By Kenny Navarro, LP*

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 Dawn Whitfield

On the cover: A student in the high angle rescue class at Texas EMS Conference learns the ropes – and makes it look like fun. Photo by B. Kinney

Above: The blades go back on the chopper as it readies for take-off after the exhibit hall closes on Tuesday. Photo by B. Kinney

Texas Department of State Health Services

Office of EMS/Trauma Systems Coordination

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Texas EMS Magazine

Texas EMS Magazine (ISSN 1063-8202) is published bimonthly by the Texas Department of State Health Services, Office of EMS/Trauma Systems Coordination, 1100 W. 49th St., Austin, TX 78756-3199. The magazine's goals are to help organizations function professionally as EMS providers, to educate individuals so they can perform lifesaving prehospital skills under stressful conditions, and to help the public get into the EMS system when they need it. Texas EMS Magazine brings state and national EMS issues and answers to ECAs, EMTs and paramedics serving in every capacity across Texas.

Editor's office: (512) 834-6700, 1100 W. 49th St., Austin, Texas 78756-3199 or FAX (512) 834-6736.

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2007 comes to close without major hurricane

Well... this calls for a sigh of relief (and more than a little disbelief): we reached the end of the 2007Atlantic hurricane season on November 30 without a major hurricane hitting the Texas coast. We had a couple of close shaves: the threat of Hurricane Dean triggered the largest mobilization of emergency resources to date in our state's history; and Humberto developed quickly and moved ashore near High Island in September, but weakened so rapidly that Texas averted major damage. When Dean came knocking, we were much more prepared than we were in 2005, when Katrina and Rita delivered a double punch. We now have 196 ground providers and six air providers who have signed our Memorandum of Agreement (MOA) to respond if called – and we *did* call during Dean. Now, since we have a few months of not stressing about potential tropical activity, DSHS is working with stakeholders to improve the MOA. We will be taking stakeholder input for a while longer, and we'll keep you updated on any changes in the magazine and on our website.

Question: When's a good time to hold a retreat? Answer: When your organization wants to refresh its perspective and consider changes in order to continue to stay true to its purpose. The Governor's EMS and Trauma Advisory Council was created in 1999 and has served as the voice of Texas EMS and trauma systems since then. All organizations benefit from periodically taking fresh looks at the way they operate and some quiet time away from distractions to sort through opportunities for improvement. GETAC will be "retreating" on January 25-27 at the YO Ranch Resort in Kerrville. Council members intend to review a number of issues, including existing committee structures and the recommendations of the EMS and Trauma Regulatory Structure Task Force. Recommendations from the retreat will then be brought to EMS/Trauma Systems stakeholders at the February 6-8 GETAC committee meetings at the Hilton Airport Austin, 9515 New Airport Drive. Call (512) 385-6767 to reserve a room. As always, call early – the hotel will only give DSHS a limited number of rooms at the \$85 rate and when they're gone, they're gone.

Several EMS rules are working their way through the approval process. The Comprehensive Clinical Management Plan (157.39), a renewal option for medics with participating employers, is scheduled for publication in the *Texas Register* sometime in December. The rule would be effective 20 days after publication. (The *Texas Register* comes out each Friday.) Other rules, 157.11(Provider), 157.38 (CE) and 157.44 (Instructor) are scheduled to be presented to the DSHS Council in January. If approved the rules would then go to the Health and Human Services Commission for approval.

And finally, we are wrapping up the last loose ends of Texas EMS Conference 2007 and have already started working on the 2008 conference in Fort Worth. The Call for Presentations is posted on our website.

Hope you all had a very happy holiday season and a happy New Year. On behalf of all of us at DSHS, we look forward to seeing you here in Austin at the February meetings so you can hear for yourselves the new ideas and recommendations about GETAC that will come out of the retreat...



From this side



Steve Janda Office of EMS/Trauma Systems Coordination



At the conference awards luncheon, honor guards from Lubbock EMS and Austin-Travis County

EMS honored those who died in the line of duty.

Honor guards pay tribute to Hall of Honor

The Department of State Health Services honors emergency medical services personnel who have died in the line of duty by inducting them into the Texas EMS Hall of Honor. The induction takes place every year at Texas EMS Conference during the Awards Luncheon. We were fortunate this year in that there were no line-ofduty deaths in EMS. However, the many who have made the ultimate sacrifice in years past were honored in a solemn flag presentation by the Austin-Travis County and Lubbock EMS honor guards at the luncheon. The Hall of Honor plaques were placed on a black-draped table by honor guard members. The playing of Taps followed. The Texas EMS Hall of Honor plaques hang at the Office of EMS/Trauma Systems Coordination, DSHS, 8407 Wall St. in Austin.

Lubbock EMS Honor Guard

Brandon Turnbow
Seth Stephens
Brandi Stephens
Eric Teaff
Donnie Henry
Lynn Wallis
Christopher Metsgar
Kat Katera
Chris Addington
Leslie Leatherwood
Jeff Tweed
Andrew Ochoa

Austin-Travis County EMS

Mark Hawkins Geoff Winslow Millie Zapata



GETAC meeting dates for 2008

February 6-8, 2008 May 7-9, 2008

August 13-15, 2008

November 22-24, 2008 (In Fort Worth and in conjunction with Texas EMS Conference 2008)

All meetings are in Austin, at the Hilton Austin Airport except where noted.

Obituaries

Curtis D. Burnett, 44, of Houston, died August 31, 2007. He was a licensed EMT-P and instructor, and worked with Superior EMS and Montgomery County Hospital District.

Julio Alvarado, Jr., 32, of Duncanville, died November 17, 2007, in a car wreck. He worked as a paramedic for Dallas Fire-Rescue for the past three years.

Brandon Baldwin, 19, of Silsbee, died November 8, 2007, in a motor vehicle collision. He worked in Jefferson County for Acadian EMS as an EMT and was enrolled in paramedic class.

Elleanor Lehrmann, 63, of Mart, died November 14, 2007. Known to most as "Ms. Ellie," she was a founder of Mart EMS, a licensed paramedic and advanced coordinator.



NREMT board votes to require paramedic accreditation by 2012

In November, the National Registry of EMTs Board of Directors voted to require that applicants for national paramedic certification graduate from a nationally accredited educational program after December 31, 2012. The motion was introduced in June 2007 and tabled for further study. Following discussions with other national EMS organizations, the board passed the motion unanimously Agenda for the Future calls for in November. The change is based on the recommendations in the EMS Education Agenda for the Future: A Systems Approach, as well as the Institute of Medicine (IOM) Report titled Emergency Medical

Services at the Crossroads. The two publications call for linking paramedic educational program accreditation with eligibility for certification.

Currently, fourteen states require national accreditation of paramedic education programs. Nationwide there are over 240 nationally accredited programs.

While the EMS Education educational accreditation for all levels of EMS personnel, the IOM report recommends requiring accreditation only at the paramedic level. The NREMT motion affects only paramedic eligibility, although

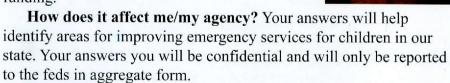
board members say they may revisit the issue of accreditation at other levels at a later date.

"This is an important step forward for the discipline of paramedicine," says Sandy Bogucki, MD, PhD, NREMT board chair.

"Every occupational group that has evolved and gained credibility as a profession has done so through strengthening their educational and credentialing systems. We know that this change will be a challenge. but the board feels confident that accreditation will improve paramedic education and ultimately the quality of care that patients receive in the out-of-hospital setting."

Providers & hospitals: your answers needed on an **EMSC** survey

DSHS has a grant from the federal Emergency Medical Services for Children program that requires a survey of all entities in our state that provide emergency services to children. Your response ensures that the state receives future funding.



To complete a survey go to: http://www.nedarc.org/surveys/ TX/

Contact Beverly Willis if you have questions or to complete the survey in paper format: 512-458-7111 x2173 or beverly.willis@dshs. state.tx.us

Surveys need to be completed by February 29, 2008.



EMS Conference taking workshop proposals

Want to teach a workshop at Texas EMS Conference 2008? Now's your chance.



The Call for Presentations is on the web at www.dshs. state.tx.us/emstraumasystems/ 07CallforPresentations.shtm. We're taking submissions for preconference classes, and for oneand two-hour classes. The deadline is February 15, 2008.

See you in Fort Worth!

Local Project Grants announced

Could your service use a little extra funding? This year the Office of EMS/Trauma Systems Coordination received 90 eligible Local Project Grant applications. Seventy-seven project grants were approved for funding. Major projects included 18 ambulances, one AED, seven monitor-defibrillators and 23 educational projects. Emphasis was placed on grants that would upgrade the level of service available, such as AEDs, reduce response time, to improve patient care capabilities.

Next year's Request for Proposals is expected to be published electronically in the spring of 2008. And, as usual, we will mail out a reminder just after publication. Questions? Contact Linda Reyes at (512) 834-6684, or e-mail linda. reyes@dshs.state.tx.us.

Key: Name City, County Funding amount Items

Allen Fire Department Allen, Collin \$7,500 AutoPulse Chest Compression Device

Americare EMS Lufkin, Angelina \$5,000 Hand Held Radios

Associated Ambulance Authority Clarendon, Donley \$7,375 Power Ambulance Cot; Advanced Cardiac Life Support, Pediatric Advanced Life Support or Prehospital Trauma Life Support Certifications

Bells/Savoy EMS Bells, Grayson \$35,000 Ambulance

Big Spring Fire Department Big Spring, Howard \$3,200 Automated External Defibrillators

Bonham Fire Department Bonham, Fannin \$29,429 Ambulance Remount Brazos Valley Regional Advisory Council Bryan, Brazos \$8,300 Robertson County EMS: Backboards; Spiderstraps; Washington County EMS: Backboards: Portable Ventilators

BRMC –EMS Brownfield, Terry \$7,500 Lifepak 12 Defibrillator/Monitor

Brownsville Fire Department Brownsville, Cameron \$15,000 MegaCode Kelly Advanced; MegaCode Kid; ECG Sign and Symptom Generator

Bulverde-Spring Branch Emergency Medical Services Spring Branch, Comal \$31,000 Ambulance; Stretchers; LifePak/ Automated External Defibrillators

Canyon Lake Fire/EMS, Inc. Canyon Lake, Comal

\$6,000 Syringe Pumps

Care Flite Grand Prairie, Tarrant \$23,780 Infant Patient Simulator Package

Cedar Park Fire Department Cedar Park, Williamson \$6,812 Rescue Tool Power Unit; Spreader; Rescue Cutter

Childrens Medical Center of Dallas Dallas, Dallas \$15,610 Optical Stylets; Glidescopes; SLAM Difficult Airway Conference Certifications

Childress Regional Medical Center EMS Childress, Childress \$2,000 Stretcher

Citizens EMS
Clyde, Callahan
\$5,596
VHF Portable Radios; Auto GPS
Navigation Devices; Stethoscopes;
Ear Thermometers; Pulse
Oximeters

Clay County Memorial Hospital Henrietta, Clay \$35,000 Ambulance

Cleveland EMS Cleveland, Liberty \$35,000 Ambulance Collinsville Volunteer Fire Department Collinsville, Grayson \$970 Compact Suction Units

Copperas Cove EMS Copperas Cove, Coryell \$2,000 Stretcher

Coryell Memorial Hospital EMS Gatesville, Coryell \$15,000 Cardiac Monitor Defibrillators

Culberson Hospital EMS Van Horn, Culberson \$1,945 Infusion Pump; Oximeter; Oximeter Carry Case; Glucose Meter

Danbury Volunteer Fire Department and EMS Danbury, Brazoria \$4,700 Stair Chair; Power Cots

Dickens County Ambulance Service Dickens, Dickens \$35,000 Ambulance

Earth EMS Earth, Lamb \$35,000 Ambulance

Eastland Memorial Hospital District Eastland, Eastland \$35,000 Ambulance

EMS of Nueces Canyon Camp Wood, Real \$6,000 Refurbished 12 Lead Cardiac Monitor

Fort Worth Fire Department Fort Worth, Tarrant \$15,000 Street Level Airway Medicine Certifications

Friona EMS Friona, Parmer \$13,410 Backboards; Medication Box; Adult Traction Splint; Base Station 2-Way Radio; Infant/Pediatric Spine Board; Portable Suction Unit; Glucose Monitor; Pulse Oximeter; Pulse Oximeter Carry Case; Pediatric Traction Splint; Stair Chair; GPS Receiver; Basic Trauma Life Support, Advanced Cardiac Life Support or Pediatric Advanced Life Support Certifications; Pediatric Education for Pre-hospital Professionals Certifications; Basic Emergency Medical Technician Course Tuition Galveston County Health District / Galveston EMS Galveston, Galveston \$26,414 Upgrade of Cardiac Monitor Defibrillators; Central Venous Access Mannequin

Ganado, Jackson \$4,020 Automatic Transport Ventilator with Carry Case; Basic Emergency

Medical Technician Course Tuition

Ganado EMS

Groom Volunteer Ambulance Service Groom, Carson \$5,678 Handheld Radios; Dashmount Radio; Control Station; Power Charger

Hamilton EMS Hamilton, Hamilton \$3,458 Map Mobile Data Software

Happy EMS Happy, Swisher \$1,100 VHF Pagers with Chargers

HealthWebCE.com Harlingen, Willacy \$7,000 Emergency Medical Technician Basic Course Tuition

Heart of Texas Regional Advisory

Council
Waco, Bosque
\$20,000
Basic Emergency Medical
Technician Course Tuition;
Advanced Cardiac Life Support
Certifications; Pediatric Advanced
Life Support or Pediatric Education
for Pre-hospital Professionals
Certifications; Basic Trauma Life
Support Certifications

Huntsville-Walker County EMS Huntsville, Walker \$35,000 Ambulance

Knox County EMS

Knox, Knox \$11,619 Auto Pulse Cardiac Support Pump; VHF Channel Pagers

Lake Bridgeport Volunteer Fire Department Bridgeport, Wise \$3,170 Trauma Bag; Backboards; Pulse Oximeter; Stethoscopes; Blood Pressure Cuff; Portable 2-way Radios

Laredo Community College Laredo, Webb \$12,152 Compact Suction Unit; 12 Lead Task Trainer; RhythmSim TV Interface and Cable; RhythmSim 6 Channel Defibrillator Trainer Arrhythmia Simulator; Adult Air Management Trainer; Pediatric Intubation Trainer; Infant Airway Management Trainer; Stretcher; Advanced Venipuncture and Injection Arm

Lower Rio Grande RAC TSA Area V, Inc. Harlingen, Cameron \$5,060 Little Junior CPR Manikins; Child Airway Management Trainers; Baby CPR Manikins; Resusci Anne Basic CPR Torso

UMC Lubbock EMS Lubbock, Lubbock \$9,144 Child Traction Splints; Adult Traction Splints; Radio Response Card Keypad; Radio Response Receiver; Card Carrying Case; Abernathy EMS: Child Traction Splints; Adult Traction Splints; Idalou EMS: Child Traction Splint; Adult Traction Splint: Shallowater EMS: Child Traction Splint; Adult Traction Splint; Slaton EMS: Child Traction Splints; Adult Traction Splints: West Carlisle Volunteer Fire Department EMS: Child Traction Splints; Adult Traction Splints; Wolfforth EMS: Child Traction Splint; Adult Traction Splint

Lufkin Fire Department Lufkin, Angelina \$27,787 Ambulance Remount

Lynn County Hosptial District EMS Tahoka, Lynn \$35,000 Ambulance

Mansfield Fire Department
Mansfield, Tarrant
\$12,796
27"Spreader Core; Telescopic
Large Ram Core; Cutter Core;
Core Duo Pump; 32" Orange
Core Hose; 32" Blue Core Hose;
Secunet with Box and Bracket;
Ram Support

Manvel EMS Manvel, Brazoria \$2,781 Continuous Positive Airway Pressure Kits

Marble Falls City Fire Department Marble Falls, Burnet \$2,994 Swiftwater Rescue Kit; Training Projectile; Infant Vest; Child Vest; Adult Vests; Rescue Tubes

Medcare Irving, Dallas \$3,750 Advanced Cardiac Life Support Certifications; Pediatric Education for Pre-hospital Professionals Certifications; Basic Trauma Life Support or Pre-hospital Trauma Life Support Certifications

Memorial Hospital (Nacogdoches County EMS)
Nacogdoches, Nacogdoches
\$8,278
Advanced Kelly Megacode;
Trauma Kelly Megacode; Advanced Kid Megacode; Trauma Pediatric Kid Megacode; VitalSim Control Units with Remote; Defibrillator
Connection for Physio Control to Manikins; IV Skin and Vein Set for Megacode Kelly

Methodist Hospitals of Dallas EMS Biocare Education Department Dallas, Dallas \$7,500 Simulation Manikin Advanced Life Support

Mineral Wells Fire/EMS Mineral Wells, Palo Pinto \$7,500 Auto Pulse Cardiac Support Pump

North Channel Emergency Medical Services Houston, Harris \$30,000 Ambulance Remount

North Runnels Hospital EMS Winters, Runnels \$30,000 Ambulance Remount

Olton Volunteer Ambulance Association, Inc. Olton, Lamb \$723 Laptop Computer

Pearland EMS
Pearland, Brazoria
\$6,846
Advance Life Support Simulator;
Vitalsim Control Unit; Trauma
Module Set

Pro-Action, Inc. El Paso, El Paso \$10,794 Compact Suction Unit; Oxygen Cases; Pulse Oximetry Monitors; Pulse Oximetry Cases; Laptop Computer; Power Point Projector; Injectable Arm; Blood Pressure Simulator; Defibrillation Chest Skin; Otoscope/opthalmoscope Set: Spine Boards: Pediatric Immobilization Board; Rescue Vests; Traction Device; Advanced Child Birth Trainer; Larry Airway Management Trainer; Pediatric Advanced Life Support Trainer; Child Injectable Training Arm; Stair Chair; Life Size Lung Model; Full Size Skeleton

Sabinal Emergency Medical Service, Inc. Sabinal, Uvalde \$6,464 Board splint; Automated External Defibrillator Monitor Carry Case; Portable Suction Unit; Pulse Oximeter; Pulse Oximeter Carry Case; Regulator; Base Station 2-way Radio; Automated External Defibrillator Upgrade; Stretcher

St. Joseph Regional EMS Bryan, Brazos \$35,000 Ambulance

San Jacinto County First Responders, Inc. Point Blank, San Jacinto \$3,023 C-Collar Carry Cases; Flash Lights; Portable Suction Unit; Safety Vests; Stair Chair; Base Station 2-way Radio

Shackelford County EMS
Shackelford, Shackelford
\$5,591
Stretcher; Pediatric MAST Pants;
Pediatric Traction Splint; Intubation
Kit; Portable Pulse Oximeter;
Extrication Device; CPAP Machine;
Laptop Computer

Shannon AirMed 1
San Angelo, Tom Green
\$11,942
Upgrade MRL Monitor; Little Anne
CPR Training Mannikins; Baby
Anne CPR Training Mannikins;
Little Anne Airways; Baby Anne
Airways; Little Anne Faces; Baby
Anne Faces; Automated External
Defibrillator Trainer; 12 Lead EKG
Interpretation Classes; Cadaver
Labs; Pre-hospital Trauma Life
Support Certifications

South Point Vol Fire & Rescue, Inc. Carlton, Erath \$5,739
Backboards; Cervical Collars; Kode Vest; Combicarrier Backboard; Aluminum Breakapart Stretcher; Spider Straps; Digital Semi-automatic Blood Pressure Monitors; Med Oxygen Bag Kits; Portable Suction with Case; Oxygen Cylinders "O"; Oxygen Cylinders "E"; Pagers; Portable Radios

South Taylor EMS Tuscola, Taylor \$35,000 Ambulance

Stamford EMS, Inc. Stamford, Jones \$35,000 Ambulance

Stephenville Fire Department Stephenville, Erath \$7,400 M Series Cardiac Monitor

Sudan Fire Department EMS Sudan, Lamb \$2,679 Laptop Computer; Ceiling Mount Kit for Projector; Multimedia Projector; Projection Screen; Ceiling Speakers; Cable and Wiring

Sunray Volunteer Fire Department and EMS Sunray, Moore \$5,756 Twin Power Unit for Extrication Tools; Spreader; Ram

Sweeny Community Hospital Sweeny, Brazoria \$995 GPS Navigation Systems

Three Rivers Ambulance Service, Inc.
Crowell, Foard
\$1,383
I O Driver; I O Adult Infusion Sets; I O Infant Infusion Sets; Emergency Medical Technician-Intermediate Course Tuition; Advanced Cardiac Life Support Certifications

Trauma Service Area H - Regional Advisory Council Lufkin, Angelina \$1,797 Oxygen Regulators

Turkey EMS Turkey, Hall \$35,000 Ambulance

University of Texas at Brownsville and Texas Southmost College Brownsville, Cameron \$19,100 Pedi Advance Life Support Trainer; Intubation Mankins; Pulse Oximeter; Advanced Cardiac Life Support Certifications; Cadaver Anatomy Lab Certifications; Surgical Airway Lab Certifications

Val Verde Hospital District Del Rio, Val Verde \$2,000 Ambulance Cot

Ward Memorial EMS Monahans, Ward \$35,000 Ambulance

Westlake Department of Public Safety Westlake, Tarrant \$7,500 Auto Pulse Cardiac Support Pump

Willacy County EMS Raymondville, Willacy \$30,104 Stretchers; 12 Lead Defibrillator Monitors with Trade-in; 12 Lead Defibrillator Monitor

Grants offered to rural EMS

Texas Engineering
Extension Service (TEEX),
in conjunction with Texas
Department of Transportation,
wants to improve response
in rural and frontier areas
through the Rural/Frontier EMS
Education grants. The goal of
grants is to assist EMS providers
with initial training, refresher
training, continuing education
training or instructor training,
including:

Initial training

- ECA or First Responder
- EMT-Basic
- EMT-Intermediate Refresher training
- ECA-Refresher
- EMT-Basic Refresher
- EMT-Intermediate Refresher
- EMT-Paramedic Refresher Continuing Education
- PHTLS/ITLS
- Pediatric ITLS
- EVOC
- EMD Instructor training
- PHTLS/ITLS
- EMS Instructor

For more information or to apply for the grant, contact Greg LaMay at:

Gregory R. LaMay, BS NREMT-P Project Manager

(TEEX) Texas Engineering Extension Service

TX-DOT EMS Education Grant Program

301 Tarrow

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EMS/Trauma System
Account Extraordinary
Emergency Funding is available
to assist licensed EMS providers,
hospitals and registered first
responder organizations when
unforeseeable events cause
degradation of services to
the communities they serve.



