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DEPARTMENTS

- From This Side
- Steve Janda
- 6 Deaths
- 10 On Duty
 - Kelly Harrell
- 23 Frequently Asked Questions
 - Mattie Mendoza
- 32 Local and Regional New John LeBas
- 44 Did You Read?
- 47 Disciplinary Actions
 - Anthony Luna
- 50 Calendar
 - Dawn Whitfield

FEATURES

Texas loses a pioneer

Babe Aycock, paramedic, dies at 91. By Kelly Harrell

GETAC Recon

GETAC and the committees met during Texas EMS

Conference.

12 Texas EMS/Trauma

Awards

Who took home top honers for the best in Texas EMS and trauma at the 21st annual conference? Turn to page 14 for all the details. By John LeBas

On the cover:

A Montgomery County Hospital District crew unloading a critical patient out of their unit. Photo by Babby McMinn

Computerized testing: what you need to know All the info you'll need to understand what to do whether you're a student or a program director, plus a listing of places to take the test. By Brett Hart

24 Local Projects Grants.

What could you do with an extra \$8,000? Find out what these services are doing with the money they are getting from Local Projects grants. Texas EMS Conference wrap-up

Two-hour workshops, plenty of networking and lots of walking. What else did you miss at Texas EMS Conference 2006? By John LeBas

30 2006 Photo Contest

Take a look at the best in EMS photos for the year.

Pulse oximetry

What is it and how can it help? Earn 1.5 hours of prep CE. By Kenny Navarro, LP

35

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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.

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Certification changes happening for EMS and trauma systems

A very happy and safe New Year to all. As we begin 2007, the Office of EMS/ Trauma Systems Coordination is looking at two significant changes for EMS providers. Computerized testing for all initial and recertification candidates began January 1. Initial and recertification applicants will now take NREMT testing for ECA, EMT, EMT-I and paramedic on computers at Pearson VUE testing centers. There are 19 centers located across the state, with two more locations still pending. For a list of testing centers and other articles that have run in the magazine over the past year, please go to www.tdh.state.tx.us/hcqs/ems and click on "Computerized Testing News." Page 18 in this issue also has some good information.

The Comprehensive Clinical Management Program (CCMP), the other big potential change to EMS certification, has taken significant steps forward. CCMP, an alternative route for EMS personnel to recertify, is another pathway to clinical excellence for EMS providers and allows a fifth option of certification and licensure renewal of their employees. At this year's Texas EMS Conference, a group led by Kelly Curry, Allen Johnson and Leigh Anne Bedrich taught providers about CCMP and how to start the process. The class was a culmination of several years' work, including a pilot program in which three courageous EMS providers opened their doors to CCMP surveyors. We'll be bringing you updates as the CCMP process progresses.

On January 9, the 80th Texas Legislature convenes. While this is not much more than a footnote in the local news for some, to those of us at DSHS in Austin, it begins 140 days of intense work as we provide analysis and cost estimates for bills that would affect EMS and trauma systems. By mid-December, hundreds of bills had already been filed for the upcoming session. Things happen quickly during session, but we'll try to keep any updates we have on bills posted on our website. Once the gavel comes down on May 28, we'll compile a wrap-up of the bills that affected EMS and trauma systems for the July/August issue of *Texas EMS Magazine*.

As I write this, we have just finished the conference in Dallas. There are so many people to thank that we couldn't possibly name them all. The bottom line is that we could not make this conference a success without the support of many EMS/ trauma systems stakeholders across this great state. Many thanks to each of you who participated as an attendee, volunteer or exhibitor. We are already working on Texas EMS Conference 2007, which will be held in Houston.

The Governor's EMS and Trauma Advisory Council (GETAC) will be back in Austin on February 23 at the Crowne Plaza Hotel near I-35 and U.S. 290 East. Committee meetings will take place February 20-22. Watch our website for a schedule of meetings. You can book a room at the state rate of \$85/single by calling (512) 323-5466. See you in Austin in February...

FROM THIS SIDE



Steve Janda Office of EMS/Trauma Systems Coordination



Two inducted into Texas EMS 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.

This year's ceremony featured a solemn flag presentation by the Austin-Travis County and Lubbock EMS honor guards, accompanied by a snare drum and bagpipe detail from Dallas Fire-Rescue. The Hall of Honor plaques were placed on a black-draped table by honor guard members, who then presented memorial obelisks and salutes to the families of the deceased. Playing of *Amazing Grace* followed.

The Texas EMS Hall of Honor plaques hang at the Office of EMS/



Trauma Systems Coordination, DSHS, 8407 Wall St. in Austin. Individuals are inducted each November during Texas EMS Conference. Those inducted this year were:

Joe Alvarez Jr., 32, of Robinson, who died September 13 when the medical van he was driving hit the back of a street sweeper in Waco. The licensed paramedic was a supervisor for East Texas Medical Center EMS.

Eric Hanson, 26, of Austin, who died October 10 when the ambulance he was driving was hit by a pickup. He was a paramedic with Marble Falls Area EMS.

– John LeBas

EMS Obituaries

Julie Ann McIntosh, 41, of Arlington died November 11 in a motor vehicle crash. She was a former medic with Mid-Cities Ambulance and Life Star EMS.

Frank Madla, 69, of San Antonio died November 24 in a fire at his home. Mr. Madla served 20 years in the Texas House and 13 years in the Senate, championing EMS causes during his tenure.

Leonard Charles Gaines, 49, of Fort Worth died of natural causes at his home in September. He was the city's first black fire chief, heading the department from 2002 until his death.

James Skeen, 49, of Red Rock died in December at his home. He was a paramedic with Guardian EMS, a member of the Bastrop County First Responder Organization and a volunteer firefighter with Five Points Volunteer Fire Department.



photos: B. Kinney

Texas loses an icon: Babe Aycock passes away at 91

by Kelly Harrell

For anyone who knew Babe Aycock, it was only fitting: One of her last requests was to be buried in her Mart EMS uniform, her red paramedic patch on her shoulder. The 91-year-old paramedic came into EMS late in her career, but it defined her life in the last 17 years, and it defined her in death.

Texas EMS lost a colorful and wellknown part of its history in November when Babe passed away after an illness. Aycock, a native of Mart, was one of the world's oldest paramedics, if not the oldest. She claimed the distinction of being the oldest active paramedic in Texas.

Edith Babe Aycock — she changed her middle name legally to Babe in the 1980s — was born August 10, 1915, in Mart. She graduated from Mart High School and 4-C College in Waco. From 1956 to 1964, she served as Mart city secretary, and she went on to serve a total of 16 years as the first female mayor of the Central Texas town. In addition to helping create the Mart Community Center, the Mart Senior Center and the local Meals on Wheels program, she was a founder and charter member of Mart EMS. The service began in 1983 when the funeral home quit making EMS runs. As mayor, she led the city



in organizing volunteers and raising money for an ambulance, banking \$60,000 and putting together a crew of 32 volunteers when Mart EMS opened its doors, a remarkable feat in a town with a population of about 2,000. The next year she became certified as an ECA. But Babe wasn't content to sit back. She became an EMT, an EMT-I and then, in 1989, a paramedic. She was 74 years old when she first certified as a paramedic. "I asked her why she was studying to be a paramedic. and she said that she couldn't ask other people to do something she wasn't doing," said Nancy Hartley, Babe's daughter. She made runs as a volunteer for Mart EMS

until she was well into her 80s. Even a broken back about five years ago couldn't keep her off the truck. When her doctor cautioned against continued on page 42



Babe Aycock started in 1984 as an ECA and went on to certify as an EMT, an EMT-I and, in 1989, a paramedic. She made runs as a volunteer on the Mart EMS ambulance well into her 80s.

GETAC Recap

The Governor's EMS and Trauma Advisory Council (GETAC) met Monday, November 20, 2006, in Dallas during Texas EMS Conference. The council unanimously approved the minutes from its August 11, 2006, meeting and heard reports from the chair, committee/task force chairs and Department of State Health Services (DSHS) staff.

Chair Report: Chair Edward M. Racht, MD, welcomed everyone to the meeting and thanked them for attending the conference.

Dr. Racht discussed the committee structure of GETAC, explaining that there are eight standing committees and several task forces. He said his intention is to make improvements to the council's procedures to ensure they are efficient and effective.

He also reminded members that they must complete the Texas Public Information Act and Open Meetings Act training before December 31, 2006. Failure to complete both training videos can result in suspension from committees and/or the council.

Dr. Racht asked Steve Janda, unit director of the Office of EMS/Trauma Systems Coordination (OEMSTS), to present the 2007 meeting dates for GETAC. They are as follows: February 21-23, 2007, at the Crowne Plaza Hotel Austin; May 23-25, 2007, at the Hilton Austin Airport; August 22-24, 2007, at the Hilton Austin Airport; and November 17-19 in

Houston in conjunction with Texas EMS Conference 2007. These dates will soon be posted on the OEMSTS website (www.tdh.state. tx.us/hcqs/ems).

Applications for GETAC committees were available on the website under the News/Features section. The deadline to turn in applications was January 2, 2007.

Dr. Racht announced the resignation of Gary Cheek, RN, EMT-I, from GETAC and expressed appreciation for his service.

Staff reports: Kathryn C.
Perkins, assistant commissioner
for the Division of Regulatory
Services, reported that
reimbursements for EMS providers
who responded for Hurricane
Katrina should be completed by
December.

Ms. Perkins said she has attended several meetings concerning the DSHS Legislative Appropriation Request (LAR). She also noted that 60 bills have been pre-filed by elected officials for the upcoming 80th Texas Legislature, and approximately half of these may impact the DSHS Regulatory Division. She invited stakeholders to monitor Senate Bill 28, "relating to transferable physician order for life-sustaining and related treatment," which may have a significant impact for EMS providers.

Mr. Janda gave an update on the state EMS and trauma systems funding program. He said 245 Texas hospitals had achieved trauma designation status: Level I – 13; Level II – 10; Level III – 41; and Level IV – 181. There are 11 hospitals in active pursuit of

designation.

Maxie Bishop Jr., state EMS director, briefly discussed news from the National Registry of EMTs (NREMT), reminding the council that Texas will go to computerized testing through NREMT starting January 1, 2007, and students will begin applying and paying online. He also asked all coordinators to go online and register for the program, and DSHS will begin reviewing them for approval.

Linda Jones, program manager of the Environmental Epidemiology and Injury Surveillance Group, said her group is looking to acquire an intern through a fellowship program to assist with the workload. Ms. Jones also discussed three project grants that have been approved for needed programs.

Combined EMS and Air
Medical Committees – EMS
Committee Chair Pete Wolf and
Air Medical Committee Chair
Shirley Scholz reported that
the committees discussed EMS
subscription rule 157.11. Both
committees reviewed and voted
to proceed with the necessary
steps for the proposed draft. The
committees will vote whether to
pass the subscription rule at the
next meeting in February.

Air Medical Committee – Ms. Scholz reported that the committee continued discussion concerning liability and subscription plans. She told the council there were six questions sent to the Office of the Attorney General in regards to these subscription plans, and a response was received. The committee has considered adopting the CAMTS standards for the subscription plans but also is

looking for an alternative, stateapproved plan.

EMS Committee – Chair Pete Wolf reported that the committee was updated on what the Disaster/ Emergency Preparedness Task Force discussed at its meeting. The committee discussed the draft changes to DSHS Rules 157.12 and 157.13 as well as the recently drafted 157.11. The committee also discussed considering EMS as an essential service and the "gurney car" bills (HB 1126, SB 521).

Education Committee
Chair Jodie Harbert III reported
that the committee looked at
the 2002 National Instructor
Guidelines and voted to replace
the 1986 guidelines with the 2002
guidelines. The committee saw a
presentation concerning the HIPAA
compliance update for EMS
educator programs. The committee
also discussed and agreed to
continue with the current hepatitis
B immunization requirements for
students.

Injury Prevention – In the absence of Chair Gary Kesling, PhD, Mario Segura, RN, reported that the committee was not able to hold a meeting because it did not have a quorum.

Medical Directors – Chair Steve Ellerbe, DO, reported that discussion topics included the Comprehensive Clinical Management Program (CCMP) draft that was provided for the meeting. The committee heard from the Disaster/Emergency Preparedness Task Force and also from a representative of the Stroke Committee.

Pediatric Committee – Chair Joan Shook, MD, reported that there needs to be more

information available to the public about pediatric concerns. Dr. Shook will be working with Greg Wilburn, coordinator for the DSHS Regulatory Division's contract management functions, to create a website with this type of information.

Stroke Committee – In the absence of Chair Neal Rutledge, MD, GETAC liaison Mike Click reported for the committee. Discussion items included recommendations for the transport plan; recommendations for the training requirements; recommendations for the stroke facility criteria and how they will be designated; and coordination plans for the stroke facilities.

Trauma Systems Committee
Chair Ronald Stewart, MD,
reported that Jorie Klein, RN, vice
chair, served in his place at the
committee meeting. The committee
discussed pediatric transfers by
Level I and Level II designated
trauma facilities, compared both
levels and reviewed the application
process for both levels.

Comprehensive Clinical
Management Program (CCMP)
Strike Force – Leigh Anne
Bedrich, RN, reported that a draft
rule has been completed and an
invitation has been extended to all
committees for any further input or
suggestions.

EMS and Trauma Regulatory
Task Force – Co-Chair Dudley
Wait reported the task force has
met three times since the August
GETAC meeting and has shown
a great deal of progress. The task
force also set up a survey booth
area in the exhibition hall at
Texas EMS Conference for those
interested in providing input to this

task force. The next meeting will be January 10, 2007.

Disaster/Emergency Preparedness Task Force – Co-Chair Eric Epley reported that the suggested list of participants for this committee is still being finalized. There was also discussion about the ambus (ambulance-bus) and the advantages of it being part of evacuation plans.

Other reports/public comment on action items:

DSHS Preparedness Coordination Council – No one was available for this report.

Traumatic Brain Injury Advisory Council – No one was available for this report.

DSHS Hospital Licensing Rules Review Workgroup – No one was available for this report.

Texas Foundation for EMS/ Trauma Care – Jorie Klein, RN, reported that the bylaws have been approved.

General public comment: There was no general public comment at this meeting.

Action items: There were no actions items presented at this meeting.

Meeting dates for 2007:

February 21-23, 2007, at the Crowne Plaza Hotel Austin; May 23-25, 2007, at the Hilton Austin Airport; August 22-24, 2007, at the Hilton Austin Airport; and November 17-19 in Houston in conjunction with Texas EMS Conference 2007.

Adjournment: The meeting adjourned at 8:20 p.m.

Group offers AED grants

Looking for money for an AED? A group of AED and CPR training organizations, in partnership with AED manufacturers, is offering private and public businesses, agencies, institutions and schools up to \$900 in grant funding to purchase automated external defibrillators. In addition, one sponsor recently committed additional funding for Texas after the University Interscholastic League voted to require all member schools to have a minimum of one AED unit on each campus.

Why are these companies offering the grants? It's simple. The AED manufacturers are interested in increasing their market share by placing these devices in as many locations as possible. The training organizations are also interested in making AED devices readily available, because this provides that many more opportunities for them to provide training. To apply for an AED grant, go to www.aedgrant.com and click on "Apply" to download the one-page application.

The new UIL requirement has a connection to EMS and the EMS conference. Matt Nader, the Awards Luncheon keynote speaker during

the conference, was resuscitated by an AED after he dropped from cardiac arrest while playing football. In his speech, Nader recounted the events on the day of his arrest, praising the medical personnel who save his life, and how he had later urged the UIL to adopt the new requirements.



Nader photo: B. Kinney

Wilburn transferred to assistant commissioner's office

Kathy Perkins, who recently was promoted to assistant commissioner for Regulatory Services, has asked Greg Wilburn to take on a new role as the coordinator for the DSHS Regulatory Division's contract management functions, and to assist Regulatory Division management in establishing and managing budgets. Wilburn, who had been serving as state trauma systems director, now reports directly to Perkins. Since coming to the EMS/trauma systems program three years ago, Wilburn has spent an extensive amount of time with the grants programs and is extremely knowledgeable about budget processes



Wilburn photo: B. I

for the EMS/trauma system funding sources. From an operations standpoint, this means that, in addition to being the director of the Office of EMS/Trauma Systems Coordination, Steve Janda will resume full-time duties as state trauma systems director.

Photo: B. Kinney

Kim Petty, EMS/Trauma Systems group manager

(kim.petty@dshs.state.tx.us; 512-834-6794), will be playing a much larger and more visible role with various office programs, including trauma facility designation; RACs; and regional EMS trauma systems funding and development.

Registry recognizes good data quality

The Texas EMS/Trauma Registry recently recognized the Trauma Service Areas (TSAs), hospitals, and EMS providers who submitted the highest-quality data to the EMS/ Trauma Registry for 2005. There are three categories: EMS Providers, Hospitals and TSAs. The EMS and hospital scores are on a scale of 0 to

2, with a "2" being perfect. EMS providers are ranked by the number of runs per year.

X-Large (>10,000): Odessa Fire Department, Odessa, (TSA J) with a score of 1.93

Large (5,001-10,000): Life Care EMS, Weatherford, (TSA E) with a score of 1.95

Medium (1,001-5,000): Guardian EMS, Pampa, (TSAA) with a score of 1.91

Small (101-1,000): PHI Air Medical 8, Fort Worth, (TSA E) with a score of 1.97

Tiny (1-100): Terlingua Fire and EMS, Terlingua, (TSA J) with a score of 1.98

Hospitals were ranked by designation levels.

