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Serving Texas Emergency Care Professionals

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CE: Management of heat emergencies page 30

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Texas EMS



FEATURES

7 EMS Week & Trauma Awareness Month

National EMS Week is upon us once again, May 20-26. This issue includes information from the American College of Emergency Physicians' EMS Planning Guide to help your service host awareness events and plan special recognitions.

14 Preconference classes at Texas EMS Conference 2012

The 2012 Texas EMS Conference will offer a wide variety of preconference classes, such as Advanced Hazmat Life Support, EMS Safety, Cave Rescues and Emergency Pediatric Care.

24 The Texas EMS/Trauma System turns 20

The first rules creating the Texas Trauma system were passed 20 years ago. We take a look back at how the system began and how it has grown over the past two decades.

30 Continuing education: Management of heat emergencies

Kenneth W. Navarro discusses how the body regulates temperature, the various pathologies of heat-related illnesses and the various treatment plans for those illnesses.

Cover spread: The Texas EMS/Trauma System marks its 20th anniversary and Texas EMS Magazine is taking a look back at how the system began. This 1997 photo by Pat Craddock illustrates the complexity of a trauma scene—and made us realize how far we've come in the 20 years since trauma facilities and Trauma Regional Advisory Councils were just an idea.

DEPARTMENTS

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Above: This photo from Don Elbert (who, with 38 years in EMS, definitely qualifies as subject of this issue's EMS Experience series) is an impromptu group shot of ETMC EMS following a staff meeting in 1979. Elbert (standing, far left) is quick to point out that blue jeans were not part of the uniform—the off-duty guys simply put uniform shirts on for the photo. He says the Oldsmobile ambulance had the smoothest ride of any ambulance he's ever been in.

Texas Department of State Health Services

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Texas EMS

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Editor's office: (512) 834-6700, Office of EMS Trauma/Systems MC 1876, PO Box 149347, Austin, Texas 78714-9347 or FAX (512) 834-6736.

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Pat Campbell 1953 - 2012

Patrick Joe "Pat" Campbell, a paramedic and EMS specialist in San Angelo with DSHS, passed away on April 4. He was 59. He was born April 14, 1953, in Ranger, where he grew up and began his life of volunteerism. While still in high school he followed his grandfather's footsteps and joined the volunteer fire department. He received his EMT certification later that year and moved to Sonora where he began serving with Sutton County EMS. He achieved his EMT-Intermediate in 1996 and then his EMT-P. He also was a long-time member of the Sonora VFD where he was responsible for writing many of the grants that gave Sonora VFD equipment they still use. He helped pioneer EMS training in Sutton County and the surrounding area. Through his efforts, many individuals were trained, encouraged and led to the same paths of service that Pat believed in. His love for his community meant that if you called, Pat responded, no matter the time or what he was doing. After serving as the director of Sutton County EMS for many years, Pat went to work for DSHS as an EMS Specialist in EMS Compliance. He proved himself to be a tireless volunteer at Texas EMS Conference. His service earned him many awards: Gene West Memorial EMT of the Year in 1988; Sonora VFD Fireman of the Year in 1995; Mayor's Award of Excellence in 1996; Gene West Memorial EMT of the Year in 2001; and Sonora VFD Fireman of the Year in 2010. Pat touched many lives not only with his hands, but also with those of all the others that he has inspired over the years. He is survived by Jaye "Butch" Campbell, his wife of 36 years, and many other friends and family members.

West Texas medic dies in line of duty

Michael "Mike" Steffen, 65, of Salt Flat, lost his life while responding to an emergency on March 12, 2012. He was responding to a call for additional assistance at a wreck on U.S. Highway 62/180 in his private vehicle when he lost control, the vehicle rolled over, and Steffen died on scene.

Retired from the U.S. Army, Steffen was an ECA and a long-time member of Dell City EMS and Northern Hudspeth County EMS. He served as the first EMS Director for Northern Hudspeth County EMS when it was formed in April 2008. He was the current President of the Board of Directors for Northern Hudspeth County EMS and had been one of the key individuals in organizing last year's successful vote to form an Emergency Services District in Northern Hudspeth County. He was a Texas Ambulance Strike Team Leader and had been involved in many Border Regional Advisory Council activities.

Steffen will be placed in the Texas EMS Hall of Honor at the 2012 Texas EMS Conference.

Moment of radio silence observed June 23

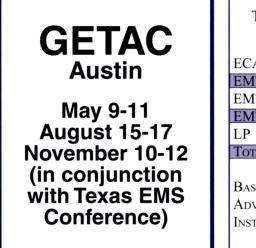
Can't get to Colorado Springs for the National EMS Memorial Service? You can show your support for those in EMS who lost their lives by participating in the fifteenth annual National Moment of Silence at 8:30 p.m. (CST) on Saturday, June 23, 2012. The National Moment of Silence is a simultaneous, voluntary moment of radio silence observed by the nation's EMS providers, agencies and emergency communications centers. The moment of silence is timed to coincide with the moment of silence observed during the actual National EMS Memorial Service held in Colorado Springs, Colorado, that day. In the past, more than 700 agencies and dispatch centers from around the United States have participated in the moment of silence. The National EMS Memorial Service has prepared a suggested script, which is available at http:// nemsms.org/silence.htm.

EMS Local Projects Grant applications due May 17, 2012

The application for fiscal year (FY) 2013 Local Projects Grant (LPG) funding is now available. You can download the application (called a Request for Proposal, or RFP) from the Texas Electronic State Business Daily (ESBD). Go to www.dshs.state.tx.us/emstramasystems/LPG2013announcement.shtm for information and the link to the ESBD site.

The following are application details that can help ensure your application is received and processed.

- The application deadline is May 17, 2012, at 2:00 P.M. C.D.T. Applications received after the deadline **will not be considered**. Applications must be mailed; those received by email or fax will not be considered.
- Eligible applicants will be department-licensed EMS providers, department-registered first responder organizations, Regional EMS/ Trauma Advisory Councils (RACs), EMS education organizations and prehospital injury prevention organizations. Organizations must be a legal entity under state statutes and maintain good standing with DSHS and other state and federal programs. Detailed requirements are listed in the RFP.
- Projects funded through LPGs include EMS personnel certification training; specialty training related to prehospital health care management; communication equipment; patient care equipment, including ambulances and non-disposable supplies; injury-prevention projects and continuing education programs. We recently began funding accreditation fees paid to CoAEMSP and CAAHEP for department-approved paramedic education programs seeking initial CoAEMSP accreditation. Accreditation fees paid prior to the LPG contract start date or after the contract end date will not be eligible for reimbursement. Refer to the RFP for details.
- Frequently asked questions from previous years are included on the RFP in Appendix F. The deadline to ask new questions about the RFP has passed; however, all new questions and answers submitted before the deadline are posted on the Electronic State Business Daily website at esbd.cpa.state.tx.us/bid_show.cfm?bidid=93882.



TEXAS EMS CERTIFICATIONS		
April 4, 2012		
ECA	2,956	
EMT	32,202	
EMT-I	3,893	
EMT-P	15,562	
LP	6,090	
TOTAL	60,703	
BASIC COORDINATOR	115	
Advanced Coordinator	223	
Instructor	2,192	

EMS Obituaries

James "Jim" Collins, 37, died April 9, 2012. Collins served as a sergeant in the U.S. Army from 1998 until 2003. In July 2008, he joined the Brazos County Precinct 4 Fire Department and served as a firefighter and EMT. Most recently, Collins was a paramedic with St. Joseph EMS.

Thomas William "Bill" Dillion,

49, of Bellville, collapsed suddenly and died on March 14, 2012, while responding to a fire call in Houston. Dillion joined the Houston Fire Department in 1989



and climbed the ranks throughout the years, becoming certified as an EMT, and ultimately reaching Senior Captain in 2002.

Brody Fleming, 24, of The Colony, died March 12, 2012, following a March 7 stroke. Fleming was a fire rescue specialist and EMT with the Plano Fire Department and had previously served in the Navy in Japan.

Kenneth Klein, 65, of Plano, died March 24, 2012. Klein's EMS career spanned more than 25 years, largely with the Plano Fire Department. He was awarded the EMS Administrator of the Year award by the state of Texas in 2010. Klein was a licensed paramedic, EMS captain and at the age of 50, became a registered nurse. He retired from the city of Plano in January 2012.

Anthony "Tony" Myers, 73, died March 1, 2012, in Fort Wayne, Indiana, following complications from a long-term illness. Myers had retired from East Texas Medical Center after serving as vice president of EMS. During 17 years with ETMC-EMS, Myers helped expand the service area throughout East Texas and developed a national outreach program, Paramedics Plus.

National EMS Week May 20-26 National Trauma Awareness Month May

National Trauma Awareness Month Decide to Drive: Arrive Alive!

This year communities are asked to the focus is on the growing problem of distracted driving.





Fact sheets, pamphlets, videos, and games directed at educating the public on distracted drivers and persons or things that will distract the driver are available at www.amtrauma.org/injurypreventionprograms/index.aspx. May is the month for communities to come together and spread the word on injury prevention and celebrate those who dedicate themselves to saving lives.



National EMS Week May 20 – 26 More Than A Job. A Calling



National Emergency Medical Services Week brings together local communities and medical personnel to publicize safety and honor the dedication of those who provide the day-today lifesaving services of medicine's "front line."

This information can be used throughout the year for public education and safety programs. Visit www.acep.org/emsweek to download the 2012 planning guide.



DSHS releases drug "shortage" statement

DSHS is aware of drug shortages cited by the U.S. Food and Drug Administration (www. fda.gov/Drugs/DrugSafety/ DrugShortages/ucm050792.htm). Some of the drugs on the FDA list, such as fentanyl, magnesium sulfate and lidocaine, are being used to treat patients in the prehospital setting by emergency medical services providers.

If DSHS receives a complaint that a provider is using expired drugs or expired drugs are found on an ambulance during an inspection, DSHS will require the EMS organization to provide documentation from the manufacturer and the provider's medical director regarding the shortage of the specific drug(s) before considering an enforcement action. DSHS is recommending that this documentation be present on any ambulance that has expired drugs approved by the medical director. For additional information visit the Texas Medical Board at www.tmb.state. tx.us/news/press/2012/120224.php.

Garland EMT/ firefighter hurt

Garland EMT/firefighter Bobby Brinkley has a fractured skull after being struck by a highpressure air tank while on a call to rescue a dog in a creek in March. The tank was being used to inflate a raft that would be used in the rescue. The heavy, metal tank came loose from the raft and hit Brinkley in the face. He was taken by Careflite to Parkland, where he remained in intensive care for several days. He is at home now and is expected to fully recover with no neurological deficits.

Accreditation rule goes for public comment in April

EMS Rule §157.32 Emergency Medical Services Education Program and Course Approval, which addresses accreditation of paramedic education programs, was reviewed and discussed by the State Health Service Council on February 22. After hearing public comment, the Council passed the rule unanimously on February 23. Following review by the DSHS Office of General Counsel and the Health and Human Services Commission, the proposed rule will be published in the Texas Register for a 30-day public comment period. The anticipated publication in the Texas Register is late April. We will make an announcement on our website once we receive notification of publication of the proposed rule in the Texas Register. To sign up for email updates on this topic or others, go to www.dshs.state.tx.us/emstraumasystems and click on "Sign up for email updates" on top right.