Situations that may severely reduce or incapacitate emergency response capability are considered extraordinary emergencies.

The following organizations were awarded Extraordinary Emergency Funding recently:

City of Presidio EMS

\$26,814 for equipment and new ambulance motor

Stamford Hospital District

\$39,294 for monitor/defibrillator and an autoclave

Swiftwater award nominations sought

The Swiftwater Rescue Committee of the National Association for Search and Rescue is seeking nominations for the 2008 Higgins and Langley Memorial Awards for outstanding achievement in the field of swiftwater rescue, the highest international honors

presented for flood and swiftwater rescue.



The awards recognize outstanding achievement in swiftwater and flood rescue. In addition to individual incidents and acts of heroism, swiftwater-flood rescue team efforts, those who have dedicated years of service to developing and implementing swiftwater-flood rescue training programs and public safety-media-education efforts can be nominated.

The awards honor civilian rescuer Earl Higgins, who lost his life in February of 1980 while attempting to save a child being swept away in the flood-swollen Los Angeles River, and firefighter/paramedic Jeffrey Langley of the Los Angeles County Fire Department,



who lost his life in a helicopter crash in March of 1993.

The awards will be presented during the annual conference of the National Association for Search and Rescue, May 29 - June 1, 2008, in Colorado Springs, CO. The deadline for submissions is February 1, 2008. Nominations for the 2008 awards may include events and achievements in both 2006 and 2007 (January 1, 2006 through December 31, 2007). For more information, go to http://higginsandlangley.org.

Study looks at ultrasound IVs

Researchers at Brackenridge Hospital and Dell Children's Medical Center of Central Texas in Austin

are examining whether a portable Sonosite ultrasound machine helps STARFlight paramedics and nurses in placing IVs in very sick patients considered "difficult sticks," or those who are in shock. The randomized study is looking at the success of 200 patients who either had an IV placed by



ultrasound or the traditional way of sight and feel.

Conducted by the Seton Family of Hospitals and Austin-Travis County EMS STARFlight, the study is the first collaboration of its kind. It's also the only study in the country looking at the use of an ultrasound machine for placing IVs in patients during an air medical transport. Brackenridge Hospital, a Level II trauma facility, has been using the procedure for more than a year, but officials say this is the first time its use has been studied in the air medical arena.

"Getting IVs is a fundamental part of caring for patients. Often an IV can mean the difference between life and death. When patients come through the door of the emergency department, we are providing rapid treatment to stabilize them, but being able to do IVs during transport could make a huge difference and that's what we are looking at," said Dr. Pat Crocker, principal investigator.

Many patients are considered "difficult sticks" because of conditions that include obesity, shock and chronical illness. Using an ultrasound allows flight

paramedics and nurses to see through the skin and find deeper veins they might not be able to feel or see otherwise. They can then guide the catheter, with the help of the ultrasound, into the vein so life-saving drugs and fluids can be administered.

"Without good access to a vein, patients can't get large amounts of fluid, drugs or blood into their system," said Howard Polden, a flight nurse with Austin-Travis County EMS STARFlight. "The only current option for patients when STARFlight paramedics and nurses can't get an IV is an IO needle that can be drilled into a bone. It works well for administration of drugs, but is not optimal for volume fluid administration."

Researchers for this study include Pat Crocker, DO, principal investigator. Co-investigators include T.J. Milling, MD; Todd Maxson, MD; Austin-Travis County EMS Medical Director Ed Racht, MD; James Kempema, MD; Dave Spear, MD; STAR-Flight nurse Howard Polden, and STARFlight medic Mike Summers.

The \$50,000 Sonosite ultrasound machine is already on board Austin-Travis County STARFlight. Later this year, the technology will be used in another study that will look at the use of ultrasound to find internal bleeding during transport.

Volunteer Registry debuts January 2008

The Texas Disaster Volunteer Registry, coordinated by DSHS' Public Health Preparedness Unit, Community Preparedness Section (CPS), debuts in January 2008. For the past three years, CPS staff has collaborated with key Texas medical and health care partners, licensing and regulatory boards, local health department representatives, volunteer coordinators, and other emergency management representatives to build Texas' version of the federally-mandated **Emergency Systems for** Advance Registration of Volunteer Health Professionals (or ESAR-VHP). Since the beginning of this project, the goal has been to build a system that would meet federal mandates and would provide local jurisdictions with an effective volunteer management tool.

The web-based Registry will have the capabilities to call down and activate volunteers, verify professional licensure, credential medical and healthcare volunteers, and deploy and track volunteers.

The Registry also will provide administrative and reporting tools.

The Registry is designed to



be a tool, first, for local response

– then branch out to regional and
state-wide response when local
resources are exhausted.

To accomplish this, CPS, with the help of SUMA/Orchard Social Marketing, will conduct

regional meetings across the state with key partners and stakeholders to provide detailed information and a demonstration of the Registry. CPS staff and local/regional partners will identify local and regional administrators with the goal of integrating existing local volunteer systems into the Registry and developing a training schedule.

The federal mandate is for Texas to have a fully operational, statewide ESAR-VHP system by the end of August 2008. A one-page document and a PowerPoint presentation that offer additional details about the Texas Disaster Volunteer Registry can be found at the Governor's EMS and Trauma Advisory Council (GETAC) website: www.dshs.state.tx.us/emstraumasystems/GETACCouncil.shtm. If you have questions or would like additional information, contact Belinda Hare at (512) 458-7219, or by email at belinda.hare@dshs.state.tx.us.

CMS now requires signatures on emergency transport

The Centers for Medicare and Medicaid Services have required signatures for several years for non-emergency transports. As of January 1, 2008, EMS providers are required to obtain a signature



following emergency transports from a representative of the receiving facility on behalf of incapacitated Medicare patients who do not have another authorized individual capable of signing a claim form. The form must document the name of the beneficiary and the date and time they were received. The rule had been opposed by ambulance provider organizations who said it would be burdensome for ambulance crews and increase the amount of time crews spent out of service. The final rule (Part II—Revisions to Payment Policies Under the Physician Fee Schedule, and Other Part B Payment Policies for CY 2008) appeared in the *Federal Register* on November 27.

Rural grants available for education, AEDs

The Office of Community and Rural Affairs announced in November two grant programs available for rural and frontier communities. Both of the grant applications have due dates of January 18, 2008.



AED grants

The Rural Access to Emergency Devices Grant Program (Rural AED Grant)

wants to increase the availability of early defibrillation in rural counties throughout Texas. The program will do this by increasing collaboration with rural emergency care providers and rural health care systems, extending the "chain of survival" with early defibrillation and cardiopulmonary resuscitation (CPR) into areas that have difficulty accessing timely care. Grant monies may be used to purchase automated external defibrillators (AEDs) or for CPR or AED training.

Eligible counties are determined by HRSA for each grant cycle. Eligible applicants include first responders (e.g., EMS, law enforcement and fire departments) and local for-profit and non-profit entities concerned about cardiac arrest survival rates. Eligible organizations may include athletic facilities (e.g., high school playing fields where a town may gather for games); faith-based organizations; Federally Qualified Health Centers; Indian Health Service clinics and tribal EMS services; libraries and other civic centers; long-term care facilities; post offices; rural health clinics; schools; and senior citizen and child day care facilities.

The grant is awarded on a competitive basis. All organizations submitting applications for the FY06-07 AED Grant were awarded on HRSA-approved scoring criteria. For more information on this grant, go to www.orca.state.tx.us and click on Rural AED Grant, or contact Rebecca Valenzuela at (512) 936-6726.

Training grants

The Rural EMS Enhancement Grant Program supports development and improvement of rural EMS response, delivery and service capacity. ORCA seeks projects that can address at least one of the program

goals: increase access to EMS in rural areas; improve quality of care in rural areas; strengthen the coordination of care between pre-hospital and hospital setting; or development of rural EMS. Maximum funding is \$3,000. Applications must be received by January 18, 2008. For a complete listing of requirements, go to www. orca.state.tx.us and click on Rural EMS Enhancement Grant, or contact Cindy Miller at (512) 936-6702.

Kerrville Chief Holloway retires

Longtime Kerrville Fire Chief Raymond Holloway retires February 1 after 35 years of service, 25 of it as chief. In 1994, Holloway helped establish Kerrville EMS, which won TDH Public Provider of the Year in 1996. Before acquiring EMS, the fire department made about 450 calls a year. The number now stands at more than 5,700 annually. Holloway was appointed to GETAC in 1999 and served for four years as the fire chief representative. In 2001, he was named Texas Fire Chief of the Year by the Texas Fire Chiefs Association and served on the board of the National Executive Fire

Officers Association.

GETAC recap

Governor's EMS and Trauma Advisory Council (GETAC) met Monday, November 19, 2007, in Houston. The council unanimously approved both the revised minutes from its February 23, 2007, meeting and the minutes from its May 25, 2007, meeting. (There were no August meeting minutes due to cancellation of the August meeting because of the threat of Hurricane Dean.)

Chair Report: Chair Edward Racht, MD, discussed the GETAC retreat, rescheduled for January 25-27, 2008, which has a goal of looking at the structure of the committees and reviewing the responses and comments of the EMS/Trauma System Regulatory Task Force survey. The annual committee application process would usually have begun in December, but it was decided that the present committee members would remain appointed until the recommendations from the GETAC retreat were brought to the stakeholders in Februrary.

Staff Reports: Kathryn C. Perkins, assistant commissioner for the Division for Regulatory Services, discussed the problems last summer with the DSHS Exchange Building; legislative issues, including the Senate Bill (SB) 10 (referred to as the gurney car bill) and SB 1119 (referred to as the red light camera bill); hospital licensing rules; and the prompt payment by DSHS to EMS responders who had signed the MOA and were deployed during Hurricane Dean. Steve Janda, director of the Office of EMS/Trauma Systems Coordination, reported the public license search—the new version of

the "cert query"—is now operating on the EMS/Trauma Systems website; reported on the disaster MOA and its review by DSHS and stakeholders that will begin soon; and discussed funding based on runs reported to the EMS/Trauma Registry and other EMS and trauma system funding programs, including the 3588 account, the ECA training program and the Local Projects grants.

Maxie Bishop, state EMS director, updated the Council about the National Registry EMS passing rate percentages (see page 30 for details). EMS/Trauma Registry's John Villanacci apologized for stakeholder challenges with the Registry and reported that a meeting will be set up with Health Commissioner David Lakey, MD, to discuss long-term strategies to fix the problems.

Standing Committee/Task Force Reports:

Air Medical Committee - Chair Shirley Scholz, RN, reported the committee discussed "lifeguard" helicopters and access to public or "prior permission required" helipads; a workgroup to explore an alternative state licensure program as an alternative to Commission on Accreditation of Air Medical Services (CAMTS); the possibility of joint DSHS-FAA surveys of air medical providers; and new language to clarify the helipad rule. The committee asked GETAC for support in recommending hospital licensing changes with regards to air medical helicopter access; and asked that rule language previously recommended to the hospital licensing rule be reconsidered and substitute language be considered later in the meeting when motions were discussed.

Education Committee – Chair Jodie Harbert, LP, reported the committee discussed provider

licensing rule 157.11; recent legislation on epinephrine auto-injector devices; suggestions on how the National Registry (NR) for EMTs could improve skills exams; use of clinical simulations in lieu of clinical training; formation of a subcommittee to look at developing a survey for suggested changes to Scope of Practice; a meeting in January to discuss EMS curriculum; national accreditation; and mandatory background checks for applicants.

EMS Committee – Chair
Pete Wolf, EMT-P, reported the committee discussed the EMS subscription rule (157.XX); the decision to make a motion at the GETAC meeting to reinstate the original verbiage into the subscription rule 157.XX; and recent legislation regarding epinephrine auto-injector devices. The committee heard a presentation on infectious disease exposures to EMS personnel, and discussed forming a task force specific for these issues and concerns to GETAC.

Injury Prevention Committee – Chair Gary Kesling, PhD, reported that the committee discussed key issues and planning for the next legislative session; issues concerning the EMS/Trauma Registry and the committee's continued support; and a possible pilot project, launching a peer review section for *Texas EMS Magazine* on prevention and research.

Medical Directors Committee – In the absence of chair Steve Ellerbe, DO, John Griswell, MD, reported that the committee requested that GETAC formally request all funds collected as part of House Bill (HB) 3588 of the 78th Legislature and SB 1119 be dispersed as intended; discussed developing a standardized system to treat infection disease exposures in emergency personnel;

discussed recommendations to improve the EMS/Trauma Registry; agreed that the Disaster Preparedness Task Force should take steps to becoming a standing committee; discussed proposed recommendations in 157.11 regarding anaphylaxis treatment and stretcher patient transport; and discussed instructor certification rule 157.44.

Pediatric Committee - Chair Joan Shook, MD, reported the committee reviewed the Emergency Medical Services for Children (EMSC) National Resource Center survey results of performance measures and concluded that data needs to be reviewed in more detail and more support provided; looked into forming a "non-responders" group to investigate lack of survey response; reported the committee wants to develop a "frequently asked questions" sheet for future surveys; and discussed hurricane preparedness, transportation needs for pediatric patients in an evacuation, and the provider licensing rule 157.11 concerning the requirement for epinephrine autoinjector devices.

Stroke Committee - In the absence of chair Neal Rutledge, MD, committee member Brent Dalley, CCEMT-P, reported that the committee viewed presentations about the American Stroke Association Stroke System; GETAC recommendations on stroke education and training; stroke facility designation and transport plans; and the RAC stroke survey letter. A newly-formed subcommittee will review recommendations for acceptable EMS training programs. The committee wants to present a final draft of the stroke facility proposed rule at the May 2008 GETAC meeting.

Trauma Systems Committee

– Chair Ronald Stewart, MD, reported that the committee supported the exception to Level III trauma facility designation criterion process currently being performed by DSHS staff and re-affirmed its support of the Level III orthopedic requirement essential criterion as it currently exists in rule; discussed the EMS/Trauma Registry and is ready to present a motion to GETAC; discussed establishing specific recommendations concerning the Senate Bill (SB) 1119; and discussed the draft DSHS rule 157.132.

Disaster/Emergency Preparedness Task Force – Chair Eric Epley, EMT-P, reported that the task force would like to work with DSHS when the agency rewrites the hurricane MOA; discussed the evacuation process and how emergency preparedness groups should be better defined.

EMS and Trauma Regulatory
Task Force – Co-chair Dudley Wait,
EMT-P, presented the results of the
recent survey conducted by the task
force which included a number of
specific recommendations to DSHS.

Other Reports/Public Comment on Action Items:

DSHS Hospital Licensing Rules Review Workgroup – Jim
Parisi reported that the rule to have all hospitals in compliance with available helipads was discussed at the Air Medical Committee.

Texas EMS, Trauma and Acute Care Foundation (TETAF)

– Jorie Klein, RN, reported possible changes to the divisions in the foundation; reported that the EMS and trauma divisions are focusing on the Comprehensive Clinical Management Program (CCMP), the disaster division on the RMOC, the education division on a site survey; and stroke division on creating stroke centers.

There were no reports from the

DSHS Preparedness Coordination Council or the Traumatic Brain Injury Advisory Council.

General Public Comment:
Public comments were heard on the lack of comments on the epinephrine auto-injector devices rule; the concerns about the EMS/Trauma Registry and possible solutions; and comments about the air medical language that was taken out of the subscription rule from the previous meeting.

Action Items: A motion was made by Pete Wolf and seconded by Shirley Scholz to request that the council rescind the friendly amendment to exclude air medical providers from the draft subscription plan rule 157.11 made at the May 2007 GETAC meeting and move forward with the original document as written by the combined EMS/Air Medical committees. The motion passed unanimously.

A motion was made by Jodie Harbert and seconded by Luis Fernandez, MD, to adopt rule 157.44 (Instructor Certification) with one minor change in line (W), "failure to notify the department when any current student or certified or licensed program employee is arrested or convicted for any crime" and add the words "when known as described." The motion passed unanimously.

A motion was made by Pete Wolf and seconded by Jodie Harbert to approve rule 157.11 (Provider Licensing) as presented by staff from DSHS with no changes. The motion passed unanimously.

A motion was made by Shirley Scholz and seconded by Marti VanRavenswaay to add the word "secure" to the Texas hospital licensing rule so as to read: "...or other safe and secure landing area..."; to add language to read

continued on page 41

Award winners named at Texas EMS Conference 2007

The 2007 Texas EMS Awards, presented during the Texas EMS Conference in Houston, honored the best in EMS and trauma in 13 categories. Congratulations to the winners!

EMS Public Information/
Injury Prevention Award Shattered Lives of Montgomery
County for excellence in teaching
dangers of poor decision-making
through a dramatic two-day
presentation at high schools.
Montgomery County Shattered
Lives is a non-profit, community
coalition that began in 1999. In
2007 they presented the two-day
program at five area high schools,
often partnering with surrounding
communities to establish similar
programs in other cities.



Linda Haden

EMS Citizen Award - Linda Haden, RN, for her response as a bystander to a collision on a rural highway, assisting with the extrication and medical treatment of a three-year-old girl whose father and six-year-old brother were both killed. Linda did not have a duty to act or provide

the amount of care that she did. Other rescue workers on the scene believe Linda's actions contributed greatly to the three-year-old being delivered to the EMS as a viable patient.