Level 1: University Medical Center, Lubbock, (TSA P) with a score of 1.99

Level 2: Brackenridge Hospital, Austin, (TSAO) with a score of 2.00

Level 3: Shannon West Texas Memorial Hospital, San Angelo, (TSAK) with a score of 2.00

Level 4: Wise Regional Health System, Decatur, (TSA E) with a score of 2.00

Undesignated: Baylor Medical Center at Garland, Garland, (TSAA) with a score of 2.00

The Regional Advisory Councils were given overall rankings:

1st place: TSA L – Temple area 2nd place: TSA D – Abilene area 3rd place: TSA A – Amarillo area 4th place: TSA M – Waco area 5th place: TSA K – San Angelo area

"We want to congratulate EMS providers, hospitals and RACs on their commitment to submitting high quality data," says Linda Jones, group manager for the Registry. "We appreciate all of the hard work and dedication it takes to making the Texas EMS/Trauma Registry the best it can be. Thanks from all of us."

EMS Week set for May 20-26

The 34th annual National EMS Week has been set for May 20-26, 2007. The American College of **Emergency Physicians** sponsors EMS Week as a way to bring together local communities and medical personnel to publicize safety and honor the dedication of those who provide dayto-day lifesaving services. The weeklong series of events will include national and local activities to honor EMS providers (paramedics, emergency medical technicians, first responders, firefighters and police) and to raise public awareness about health and safety issues, including how to prevent injuries and what to do in a medical emergency. The theme of this year's EMS Week is "EMS: Extraordinary People, Extraordinary Service." As in years past, ACEP is developing and distributing EMS Week organizational kits to help communities plan and promote activities for the week. When the kits are available, you can order at www.acep.org/emsweek.

> **GETAC** February 21-23 Austin

Medicare money available

According to the Centers for Medicare/Medicaid Services, there is a significant amount of funding left for EMS providers, hospitals, and physicians through the Medicare Prescription Drug, Improvement and Modernization Act of 2003, Section 1011. This section provides \$250 million per year for fiscal years (FY) 2005-2008 for payments to eligible providers for emergency health services. Two-thirds of the funds will be divided among all 50 states and the District of Columbia, based on their relative percentages of undocumented aliens, and one-third will be divided among the six states—including Texas with the largest number of undocumented workers.

The money is for otherwise

un-reimbursed costs of providing services required by section 1867 of the Social Security Act (EMTALA) and related hospital inpatient, outpatient, and ambulance services

furnished to undocumented aliens, aliens paroled into the United States at a United States port of entry for the purpose of receiving such services, and Mexican citizens permitted temporary entry to the United States with a laser visa. For information, go to https://www.trailblazerhealth.com/section1011/Default.aspx.

Some conference photos on photo website

The EMS conference photographer has made some of the photos from Texas EMS Conference 2006 available for purchase online. Go to www.dotphoto. com and login as a new user. Select "Galleries" at the top of page, then select "Schools, Clubs and Orgs." Click on "Police" and you can choose from "EMS 2005" or "EMS 2006." Money from photos purchased goes to the

Conference.



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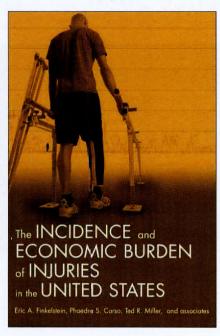
Each day, 1,301 children suffer traumatic brain injuries, 1,294 teens attempt suicide and require medical attention to prevent death, and 801 older adults suffer hip fractures. But those represent only a small portion of the people who will be injured each year in the United States. The Incidence and Economic Burden of Injuries in the United States, a book available from Oxford University Press, examines the lifetime costs associated with the injuries that occur in just one year. In 2000 alone, the 50 million injuries that required medical treatment will ultimately cost \$406 billion. These total costs, for both fatal and nonfatal injuries, include estimates of \$80.2 billion in medical care costs and \$326 billion in productivity losses, which include lost wages and the accompanying fringe benefits, as well as the lost ability to perform normal household responsibilities.

The authors also examine medical expenses and productivity losses by gender, age, mechanism of injury, body region and body part injured, and severity. Findings include:

- Males account for approximately 70 percent (\$283 billion) of the total costs of injuries.
- People ages 25 to 44 represent 30 percent of the U.S. population and 40 percent (\$164 billion) of







the total costs of injuries.

- Motor vehicle and fall injuries account for 22 percent (\$89 billion) and 20 percent (\$81 billion), respectively, of the total costs of injuries.
- Upper extremity and lower extremity injuries each account for 17 percent (\$68 billion) of the total costs of injuries.

This book, released by Oxford University Press, is available for purchase at the publisher's website: www.us.oup.com/us/catalog/general/subject/Medicine/PublicHealth/?view=usa&ci=9780195179484. For free information and fact sheets on injuries, go to www.cdc.gov/ncipc/factsheets/Economic_Burden_of_Injury.htm.

Big stretcher sales expected to expand with waistlines

Americans are getting bigger — so is the equipment needed to transport them. More than 60 percent of Americans age 20 and older are overweight, and one-quarter of American adults also are obese, generally defined as 20 percent over ideal weight. An increasing number of EMS providers are investing in special stretchers and other equipment that can accommodate patients weighing as much as 1,600 pounds. Sales of the special stretchers are expected to rise from

\$29.6 million in 2004 to \$50.5 million in 2012. Sales of special lift systems are expected to rise



from nearly \$75 million to \$193 million.

Nurse killed responding to crash

A Houston area nurse who stopped to help occupants of cars involved in a crash was struck and killed while checking one of the drivers. Sharon Ann Wegelt of Sugar Land died after the car she was checking on was struck by another vehicle. It was her 54th birthday. One other person was transported with critical injuries, and two others had minor injuries.

Bedrich named battalion chief

The Flower Mound Fire Department announced that Leigh Anne Bedrich has been named as EMS battalion chief. This position will oversee the EMS Division, as well as perform the dayto-day management duties of the South Denton County **EMS Medical Control** Group. Bedrich brings a long background of EMS field work and management expertise to both the fire department and the medical control consortium. She was awarded the Journey of Excellence Award at the 2006 Texas EMS Conference for her efforts with the development of CCMP and her involvement in statewide issues.

Awards winners named at Texas EMS Conference 2006

The 2006 Texas EMS Awards, presented during Texas EMS Conference in Dallas, honored the best in EMS and trauma in 14 categories. Congratulations to the winners:

EMS Administrator Award

 Maxine Pate of Brookshire for dedicating nearly three decades of her life to serving the citizens of the



Maxine Pate

Brookshire-Pattison EMS service area. Ms. Pate started her EMS career in the late 1970s as an ECA and went on to become a paramedic. She joined the

newly formed Brookshire-Pattison Ambulance Corp. in 1977 and volunteered countless hours as an EMS caregiver and board member, focused on developing a state-of-theart, advance-care provider for the 150-square-mile service area. Ms. Pate became director of Brookshire-Pattison EMS in 1998 and remains in that position today.

Ms. Pate is known for keeping an open-door policy, which is credited with maintaining high employee morale. She also consistently provides employees with a state-approved continuing-education program. For these and other reasons, say those who nominated her, members of the community immediately think of Maxine Pate upon hearing the name Brookshire-Pattison EMS.

EMS Public Information/Injury **Prevention Award** - Austin County **Emergency Medical** Services, Bellville, for dedication to providing public education in an effort to reduce injury. The service sponsors a community blood drive; introduced the Vial of Life to the county, especially in assisted-living and retirement communities; and provides county

EMT classes and free community CPR classes. Austin County EMS also provides continuing-education classes for EMS personnel and ACLS/PALS/BTLS classes for the Austin County medical community.

The service has further reached out by acting as the clinical site for four EMS training groups, operating the local award-winning Shattered Dreams program, certifying area fire and police departments as first-responder programs, and helping the nurse and her assistant at a local school district gain protocol for the use of the combitube airway so they could upgrade their AED/CPR program.

EMS Educator Award – Jeff
McDonald of North Richland Hills
for his service as an educator and
administrator at the Tarrant County
College EMS program. Under Mr.
McDonald's administration, the
TCC program was one of the first
nationally accredited programs in
the state. He has led the way in
maintaining high standards of quality
for both students and customers



Members of the Austin County EMS include (from left): Deputy Director Gary Scarborough, Paramedic Jackie Scarborough, EMT Linda Toman, Director Ron Dille and Deputy Director Jim Turnbull.

of the college. Mr. McDonald developed and implemented the college's paramedic associate degree, the critical care paramedic program and various continuing education programs. The school has one of the highest initial pass rates on the National Registry exams among Texas programs.

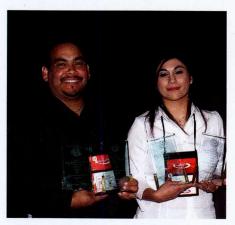
Mr. McDonald stays abreast of current EMS issues by attending meetings of the Governor's EMS and Trauma Advisory Council (GETAC), the local Regional Advisory Council (RAC) and EMS provider organizations. He also participates in the National Scope of Practice model program.





photos: B.Kinney

Telecommunicator Award – Angie Razo, Rafael Gonzalez, Mayda Lopez, Hector Vasquez and Brenda Cavazos for performing to the highest standards of telecommunication specialists following an explosion at a McAllen restaurant. The telecommunicators, all employees of Med-Care EMS, quickly dispatched a unit and two



Danny Ramirez and Mayda Lopez accept the award for the telecommunicators.

supervisors to the scene. After triage, it was determined that 18 patients would require transport and another 23 were refusing treatment. When no response was received from the local emergency communication network, the telecommunicators performed a manual bed poll to determine the number of patients each area hospital would receive. During this time, the telecommunicators also handled four other emergencies without incident.

In the end, the numbers told the story: Seven units and three supervisors dispatched, 41 patients triaged, 18 patients transported to five hospitals, and 1 hour and 5 minutes from the time the call came in to the time the last patient arrived at the hospital. All the while, the telecommunicators worked calmly, quickly and effectively in helping to manage the EMS response.

EMS Medical Director Award - the late Russell K. Miller, MD, of Galveston for his service as a mentor, supporter and advocate for EMS throughout Texas for more than 25 years. Dr. Miller, who passed away in August after he had been nominated for this award, was medical director for 20 EMS providers and 10 fire-based first-responder organizations in the Houston/Galveston area. He was instrumental in establishing the use by EMS of continuous positive airway pressure (CPAP) on congestive heart failure patients, which has decreased the intubation rate of those patients by 90 percent and greatly decreased their length of hospital stays and mortality rates. He also implemented aggressive prehospital protocols for cardiac



Accepting the EMS Medical Director Award is Christopher Roberts, son of the late Russell K. Miller, MD.

patients that have been credited with saving lives.

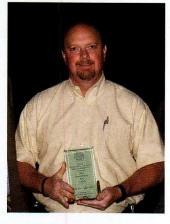
Dr. Miller had his EMS organizations participate in medical studies, planned aggressively for disaster management, set up an occupational injury prevention program for his medics, and helped start the Clear Lake Dive and Rescue Team, the first EMS-based dive and rescue response team in Texas.

In addition to receiving the statewide EMS Medical Director Award, Dr. Miller was named the Greater Houston Emergency Medical Services Council Medical Director of the Year for 2006.

RAC Award – Deep East Texas Regional Advisory Council (Trauma Service Area H)

for outstanding advancement of its regional trauma system. DETRAC EMS providers and hospitals continue to improve the region's trauma system plan in an exemplary manner, with lasting impact on trauma patient care. In the face of diminished local resources due to

Accepting the RAC award is Scott Christopher.



Hurricane Rita, it provided a rapid disaster response by taking care of special-needs patients from not only lower East Texas counties, but also patients from the aftermath of Hurricane Katrina in southern Louisiana. In spite of the devastation of local infrastructure, DETRAC rose to the challenge and maintained lines of communication and resources between local, regional and state entities.

Through ongoing introspective review, DETRAC continues to improve its regional system plan and organizational practices, which strengthens the trauma system in this region and better serves the citizens of the area.

Air Medical Service Award – STAR Flight, Austin/Travis County EMS, for displaying leadership and the highest standards in providing air medical services. Founded in 1985, STAR Flight has the primary mission



STAR Flight crew members include (from left): Casey Ping, Mark Parcell, Willy Culberson, Jim Allday, Mike Summers, Howard Polden, Brian Johnson, Lynn Burtschell and Rick Rutledge.

of providing critical care transport for a 16,000-square-mile area of Central Texas. It also performs search-and-rescue, firefighting and water and land rescue missions. STAR Flight pilots average 8,000 flight hours each, its flight nurses' experience ranges from seven to 20 years and the flight paramedics have experience up to 25 years. These personnel also conduct landing-zone training, coordinate EMS programs for rural services and participate in community public education events.

STAR Flight operates a pair of Eurocopter EC145s equipped with the latest navigation, rescue and emergency medical equipment. With extensive written protocols and top-of-the-line equipment at their disposal, the flight crews are able to able to deliver fast, effective care and transport for their patients. These emergency medical and rescue efforts have been recognized with awards from the Helicopter Association International/ Eurocopter, The Weather Channel, Rotor & Wing magazine, National Association for Search and Rescue

and the Higgins-Langley Memorial Awards.

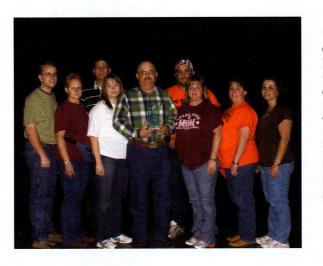
Volunteer Provider Award – Grapeland Volunteer Fire/EMS for its professionalism and dedication in providing EMS services to the citizens of Grapeland. The volunteers who staff the department maintain a high level of education, stay abreast with current technology and standards of care and pay special attention to the upkeep of their equipment and vehicles. The department has a reputation for being community-oriented, according

to nominations for this award. In an example of this personal touch, Grapeland Volunteer Fire/EMS personnel recently displayed familylike compassion while responding to a crash involving a well-known community member. For this and other reasons, the department was a perfect selection for this year's Volunteer Provider Award.

EMS First Responder Award – Cedar Park Fire Department,

Cedar Park, for consistently demonstrating a high standard of professionalism and knowledge in the care of sick and injured patients. Established in 1972 as a volunteer outfit, the department now serves a population of 52,500 with three engine companies and 50 full-time, paid firefighters. Those personnel provide BLS medical response, hazmat response, dive rescue, swift-water rescue, high-angle rescue, technical rescue, automobile extrication, fire-safety education, fire suppression/prevention and emergency management.

Cedar Park Fire Department provides fire prevention education for the public and is training all other city departments in the National Incident Management System. It also oversees the Cedar Park Citizen



Grapeland Volunteer Fire/EMS members include (from left) Chad LeBlanc, Susan Rowden, Jamie Thomas, Chastity LeBlanc, Roger Dickey, Phillip Squyres, Rhonda Smith, Joy Squyres and Tracey Yates. Corps, is involved in the Community Emergency Response Team, and participates in the Stranger Danger and Adopt-A-School programs.



Cedar Park Fire Department members include (from left): Lt. Jody Sanguinet, Lt. Zac Butoryak, Chief Chris Connealy, Lt. Shawn Wheeler and Firefighter Rick Barrios.

Private/Public Provider Award—Marble Falls Area EMS in Marble Falls for its efforts in meeting the demands and improving the quality of life of a growing population. Established as a BLS service in 1976, it now operates a fleet of five ambulances and serves a population of some 30,000 over nearly 300 square miles. Each



Marble Falls Area EMS members include (from left): Jonathon Curlee, Brandon Dempsey, Darlene Campbell, Johnny Campbell, Ken Smathers and Joyce Pierce.

ambulance is licensed BLS with MICU capabilities, a paramedic and EMT-I usually staff each unit and the primary units are equipped with a 12-lead ECG monitor upgraded with capnography.

Marble Falls Area EMS operates a child safety seat program called BEARS (Burnet County Everyone Always Rides Safe), hosting monthly fitting sessions and providing car seats for families that cannot afford them. It's the only program of its kind in the Highland Lakes area. The service also provides regular CPR classes for the public, participates in educational programs on injury awareness and prevention, does school visits and provides job information to local students.

Citizen Award – Conor Gibson of Denton and Kyler Whatley of Pilot Point for rescuing a drowning girl from the bottom of a pool. Conor, 12, and Kyler, 10, were on a field trip at the Denton Natatorium when they



Kyler Watley and Conor Gibson

saw the 4-year-old girl unconscious in the water. Neither boy had any rescue or first-aid training, but they acted quickly and decisively once they realized the girl's life was in danger. Working together, they pulled her girl to the surface. She was blue and wasn't breathing, but an unidentified EMT was able to revive her with help from lifeguards on the scene. The girl went on to make a complete recovery.

Nearly 20 people – including parents, educators, friends and EMS and police officials – nominated Conor and Kyler for the 2006 Citizen Award. They were described in those nominations as courageous, compassionate and selfless young gentlemen.

EMS Person of the Year – Jim Majorowski of Ransom Canyon for dedicating more than 30 years of his life to EMS service and education. "Major," as he is known, is a licensed paramedic and former firefighter. He is the basic coordinator for the South Plains



Jim Majorowski reacts emotionally to being named EMS Person of the Year.