Houston EMS Office welcomes new specialist

A new EMS specialist has joined the DSHS EMS office in Houston. Robin Duckett, a native of La Porte,



Robin Duckett

began her service in EMS in 2006 with the Deer Park VFD. In October 2007, she started working with the Memorial Hermann System as an emergency room technician where she provided patient care and employee training. She returned to school and is working toward a bachelor's in psychology with a minor in communications. Her email address is Robin. duckett@dshs.state.tx.us and her phone number is (713) 767-3334.

Updated fingerprint form online

Here's some good news from L-1 Identity Solutions: The fee has been reduced for the FBI fingerprint criminal history check required for all initial and reciprocity applications. L-1 Identity Solutions (www.L1.com) handles all fingerprint requests. The price is now \$41.45,



down about \$3. An updated form is online at www.dshs. state.tx.us/emstraumasystems/formsresources.shtm. As a reminder, make sure you access the most recent DSHS form for all your certification needs by going to the "Forms and Resources" area of the website (link is on upper right) and printing a new form each time you need one. Submitting an outdated form can delay processing.

MedStar names new executive director

Douglas Hooten was named executive director of Fort Worth's MedStar in February. He comes to the Fort Worthbased 9-1-1 and non-emergency provider with thirty years of EMS experience, including stints at American Medical Response, Metropolitan Ambulance Service Trust in Kansas City, and Rural/Metro Ambulance in South Carolina, Ohio and Georgia. Hooten started his EMS career as a field paramedic in Conroe. He holds an undergraduate degree in business administration from Sam Houston State University and a master's in business administration from Rockhurst University in Missouri. MedStar responds to 100,000 calls each year in Fort Worth and 14 other Tarrant County cities.

Suicide attempt shuts down ED in Florida

A Florida emergency department near Fort Lauderdale had to be temporarily shut down after a man who attempted suicide vomited up poison, sickening the three paramedics transporting him. The



man had tried to kill himself by drinking the pesticide malathion. Paramedics responded and found the man on his front lawn about 1:30 a.m. and transported him. While en route, the man threw up the poison, making the three paramedics dizzy and nauseous. The man was brought into a containment area at a hospital but the emergency department was closed as a precaution. The ambulance was put into quarantine and decontaminated along with the hospital equipment. The man survived and the emergency department reopened the next morning.

Texas nurse sentenced to life for dialysis deaths

It was the paramedics who first reported something amiss at the DaVita Dialysis Clinic in Lufkin in 2008. The medics were making so many calls there – 16 patients in two weeks – that a fire department official wrote an anonymous letter asking DSHS to take a look. At that point, EMS had been called as many as 30 times in a month, and four people had died. Within days, DSHS inspectors showed up at the clinic. While they were there, two more patients became ill and suspicion fell on Kimberly Saenz, LVN, who was suspected of injecting bleach into dialysis tubing. Saenz was sent home, the clinic shut down, and Saenz was then fired. In March, Saenz was convicted of capital murder and sentenced to life without the possibility of parole for causing the patient deaths. The clinic reopened about two months after it was closed.

Harbert moves to new job

Jodie Harbert will take the reins as program director of the Blinn College EMS Program in May. Harbert was most recently associate professor of EMS at Collin County Community College. Blinn College received accreditation from the Commission on Accreditation in Allied Health Education Programs in January of 2011. The program recently relocated to a state-of-theart facility on the Texas A&M campus in Bryan. Harbert serves as the GETAC **Education Committee Chair** and represents EMS educators on the Governor's EMS and Trauma Advisory Council.

Ready Teddy books being phased out

The budget crunch has finally impacted the Ready Teddy materials available free from DSHS. Ready Teddy coloring books are currently being reprinted, but once that supply is gone they will not be re-stocked. Orders will still be limited to 500 coloring books. However, the coloring books will remain available online in a PDF format, and organizations are free to print their own books from the online file. In addition, the Ready Teddy bearamedic suits, which have seen much better (and less smelly) days, are being retired. A decision has not been made on the other materials.



On Duty



July deadline for Star of Texas nominations

In 2003, the 78th Texas

Legislature passed House Bill

On Duty

1937, which created the Star of Texas Awards to honor first responders killed or seriously injured while performing their duties as peace officers, firefighters and emergency medical first responders. The law also designated September 11th of every year as Texas First Responders Day. The first Star of Texas awards were presented in 2004 to three Texas first responders, one for each category of first responder: emergency medical, fire and law enforcement. The Texas Legislature amended the original legislation to require awards for each first responder seriously injured or killed after September 1, 2003. To be eligible for consideration for this year's awards, the critical incident must have occurred between September 1, 2003, and June 30, 2012, and the individual must have not previously received a Star of Texas Award. Nominations for this year's awards may be submitted no later than July 31, 2012. The awards ceremony will be held in the fall of 2012. To nominate an individual for a Star of Texas Award, please fill out the form at http://governor.state.tx.us/ cjd/star_awards.

Two ways to honor emergency responders

Besides the awards given at Texas EMS Conference, DSHS honors individuals in EMS in two other ways. For information about either of the following, contact Kelly Harrell at (512) 834-6743 or at kelly.harrell@dshs.state. tx.us.

Texas EMS Hall of Fame

The Texas Department of State Health Services honors individuals who have made significant contributions to emergency medical services in Texas. This honor is intended to remain a permanent part of the EMS history of this state. Nominations are due June 1. For more information on how to nominate someone for Texas EMS Hall of Fame or to see who is in the Hall of Fame, go the website at www.dshs.state.tx.us/ emstraumasystems/emsfam.shtm.

Texas EMS Hall of Honor

The Texas EMS Hall of Honor memorial honors emergency medical service personnel who lost their lives in the line of duty. The plaques hang permanently at the Office of EMS/Trauma Systems Coordination in Austin as a tribute to those individuals who made the ultimate sacrifice for public safety. Each plaque holds engraved names along with certifications and licensure, and date of death. The plaques are also displayed each year at the conference. Find the names of those killed in the line of duty at www.dshs.state.tx.us/emstraumasystems/emshon. shtm.



Texas EMS Hall of Honor memorial is on display each year at Texas EMS Conference.

Send in your EMS Awards nominations

Send us your best in EMS and trauma! We're making the process easier than ever this year – all you have to do is go to our website, click on Texas EMS Conference, then scroll down the page until you see Texas EMS and Trauma Awards. That link will take you directly to a page where you fill out the nomination form. No need to save and email to us. Once you've finished, a page will come up that allows you to print the nomination for your records. No need to submit after that – once you close the page, it will be routed to us. Best of all, you will get an email letting you know we received it.

When filling out the nomination, please include written explanations of why this person or organization should win. Please be specific, using examples when possible. Keep in mind that the people who review the nominations most likely won't be as familiar with your nominee as you are. Nominations will be accepted until **September 28**, **2012.** These are then given to programs in the Office of EMS and Trauma Systems Coordination and sent to each EMS zone office. Each program and zone ranks the nominations for each category and returns the information to the Office, where scores are tallied. Scores are kept confidential from all except those who tally the scores. Winners are announced at the Awards Luncheon at Texas EMS Conference.

Award Categories 2012

EMS Educator Award EMS Medical Director Award EMS Administrator Award Public Information/Injury Prevention Award Citizen Award Private/Public Provider Award Volunteer Provider Award First Responder Award Air Medical Service Award Outstanding EMS Person of the Year Telecommunicator of the Year Regional Advisory Council of the Year Trauma Facility of the Year

National EMS Memorial Service set for June

The 20th Annual National EMS Memorial Service will take place on June 23, 2012, in Colorado Springs, Colorado. The event honors those in EMS who have given their lives in the line of duty. The 20 individuals being honored this year join 581 others previously honored by the National EMS Memorial Service. There are no Texans being added to the rolls this year.

The mission of the National EMS Memorial Service is to honor those in EMS who have given their lives in the line of duty, and to recognize the sacrifice they have made in service to their communities and their fellow citizens. Each year since 1992, hundreds of family members, friends, coworkers, EMS and political leaders, and colleagues from EMS agencies from around the nation gather together for the ceremony. Members of the honorees' families are presented with a medallion, symbolizing eternal memory; a U.S. flag that has flown over the Capitol, symbolizing service to the country; and a white rose, symbolizing undying love. Each honoree's name is engraved on a bronze oak leaf which is added to the National EMS Memorial. For more information go to www. nemsms.org.

Texas EMS Conference



See you in Austin!

Austin Convention Center November 11-14

Exhibit Hall Hours

Sunday 2 to 7pm Monday 11am to 6pm Tuesday 8 to 11am

Education

One-hour lectures Two-hour, hands-on workshops In-depth preconference classes

The full package includes

Up to 15 hours CE credit Exhibit Hall pass Conference logo tote bag Coffee and snack breaks each day Buffet lunch on Monday Awards Luncheon on Tuesday

New!

Exhibit Hall Passes

-Included with conference registration
-Included with preconference registration
-Pass only: \$10 before 10/26, \$15 at the door



Austin Convention Center

Saturday, November 10

7:00 am - 6:00 pm Exhibitor registration 3:00 pm - 6:00 pm Attendee registration

Sunday, November 11

7:00 am - 7:00 pm Registration 2:00 pm - 7:00 pm Exhibit Hall open 4:00 pm - 6:00 pm Welcome Reception

Monday, November 12

7:00 am - 6:00 pm Registration 8:15 am - 9:30 am Opening Session 9:45 am - 10:45 am Workshop Breakouts 11:00 am - 6:00 pm Exhibit Hall open 11:00 am - Noon Workshop Breakouts 11:30 am - 1:00 pm Lunch 1:30 pm - 2:30 pm Workshop Breakouts 2:45 pm - 3:45 pm Workshop Breakouts 4:00 pm - 5:00 pm Workshop Breakouts

Tuesday, November 13

7:00 am - 3:00 pm Registration 7:30 am - 8:30 am Workshop Breakouts 8:00 am - 11:00 am Exhibit Hall open 8:45 am - 9:45 am Workshop Breakouts 10:00 am -11:00 am Workshop Breakouts 11:00 am Exhibit Hall closes 11:45 am - 1:30 pm Awards Luncheon 2:00 pm - 3:00 pm Workshop Breakouts 3:15 pm - 4:15 pm Workshop Breakouts 4:30 pm - 5:30 pm Workshop Breakouts

Wednesday, November 14

8:30 am - 9:30 am Workshop Breakouts 9:45 am - 10:45 am Workshop Breakouts 11:00 am - Noon Closing Session Conference adjourns

November 11-14, 2012



Special conference rates available at seven downtown hotels.

Hilton Austin

500 East 4th Street Austin, Texas 78701 (800) 236-1592 \$98/\$98 Single/Double occupancy or \$204/\$204 for triple/quadruple occupancy Booking code: TXE The Hilton Austin, adjacent to the convention center, will be the conference host hotel.

Hampton Inn & Suites Austin-Downtown

200 San Jacinto Boulevard Austin, Texas 78701 (512) 472-1500 \$98/\$98 Single/Double occupancy or \$159/\$159 for triple/quadruple occupancy Booking code: EMS The Hampton Inn is just one block west of the convention center.