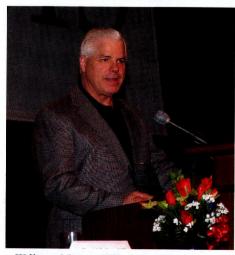
Kristine Kern

EMS Educator Award - Kristine Kern, LP, for her innovative teaching techniques and rapport she maintains with her students as assistant professor in the EMS program at College of the Mainland. Kern, a paramedic and educator for over 19 years, often spends her off-hours in the lab with students, in study groups, or riding as a paramedic and giving truly "hands-on" teaching to students. She recently took on the role of assistant chief in charge of training for Friendswood VFD – EMS, developing challenging continuing education classes for all skill levels. Kristine offers her teaching talents in many other arenas, such as the volunteer fire department, 12-lead training for nurses and doctors at local hospitals, business and industry groups and community first responders. Kern believes that education is key to a well-rounded medic.



Ed Racht, MD; David Lakey, MD; William Moore, MD, of ETMC; and Maxie Bishop

Designated Trauma Facility Award - East Texas Medical Center, Tyler, for its role as a Level I trauma center at a community-based, non-teaching hospital, a rarity in the U.S. The hospital serves a 100-mile radius in East Texas, and is the only Level I hospital between Dallas and Shreveport, Louisiana. The trauma service has been re-certified by the American College of Surgeons several times and continues to get excellent reviews. The physicians involved in the trauma surgery department have shown a dedication to trauma research and have presented their research at numerous trauma meetings.



William Moore, MD

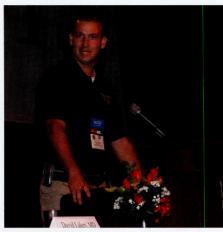
EMS Medical Director Award - William Moore, MD, for his innovative work and his dedication to EMS and the Texas Trauma System. Moore has been with East Texas Medical Center (ETMC) -Tyler since 1989 as the medical director of EMS and as an emergency room staff physician. He is the chairman of the hospital preparedness committee for the Piney Woods RAC. He is a member of GETAC's Medical Director Committee and a tireless advocate for prehospital medicine and the trauma system. Moore also received the EMS Medical Director Award in 1993.



Kathy Perkins, second from left and Ronny Stewart, MD, third from right, with members of STRAC

Outstanding RAC Award - Southwest Texas RAC, for partnering with state agencies to coordinate a comprehensive trauma and disaster preparedness "systems-approach" to mobilizing medical resources as Hurricane Dean approached the Gulf of Mexico. It also coordinated regional medical responses to the April 2007 tornado in the Eagle Pass-Piedras Negras area in which ten people were killed and dozens injured, and it coordinated responses to wildfires in both Kerrville and Bexar counties. These activities were carried out through the STRAC's "EMS-Hospital Disaster Group," a concept that exponentially

expands the traditional role of RACs from not only architects of regional trauma systems, but also developers of regional disaster-emergency healthcare systems. The STRAC exemplifies the significant regional influence of EMS providers and hospitals working collaboratively with each other to get the right patient to the right hospital in the right amount of time. STRAC also won the award in 2000.



Kevin Deramus

EMS Administrator Award - Kevin Deramus, LP, for his role as director of Washington County EMS and as co-chair of the EMS Committee for the Brazos Valley Regional Advisory Council. In those roles, he has pushed for regional standardized protocols, participated in the stroke team and several injury prevention programs, and assisted with the implementation of rapid sequence intubation (RSI). His efforts have provided the community with Public Access Defibrillation programs and there are now 55 Automatic External Defibrillators (AEDs) in Washington County. He also began the public CPR program, resulting in hundreds of residents being trained in CPR. He sought advanced protocols for Washington County, and provides education to his employees and to staff at local hospitals. He has implemented programs such as Injury Prevention/Fall Prevention for the elderly and a Special Operations Team that has nine members who train in hazmat, high angle rescue, water rescue, and child/adult immunization program.



Shannon Air Med 1

EMS Air Medical Service Award -- Shannon AirMed 1, for excellent service to the people of the Concho Valley in West Texas, covering an area spanning over 131,323 square miles and 108 counties. Given the geographical response area, emergent transfers frequently average more than two hours. The crew of AirMed 1 are trained to initiate advanced critical care treatment in the field, meaning that critically ill patients can be transported from the helicopter directly to the cath lab or surgery. AirMed 1 also enthusiatically participates in community functions, health fairs, youth activities, food bank collections, and career days in San Angelo and all over its service area. The service participated in over ten Shattered Dreams programs this year. AirMed 1 received a Local Projects Grant in 2006 which they used to buy equipment to provide free emergency related education in rural areas.



Friendswood VFD EMS

Volunteer Provider Award - Friendswood VFD EMS for its dedicated personnel, including firefighters, medics nurses, educators and flight medics, who donate their time and expertise to their community. FEMS works hard to add aggressive new protocols such as recently adding the Induced Cooling by EMS (ICE) protocol as a research project with Clear Lake Regional Hospital and neighboring EMS agencies. Over the last few years they have added protocols such as RSI and pain management to help FEMS medics better treat their patients. FEMS' focus on continuing education goes beyond the volunteer medics, reaching out to Friendswood High School and College of the Mainland to work with HOSA high school students who are interested in pursuing EMT as a career. Two students won first place in the EMT skills portion of the state HOSA competition then went on to win 2nd place in the national EMT skills HOSA competition last year. Friendswood EMS is active in SETTRAC and in its community with programs such as free immunization clinics/kid care, CPR for friends and family classes, and a bike medic group.



Washington County EMS

Private/Public Provider **Award - Washington County** EMS for its leadership role in advancing aggressive protocols, partnering with other public safety agencies, educating the public about EMS and other health issues, partnering with other public agencies, and having a management team highly attuned to the needs of medics on the street. Washington County EMS (WCEMS) has spent the last several years educating the public about EMS and it has paid off in tremendous community support from the public and from the county commissioners. The staff remains highly visible, whether through serving on a RAC or other public health committees. And in the midst of tremendous growth the agency has experienced, it took on new roles in public health, having medics administer vaccines and flu vaccinations in the absence of other resources, such as a public health nurse. In addition, the service pushes for aggressive protocols and for more disaster preparedness. By forging agreements with police, fire and other public safety entities, WCEMS demonstrates that its first priority is service to the people of the region, regardless of the agency

tapped to respond first. WCEMS organized a special operations division to provide paramedic support to the Brenham SWAT team and is working on an MOA with Brenham Fire Department to provide joint hazmat response. However, patients say it best: on a recent survey, 95 percent of respondents treated by paramedics said they were "extremely competent and professional."



Jack Howley

EMS Person Award - Jack Howley, EMT-P, for longtime service to EMS in Del Rio. Howley experienced for himself EMS as it evolved from a hobby to a life-long commitment of service, dedication and selfsacrifice. During his 25 years as director at Val Verde Regional Medical Center EMS, Jack built a solid team of dedicated paramedics, a fleet of first class ambulances and equipment, and, most importantly, built trust within the community. Howley retired in 2007, but his legacy will continue at Val Verde EMS for many years.

all award photos by B. Kinney



Dudley Wait

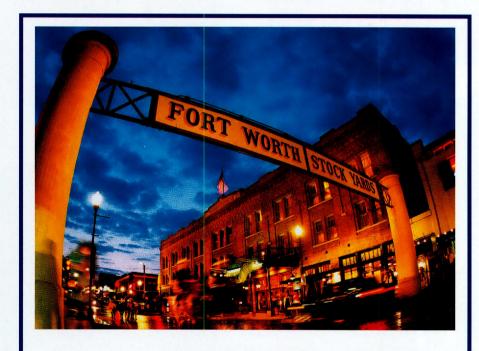
Journey of Excellence Award -Dudley Wait, LP, for his passionate involvement in committees and task forces for GETAC. For many years he has played a major role in facilitating consensus among people with widely divergent opinions, developing a concise summary of the real issues and a workable action plan. His efforts always remind us that we are in this business to take care of the sick and injured and that they rely on us to develop a system that accomplishes it in the best way it can. His kind approach, and friendly, inclusive style, paired with an "EMS" sense of humor make him an extraordinarily effective leader. The 2007 Journey of Excellence recognizes Dudley Wait as a true Texas EMS treasure. The award is given by the chair and vicechair of GETAC to an individual who consistently demonstrates a keen ability to work through complex problems involving many different organizations and individuals, with a focus on providing a better environment for patient care. The award is unique because it emphasizes not only what an individual does, it recognizes how the individual accomplishes the goals.



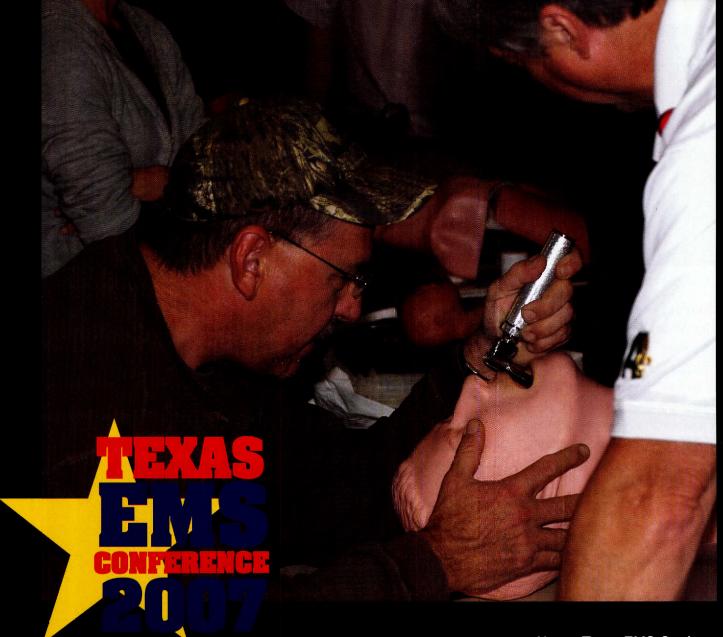
Ashish Shah, MD, (left) and David Persse, MD, (right), thank representatives from the Houston Livestock Show and Rodeo Safety Committee

EMS First Responder Award
- Houston Livestock Show and
Rodeo Safety Committee for
providing exemplary service
for all Houston Livestock Show
and Rodeo (HLS&R) Safety
Committee events, both on-site and

off-site (parade, trail ride events and campout at Memorial Park, off-site judging of livestock, etc.), as well as for the cowboy and cowgirl rodeo contestants. During show hours, the committee is the first responder for the Houston Fire Department and is in radio contact with HFD dispatch center and EMS units. During 2007, the safety committee responded to 556 incidents and treated a total of 2,306 visitors. The safety committee has its own training division, and its 750 members are required to attend two training sessions each year. Training topics includes AED, CPR, back board, immobilization and correct stretcher techniques, along with record keeping procedures.



Texas EMS
Conference
November 23-26, 2008
Fort Worth



Houston welcomes EMS Conference

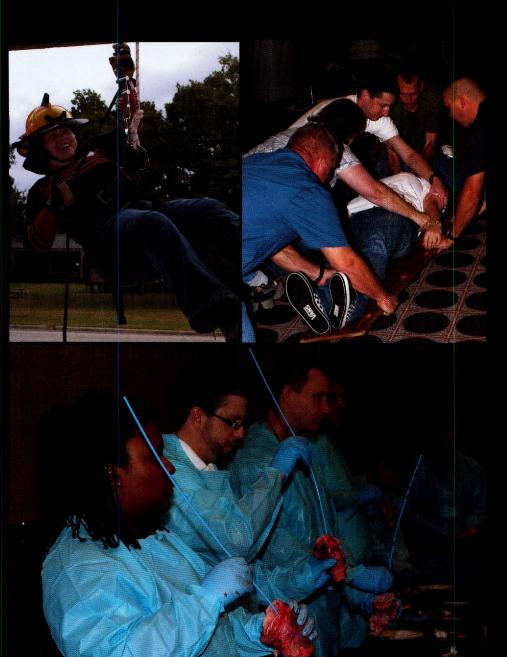
ouston, we have a ... conference. Texas EMS Conference 2007 brought nearly 1,800 paid attendees (nearly 100 more than 2006) and another 1,000 exhibitor reps, staff, faculty and volunteers to the Bayou City for five days. The verdict? The Houston set-up of the convention center attached to host hotel got rave reviews, as did the classes. Especially popular were the hands-on classes that allowed students to get practice skills. The nearly 160,000 square feet of exhibit hall was also a hit, drawing in nearly 1,000 extra visitors during the show.

We move the conference to Fort Worth for 2008 and 2009, so dust off your cowboy boots as we move to Cowtown and the newly remodeled (and enlarged) convention center.

Photographs by B. Kinney

Above, Texas EMS Conference attendees got plenty of skills practice. Here a medic practices intubation in one of the 150 different classes. The conference offered larger lecture classes and smaller, hands-on classes, such as the airway class pictured above.

Top left, students in the high angle class were left hanging – but not for long. A student learns the value of a good harness – and rope – in one of the outdoor rescue classes. Several rescue classes were offered on Saturday and Sunday.



Right: One, two, three, roll! Students in the Basic Trauma Life Support class practice proper backboarding at one of the six skills stations during the 16-hour class.

Middle: Ready, set, intubate. Pig tracheas took over a classroom for a day as students practiced during the two-hour hands-on lectures. The hands-on lectures are limited to 25 students and require advance registration.

Bottom left: EMS is a different breed, as we know. Students "sang the praises" of hands-onclasses and looked really happy as they examined different parts of cows during one of the twohour workshops.

Bottom middle: The little bears were back on the table at the Tuesday awards luncheon, which seated nearly 2,400 people for a meal of grilled chicken and mashed potatoes. And some really awesome chocolate cake! The bears are given to the winners of the provider awards to give to children on calls.

Below: Bernie Stafford, center, shows a moulage student how to make a good bloody injury. Moulage was taught as one of the two-hour hands-on classes during the conference. At the end, one of the students won a moulage kit from the workshop's sponsor, The Fun Shop.





Large exhibit hall draws thousands of visitors

After attendees walked through these arches (above), they found nearly 160,000 square feet of state-of-the-art equipment, supplies and educational materials, and a whole bunch of ambulances and helicopters. Nearly 3,000 attendees, faculty, volunteers and exhibitor reps visited the exhibit hall, plus another 1,000 visitors who took advantage of the complimentary exhibit hall.

Inset: Hermann LifeFlight staff polish their chopper in anticipation of the many visitors who came to the show.

Facing page, top left: The Houston Fire Department showed up in their finest to help kick off the exhibit hall opening. Our

thanks to Houston Fire Department personnel, who worked all year to make sure attendees had a wonderful stay in Houston.

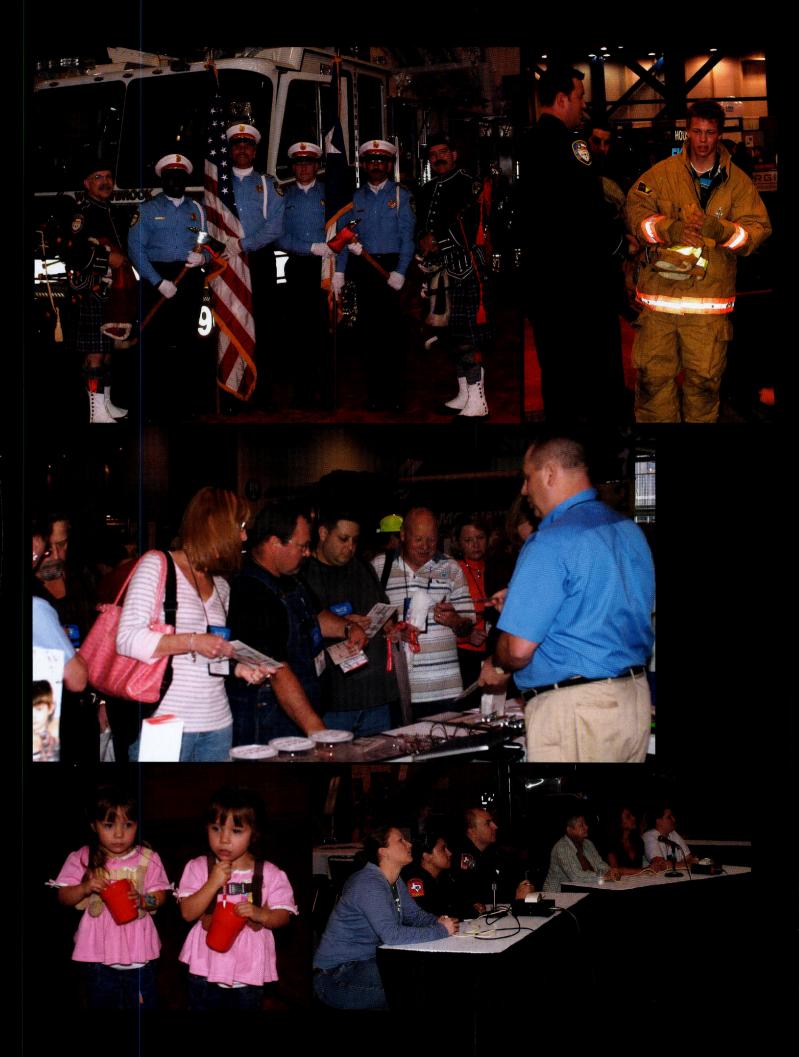
Facing page, top right: A young visitor to the exhibit hall tries out a maze set up by the Houston Fire Department. HFD set up several hands-on displays, in addition to several rescue vehicles.

Facing page, Middle: If they demonstrate, they will come. An exhibitor shows off his wares during the show. The exhibit hall is set up to let EMS personnel see the newest in prehospital equipment and technology.

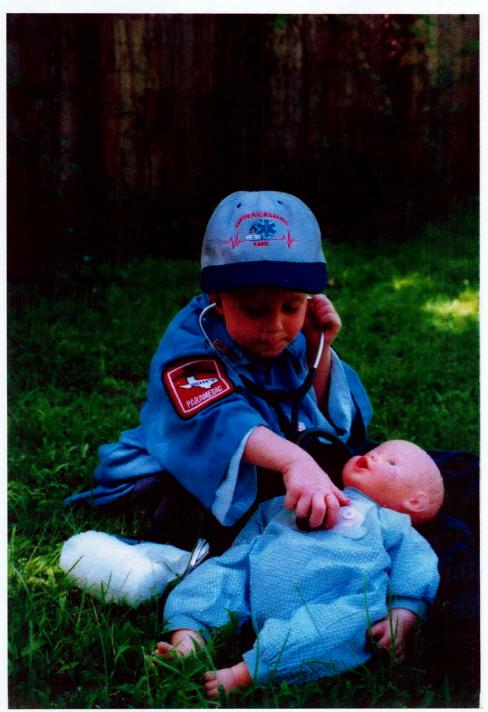
Facing page, bottom left: Rebekkah Renee and Cierra

Nevaeh Guerrero of El Paso enjoy the exhibit hall while visiting with their grandparents. Grandfather Raul Guerrero knows the importance of getting an early start in EMS.

Facing page, bottom right: Valsalva returns! The EMS game show made a comeback this year. The preliminaries were Sunday evening and the finals (shown here) were in the exhibit hall at lunch. The Blue Schertz teams took first; Charlie's Angels took second; and White Schertz are the teams that took home top honors.



Texas EMS Photo Contest 2007



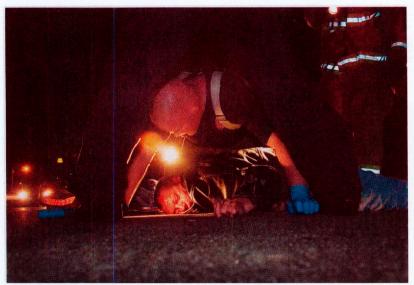
First Place - Catherine Kuhlmann

First Place goes to
Catherine Kuhlmann with
the City of Fredericksburg
EMS. The future of EMS
through the eyes of a child. The
photographer's four year old son
DJ caught playing dress up in
mom's uniform.