College EMS program and also works for Lubbock EMS, of which he is a charter member. He recently retired from the field and now trains personnel in the communications center. Most of the personnel at Lubbock EMS received their basic training from Mr. Majorowski, and he is counted as a mentor and friend by countless EMS professionals in the area. In addition, he performs training and peer review for smaller continued on page 43

By Brett Hart

Computerized testing: what you need to know

Throw away your pencils — taking an EMS exam in Texas now means a session at a computer. We've run several articles in this magazine over the past year about computer-based testing (CBT) and what it will mean. We've posted all that information on our website at www.tdh.state.tx.us/hcqs/ems. Click on "Computerized testing info." Below are the essentials — what you really need to know about NREMT testing.

What should everyone know about CBT?

- DSHS will not give any paper-and-pencil exams at the ECA, EMT, intermediate or paramedic levels after December 31, 2006.
- NREMT will not accept or grade any paper-and-pencil exams given after December 31, 2006.
- All education programs and students must register with NREMT. The NREMT web address is www. nremt.org.
- Students began registering accounts and filing applications after December 15, 2006.
- EMS students taking an EMS instructor course will call a local DSHS EMS field office to arrange EMS instructor exams.
- Pearson VUE is a separate entity that has an agreement with NREMT to give the exams. The Authorization to Test (ATT) is your permission slip to contact Pearson VUE to schedule your exam.
- The exam scheduling feature and email address used by DSHS were deactivated and are no longer used as of January 1, 2007.

What should Texas EMS education programs know about CBT?

- Every program must go online to the NREMT website and register (see page 22). Once you have registered, a notice will be sent to DSHS that you have registered your program. Once your program is acknowledged to be an approved program by DSHS, NREMT will be notified. If you have not registered your program, this must be done immediately.
- Once your program is approved by DSHS, NREMT will mail you a DVD about the computer-based testing process.
- DSHS will no longer require course completion rosters at the ECA and EMT levels. Coordinators should issue students an individual course completion certificate; these will be audited as needed by DSHS.
- The NREMT computer system will create rosters that go to NREMT to verify course completion.
- Education programs must register through NREMT, and then DSHS can approve them for CBT.
- The ECA and EMT practical (skills) testing are done within the education course. National Registry representatives are still needed for advanced practical exams.
- The electronic verification of course completion does away with the need for education program medical director signatures.
- Be sure your students have the program name and program number you registered with NREMT.

What should EMS students know about CBT?

- EMS students must create an account with NREMT (see page 21). Once the account is established, they can apply for registration and testing. Once the student's education program verifies course completion, they will get an Authorization to Test (ATT) that will allow the student to schedule with Pearson VUE.
- If you do not show for an exam, you must file another application and pay another fee. Candidates can

- change an appointment, but each candidate must contact Pearson VUE directly to cancel or change an appointment to test. This must occur no less than 24 hours prior to the scheduled appointment or the candidate will be charged for the exam.
- If you started with a paper-and-pencil exam and must retest by computer-based testing, your number of attempts start back at one with the computer-based test. All of the other eligibility requirements and rules must be followed.
- Students must have two forms of identification when they go to the test center (examples: driver's license and credit/debit card; driver's license and Social Security card; passport and credit/debit card; or passport and Social Security card).
- Candidates who do not pass the exam will be able to reschedule another exam 14 days after an unsuccessful attempt, which is sooner than with pencil-and-paper examinations.

What should EMS students upgrading to a new level of certification know about CBT?

- EMS students must create an account with NREMT. Once the account is established, they can apply for registration and testing. If they already have an account, they can use the existing one. Once the students' education programs verify course completion, they will get an authorization to test that will allow the students to schedule with Pearson VUE.
- Students must have two forms of identification when you go to the test center (examples: driver's license and credit/debit card; driver's license and Social Security card; passport and credit/debit card; or passport and Social Security card).

What about Texas EMS renewal candidates who choose the written exam option?

- This option is still available. This assessment exam will be a CBT exam as well. We will use an exam developed for DSHS by NREMT and will follow the same process for the other CBT exams.
- When you create your account, you will choose assessment exam.
- Exam results will be reported directly to DSHS.

What should the EMS instructor students know about CBT?

- DSHS is in the process of going forward with recommendations from GETAC on using the 2002 EMS Instructor Curriculum.
- EMS students taking an EMS instructor course will call a local DSHS EMS field office to arrange EMS instructor exams.
- This is a paper-and-pencil exam.
- The exam scheduling feature and email address used by DSHS has been deactivated and is no longer used as of January 1, 2007.

What should Texas National Registry representatives know about CBT?

- Education programs will still need representatives for advanced practical exams.
- The representatives will follow the instructions issued by NREMT to report practical exam results.

Who do I contact if I have questions?

- Contact National Registry. The Community Relations Department will be able to assist you with additional questions during the transition to computer based-testing.
- Website: www.nremt.org/about/CBT_home.as

Common Acronyms:

NREMT/NR:

National Registry of Emergency Medical Technicians

PV:

PearsonVUE

CBT:

Computer-based testing

ATT:

Authorization To Test



CBT vs. CAT

You might have heard computerized testing referred to as CAT.

While these terms have been used interchangeably, there are differences between CBT and computer-adaptive testing (CAT). CBT is simply a description of the method of testing. A computer-based test could be simply a mirror image of a so-called 'linear' pencil-and-paper test, where each candidate takes a test with the same test questions in the same order. Or it could be a computer-adaptive test, which adapts questions to the candidate's perceived knowledge. According to testing experts, CAT is a method of question selection for a candidate that allows for the most efficient testing of a candidate's knowledge in the shortest amount of time. For instance, if a candidate correctly answers a question, the computer will choose one slightly more difficult for the next question. This will continue until the candidate misses a question. The computer then asks an easier question. The reverse is true for a candidate with less ability. If a candidate continues to answer incorrectly, then the questions would become easier. The theory of CAT is that it will take fewer questions, answered incorrectly or correctly, to determine whether the candidate possesses the required knowledge. The end result is that candidates at the top end and low end of knowledge will have shorter tests. For those in the middle, it might take a bit longer for the computer to determine if the candidate has the knowledge to pass. As you might have guessed, there are no grades in CAT, simply a pass/fail notation.

ECA, EMT and paramedic tests are CAT while EMT-1 is still CBT.

Texas Pearson VUE locations:

Abilene

500 Chestnut, Suite 856 Abilene 79602 325-675-5694

Amarillo

1616 S. Kentucky, Suite C305 Amarillo 79102 806-463-7465

Austin

301 Congress Avenue, Suite 565 Austin 78701 512-469-0276

Beaumont

Lamar Institute of Technology 855 E Lavaca Beaumont 77705 409-880-8687

Bellaire (Houston area) Prosperity Bank Building 6800 West Loop South, Suite 405 Bellaire 77401 713-838-1849

Near Brownwood – location to be determined

Corpus Christi

Corona South Building 4646 Corona Drive, Suite 175 Corpus Christi 78411 361-814-5872

Dallas

9101 LBJ Freeway, Suite 480 Dallas 75243 214-870-8265

Edinburg

University of Texas UTPA Annex Room 180 Edinburg 78539 956-292-7583

El Paso

Coventry III Building 4445 North Mesa Street, Suite 119 El Paso 79902 915-351-6733

Harlingen

Texas State Technical College 1902 North Loop 499 Harlingen 78550 956-364-4537

Houston

8876 Gulf Freeway, Suite 220 Houston 77017 713-943-2479

Hurst (Fort Worth) 500 Grapevine Hwy, Suite 401 Hurst 76054-2707 817-427-0960

Laredo

Laredo Community College West End Washington Street Laredo 78040 956-721-5245

Lubbock

Wells Fargo Tower 1500 Broadway, Suite 1113 Lubbock 79401 806-744-1697

Midland

3300 N. A Street Building 4-228 Midland 79705-5457

San Antonio

10000 San Pedro, Suite 175 San Antonio 78216 210-340-3628

Southwest Texas – location to be determined

Tyler

One America Center 909 East Southeast Loop 323, Suite 625 Tyler 75701 903-561-5038

Waco

1105 Wooded Acres, Suite 406 Waco 76710 254-751-0483

Wichita Falls

American School of Business 4317 Barnett Rd Wichita Falls 76310 940-691-0454

Steps for taking the EMS exam

After you complete your EMS course, you will be taking the NREMT certification exam. It might be wise to begin the application process four to six weeks before you intend to take the test. **Prior to testing you will need the following:**

- application
- course completion verification by your program director and
- application fee payment

You will need the following information from your instructor:

The state where the course was approved Program Name

Section Code (if applicable)

Follow these steps for taking the NREMT exam.

Step 1

Create Your Account

- · Go to www.nremt.org
- Click on "Login" (found in the blue bar at the top of the page)
- · Click on "Set Up New Account"
- · Complete all information in this section as prompted
- Request user role of "Registrant or Candidate" (do not complete any information within the gray box)
- · Read the submission statement
- · Click on "Submit"

Step 2

Login

• After you have completed Step 1, you can follow the link and login with the username and password you created

Step 3

Manage your account information

- Complete all information in the Personal Account Information fields as prompted. Note: This is the name that will appear on your application, National Registry certificate and card upon successful completion of the examination
- When you have completed all fields, click "Save". You will receive a message indicating "Account Saved"

Step 4

Create a new application

- · Click on "Create a New Application"
- Review the Personal Information Summary if any items are incorrect, make corrections by clicking on "Manage Account Information"
- Select the application level you wish to complete
- Review the Entry Requirements; check the acknowledgement to complete the online application
- · Complete any statements as prompted
- · Click on "Next"
- Complete all information in this section as prompted. *Use the information in the box above provided by your instructor*
- Read the acknowledgement prior to clicking "Submit".
 Clicking "Submit" is your electronic signature and indicates that you have read, reviewed and agree to the acknowledgement

Step 5

Pay application fee

- It is recommended that you pay your application fee at the time you complete your online application. However, if you choose, you may pay at a later date. An Authorization to Test (ATT) will not be issued until payment has been received and all other verifications are complete.
- You can pay by credit/debit online or print a money order tracking slip for mailing your money order to the NREMT.

Monitor the progress of your application

You can monitor the progress of your application at any time.

- Login on the NREMT (www.nremt.org) using your username and password
- · Click on "Candidate Services"
- Click on "Check Application Status"
- Three areas of the application process are displayed:
 - 1. Course Completion Verification,
 - 2. Payment of Application Fee and
 - Practical Skills Verification. Each topic provides an explanation of the status and who to contact for further assistance.

Ask your instructor for more information or visit the NREMT website at www.NREMT.org.

Revisions and updates may be necessary to make the CBT transition as smooth as possible. Please refer to the NREMT website for the most currrent policies and procedures.

Program directors and instructors: Register your program with NREMT

Attention program coordinators and instructors: if your program is not registered and approved through NREMT, your students will not be able to take an NREMT exam. That means your program needs to be registered now!

If you are a program director, you should go to www. nremt.org to establish a personal account and register your program. If you are an instructor, contact your program director and confirm that your program has been registered. The steps below will make it easy for program directors to complete this process.

Education Program."

- Enter the information requested. (Note: You will not be able to edit the field Program Director).
- · Click "submit."
- Your request for registration will be sent to DSHS for review. Upon approval, you will receive an email acknowledging your program has been officially registered — and you will get a DVD with more information about CBT.

How to register a program

Step 1

Create a personal account:

- Go to www.nremt.org.
- Click on "Login" located in the center area of the blue frame.
- Click on "Set Up New Account."
- Enter your personal information as prompted.
- Create a username that you will remember.
- Do not give your username or password to anyone!
- Request the Program Director user role.
- · Click "submit".

Step 2

Create your PROGRAM account:

- Go to www.nremt.org
- Login using the username and password you established.
- Click on the link "Request Authorization of an EMS

Helpful information

What is a program?

An *entity* (typically a college, hospital, EMS agency or private company) that has been authorized by the appropriate state authority to sponsor EMS courses leading to state licensure. Some programs have multiple courses or sections/satellites. The program is the *course* sponsor.

Who is the program director?

The *individual* responsible for overseeing the state-approved EMS educational program.

What is the correct 'name' of a program? Use the full (unabbreviated) legal name of the program (e.g. Butler Community College—not BCC or Butler Co Coll). The name field is limited to 50 characters.

For more information and instructor resources on CBT, go to www.NREMT.org, or call (614)888-4484

Frequently Asked Questions

By Mattie Mendoza

Q: I need to take an advancedlevel (EMT-I, EMT-P or LP) National Registry (NR) exam and need some information.

A: For information on advanced-level NR exams, you will need to contact National Registry. The NR website (www.nremt.org) has lots of information; you may want to explore it first. Or, you can contact National Registry by phone at (614)888-4484.

Q: My company submitted my Texas application for certification along with several other employees' applications, and I'm the only one who hasn't seen any change on the website yet. How can this happen?

A: A delay in the process can occur when several applications are submitted with one check to pay for all fees. All applications and fees first go to our fiscal department for the fees to be processed before the applications are reviewed and processed. If the amount to be credited to each application is not listed, it could result in a delay or an error with one or more of the applications. We encourage companies that submit applications for several employees at once to also submit a list with the names, levels, fees for each and either the EMS ID number or Social Security number for each employee. We also encourage all companies to take advantage of the Third Party Pay option. It allows companies to electronically

pay for several employees applications with their assigned Third Party Pay number, which is given once they are enrolled in the program. To find out more about the Third Party Pay Option, go online to http://www.tdh.state. tx.us/hcqs/ems/emstxonlinefags. htm#Thirdpartypay. And even though your company submitted the application and fee for you, please remember that your certification is ultimately vour responsibility. You can always check the status of your application from our website at http://dshsregn. dshs.state.tx.us/ems/certquery.htm, or call our office at 512-834-6700.

Q: I've checked my EMS certification status on your website and I see two separate records: one where I am currently certified and another that shows I'm deficient for application and fee. How can I have deficiencies if I'm currently certified and haven't applied for renewal yet?

A: If the second record status reads "Eligible for TexasOnline renewal," it was created as a marker by our technology department to enable online renewal. This entry does not affect your current certification status. If you are within one year of expiration or within one year after expiration, you are eligible for renewal through either the TexasOnline website (http://www.tdh.state.tx.us/hcqs/ems/Txonlinelinks.htm) or paper

application and fee submission.

Q: How does the electronic TexasOnline renewal process work?

A: Log into electronic TexasOnline application at http://www.tdh.state. tx.us/hcqs/ems/Txonlinelinks.htm. using your EMS ID and Social Security number. The system will verify your eligibility and let you know whether you can renew online. If you are eligible to renew, the system will prompt you with questions regarding maintenance of your certificate/license. A change of address also can be completed at this time. Once the application is completed, you will be given an opportunity to review the information you entered. Proceed to the payment page. After providing payment information (you may pay using Visa, MasterCard, Discover, American Express or ACH electronic check), the final step is to view and print the transaction receipt. Keep this transaction receipt, as it is your proof of electronic application submission and of payment. Once processed by state certification staff (approximately four to six weeks), the renewed certification/license will be mailed to the mailing address you entered. You can always check the status of your application/certification by clicking on the Certification Query link on the front page of our website or by going directly to http://dshsregn. dshs.state.tx.us/ems/certquery.htm.

98 projects approved for Local Projects Grant Funding

This year the Office of EMS/Trauma Systems Coordination received 105 Local Project Grant applications, with 98 project grants approved for funding. The funding included 28 ambulances, 11 AEDs, 30 monitor-defibrillators and 20 educational projects. Emphasis was placed on grants that would upgrade the level of service available, such as placing AEDs on BLS units, reducing response time, and improving patient care capabilities at the county level.

Next year's Request for Proposals is expected to be published electronically in early summer of 2007. 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.

Alamo Heights Fire/EMS

San Antonio, Bexar \$17,500—Ambulance

Allen Fire Department

Allen, Collin \$7,500—Automatic Pulse

Anson General Hospital

Anson, Jones \$4,000—Ambulance Stretchers

Aransas Co. Medical Services, Inc. Rockport, Aransas

\$35,000—Ambulance

Ballinger Memorial Hospital District

Ballinger, Runnels \$2,000—Ambulance Stretcher

Baytown Health Department EMS

Baytown, Harris \$7,500—Cardiac Monitor/ Defibrillator

Blessing EMS First Responders

Blessing, Matagorda \$901—Finger Oximeter; Radio

Boerne Fire Department

Boerne, Kendall \$1,169—Pulse Oximeters; Glucometers

Brazos Valley Regional Advisory Council

Bryan, Brazos \$16,598-Washington County EMS: Flat Stretchers; Portable 2-Way Radios; Laptop Computer: K & L Transport: GPS: Laptop Computer; Jewett EMS: Portable Suction Unit; Stair Chairs; Leg Traction Devices; Cardiac Monitor/Defibrillator: BlackJack Volunteer Fire Department First Responders: Back Boards; Head Immobilizers; KED Stretchers: Web Straps: 10 x 20 Scene Shelter; Equipment Bags; Regulators; Helicopter Landing Lights; Pagers; Radios

BRMC - EMS

Brownfield, Terry \$35,000—Ambulance

Brownsville Fire Department

Brownsville, Cameron \$35,000—Ambulance

Bryan Fire Department, City of

Bryan, Brazos \$35,000—Ambulance

Canyon Lake Fire/EMS

Canyon, Comal \$9,000—Automatic Ventilators

Castro County Hospital District

Dimmitt, Castro \$6,075—Emergency Medical Technician- Basic; Portable Suction Unit; Scoop Stretcher

Cedar Park Fire Department, City of

Cedar Park, Williamson \$8,800—Two-Way Radios

Citizens EMS, Inc.