Four Seasons Hotel Austin

98 San Jacinto Boulevard Austin, Texas 78701 (512) 685-8100 \$139/\$139 Booking code: EMS Call (512) 685-8100 and reserve rooms using the booking code. The Four Seasons Hotel is near Lady Bird Lake and just one block south of the convention center.

Courtyard Austin Downtown

300 East 4th Street
Austin, Texas 78701
1-800-Marriott
\$99/\$99 Single/Double occupancy
or \$99/\$99 for triple/quadruple
occupancy
Booking Code: TX EMS
The Courtyard Marriott is just up
the block from the convention center

entrance and adjoins the Residence

Inn

Hilton Garden Inn Austin Downtown 500 North IH 35 Austin, Texas 78701 (877) 782-9444 \$90/\$90 Single/Double occupancy or \$90/\$90 for triple/quadruple occupancy Booking code: EMC The Hilton Garden Inn is located 1 Block from the Hilton Austin and the Austin Convention Center

Residence Inn Austin Downtown

300 East 4th Street Austin, Texas 78701 1-800-Marriott \$104 Booking code: TX EMS



Radisson Hotel & Suites Austin-Town Lake 111 Cesar Chavez Street Austin Texas 78701 (800) 333-3333 \$85/\$85 Single/Double occupancy or \$105/\$125 for triple/quadruple occupancy Booking code: Texas EMS Conference The Radisson Hotel is at the corner of Congress Ave and Cesar Chavez St, about three blocks west of the convention center.

NOTE: To book a hotel online, go to our website at www. dshs.state.tx.us/ emstraumasystems and click on the Texas EMS Conference site.

2012 Texas EMS Photography Contest CASH for your best EMS photos! Inter for a chance to win hundreds in cash prizes and be published in Texas EMS Magazine. For details, go to: www.dshs.state.tx.us/ emstraumasystems/

photocontest2012.pdf. Deadline for entry is October 26, 2012.

Registration deadline October 15 — prices increase October 16 For registration information or to find out whether a class is full, call (512) 759-1720. For information on class content, contact the person indicated in the class description.

Friday–Saturday–Sunday National Association of EMS Educators Instructor Course: \$435;

Friday, 11/9, 8:00 am-5:00 pm; Saturday, 11/10, 8:00 am-5:00 pm: and Sunday, 11/11, 8:00 am-5:00 pm; lunch on own; Hilton Austin; CE: Additional. NAEMSE presents the EMS Instructor Course, which has been designed and developed by the same individuals who produced the DOT/ NHTSA 2002 National Guidelines for Educating EMS Instructors. The NAEMSE Instructor Course represents the didactic component and practical application of the beginning education process to become an EMS instructor. The content of this 40-hour course aligns the NAEMSE developed modules with the curriculum objectives of the 2002 National Guidelines. NAEMSE recognizes that the development of a professional EMS educator requires many components, including formalized education in all aspects of the educational process, practical experience in teaching and mentoring by other members of the educational team to foster personal growth and development. This course does not include all these components, but it does offer the beginning steps of the process. Enrollment will be limited to 100 participants. Individuals must complete a 16-hour online course before attending the class. Information about the online course will be sent after registration. Individuals who attend the entire course and pass the post test will receive a Certificate of Course Completion from NAEMSE and will be eligible for Texas instructor certification. Continuing education hours have been applied for through NAEMSE, which is accredited by the Continuing Education Coordinating Board for Emergency Medical Services (CECBEMS). For more information on course content,

contact Stephanie Patton at Stephanie. Patton@naemse.org or (412) 343-4775.

Saturday–Sunday Advanced Hazmat Life Support:

\$200; Saturday, 11/10, 8:00 am-5:30 pm; and Sunday, 11/11, 8:00 am-5:30 pm; $1\frac{1}{2}$ hours for lunch on own; Austin Convention Center; CE: Patient Assessment, Medical, Special considerations. The Advanced Hazmat Life Support (AHLS) Provider program gives health professionals a timely and effective response strategy in the medical management of hazmat incidents. Participants will receive a four-year verification status upon successful completion of the course. This course covers a vast array of hazardous materials, including pesticides, corrosives, toxic inhalants and chemical, biological, radiological and nuclear agents. AHLS Provider course participants learn how to rapidly assess hazmat patients, recognize toxic syndromes (toxidromes), apply the poisoning treatment paradigm, and identify and administer specific antidotes. Support for this ALHS training provided by the CDC through a Public Health Emergency Prepartedness grant under the administration of DSHS. Attendees must contact Judy Whitfield for additional pre-class registration with AHLS, (512) 776-6328 or Judy. Whitfield@dshs.state.tx.us.

Advanced Medical Life Support:

\$350; Saturday, 11/10, 8:00 am-5:30 pm; and Sunday, 11/11, 8:00 am-5:30 pm; 1¹/₂ hours for lunch on own; Austin Convention Center; CE: Medical. AMLS is a 16-hour program with interactive lectures, teaching and evaluation stations. The interactive/ case-based lectures include the following topics: patient assessment, airway management, assessment of

the shock patient, dyspnea/respiratory failure, chest pain, altered mental status and abdominal pain. Skill station practice follows the lectures each day. Students will learn to perform a thorough AMLS systematic patient assessment, discuss possible differential diagnoses from initial assessment information, identify probable differential diagnoses from focused history, physical exam and diagnostic information and navigate from an initial assessment-based approach to a diagnostic-based approach to assessment Initiate and modify management strategies based on assessment findings and patient response. Attendees must download an AMLS pre-test (choose ALS or BLS), and bring the completed test to the preconference class, www. uthscsacommed.org/resources.html. Also, attendees can purchase the textbook, AMLS-Advanced Medical Life Support, 1st edition, by the NAEMT, but it is not required.

Coordinator Course: \$600; Saturday, 11/10, 8:00 am-5:30 pm; and Sunday, 11/11, 8:00 am-6:00 pm; lunch provided both days; Austin Convention Center; course limited to 25 attendees. No CE. Exam on Mondav at the Convention Center. This 16-hour course is intended to train Texas EMS course coordinators. Participants will be selected through a competitive application process. To apply, complete and mail the course application along with the required documentation and a letter detailing justification for your enrollment. Do not complete a state certification application at this time. The course application and screening criteria can be found at www.dshs.state.tx.us/ emstraumasystems/CoordinatorCourse. shtm. Course applications must be postmarked on or before July 16,

Registration deadline October 15 — prices increase October 16 For registration information or to find out whether a class is full, call (512) 759-1720. For information on class content, contact the person indicated in the class description.

2012. Do not submit a fee until you receive an invoice for payment and an acceptance letter detailing additional steps of the process. Mail the completed course application, without payment, to Phil Lockwood, Texas EMS Conference, PO Box 142694, Austin, TX 78714. Attendees will be selected by September 1, 2012, and notified by U.S. mail shortly afterward. Upon receipt of an acceptance letter, you will have until September 30, 2012, to submit payments for the preconference coordinator course and the state coordinator certification application and fees. For more information on course content, contact Phil Lockwood at phil. lockwood@dshs.state.tx.us or (512) 834-6700 x2032.

NAEMT's Emergency Pediatric

Care: \$250; Saturday, 11/10, 8:00 am-5:30 pm; and Sunday, 11/11, 8:00 $am-5:30 pm; 1\frac{1}{2}$ hours for lunch on own; Austin Convention Center; CE: Pediatric. NAEMT's Emergency Pediatric Care (EPC) course focuses on the care of sick and injured children, addressing a full spectrum of emergency illnesses, injuries and scenarios that an EMS practitioner might encounter. EPC is different from any other EMS continuing education course in that it provides an in-depth understanding of the pathophysiology of the most common pediatric emergency issues, and it stresses critical thinking skills to help practitioners make the best decisions for their patients. For information on course content, contact Paul Garcia at ssti@me.com.

PEPP: Pediatric Education for Prehospital Professionals: \$375;

Saturday, 11/10, 8:00 am–5:30 pm; and Sunday, 11/11, 8:00 am–5:30 pm; 1¹/₂ hours for lunch on own; Austin Convention Center; CE: Pediatric.

Pediatric calls are some of the most stressful times as an EMS provider. Even in a noncritical setting, assessing a pediatric patient presents unique challenges: Only 10 percent of calls involve children, and only 1 in 100 deal with critical pediatric patients. To lessen the stress of these calls, this class offers a comprehensive source of prehospital medical information for the emergent care of infants and children. Developed by the American Academy of Pediatrics, it is designed specifically to teach prehospital professionals how to better assess and manage ill or injured children. The two-day ALS course is geared toward EMT-Intermediate and paramedic providers. This PEPP ALS class will be taught by Medical City Children's Transport team and pediatric emergency physicians, as well as other pediatric specialists. The lectures are tailored and updated to meet the new AHA standards and to reflect recent pediatric initiatives and best practice in pediatric prehospital care. For more information on course content, contact Craig White at Craig.White@ hcahealthcare.com.

Street Survival for EMS

Professionals: \$450; Saturday, 11/10, 8:00 am–5:30 pm; and Sunday, 11/11, 8:00 am–5:30 pm; 1½ hours for lunch on own; Austin Convention Center; CE: Special considerations. We are adept at medically caring for our patients; however, that medical care cannot be delivered if something happens to us which prevents us from caring for our patient. This course addresses those dangers and the techniques that can reduce and, hopefully, mitigate violence against those who work to save lives.

Building upon the precepts of professional patient assessment skills, the course enhances the patient assessment skills of the attendee and thus his/her physical safety, while increasing the legal protection to the EMS professional, which reduces the liability profile of the organization and the medical director.

The course includes, but is not limited to: violence in society; survival mindset and lifestyle; response and scene engagement practices; safe patient/bystander contact and care; weapons recognition and management; safety on problem calls and transports; responding to and working at violent in-progress calls. For more information on course content, contact Tim Shane at Caliber Press, tim.shane@calibrepress. com.

Saturday

Basic and Clinical Research and Presentation Strategies: *\$275;*

Saturday, 11/10; 8:00 am-5:30 pm; lunch will be provided; Hilton Austin; CE: Special considerations. This class will introduce the participant to the fundamentals of performing basic and clinical research as well as literature reviews. We will discuss interesting uses of common tools widely available and how to find and use some of the lesser-known resources. In this course, we will also discuss the regulatory requirements and pitfalls of humanbased research. We will provide hands-on experience in developing scientific-focused poster and oral presentations. Participants who attend with specific research ideas will receive individualized project assistance from the faculty. For more information on course content, contact David Wampler at (210) 567-7598 or wamplerd@ uthscsa.edu.

Constructing the Multiple Choice Exam: Better Prepare Students for National Certification: *\$220; Saturday, 11/10; 8:00 am–5:30 pm;*

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 $1\frac{1}{2}$ hours for lunch on own; Hilton Austin; CE: Clinically related operations. Constructing test items that accurately measure achievement, ability and aptitude is a task of enormous importance. The quality of those items directly influences the power to interpret test scores. The State of EMS Education Research Project (SEERP) identified as one of the top ten challenges for EMS educators as the task of learning to write realistic and valid exams. This class will introduce EMS educators to very simple techniques for improving the quality of their multiple-choice examinations. For information on course content, contact Kenneth Navarro at kenneth.navarro@ UTSouthwestern.edu.