Second Place goes to
Evan Lewis of the Texarkana
Gazette. A near fatal motorcycle
accident. Treated by LifeNet
and Texarkana Texas Fire
Department.

Third Place goes to Mike Duncan with the Roanoke Fire Department. An intubation attempt on a cardiac arrest victim.

Honorable Mention goes to a photo entered by Melissa Kendrick with Memorial Hermann Life Flight. The photographer was Kevin Frieze of League City EMS. Securing an intubation tube on a patient of a head-on multiple vehicle collision.



Second Place - Evan Lewis



Third Place - Mike Duncan



Honorable Mention -Kevin Frieze

Plan now to enter the Texas EMS Conference 2008 photo contest

Photo Contest Rules

• Winning categories and prizes: Grand Prize winner (either color or black and white)—\$250 and a plaque.

First Place—\$175 and a ribbon. Second Place—\$100 and a ribbon.

Third Place—\$75 and a ribbon. Honorable Mention—\$50 and a ribbon.

- **Deadline:** Entries must be received no later than **November 10, 2008.** All photos will be displayed at Texas EMS Conference, and winners will be printed in the January/February issue of *Texas EMS Magazine*.
- **Photos**: Send unmatted prints, in color or black and white (5 X 7 to 9 X 12 is best). Fill out the entry form, tape it to the back of your photograph and mail your entry to: Texas Department of State Health Services/EMS, 1100 W. 49th St., Austin, TX 78756-3199.
- For digital photos: Please print out a copy and mail it with the entry form attached. You also may e-mail the photo in .jpg format, using CMYK colors, to Dawn.Whitfield@dshs.state.tx.us.
- The photographer's name will be printed along with the photo.
- Anyone is eligible; no entry fee is required.
- Photographs should show good patient care.
- The ownership of the negative will remain with the photographer.

by Dean Lofton

New stretchers go to Texas City EMS

The City of Texas City EMS Department recently received three new Stryker Power Pro 6500 Stretchers for its three primary response units. Four new LifePak 12 ECG monitor/ defibrillators with end tidal CO2, pulse oximetry, 12-lead and transmit capabilities were also purchased, and placed on the first responder apparatus. All monitors have the ability to upload real time ECG data to the mobile patient care reporting software, allowing the complete record to remain with the ePCR for retention. Texas City EMS delivered care to more than 9.000 patients in its first 22 months of service.

Harris County hospitals receive new equipment

Harris County Hospital
District recently acquired fullbody transporter sleds and
specially-designed traction
wheelchairs. Employees were
trained in use of the equipment
for evacuating non-ambulatory
patients down stairs. The
district, whose hospitals
include Ben Taub, Lyndon B.
Johnson and Quentin Mease,
used a \$108,000 grant from
the Department of Homeland
Security to purchase the 60
sleds and 15 wheelchairs.



Ready Teddy teaches bike safety

Ready Teddy of Lake Jackson EMS participated in a bike rodeo to educate children about bicycle safety and the importance of wearing a helmet at the City of Lake Jackson's Fall Cleanup. Lake Jackson EMS promotes injury prevention with bike rodeos and Ready Teddy appearances.

Austin cadets stage food drive

What started as a community project challenge for an **Austin-Travis County EMS** cadet class last fall grew beyond anyone's expectations. The EMS cadets' goal was to collect enough money and food donations to provide 10,000 meals for the Capital Area Food Bank. The Capital Area Food Bank feeds more than 40,000 Central Texans every week. The cadets called upon EMS co-workers, ATCEMS Academy instructors, and the Central Texas community to help meet the challenge. The cadets asked for donations of

non-perishable food items and money – at local EMS stations, at EMS headquarters, on an internet website, and finally at a two-day weekend event at a north Austin Wal-Mart store. To show support for the cause, EMS cadets went on a hunger strike where they skipped at least one meal. The EMS cadets collected \$3.097 and 3,614 lbs of food. These totals will provide 20,237 meals from the Capital Area Food Bank. The Austin-Travis County EMS cadets graduated from the thirteen-week academy on November 2 at Austin City Hall.



In January of 2009, the Cypress Creek EMS complex will include administrative offices, an education center, a communicatins center and an EMS station. CCEMS Board of Directors, from L to R: Greg Marwill, president; Jim Cravens, president-elect; Dave King, secretary; Karen Plummer, corresponding secretary; Ruben Gonzales, Jr., director; Dennis Schmidt, volunteer representative; Bill Carey, director; Drew Kahn, director; Brad England, CCEMS executive director; Dr. Levon Vartanian, CCEMS medical director.

Cypress Creek EMS breaks ground

In November, Cypress Creek EMS held a ground breaking for their new six-acre complex. Scheduled to be completed in January of 2009, the complex will include administrative offices, the new Charles R. Hooks Education Center, a communications center, and an EMS station. Having these departments at a centralized campus will provide the community easier access to all departments.

The communications center will house consoles for up to 14

emergency dispatchers and will provide dispatchers with the latest technological advances. The new education center will allow for larger classes, greater flexibility in classroom configuration, and a new technology-based skills lab. In addition, the new EMS station located in the complex will provide better 9-1-1 coverage in an area with an already demanding call volume. It will have three bays, one of which will be large enough to house a new mobile communications vehicle.

Are you mentioned in Local and Regional EMS News?

You need to be! Are you planning a fundraiser? A training class? A public education program? Do you have new people on board? Have you elected new officers? Send your news to:

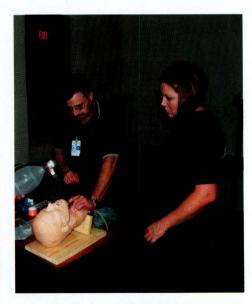
Texas EMS Magazine Kelly Harrell, Editor 1100 West 49th Street Austin, Texas 78756-3199

or: kelly.harrell@dshs.state.tx.us (512)834-6700 Fax (512) 834-6736

We welcome letters to the editor on EMS issues, magazine articles or other topics of interest. We print letters to the editor as we have space.

RAC-R hosts airway class

The education committee of East Texas Gulf Coast Regional Trauma Advisory Council recently put on its third Emergency Airway Management Class (EAMC), hosted by Lake Jackson EMS. Each class is limited to 20 students, enabling a 5-to-1 student-toinstructor ratio. The mission of the East Texas Gulf Coast Regional Trauma Advisory Council -Education Committee is to share medical knowledge and best practices with all prehospital and hospital providers. The Education Committee embraces the belief that "excellent patient care is through education, training, and experiences." Information on future classes can be found at www.racr.com.



The Education Committee of East Texas Gulf Coast Regional Trauma Advisory Council recently put on its third Emergency Airway Management Class (EAMC), hosted by Lake Jackson EMS. Information on other classes can be found at www.rac-r.com.



EMS officials met with Williamson County staff in October. From top left by row, top row: Joe Granberry, John Gonzales, Ed Tydings, Mike Knipstein; middle row: James Cervenka, Jason Valdez, Calvin Coles, John Gaines, Steve Hites, John Sneed, Chris Meyer; bottom row: Nathan Denney, Stephen Benold, Lisa Tipton, Wendi Kirk, Terri King, Laurie Emmer and Brett Hart, Manager DSHS

WilCo welcomes new employees

Brett Hart and Christopher Meyer, both with DSHS EMS Compliance, and Maxie Bishop, state EMS director, visited Williamson County EMS's (WilCo EMS) new employee orientation in October, and met with management and the new employees. WilCo EMS will open new stations in Cedar Park and Hutto this year. The service began in 1975 after Davis Funeral Home stopped providing ambulance transport. Over the years the service has grown to twelve stations handling over 24,000 calls per year. In the past few years, call volume has increased 30 percent to 35 percent each year. The organization consists of 101 full-time personnel, and serves the 1,124 square miles of Williamson County.

Christus Spohn upgrades to Level II

Christus Spohn Hospital Corpus Christi – Memorial recently achieved Major (Level II) Trauma Center designation, upgrading their trauma designation status from an Advanced (Level III) Trauma Center.

Dr. Osbert Blow, MD, FACS, chair, Department of Acute Care Surgery, Trauma and Surgical Critical Care and medical director for Christus Spohn's Trauma and Surgical Critical Care Services, says, "This is an historic moment for the Coastal Bend area and South Texas. Memorial is now the only Level II Trauma Center south of Austin."

The state Level II trauma designation process requires that a facility be surveyed through the American College of Surgeons trauma verification program. Specific services such as neurosurgery and other surgical specialties needed to provide a higher level of care must be met. Each hospital has an on-site review by a survey team which includes two experienced trauma surgeons, an emergency room physician and a trauma nurse. Dr. Blow said Memorial's American College of Surgeon's Committee on Trauma Verification as a Level II Trauma Facility marks the beginning of all the work needed not only in clinic care, but also in the areas of injury prevention, community service, education and public awareness outreach.



Dr. G. Kemball Bennett (left) is presented with a proclamation by Texas Task Force 1 Director Bob McKee at the 10-year anniversary celebration for Texas Task Force 1 in October in College Station. Bennett has been called the "father of Texas Task Force 1."

Texas Task Force 1 celebrates ten-year anniversary

In October, about 300 current and former Texas Task Force 1 (TX-TF1) members and their families attended a ten-year anniversary and awards ceremony at the Annenberg Conference Center of the George Bush Presidential Library in College Station. Keynote speaker and "the father of Texas Task Force 1" Dr. G. Kemball Bennett spoke about the history of the task force and the countless hours of service the men and women of the task force have provided.

Numerous dignitaries thanked the task force for its years of service. Former President George Bush and U.S. Senator John Cornyn delivered video messages, and Texas State Representative Fred Brown read a proclamation from Texas governor Rick Perry.

TX-TF1 is a state and federal urban search and rescue team made up of more than 300 personnel representing more than 60 jurisdictions and agencies from across the state of Texas.



Sheryl Coffey, executive director of Piney Woods RAC, was a 2007 "Difference Maker" honoree at the Mother's Against Drunk Driving "Tie One on for Safety" annual event in Tyler in November.

been a driving force in developing a collaborative partnership with MADD East Texas to prevent injuries and deaths due to drunk driving; Lana Kaye Taylor, whose daughter was killed by a drunk driver prompting her to work with DUI/DWI offenders for the past 16 years; and Cindy Grimes, who was critically injured in a crash caused by a drunken driver that killed her mother and infant daughter.

Special recognition and honor was given to local law enforcement for strict enforcement and prosecution of DWI/DUI offenders, and to local colleges for their proactive approach in preventing underage drinking through the establishment of MADD chapters on campus.

MADD East Texas and Piney Woods RAC launch third "Tie One On For Safety" campaign

The Mothers Against Drunk
Driving, (MADD) East Texas
Region, Tyler affiliate, and the
Piney Woods Regional Advisory
Council (RAC-G) launched the
third "Tie One On For Safety"
campaign (TOOFS) in November.
Each year, more than six million
red ribbons or red ribbon decals are
distributed nationally as a symbol
of the driver's pledge to drive
safe, sober and buckled up. It is a
reminder to everyone to keep roads
safe from drunken driving.

The Piney Woods Regional Advisory Council was the presenting sponsor for the third

year. Nearly 200 people attended this event, including representatives from the medical community, law enforcement, district attorneys, judges, elected officials, social service agencies, educators, community leaders and media. This year's keynote speakers were: Joey Seeber, mayor of Tyler; Dr. David Lakey, DSHS health commissioner; and Chuck Hurley, CEO MADD national office.

In addition, MADD presented awards to the following 2007 "Difference Maker" honorees: Sheryl Coffey, executive director of Piney Woods RAC, who has

TEXAS EMS C	OF
As of 12	/11/07
ECA	3500
EMT	28439
EMT-I	3663
EMT-P	12248
LP	5599
Total	53,449
Basic Coordin	ator 118
Adv. Coording	ator 221
Instructor	1779

National Registry-Texas Pass Percentage January 1, 2007- November 12, 2007

The statistics below list the 2007 Texas EMS program pass rates and compare overall Texas scores to the national average. The stats only include data from January 1, 2007 through November 14, 2007. A pass rate which considers a low number of students isn't indicative of a program's capabilities.

The state EMS director and DSHS EMS compliance managers for your region are gladly willing to further explain the statistics and documents, and are also available to explore different avenues of process improvement for Texas EMS education programs. Contact information:

State EMS Director: Maxie Bishop: 512.834.6700; maxie.bishop@dshs.state.tx.us EMS Manager, North: Kevin Veal: 817-264-4720; kevin.veal@dshs.state.tx.us

EMS Manager, South: Fernando Posada: 210-949-2050; fernando.posada@dshs.state.tx.us

EMS Manager, Central: Brett Hart: 512-834-6700; brett.hart@dshs.state.tx.us

EMS Manager, East: Aaron Patterson: 713.767.3333; aaron.patterson@dshs.state.tx.us

EMS Certification Level	National Average Pass Percentage	Texas 1 st Opportunity Pass Percentage	Texas Overall Pass Percentage
ECA (FR exam)	78%	73%	80%
ЕМТ-В	72%	63%	72%
EMT-I	68%	68%	73%
ЕМТ-Р	65%	48%	64%

ЕМТ-В				ЕМТ-В			
I	Number	Numbe	r Pass		Number	Number	Pass
	Students	Passed 1	Percentage	Provider	Students	Passed P	ercentage
B & M Ambulance Service	8	8	100	Schertz EMS Training Academy	15	13	87
Emergency Medical Training Serv-El Pas	o 7	7	100	Brazosport College	14	12	86
Mesquite Fire Department	5	5	100	Careflite Education	7	6	86
Olton EMS Training Program	4	4	100	College of the Mainland	51	44	86
Plano Independant School District	4	4	100	Longhorn Student EMS Education Prog	ram14	12	86
Rice University EMS	17	17	100	San Antonio College EMS Academy	14	12	86
San Angelo Fire Department	9	9	100	Temple College	46	39	85
San Saba County EMS	1	1	100	Training Division.com	103	87	84
Schleicher County Volunteer	3	3	100	Grayson County College	83	69	83
Seminole EMS	2	2	100	North Central Texas College	40	33	83
Texarkana College	1	1	100	TX State Technical College-West Texas	35	29	83
Tri-County Training Program	5	5	100	Clay County Memorial Hospital	11	9	82
Western Texas College	2	2	100	Collin County Community College	85	70	82
Fort Worth Fire Department	33	32	97	ABC Resources	26	21	81
Corpus Christi Fire Department	22	21	95	Austin Fire Department EMT Academy	21	17	81
Duggan and Associates EMT Services	76	71	93	Cy-Fair College	105	85	81
University of Texas Health Science Ctr	68	63	93	Port Aransas EMS	5	4	80
Methodist Dallas Medical Center	35	32	91	San Marcos Hays County	49	39	80
Associated Ambulance Authority	10	9	90	Victoria College	44	35	80
Univ of TX Southwestern Medical Center	67	60	90	Texas Engineering Extension Service	219	174	79
Austin Community College	100	89	89	Angelina College	37	29	78
Alert Academy	17	15	88	Frank Phillips College	18	14	78
City of Lockhart EMS Education	8	7	88	Tarrant County College	116	91	78
Montgomery County Hospital District	24	21	88	Blinn College	49	38	77
Roberson EMS Training Academy	8	7	88	Central Texas College	22	17	77

ЕМТ-В				ЕМТ-В			
	Number	Number	r Pass		Number		
			Percentage	Provider			Percentage
Emergency Mgt Training & Services	26	20	77	Mart EMS Inc.	7	4	57
Palo Alto College	13	10	77	Texas Emergency Training	28	16	57
DeSoto Fire Academy EMS	29	22	76	Nomad Emergency Medical Training	9	5	55
El Paso Community College	67	51	76 76	South Texas College	53	29	55
Midland College	17	13	76	West Texas Emergency Services Trainin		6	55 53
Aransas County EMS	8	6	75	Northeast TX Fire/EMS Training Acade		26	53
Driscoll Childrens Hospital	4	3	75 7.5	GEM Training Center	2	1	50
EMS Network, Inc.	4	3	75 75	Healthwebce.com Limited Liability Co		3	50
Harker Heights Fire Department	4	3	75 75	Lexington Volunteer EMS	6	3	50
National College of Tech Instruction-AM		33	75 75	Plainview Fire EMS	20	10	50
North Wheeler County EMS	4	3	75 75	Southeast Texas EMS Instructors	10	5	50
Weatherford College	28	21	75	University of Texas at Brownsville	14	7	50
Weslaco Fire Department EMS	8	6	75 74	Cintas First Aid and Safety	136	65	48
Hill College	31	23	74	MetroCare Services	17	8	47
Integrated Training Services, Inc	19	14	74 72	Panola College	15	7	47
Killeen Fire Department Academy	30	22	73 72	Emergency Training Enterprises	24	11	46
TechPro Services, Inc.	63	46	73 72	Lamar State College-Orange	16	7	44
Texas State Technical College-Harlinger		29	73	Friona EMS Education	7	3	43
Bulverde Spring Branch EMS	41	29	71	Waller County EMS	7	3	43
Southwest Texas EMS Training	14	10	71	ProAction EMS Training Center	12	5	42
Tyler Junior College	49 50	35	71	Sutton County EMS	5 12	2	40
Wharton County Junior College	58	41	71	Atascosa County EMS Training Progra		5	38
Cypress Creek EMS	77	54	70 70	Lee College	16	6	37
North Harris College	87	61	70 70	Laredo Community College	14	5	36 36
Trinity Valley Community College	37	26	70	Res-Q-One	11	4	33
Amarillo College	62	43	69	Austin-Travis County EMS	3 9	1	33 33
Brookhaven College	59 42	41 29	69 69	Howard College Mexia Training Associates	3	3 1	33 33
East Texas Medical Center	39	29 27	69 69	Dalhart EMS Education Department	2	0	0
Kilgore College	39	27	69	Abilene Fire Department	None	U	U
Life Ambulance EMS Academy	28	19	68	Booker EMS Education Program	None		
Alvin Community College	26 15	19	67	Bovina EMS	None		
Eagle Pass Fire Department EMS Educators	12	8	67	Canyon Volunteer Fire Department	None		
R L Turner Biomedical Academy	3	2	67	Childress EMS Training Program	None		
Safety First	6	4	67	City of Laredo Fire Department	None		
San Jacinto Community College	177	118	67	Cuero Community Hospital	None		
TX Emergency Services Education Grou		10	67	Diamond Education	None		
Wise Medical Training	18	12	67	ECAT DSHS Dilworth	TOHC		
San Antonio EMS Degree Program	68	45	66	El Paso Fire Department Training Acad	lemy Non	p.	
Emergency Consultants, Inc.	72	47	65	International Academy of Emergency I		C	
GCS Resources	17	11	65	Jim Hogg County EMS Training Center			
Goldenwest EMS	11	7	64	Kingsville Fire/EMS Academy	None		
Lamar Institute of Technology	56	36	64	Lifesaver Education Courses	None		
South Plains College	106	68	64	Mountain Medics	None		
Galveston College	24	15	63	Nocona General Hospital	None		
Medical Education Systems Inc	16	10	63	Paris Jr College	None		
McLennan Community College	67	41	61	People's Ambulance Service	None		
Red River Medical Institute	18	11	61	San Angelo Emergency Corps	None		
EMS Unlimited Educators	5	3	60	Schaaf Consulting LLC	None		
Nacogdoches Memorial Hospital	5	3	60	Texas Tech School of Medicine	None		
Navarro College	47	28	60	Travis County #1	None		
Del Mar College	4 7	28	59	Washington County EMS	None		
Lone Star Public Safety Academy	17	10	59				
Northeast Texas Community College	27	16	59	EMT-I			
Vernon College	27	16	59		Number	Numbe	r Pass
Champion EMS Training Center	24	14	58	Provider	Students	s Passed	Percentage
Houston Community College	53	31	58	Alvin Community College	5	5	100
Odessa College	26	14	58	Austin Community College	20	20	100