Clyde, Callahan \$7,093—Cardiac Monitor/ Defibrillator; Ambulance Stretcher

Coastal Bend RAC on Trauma

Corpus Christi, Aransas \$11,337—Coastal Bend Regional Advisory Council on Trauma: Car Safety Seats; High Back Safety Seats; Refugio County EMS: Base Station; Kingsville Fire Department: Cardiac Monitor/Defibrillator; Monitor Carry Case

Coleman County Medical Center

Coleman, Coleman \$520—Pediatric Immobilizers; Broselow Tape

Comanche Co. Consolidated Hospital District

Comanche, Comanche \$35,000—Ambulance

Concho Valley RAC, TSA "K"

San Angelo, Coke \$5,690—Convertible Car Seats; Express Car Seats; Booster Seats; Backless Booster Seats

Converse Fire & EMS

Converse, Bexar \$6,666—Cardiac Monitor/ Defibrillator

County Line Volunteer Fire Department and First Responders

Seguin, Guadalupe \$1,174—Scoop Stretcher; Reflective Vests; Portable Suction Unit; MegaMover Stretcher

Crosbyton Clinic Hospital EMS

Crosbyton, Crosby \$7,500—Cardiac Monitor/ Defibrillator

Cross Plains EMS

Cross Plains, Callahan \$2,200—Automated External Defibrillator; Stair Chair

Cuero Community Hospital

Cuero, DeWitt \$15,000—Ambulance

Culberson Hospital EMS

Van Horn, Culberson \$8,500—Cardiac Monitor/ Defibrillator; Two-Way Radios

Danbury Volunteer Fire Department & EMS, Inc.

Danbury, Brazoria \$7,500—Cardiac Monitor/ Defibrillator

East Texas Gulf Coast RAC, TSA "R"

Fulshear, Liberty \$8,464—Advanced Airway Course

East Texas Medical Center EMS

Tyler, Smith \$2,500—Emergency Medical Technician Instructor

Erath County EMS

Stephenville, Erath \$6,175—Cardiac Monitor/ Defibrillator

Floydada EMS

Floydada, Floyd \$7,500—Cardiac Monitor/ Defibrillator

Frio County EMS

Pearsall, Frio \$35,000—Ambulance

Galveston EMS

Galveston, Galveston \$7,100—Pediatric Advanced Life Support Trainer; Megacode Kelly; Vital Simulator Unit

Ganado EMS, City of

Ganado, Jackson \$1,922—Toughbook Laptop Computer

Graham Regional Medical Center

Graham, Young \$29,350—Ambulance Remount

Grandbury Hood Co. EMS, Inc.

Granbury, Hood \$35,000—Ambulance

Grapeland VFD/EMS

Grapeland, Houston \$35,000—Ambulance

Hall County EMS, Inc.

Memphis, Hall \$42,500—Cardiac Monitor/ Defibrillator: Ambulance

Hamilton EMS

Hamilton, Hamilton \$25,425—Ambulance Remount

Happy EMS, City of

Happy, Swisher \$622—Rescue Bag with Oxygen Module; EMS Safety Vest

Heart of Texas Regional Advisory Council

Waco, Bosque \$16,000—Advanced Cardiac Life Support; Pediatric Advanced Life Support/Pediatric Education for Prehospital Professionals; Emergency Medical Technician- Basic; Basic Trauma Life Support/Pre-Hospital Trauma Life Support; Emergency Medical Technician- Intermediate; Emergency Medical Technician-Paramedic certifications

Helotes Fire Department, City of

Helotes, Bexar \$7,200—Cardiac Monitor/ Defibrillator

Highlands Volunteer Fire Department

Highlands, Harris \$8,227—Cardiac Monitor/ Defibrillator; Monitor Carry Case; SPO2 Sensor Houston Fire Department - EMS Houston, Harris \$12,075—Voice Recording System

Hudson Volunteer Fire Department

Lufkin, Angelina \$1,830—Trauma Bags; Trauma Bag with Regulator; Pediatric Trauma Bag with Regulator **Huntsville-Walker Co EMS**

Huntsville, Walker \$21,970—Cardiac Monitor/ Defibrillator; Medical Priority Dispatch System Software

Jacinto City Fire Department

Houston, Harris \$8,500—Oxygen Generating System

Jacksonville EMS

Jacksonville, Cherokee \$7,500—Cardiac Monitor/ Defibrillator

Keathly & Thomas LLC

Irving, Dallas \$1,831—STAT Manikin

Kennedale Fire Department, City of

Kennedale, Tarrant \$2,500—Advanced Cardiac Life Support; Pediatric Education for Pre-hospital Professionals; Basic Trauma Life Support certifications

Kimble County EMS

Junction, Kimble \$4,600—Ambulance Stretchers; Ramp Sets

Kirby Fire & EMS

Kirby, Bexar \$6,874—Cardiac Monitor/ Defibrillator

Knox County EMS

Knox City, Knox \$7,470—Cardiac Support Pump

Laredo Fire Department, City of

Laredo, Webb \$10,000—Cardiac Monitor/ Defibrillator; Cardiac Monitor/ Defibrillators Refurbishment

Liberty Co. EMS, Inc.

Hull, Liberty \$7,470—Cardiac Monitor/ Defibrillator

Liberty Fire Department EMS, City of

Liberty, Liberty \$8,750—Emergency Medical Technician Paramedic certifications

Lockhart EMS, City of

Lockhart, Caldwell \$35,000—Ambulance

Lumberton Fire & EMS

Lumberton, Hardin \$1,516—Portable Suction Unit; Back Boards; Web Straps; Pediatric Traction Splint; Adult Traction Splint; Blood Pressure Cuff Sets; Stethoscopes

Mansfield Fire Department, City of Mansfield, Tarrant \$7,500—Cardiac Monitor/ Defibrillator

Manvel EMS

Manvel, Brazoria \$13,000—Cardiac Monitor/ Defibrillator; Automatic Pulse

Marble Falls Area EMS, Inc.

Marble Falls, Burnet \$6,000—Ambulance Stretchers

Martin County Hospital District

Stanton, Martin \$35,000—Ambulance

Mathis, City of

Mathis, San Patricio \$35,000—Ambulance

Memorial Hospital Nacogdoches Co EMS

Nacogdoches, Nacogdoches \$4,000—Ambulance Stretchers

Merit Volunteer Fire Department

Merit, Hunt \$1,950—Pager; Radios; Digital Projector

Montgomery County Hospital District

Conroe, Montgomery \$8,595—Satellite Telecommunications Systems

Motorcycle Special Events Team-Texas

Austin, Travis \$3,534—Automated External Defibrillator; Two-Way Radios; Portable Repeater; Vertex Programming Software

Murphy-Fire Department, City of

Murphy, Collin \$35,000—Ambulance

North Channel EMS

Houston, Harris \$9,500—Oxygen Generation System

North Tarrant Co. Rural Fire Company Inc.

Keller, Tarrant \$3,200—Emergency Medical Technician- Basic; Emergency Medical Technician- Paramedic certifications

Northwest Rural EMS Association, Inc.

Tomball, Harris \$35,000—Ambulance

NTRAC TSA-C, Inc.

Wichita Falls, Archer \$18,000—Back Board Washer; CPR Kits; Bicycle Helmets Olton Volunteer Ambulance Association, Inc.

Olton, Lamb \$1,824—IV Arm Trainer; Intraosseus Infusion Simulator; EZIO Infusion Set; Evac-U Splint Vacuum

Payne Springs Volunteer Fire Department, Inc.

Payne Springs, Henderson \$2,740—Stokes Stretcher; Regulators; Two-Way Radios

Pearland EMS

Pearland, Brazoria \$35,000—Ambulance

Pickton Pine Forest Volunteer Fire Department

Pickton, Hopkins \$612—Portable Suction Unit; Regulator; Trauma Bag

Preston Volunteer Emergency Services

Pottsboro, Grayson \$35,000—Ambulance

Red Oak Fire Rescue

Red Oak, Ellis \$1,497—Automated External Defibrillator

Robertson Co. EMS, Inc.

Franklin, Robertson \$32,000—Ambulance Remount

Rural Hill EMS, Inc.

Hubbard, Hill \$9,020—Cardiac Monitor/ Defibrillator Upgrade; Portable Ventilator

San Jacinto Co. First Responders Inc.

Point Blank, San Jacinto \$1,304—Blood Pressure Cuff Sets; Stokes Basket

Seguin-Fire/EMS Department, City of

Seguin, Guadalupe \$35,000—Ambulance

Shannon AirMed 1

San Angelo, Tom Green \$18,755—NAACS (air medical dispatch) certifications; Cadaver Lab; Laptop Computers; Projector; Projector Screen

Sinton, City of

Sinton, San Patricio \$35,000—Ambulance

South Brazos Co. Fire Department

Millican, Brazos \$2,198—Adult CPR Manikin; Pediatric CPR Manikin; Junior CPR Manikin; Back Board

South Taylor EMS

Tuscola, Taylor \$35,000—Ambulance

Stephenville Fire Department, City of

Stephenville, Erath \$7,100—Cardiac Monitor/ Defibrillator

Stockdale Volunteer Ambulance Service

Stockdale, Wilson \$7,500—Cardiac Monitor/ Defibrillator

Sunray VFD & EMS

Sunray, Moore \$5,825—Cardiac Monitor/ Defibrillator Upgrade; Cardiac Monitor/Defibrillator with etCO2 Monitor Upgrade

Sweeny Hospital District dba Sweeny Comm. Hosp.

Sweeny, Brazoria \$12,100—Ambulance

Trauma Service Area H Regional Advisory Council

Lufkin, Angelina \$16,917—D Oxygen Cylinders; E Oxygen Cylinders; Stationary Racks for D & E Oxygen Cylinders; Portable Oxygen Racks

Tri-County EMS, Inc. Ingleside, San Patricio \$35,000—Ambulance

Uvalde EMS, Inc. Uvalde, Uvalde \$35,000—Ambulance

Val Verde Hospital District

Del Rio, Val Verde \$35,000—Ambulance

Ward Memorial Hospital EMS

Monahans, Ward \$6,798—Cardiac Monitor/ Defibrillator

Willacy Co. EMS

Raymondville, Willacy \$7,576—Automated External Defibrillators

Williamson County EMS

Georgetown, Williamson \$10,733—WHALE Packets (identification and information package for car safety seats); Injury Prevention Billboard

www.HealthWebCE.com

Harlingen, Cameron \$1,900—Online Continuing Education Fees

Walk it off – it's conference time!

Every year, Texas EMS
Conference tries to offer something
new to its attendees. But one of 2006's
special treats was a bit unintentional
– lots and lots and LOTS of walking.
The Dallas Convention Center, which
hosted the conference, is simply huge
(about half-a-mile long from end to
end) and our hotels were scattered
across downtown Dallas. This made
for excellent exercise – and a little
griping, of course. But by and large
our 2,800 attendees took all the



walking in stride (pardon the pun) and focused on the good stuff: top-notch

education, state-of-the-art exhibits and plenty of old and new acquaintances.

One of the intended special treats – the first-ever offering of two-hour, hands-on workshops – was a big hit, and we're planning to bring those back next year. In case you missed it, the two-hour workshops are taught in small groups so attendees can get personal instruction and closer contact with the subject matter, whether it's intubation training

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Above and right: How do you get a patient off a cliff? Ropes and a Stokes basket. Participants in the high-angle rescue preconference class learned the basics of high-angle rescue at the Dallas Fire-Rescue training tower. Left: The SLAM preconference class provided plenty of practice on intubation using mannequins and pig tracheas.

photos: B. Kinney





using pig tracheas or learning about capnography. Of course, we still had about 130 regular workshops covering all the CE categories, along with the usual preconference rescue, helicopter and cadaver courses. The 2007 lineup will start taking shape soon – the call for presentations goes out this month.

The Awards Luncheon at Texas EMS Conference 2006 was particularly emotional. The solemn Hall of Honor induction for two medics killed in the line of duty was preceded by a rousing talk from an Austin-area high school football player whose heart was restarted on the sidelines by an AED. The awards ceremony featured the reunion of two boys and a girl they rescued from the bottom of a pool, and our EMS Person of the Year was moved to tears by both the honor and the surprise appearance of family members.

Texas EMS Conference 2007 will be in downtown Houston - like Dallas. a first for us - at the George R. Brown Convention Center. The host hotel, Hilton Americas, is connected to the George R. Brown by a walkway; that, along with the convention center's more compact layout, should make for fewer sore feet. See you there! - John LeBas



photos: B. Kinney

Above left: Natalie Kolff hugs a teddy bear given to her during the Awards Luncheon. Natalie attended the luncheon to show support for the winners of the EMS Citizen Award, Kyler Whatley and Conor Gibson. Kyler and Conor pulled Natalie from the bottom of a pool. Above: A "patient" is quizzed in Spanish about her medical condition by a participant in the Spanish for EMS class, a Sunday preconference workshop. Above right: participants practice airway techniques in Better Intubation through Yoga, a two-hour hands-on workshop. Right: in another two-hour workshop, participants learn how to do patient assessment with tactile sensory deprivation.

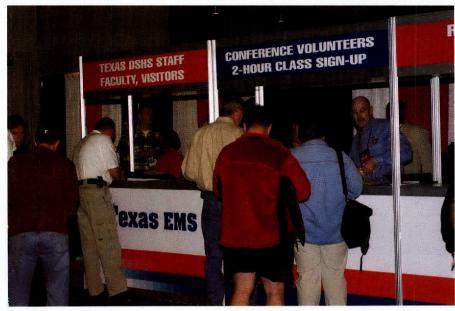


Exhibit Hall expands as displays grow

It's no small feat to fill a space equal to more than 2 1/2 football fields with ambulances, helicopters and the latest in EMS technology and goodies. But the two days of move-in for the Texas EMS Conference 2006 Exhibit Hall went off without a hitch, resulting in one of the best exhibit halls yet.

Attendees browsed 150,000 square feet of exhibit space in the massive Dallas Convention Center. Among the displays were seven helicopters and 42 ambulances – a delight to both the young and the young at heart. And, of course, there was a seemingly endless selection of

continued next page



Above: Lines formed early at registration to sign up for the two-hour workshops, which had limited space. Below: The Exhibit Hall drew thousands of visitors over the three days it was open.





clothing, life-saving and rescue equipment, training devices, and much, much more.

We want to thank Medtronic for being our Platinum Sponsor and CareFlite for helping with the helicopter loacin. Thanks also to all of our vendors, who help underwrite the conference every year and keep costs low for our attendees.

The 2007 conference will be in Houston at the George R. Brown Convention Center. Even though the exhibit hall floorplan won't be ready until next month, we already have several exhibitors lined up for booth space. Hope to see you there, too. – *John LeBas*



photos: B. Kinney



Top: A little practice never hurts as participants try out new products in the Exhibit Hall. Above: The crew of CareFlite was instrumental in scheduling all the helicopters and sponsoring the helicopter operations preconference class. Left: Air Evac Lifeteam got a prime location next to the food at the welcome reception, which was sponsored by Medtronic.

Texas EMS Photo Contest

The 2006 EMS photo contest winners were chosen from the 81 photos submitted and displayed at the Texas EMS Conference in Dallas. Conference goers each received a ballot on which to vote for their favorites. The results are as follows:

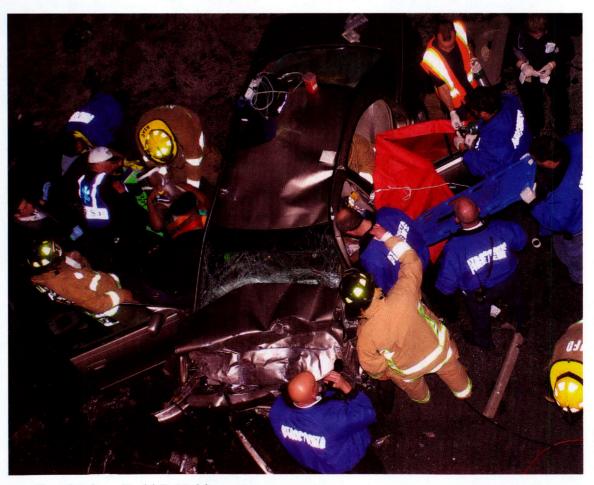
Grand Prize goes to Todd S. Holder with the Atascocita VFD. It is an aerial view of a two car head-on MVA with multiple victims and a multi-agency response.

First Place goes to Watson Kohankie of the Carrollton Fire Department. The photo shows a CareFLITE Nurse/Paramedic providing patient care during flight from scene to trauma center.

Second Place was awarded to Tim Burnett of *The Post Dispatch* for a photo of responders to a multiple-vehicle pile-up during a major dust storm north of Post.

Third Place went to Chris Chomel of San Marcos for a photo of a firefighter preparing to extinguish a fire.

Honorable Mention was awarded to Carl Kemp with the Deer Park VFD for a photo of his granddaugher Macie exploring an ambulance.



Grand Prize - Todd S. Holder



First Place - Watson Kohankie



Second Place - Tim Burnett



Honorable Mention - Carl Kemp



Third Place - Chris Chomel

Local & Regional EMS News

by John LeBas



Merkel EMS member David Cunningham, shown with Alyssa Martinez of Abilene, took the service's Med 3 ambulance to Wal-Mart in Abilene to celebrate October as National Safety Month. He passed out coloring books and stickers to the children and shared safety tips.