High Angle Rescue: \$250,

Saturday, 11/10; 8:00 am-5:30 pm; lunch provided; meet off-site; CE: Preparatory, Patient assessment, Trauma. This fun, eight-hour course covers basic equipment used in highangle rescue, rappelling, belays, simple hauls and lowers, and it also teaches self-rescue techniques, patient assessment and patient packaging. Students must bring sturdy boots, rugged clothing, harness (provided if you do not have one), helmet (firefighting, wilderness or industrial style), leather gloves (non-firefighting or hazmat) and canteen or water bottle. Lunch is provided. For more information on course content, contact John Green at john@texasroperescue. com.

Managing Excited Delirium: \$175;

Saturday, 11/10; 8:00 am-5:30 pm; 1¹/₂ hours for lunch on own; Hilton Austin; CE: Preparatory, Patient assessment, Medical, Special considerations, Clinically related operations. This eight-hour class is an interactive, handson approach to safely managing an excited delirium (ED) event. Attendees will learn how to recognize ED and how to safely handle a patient suffering from ED by learning to minimize the risk of injuries to the rescuers and to the patient. Specific take-downs and techniques for capturing and restraining the patient will be demonstrated and practiced. Patient outcomes will also be discussed, as will protocol and department policies. For more information on course content, contact Wren Nealy at (281) 378-0826 or wnealy@ccems.com.

EMS Safety: Taking Safety to the

Streets: \$175; Saturday, 11/10; 8:00 $am-5:30 pm; 1\frac{1}{2} hours for lunch$ on own; Hilton Austin; CE: Special considerations. The class will increase attendees' awareness and understanding of EMS safety standards and practices and develop their ability to effectively implement these practices when on duty. The six-module course will cover the following topics: crew resource management; emergency vehicle safety; operational scene safety; safe patient handling; patient, practitioner and bystander safety and personal health. Course manual included. For more information on course content, contact Michael L. Shelton at (817) 632-0515 or mshelton@medstar911.org.

Sunday

Cave Rescue: \$250, Sunday, 11/11; 8:00 am–5:30 pm; lunch provided; meet at Hilton at 7:15 for bus; CE: Preparatory, Patient assessment, Trauma. Learn the basics of cave rescue in this 8-hour introductory course. This physically strenuous cave class provides lots of hands-on training in patient assessment, patient packaging, hauls/lowers, all while underground in a cave. All necessary equipment is provided except leather gloves and knee pads. Since you will crawling through tight spaces in dirt and mud, this class is not for anyone who is claustrophobic or minds getting muddy. Lunch and transportation provided. For more information on course content, contact John Green at john@texasroperescue. com.

Delivering "The News" with Care and Compassion: *\$150; Sunday,*

11/11; 9 am-4:30 pm; 1¹/₂ hours for lunch on own; Hilton Austin; CE: Special considerations. Dealing with sudden, violent death touches many professionals-emergency medical personnel, doctors, nurses, hospital social workers, law enforcement officers and mental health counselorson a daily basis. Sudden, violent deaths such as homicides, motor vehicle crashes, suicides and school shootings cause hundreds and thousands of parents, children, spouses, grandparents, brothers, sisters and friends to grieve and change their lives forever. Most families experiencing a sudden death say that the most traumatic moment of their life was the notification of the death of their loved one. Most recall vivid tunnel-vision for a portion of it. Likewise, most people who are required to deliver death notifications say it is the most difficult and stressful part of their jobs. This training session is designed to assist you in gaining knowledge regarding a sudden, traumatic death and death. For information on course content, contact Jennifer Northway at Jennifer.Northway@madd.org.

GEMS: Geriatric Education for

EMS: \$150; Sunday, 11/11; 12:00 pm-6:00 pm; working lunch will be provided; Hilton Austin; CE: Special considerations. GEMS is a national continuing education curriculum

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designed to address all of the special needs of the older population, including the geriatric objectives as identified in the EMT-Basic, Intermediate and Paramedic NHTSA National Standard Curricula. The proportion of the aged in society today is greater than ever before and growing faster than any other segment of our population. Current indications are that approximately 34 percent of calls for emergency medical services, or 3.4 million emergency responses, involve patients over the age of 60. For information on course content, contact Rommie Duckworth at romduck@snet.net.

Keeping It Real—Emergent Procedures and Human Anatomy

Lab: \$200; Sunday, 11/11; 8:00 am-6:00 pm; breakfast, lunch and snack provided; off-site at Bulverde Spring Branch Centre for Emergency Health Sciences (bus departs from Hilton Austin at 8:00 am) CE: Preparatory. Keeping It Real is a nationally recognized anatomy program focusing on emergent resuscitation and appropriate procedural interventions. This program is a hands-on experience, blending fresh and embalmed human specimens, in concert with a team of experienced medical professionals (paramedics, nurses and physicians), engaged to teach you the most demanding procedures, with the right dose of appropriateness. This entire course is designed to comprehensively explain and train fundamental to surgical ventilation management, vascular access (IV, IO, CV), thoracic decompression, chest tube placement and management, pericardiocentesis as well as ultrasound assessment and usage. Participants are actively encouraged to locate, visualize, mobilize and explore the anatomy of the human neck, chest, abdomen

and extremities to better appreciate the impact our procedures have on the body—while simultaneously appreciating the more common medical and traumatic complications we frequently encounter. *Keeping It Real* is orchestrated toward the common goal of improving "indication recognition" while simultaneously offering the hands-on experience these procedures require. For more information on course content, contact Scotty Bolleter at sbolleter@bsbems. org.

Neonatal Assessment: \$150; Sunday, 11/11; 8:00 am-5:30 pm; 1¹/₂ hours for lunch on own; Austin Convention Center; CE: Pediatric. This eight-hour class provides a detailed exploration of the skills required to assess an infant within the first month of life. A major emphasis is placed on distinguishing between normal, abnormal and emergent findings in each body system. The knowledge gained in this class will help providers to maintain confidence, composure and efficiency with an unfamiliar patient population. For information on course content, contact Eric Frost at Eric.Frost@ memorialhermann.org.

Pit Crew Approach to Cardiac

Arrest Management: \$150; Sunday, 11/11; 8:00 am–5:30 pm; 1½ hours for lunch on own; Hilton Austin; CE: Preparatory, Medical. Modern EMS evolved from a desire to bring specialized medical care quickly to cardiac arrest victims. Since the birth of EMS, experts have continuously updated resuscitation standards for those victims. Despite these "advances," survival rates following out-of-hospital cardiac arrest remain dismal. A highly trained and efficient NASCAR pit crew can refuel a car, change four tires, and clean the windshield in about twenty seconds. Perhaps an EMS team displaying the same incredible precision and teamwork coupled with a thorough understanding of the science behind resuscitation could influence outof-hospital cardiac arrest survival rates. This course will emphasize the importance of basic life support interventions, the integration of those interventions with advanced care, and the importance of effective team interaction and communication during the resuscitation attempt. Although this course will focus on BLS, participants at every level of certification can learn to improve the quality of their resuscitation attempt. For information on course content. contact Kenneth Navarro at Kenneth. Navarro@UTSouthwestern.edu.

Taking Care of Our

Musculoskeletal Injuries: \$125; Sunday, 11/11; 1:00 pm-5:00 pm; Austin Convention Center; CE: Special considerations. Expanding on a two-hour workshop presented at Texas EMS Conference in 2011, Katie Lyman will offer information on basic musculoskeletal injuries common in EMS providers. This class will be interactive and include hands-on experience involving taping, wrapping, stretching and more. If you've ever experienced an injury, are fearful of being injured, witnessed a co-worker sustain an injury or simply want to help yourself or your colleagues, this class is intended for vou! In order to take care of others. we need to take care of ourselves. Be prepared to participate and learn about caring for your own injuries. For more information on course content, contact Katie Lyman at katie. lyman12@gmail.com.

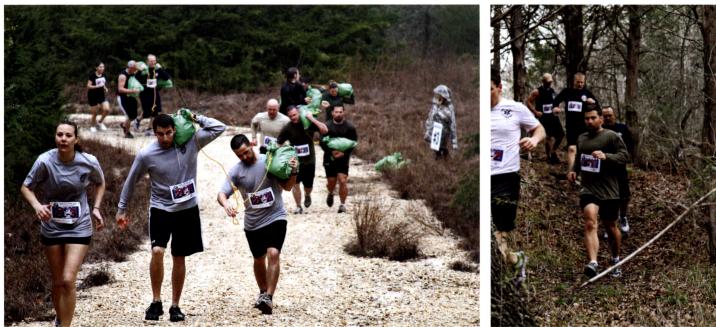
by Kathy Clayton

Brazos Valley adventure race brings sweat, mud

The Brazos Valley Regional Advisory Council hosted the first Battle of the Brazos Valley Public Safety and Healthcare Personnel Adventure Race in February on U.S. Corps of Engineer property at Lake Somerville. The race was a cross between a "warrior dash" and a "tough mudder," designed specifically to challenge public safety and health care personnel.

The organizers' goal was to increase awareness and improve overall health and wellness in public safety and health care personnel, but the real reason for the event had to be to get dirty and have some fun! Three-person teams competed in three events—a trail run, a two-person sand-bag run and an obstacle course that included stairs, boating, ropes and swimming, for a combined six miles of obstacles and trails. Sponsorship from more than 12 businesses and organizations allowed organizers to offer free registration, which quickly hit the participant limit. The race included 100 participants, 30 volunteers, at least 50 spectators and coverage from local media. Medals were given to overall 1st, 2nd and 3rd place teams, plus medals for the firstplace co-ed team. Local businesses donated additional prizes for winning teams. The Washington County EMS-Special Operations Division took top honors, followed by Austin-Travis County EMS, Bryan Fire Department and St. Joseph's Hospital EMS.





The first Battle of Brazos Valley Public Safety and Healthcare Personnel Adventure Race was held in February on Lake Somerville. Threeperson teams participated in a trail run, a two-person sandbag run, and an obstacle course. Photos by Debora Hamff.

A Christmas miracle

November 28, 2011, began as a typical day for Arlington resident Cliff Pace. Late that afternoon Cliff decided to adjust the Christmas lighting display on the roof of his single-story home. Cliff's wife, Kimberly, decided she would go outside to keep an eye on her husband, but shortly thereafter, 48-year-old Cliff collapsed in cardiac arrest on the roof. Kimberly screamed, attracting the attention of Cliff's 17-year-old daughter, Bayleigh. She ran to summon help from Cliff's brother, Michael who



Cliff Pace, center, with wife, Kimberly (R) and daughter, Bayleight (L).



After recovering from cardiac arrest, Cliff Pace joins his wife and daughter and the Arlington Fire Department and American Medical Response crews who were honored for their life-saving actions in December when he suffered a heart attack while adjusting Christmas lights on his rooftop.

lives across the street and happened to be at home.

Michael climbed to the roof and secured Cliff while Bayleigh called 9-1-1. Bayleigh eventually passed the phone to her uncle and mother on the roof. Relying on years'-old CPR training, Michael began chest compressions and coached Kimberly, who had no prior CPR training, on administering rescue breaths.