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2	Number	Number	Pass
Provider			ercentage
Del Mar College	1	1	100
Houston Community College	1	1	100
Life Ambulance EMS Academy	4	4	100
McLennan Community College	3	3	100
Midland College	1	1	100
Montgomery County Hospital District	1	1	100
Northeast Texas Community College	3	3	100
Roberson EMS Training Academy	4	4	100
San Angelo Fire Department	10	10	100
San Antonio EMS Degree Program Seminole EMS	2	2	100
	4	4	100
Tarrant County College TechPro Services, Inc.	7	7	100
Temple College	6	6	100
Texas Tech School of Medicine	1 16	1	100
Tyler Junior College	5	16 _. 5	100 100
Vernon College	3	3	100
North Harris College	18	3 17	94
Bulverde Spring Branch EMS	23	20	94 87
Southwest Texas EMS Training	7	6	86
Frank Phillips College	17	14	82
Texas State Technical College-West Tex		4	80
San Antonio College EMS Academy	9	7	78
Angelina College	13	10	77
Victoria College	4	3	75
Palo Alto College	7	5	71
Kilgore College	10	7	70
Emergency Consultants, Inc.	52	36	69
College of the Mainland	3	2	67
Cy-Fair College	9	6	67
Galveston College	9	6	67
Lone Star Public Safety Academy	3	2	67
MetroCare Services	3	2	67
South Plains College	6	4	67
South Texas College	12	8	67
San Jacinto Community College	41	27	66
Brazosport College	8	5	63
University of Texas at Brownsville Texas Engineering Extension Service	8 13	5 8	63
Hill College	5	3	62 60
Wharton County Junior College	9	5	56
Associated Ambulance Authority	4	2	50
El Paso Community College	2	1	50
Lamar Institute of Technology	8	4	50
Laredo Community College	4	2	50
Mart EMS Inc.	8	4	50
Navarro College	2	1	50
Trinity Valley Community College	4	2	50
Waller County EMS	4	2	50
West Texas Emergency Services Training	-	4	40
Weslaco Fire Department EMS	9	1	11
EMS Educators	3	0	0
Lee College	1	0	0
Red River Medical Institute	3	0	0
Safety First	1	0	0
Texas State Technical College-Harlinger		0	0
Western Texas College	1 None	0	0
Abilene Fire Department	None		
Amarillo College Aransas County EMS	None None		
Addison County Livin	TAOHE		

EMT-I

	Number	Number Pass
Provider		Passed Percentage
Blinn College	None	1 assect 1 electring
Brookhaven College	None	
Central Texas College	None	
Childress EMS Training Program	None	
City of Laredo Fire Department	None	
Clay County Memorial Hospital	None	
Collin County Community College	None	
Corpus Christi Fire Department	None	
Cuero Community Hospital	None	
Cypress Creek EMS	None	
Duggan and Associates EMT Services	None	
East Texas Medical Center	None	
El Paso Fire Department Training Acade		
Emergency Medical Training Serv-El Pa	so None	,
Friona EMS Education	None	
Grayson County College	None	
Howard College	None	
International Academy of Emergency Pr		
Jim Hogg County EMS Training Center	None	
Kingsville Fire/EMS Academy	None	
Lamar State College-Orange	None	
Methodist Dallas Medical Center	None	,
Mountain Medics	None	
Nacogdoches Memorial Hospital	None	
National College of Tech Instruction-AM		
Nocona General Hospital	None	
North Central Texas College	None	
North Wheeler County EMS	None	
Odessa College	None	
Paramedic Re-entry Program		
Paris Jr College	None None	
ProAction EMS Training Center		
	None	
Re-registration by Exam Program Rice University EMS	None	
Southeast Texas EMS Instructors	None	
Sutton County EMS	None	
	None	
Texarkana College	None	NT
Texas Emergency Services Education Gr	-	None
Training Division.com	None	
Univ of TX Southwestern Medical Center		
University of Texas Health Science Ctr	None	
Washington County EMS	None	
Weatherford College	None	

EMT-P

	Number	Numbe	er Pass
Provider	Students	Passed	Percentage
Associated Ambulance Authority	1	1	100
Austin Community College	21	21	100
College of the Mainland	3	3	100
Galveston College	1	1	100
Temple College	7	7	100
Texas Tech School of Medicine	6	6	100
Western Texas College	2	2	100
Houston Community College	35	33	94
Univ of TX Southwestern Medical Center	er 116	109	94
North Harris College	14	13	93
University of Texas Health Science Ctr	76	71	93
Angelina College	12	11	92
Northeast Texas Community College	10	9	90

Provider	ЕМТ-Р	Number	Numbe	er Pass
Tarrant County College 15 13 87 Victoria College 15 13 87 Southwest Texas EMS Training 7 6 86 Montgomery County Hospital District 13 11 85 Blinn College 12 10 83 Brookhaven College 25 19 76 North Central Texas College 54 41 76 Abilene Fire Department 4 3 75 San Angelo Fire Department 4 3 75 San Angelo Fire Department 7 5 71 Duggan and Associates EMT Services 27 20 74 Grayson County College 31 23 74 Alert Academy 7 5 71 Corpus Christi Fire Department 7 5 71 MetroCare Services 7 5 71 Collin County Community College 13 9 69 San Antonio EMS Degree Program 8 5 63	Provider	Students	Passed	Percentage
Victoria College 15 13 87 Southwest Texas EMS Training 7 6 86 Montgomery County Hospital District 13 11 85 Blinn College 12 10 83 Brookhaven College 25 19 76 North Central Texas College 54 41 76 Abilene Fire Department 4 3 75 San Angelo Fire Department 4 3 75 Cargyon County College 31 23 74 Alert Academy 7 5 71 Corpus Christi Fire Department 7 5 71 MetroCare Services 7 5 71 Collin County Community College 13 9 69 San Antonio EMS Degree Program 8 5 63 Navarro College 10 6 60 Cypress Creck EMS 15 9 60 Bulverde Spring Branch EMS 26 15 58 Del	Amarillo College	9	8	89
Southwest Texas EMS Training 7 6 86 Montgomery County Hospital District 13 11 85 Blinn College 25 19 76 North Central Texas College 54 41 76 Abilene Fire Department 4 3 75 San Angelo Fire Department 4 3 75 San Angelo Fire Department 4 3 75 Corpus Christi Fire Department 7 5 71 Metra Academy 7 5 71 Corpus Christi Fire Department 7 5 71 MetroCare Services 15 9 60 San Antonio EMS Degree Program 8 5 63 Navarro Coll	Tarrant County College	15	13	87
Montgomery County Hospital District	Victoria College	15	13	87
Blinn College	Southwest Texas EMS Training	7	6	86
Brookhaven College 25 19 76 North Central Texas College 54 41 76 Abilene Fire Department 4 3 75 San Angelo Fire Department 4 3 75 Duggan and Associates EMT Services 27 20 74 Grayson County College 31 23 74 Alert Academy 7 5 71 Corpus Christi Fire Department 7 5 71 MetroCare Services 7 5 71 Collin County Community College 13 9 69 San Antonio EMS Degree Program 8 5 63 Navarro College 47 29 62 Alvin Community College 10 6 60 Cypress Creek EMS 15 9 60 Bulverde Spring Branch EMS 26 15 58 Bel Mar College 14 8 57 Kilgore College 13 13 57 Echel T	Montgomery County Hospital District	13	11	85
North Central Texas College 54 41 76 Abilene Fire Department 4 3 75 San Angelo Fire Department 4 3 75 Duggan and Associates EMT Services 27 20 74 Grayson County College 31 23 74 Alert Academy 7 5 71 Corpus Christi Fire Department 7 5 71 MetroCare Services 7 5 71 Collin County Community College 13 9 69 San Antonio EMS Degree Program 8 5 63 Navarro College 47 29 62 Alvin Community College 10 6 60 Cypress Creek EMS 15 9 60 Bulverde Spring Branch EMS 26 15 58 Del Mar College 14 8 57 Kilgore College 14 8 57 Kilgore College 14 8 57 Kilgore Serv	Blinn College	12	10	83
Abilene Fire Department	Brookhaven College		19	76
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Provider			ercentage
Brazosport College	2	0	0
Clay County Memorial Hospital	3	0	0
Cy-Fair College	1	0	0
Friona EMS Education	1	0	0
Paris Jr College	1	0	0
Red River Medical Institute	5	0	0
City of Laredo Fire Department	None		
El Paso Fire Department Training	None		
EMS Educators	None		
International Academy of Emergency P.	rep None		
Lamar State College-Orange	None		
Lee College	None		
Mart EMS Inc.	None		
Mountain Medics	None		
Nacogdoches Memorial Hospital	None		
Nocona General Hospital	None		
North Wheeler County EMS	None		
Roberson EMS Training Academy	None		
Sutton County EMS	None		
Weslaco Fire Department EMS	None		
West Texas Emergency Services Training	ng None		

Did you know?



Applicants for initial or renewal EMS certification or licensure must report all criminal history convictions received as an adult, including deferred adjudications. For most people, that's age 18. But if you were under 18 and tried as an adult, you also must report those convictions and deferred adjudications. Not telling us about a criminal history will only slow the application down, and it could mean that you could lose – or be denied – certification or licensure.



Heart matters

Cardiovascular events demand quick response

By Kenny Navarro, LP

Objectives

At the end of this module, the paramedic will be able to

- Discuss the American Heart Association's Chain of Survival.
- Review the pathophysiology of the fibrillating myocardium.
- Describe the three-phase model of ventricular fibrillation.
- Formulate a treatment plan for the victim of cardiac arrest.



photo by Audra Horton of Merkel EMS

"If the heart trembles, has little power and sinks, the disease is advancing ... and death is near..."

- the Papyrus Ebers (circa 1550 BC)

Overview

Cardiovascular disease is a significant source of morbidity and mortality in the United States with

estimates of a half-million deaths per year attributed directly to sudden cardiac death. Another three quarters of a million people will require resuscitation attempts during hospitalization. Although treatment algorithms have been continuously revised over the last 30 years, the hospital admission rate among patients who undergo resuscitation in

TABLE 1	1975	1995	P value*
Prevalence of ventricular fibrillation or tachycardia	42%	28%	0.21
Prevalence of asystole or pulseless electrical activity as the first documented rhythm	58%	72%	.021
Survival to hospital discharge	22%	9%	.007

^{*}The p-value is a term that represents statistical significance, or the probab lity that the observed effect could have been obtained by chance. In many clinical trials, the results would be considered statistically signif cant if the p-value is less than or equal to 0.05.

Given a p-value of 0.05, if a particular study were to be conducted 100 separate times, the same results would occur 95 times, and different results would occur only 5 times

the field remains very low and even fewer are discharged neurologically functional.³⁻⁸

In a study published in 1998, researchers in Los Angeles compared cardiac arrest survival rates from the year 1995 to the year 1975. During that twenty-year period, the Los Angeles EMS world saw the introduction of 9-1-1 access, the concept of an emergency medical dispatcher, endotracheal intubation, first responders with automated external defibrillators, a transition away from hospital radio telemetry contact toward standing orders and the development of the American Heart Association ACLS algorithms.

The data showed a statistically significant decrease in survival to hospital discharge despite all the advances made during that time (Table 1).

Despite the fact that the modern form of CPR has been around for almost half a century,¹⁰ no significant increases in survival rates have been reported for over thirty years.⁷ When examining the characteristics of resuscitation during that time, most of the changes have been at the advanced level. Based on that observation, two important questions emerge.

- 1. If advanced care is not improving survival rates from cardiac arrest, why continue to do it?
- 2. Could there still be some undiscovered basic principle of cardiac arrest resuscitation that prevents the advanced care from working?

 Clearly, a change has to be made.

The Chain of Survival

The American Heart Association's Emergency Cardiovascular Care programs emphasize a series of steps which must be performed as quickly as possible. These steps are collectively known as the Chain of Survival.¹¹

The first link in the chain is early access. If the warning signs of an

impending cardiac arrest (such as chest pain and shortness of breath) are recognized and emergency medical care is accessed early, it may be possible to avoid the arrest altogether. In situations where the signs are not recognized or no warning signs occur, early recognition of the collapse and access to the 9-1-1 system is critical.

The second link in the chain is early CPR. CPR is most effective when started immediately after the collapse. The chances of successful resuscitation double when bystanders perform CPR prior to the arrival of EMS.

The third link in the chain of survival is early defibrillation. For most adult victims of non-traumatic cardiac arrest, ventricular fibrillation is most often the initiating dysrhythmia. The interval from collapse to first shock is the single greatest determinant of survival. For every minute that passes while the patient is in ventricular fibrillation (V-fib), survival decreases by 7 percent to 10 percent. For most adult.

The only therapy that will successfully terminate V-fib is electrical shock or countershock. Obviously, this can only be accomplished by having the defibrillator with you and in a state of readiness. If you encounter a cardiac arrest victim and the defibrillator is not immediately available, the time it takes to get it and come back will waste precious minutes the patient might not be able to spare.

A fibrillating myocardium is consuming energy faster than even perfect CPR can replace it. At about 10-12 minutes of fibrillation, the entire energy reserves of the myocardium will be depleted and it will be impossible to stimulate the heart to beat again. Fibrillation must be terminated while there is still enough energy remaining within the myocardium to produce muscle contraction.

In the prehospital environment, ventricular fibrillation is generally not the





most common initial rhythm.¹⁴ Medics far more often encounter asystole or a bradyasystolic rhythm. This does not mean that ventricular fibrillation is infrequent in prehospital cardiac arrests, but rather, EMS generally does not arrive soon enough to see it.

Advanced cardiac life support is the final, although admittedly weakest, link in the chain. Paramedics providing advanced life support measures at the scene can contribute to overall survival rates for out-of-hospital cardiac arrest. In the best of circumstances, however, if pulse restoration does not occur within 15 minutes from collapse into cardiac arrest, the patient will not survive.

Three-Phase Model of Ventricular Fibrillation

Recent evidence has suggested that providing immediate shocks to newly discovered ventricular fibrillation may not be adequately serving all patients. Ventricular fibrillation may actually progress through three distinctively separate phases each with its own optimal management strategy.¹⁵

The "Electrical Phase" starts when the fibrillation begins and lasts for about four minutes. During this period, the heart muscle has not had time to develop significant ischemic injury. ¹⁶ The therapy that appears to offer the greatest benefit for these patients is early defibrillation. Whether CPR is delivered during this phase does not seem to affect morbidity and mortality. ¹⁶

The "Circulatory Phase" begins at about the four-minute mark and lasts for an additional six minutes. During this second phase, tissue injury begins within the heart muscle following depletion of metabolic reserves, accumulation of toxic metabolites, and the initiation of the ischemic cascade. All of these factors contribute to the ability of the heart to respond to various therapies, including a countershock. Administration of some

interval of chest compressions before any attempt at defibrillation appears to improve the outcome for patients who have reached this phase. 16-18

The final "Metabolic Phase" begins about ten minutes after the onset of fibrillation. At this point, irreversible cellular damage has developed.

Myocardial cells that have managed to survive this long have been rendered too weak to recover. In fact, restoration of normal blood flow into this weakened area, if not undertaken properly, may lead to additional reperfusion injury. No therapy has yet been identified which improves the outcome for patients who have entered into the metabolic phase of ventricular fibrillation.

Management

As with any medical procedure, always follow your medical director's protocols. One way to manage a cardiac event is to begin your assessment by establishing unresponsiveness, calling for additional help if needed, and getting a defibrillator to the patient's side as quickly as possible. During the general survey of the patient and the scene, determine if a resuscitation attempt is appropriate. In any situation where the possibility of life exists, EMS personnel should make an intense resuscitation effort.

Manually open the airway. Look, listen and feel for any respiratory effort. If the patient is not breathing normally, ventilate with a BVM and 100 percent oxygen. Establish pulselessness and begin CPR. Apply a cardiac monitor or AED and analyze the rhythm.

If EMS personnel witness the start of the fibrillation, delivery of a single countershock may be more beneficial than even chest compressions. The optimal energy setting necessary for successful conversion is still unknown. ¹² For agencies using monophasic defibrillators, the American Heart

Association recommends a 360-joule energy setting for the first and each subsequent shock.¹²

For agencies with biphasic waveform defibrillators (the standard since the year 2000), deliver a first shock energy level between 120 and 200 joules. ¹² EMS agencies should check with the defibrillator manufacturer to determine the optimal energy level for their particular machine. If there is a delay in getting to the defibrillator however, CPR should be initiated as quickly as possible.

In situations where the start of fibrillation was not witnessed by EMS personnel, immediate defibrillation may not be the most appropriate therapy. Instead, medics should delay the shock and begin high-quality CPR as quickly as possible. High quality CPR is achieved when:

- chest compressions are deep and fast:
- rescuers allow the chest to fully recoil following compression; and
- interruptions in compressions are minimized.

Following five cycles, or roughly two minutes of CPR, medics should deliver a single countershock at the energy settings previously discussed.

The use of three stacked shocks in the initial management of ventricular fibrillation is no longer recommended.¹⁹ The original need for the three-shock sequence was based on conversion rates. The old-style monophasic defibrillators often required a series of three shocks in order to achieve a 90 percent successful conversion rate. Current biphasic technology is capable of achieving 90 percent conversion rates with a single shock.²⁰

Regardless of whether the witnessed arrest received the countershock first or the non-witnessed arrest received CPR before the countershock, all defibrillation

attempts should be followed by an immediate two-minute period of high-quality CPR.¹⁹ EMS personnel should not waste time checking for pulses or analyzing for a rhythm conversion. As soon as the shock is administered, deliver a two-minute period of CPR beginning with chest compressions. A rhythm check can occur at the end of the CPR period.

It has been demonstrated that even in situations where rhythm conversion has occurred, the fibrillation period has left the heart too weakened to maintain effective blood flow.²¹ A period of chest compressions following the countershock will enhance blood flow produced by the weakened myocardium and give the heart an opportunity to regain strength. There is no evidence that compressing the chest and heart of a patient who has just been successfully defibrillated is harmful.¹⁹

During the initial two-minute period of CPR, EMS personnel may begin advanced procedures; however, advanced care should never be allowed to interfere with high-quality CPR or countershocks. No link has been established between prehospital advanced care and survival from cardiac arrest.¹⁹

The American Heart Association no longer considers early insertion of an endotracheal tube to be the goal of all resuscitation attempts.²² Supraglottic airways, such as Combitubes and the LMA may be considered as acceptable alternatives to the endotracheal tube and may even be preferable in some cases. EMS personnel may also ventilate with a BVM and defer insertion of an advanced airway until the patient has regained spontaneous circulation or failed to respond to countershocks and several periods of CPR.²²

Advanced life support therapy for medical CPR cases should be performed exactly where the patient is found,





assuming there is no risk of harm to the patient or EMS personnel by remaining at that location. Moving medical CPR patients early in the resuscitation phase interrupts CPR and diminishes the chances of recovery.

As soon as IV access has been achieved, one of two vasopressors may be administered. Epinephrine 1:10,000 is commonly used and may be administered by IV push in 1 mg boluses repeated every three to five minutes for the duration of the arrest. ¹⁹ The hormone vasopressin may be substituted for either the first or second epinephrine and is given in 40 mg (units) IV push. ¹⁹ The vasopressors will not convert the fibrillation, but they may create a situation whereby the defibrillation attempts are more effective.

At the end of this two-minute period of CPR, EMS providers should check the ECG rhythm. If the patient remains in fibrillation, attempt defibrillation again with a single countershock at either the same energy setting or the next higher setting. There is no available evidence to suggest that escalating energy levels are any more effective than non-escalating energy levels and either strategy can be used safely and effectively. As soon as the countershock is delivered, resume CPR immediately beginning with chest compressions.

If the patient remains in ventricular fibrillation after two or three shock/CPR cycles and vasopressor use, medics may administer an antiarrhythmic.

Amiodarone is recommended as the first-line antiarrhythmic medication, however lidocaine is an acceptable alternative.

Amiodarone is a complex drug that acts on the sodium, potassium, and calcium channels as well as possessing some alpha and beta-blocker properties.

The usual first dose of amiodarone is 300-milligrams IV or IO push.