MADD kicks off campaign in Tyler

Mothers Against Drunk Driving (MADD), East Texas Region, Tyler affiliate, launched its second annual Tie One On For Safety Campaign in November. The 2006 Miss America, Jennifer Berry, served as one of the keynote speakers for the launch of the program, which promotes safe and sober driving during the holiday season. Also speaking were U.S. Rep. Louis Gohmert and MADD national CEO Chuck Hurley. Lonny Uzzell, executive vice president of Southside Bank, was master of ceremonies.

The presenting sponsor this year was the Piney Woods Regional Advisory Council (RAC-G).
Those honored as MADD's 2006

"Difference Makers" were: Dr. William L. Moore, regional EMS director for East Texas Medical Center: 114th District Court Judge Cynthia Kent; Kirk Brown, MADD community action site leader, Bryan; and state Rep. Leo Berman. Special acknowledgement also was given to the following "unsung heroes": Trooper Jeanne Dark, Tyler area Department of Public Safety; Don Martin, Tyler public information officer; Capt. Larry Hand, Texas Parks and Wildlife regional director; Ronald L. Morton, EMS instructor, Panola College; and Arnie Spiers, regional operations director, Champion EMS.

EMS director noted for volunteerism

The EMS director for Shackelford County was nominated for the 2006 Jefferson Awards. which honor volunteers for their public service. Dan Breeden, 29, is known for his willingness to tackle any task – no matter the size, the Abilene Reporter-News reported. He organized the demolition of the Shackelford County Hospital, built offices for the Albany Volunteer Fire Department and Shackelford County Rural Volunteer Fire Department, and wrote a grant for computers for those departments. "Somebody's got to do it," Breeden told the Reporter-News of his efforts. "I have time. I just do it. I do it because I'm able."

Pavilion named for air medical pioneer

A late Army officer known as "the father of aviation medicine" has been honored in San Antonio with the dedication of a new pavilion in his name. The Spurgeon Neel Evacuation Pavilion at Fort Sam Houston's Army Medical Department Museum opened in September. Neel, who retired as a major general, championed the use of helicopters to carry wounded soldiers to safety and treatment, the San Antonio Express-News reported. He helped design the UH-1 "Huey" helicopter, which was used to transport thousands

Local & Regional EMS News

of wounded soldiers during the Vietnam War. The new pavilion includes displays of both a Huey and an H-13D. Neel, who died in 2003, also oversaw the formation in the 1970s of a military medical company that rescued thousands of civilians. This was the start of civilian air medical transport, now carried out by some 800 private air ambulance providers across the country.

Patient, paramedic enjoy surprise reunion

It's not often that patients get to reunite with the EMS professionals who saved their lives, and it's even rarer when they come faceto-face in a surprise meeting. But that's exactly what happened with Margaret Williams and Lisa-Anne Raney-Scillia recently in Austin. Williams was at an Austin hotel in 2005 when she suffered a stroke. Raney-Scillia, a paramedic and DSHS EMS staff member who was at the hotel for a meeting, noticed Williams was looking ill and started an assessment. Recognizing the signs of stroke, Raney-Scillia called EMS and Williams was taken to the hospital. Williams credited the quick action by Raney-Scillia with saving her life and got the opportunity to thank her during a chance encounter a year later at the same hotel. "All we could do was hug each other and cry, and all I could say was thank you," said Williams, who is still recovering

but has since returned to work. "We stood there for about five minutes just crying and holding on to each other, and I reassured Ms. Lisa she was my guardian angel that day."

San Antonio nurse team wins national award

The San Antonio Trauma
Nursing Core Course (TNCC)
Team was honored with the 2006
Emergency Nurses Association
(ENA) Team Award in recognition
of its exemplifying the mission
of the ENA. More than 1,300
civilians and 271 military nurses
have attended the team's courses
in the past five years, according
to nomination documents. The
team holds courses not only in San
Antonio but also Victoria, Laredo
and the Rio Grande Valley to meet
the needs of underserved areas.

The team began teaching TNCC to Army nurses in 2005;

among the courses was a "megacourse" for 134 students, requiring 37 instructors, four test proctors, eight spinal models, eight runners and eight volunteers.

"For 20 years, the SATT has sustained a TNCC program that has had a positive impact on both emergency nursing and patients throughout Texas and now worldwide due to their training of Army nurses," read the nomination letter.

ENA members on the San Antonio TNCC Team are Susan Douglass, team leader, past president of Texas ENA and San Antonio ENA; Jan Elliott, past president of San Antonio ENA, Texas ENA trauma and pediatric committees; Michael Moon, ENA board member; Sondra White, past president of San Antonio ENA, Texas ENA awards and newsletter committees; Teresa Weaver, past president of San Antonio ENA. Texas ENA awards and scholarship committees; Robert Parker; and Sherilee Demmer.



Members of the San Antonio Trauma Nursing Core Course Team include (from left): Sherilee Demmer, Susan Douglass, Jan Elliott, Robert Parker, Tess Weaver, Sondie White and Michael Moon.



Pulse Oximetry

by Kenny Navarro, LP

Introduction

Pulse oximetry is very helpful in the assessment and care of all acutely ill patients, not just those suffering from respiratory distress. Pulse oximetry indirectly approximates the amount of oxygen present in the patient's arterial blood. As important, pulse oximetry tells you how effectively the respiratory and cardiovascular systems are working to deliver that oxygen to the most distal ends of the circulatory system.

Principles of pulse oximetry

Most of the oxygen in the bloodstream is carried by the billions of hemoglobin molecules found within red blood cells. Each hemoglobin molecule is capable of carrying four molecules of oxygen. If a hemoglobin molecule has all four oxygen passengers, it is called an oxygen-rich hemoglobin. If even one oxygen passenger is missing, it is referred to as oxygen-poor hemoglobin.

Oxygen-rich and oxygen-poor hemoglobin absorb light differently. The oximeter probe directs two wavelengths of light through a small area of tissue. Paired sensors measure the amount of light that travels all the way through that tissue. Oxygen-rich hemoglobin absorbs the light at one rate, while oxygen-poor hemoglobin absorbs the light at a different rate. A microcomputer inside the oximeter calculates the relative concentrations of the two types of hemoglobin. The oximeter then uses those two values, along with the detected arterial pulsation rate, and mathematically converts the result into the oxygen saturation level. Oxygen saturation is expressed as a percentage of hemoglobin bound to oxygen molecules. It is recorded as SpO₂, or saturation by pulse oximetry.

Normal and abnormal values

An oxygen saturation by pulse oximetry value over 95 percent would generally be considered safe. Patients under 95 percent might benefit from the administration of supplemental oxygen. Any patient with a room-air pulse oximetry reading under 90 percent is considered to

be in respiratory distress.

The pulse oximeter probe should be attached as soon as patient contact is made. It will take about 8 to 10 seconds for the reading to stabilize. During this time, the oximeter is attempting to acquire a strong pulse and find the proper intensity of light for

transmission through the tissue. While the machine is stabilizing, you can prepare your oxygen-delivery equipment.

In the event the pulse oximeter probe cannot obtain a signal, the patient must be closely evaluated. Correct any underlying cardiorespiratory problems that might be present. If the patient is still breathing and has an adequate blood pressure, simply repositioning the probe may correct the problem.

Once an accurate oximetry reading has been obtained, you can determine whether the patient will benefit from supplemental oxygen and titrate your administration to the pulse oximeter reading. Patients with room-air pulse oximeter readings of greater than 95 percent do not significantly benefit from the administration of supplemental oxygen. One then has to wonder: If the

Objectives

At the end of the CE module, the EMS provider will be able to

- Define oxygen saturation by pulse oximetry, list several places where pulse oximeter probes can be attached, and recognize normal and abnormal values.
- List advantages and limitations of pulse oximetry.
- Describe the role of pulse oximetry in determining correct endotracheal intubation.
- List several clinical situations when pulse oximetry readings are inaccurate or misleading.

patient is not going to benefit from the administration of high-flow oxygen, why would we administer it?

The answer, unfortunately, is that there still is an expectation from the patient, the family and even other health care providers that patients receive oxygen. But, from a clinical standpoint, the patient needs only enough oxygen to saturate his or her hemoglobin molecules. Once they are saturated above 95 percent, they cannot carry significantly more oxygen.

Any change (good or bad) in the patient's condition will be reflected in the oximetry reading within a few minutes, depending on the location of the probe. The overwhelming majority of patients will be able to fully equilibriate within about 3 1/2 minutes of oxygen administration.² The oximeter then can tell you whether your care is effective.

Attaching a pulse oximeter probe

There are many places where pulse oximeter probes can be attached. You can attach the probe to a finger or toe with no polish. In most cases, any polish should be removed with fingernail polish remover. If the patient has a light-colored polish, the sensor may still be able to detect light passing through the finger. However, if the nail polish is dark, it may interfere with the reading.3 If you do not have any fingernail polish remover, in some cases you can reposition the sensor so that the light beams are transmitted from side-to-side through the finger instead of through the nail. This same positioning also works for artificial nails that interfere with the proper positioning of the oximeter probe.

If you have the right type of probe, you can attach it to an earlobe or other fold of skin, the foot of a neonate, or the bridge of the nose.

Advantages of pulse oximetry

Some have suggested that pulse oximetry is a much more reliable tool for detecting hypoxia than even a clinical

exam. In a study involving nearly 2,000 geriatric patients who presented to an emergency room with various complaints, a pulse oximeter reading was taken in the





hospital triage area.⁴ About 20 percent of the patients had a baseline pulse oximeter reading of less than 95 percent. The patients were then taken to an exam room and treated without the doctor knowing the baseline reading. When all the tests were completed and the patients were ready for discharge, the physician was informed of the baseline readings.

Forty-four patients initially scheduled for discharge after a complete emergency room evaluation were kept while further tests were performed in an attempt to explain the low initial saturations. Nine patients were admitted to the hospital, and physicians changed or added a diagnosis for 27 additional patients.

In a similar study at an urban university medical center involving 368 pediatric patients suffering from a respiratory illness, routine pulse oximetry identified 46 cases of unrecognized hypoxia following a pre-screening evaluation.⁵ In 91 percent of those cases, the pulse oximeter value changed the management of the child. In 28 percent of those cases, a decision was made to admit the child to the hospital rather than discharge. Clearly, pulse oximetry should be regarded as a fifth vital sign capable of detecting hypoxia that a physical exam can fail to identify.

Pulse oximetry and endotracheal intubation

If you are intubating a patient in cardiac





arrest, the pulse oximeter has no value because there is no pulse for the machine to use in its mathematical conversion.

On the other hand, if the patient has a pulse, the pulse oximeter becomes another tool that can be used to determine correct endotracheal tube placement. If the tube was correctly placed and the patient is being ventilated with 100 percent oxygen, one would expect the pulse oximeter readings to improve. If the tube was inadvertently placed into the esophagus, the readings would not improve with oxygen administration.

If the tube was placed too far into the trachea, we would expect oximetry values to improve, but not to approach 100 percent. In a study comparing capnography with pulse oximetry in perfusing children, pulse oximetry provided the first diagnostic clue in 13 of 14 episodes of mainstem intubation.⁶

Limitations of pulse oximetry

While pulse oximetry is useful in the prehospital setting, it is not without its limitations. Pulse oximetry is only a mathematical estimation of the saturation of the hemoglobin. It does not provide a direct measurement of blood oxygen content. Additionally, a pulse oximeter does not indicate whether the body's cells can utilize the oxygen present.

Skin pigmentation – While some studies have suggested that darker skin pigmentation can interfere with the accuracy of the pulse oximeter,^{3,7} other studies have failed to demonstrate a correlation.^{8,9}

Inaccurate pulse – Pulse oximeters provide only a mathematical approximation, but they are considered to be very accurate if they are used properly. Remember that the microcomputer within the oximeter uses arterial pulsations in a mathematical formula to calculate the oximetry reading. The pulse rate reported by the oximeter sensor must be within 5 beats per minute of the patient's actual

palpated pulse rate. If not, the machine is using an inaccurate number to make the calculation, which means the final answer will be inaccurate.

Ambient light – The lighting present at the scene is a potential source of interference. Florescent lighting and bright sunlight have been known to affect the pulse oximeter readings. ¹⁰ By simply blocking the light source with a towel or other opaque shield, accurate readings may be obtained.

COPD – COPD patients are another group for which pulse oximetry readings may be misleading. COPD patients retain carbon dioxide and more residual air than healthy patients. Oxygen saturation readings for COPD patients will generally be lower than what is normally considered safe.

COPD patients with chronic hypoxia, such as those on home supplemental oxygen, should have oxygen administered as necessary to keep their pulse oximetry readings between 88 percent and 92 percent.11 If you attempt to raise saturation levels to 100 percent, you run the risk of depressing the respiratory drive in these patients. However, if these patients are experiencing respiratory distress that does not improve with low-flow oxygen therapy, a higher-flow oxygen rate is indicated. You must then monitor your patient very carefully for signs of a decreased respiratory rate, decreased levels of consciousness or an increase in the amount of carbon dioxide being exhaled.

Carbon monoxide exposure – Carbon monoxide binds to the hemoglobin just like oxygen does. The oximetry sensors cannot tell the difference between hemoglobin bound to oxygen or hemoglobin bound to carbon monoxide. As a result, the oximeter believes the blood is saturated with oxygen when in fact it is saturated with carbon monoxide. In one animal study, the pulse oximeter read 90 percent saturation in subjects that were only 30 percent saturated with oxygen. The other 70 percent of the



hemoglobin was saturated with carbon monoxide.¹²

Certainly, smoke-inhalation victims have had a carbon monoxide exposure, and the accuracy of pulse oximetry in those patients would be questionable. Carbon monoxide exposure can come from other, not quite so obvious, sources. You must rule out any history of carbon monoxide inhalation, including smoking, when considering the significance of the pulse oximeter reading.

Low-flow or shock states – In low-flow or shock states, the reading will not be false, but there will be no reading at all. This is because the oximeter cannot sense a pulse, so no mathematical computation can be made. It is generally accepted that in low-flow or shock states, there is a decrease in blood flow, and consequently oxygen delivery to the tissue and supplemental oxygen should be delivered to the patient while the cause of the shock state is addressed.

Cold exposure – Exposure to a cold environment results in peripheral vasoconstriction, a low-flow state. It thus reduces the distal arterial pulsing needed to obtain an oximetry reading. For patients suffering from cold exposure, supplemental oxygen can be administered as the hypothermia is treated.

Hypovolemia – Blood loss can result in a low-flow state. This reduces the distal arterial pulsing needed to obtain an oximetry reading. Replacing the fluid in the prehospital environment does not improve the situation.

When the blood loss is replaced with a crystalloid, the remaining blood becomes diluted. A saturation of 97 percent may accurately reflect that the remaining red blood cells are well oxygenated. However, there may not be enough hemoglobin available to carry sufficient oxygen to keep the body tissues alive. In any hypovolemic situation, high-flow supplemental oxygen ensures the remaining hemoglobin is well saturated until the source of the

hypovolemia can be corrected. At the hospital, the patient can be infused with additional donor red blood cells.



Summary

While there are some limitations to non-invasive oxygen saturation measurements, pulse oximetry has been shown to be able to detect hypoxia when physical exam techniques and history fail. Continuous pulse oximetry can reflect positive and negative responses to our treatment and even be used as a predictor of hospital admission. Strong evidence exists that pulse oximetry should be considered as a fifth vital sign that should be performed on almost every patient contact made in the prehospital environment.

Bibliography

- 1. Kelleher JF: Pulse oximetry. J Clin Monit 1989;5:37-62.
- Gruber P, Kwiatkowski T, Silverman R, Flaster E, Auerbach. Time to equilibration of oxygen saturation using pulse oximetry. Acad Emerg Med 1995;2:810-815
- Ralston AC, Webb RK, Runciman WB. Potential errors in pulse oximetry. III: Effects of interference, dyes, dyshaemoglobins and other pigments. *Anaesthesia* 1991:46(4):291-5.
- Mower WR, Myers G, Nicklin EL, Kearin KT, Baraff LJ, Sachs C. Pulse oximetry as a fifth vital sign in emergency geriatric assessment. Acad Emerg Med 1998:5:858-86.
- Maneker AJ, Petrack EM, Krug SE. Contribution of routine pulse oximetry to evaluation and management of patients with respiratory illness in a pediatric emergency department. Ann Emerg Med 1995:25:36-40.
- Rolf N, Cote CJ. Diagnosis of clinically unrecognized endobronchial intubation in peadiatric anaesthesia; which is more sensitive, pulse oxymetry or capnography? *Paediatr Anaesth* 1992;2:31-5.
- Zeballos RJ, Weisman IM. Reliability of noninvasive oximetry in black subjects during exercise and hypoxia. *Am Rev Respir Dis* 1991:144(6):1240-4.
- Adler JN, Hughes LA, Vivilecchia R, Camargo Jr CA. Effect of skin pigmentation on pulse oximetry accuracy in the emergency department. *Acad Emerg Med* 1998:5:965-970.
- Bothma PA, Joynt GM, Lipman J, Hon H, Mathala B, Scribant J, Kromberg J. Accuracy of pulse oximetry in pigmented patients. S Afr Med J 1996:86(5 Suppl):594-6.
- Grace RF: Pulse Oximetry. Gold standard or false sense of security? Med J Aust 1994;160:638-644.
- The University of Texas Southwestern Medical Center at Dallas/Biotel System. Emergency Medical Services Protocol for Therapy, The University of Texas Southwestern Medical Center at Dallas, 2001.
- Barker SJ, Tremper KK: The effect of carbon monoxide inhalation on pulse oximetry and transcutaneous PO2. *Anesthesiology* 1987;66:677-679.