Arlington Fire Department Quint 7 arrived in just over four minutes, expecting a cardiac arrest patient in a bathroom (because of a minor miscommunication during the 9-1-1 call). Much to the crew's surprise, they saw their patient on the roof, with CPR in progress. They quickly laddered the roof and moved Cliff to the ground. American Medical Response Medic 1 arrived during patient removal. Within 90 seconds of the first unit's arrival, the patient was on the ground with both crews working together to administer CPR and ACLS. Engine 12 arrived with additional personnel to assist. Within 60 seconds of defibrillation, Cliff's heartbeat and respirations returned.

Cliff was released from the hospital a few days later with only a sore chest to remind him of his neardeath experience.

In December, the Pace family met at Fire Station 7 to celebrate "Cliff's Christmas Miracle." Awards for life saving were presented to Cliff's family members along with the AFD and AMR crews who contributed to the rescue.

Increasing the number of Arlington citizens trained to administer CPR is the core mission of the CPaRlington program, recipient of the DSHS 2011 Public Information/ Injury Prevention award at the Texas EMS Conference 2011.

Five firefighters honored for 2011 cell tower rescue

One Crowley and four Burleson firefighters involved in the August 2011 rescue of a worker trapped on a cell tower about 700 feet in the air were presented the Valor Award by the Texas Fire Chiefs Association earlier this month. The award, which recognizes Texas firefighters who risk their own lives to save others, was given to Burleson firefighters Dallas Fowler, EMT-I; Bill Buchanan, EMT-P; Matt Moseley, EMT-P; and Lt. Jeremiah Lozier, EMT-I; and Crowlev firefighter Gary Sansing, EMT-P, during the Southwest Fire Rescue Conference in Frisco in March.

The rescue effort began on the evening of August 3 when a worker who had been on the tower all day replacing equipment with two others was apparently overwhelmed by the heat and could not climb down. The rescuers overcame triple-digit heat, dehydration, cramping and a strong wind to assist the victim.

Lt. Lozier handled operations for the incident and coordinated the rescue. Firefighter Fowler was the first up the tower with a medical bag (water, IV fluids and first aid supplies). The plan was to get the stranded worker hydrated, then help him climb down the tower.

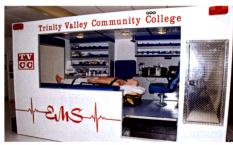
It took Firefighter Fowler approximately one hour to get to the patient. When he reached him, the worker had undone his safety harness and was lying on a platform edge. The worker was in and out of consciousness. The platform the worker was on was approximately three-feet by three-feet and the sides were unprotected. Crews estimated the patient was approximately 6-feet-5-inches tall and 250 pounds.

The incident changed from a simple rescue to a full rescue. Firefighters Buchanan and Moseley started the climb, towing a three-point anchor system and approximately 1,500 feet of rope. By the time they reached the patient, Firefighter Fowler had tossed the patient an IV bag and, on the advice of the medical director, the worker drank the IV fluids. After hydrating, the worker was able to put his safety harness back on and helped the firefighters get him back inside the tower. The firefighters constructed a three-point anchor and pulley system inside the tower and lowered the rope to the bottom where firefighters constructed a belay system. The three firefighters and the worker were all inside the tower as they started the descent.

Crowley Firefighter Sansing climbed approximately one-third of the way up the tower to keep all of the equipment and rope from tangling as the three rescuers and the worker started down. The stranded worker's feet touched ground at 2:30 a.m., seven hours after the rescue began.

"I nominated these firefighters for this award because they demonstrated valor, determination and unmatched courage during this incident," Burleson Fire Chief Gary Wisdom stated in a press release. "They used the training that they had learned and dealt with a very difficult situation and saw it to a successful end. They were all well deserving of this award and they are all heroes."

Trinity Valley Community College introduces ambulance simulator



The new ambulance simulator at Trinity Valley Community College's Palestine campus is dedicated to helping EMT students learn how to work inside an emergency vehicle. The recently completed simulator precisely mimics the specifications of a real ambulance.

Many northeast Texas paramedics and emergency medical technicians are trained by the EMT program at Trinity Valley Community College. Before this semester, however, many of the students in the program had limited experience in an actual ambulance. In order to get a little real experience in the vehicle, local EMTs would visit the college to help train the students. But that presented logistical problems, according to Scott Walker, who has overseen the EMT training program at the college's Palestine campus for 13 years. Specifically, paramedics on duty are often called away, which made getting the students their needed training very difficult.

Thanks to a grant from the Texas Department of State Health Services, that's less of a problem these days. The grant, awarded to the college last fall, has paved the way for the installation of a full ambulance simulator at the Palestine campus. The replica, said Walker, is an exact model of the back of an ambulance. The simulator is equipped with a variety of medical supplies, a state-of-the art heart monitor and even a "patient."

"It really helps us concentrate on the task at hand ... they spend enough time sitting behind a desk. This helps get them into the real world," said Walker. An actual ambulance would have been nice, said Walker, but the simulator has some real advantages. There are no weather concerns during training, he noted. Also, the simulator will soon be fitted with cameras and a monitoring system that will allow an instructor to monitor the students from another room. Not having an instructor present just adds another real-world aspect to the training, said Walker.



Dr. Jennifer Arnold, left, trains Houston Fire Department crews in Texas Children's Simulation Center. Photo by Paul Vincent Kuntz.

Texas Children's Hospital to provide simulation training to Houston Fire Department medics

The Simulation Center at Texas Children's Hospital has begun providing pediatric simulation training for emergency prehospital providers (the program is called Pedi-STEPPs) to members of the Houston Fire Department EMS. A grant from the Cullen Trust for Healthcare, as well as a community benefit donation from Texas Children's Hospital will allow this training to be offered free of charge to the city for 500 firefighters over the next two years.

The training course is part of a comprehensive, yearly curriculum incorporating didactic study, technical skills training and communication/team skills training through participation in high-fidelity simulation scenarios. Each highfidelity simulation is followed by a facilitated video-reviewed debriefing session where participants can learn from their performance. The program organizers and participants, Texas Children's Hospital, Baylor College of Medicine (BCM) and HFD, have been working together for more than 20 years.

"In addition to training hospital staff, it has always been a larger goal of ours to reach further into the community by working with first responders," said Dr. Jennifer Arnold, medical director of the Simulation Center and assistant professor of pediatrics at BCM. "By providing this type of training to the Houston Fire Department, we're making sure pediatric patients and their families receive the best possible care, from the moment help arrives."

Each eight-hour course provides hands-on skills and scenario-based training. The simulations depict rare and high risk senarios, offering the ability to practice life saving skills for neonatal and pediatric patients not normally practiced. The course will offer the opportunity to work through complicated procedures without the concerns or risks associated with learning on real patients.

"We are excited to be a part of the Simulation Center program at Texas Children's Hospital," said Dr. David Persse, physician director of EMS and professor of surgery at BCM. "This access to world-renown training will give us access and hone our skills to tackle high-risk and complicated pediatric emergency situations in the field. We hope this will be a model that other cities can adopt."



Stride4Stroke is a 5-kilometer run/ walk dedicated to promoting education and awareness of stroke symptoms, treatment, prevention and research, held each year in March. This year's sixth annual Stride4Stroke, held at the Rice University football stadium on March 3, attracted more than 3,700 walkers and runners and raised more than \$500,000. Funds raised from participation benefited the Methodist Neurological Institute and its stroke outreach education programs at all Methodist system hospitals.

Tell us your EMS news, and we'll share it in Local and Regional EMS News.



Send your news to: Texas EMS Magazine Kelly Harrell, Editor MC 1876 P.O. Box 149347 Austin, Texas 78714-9347

or kelly.harrell@dshs.state. tx.us (512) 834-6743 Fax (512) 834-6736

The EMS Experience Saluting those with 20 years or more in EMS Don Elbert, LP



Elbert, left, delivers a merit award to Jeremy Blaylock in 2005.

What was your first day on the job in EMS?

Wow. Early October 1974 (while trying to work through college at North Texas State University, which is now the University of North Texas)-at the first of the four ambulance/EMS jobs I've had: a funeral home-based service in Denton. I'll just say that my experiences there were very enlightening. And it was definitely meant to be a temporary job. But what got my attention was seeing where this could lead. "Emergency!" was on primetime TV, and Greg Taylor (now retired officer, firefighter-paramedic from Denton Fire, and good friend) and I were trying the hardest to learn about this new thing called EMS and the kind of training that was part of it. We loved the medical training that would follow.

Which services have you worked for over the years?

Well ... my career has gone from funeral home to hospital-based to fire-based to hospital-based. Denton's Westgate Hospital (now Columbia Medical Center) ran EMS for three years (1975-1978), and the clinical staff there gave us a fantastic learning experience and many opportunities for patient care and in every area of the hospital. This learning experience included EMT and paramedic training. Amazing now to think of how limited and yet-to-be-formalized these courses were in the mid-70s and how few cities had any classes to attend. Despite not being as well-developed as the courses are now, I can say that so many of the same key concepts in education we had then are still the mainstays we teach now.

But the learning process then had another side. We made acquaintance with guys like Gene Weatherall and Jimmy Dunn from *THE Department* who came to test us on skills days. We then learned a new type of pressure. It was called state testing. But despite the stress of that, I appreciate now having gotten to know people like Gene and Jimmy. They were essentially the early founders of our business here in Texas. For anyone who does not know who Gene was, he eventually would become the chief of the Bureau of Emergency Management and really brought Texas EMS into a new era. God rest his soul. A dedicated guy. We hated the pressure of the test, but what really did work was this: when you prepared yourself to pass the skills testing when the "state guys" were coming to test you, you had to know it well, and the result was that those skills would never leave you. I now hate to find many EMTs and paramedics that don't know their basic skills nearly as well as we had to learn them years ago and the reason is, in my opinion, because of much easier testing processes today.

After Westgate Hospital gave up the EMS service in Denton County, the Denton Fire Department took over the service. I spent just short of a year there. It was a great year in my career. Good people, good equipment, working with an engine company on calls. ... I felt like I was Johnny Gage from Squad 51. In early '79 I moved back to my hometown of Tyler and went to work for East Texas Medical Center EMS. I'm so proud to have gotten on-board with an organization that would quickly become a cuttingedge company. It has believed in the right things about the business: training/ education, community service and highperformance operations. I have been here for 33 years with 31 of them in the clinical department (clinical coordinator, FTO, and educator), and the company just gets better every year.

Why did you get into EMS?

I found it interesting and challenging. That simple.

How has the field changed since you've been in it?

From 1974 to now-totally different. I think I've seen the complete evolution of the business. This article does not have enough space to really answer the question thoroughly. But to go from the "stretcher jockey" days to what we have now has been amazing. I would've given anything to have the tools and education that are available now back when I first started. Despite that, I really like having had my early years be in a setting like we had at the hospital EMS in Denton. I have some lifelong friendships from those days. It was a close group with a lot of camaraderie. We worked together and we played together. I miss that group.

I would have never envisioned when I got my first EMT training in 1974-75 that the business could lead to CADs, GPS, NOMAD mapping, the science of capnography, the changes/additions in pharmacology, an amazing array of airway devices, powered stretchers, high-quality 12-lead monitors, extensive protocols and far nicer trucks. One significant and, I think, important change is with medications. It's not the old shotgun approach when, years ago, lots of drugs were just thrown into protocols and onto ambulances without enough evidence to their effectiveness. We all hoped that From the left, Randy Looney, Don Elbert, Gary Drake and Brad Cole embrace their role as medics with the Denton Fire Department in 1979. All four men remained active in emergency servies throughout their careers.

they would work and if one didn't you almost always had another one that you thought might. Now, the right drugs are chosen based on evidence to their effect. A lot of the "old" drugs are gone, and for good reason. The treatment that a paramedic can now provide is far more effective than years ago.