If there is no conversion within five minutes, a single subsequent dose of 150 mg is

acceptable.19

If lidocaine is used, the recommended dose is 1.0 to 1.5 milligrams per kilogram as an IV or IO bolus. 19 Repeat doses of lidocaine in three to five minutes if there is no response. 19 It is important to note, however, that there is no evidence that any of the antiarrhythmics positively influence the survival-to hospital discharge of cardiac arrest victims when compared to countershocks only. 19

Continue to provide single countershocks as needed, followed by two minute periods of high quality CPR. During the CPR periods, continue to provide epinephrine and an antiarrhythmic at three to five minute intervals.

If at any time the patient regains a pulse, a reassessment of the airway, breathing and circulatory status should occur.²³ A blood pressure should be obtained as quickly as possible. If the patient is found to be hypotensive, a single fluid bolus of 250-500 mL of normal saline in considered appropriate.²³ The blood pressure should then be reassessed for response. If needed, a vasoactive medication, such as dopamine or norepinephrine may be administered.

The Future of Resuscitation

Currently, research is underway to find ECG signal characteristics that can be used to aid in the delivery of fewer but more effective countershocks. One such characteristic, derived from fractal geometry, is called the scaling exponent.²⁴ The scaling exponent characterizes the "roughness" or "smoothness" of the VF waveform and expresses that characteristic as a number between 1 and 2.²⁴

The exponent is calculated by a microcomputer inside the defibrillator or AED. Early, retrospective studies using data from AEDs carried by seven police departments in suburban Pittsburgh suggest that the scaling exponent can be used to predict the likelihood of successful

defibrillation.²⁵ In the not-too-distant future, the scaling exponent may help guide the resuscitation attempts both in and out of the hospital.

Summary

The majority of adult cardiac arrest victims develop ventricular fibrillation as the cause of their collapse. Every minute that passes from the moment of collapse until the patient is successfully brought out of fibrillation, the chances of survival decrease by about 10 percent. The only intervention that has been proven to convert ventricular fibrillation to a perfusing rhythm is a successful countershock. Evidence exists which suggests that ventricular fibrillation may actually progress through three distinctively separate phases. An interval of CPR prior to the delivery of a countershock may provide survival advantages in some patients.

References

- 1. Zheng ZJ, Croft JB, Giles WH, Mensah GA. Sudden cardiac death in the United States, 1989 to 1998. Circulation 2001;104:2158–63.
- 2. Eisenberg MS, Mengert TJ. Cardiac resuscitation. N Engl J Med. 2001;344:1304-13.
- 3. Stiell IG, Hebert PC, Weitman BN. High-dose epinephrine in adult cardiac arrest. N Engl J Med. 1992;327:1045-50.
- 4. Brown CG, Martin DR, Pepe PE. A comparison of standard-dose and high-dose epinephrine in cardiac arrest outside the hospital. N Engl J Med. 1992;327:1051-5.
- 5. Callahan M, Madsen CD, Barton CW. A randomized clinical trial of high-dose epinephrine and norepinephrine vs. standard dose epinephrine in pre-hospital cardiac arrest. JAMA. 1992;268:2667-72.
- Schwab T, Callahan ML, Madsen CD, Utecht TA. A randomized clinical trial of active compressiondecompression CPR vs standard CPR in outof-hospital cardiac arrest in two cities. JAMA. 1995;273:1261-8.
- 7. Becker LB, Der MP, Barrett J, Kondos GT. Outcome of CPR in a large metropolitan area: where are the survivors? Ann Emerg Med. 1991;20:355-61. 8. Lombardi G, Gallagher J, Gennis P. Outcome of out-of-hospital arrest in New York City: The prehospital arrest survival evaluation (PHASE) study. JAMA. 1994;20:687-93.
- 9. Stratton S, Niemann JT. Effects of adding links to "the chain of survival" for prehospital cardiac arrest:

- a contrast in outcomes in 1975 and 1995 at a single institution. <u>Ann Emerg Med.</u> 1998;4:471-7. 10. Kouwenhoven WB, Jude JR, Knickerbocker GG. Closed chest cardiacmassage. JAMA 1960:173:1064-1067.
- 11. Tucker KJ, Larson JL, Idris A, Curtis A. Advanced cardiac life support: update on recent guidelines and a look at the future. Clin Cardiol. 1995;18:497-504.
- 12. American Heart Association. Part 5: Electrical Therapies Automated External Defibrillators, Defibrillation, Cardioversion, and Pacing. (Circulation. 2005;112:IV-35-IV-46.
- 13. Larsen MP, Eisenberg MS, Cummins RO, Hallstrom AP. Predicting survival from out-of-hospital cardiac arrest: a graphic model. Ann Emerg Med. 1993;22:1652–1658.
- 14. Holmberg M, Holmberg S, Herlitz J. Low chance of survival among patients requiring adrenaline (epinephrine) or intubation after out-of-hospital cardiac arrest in Sweden. Resuscitation 2002;54:37-45.
- 15. Weisfeldt ML, Becker LB. Resuscitation after cardiac arrest: a 3-phase time-sensitive model. J Am Med Assoc 2002;288(23):3035–8.
- 16. Vilke GM, Chan TC, Dunford JV, et al. The three-phase model of cardiac arrest as applied to ventricular fibrillation in a large, urban emergency medical services system. Resuscitation 2005;64:341–346.
- 17. Cobb LA, Fahrenbruch CE, Walsh TR, et al. Influence of cardiopulmonary resuscitation prior to defibrillation in patients with out-of-hospital ventricular fibrillation. J Am Med Assoc 1999;281(13):1182–8.
- 18. Wik L, Hansen TB, Fylling F, et al. Delaying defibrillation to give basic cardiopulmonary resuscitation to patients with out-of-hospital ventricular fibrillation: a randomized trial. J Am Med Assoc 2003;289(11):1389–95.
- 19. American Heart Association. Part 7.2: Management of Cardiac Arrest. Circulation. 2005;112:IV-57-IV-66.
- 20. Martens PR, Russell JK, Wolcke B, Paschen H, Kuisma M, Gliner BE, Weaver WD, Bossaert L, Chamberlain D, Schneider T. Optimal Response to Cardiac Arrest study: defibrillation waveform effects. Resuscitation. 2001;49:233–243.
- 21. Carpenter J, Rea TD, Murray JA, Kudenchuk PJ, Eisenberg MS. Defibrillation waveform and post-shock rhythm in out-of-hospital ventricular fibrillation cardiac arrest. Resuscitation. 2003;59:189 –96.
 22. American Heart Association. Part 7.1: Adjuncts for Airway Control and Ventilation. Circulation. 2005;112:IV-51-IV-56.
- 23. American Heart Association. Part 7.5; Postresuscitation Support. Circulation. 2005;000: IV-84-IV-88.
- 24. Higuchi T. Approach to an irregular time series on the basis of the fractal theory. Physica D. 1988;31:277–283.
- 25. Callaway CW, Sherman LD, Mosesso VN, et al. Scaling exponent predicts defibrillation success for out-of-hospital ventricular fibrillation cardiac arrest. Circulation 2001;103;1656-1661.



Ventricular Fibrillation Exam

EMTs and Intermediates answer questions 1-10; Paramedics answer all questions.

- Which of the following is the first link in the American Heart Association's Chain of Survival?
 - a. Early CPR.
 - b. Early access.
 - c. Early defibrillation.
 - d. Early IV and intubation.
- You arrive on scene to find a 48year-old male in cardiac arrest with bystander CPR in progress. You place the patient on your cardiac monitor and discover ventricular fibrillation. The single greatest determinant of survival is the interval from collapse to
 - a. CPR.
 - b. intubation.
 - c. first shock.
 - d. first epinephrine.
- For every minute that passes when the patient is in ventricular fibrillation and the dysrhythmia is not terminated, survival decreases by about
 - a. 1% to 3%.
 - b. 7% to 10%.
 - c. 15% to 20%.
 - d. 25% to 30%.
- 4. What is the weakest link in the American Heart Association's Chain of Survival?
 - a. Early CPR.
 - b. Early access.
 - c. Early defibrillation.
 - d. Early advanced care.
- 5. For most adult victims of nontraumatic cardiac arrest, which of the following is most often the initiating dysrhythmia?
 - a. Asystole.
 - b. Ventricular fibrillation.
 - c. Bradyasystolic rhythm.
 - d. Third-degree heart block.

- 6. What is the name of the interval during ventricular fibrillation when the heart muscle has not had enough time to develop significant ischemic injury?
 - a. Electrical phase.
 - b. Metabolic phase.
 - c. Circulatory phase.
- The American Heart Association's recommended energy level for first shock delivery with a monophasic defibrillator is
 - a. 120 joules.
 - b. 150 joules.
 - c. 200 joules.
 - d. 360 joules.
- 8. You encounter a 54-year-old male in ventricular fibrillation. You deliver a countershock at 200 joules and the dysrhythmia does not convert. Your next action would be to
 - a. attempt to establish IV access.
 - b. perform endotracheal intubation.
 - c. begin providing high quality CPR.
 - d. immediately deliver another countershock at 300 joules.
- During the resuscitation attempt, once CPR has been initiated, rhythm and pulse checks should be performed
 - a. every thirty seconds.
 - between each stacked shock.
 - c. immediately after each countershock.
 - d. at the end of the two minute period of CPR.
- The most commonly encountered ECG rhythm in prehospital cardiac arrest is
 - a. ventricular fibrillation.
 - b. ventricular tachycardia.

- c. third-degree heart block.
- d. asystole or bradyasystole.
- 11. Your ambulance arrives on the scene of a 68-year-old female in cardiac arrest. CPR is in progress and the patient has already received an unsuccessful countershock. The patient has been successfully intubated and an IV is already established. The first medication that should be administered is
 - a. lidocaine.
 - b. amiodarone.
 - c. sodium bicarbonate.
 - d. one of the vasopressors.
- Early insertion of an endotracheal tube has proven to increase the chances of a successful resuscitation.
 - a. True
 - b. False
- 13. The first-line antiarrhythmic medication recommended for refractory ventricular fibrillation is
 - a. lidocaine.
 - b. amiodarone.
 - c. procainamide.
 - d. magnesium sulfate.
- 14. If epinephrine is used during the resuscitation attempt, what is the most appropriate dose and administration interval for an adult victim of cardiac arrest?
 - a. 40 units every five minutes.
 - b. 1 mg every three to five minutes.
 - c. 1 mg, 3mg, then 5mg every three minutes.
 - d. 1 mg first dose, 10 mg all subsequent does at three minute intervals.

- 15. Your 62-year-old male was shocked unsuccessfully at 150 joules. Following two minutes of high quality CPR, a second shock is to be delivered. Escalating the energy output to the next higher setting provides the greatest chances for a successful conversion.
 - a. True
 - b. False
- 16. If vasopressin is substituted for epinephrine during the resuscitation attempt, what is the most appropriate dose for an adult victim of cardiac arrest?
 - a. 1 mg
 - b. 5 mg
 - c. 20 mg
 - d. 40 mg

- 17. If amiodarone is used during the resuscitation, the standard first dose is
 - a. 30 mg.
 - b. 300 mg.
 - c. 1.5 mg/kg.
 - d. 1 mg/kg.
- If lidocaine is used during the resuscitation, the normal range for the first dose is
 - a. 4 16 mg/kg.
 - b. 1.0 1.5 mg/kg.
 - c. 1 2 grams IV push.
 - d. 2 10 mcg/kg/minute.

- 19. Following a successful resuscitation attempt from a cardiac arrest presumed to be of cardiac origin, the patient is found to be hypotensive. Which of the following is the most appropriate first step to improve the hemodynamic status of the patient?
 - a. Begin a dopamine drip.
 - b. Begin a norepinephrine drip.
 - Administer a fluid bolus of 250 mL - 500 mL.
 - d. Apply the pneumatic antishock garment (PASG).
- 20. Amiodarone acts on the
 - a. sodium channels.
 - b. calcium channels.
 - c. potassium channels.
 - d. All of the above.

continued from page 15

"...size and construction to allow a licensed air ambulance in the state of Texas up to medium twin or 14,000 pounds max gross weight, to land safely. For an aircraft greater than 14,000 pounds, such as may be used by the military during disasters, the hospital will have a plan for an alternative landing area, which could be a street or a parking lot that could be secured. Hospital construction in the future will incorporate these requirements into their plan."; and add language at the end that hospitals granted a waiver to the rule must make that waiver known to the public by generally accepted notification processes. The motion passed unanimously.

A motion was made by Ronald Stewart, MD, to suspend EMS/Trauma Registry submissions by stakeholders starting January 1, 2008, and continuing until such time that the problems associated with the Trauma Registry are corrected to GETAC's satisfaction. A friendly amendment was made by Luis Fernandez, MD, that a group of internal/external stakeholders work on acceptable resolutions in a reasonable time frame. A second friendly amendment was made by Pete Wolf to suspend Trauma Registry submissions until the next scheduled GETAC meeting set for February 6-8, 2008. A revised motion was then made by Ronald Stewart, MD, and seconded by Luis Fernandez, MD, to suspend EMS/Trauma Registry submission by stakeholders after the February 9, 2008, meeting, if problems with the Trauma Registry are not addressed satisfactorily and to

assemble a group of internal/external stakeholders to work on specific issues or resolutions in a reasonable time frame. The motion passed unanimously.

A motion was made by Pete Wolf and seconded by Luis Fernandez, MD, to request GETAC to ask the governor, the speaker of the house and the lieutenant governor that all funds allocated to trauma facilities, EMS providers, and Regional Advisory Councils in HB 3588 of the 78th Legislature and the SB 1119 of the 80th Legislature actually be appropriated to these entities. The motion passed.

Future meeting dates in 2008: February 6-8; May 7-9; August 13-15; and November 22-24 in Fort Worth, Texas in conjunction with the 2008 Texas EMS Conference.

Adjournment: The meeting was adjourned at 9:48 p.m.

This answer sheet must be postmarked by February 20, 2008

CF Answer Sheet Texas FMS Magazine

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Frequently Asked Questions

By Mattie Mendoza and Phil Lockwood

Q: How do I check my certification status?

A: Click on the "Check Certification Status" link, located in the upper left of the home page. Then click on the "Click here for live online Certification/Licensee Search" link, which will take you to DSHS online license search. Ignore the request for registration on the right and click on the "Public License Search" link on the left. Choose the type of license you need and when prompted, type in the name of the person. This live link to our certification database will enable you to see real-time information. You can print the certification status page to use as temporary proof of certification until certificate/wallet card arrives. You can find the link on our website at www.dshs. state.tx.us/emstraumasystems.

Q: I am applying for certification in Texas from out of state. One of the requirements is to submit the Out-of-State Verification Form A. How do I submit that form?

A: When applying for reciprocity for State of Texas certification, one of the requirements is to submit a completed Out-of-State Verification Form A for each state that you have held certification in. Complete the information on the top portion of the form, then either fax or mail the form to each state EMS certification department in which you have held certification. The state offices complete the form and can either fax or mail the completed form to the State of Texas EMS certification office at the addresses listed on the top of the form. You will find this form on the reciprocity link on our website at: www.dshs.state.tx.us/ emstraumasystems/stdrecip.shtm.

Q: I am in EMT class and considering going on to a paramedic class, but some of my classmates tell me I will have to get a degree in EMS to become a paramedic. Is this true?

A: No. You can become certified as a paramedic without having a degree in EMS. Texas has both certified (EMT-

P) and licensed paramedics (LP). To become certified as a paramedic, you must successfully complete a paramedic course and pass the National Registry exam at paramedic level. To be certified as a licensed paramedic, you must pass the National Registry at paramedic level and have an associate's degree in EMS or baccalaureate or postgraduate degree in any field. You can find all of the initial certification requirements on our website at: www.dshs.state.tx.us/emstraumasystems.

Q: My certification expires this year and I would like to recertify choosing National Registry as my renewal option, but my National Registry card expires in the next few months. Do I have to renew my NR card before I can renew my Texas certification?

A: No, as long as you submit a **complete** Texas application before your NR card expires. Your NR card must be current when you apply for Texas renewal. If your application is not complete, it will delay the processes, and you may have to renew your NR or choose another renewal option. Also, don't forget to factor in the four-to-six week application processing time.

Q: My service hires many out-ofstate medics. Among other things, the reciprocity process requires them to get FBI fingerprints for a background check prior to certification. It seems to take a long time -- up to 18 weeks. Can anything be done about this?

A: Yes. We've just begun a new process to speed up background checks by moving from traditional fingerprinting to scanned prints through Fingerprint Applicant Services of Texas (FAST). Candidates can download a reciprocity application and a FASTPASS form from our website, then schedule an appointment with L-1 Identity Solutions for electronic submission of fingerprints to the FBI (many sites are available throughout Texas – see www. iisfingerprint.com). The results are sent

directly to DSHS EMS Compliance electronically, significantly reducing the turnaround time -usually it takes about two weeks. Applicants are responsible for the processing fee of \$44.20, which includes both FBI and Texas DPS crime history reports.

Q: I am somewhat clueless about the rulemaking process as it affects EMS regulations. Although I'm aware of GETAC's role, it's not clear to me how I can best get involved or affect the process. I really can't afford to travel to a lot of meetings, but unless I attend, I don't know how to have my voice heard or share ideas from my perspective.

don't know how to have my voice heard A: Big question, little space. I'll hit the high points. GETAC and DSHS represent a variety of perspectives, some of which may match yours. The law requires GETAC to name members from affected professions, as follows: an emergency physician, medical director, fire chief, private EMS provider, volunteer EMS provider, EMS educator, air medical provider, fire department EMS provider, trauma facility hospitals (one urban, one rural), county EMS, pediatrician, trauma surgeon and two general public representatives. You can provide input through one of these representatives (see www.dshs.state.tx.us/emstraumasystems/ governor.shtm for contact information), or communicate directly to DSHS through one of the many opportunities in the formal rulemaking process. Stakeholder input via GETAC most often occurs at the early stages, but direct public input opportunities are also available when rules are proposed at State Health Services Council meetings and during the public comment period after proposed rules are published in the Texas Register, the official journal of state agency rulemaking (see www.sos. state.tx.us/texreg). Written comments can be made directly to the department at any stage of the process, but the department provides official responses to those submitted during the public comment



A recent British study in the Journal of American Medical Association showed taking antibiotics made no difference in improvement from symptoms of sinus infections. Instead of antibiotics, the study recommends

Taking antibiotics made no difference in improvement from symptoms of sinus infections.

ibuprofen and other over-the counter painkillers. Other ways to relieve symptoms include inhaling steam and squirting salt water in the nose. In 2001, the American College of Physicians advised otherwise healthy people to not take antibiotics for sinus infections because overuse adds to the problem of drug-resistant bacteria. Approximately 31 million Americans are diagnosed with sinus infections annually with symptoms such as excess mucus and inflammation causing congestion, headaches and eye and face pain.

From *Austin American-Statesman*, "Study: Antibiotics no better than letting sinus infection run its course," December 5, 2007.

Cold, dry air assists the flu virus in remaining stable and staying in the air longer, researchers at Mount Sinai Medical College in New York report in a new study. Influenza comes from an Italian root word thought to mean "influence of the cold." Unlike cold viruses, which are primarily spread through direct contact, the flu virus is spread through the air. There have been

Influenza comes from an Italian root word thought to mean "influence of the cold."

many hypotheses about why the flu happens during winter months: more people indoors together, facilitating transmission; weaker immune systems because of less Vitamin D from the sun during the shorter days of winter; and even the upper atmosphere's direction of air currents. However, scientists had a hard time proving any of these because their usual

test subjects, mice, do not transmit the flu virus. Human studies were not an option since there would be no benefit to the individuals being exposed to the virus. A breakthrough occurred when Dr. Peter Palese, lead author of this study, noticed in a flu article in a 1919 edition of the Journal of the American Medical Association that a lab's guinea pigs began to die after the 1918 flu epidemic. He began doing research with guinea pigs and found they transmit the flu virus. Experimenting with temperature and humidity levels proved that flu viruses remain stable in colder air and that low humidity helps the viruses remain airborne. Dr. Palese considers a flu shot the best strategy to avoid the flu.