Pulse Oximetry

- Which of the following statements about pulse oximetry is FALSE?
 - A. Pulse oximetry measures arterial oxygen saturation.
 - B. Pulse oximetry has value only in patients with respiratory distress.
 - C. Pulse oximetry is very helpful in the assessment of all acutely ill patients.
 - D. Pulse oximetry tells you how effective the respiratory and cardiovascular systems are in delivering oxygen to the most distal ends of the circulatory system.
- Each hemoglobin molecule in the body is capable of carrying
 - A. one molecule of oxygen.
 - B. two molecules of oxygen.
 - C. three molecules of oxygen.
 - D. four molecules of oxygen.
- 3. Which of the following statements about how pulse oximeters work is FALSE?
 - A. The oximeter probe directly measures the amount of oxygen the blood is capable of carrying.
 - B. The oximeter probe directs two wavelengths of light through a small area of tissue.

- C. Paired sensors measure the amount of light that makes it all the way through that tissue.
- D. A microcomputer calculates the relative concentration of the two types of hemoglobin and then, along with the detected arterial pulsation rate, converts the result into the oxygen saturation level.
- 4. Of the following patients, in which is the pulse oximetry value considered to be safe?
 - A. 62-year-old female complaining of chest pain, RaSpO2 - 85 percent
 - B. 18-year-old male complaining of abdominal pain, RaSpO2 - 96 percent
 - C. 56-year-old male complaining of shortness of breath, RaSpO2 - 93 percent
 - D. 45-year-old female complaining of shortness of breath, RaSpO2 90 percent
- 5. Assuming adequate circulation and a properly functioning pulse oximeter, after placing the oximetry probe on a finger, how much time does it take for the reading to stabilize?
 - A. 1-3 seconds
 - B. 8-10 seconds

- C. about 30 seconds
- D. about 3 minutes
- 6. Which of the following statements about supplemental oxygen is TRUE?
 - A. Most patients with room-air pulse oximeter readings of greater than 95 percent do not significantly benefit from the administration of supplemental oxygen.
 - B. All patients with a chief complaint of chest pain need to have high-flow oxygen administered regardless of the pulse oximeter readings.
 - C. From a clinical standpoint, patients must fully saturate their hemoglobin molecules in order to benefit from oxygen administration.
 - D. The pulse oximeter measures the effectiveness of ventilation and is not capable of telling us about the effectiveness of oxygen administration.
- 7. After attaching a pulse oximeter probe to a patient's finger, you notice the oximeter is not picking up a signal. The nail on the finger is covered with dark polish. Which of the following is the LEAST effective method of managing this situation?

- A. Attempt to find a finger or toe with no polish.
- B. Remove the polish with fingernail polish remover.
- C. Abandon attempts to obtain a pulse oximeter reading.
- D. Reposition the sensor so that the light beams are transmitted from side-toside through the finger instead of through the nail.
- 8. Pulse oximetry has been proven to be able to detect hypoxia that a physical exam fails to identify.
 - A. True
 - B. False
- 9. A 63-year-old female has gone into cardiac arrest in a grocery store. Bystander CPR was initiated immediately. The patient has been intubated and all of your physical examination techniques suggest the intubation was successful. Your partner suggests applying a pulse oximeter as an additional method of verifying tube placement. Which of the following statements is MOST CORRECT concerning the pulse oximeter in this situation?
 - A. The pulse oximeter will not work because there is no pulse.
 - B. A pulse oximeter reading of less than 80 percent suggests esophageal placement.

- C. The pulse oximetry will provide a good estimation of the quality of the ventilatory efforts.
- D. A high pulse oximeter reading may be misleading because of all the carbon dioxide building in the bloodstream.
- 10. You are caring for an apneic 23-year-old male suspected of a drug overdose who fails to respond to naloxone (Narcan). The pulse rate is 110, the blood pressure is 98/60 and you are ventilating the patient with a BVM and 100 percent oxygen. After intubation, you notice that the pulse oximeter values begin to drop. What is the MOST LIKELY explanation for the falling oximeter reading?
 - A. The pulse oximeter has malfunctioned.
 - B. The patient has gone into cardiac arrest.
 - C. The tube is too small to effectively ventilate the patient.
 - D. The tube has accidentally been placed into the esophagus.
- 11. The pulse oximeter is sensitive enough to provide the first diagnostic clue of a mainstem intubation.
 - A. True
 - B. False
- All of the following statements concerning pulse

oximetry are true EXCEPT

- A. Pulse oximetry is considered accurate if used properly.
- B. Pulse oximetry is a mathematical estimation of the saturation of the hemoglobin.
- C. A pulse oximeter indicates whether the body's cells can utilize the oxygen present.
- D. Some studies have suggested that darker skin pigmentation can interfere with the accuracy of the pulse oximeter; other studies have failed to demonstrate a correlation.
- 13. The pulse rate reported by the oximeter sensor must be within how many beats per minute of the actual palpated pulse rate taken by the paramedics for the reading to be considered accurate?
 - A. Within 5 beats.
 - B. Within 10 beats.
 - C. They must be equal.
 - D. The beating heart has nothing to do with an oximeter reading.
- 14. You are treating a tourist lying on the sidewalk in the midday sun who may have suffered from heat exhaustion. The pulse oximeter is not detecting a signal. Which of the following is the most likely explanation for this problem and what should you do

about it?

- A. The patient has likely developed a low-flow situation; rapidly infuse a liter of saline.
- B. The patient has probably suffered a heat stroke; raise the blood pressure with dopamine.
- C. The excessive heat within the body has caused the oximeter to malfunction; rapidly cool the body.
- D. The bright sunlight is likely affecting the pulse oximeter reading; blocking the sun with a towel may help.
- 15. What would you expect the pulse oximeter reading to be in a patient with a history of COPD?
 - A. It should be normal.
 - B. It should be higher than normal.
 - C. It should be lower than normal.
 - D. COPD doesn't affect pulse oximetry.
- 16. You are treating a 72-yearold male with a history
 of COPD. The patient is
 complaining of extreme
 shortness of breath
 worsening over the last
 couple of days despite
 the fact that the patient
 is on home oxygen at 2
 Ipm by nasal cannula. The
 pulse oximetry reading
 is 92 percent. Which of
 the following oxygen
 administration strategies is

- MOST appropriate for this patient?
- A. For COPD patients, administer low-flow oxygen only.
- B. Oxygen is not indicated for this patient he needs albuterol.
- C. Administer high-flow oxygen to any patient with shortness of breath.
- D. Administer as much oxygen as necessary to ease the distress regardless of the pulse oximeter reading.
- 17. The problem with carbon monoxide exposure is that carbon monoxide
 - A. damages the alveolar DNA, which renders them non-functional.
 - B. interferes with the ability of the body to get rid of carbon dioxide.
 - C. reacts with the moisture in the lungs to form carbonic acid, which destroys the alveoli.
 - D. occupies the space on the hemoglobin molecule reserved for oxygen.
- 18. You are caring for a smokeinhalation victim with some
 partial thickness burns on
 the hands and chest. The
 pulse oximeter placed on
 the patient by your partner
 reveals a saturation of 100
 percent. This patient will
 not significantly benefit
 from supplemental oxygen
 because of the high
 saturation already present.

- A. True
- B. False
- 19. When dealing with a patient who is experiencing profound cardiogenic shock, what would you expect his pulse oximeter reading to be?
 - A. Low
 - B. High
 - C. Normal
 - D. I wouldn't expect the pulse oximeter to detect a signal.
- 20. You are transporting a hypovolemic patient who is the victim of multi-system trauma after being involved in a vehicle collision. You place the patient on high-flow oxygen and rapidly administer a liter of saline. The pulse oximeter reading is 96 percent. All of the following statements about oxygen administration and the pulse oximeter in this patient are true EXCEPT
 - A. The oxygen saturation value is accurate.
 - B. This patient does not need high-flow oxygen.
 - C. The source of the bleeding must be corrected regardless of the oximeter reading.
 - D. There may not be enough hemoglobin available to carry sufficient oxygen to keep the body tissues alive.

This answer sheet must be postmarked by February 20, 2007 CE Answer Sheet Texas EMS Magazine

Name	Name				SSN					
Certification Level	Certification Level				Expiration Date					
Organization				Work Phone area code						
				City						
State	Zip			Home Phone area code						
Note: Due to the cost of processing CE, each answer sheet must be accompanied by a check or money order for \$5, made out to UT Southwestern.										
For DSHS CE credit, mail your completed answer sheet with a check or money order for \$5 made out to UT Southwestern to:										
Debra Cason, RN, EMS Training Coo The University of Southwestern Med 5323 Harry Hines Dallas, Texas 753 You will receive your percent is required to a	ordinator Texas dical Cente Blvd. 90-9134 certificate	for 1.5	hours of	f CE about si	x weeks	after the	closing	date. A	grade of 70	
Answer Form										
Check the appropriate box for each question. All questions must be answered.										
1 1. A.□ 2. A.□ 3. A.□ 4. A.□ 5. A.□ 6. A.□ 7. A.□ 8. A.□ 9. A.□ 10. A.□	B.□ B.□ B.□ B.□ B.□ B.□		D. □		11. 12. 13. 14. 15. 16. 17. 18. 19. 20.	A. □	B. □	C. □	D. □	
Did you enclose your \$5 check or money order?										

any lifting, she simply rode out to help the crews. It was only in the last few years that she had to quit making calls. But she held out hope she would return. In the summer of 2005, she recertified as a paramedic.

"She was bound and determined and said she was good for four more years. She said she might recertify again (in 2009)," Hartley said.

That feistiness and independence defined Babe. Mike Foegelle, a former DSHS employee in Temple, tells the story of a visit he made to Babe in Mart another time she was recertifying. Babe, who was not shy with her opinions, told Foegelle that she was having a hard time getting all her continuing education credits. Mike suggested that she get some of her CE hours online. He assumed she didn't have computer skills and told her to have someone call him so he could give them the info. He recalls that Babe looked straight at him.

"She said, 'Hell, honey, just send it right to me," Foegelle says. "I thought that because she was in her 80s, she wouldn't know how to use the Internet. I had underestimated her."

Through the years, she continued her EMS education, becoming an EMS coordinator and completing training in ACLS, BTLS and advanced high-angle rescue. At the 1993 Texas EMS Conference, Babe volunteered to be a patient in a high-angle demonstration on a 16 story hotel.

She also received several

awards in her later years. In the early 1990s, she won a Jefferson Award for Public Service and was invited to the national ceremony in Washington, D.C.. The Jefferson Awards for Public Service is a nationwide program to recognize unsung heroes and celebrate community betterment through volunteerism. In 1994, the Texas Department of Health (now DSHS) inducted her into the EMS Hall of Fame. which honors honors individuals who have made a significant and dramatic contribution to emergency medical services in Texas during their careers.

Still, Hartley says her mother's proudest achievement was Mart EMS. At her funeral, medics from the area lined the stairs of the church, and at the cemetery, the medics called her number, 12. She insisted that the funeral be conducted with an open casket — an unusual request — so that people would remember her in uniform. In an interview in 1993, Babe described the time a reporter asked her how she wanted to be remembered.

"As a volunteer paramedic who cared. I will miss a meal, I will miss sleep, I will put off going to the doctor because I want to work my shift. When I leave a place, I want them to say, 'There goes a 77-year-old paramedic, and she works everyday."



GETAC Meeting Dates for 2007

All meetings are in Austin, except where noted. Watch the website for details about location and times. Generally, committees meet the days before the general GETAC meeting. A limited number of hotel rooms are offered at an \$85/night rate.

February 21-23, 2007 Crowne Plaza Hotel 6121 N. I-35 (at U.S. 290) (512) 323-5466

May 23-25, 2007 Hilton Austin Airport 9515 New Airport Dr. (512) 358-6767

August 22-24, 2007 Hilton Austin Airport 9515 New Airport Dr. (512) 358-6767

November 17-19, 2007 (In Houston in conjunction with Texas EMS Conference 2007) services throughout the South Plains region.

Mr. Majorowski is known as a tireless promoter of EMS who volunteers his time for the Shattered Dreams anti-drunken-driving program and other educational efforts. His former students recall him as an imposing and stern but extremely caring and giving man who expected them to do their best and would do anything to help them succeed. Mr. Majorowski's commitment to EMS was proudly and lovingly described in the more than two dozen nominations submitted for this award.

EMS/Trauma Registry Data Quality Award - Central Texas Trauma Council (TSAL) for its dedication to the reporting of quality data to the Texas EMS/ Trauma Registry. With quality data, the science of preventing injuries and improving trauma system performance achieves precision. To determine the winner of the first-ever Data Quality Award, staff examined three indicators: usability of data for analysis purposes, Registry participation by entities and the number of months reported by entities. Final scores were calculated, and TSA L emerged with the highest.



Accepting the EMS/Trauma Registry Data Quality Award for TSA L is Liz Owens.



Accepting the Designated Trauma Facility Award are (from left): Childrens' Medical Center of Dallas representatives Lori Winson and Debbie Brown; and Covenant Children's Hospital-Lubbock reprensentatives Dondi Kilpatrick, Dr. Craig Rhyne and Tammy Jones.

Designated Trauma Facility Award - Covenant Children's Hospital-Lubbock and Children's Medical Center Dallas for their unwavering efforts to strengthen the state EMS/ trauma system for the children of Texas. As the only two standalone pediatric facilities in Texas to have achieved trauma designation status from the Department of State Health Services, these hospitals are champions for the needs of injured children. On June 5, 2003, Covenant Children's Hospital became Texas' first pediatric facility to achieve designation as a Major (Level II) Trauma Facility. Soon after, Children's Medical Center Dallas became Texas' first pediatric facility to achieve designation as a Comprehensive (Level I) Trauma Facility. These facilities are leaders in the Texas trauma system.



Leigh Anne Bedrich

Journey of Excellence Award -

Leigh Anne Bedrich was recognized with the Governor's EMS & Trauma Advisory Council Journey of Excellence Award. Given by GETAC Chair Ed Racht and Vice Chair Pete Wolf, the award honored Bedrich's exemplary commitment to improving care to acutely ill and injured patients in Texas. Over the past five years, Bedrich has committed countless hours working on GETAC and state issues, with a specific passion for the Comprehensive Clinical Management Program (CCMP). She has worked tirelessly with her colleagues from around the state to develop a program that identifies clinical and operational excellence in Texas. The GETAC Journey of Excellence highlights not only what she accomplished but the way she has fostered collaboration, participation and involvement in a broad and diverse group of players.

Texas EMS Conference Houston 2007 November 18-21



The antidepressant Paxil is the latest prescription drug that women should avoid taking, a national group of obstetricians has advised. Two studies have shown that women taking Paxil in the first trimester have babies with heart defects at a rate twice the norm, according to the U.S. Food and Drug Administration. Those findings were followed in late 2006 by an opinion from the American College of

Two studies have shown that women taking Paxil in the first trimester have babies with heart defects at a rate twice the norm.

Obstetricians and Gynecologists that women who are or may become pregnant should avoid taking the medication. The opinion appears in the December issue of *Obstetrics and Gynecology*. From Associated Press, "Obstetricians urge caution in use of antidepressant Paxil," December 1, 2006.

Tew evidence shows that health care providers – not patients – are the source of most hospital-acquired infections, according to recently published studies of the problem. And hospitals could do more to prevent the growing number of infections among patients, the researchers suggested. Among the recommendations: promote hand-washing among health care professionals, use gowns and other clothing with greater care, limit the number of people entering and leaving

operating rooms, isolate patients if needed and be more judicious in the use of antibiotics. "It's the process, not the patients," said David B. Nash, editor of

Researchers say hospitals could do more to prevent the growing number of infections among patients.

the American Journal of Medical Quality, which published the studies in November. "These three groups independently found that, despite hospitals' claims that in the sickest patients it's inevitable that someone is going to get a hospital acquired infection, that's just not the case." Patients also should be encouraged to ask doctors and nurses if they washed their hands before treatment, Nash said. The American Hospital Association agrees that hospitals could do more. "The new wave of research is showing that our previous expectations around what was preventable underestimated what we could actually achieve," said Nancy Foster, the association's vice president for quality and patient safety. From The Washington Post, "Studies: Hospitals could do more to avoid infections," November 21, 2006.

Falls now kill dramatically more elderly people than a decade ago, according to new research that pins the finding on the fact that people are living longer with cancer, heart disease and other chronic conditions. "Since people are not dying as much from chronic diseases, they're more likely to

die from a fall," said Judy Stevens, an epidemiologist with the U.S. Centers for Disease Control and Prevention. Stevens, the lead author of a study published in November in the CDC's *Morbidity and Mortality Weekly Report*, also noted

"Since people are not dying as much from chronic diseases, they're more likely to die from a fall."

a drop in women's hip fracture injury rates, likely because of bone-density screenings and treatments. However, the rate of death from falls rose more sharply among women then men in the time period studied by the researchers. "I think it comes back to the issue of longevity," Stevens said. "Women are living longer. There are even more frail women living to older ages than frail men." From Associated Press, "Elderly dying from falls more often," November 17, 2006.

The American Heart Association and the American College of Cardiology are asking doctors to give flu vaccines to their patients with coronary heart disease. Only one in three patients with cardiovascular disease is

Annual vaccinations can prevent death in both adults and children with chronic heart conditions.

now vaccinated against the flu, despite findings that annual vaccinations can

prevent death in both adults and children with chronic heart conditions. Such patients tend to get sicker with the flu than healthy people and have a higher chance of going to the hospital, scientists say. And flu complications, such as pneumonia, can cause cardiovascular disease to get worse. Doctors are reminded, however, that patients with cardiovascular disease should not get the nasal-spray flu vaccine. From the American Heart Association, September 18, 2006.