Is there a particular moment or call that stands out?

Every one of us has those certain calls that, no matter how many years later it's been, are the ones you have right at the front of your memory when asked this question. Some may be because they are some of the funniest or strangest things you could ever see. Some are because they were just simply amazing. I think most EMS providers would say, like I will, it's with a life you gave back. I feel fortunate to know I have given more than one life back to someone, and most of these cases are due to being in the right place at the right time with a defibrillator-in my opinion the single most important piece of emergency medical equipment ever created. The call that I reflect on the most occurred with a 42-year-old single mother who experienced a cardiac arrest in her bathtub at her Denton home early one morning. A Denton police officer gets credit for saving her life after he rescued her from the tub in which she was submerged. Her young daughter was unable to pull her out. It then took six defibrillations before I managed to restore her pulse. After delivering her in a deeply comatose state to the hospital, I didn't know what became of her until I was asked to run a 12-lead ECG on a patient in the ED a year later.



It didn't take long for us to discover who the other was, and I felt so good about the save I had made the previous year on this very intelligent, very personable lady who I know meant the world to her stillyoung child at home. To give that young girl her mother back, and to give this nice woman's life back to her was such a great feeling. And still is. Having children of my own is the only experience in life I can say that's been greater for me.

What has been your favorite part of your career in EMS?

Easy: The great people I have worked with and my students who have given of themselves and have thrived in EMS (and in other careers). Numerous former students are practicing physicians. Many are successful EMS administrators now. Some are nurses and have achieved nurse administrator positions. Our operations director here at ETMC-EMS (and former Tyler Fire Chief) was a fire cadet when he took my EMT class. But the best part of it for me is not with those who went into other careers but with those many EMTs and paramedics who have remained on the streets and have developed into the best that can be found anywhere. And they didn't get there because of me. They got to that level by lots of years of practice at paramedicine and by being good people first. The really competent EMT and paramedic is something that only occurs with time. No one walks out of class that way nor gets there with just a little bit of experience. After being in EMS for 38 years I know, if I know nothing else, just how specialized and valuable a skilled EMT or paramedic is. I just want to think I gave them a good foundation and got them started.

Texas EMS/Trauma System marks 20-year anniversary

1992 was quite a year.

Hurricane Andrew, a Category 5 howling blast of wind and water, pounded Florida and muscled its way through the Tennessee River valley, taking the lives of 23 people. An earthquake in Nicaragua killed 116 people; a plane crash in China killed 141; millions of sick and injured people across the U.S. were delivered in ambulances to emergency rooms.

And something else happened: The

Texas EMS-Trauma System was born when a determined group of visionary emergency health care professionals began thinking globally but acting locally. In January, final Texas Department of Health rules were approved for trauma facilities and regional advisory councils (RACs), marking the beginning of a 20-year journey that brought Texas into a leadership role in EMS/trauma systems.

Saving lives and families, especially in rural areas, is what initially spurred the 1989 Texas Legislature to pass into law Chapter 773 of the Health & Safety Code and the Omnibus Rural Healthcare Rescue Act which directed TDH—now the Texas Department of State Health Services (DSHS)—to develop a statewide trauma system.

The Legislature did not initially provide funding for this historic public health initiative that, when enacted, would not only save lives but extend the productivity of working Texans. As a core group of EMS providers, trauma physicians and nurses volunteered countless hours in their "spare time" to develop and improve their regional trauma care plans through their local Regional Advisory



Assistant Commissioner for Regulatory Services Kathy Perkins began her career with DSHS as a statistical clerk. She began working on developing the Texas EMS/Trauma System in 1991.

Councils, they had no idea these small steps would be the foundation of today's EMS/ Trauma System. In just 20 years, the system has grown to 264 designated trauma facilities and 79 stroke facilities, a state-of-the-art Registry coming online soon, and a network



Kathy Perkins, left, works on a grant project at the Bureau of Emergency Management in the early 1990s with Ernie Rodriguez. For several years, Perkins was the only employee in the trauma systems program. Rodriguez, who worked in EMS grants, is now director of Austin-Travis County EMS.



In the early days of designation, Kathy Perkins was personally involved in many of the surveys of Level II and Level III trauma facilities. She would make cold calls to hospitals to see if they were interested in participating in a trauma system.

of 22 free-standing regional councils devoted to emergency medical care and disaster management.

Kathy Perkins, the first person hired into the trauma program, had a conversation with Texas EMS Magazine about what it was like in the beginning. – *Steve Janda*

- **Texas EMS Magazine:** You were around from the beginning. How did you get involved?
- Kathy Perkins: The trauma system got started in 1989 when the Omnibus Rural Healthcare Rescue Act passed in the Texas Legislature. I had a new master's in business and was a nurse and I thought I wanted to do health care administration at a hospital but I couldn't get any interviews. I was hired as a statistical clerk in the Bureau of Emergency Management on the 14th of April 1989, and the legislation passed in May. Six months later TDH posted a trauma systems specialist position and I applied. Then the trauma rules were passed in January of 1992.
- **TEXAS EMS:** At that point, had they started to implement the law?
- **KP:** I started in the trauma job December 1, and the first TTAC (Trauma Technical Advisory Committee) meeting was in January. There had been some behind the scenes work and lots of discussion about

how we were going to make (the law) work because there were no resources for it. There was no funding for many years for trauma systems.

TEXAS EMS: And the law said...

KP: Basically the law told us to do four things. It told us to develop a statewide trauma system, designate trauma facilities and to establish a trauma registry. And the final thing it told us to do was evaluate trauma care in every health care facility in Texas. It was a big mandate. The only way it got passed was that it was attached to the Rural Omnibus Healthcare Act and at the time there was a push from the rural hospitals because they were having a lot of trouble getting their patients transferred to bigger cities. Not just trauma patients. We had patients dying because it sometimes took hours to get patients transferred. And we didn't have the helicopters we have now. It was just a different world.

- **TEXAS EMS:** And there were no designated trauma facilities then?
- **KP:** There were none in Texas, but there were some in other states. In the Vietnam and Korean wars, people realized the quicker



In a 1989 photo from Williamson County, a helicopter transports a patient. There were no designated trauma facilities in 1989; the rules that created Trauma Regional Advisory Councils and trauma facilities were passed in 1992. Photo by Daniel Byram.

they got injured soldiers to a surgeon, to a physician, to a hospital, the better their outcomes were. They started at that point translating that knowledge to trauma care outside the military. Some states at that time were ahead of us: Oregon, Missouri, Florida. So there was some national interest in trauma systems. And trauma facilities.

- **TEXAS EMS:** So what did you do when you first got the job?
- **KP:** We didn't have any money for a trauma system. I don't know what conversations had been going on (about implementation). But once they hired me, the first thing I did was start calling the emergency department directors in the hospitals I thought might be trauma centers someday. So I called people like Jorie Klein, Phyllis Blanco and Donna George. They all stepped up. Every



When this photo was taken in 1996 in Cleburne, the 22 RACs had been established, but there were still only a handful of trauma facilities designated across the state. Photo by Don Peoples.

meeting I went to brought more people in the fold. I created a database list, and every person I talked to I asked if I could put them on my contact list, most said yes.

TEXAS EMS: Cold calls?

KP: Yes, cold calls. I'd say: "Here's what we have to do. Will you help me? The state has no money but I think it's a good thing for patients." I was a nurse but I had never worked in the emergency room and I was honest with them (about that). I told them that I would really depend on their expertise. I put in a lot of miles those first couple of years-I wish I had kept count-traveling across Texas, especially after the rules passed. What we found was even getting everyone together and talking can make a difference in patient care. When people are in the same room talking about what's good for the patient, then you don't have the same old attitudes. Just the relationship-building made a difference in patient care.

Texas EMS: And who developed the rules? **KP:** We had an advisory committee, Trauma Technical Advisory Committee, that worked with the department. It took a lot of thought. Some decisions we made resulted in making our system work better in the end. One thing we realized quickly -- we could not run a statewide system from Austin. The law referenced geographical regions, so it gave us an opportunity to divide the state into regions. We felt strongly about that. The law says, too, that rules must provide specific requirements for the care of trauma patients, must ensure trauma care is fully coordinated with all hospitals and emergency medical services in the delivery area, and must reflect the geographic areas of the state considering time and distance. So we immediately began looking at the best way to break up the state.

TEXAS EMS: And how did you do that?

- **KP:** We first talked to the COGs (Councils of Government, regional entities) and tried to get them interested, but there wasn't any money and they were busy with other issues. But we ultimately used the boundaries of the 24 COGs. Originally, we wanted at least a Level I or Level II in every one of these regions, but we quickly realized that probably wasn't going to be possible because of the size of the state. So we had to go to a Level III, which is very different from what was happening in the rest of the country, where they were designating only Level Is and Level IIs. So we went with at least a Level III, a lead Level III is what we called it at the time. We took those 24 COGs and collapsed two where we didn't think there would be a III and created 22 Trauma Service Areas.
- **TEXAS EMS:** What was the reasoning behind dividing up the state?
- **KP:** That was a big discussion point. I don't think we started initially breaking the state up, but as we started discussing issues like triage, we realized what would work in Austin isn't going to work in San Angelo.

But that decision-making there also defined that Level IIIs could be an important piece in Texas, and it has turned out that way. "Lead" Level IIIs have turned out to keep 90 to 95 percent of trauma. What they may not keep is critical heads, although a lot of them do have neuro; burns; and children and specialties - plastics, reattachments, those kinds of things. We expected lead facilities to be leaders in the RAC. We expected them to get the RAC up and running, to provide outreach to all hospitals and EMS and to work to reduce transfer approvals and also to assist in getting injury prevention activities deeper into our state, not just in the urban areas.

TEXAS EMS: You had the boundaries for the RACs. How did you convince people to start an organization?



Over the years, the EMS/Trauma System has been tested, as it was during this response to a horrific bus wreck outside Victoria. The Golden Crescent RAC (RAC-S) helped coordinate the emergency resources of the area. A National Traffic Safety Board investigator later told the Victoria fire chief that is was one of the best responses he'd seen. Photo by Frank Tilley.

KP: There was another key element in the rules and that was that a hospital could not be designated as a trauma facility unless they had a letter of support from the Regional Advisory Council indicating they were participating. That means there had to be a RAC. There were hospitals that wanted to be designated and they could not until a RAC was in place. That was one thing that helped. I did travel the state. I set up meetings with ED staff, hospital CEOs. But it was mostly nurses and EMS people at these initial meetings. So I went out and tried to convince them it was the right thing to do. We didn't have much guidance.

But I have to be honest, what really kicked it down the road was when the state decided to tie dispro (Medicaid disproportionate share program) to designation. That happened in 1993. The state said any hospital receiving dispro funds had to be designated. So places that were lagging, like the Valley, came on board. I was once told that there would never be a trauma facility in the Valley.