From Austin American-Statesman and The New York Times, "What makes winter the hot time for flu? Clues are in the air," December 5, 2007.

Texas has the largest percentage of women ages 18 to 64 without health insurance – 28 percent -- while the national average is 18 percent. In a report ranking each state by standards set by the US Department

Texas has the largest percentage of women ages 18 to 64 without health insurance – 28 percent.

of Health and Human Services "Healthy People 2010" agenda, the National Women's Law Center and Oregon Health and Science University also ranked Texas 42nd in the nation overall. The state ranked in the last five states for important screenings that could save lives such as pap tests, mammograms and cholesterol screenings. The entire country received an "unsatisfactory" grade since all 50 states only met three of the agenda's 27 benchmarks and only two of the 63 policy goals. Mississippi was the worst state for women's health care, and Vermont was the best. The report's authors said the initial steps to improving health care are to provide health insurance and make it easier for low-income families to obtain Medicaid.

From Austin American-Statesman, "Texas ranks at bottom of nation for women's health care," October 18, 2007.

While the good news is that Texas is one of the "least-depressed" states in the country, the bad news is that it's probably because Texans aren't as likely to report symptoms of depression. Using data from 2004 through 2006 Mental Health America published a report titled, "Ranking America's Mental Health: An Analysis of Depression Across the

The report shows Texas spends only \$36.70 per capita on mental health, while the national average is \$95.70.

States." The report shows Texas spends only \$36.70 per capita on mental health, while the national average is \$95.70. In Texas there are 7.4 psychiatrists and 28.4 psychologists for every 100,000 residents. Nationally the average is 12.87 psychiatrists and 44.39 psychologists.

From *Houston Chronicle*, "Depression is low in Texas, but so is treatment," November 30, 2007.

Vaccines not stored at the correct refrigerated temperature create danger to youngsters receiving the shots and wastes funds in the budget of the federal Vaccines for Children program. Those who receive the ineffective shots may be exposed to diseases such as flu, diphtheria, tetanus, whooping

The Centers for Disease control counts poor refrigeration as the biggest contributor of \$20 million in waste in the federal vaccine program annually.

cough, polio, mumps, measles, chicken pox and the cervical cancer virus and erroneously think they are protected. The Centers for Disease control counts poor refrigeration as the biggest contributor of \$20 million in waste in the federal vaccine program annually. Recent cases caused by improper refrigeration include Sioux City, Iowa, where over 1,000 families were asked to have their children revaccinated after state officials discovered the clinic providing the shots had a refrigerator temperature below freezing, which could have ruined the vaccines. The problems can be caused by several factors: malfunctioning refrigerators, improper temperature settings, which is sometimes caused by leaving the refrigerator door opened for too long, and employees not noticing the recorded temperatures were too high.

From *Associated Press*, "Vaccines ruined by poor refrigeration," December 5, 2007.

People who often eat when they're not hungry but are anxious or depressed are more likely to gain weight than people who eat in response to external factors like being around more food at the holidays. Called "emotional eating," the excess eating usually leads people to munchies and sweets as a distraction from

It only takes a small amount of food to restore the serotonin level, but emotional eaters often don't stop at just a little.

emotional conflicts. The body's chemistry also plays a part because when serotonin levels drop, people crave sweets. Low serotin levels can cause depression. It only takes a small amount of food to restore the serotonin level, but emotional eaters often don't stop at just a little. In a paper by researchers at Miriam Hospital in Providence, Rhode Island, published in Obesity magazine, emotional eaters were found less likely to have success with dieting programs. The paper calls for more research into how to best help emotional eaters lose weight. Some initial suggestions are to keep a food log and note emotions before, during and after eating, and to focus on a hobby or exercise instead of eating.

From *The Monitor*, "Research: emotional eating a serious problem," November 26, 2007.



Did You Tea

Final enforcement actions and court orders shall continue to be posted in Texas EMS Magazine for a minimum of one year or until the end of any probationary term or period of deferment, whichever is longer. This policy mirrors TAC, Title 1, Part 1, Chapter 1, Subchapter X, §1.552, Posting Final Enforcement Actions.

If a complaint has been self-reported, i.e., an individual or organization reported the violation to DSHS before DSHS became aware of it and that act was taken into consideration by the Enforcement Review Committee, then the magazine shall denote that the violation was self-reported by printing the phrase 'self-reported' at the end of the entry.

DSHS encourages individuals and organizations to self-report rule violations to DSHS. When the case is reviewed by the Enforcement Review Committee, the fact that an individual or organization self-reported a violation can be seen as a mitigating circumstance.

Acosta, Oscar, El Paso, TX. April 26, 2007, Reprimand, for violating EMS Rule 157.36.

Advicare Ambulance Service, Houston, TX, July 27, 2007, Surrender of Provider License while disciplinary action was pending.

Allen, James K., Parker, TX. November 6, 2007, Reprimand, for violating the EMS Rule 157.36.

Amb-Trans Ambulance, San Antonio, TX. October 26, 2007, assessed an administrative penalty of \$1,500.00, for violating EMS Rule 157.11.

Americana Ambulance, San Antonio, TX. September 26, 2007, assessed an administrative penalty of \$500.00, for violating EMS Rule 157.11.

American Medical Response d/b/a Hunt County EMS, Greenville,

TX. October 24, 2007, assessed an administrative penalty of \$1,000.00, for violating EMS Rule 157.11.

Anson General Hospital, Anson, TX. July 18, 2007, assessed an administrative penalty of \$500.00, for violating EMS Rules 157.11.

Baker, Timothy A., Houston, TX. July 16, 2007, Reprimand, for violating EMS Rule 157.36.

Baileys, Anson, Arlington, TX. Fortyeight (48) month probated suspension of EMS certification through July 21, 2008, for one (1) misdemeanor conviction, and two (2) felony convictions. EMS Rules 157.37 and 157.36(b) and (c).

Bayou City EMS Group, Inc., Houston, TX. April 17, 2007, assessed an administrative penalty of \$5,000.00, for violating EMS Rules 157.11..

Belton Fire Department, Belton, TX. July 16, 2007, Reprimand, for violating EMS Rules 157.11.

Billy, Leasa M., Waxahachie, TX. September 24, 2007, Denial of EMT-Basic application, pursuant to EMS Rule 157.36.

Blancas, Christina A., El Paso, TX. May 31, 2007, Reprimand, for violating EMS Rule 157.36.

Boldra, Michael L., San Antonio, TX. September 25, 2007, Reprimand, for violating EMS Rule 157.36.

Brewer, Natalie A., Dallas, TX. September 18, 2007, Reprimand, for violating EMS Rule 157.36.

Britton, Chad A., Vernon, TX. May 28, 2007, Reprimand, for violating EMS Rule 25 TAC § 157.36.

Brown, Nicholas G., Portland, TX. March 22, 2007, Reprimand, for violating the EMS Rules 157.36.

Brunt, Jonathan M., League City, TX. October 9, 2007, Reprimand, for violating the EMS Rule 157.36.

Caregiver EMS, Inc., Houston, TX. May 10, 2007, assessed an administrative penalty of \$250.00, for violating EMS Rules 157.11.

Carmona, Jose E., Rio Grande City, TX. April 17, 2007, Reprimand, for violating EMS Rule 157.36.

Clarke, Russell G., Midland, TX. June 5, 2006, 19 month 26 day suspension, for violating the EMS Rules 157.36.

Classen, Trent M., Round Rock, TX. February 22, 2007, Reprimand, for violating the EMS Rules 157.36.

Coastal Tranportation Services, Inc., Victoria, TX. April 26, 2007, Reprimand, for violating EMS Rules 157.11.

Cobb, James E., Dallas, TX. April 17, 2007, Reprimand, for violating EMS Rule 157.36.

Coleman County Medical Center, Coleman, TX. April 17, 2007, Reprimand, for violating EMS Rule 25 TAC §§ 157.11.

Coleman, Rick E., West, TX. May 31, 2007, 24 month probated suspension, pursuant to the EMS Rules 25 TAC § 157.36.

Crain, Chad E., Abilene, TX. February 24, 2007, Reprimand, for violating the EMS Rules 157.36.

Cruz, Juan J., Aransas Pass, TX. May 21, 2007, 1 year probation, pursuant to EMS Rule 157.36(f).

Cunningham, Jeffrey D., Jacksonville, TX. May 28, 2007, Reprimand, for violating EMS Rule 25 TAC § 157.36. D & L EMS, Porter, TX. February 19, 2007, Reprimand, for violating the EMS Rules 157.11.

Davies, Roger, Anna, TX. February 22, 2007, EMT certification revoked, for violating the EMS Rules 157.36.

Davis, Bradley, Eagle Pass, TX. May 10, 2007, Surrender of EMT certification in lieu of Enforcement action, for violating EMS Rule 157.36.

Depau, James A., LaPorte, TX. February 21, 2006, 24 months suspension with 18 months probated, for violating the EMS Rules 157.36.

Davis, Jessie J., San Antonio, TX. April 17, 2007, 6 month suspension followed by a 42 month probated suspension through April 16, 2011, for violating the EMS Rules 157.36.

Denton Fire Department, Denton, TX . July 16, 2007, assessed an administrative penalty of \$3,000.00, for violating EMS Rules 25 TAC § 157.11.

Desopo, James A., Waco, TX, August 29, 2007, 6 month suspension, for violating the EMS Rules 25 TAC § 157.36.

Duke, Brian R., Houston, TX. April 17, 2007, Reprimand, for violating EMS

Rule 157.36.

Dupree, Gregory W., Powderly, TX. April 17, 2007, Reprimand, for violating EMS Rule 157.36.

Echols, Kelly, San Antonio, TX. May 28, 2007, Reprimand, for violating EMS Rule 157.36.

Eppinette, Rose M., New Caney, TX. May 10, 2007, Reprimand, for violating EMS Rule 157.36.

Escamilla, Daniel, Corpus Christi, TX. 48 month probated suspension of EMS certification through September 2007, misdemeanor convictions and misdemeanor deferred adjudication probation. EMS Rules 157.37, 157.36(b) and (c).

Experts EMS, Houston, TX. April 23, 2007, assessed an administrative penalty of \$5,000.00, for violating EMS Rule 157.11.

Fambro, Tiffany E., Odessa, TX. October 9, 2007, Reprimand, for violating the EMS Rules 157.36.

Feemster, Bobby D., Stephenville, TX. September 25, 2007, Surrender of EMT-Basic certification while disciplinary action was pending.

Fenner, Lisa L., Pasadena, TX. September 30, 2006, 24 months probated suspension, for violating the EMS Rules 157.36 and 157.37.

Firmin, Susan, Longview, TX. March 16, 2007, 3 month suspension followed by a 9 month probated suspension, for violating the EMS Rules 157.36.

Fritch EMS, Fritch, TX. May 31, 2007, Reprimand, for violating EMS Rules 157.11 and 157.16.

Garcia, Albert S., Kingsville, TX. February 27, 2007, ECA certification revoked and application for ECA renewal denied, for violating the EMS Rules 157.36.

Garcia, Steven, El Paso, TX, August 29, 2007, 6 month probated suspension, for violating the EMS Rules 25 TAC § 157.36.

Gemni Ambulance, San Antonio, TX. April 26, 2007, assessed an administrative penalty of \$1,500.00, for violating EMS Rules 157.11.

Giannotti, Koy R., Sugarland, TX. June 7, 2007, Revocation of EMT-Basic certification, for violating the EMS

Rules 157.36.

Gonzales, Mark A., San Antonio, TX. April 17, 2007, 6 month suspension followed by a 42 month probated suspension, for violating the EMS Rules 157.36.

Gonzalez, Fernando, Zapata, TX. December 22, 2005, 48 months suspension with 45 months probated suspension, for violating the EMS Rules 157.36.

Grabs, Teresa, Valley Mills, TX. 108 months probated suspension of LP through September 26, 2010. EMS Rules 157.37(e)(2)(3)(G).

Graham, Kevin W., Nemo, TX. February 19, 2007, Reprimand, for violating the EMS Rules 157.36.

Griggs, Clayton, Bagwell, TX. Fortyeight (48) month probated suspension of EMS certification through November 1, 2008, for three (3) misdemeanor convictions. EMS Rules 157.37 and 157.36(b) and (c).

Grube, David A., Montgomery, TX . June 7, 2007, Revocation of EMT-Basic certification, for violating the EMS Rules 157.36.

Guthrie, Tammy L., Kempner, TX. August 14, 2006, 24 months suspension with 23 months probated suspension after serving an actual one-month suspension, for violating the EMS Rules 25 TAC § 157.36.

Hall, Lee, Victoria, TX. Forty-eight (48) month probated suspension of EMS certification through June 29, 2008, for six (6) misdemeanor convictions. EMS Rules 157.37 and 157.36(b) and (c).

Herrera, Jorge, El Paso, TX. June 5, 2006, 24 month 5 day suspension, for violating the EMS Rules 157.36.

Highland Village Fire Department, Highland Village, TX. April 26, 2007, Reprimand, for violating EMS Rules 157.11.

Hollon, James D., Odessa, TX, August 29, 2007, Surrender of EMT-Intermediate certification while disciplinary action was pending.

Johnson, Doyle D., New Caney, TX.
February 22, 2007, Revocation of EMT-Basic certification, for violating the EMS Rules 157.36.

Kent County EMS, Jayton, TX. May

31, 2007, Reprimand, for violating EMS Rules 157.11.

Kinney County EMS, Brackettville, TX. February 22, 2007, Reprimand, for violating EMS Rules 157.11 and 157.16. Kline, Kyle, San Leon, TX. Forty-Eight (48) month probated suspension of EMS certification through June 29, 2008, for three (3) misdemeanor convictions. EMS Rules 157.37 and 157.36(b) and (c).

Knox County EMS, Knox City, TX. March 22, 2007, Reprimand, for violating EMS Rules 157.11.

Lifetime Ambulance Service, Inc., Houston, TX. May 17, 2007, assessed an administrative penalty of \$5,000.00, for violating EMS Rules 157.11.

Little Elm Fire Department, Little Elm, TX, August 29, 2007, assessed an administrative penalty of \$700.00, for violating EMS Rules 25 TAC § 157.11, HSC § 773.041(b) and HSC § 773.050(a).

Loftin, Sharon K., Santo, TX. October 24, 2007, EMT-Paramedic certification placed on a 48 month probated suspension, for violating the EMS Rules 157.36.

Lopez, Frank X., Houston, TX. April 17, 2007, Reprimand, for violating the EMS Rules 157.36.

Lugo, **Karim**, Houston, TX. February 27, 2007, Reprimand, for violating the EMS Rules 157.36.

Lutz, Scott J., Stephenville, TX. May 17, 2007, Reprimand, for violating EMS Rule 157.36.

Mansfield Fire Department, Mansfield, TX. October 24, 2007, assessed an administrative penalty of \$1,300.00, for violating the HSC §§ 773.041, 773.50(a) & EMS Rules 157.11.

Martello, Joseph, Cooper, TX. December 22, 2005, 36 month probated suspension, for violating the EMS Rules 157.37.

Martinez, Joshua J., Odessa, TX. May 28, 2007, Reprimand, for violating EMS Rule 157.36.

Martinez, Oscar M., Van, TX. September 14, 2007, Reprimand, for violating EMS Rule 157.36.

Mata, Daniel, McAllen, TX. December 11, 2006, 24 month probated suspension, for violating the EMS Rules 157.36.

Matagorda County EMS I, LLP d/b/a Americare EMS, Bay City, TX. April 26, 2007, assessed an administrative penalty of \$500.00, for violating EMS Rules 157.11.

McGarity, Todd A., Fort Worth, TX. May 31, 2007, 6 month probated suspension, for violating the EMS Rules 157.36.

Med-Alert EMS, McAllen, TX. May 21, 2007, assessed an administrative penalty of \$7,500.00, for violating EMS Rules 157.11.

Medpro Emergency Medical Services, Tyler, TX. May 31, 2007, assessed an administrative penalty of \$3,750.00, for violating EMS Rules 157.11.

Medxpress EMS, Kingwood, TX. October 9, 2007, assessed an administrative penalty of \$11,250.00, for violating EMS Rule 157.11.

Mid-Valley EMS, McAllen, TX. April 23, 2007, assessed an administrative penalty of \$5,800.00, for violating EMS Rules 157.11 and 157.16.

Mitlacher, Carol L., Leander, TX. June 7, 2006, 18 month 23 day suspension, for violating the EMS Rules 157.36.

Mize, Thomas W., Gun Barrel City, TX . July 18, 2007, Reprimended, for violating the EMS Rules 157.36.

Morgan, Sherry L., Kennard, TX. September 3, 2007, Reprimand, for violating EMS Rule 157.36.

Munoz, Blanca D., Carrizo Springs, TX. October 26, 2007, Grant ECA certification with ECA certification placed on a 12 month probationary period, pursuant to EMS Rules 157.36(f) & 157.36(g)(5).

Naccarato, Cameron J., Abilene, TX. February 8, 2007, EMT certification revoked, for violating EMS Rule 157.36. Needham, Christopher, Troup,

TX. Twelve (12) month suspension followed by a thirty-six (36) month probated suspension of EMS certification through November 4, 2008, for EMS rule violations. EMS Rules 157.37 and 157.36(b) (1), (2), (26), (27), (28), and/or (29).

Nichols, James J., Lavon, TX. April 19, 2006, 24 month probated suspension, for violating the EMS Rules 157.36.

North East Texas EMS, Center, TX. July 18, 2007, assessed an administrative penalty of \$500.00, for violating EMS Rules 25 TAC § 157.11.

Page, Samantha L., New Caney, TX. May 17, 2007, EMT-I certification revoked and re-certification application for EMT-I is denied, for violating the EMS Rules 157.36.

Paul, Jon D., Rowlett, TX. July 18, 2007, Suspension of EMT-Basic certification through September 7, 2007, for violating EMS Rule 157.36.

Pitts, Edward D., Teague, TX. February 19, 2007, Reprimand, for violating the EMS Rules 157.36.

Pointer, Lonnie W., Whitewright, TX. February 19, 2007, Reprimand, for violating the EMS Rules 157.36.

Pompa, Veronica, Corpus Christi, TX. December 2, 2005, 36 month probated suspension, for violating the EMS Rules 157.37.

Possum Kingdom Lake Volunteer EMS, Graford, TX. February 22, 2007, Reprimand, for violating EMS Rule 157.11.

Powers, Matthew, Arlington, TX, August 29, 2007, Surrender of EMT-Intermediate certification while disciplinary action was pending. **Preferred Ambulance**, Mission, TX.

July 18, 2007, assessed an administrative penalty of \$10,90.00, for violating EMS

Preferred Ambulance, Inc., Mission, TX. October 24, 2007, assessed an administrative penalty of \$2,800.00, for violating EMS Rules 157.11 & 157.16.

Quality Ambulance Service,

Rules 157.11.

Pleasanton, TX. May 10, 2007, assessed an administrative penalty of \$3,750.00, for violating EMS Rules 157.11.

Quality Elite EMS LLC, Inc., Richmond, TX. July 18, 2007, assessed an administrative penalty of \$5,000.00, for violating EMS Rules 157.11.

Ramsey, David W., Mabank, TX. April 17, 2007, Reprimand, for violating EMS Rule 157.36.

Regional Ambualnce, Victoria, TX. July 18, 2007, assessed an administrative penalty of \$5,000.00, for violating EMS Rules 157.11.

Rio Grande Ambulance Service, El Paso, TX. January 25, 2007, assessed an administrative penalty of \$1,000.00, for violating HSC 773, EMS Rules 157.11 and 157.16.

Rones, Robert S., McKinney, TX. April 26, 2007, Reprimand, for violating EMS Rule 157.36.

Rushing, Janie M., Kennard, TX. September 13, 2007, Reprimand, for violating EMS Rule 157.36.