Astring of recalls and poisonings has prompted the federal government to limit the amount of lead that can be present in children's jewelry. Lead exposure can cause neurological problems, developmental delays and hearing loss, and children are

Since 2004, there have been 14 recalls of some 160 million pieces of jewelry with dangerous lead content.

especially susceptible to lead poisoning because they are most likely to put lead-containing items in their mouths. Since 2004, there have been 14 recalls of some 160 million pieces of jewelry with dangerous lead content, and a 4-year-old boy in Minneapolis died of lead poising this year after swallowing a charm that came with a pair of women's sneakers. The new limit on lead content for children's jewelry, set by the U.S. Consumer Product Safety Commission,



0 YOU



is 0.06 percent by weight. The sale of any jewelry with higher lead content will be prohibited. From *USA Today*, "Limit set on amount of lead in children's jewelry," December 12, 2006.

In a report that attaches dollar amounts to a highly controversial issue, the state comptroller recently determined that illegal immigration

Illegal immigration is bolstering the Texas economy while siphoning resources from local governments.

is bolstering the Texas economy while siphoning resources from local governments. Counties are spending \$1.44 billion a year on care and law enforcement for illegal immigrants but collecting only \$513 million in taxes and other revenue. The state, meanwhile, is paying \$1.16 billion in services for illegal immigrants but generating \$1.58 billion in taxes and fees paid by that group. Taking away the estimated 1.4 million illegal immigrants who live in Texas would cost the state \$17.7 billion in gross state product. The figures are only estimates because precise numbers aren't easy to find, according to the report, issued by Comptroller Carole Keeton Strayhorn. From The Dallas Morning News, "Illegal immigration's give-andtake," December 8, 2006.

New York City has banned trans fats from the city's eateries, a

move strongly opposed by restaurants but welcomed by health proponents as a model for other cities. Trans fats have long been used as an alternative for saturated fats, in part because they're cheaper and have a longer shelf life, but they are considered a heart risk and raise levels of bad cholesterol. The ban, set to start taking effect in July, will be monitored by restaurant inspectors who will check food packaging for trans fats amounts. Only very small amounts will be allowed. "We are just trying to make food safer," Mayor Michael Bloomberg said." Some restaurants had already begun to remove trans fats from their recipes as tougher federal rules were looming. But many of those who have not say it will be difficult and costly to make the switch while maintaining

The trans fats ban, set to start taking effect in July in New York, will be monitored by inspectors who will check food packaging for trans fats amounts.

the taste and texture of some foods. In response to this complaint, the city agreed to phase in the changes over the next couple of years. Along with the trans fats ban, the city approved a requirement for some restaurants to display calorie content of their foods on menu boards or near the registers. From *The New York Times*, "New York bans most trans fats in restaurants," December 6, 2006.

50

DISCIPLINARY ACTIONS

Absolute Ambulance Service, Weslaco, TX. June 16, 2006, Administrative penalty in the amount of \$5,950.00, for violating the EMS Rules 157.11 and 157.16.

Alexander, Christofer J., Allen, TX. July 7, 2006, Reprimand, for violating the EMS Rules 157.36.

Alfaro, Carlos M., La Vernia, TX, August 14, 2006, Reprimand, for violating the EMS Rules 157.36.

All Nations Group DBA Ang EMS, Houston, TX. September 30, 2006, assessment of an administrative penalty in the amount of \$9,750.00, for violating the EMS Rules 25 TAC §§ 157.11 and 157.16.

Allen, Roger L., Vernon, TX, July 21, 2006, Reprimand, for violating the EMS Rules 157.36.

Anders, Scott W., Ponder, TX. July 3, 2006, Reprimand, for violating the EMS Rules 157.36.

Arguello, Luis, San Juan, Texas, December 22, 2005 through December 22, 2007, 24 month probated suspension, for violating the EMS Rules 157.37 and Texas Occupation Code Chapter 53 and the Texas Health and Safety Code § 773.061.

Boddie, Anthony A., Houston, TX, March 31, 2006 through March 31, 2007, 12 month probated suspension, for violating the EMS Rules 157.37.

Baileys, Anson, Arlington, TX. Forty-eight (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).

Barnes, Thomas E., Kerrville, TX, August 14, 2006, Revoked, for violating the EMS Rules 157.36

Barrera, **Jeremy L**, Odessa, TX, April 27, 2006, Reprimand, for violating the EMS Rules 157.36.

Blair, Patrick R., Arlington, Texas, February 21, 2006, 12 month suspension with 11 months probated after serving an actual 1 month suspension, for violating the EMS Rules 157.36. **Blanton, Christopher A.**, Wylie, TX, April 17, 2006, Denied EMT-B, for violating the EMS Rules 157.36, 157.37, and the Texas Occupations Code, Chapter 53.

Boldra, Michael, San Antonio, TX. 1 month suspension, followed by 48-month probated suspension through February 2008 of the EMT certification. EMS Rules 157.36(b)(1), (2), (17) and (28).

Bonilla, David, Mission, TX. Thirty-six (36) month probated suspension of EMS certification through November 4, 2007, for one (1) felony deferred adjudication, and one (1) misdemeanor conviction. EMS Rules 157.37 and 157.36(b) and (c).

Brasher, Jr., John L., Texas City, TX, August

3, 2006, Reprimand, for violating the EMS Rules 157.36.

Bray, Randall, San Antonio, TX, August 25, 2006, Revoked, for violating the EMS Rules 157.36.

Brookes, Warren P., Vernon, TX, March 29, 2006, Reprimand, for violating the EMS Rules 157.37.

Byers, Danny, Earth, TX. 60 month probated suspension of EMT-P certification through March 2007. EMS Rules 157.36(b)(1), (2), (23), (25), (26), (28) and (29); 157.37(a)-(c); and Occupations Code Chap 53.

Byrd, Michael W., Houston, TX, August 3, 2006, Reprimand, for violating the EMS Rules 157.37.

Capehart, Robert, Longview, TX, March 27, 2006, Revocation, for violating the EMS Rules 157.36.

Caraway, Cassie D., Port Lavaca, TX, April 27, 2006, Reprimand, for violating the EMS Rules 157.36.

Careflight Ground, Grand Praire, TX. June 23, 2006, Administrative penalty in the amount of \$500.00, for violating the EMS Rules 157.11 and 157.16.

Carillo, Tito, El Paso, TX, August 25, 2006, Reprimand, for violating the EMS Rules 157.36.

Castillo, Daniel A., Edinburg, TX, April 13, 2006, Reprimand, for violating the EMS Rules 157.37 and Chapter 773 of the Healthy and Safety Code.

Christus Spohn Brooks EMS, Falfurrias, TX. July 3, 2006, Reprimand, for violating the EMS Rules 157.11 and 157.16.

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

Clear Lake Emergency Medial Corps, Houston, TX, August 25, 2006, Reprimand, for violating the EMS Rules 157.11.

Clements, Elizabeth A., Tyler, TX, July 21, 2006, Revocation, for violating the EMS Rules 157.36.

Cole, Kenneth M., Millsap, TX. July 3, 2006, Reprimand, for violating the EMS Rules 157.36.

Cooke County EMS, Gainesville, TX, August 14, 2006, assessed an administrative penalty in the amount of \$890.00 for violating the EMS Rules 157.11 and 157.16.

Cooper, Keith A., El Paso, TX. September 27, 2006, Reprimand, for violating the EMS Rules 25 TAC § 157.36.

Cruz, Ricardo, Harlingen, TX, March 16, 2006 through March 16, 2007, 11 month probated suspension with 1 month actual suspension, for violating the EMS Rules 157.37.

Depau, James A., LaPorte, TX. February 21, 2006, 24 months suspension with 18 months probated, for violating the EMS Rules 157.36. **Diaz, Gilbert**, Houston, TX, August 9, 2006,

Reprimand, for violating the EMS Rules 157.36.

Dube, Chad K., Austin, TX. February 21, 2006 through February 21, 2007, 12 month probated suspension, for violating the EMS Rules 157.36. **Dunn, Joshua D.**, Beckville, TX. September 14, 2006, Reprimand, for violating the EMS

Rules 25 TAC § 157.36. **Duran, Lisa D.**, Ferris, TX, July 21, 2006, Reprimand, for violating the EMS Rules 157.36.

Enerman EMS, Everman, TX, July 21, 2006, Reprimand, for violating the EMS Rules 157.11. 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).

Everett, Navada, Roscoe, TX, April 27, 2006, 12 month probated suspension with 6 month actual suspension, for violating the EMS Rules 157.36.

Extended Care EMS, Inc., Houston, TX, April 13, 2006, Administrative penalty in the amount of \$3,750.00, for violating the EMS Rules 157.11 and Chapter 773 of the Health and Safety Code.

Fason, Carl W., Arlington, TX. June 12, 2006, 8 month suspension through February 12, 2007, for violating the EMS Rules at 25 TAC § 157.36.

Fenner, Lisa L., Pasadena, TX. September 30, 2006, 24 months probated suspension, for violating the EMS Rules 25 TAC §§ 157.36 and 157.37.

Fernung, Lloyd, Austin, TX, Twenty-four (24) month probated suspension of EMS certification through February 2, 2007, for cne (1), misdemeanor deferred adjudication, and one (1) misdemeanor conviction, EMS Rules 157.37 and 157.36(b) and (c).

Fickey, Bobby, College Station, TX, August 25, 2006, Reprimand, for violating the EMS Rules 157 36

Flower Mound Fire Department, Flower Mound, TX. assessment of an administrative penalty in the amount of \$1,050.00, for violating the EMS Rules 25 TAC § 157.11. Franks, Steven L., Sherman, TX, July 21, 2006, Reprimand, for violating the EMS Rules 157.36.

First Response Medical Services, McAllen, TX, July 21, 2006, assessed an administrative penalty in the amount of \$9,800.00 for violating the EMS Rules 157.11.

Garcia, Adrian J., Brownsville, TX, March 31, 2006, 10 month probated suspension with 2 month actual suspension, for violating the EMS Rules 157.37.

Garcia, Ismael N., Odem, TX. June 5, 2006,12 month 25 day suspension, for violating the EMS Rules 157.36.

Disciplinary Actions

Garcia, Mark A., Houston, TX. June 12, 2006, 11 month 19 day suspension through May 31, 2007, for violating the EMS Rules 157.36. Garner, John, Burleson, TX. 12 month suspension followed by 36 month probated suspension of EMS certification through June 3, 2007 for misdemeanor convictions. EMS Rules 157.37, 157.36(b) and (c).

Garza, Diana, Weslaco, TX, August 14, 2006, Reprimand, for violating the EMS Rules 157.36.

Godkin, Gregory W., Deer Park, TX, April 13, 2006, Voluntary Surrender of EMT-B certification in lieu of the Department taking formal disciplinary action for violating the EMS Rules 157.36.

Gonzalez, Donna, Princeton, TX. 48 months probated suspension of EMT-P license through July 2007. EMS Rules 157.36(b)(1), (2), (26), (27) and (28).

Gonzales, Robert, San Antonio, TX, August 9, 2006, Revocation, for violating the EMS Rules 157.36.

Goodson, Angela R., Amarillo, TX, July 21, 2006, Reprimand, 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(c)(2)(3)(G).

Granado, Sammy S., Jr., Midland, TX, August 25, 2006, Reprimand, for violating the EMS Rules 157.36.

Gray, Javiya, Houston, TX. 60 month probated suspension of EMT certification through December 17, 2007, felony deferred adjudication. EMS Rules 157.37, 157.36(b) and/or (c).

Griggs, Clayton, Bagwell, TX. Forty-eight (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).

Groves, Brent, Lake Dallas, TX. 48 month probated suspension of EMS certification through May 5, 2007, felony deferred adjudication probation. EMS Rules 157.37, 157.36(b), and/or (c).

Guin, James A., Bloomburg, TX. July 3, 2006, Reprimand, 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 onemonth 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).

Hartz, Mikel, North Richland Hills, TX. September 20, 2006, Reprimand, for violating the EMS Rules 25 TAC § 157.36.

Haskell Co. Ambulance Service, Haskell, TX,

April 27, 2006, Administrative penalty in the amount of \$3,750.00, for violating the EMS Rules 157.11, and Chapter 773 of the Health and Safety Code.

Hayden, Christopher T., North Richland Hills, TX. June 5, 2006, 9 month 23 day suspension, for violating the EMS Rules 157.36.

Hemphill, Mark R., Sachse, TX, April 13, 2006, Revocation, for violating the EMS Rules 157.36.

Hendrickson, Andrew A., Carrollton, TX, August 9, 2006, Reprimand, for violating the EMS Rules 157.36.

Hernandez, Rogerio, Brownsville, TX. Thirty-six (36) month probated suspension of EMS certification through November 1, 2007, for one (1) felony deferred adjudication probation. 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.

Hiltbrunner, Lois, Shamrock, TX. 48 month probated suspension of EMS certification through September 30, 2007, felony deferred adjudication probation. EMS Rules 157.37, 157.36(b) and (c).

Houdek, Joleen J., Fort Worth, Texas, December 2, 2005, Reprimand, for violating the EMS Rules 157.36.

Iles, Megan, Seabrook, TX. March 7, 2005 through March 7, 2007, 24 month suspension with 23 months probated, for violating EMS Ruiles 157.36.

Jacobs, Daniel E., Dallas, TX, March 27, 2006 through March 27, 2007, 12 month probated suspension, for violating the EMS Rules 157.36. Jones, Clifford E., Beaumont, TX, April 17, 2006, Denied EMT-B, for violating the EMS Rules 157.36 and 157.37.

Keating, Patricia, El Paso, TX, March 31, 2006, Reprimand, for violating the EMS Rules 157.36.

Kelly, John P., Webster, TX, July 25, 2006, 2 month suspension, for violating the EMS Rules 157.36.

Kennedy, William L., Gun Barrel, TX, September 6, 2006, 12 month suspension, for violating the EMS Rules 25 TAC § 157.36. **Klein, John F.,** Sulphur Springs, TX. June 5,

Klein, John F., Sulphur Springs, TX. June 5, 2006, 7 month 26 day suspension, for violating the EMS Rules 157.36.

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).

Kohler, Bryan C., Austin, TX, March 16, 2006, Reprimand, for violating the EMS Rules 157.36.

Krodel, James R., Royse City, Texas, December 2, 2005 through December 2, 2007, 24 month probated suspension, for violating the EMS Rules 157.36.

Lacey, Michael C., Austin, TX. June 12, 2006,

Reprimand, for violating the EMS Rules 157.36.

Langdale, Charles T., Killeen, TX. September 27, 2006, Reprimand, for violating the EMS Rules 25 TAC § 157.36.

Leasure, **Adam C.**, Florence, TX, March 1, 2006 through March 1, 2007, 12 month probated suspension, for violating the EMS Rules 157.36.

Lifeguard Ambulance Service, Dallas, TX, September 6, 2006, assessed an administrative penalty in the amount of \$5,650.00 with \$50,850.00 administrative penalty probated for 12 months, for violating the EMS Rules 157.11 and 157.16.

Lifeline Ambulance Service, Laredo, TX, April 13, 2006, Administrative penalty in the amount of \$3,750.00, for violating the EMS Rules 157.11 and Chapter 773 of the Health and Safety Code.

Llano County EMS, Llano, Texas, July 21, 2006, Reprimand, for violating the EMS Rules 157.11.

Loar, David R., Lubbock, TX, August 25, 2006, Reprimand, for violating the EMS Rules 157.36.

Longoria, Leonard, Murphy, TX, August 9, 2006, Reprimand, for violating the EMS Rules 25 157.36.

Luna, Stephanie D., Lewisville, TX. June 5, 2006, 15 month suspension, for violating the EMS Rules 157.36.

Martinez, Desiderio, La Feria, TX. September 30, 2006, Reprimand, for violating the EMS Rules 25 TAC § 157.36.

Martinez, Jose G., Brownsville, TX. June 12, 2006, Reprimand, for violating the EMS Rules 157.36.

Martinez, Julio, Laredo, TX. February 1, 2006, Reprimand, for violating the EMS Rules 157.36.

Martinez, Oscar, Lindale, TX. 48-month probated suspension of EMT-P certification through September 2007. EMS Rules 157.36(b)(1), (2), (19), (26), (27), (28) and (29). Massey, Charles D., Fort Worth, TX. July 3, 2006, Reprimand, for violating the EMS Rules 157.36.

McCurdy, Daniel L., Austin, TX. March 1, 2006, Reprimand, for violating the EMS Rules 157.36.

McGiboney, Brian R., Danbury, TX, April 17, 2006, Denied ECA, for violating the EMS Rules 157.37 and Texas Occupations Code, Chapter 53.

Mckinnon, Tammie S., Jasper, TX, September 6, 2006 through February 6, 2007, 6 month suspension, for violating the EMS Rules 157.36. McMeans, Nancy H., Santa Fe, TX., July 3, 2006, Reprimand, for violating the EMS Rules 157.36.

Medical Ambulance Service's Inc., Laredo, TX. June 16, 2006, Administrative penalty in the amount of \$11,200.00, for violating the

DISCIPLINARY ACTIONS

EMS Rules 157.11 and 157.16.

Mendoza, Carlos, El Paso, TX, July 21, 2006, Reprimand, for violating the EMS Rules 157.36.