In just 20 years, the system has grown to 264 designated trauma facilities and 79 stroke facilities, a state-of-the-art Registry coming online soon, and a network of 22 free-standing regional councils devoted to emergency medical care and disaster management. Photo by Don Peoples.

TEXAS EMS: Did you take that as a challenge?

KP: Yes. (laughter). But I honestly don't know if dispro had not been tied to it, he might have been right. So we had pockets and holes where we did not have RACs. It was still 1995 before we had all the RACs in place.

TEXAS EMS: Twenty years ago, trauma care wasn't really a well-known phrase. **KP:** People didn't really think of trauma from an injury perspective. In the presentations I made, I had a slide that said "Trauma = Injury." We had to educate people that we were talking about an event where some kind of force caused an injury or potential injury. We also had to define what of the ICD9 codes to include in trauma. I remember we had a big discussion about rattlesnake bites. We ultimately decided they are trauma. But think about it like this: These hospitals are getting designated and have to start including data in these registries. That's a workload issue. We had no money, they

had no money. So this was a hot topic, what to include in the definition of trauma.

TEXAS EMS: It was you and ...

- **KP:** It was just me. Along the way I got a few more staff, but it was just me for a couple of years. There was a point at which they had adopted the dispro rules. I had two boxes of applications from trauma facilities that I reviewed while I was on vacation in the motor home with my husband. There was nobody else to do it.
- **TEXAS EMS:** What was your most daunting challenge in all of this?
- **KP:** The regions wanted us to tell them exactly how to do it-how to set up a RAC. But, what they needed to do was create a RAC that worked for them. There was no "one" way to do it. So I'd tell them: "All the hospitals who take trauma need to be at the table. All the EMS firms need to be at the table. Anyone else you want at the table is fine with me." Then once we got the first set of bylaws and trauma system plans in, we would share them with other developing RACs; they learned from each other. The other thing that was so hard was the trauma registry, which we're still working on. Stakeholders wanted it but we had no money. We cobbled money together from TxDOT for years.
- **TEXAS EMS:** At some point, this became personal for you with your brother.
- **KP:** That brought it home (when my brother was in a car wreck in West Texas). That area didn't have the first RAC, but they had one of the first, and University Medical Center (Lubbock) was the first trauma facility, which is where they took him. When I heard the injury he had, which was a grade 4 or 5 liver fracture, I knew he would likely have died if he'd gone anywhere else. That gives me goosebumps (to think about). Yes, it was working. We'd already seen signs that it was working in the discussions and talks at the early meetings.

TEXAS EMS: What are you most proud of?

KP: I am very proud of the military connection in our system. They have brought something to our system that I don't believe any other state has done. For many years, those Level Is in San Antonio (now one Level I) took 40 percent of the civilian trauma. And I understand why they did that. They did it to train their doctors to take care of our soldiers. At one point we had four (military facilities) in the Texas EMS/Trauma System. So I'm very proud that has been taken to our soldiers in Iraq and Afghanistan.

I am proud that we had the first multi-state RAC, which was the Far West Texas and Southern New Mexico RAC, now called the Border RAC. The RAC also made a point to include input from Mexico. All around the state, trauma patients were coming into our state, not going out of our state. And I'm proud we actually got, without any money, a system built. And I think one of the premier systems in the country.

Texas EMS: What's next?

KP: How do we stay relevant? Right here in our law it talks about emergency health care systems. And I almost got booed out of a trauma systems committee because I wanted to consider changing the name to emergency health care systems. At the time, they did not want to. They said if we get away from our trauma name and bring in disaster and stroke, we'll lose. I can understand some of that, but where are we now with the addition of stroke?

I'm also very proud of the fact that if you take care of critical trauma patients and you handle incidents on a local level every day, those same resources can be brought to bear in a disaster situation. I believed that from the beginning. And it started to show with Tropical Storm Allison and TSA-Q. And now we've seen it again and again with hurricanes and other statewide events.

- **TEXAS EMS:** Did you think that twenty years later we would have fully functioning RACs ...
- **KP:** I dreamed of there being paid staff at the RACs, but I didn't know if it would ever happen. I'm proud of what has been created, that these people came together and built this system. That they came to help and have continued, so many of them, to this day.

Next issue: Funding the Texas EMS/Trauma System



The Texas EMS/Trauma System will soon get a new EMS/ Trauma Registry, which comes online after years of stakeholder input. Data from that registry can be used to spot trends and perhaps prevent injuries. Photo by Joe Duty.



Management of Heat Emergencies

By Kenneth W. Navarro, Assistant Professor, Emergency Medicine Education, University of Texas Southwestern



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Objectives

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

- 1. Understand the basic physiology of thermoregulation.
- 2. Understand the pathology of heat-related illnesses.
- 3. Formulate a treatment plan for the management of heat cramps, heat exhaustion and heat stroke.

Introduction

Heat-related illnesses exist on a continuum and range from mild discomfort to life-threatening neurological and cardiovascular dysfunction. Heat stroke, the most severe of the heat-related illnesses is often fatal but those who do survive frequently suffer permanent neurological injury. This article will familiarize EMS professionals with the pathophysiology and progression of heatrelated illness while providing useful information for developing treatment plans for the various conditions.

Excessive heat is a known public health hazard (Kovats & Hajat, 2008). Many researchers have demonstrated an association between heat and a variety of health-related outcomes, including death (Anderson & Bell, 2009; Baccini et al., 2008; Basu, 2009; Basu & Samet, 2002). Mortality is more greatly affected by the temperature on any given day and to a much lesser degree, the duration of excessive heat days (Gasparrini & Armstrong, 2011).

During the summer of 1996, nearly 700 people in Chicago died as the result of heat-related emergencies (Semenza et al., 1996). More than half of the dead were 75 years of age or older. Seven years later, heat waves across Western Europe killed between 22 and 50 thousand people (Brucker, 2005) with almost 15 thousand deaths in France alone during a 14-day period (Dhainaut, Claessens, Ginsburg, & Riou, 2004). The elderly, again, accounted for the most of the deaths (Brucker, 2005).

Introduction to thermoregulation

The human body attempts to keep its internal temperature within the very narrow range of $97.7^{\circ}F(36.5^{\circ}C)$ to $99.5^{\circ}F(37.5^{\circ}C)$ (Lewis, 2007). This process is called thermoregulation. If the internal temperature falls below the threshold, cells within the body convert stored energy into heat. On the other hand, if the temperature is too high, thermoregulatory mechanisms must rid the body of excess heat before cellular injury occurs. There are four ways for the body to do this.

Infrared radiation is a form of heat energy emitted by all objects. Humans cannot see infrared energy because it is below the spectrum of visible light. Human skin absorbs infrared radiation emitted by nearby objects causing the body temperature to rise. On the other hand, heat created within the body through cellular metabolism radiates away from our skin, heating the objects around us. Although half of our daily heat loss occurs through radiation (Martini, Bartholomew, & Bledsoe, 2002), this method of cooling is ineffective in a very warm environment since the body absorbs more heat than it emits.

Conduction occurs when the body transmits heat directly to another object through touch. Conduction requires physical contact between two objects, such as when a hyperthermic patient sits on a cool, plastic bench. The heat from the body transfers to the bench.

Convection describes the movement of warmed objects and begins when the body conducts heat to the air molecules in contact with the surface of the skin. Since heat rises, the warmed air molecules float away carrying the heat with them. Cooler air molecules rush in to replace the warmer molecules near the surface of the skin. These molecules contact the skin, are heated and float away only to be replaced by cooler molecules starting the process again.

Evaporation involves the conversion of a liquid to a gas. Conduction heats the small beads of sweat that accumulate on the skin during warm weather. Some of the water molecules in the sweat absorb enough energy to break free from the surface of the droplet and float away or evaporate, carrying the energy away from the body.

Although radiation accounts for most of the heat loss from the body, evaporation is the most efficient cooling process and the primary method of cooling on warm days (Glazer, 2005). However, as the humidity rises, the efficiency of evaporation as a cooling mechanism decreases.

The body can adjust its internal physiology in an effort to maximize the efficiency of these primary methods of temperature reduction. For example, in warm weather, the brain sends vasodilatory signals to the blood vessels, especially those near the outside surfaces of the body. Upon receiving the signals, the vessels enlarge, thereby allowing more blood and consequently more heat to flow toward the surface of the skin, which increases the efficiency of all heat transfer mechanisms. In addition, the heat increases sweat production, which places more moisture on skin surfaces and maximizes evaporative efficiency.

The normal physiological response to hyperthermia is to increase cardiac output by as much as 20 liters per minute in an effort to divert the heated blood to the surface of the skin (Bouchama & Knochel, 2002). Patients with preexisting cardiovascular problems, such as the elderly, may not be able to increase cardiac output sufficiently to cool the body, making them more susceptible to the effects of hyperthermia.

Heat illnesses

It is important to recognize the difference between fever and heat illness. Fever is a normal body response that remains under control of the thermoregulatory centers of the brain (Jardine, 2007). Circulating proteins in the bloodstream called pyrogens are capable of resetting the body's internal thermostat, thereby raising the temperature. Within limits, this temperature elevation helps the body fight disease.

Heat illness, on the other hand, occurs

because the body's heat transfer mechanisms, which normally help keep the body cool, become ineffective. Without the heat transfer mechanisms, the thermoregulatory centers in the brain are quickly overwhelmed and the internal temperature rapidly rises to dangerous levels.

Prior to developing life threatening heat illnesses, patients will usually experience lesser degrees of discomfort. The least serious form of heat illness is heat stress, which is the psychological discomfort and physical stress felt by individuals in a hot environment (Jardine, 2007). Although the internal body temperature remains within normal limits, patients experiencing heat stress are often uncomfortable (Bouchama & Knochel, 2002). A slight decrease in physical performance may be the only symptom (Jardine, 2007).

The next step along the continuum is the development of heat cramps. Heat cramps are painful involuntary spasms that usually develop in the muscles of the calves, thighs and shoulders within several hours of vigorous exercise (Lugo-Amador, Rothenhaus, & Moyer, 2004). Although the exact nature of the spasms is unclear, researchers believe that as sweat loss is replaced by water, the concentration of sodium in body fluids falls, resulting in dilutional hyponatremia (Hubbard, Gaffin, & Squire, 1995; Olson & Benowitz, 1984; Wexler, 2002). The internal temperature of a patient experiencing heat cramps is often within normal limits, although slight elevations are not uncommon.

Once the body temperature starts to rise, the patient progresses to heat exhaustion (Jardine, 2007). Heat exhaustion produces a mild degree of dehydration with or without accompanying sodium and other electrolyte abnormalities (Jardine, 2007). Temperatures are above normal but do not generally rise above 104° F (40° C). Patients are sweating, often profusely, with complaints of thirst, nausea, headache and dizziness. There may be associated confusion and vomiting. Normally, however, patients experiencing heat exhaustion do not exhibit any major neurological deficits (Jardine, 2007).

The most serious of the heat-related illnesses is heat stroke. Heat stroke occurs when direct cellular injury results from an increased body temperature (Jardine, 2007). Prolonged internal temperatures of 105.8° F (41° C) or greater will cause a change in the structure of cellular proteins in a process known as denaturing. Once these proteins denature, they no longer function and the cell dies. If enough proteins within an organ denature, the organ is at risk for failure. Approximately 12 to 60 percent of people who suffer a heat stroke will die (Jardine, 2007; Bouchama, Dehbi, et al., 2007).