Saenz, Hector, Edinburg, TX. May 21, 2007, 1 year probation, pursuant to EMS Rule 157.36(f).

Sanders, Thomas J., Lubbock, TX. September 24, 2007, 24 month probated suspension, for violating the EMS Rule 157.36.

Santos, Victor P.S., North Easton, Massachusetts, September 24, 2007, Reprimand, for violating the HSC § 773.041(b) & EMS Rule 157.36.

Satellite EMS, Houston, TX, August 27, 2007, assessed an administrative penalty of \$12,500.00, for violating EMS Rules 25 TAC § 157.11.

Scarborough, Samuel L., Stephenville, TX. April 17, 2007, Reprimand, for violating EMS Rule 157.36.

Schertz EMS, Schertz, TX, February 27, 2007, assessed an administrative penalty of \$1,220.00, for violating HSC § 773, EMS Rules 157.11 and 157.16, these violations were self-reported to the Department.

Schreiber, Kimberly, Tomball, TX. October 9, 2007, Reprimand, for violating the EMS Rule 157.36.

Secure Ambulance, Farmers Branch, TX, August 29, 2007, assessed an administrative penalty of \$500.00, for violating EMS Rules 157.11, HSC §773.041(b) and HSC § 773.050(a) .

Sherman Fire Department, Sherman, TX. December 23, 2007, assessed an administrative penalty of \$1,260.00, for violating EMS Rule 157.11.

Skiles, Billy, Dallas, TX. a one (1) month suspension followed by a forty-seven (47) month probated suspension through March 28, 2009, for violating EMS Rules 25 TAC § 157.36, and/or 25 TAC § 157.37. (March 28, 2005)

Smith, Jacoby D., Odessa, TX. October

26, 2007, Reprimand, for violating the EMS Rules 157.36.

Smith, L.J., Austin, TX. July 16, 2007, Revocation of ECA certification, for violating the EMS Rules 157.36.

Smith, Ronald G., Abilene, TX. July 18, 2007, revocation of Paramedic License and Course Coordinator certification, for violating EMS Rule 157.36 and 157.43.

Smith, Steven C., Midlothian, TX. October 26, 2007, Reprimand, for violating the EMS Rules 157.36.

Snowden, Casey L., League City, TX. March 1, 2006 through March 1, 2008, 24 months probated suspension, for violating the EMS Rules 157.36.

Snyder EMS, Inc., Snyder, TX. February 22, 2007, Reprimand, for violating EMS Rule 157.11.

St. Anthony's Ambulance Service, Inc., Houston, TX, August 29, 2007, 18 month probated suspension and assessed an administrative penalty of \$10,000.00, for violating EMS Rules 25 TAC §§ 157.11 and 157.16.

St. Emmanuel EMS, Houston, TX. February 22, 2007, Reprimand, for violating EMS Rule 25 TAC §§ 157.11. **St. Mary's Ambulance Sevice, Inc.**, Westlaco, TX. February 27, 2007, Reprimand, for violating HSC § 773.061 and EMS Rules 157.11 and 157.16.

St. Patrick EMS Ambulance Service, Houston, TX, September 14, 2007, Reprimanded, for violating EMS Rules 157.11 & 157.16.

Stat Services Of Jefferson County, LLP d/b/a Stat Care EMS, Beaumont, TX. April 17, 2007, Reprimand, for violating EMS Rules 157.11 and 157.16. Stonewall County Ambulance Service, Aspermont, TX. February 22, 2007, Reprimand, for violating EMS Rule 157.11.

Stovall, Jerry P., Gatesville, TX. November 6, 2007, EMT-Paramedic certification suspended for 12 months, for violating the EMS Rules 157.36. **Thompson, Syler R.**, San Antonio, TX. February 27, 2007, EMT certification revoked, for violating the EMS Rules 157.36.

Timpson Volunteer Ambulance Service, Timpson, TX. April 17, 2007, Reprimand, for violating EMS Rule 157.11.

Tonarelli, Cathy M., Plano, TX. September 27, 2007, Revocation of Paramedic License, for violating the EMS Rules 157.36.

Trans-Care Medical Transport, Kennedale, TX, July 18, 2007, assessed an administrative penalty of \$5,000.00, for violating EMS Rules 25 TAC §§ 157.11 and 157.16.

Valley Emergency Medical Services, Edinburg, TX. May 31, 2007, Reprimand, for violating EMS Rules 157.11.

Vanderbilt, Brad C., Dallas, TX. October 24, 2007, EMT-Paramedic certification placed on a 6 month probated suspension, for violating the EMS Rules 25 TAC § 157.36.

Victorino, Victor J., Austin, TX, July 27, 2007, Reprimand, for violating EMS Rule 25 TAC § 157.36.

Villa, Baldemar, Edinburg, TX. April 17, 2007, Reprimand, for violating EMS Rule 157.36.

Visions EMS, De Soto, TX. September 14, 2007, assessed an administrative penalty of \$13.600.00, for violating EMS Rule 157.11.

Vols, Allen L., Pottsboro, TX. February 22, 2007, ECA certification revoked and application for ECA renewal denied, for violating the EMS Rules 157.36.

Wade, Matthew A., San Antonio, TX. March 27, 2006, 36 month probated suspension, for violating the EMS Rules 157.37.

Walker, Mark, Seabrook, TX. July 16, 2007, 2 month suspension of EMT-Basic certification, for violating EMS Rule 157.36.

White, Jeffery D., Austin, TX. October 26, 2007, Surrender of EMT-Basic certification while disciplinary action was pending.

Wike, David W., San Angelo, TX. March 22, 2007, Reprimand, for violating the EMS Rules 157.36. Wilburn, Eric W., Conroe, TX. September 24, 2007, Revocation of EMT-Basic certification and denial of renewal for EMT-Basic certification, for violating the EMS Rules 157.36.

All postings will remain on the website and in the Texas EMS Magazine listing:

- Until the suspension or probation expires; or,
- For one year after final action is taken (for decertifications, denials, revocations and administrative penalties).

Willhite, III, John H., Alvin, TX. September 13, 2007, Revocation of EMT-Paramedic certification, for violating the EMS Rules 157.36. Williams, Stanley J., Port Neches, TX. March 22, 2007, EMT certification revoked and re-certification application for EMT is denied, for violating the

Willis, Reginald E., Burleson, TX. May 28, 2007, Reprimand, for violating EMS Rule 157.36.

EMS Rules 157.36.

Wilson, Alvin, Palestine, TX. April 17, 2007, Reprimand, for violating EMS Rule 157.36.

Wilson, David R., Houston, TX, August 29, 2007, Reprimand, for violating EMS Rule 25 TAC § 157.36.

Womack, Jason M., Joshua, TX. September 24, 2007, Revocation of EMT-Intermediate certification and denial of EMT-Paramedic application, for violating the EMS Rules 157.36. Wolf, Darrell G., Red Oak, TX. May

17, 2007, Reprimand, for violating EMS Rule 157.36.

X-Tra Mile Ambulance Service, Pharr, TX. July 18, 2007, assessed an administrative penalty of \$750.00, for violating EMS Rules 157.11.

Zulyevic, Colleen, Canyon Lake, TX. September 24, 2007, Revocation of EMT-Intermediate certification, for violating the EMS Rules 157.36.

Meetings & Notices

Calendar

February 2008. Central Texas College, Killeen, Texas, offering **EMS Instructor Course**. For more information contact Tammy Samarripa at 254/526-1479. February 9-10, 2008. **Supporting Independent Rescuers Educational Needs (S.I.R.E.N.) Conference** at Blinn College in Bryan, Texas, sponsored by PHI Air Medical and PHI STAT Air. For more information go to www.phistatair.com.

February 16-17, 2008. **Basic Trauma Life Support.** University of Texas, M.D. Anderson Cancer Center, Houston. Cost \$125.00, includes course text, pocket mask, and breakfast/lunch both days. Contact Ellen at 713/792-2530 or email springle@mdanderson.org.

February 22-23, 2008. **Eagles Conference**, Dallas Marriot Las Colinas, 223 West Las Colinas Blvd., Irving, Texas. CME credit will be offered. For more information contact eagles@utsouthwestern.edu or call 800/688-8678, 214/648-3138 or online at www.gatheringofeagles.us/2008information. htm.

August 7-8, 2008. The South East Texas Regional Advisory Council (SETTRAC) annual Emergency and Trauma Care Conference. To suggest topics, speakers,

Deadlines and information for meetings and advertisements

Deadline: Meetings and notices must be sent in six weeks in advance. Timeline: After the pages of this magazine have completely gone through editorial, design and layout, the magazine goes to the printshop to get printed (a 15-working-day process), then on to our mailing service (a four-day process), and then to the post office to get mailed out.

Cost: Calendar items are run at no charge. Calendar items run in the meeting and notices section until just prior to the meeting or class. Classified ads run for two issues unless we are notified to cancel the ad.

Fax or mail: Calendar items can be faxed to 512/834-6736 or mailed to Texas EMS Magazine, Texas Department of State Health Services, 1100 W. 49th St., Austin, TX 78756-3199. Call 512/834-6700 if you have a question about the meetings and notices section.

and vendors, or for more information email emsandtraumacare@yahoo.com.

Jobs

Paramedic: PPD, a leading global provider of discovery and development resources for pharmaceutical and biotechnology companies, has openings for PRN and full-time paramedics in Austin. Qualified candidates must be Texas certified EMT-P with ACLS certification and have previous experience on an ALS unit with minimal supervision. Must be able to work evenings, nights, and weekends. If interested apply online at www.ppdi.com.

Education Director: Texas Tech University Health Science Center at El Paso, Texas is seeking a qualified individual for the Associate Education Director within the Department of Emergency Medicine, Division of EMS, in El Paso Texas. Responsible for coordinating and/or instructing EMS courses at all levels, includes coordinating and/or instructing EMS specialty courses (ITLS, PALS, ACLS and BLS), instructing in our CE program, and participating in EMS educational events for specialty teams. Requires detailed knowledge of EMS systems and educational curriculum at all levels, superior organization skills, and the ability to work independently within established guidelines and procedures. Associate's degree in a medical related field preferred, one year experience in EMS/ALS education, three years experience as an ALS provider or High School diploma and seven years experience as an ALS provider and one year experience in EMS/ALS education. Current certification/licensure as a Texas paramedic or Texas RN license preferred. To apply contact Texas Tech University HSC, Human Resource Department, 4801 Alberta Ave., El Paso, TX 79905, 915/545-6515. Paramedic: Clear Lake Emergency Medical Corps (CLEMC) is hiring full and parttime paramedics. CLEMC serves several communities over 70,00 residents. Requires DSHS certification in good standing, minimum 2-years paramedic experience preferred, ACLS, PALS, good driving record with a valid license and good computer skills. Competitive pay and benefits. Contact CLEMC at 281/488-3078 or 281/488-0023, Monday-Friday, 8:00am to 4:00pm for more information. +

EMT/EMT-I: Terlingua Fire and EMS, Inc. is seeking a full-time EMT/EMT-I. Must have current Texas certification, as well as CPR at the Healthcare Provider level. Terlinqua Fire and EMS, Inc. located in Study Butte, TX, is a low volume 9-1-1 provider that has a service area of approximately 3,000 square miles. Candidates must be in good physical condition, enjoy working and living in a remote environment and possess excellent critical thinking skills due to long transport times. Salary and benefits based on experience and level of training. For more information or to apply contact Greg Henington, EMS Chief, at 432/371-2633 or email at greg@ffoc.net. *

Executive Director: The North Central Texas Trauma Regional Advisory Council (NCTTRAC) is seeking a highly motivated, qualified individual to lead the organization in the newly created position of executive director. Headquartered in the Dallas/Ft. Worth metroplex area. Salary negotiable depending on qualifications and experience. For more information or if interested send a letter of interest and CV to Leigh Bedrich at leigh.bedrich@flower-mound.com. *

Education Coordinator: Harris County Emergency Services District 1 is accepting applications for an Education Coordinator to develop CE and coordinate internal training. For complete responsibilities, criteria, salary, and to apply visit www.hcesd-1.org. *

Paramedics: Texas City EMS Department is accepting applications for paramedics to fill full and part-time openings. Competitive salary and benefits. 24 hour shifts with progressive protocols and new equipment. Email resume to tkrenek@texas-city-tx.org or call 419/643-5705. *

Paramedics: A*Med Ambulance Service, Inc. is accepting applications for paramedics to fill full and part-time openings. A*Med is a new critical care transport agency providing service to the Galveston, Fort Bend, Harris, and surrounding counties. Competitive salary and benefit packages. Multiple shifts available, progressive protocols and new equipment. Email resume to tsimmons@amedhomehealth.com or call 832/771-4783. *

Volunteer, Training, Employment: F.O.R.C.E.S. Medical Reserve Corps is accepting applications/training slots for EMS and Allied Health Care personnel in the South Texas area. Supervisor EMS positions, NIMS training, Medic Ryders®

Meetings & Notices

Equestrian Unit, tactical EMS support, or disaster response teams. If interested contact our Medical Team at 866/MT-FORCE (683-6723) or visit www.forces.cc or www.medicalreservecorps.gov or email info@forces.cc. *

For Sale

For sale: FERNO ambulance stretchers. Two model 96SE Squadmate 500 pound rated with nice mattresses, \$650 each or \$1100.00 for both. Two model 29M stretchers with nice mattresses, \$450.00 each. Shipping extra or pickup in the Metro Houston area. Call Louis Bernhardt 281/595-2002 for more information. *

Miscellaneous

CE Solutions: www.ems-ce.com offers online EMS continuing education that is convenient, cost effective and interesting. Visit www.ems-ce.com for a free test-drive or call 1-888-447-1993. +

Firefighter Continuing Education: Now available online at www.FirefighterCE. com. FirefighterCE is accepted by the Texas Commission on Fire Protection. Visit www. FirefighterCE.com for a free test-drive or call 1-888-447-1993. +

Medical Billing: Providers Billing Service is an electronic billing and collection service for Texas EMS, volunteer and paid departments. HIPAA compliant. Call for more information 888-473-0920 or fax a request for information to: PBS, Request info, Attn: Mascha. Fax number 877-687-7471. +

EmCert.com: All courses DSHS/ CECBEMS accredited and meets National Registry requirements. Offers competitive individual, group and military rates. Want outstanding courses, prices, and administrative features and customer support? Visit www.emcert.com or call 877-EMS-HERO. +

Ambulance Supplies: Basic supplies for ambulance inspections. We have what it takes to pass inspections. Contact us for a list of supplies you need at the prices you will like. Call Ellett Medical at 713/501-3310. +

Education: Texas Emergency Services Education Group offers initial and continuing education courses in Texas.

Upcoming classes schedule for January-October 2008. Call 866-240-5231 for more information. Payment plans and Veterans Administration funding available. +

Medical Billing: Express Billing, Inc. is a medical billing serviced in business since 1998 and has over 30 years of experience in medical billing specializing in ambulance billing. Call 713/484-5700 for more information. +

Advanced Card Courses: ACLS, PALS, ITLS, GEMS, PEPP classes monthly in the Houston area. PHTLS and AMLS available for groups with 45 days notice. CPR, AED, and First Aid training held weekly. Moulage services, CE seminars, clinical and billing consulting available. Flexible scheduling for individuals and small groups. Preregistration is required. We will travel. Contact Medical Matters at 281/825-8145 or online at www. medicalmatterstx.com. *

Paramedic, Intermediate-85, and EMT-B Courses: Houston Community College EMS Department is currently accepting applications for all levels of EMS courses to meet your educational requirements. Academy style (full-time) and traditional semester course format are designed to meet your schedule. For more information call 713/718-7694 or visit www.hccs.edu for details on upcoming courses. *

Texas EMS Consulting Service: Our goal is to provide assistance for Texas EMS agencies. Operations result from over 30 years of EMS and fire service experience. Resume available upon request. Services provided include but not limited to: evaluation of EMS; referrals for education

programs; grant preparation. This service is in no way connected to DSHS. For more information contact Max Smith, LP, at 254/445-4759 or email texasems@hotmail.com. *

Health Claims Plus: EMS and fire department billing. Excellent rates and services. Electronic billing, weekly and monthly reports and educational workshops. Contact 888/483-9893 or visit www. healthclaimsplus.com. *

Online Bachelor's degree: St. Edward's University, Austin, Texas, now has an online option for its BA degree in public safety management. The program is accelerated taking one-half the time of a traditional program. There is also an optional BAAS degree for those with an associate's degree. For more information visit www.stedwards. edu/newc/pacepsm.htm or call 877/738-4723 or 512/428-1050. *

Rope Rescue Training: Training for fire, EMS, law enforcement and industry in technical rescue, rope rescue, fire rescue, cave rescue, vehicle rescue and wilderness first aid. Call John Green at 361/938-7080 or visit www.texasroperescue.com. *

- + This listing is new to the issue.
- * Last issue to run (If you want your ad to run again please call 512/834-6748).

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EMS Profile: Childress Regional Medical Center EMS



Childress EMS, standing, from left: Vince LaCario, Sherry Arnold, Kellie LaCario, Pamela Mayhugh, Blain Burton, Jake Chapman, Kenny Smith, and Leslie Birkie; kneeling from left: Zack Coleman, Daniel Tyler, Steven Tyler, Roger Elliott and Gerardo Garcia

Number of Personnel: Childress Regional Medical Center (CRMC) EMS has a staff of 18 employees led by EMS Director Gerardo Garcia, NREMT-P. There are currently four full-time employees and 14 part-time employees. The full-time staff includes Roger Elliott, NREMT-P; Gerardo Garcia, NREMT-P; Pamela Mayhugh, EMT-B; and Steven Tyler, NREMT-B. The part-time employees include: Sherry Arnold, EMT-P; Leslie Birkie, LP; Jake Chapman, NREMT-P; Leslie Birkie, LP; Jake Chapman, NREMT-P; Tim Hightower, NREMT-P; Leann Preston, EMT; James Hewett, NREMT-P; Blain Burton, NREMT-I; Zack Coleman, NREMT-I; Kenny Smith, NREMT-B; Daniel Tyler, NREMT-B; David

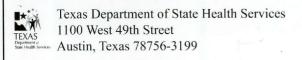
Cruz, NREMT-B; Kellie LaCario, EMT-B; Vince LaCario, EMT-B; and Rodney Mestas, EMT-B.

Years of service, number of units and number of calls: CRMC EMS is a hospital-based EMS service that began in 1980 with two ambulances when medical staff members petitioned the Childress Regional Medical Center's board of directors to implement a paramedic service. The first paramedic, W. J. Copeland, was on call 24 hours a day. He began teaching EMT classes to hospital personnel, LVNs, respiratory therapists and physical therapists, and soon more people became certified to work on the ambulance.

CRMC EMS now has a fleet of three Type III ambulances, two of which are staffed 24 hours a day with at least one paramedic on each unit. The third ambulance is placed in service when more than one inter-facility transfer is needed. All three ambulances are BLS with MICU capabilities. Each unit is stocked with LifePack 12 cardiac monitors and is capable of waveform capnography. Portable ventilators are also carried for intubated patients. CRMC EMS operates under Panhandle Emergency Medical Services System (PEMSS) and under the medical control of Carl Paetzold, MD.

In 2006, CRMC EMS responded to 1,034 calls, 201 of which were inter-facility transfers. The service area for Childress EMS is 720 square miles and includes 6,000 people in the city of Childress. CRMC EMS provides 9-1-1 services for the citizens of Childress and Childress County, as well as the thousands of travelers who drive on the two US highways that intersect in Childress. The service also provides paramedic mutual aid for two surrounding communities that do not always have a hospital or a paramedic on duty.

Current activities: CRMC EMS has participated in the past two annual city-wide disaster drills. By offering free monthly CPR courses, CRMC EMS trained 159 people as CPR providers in 2007 and expects to exceed that number this year. The service is building a new ambulance station and will soon be purchasing a new ambulance. An emergency vehicle operations course is planned for early 2008. CRMC EMS was awarded the PEMSS Public/Private provider of the year award in 2002 and again in 2004.



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