Mendoza, Juan C., Elmer, OK. June 12, 2006, Reprimand, for violating the EMS Rules 157.36.

Metro-Med, Edingburg, TX, July 21, 2006, assessed an administrative penalty in the amount of \$3,750.00 for violating the EMS Rules 157.11.

Mid-Valley EMS, McAllen, TX. June 12, 2006, Reprimand, for violating the EMS Rules 157.11 and 157.16.

Mims, Sara K., Watauga, TX, March 29, 2006, Revocation, for violating the EMS Rules 157.36.

Mitlacher, Carol L., Leander, TX. June 7, 2006, 18 month 23 day suspension, for violating the EMS Rules 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. September 14, 2006, Reprimand, for violating the EMS Rules 25 TAC §§ 157.11 and 157.16.

O'Kane, Thomas, Bacliff, TX. June 12, 2006, 6 month probated suspension through December 12, 2006, for violating the EMS Rules 157.36. Pappas, James, Wake Village, TX, August 25, 2006, Assessed a \$700.00 administrative penalty against EMS Coordinator certification, for violating the EMS Rules 157.43.

Parker, Alvin, Jefferson, TX, August 12, 2005, Twenty four (24) month suspension of EMT certification with twenty one (21) months probated, for violating EMS Rules 157.36. (August 12, 2005-August 12, 2007)

Paul, Jon, Rowlett, TX. 48 month probated suspension of EMS certification through September 2, 2007, felony convictions. EMS Rules 157.37, 157.36(b), and/or (c).

Pendergrass, Cassandra D., El Paso, TX, August 25, 2006, 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. Reed, Carroll, Houston, TX, 48-month probated suspension of EMS certification through August 22, 2007, felony deferred adjudication probation. EMS Rules 157.37, 157.36(b) and (c).

Reed, Johnny, La Porte, TX, April 7, 2006, Reprimand, for violating the EMS Rules 157.37.

Reid, James G., Denton, TX. June 12, 2006,

Reprimand, for violating the EMS Rules 157.37.

Rosser, Daniel E., Corinth, TX. June 12, 2006, Reprimand, for violating the EMS Rules 157.37.

Rosales, Antonio R., San Antonio, TX, March 16, 2006, 12 month probated suspension, for violating the EMS Rules 157.36.

Roth, Peter W., Bandera, TX, August 14, 2006, EMS Instructor certification Revoked, for violating the EMS Rules 157.32 and 157.44. Rothrock, Kelly C., Texas City, TX, April 27, 2006, Reprimand, for violating the EMS Rules 157.36.

Royal EMS Ambulance Service, Houston, TX. July 7, 2006, Administrative penalty in the amount of \$5,200.00 with \$2,700.00 probated for three months, for violating the EMS Rules 157.11 and 157.16.

Russell, Richard A., Lufkin, TX, July 21, 2006, 12 month suspension with 11 months and 3 weeks probated after serving an actual 1 week suspension, for violating the EMS Rules 157.36. Salas, Rosa M., Brady, TX, August 25, 2006, Reprimand, for violating the EMS Rules 157.36.

Scarborough, Samuel L., Hamilton, TX, August 25, 2006, Reprimand, for violating the EMS Rules 157.36.

SF Diamond Corporation, Houston, TX, August 14, 2006, assessed an administrative penalty in the amount of \$500.00 for violating the EMS Rules 157.11.

Shelton, Tommy, Crosby, TX. Thirty-Six (36) month probated suspension of EMS certification through May 24, 2007, for one (1) felony misdemeanor. EMS Rules 157.37 and 157.36(b) and (c).

Simmons, Kevin W., Bryan, TX, September 6, 2006, Reprimand, for violating the EMS Rules 157.36.

Singletary, Michael W., The Woodlands, TX, April 17, 2006, Denied EMT-B, for violating the EMS Rules 157.36, 157.37, and Texas Occupations Code, Chapter 53.

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)

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

Southeast Texas EMS, Beaumont, TX, July 21, 2006, administrative penalty in the amount of \$5,000.00, for violating the EMS Rules 157.11. **Stewart, Alvin D.**, Comanche, TX, August 25, 2006, Reprimand, for violating the EMS Rules 157.36.

Sutton, Brian M., Sherman, TX. September 20, 2006, Reprimand, for violating the Health and Safety Code (Act) § 773 and EMS Rules 25

TAC § 157.36.

Sweat, Jr., Derick M., Galveston, TX. March 1, 2006, 12 month suspension with 10 month probated after serving an actual 2 month suspension, for violating the EMS Rules 157.36. **Sweeney, Lisa G.**, Beaumont, TX, April 27, 2006, Reprimand, for violating the EMS Rules 157.37.

Todd II, Jack W., Tulia, TX. September 14, 2006, Reprimand, for violating the EMS Rules 25 TAC § 157.36.

Torrez, Adriana L., Hurst, TX. July 7, 2006, Reprimand, for violating the EMS Rules 157.36.

Torres, Johnny, McAllen, TX, July 21, 2006, Reprimand, for violating the EMS Rules 157.36.

Torres, Jr., Roberto C., Houston, TX. June 12, 2006, Reprimand, for violating the EMS Rules 157.36

Trevino, Guadalupe, Harlingen, TX, July 21, 2006, Reprimand, for violating the EMS Rules 157.36.

Tucker, Chad, Allen, TX, December 7, 2005, 24 month suspension with 21 month probated suspension, for violating the EMS Rules 157.36. **Tuijillo, Thomas**, Fort Worth, TX, July 21, 2006, Reprimand, for violating the EMS Rules 157.36

USA Ambulance Service, Sugar Land, TX. July 3, 2006, Reprimand, for violating the EMS Rules 157.11 and 157.16.

Vernon Fire/EMS Dept., Vernon, TX. June 12, 2006, Reprimand, for violating the EMS Rules 157.11 and 157.16.

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

Watters, Ray G., Burleson, TX, April 3, 2006, Voluntary Surrender of Paramedic License in lieu of the Department taking formal disciplinary action for violating the EMS Rules 157.36.

Wheel Care EMS, Houston, TX, August 25, 2006, assessed an administrative penalty in the amount of \$15,000.00 for violating the EMS Rules 157.11.

Willhite, III, John H., Alvin, TX, March 16, 2006, 48 month probated suspension, for violating the EMS Rules 157.36.

Williamson, Bobby, Belton, TX, placed on a twenty-four 24 month probated suspension through April 6, 2007, for violating EMS Rules 157.36, and/or 157.37. (April 6, 2005)

Wilson, Keni M., Clyde, TX, July 21, 2006, Reprimand, for violating the EMS Rules

Woody, William K., Cleburne, TX, July 21, 2006, Reprimand, for violating the EMS Rules 157.36.

Wooten, Danny M., Horseshoe Bay, TX, September 6, 2006, Revoked, for violating the EMS Rules 157.36.

Meetings & Notices

Calendar

February 10, 2007. **South Plains EMS** (SPEMS) Conference. Will be held at the University Medical Center in Lubbock, Texas. Will be a full day of lectures with a regional awards ceremony during lunch. Case reviews, airway adjuncts, burns, disaster management from the front line, IOs, pediatrics, and more will be discussed. EMS and nurses will have CEs available. For information, contact Jim Waters at 806/791-2582 or Cristi Cline at 806/775-9315.

Jobs

EMS Instructor: Weatherford College is accepting applications for an EMS Instructor. AAS in EMT preferred; must be current licensed paramedic; current DSHS EMS instructor certified; three years teaching experience preferred; four years work experience in active 911 service and/or emergency medicine setting; current ACLS required/ACLS instructor preferred; current BTLS or equivalent preferred; current PALS

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.

or equivalent preferred. Visit the website for more information and application: www. wc.edu. +

EMT/Paramedic: ETMC EMS is hiring certified paramedics and EMTs. Based in Tyler, Texas with locations throughout East Texas, ETMC EMS serves more than 17 counties and close to 17,000 square miles. Offer paramedic sign-on bonus of \$2,000, in-house paramedic program, speciality programs at no employee cost, variety in shift hours, benefits package, tuition aid. 20 years or older, high school diploma or GED, DSHS EMT-Paramedic certification, current Texas driver's license and be within company guidelines. For immediate consideration call 903/939-5744, fax 903/939-5758 or email lbneal@etmc.org. + Paramedics: Cypress Creek EMS has openings for paramedics of all experience levels. CCEMS is an all-MICU, 911-only service serving the northern suburbs of Houston, Texas. In addition to great pay, excellent benefits, and a positive atmosphere, we offer the finest tools and equipment and aggressive patient care protocols. Call 800-803-4124 or visit the website at www.ccems. com. +

EMT/Paramedics: Physicians Network Association is seeking full/part-time EMT/ paramedics to fill openings at correctional facilities throughout Texas. We offer excellent benefits and paid vacation. For more information contact Misty Smith at 806/799-1326 or fax resume to 806/687-9515 or email msmith@pnamedical.net. + Articulation/Transition Program: North Harris College in Houston offers a oneyear program for LVNs and paramedics to become registered nurses (RNs). To receive the Associate of Applied Science (AAS) degree in nursing, must be currently EMT-P or LP. Program information and requirements are available on the website at http://nursing.northharriscollege.com. Applications available in January. The Nursing Department offers information sessions twice a month on the North Harris College campus. Schedule of information sessions and a list of admissions criteria can be found on the website. For additional questions, contact Carla M. Porter, academic counselor at 281/765-7836 or email cporter@nhmccd.edu. +

Paramedics: Looking for PRN ACLS certified paramedics in the Austin or San Antonio area. CEDRA Clinical Research,

LLC, a clinical research organization servicing the pharmaceutical and biotech industries is looking for PRN paramedics with ACLS certification and one year experience. Shift assignment will be either days or nights. We will work with your availability. For Austin, call Kristie at 512/615-2263, and for San Antonio, call Christie at 210/635-1529 or email hrcoor@cedracorp.com. +

Instructor: The University of Texas at Brownsville is looking for a full-time, tenure-track instructor or assistant master technical instructor. Bachelor's degree preferred, associate degree considered. Candidate is required to be NREMT-P and proficiency in Spanish helpful. For more information, contact Adiel Garcia at 956/882-5025 or by email at adiel.garcia@utb.edu. +

EMT-I/Paramedic Instructor: Clinical Simulation Training & Patient Safety. This is an NIH-funded clinical simulation project to study an important patient safety problem. Candidates should be Texas and/or NREMT-P certified or licensed. Preferred experience: one to two years of EMS or 911, associate degree or higher, EMS instructor, ACLS, BCLS, PALS. Candidates must demonstrate competency handling emergencies utilizing all basic and ALS equipment and skills. This research will take place at Scott & White Hospital, in conjunction with Texas A&M Health Science Center College of Medicine, and at the Clinical Simulation Center at Temple College, www.templejc.edu/dept/ HealthScience/Sim Center.htm. Send CV and contact information for three references to: Jose F. Pliego, MD, via email at jpliego@ swmail.sw.org or by fax 254/724-8344. Call 254/724-4320 for additional information. *

Paramedic/EMT-P/RN: Central Texas Hospital in Cameron has immediate openings for the Acute Care Unit and Emergency Room. Flexible schedules and benefits. Apply with David at 254/749-8503 or send resume to centexhospital@gmail. com *

EMT-I/EMT-P/Dispatchers: Montgomery County Hospital District-EMS, the 911 emergency provider for Montgomery County, is seeking to candidates to keep pace with our growing community. Signon bonuses available for paramedics, intermediates and dispatchers. To apply, contact Human Resources at 936/523-1132 or scox@mchd-tx.org, or apply online at

Meetings & Notices

http://www.mchd-tx.org/emp app.cfm. * EMT/EMT-I/Paramedic: Knox County Hospital District EMS is accepting applications for full and part-time positions. KCHEMS provides 911 service and MICU level transports for Knox County, averaging 650 calls annually with two primary BLS/ MICU units staffed 24/7 and one BLS callin unit. Paramedics must maintain ACLS, PALS, and PHTLS certifications. Relocation not required and sleeping quarters are available. Resumes may be faxed to KCHEMS Attn: Ronnie Brown at 940/422-4929 or 940/657-5521. For questions or applications contact Ronnie Brown at 940/203-0775 or Lisa Myers at 940/657-3535. *

Part-time Paramedic Instructor: Needed to teach evening courses for the Spring 2007 semester at Trinity Valley Community College in Kaufman (30 miles SE of Dallas). Associate degree or higher and at least three years of recent clinical experience in emergency medicine required. For more information, visit www.tvcc.edu/hr/JobOpenings. Call 972/932-4309 or send resume to TVCC Health Science Center, 800 Hwy 243 W. Kaufman TX 75142.*

Adjunct EMS Instructor: Responsible for general effectiveness of the didactic and clinical experiences of students enrolled in the EMS program at Galveston College. This is a part-time position reporting to the program coordinator. Requires Texas certification as EMT-B and Texas EMS instructor. Preferred associate degree, EMS field experience, and previous teaching experience. Check our website, www.gc.edu for more information.*

For Sale

For Sale: 1998 Type III Osage ambulance. High miles, but good condition. \$6000.00 OBO. 2002 Type III remounted ambulance with 158,000 miles. This ambulance has a new engine with only 15,000 miles. Good condition. \$12,500.00 OBO. For more information, contact Stephen Stephens, Uvalde EMS, at 830/278-6583 or email uems911@yahoo.com. Both of these units will be available upon delivery of new ambulances in late January.

Miscellaneous

Online EMS Education: TechPro services offers online and traditional EMS courses from ECA to paramedic level, refresher courses to NR testing prep courses. For more information please visit www. techproservices.net or call 325/695-0900. prnMedics.com: Free web-based listing service for all certification levels of EMTs. If you are looking for full or part-time employment you can list with us. For more information, call 409/284-2947. + Rope Rescue Training: Training for fire,

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. +

National Registry Prep Class: 16-hour refresher class from medical, legal to pediatrics. Good review for national EMT-P curriculum and is designed as a refresher before taking the NREMT exam. Visit www.nationalregistryprep.com for more information, schedules and registration. * Health Claims Plus: EMS and Fire Department billing. Excellent rates and

services. We offer electronic billing, weekly and monthly reports and educational workshops. Contact 1-888-483-9893 or visit www.healthclaimsplus.com. *

Online Education: Online options for a bachelor's degree in public safety management. St. Edward's University in

Austin 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 degree. For more information visit www.stedwards.edu/newc/pacepsm.htm or call 877/738-4723 or 512/428-1050. *

- + 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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November
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Houston

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EMS Profile: Cedar Park Fire Department



From left: Battalion Chief Larry Mulrain, Firefighter David Henderson, Firefighter Michael Sweeney, Firefighter Taylor Selden, Firefighter Jeremy House, Firefighter Tom O'Brien, Firefighter Frank Sykora, Driver/Engineer Mickey O'Riley, Firefighter Sean Kepler, Lt. Mike Wofford, Driver/Engineer Martin Wenzel, Firefighter Aston Bowers, Lt. Brian Jackson and Firefighter Rick Barrios.

Number of Personnel: The Cedar Park Fire Department has 58 employees and three fire stations that serve a population of 65,000. There is a fire chief, an assistant chief, three line battalion chiefs, a battalion chief over training, a fire marshal, nine lieutenants, a fire inspector, nine driver/engineers, 28 firefighters, two code enforcement officers and two administrative assistants. All engine companies are staffed with a minimum of four personnel, and each shift has minimum staffing of 13 on duty. The department has three engines, a ladder tower, a rescue truck, two hazardous materials units, a tanker, three brush trucks, a swiftwater/dive trailer and four command vehicles.

How many years of service as a first responder group: The organization was founded in 1972 as a volunteer fire department. Cedar Park

Texas Department of State Health Services 1100 West 49th Street Austin, Texas 78756-3199 Periodical Rate Paid At Austin, Texas

1990, the population was 5,000. Today, the population within the city limits is 45,000 and the ETJ has another 20,000. The fire department services the city and ETJ. Over the past 10 years, Cedar Park has been among the top 10 fastest-growing small cities in the United States. In 1995, the first paid firefighters were hired, which made the organization a combination fire department. By 2001, the department was staffed entirely by paid personnel. Williamson County EMS provides ALS and transport. The personnel in the fire department are certified to EMT-

borders Northwest Austin and Round Rock to the west. In

B as a minimum. Dr. Stephen Benold is the medical director for the fire department and Williamson County EMS and provides our personnel with progressive protocols.

Number of calls per year: In 2005, the department responded to 3,328 emergency calls. Of this total, 2,377 (71 percent of the total call volume) were EMS incidents and vehicle accidents. All EMS calls get an engine company and a Williamson County EMS unit at a minimum.

Current Projects: Due to the continued rapid growth, a fourth fire station has been approved to be located on the east side of the city. It is scheduled to open in February 2008. The City Council and city management are strong supporters of the fire department. Williamson County EMS has received additional funding to staff a second ambulance within Cedar Park beginning in March 2007. A recent grant from the Texas Department of State Health Services was used to purchase six new AEDs and additional training AEDs. A fifth fire station is master-planned for the north side of the city and is expected to open within the next five years. Training is constant within the department to improve EMS skills and firefighter safety. A \$750,000 training facility was completed in 2005. We will soon be providing CPR training in the community. The Department is a partner in the Shattered Dreams Program for high school students. A Community Emergency Response Team (CERT) has been developed that will provide assistance during disasters and currently has 26 trained members. Twenty citizens have already signed up for the next CERT class.