EMS professionals can distinguish between heat stroke and heat exhaustion by three characteristics. Heat stroke will have a history





of exposure to elevated ambient heat, an internal temperature greater than 104° F (40° C) and neurological dysfunction (Jardine, 2007). Patients suffering from heat stroke will be severely dehydrated and present with hot, dry and flushed skin (Bouchama & Knochel, 2002), although one should not consider the absence of sweat a diagnostic criterion (Lugo-Amador, Rothenhaus, & Moyer, 2004). In fact, loss of sweating is a rare clinical finding in exertional heat stroke (Epstein & Roberts, 2011).

Heat stroke is a multi-organ problem and the signs and symptoms are a reflection of the degree to which the organ systems are injured. One study demonstrated that one-third of heat stroke patients have failure in more than one organ system (Bouchama & De Vol, 2001). A hallmark of heat stroke is the presence of neurological dysfunction, which may range from confusion and delirium to coma and seizures. Generally, severe neurological dysfunction does not occur with rectal temperatures under 105.8° F (41° C) (Jardine, 2007). Patients with severe neurological dysfunction have a poor prognosis (Jardine, 2007).

Patients suffering from heat stroke often present in shock, especially when internal temperatures exceed 107.6° F (42° C). As many as 65 percent of heat stroke victims experience circulatory failure (Sprung, 1979). Early in the heat illness continuum, hypotension results from the vasodilation produced by the body in an attempt to cool the system. Continued fluid losses through incessant sweating, which can be greater than one to two liters per hour (Epstein & Roberts, 2011) produce dehydration that contributes significantly to the low blood pressure (Jardine, 2007). Although dehydration is not the direct cause of the heat stroke, its presence may impair cooling mechanisms and promote cardiovascular collapse (Epstein & Roberts, 2011).

Hyperthermia causes bleeding within the gastrointestinal tract, along with a release of harmful endotoxins. These toxins, along with other harmful substances, place the liver at risk for damage. A significant percentage of patients suffering from heat stroke develop renal insufficiency (Jardine, 2007). Severe hyperthermia shortens red blood cell half-lives, reduces the platelet count and produces disseminated intravascular coagulation.

Researchers classify heat stroke into two categories: exertional heat stroke and classic heat stroke (Epstein & Roberts, 2011). Exertional heat stroke occurs during physical activity and primarily affects young athletes and individuals engaged in strenuous work. Classic heat stroke occurs in individuals who physically lack the ability to escape the heat and may appear despite the absence of strenuous physical activity by the patient. This type of heat stroke is more common during the summer months and especially during heat waves (Jardine, 2007).

Two age groups have an increased risk of developing classic heat stroke, the elderly and the sleeping infant. With the elderly, medical conditions such as diabetes and cardiovascular diseases may impair thermoregulatory efficiency while vasoconstrictors and diuretics may alter fluid balance, making the elderly more vulnerable to heat exhaustion with more rapid progression to heat stroke (Lewis, 2007). Bed-confined patients or those with mobility deficits may be incapable of self-hydration or movement to cooler locations. City dwellers are susceptible due to the "heat island effect" created by the concrete infrastructure, which produces environmental temperatures as much as 22° F higher than the surrounding countryside (U.S. Environmental Protection Agency, 2007). Other factors that appear to influence the susceptibility of this age group to heat include pre-existing illnesses, social isolation and lack of adequate air-conditioning (Centers for Disease Control and Prevention, 1995).

Infants lack the physical mobility skills to escape a warm environment. In addition, the sleeping infant may retain excessive heat if covered with a blanket during naptime. In that situation, the infant may not possess the physical maturity to shed the blanket with movement during sleep.

Both infants and children are at an increased risk for classic heat stroke if left unattended in a vehicle directly exposed to the sun or during warm weather. Studies of parked cars in the summer sunlight demonstrate an ambient temperature increase inside the vehicle from 97° F (36° C) to 153° F (67° C) in as little as 15 minutes (King, Negus, & Vance, 1981).

Exertional heat stroke results from the inability to dissipate excess heat produced during physical activity. While high ambient temperatures may contribute to the development of exertional heat stroke, the condition may develop during cooler months if the activity is strenuous. Exertional heat stroke is more common in adolescents and adults. In fact, among high school athletes, it is the third leading cause of death (Coris, Ramirez, & Van Durme, 2004). Exertional heat stroke is less common in children, which is likely the result of disengagement from physical activity due to the heat stress discomfort that precedes heat stroke. Adolescents and adults, on the other hand, may be sufficiently motivated to ignore those early warning signs and push their bodies to dangerous levels.

One common devastating systemic emergency that often accompanies heat illness is rhabdomyolysis (Dr. Gil Salazar, personal communication, August 4, 2011). During rhabdomyolysis, muscle cells disintegrate and release massive quantities of toxic cell components and electrolytes into the bloodstream (Poels & Gabreels, 1993; Vanholder, Sever, Erek, & Lameire, 2000). These substances damage the kidneys (Prendergast & George, 1993), contribute to dangerous electrolyte imbalances (Coco & Klasner, 2004) and significantly alter the acid-base balance of the bloodstream (Dayer-Berenson, 1994; Poels & Gabreels, 1993). In addition, massive amounts of fluid can accumulate in the damaged muscle (Curry, Chang, & Connor, 1989; Vanholder, Sever, Erek, & Lameire, 2000) which can contribute to a profound cardiovascular collapse.

The most immediately life threatening complication of rhabdomyolysis is the cellular release of potassium (Bagley, Yang, & Shah, 2007). Rising potassium levels in the extracellular space can produce respiratory failure, life-threatening ventricular rhythms and asystolic cardiac arrest (American Heart Association, 2005).

Assessment and management

As with all emergency responses, responders must remain safe. The environmental factors that produce the emergency for the patient can create a threat to the responding medical team. Dr. Marshall Isaacs (personal communication, July 26, 2011), Assistant Medical Director for the BioTel system, stresses that medics must remain hydrated throughout the day and not wait for thirst or other symptoms before consuming fluids.

EMS professionals must carefully monitor and aggressively treat any patient suffering from a heat-related illness to prevent the development of heat stroke. If hot or warm patients display any alteration in mental status, medics must assume that heat stroke is present and manage that patient accordingly. Removing the patient from the overheated environment is often enough to begin the cooling process, although rescuers should also remove the victim's clothing while protecting the patient's modesty. If bystanders removed the patient from the offending environment prior to EMS arrival, the internal body temperature may appear normal but the cellular and organ damage has already occurred.

For patients experiencing heat cramps, treatment is supportive and consists of patient rest and oral rehydration with an electrolyte solution (Lugo-Amador, Rothenhaus, & Moyer, 2004). Intravenous administration of a saline solution is an effective alternative to oral rehydration and usually relives the spasms and accompanying pain rapidly. It is usually not necessary to provide analgesics or antispasmodics, as administration of electrolytes will lessen the frequency and severity of the muscle spasms. The spasms often occur in isolation, however they may also present during heat exhaustion. Treatment for patients suffering from heat exhaustion will vary depending upon the presentation. In general, medics should move heat exhaustion patients into a cool environment and remove the patient's clothing. If the patient is alert, has normal vital signs and no clinical evidence of dehydration or vomiting, oral rehydration with an electrolyte solution is usually sufficient.

If the patient fails to respond to conservative treatment, presents with vital sign abnormalities or vomits, intravenous fluid replacement is indicated. Begin with fluid boluses of 250-500 mL and reassess frequently. Medics should assess blood glucose levels and correct any deficits that might be present. Transport to the hospital is essential in order to prevent any complications from electrolyte or blood chemistry imbalances. The vast majority of patients suffering from heat exhaustion recover with no long-term problems (Lugo-Amador, Rothenhaus, & Moyer, 2004), however, if the symptoms do not resolve within 20 or 30 minutes or if significant neurological symptoms begin, the rescuer must strongly consider the possibility of heat stroke as a diagnosis.

Since heat stroke is considered a lifethreatening condition, much more aggressive therapy is warranted. The single most important intervention for EMS personnel to perform for patients suffering from heat stroke is aggressive cooling. Morbidity and mortality are directly related to the duration of the elevated temperature (Chou, Lai, Lee, & Lin, 2003; Costrini, 1990; Costrini, Pitt, Gustafson, & Uddin, 1979; Shapiro & Seidman, 1990). Clinical studies have shown that death most often occurs shortly after the onset of the hyperthermia (Ferris, Blankenhorn, Robinson, & Cullen, 1938; Levine, 1969).

Similar to heat exhaustion, patients suffering from heat stroke must be moved out of the heat and into a cooler environment. However, medics must act much more aggressively to reduce the patient's temperature below 104° F (40° C). Historically, immersing the patient in ice water was considered the most effective method of reducing the patient's temperature quickly (Smith, 2005) with one case series demonstrating a mean temperature reduction to under 102.2° F (39° C) in less than 20 minutes (Costrini, 1990). However, for obvious reasons, this method may not be practical in the prehospital environment.

Many EMS treatment protocols and guidelines recommend the application of cold packs to the patient's neck, axillae and groin, however, a much more effective technique involves evaporative cooling. With this technique, EMS providers remove the patient's clothing and spray the patient with cool or tepid water. The medics then set a battery-operated fan to blow across the patient thereby enhancing evaporation and convection





(Smith, 2005). If a portable fan is not available, medics can manually fan the patient.

Another frequently used method of cooling the patient is the intravenous infusion of chilled saline. This method of cooling has the added advantage of rehydrating the patient who may also be suffering from fluid and electrolyte imbalance (Jardine, 2007). Fluid losses through sweating may approach two liters per hour or more in some patients (Bouchama & Knochel, 2002), although most will not need large volumes of saline replacement (Lugo-Amador, Rothenhaus, & Moyer, 2004).

However, infusion of cold saline is not without risk. The temperature difference between chilled saline and the patient's blood may be as high as 70° F. Dr. Ray Fowler (personal communication, August 3, 2011), Deputy Medical Director for the BioTel system warns that slamming these patients with chilled saline places them at risk for the development of life threatening arrhythmia. Dr. Fowler recommends that medics use room temperature fluids, as long as the saline bags are not as hot as the ambient temperature. Room temperature fluid cools the body efficiently and reduces the risk of arrhythmia.

Heat exhaustion and heat stroke treatment does not end with core temperature reduction. If the patient is exhibiting any signs that suggest rhabdomyolysis, such as altered mental status, arrhythmia or myocardial infarction, Dr. Salazar (personal communication, August 4, 2011) suggests that medics assume the condition is present and begin corrective action as soon as possible. This includes airway management with supplemental oxygen administration, IV fluid resuscitation of at least 1000 ml, continuous cardiac monitoring, blood glucose measurement and early transport to a facility capable of managing the condition.

The neurological disability associated with heat stroke may manifest as seizure activity. Fortunately, anticonvulsants such as the benzodiazepines are effective for controlling these seizures. Any observed respiratory failure is likely the result of neurological impairment instead of pulmonary pathology (Jardine, 2007).

Patients with mild heat stroke usually recover intact, especially if managed early and aggressively. The risk of complication increases with moderate heat stroke, and patients with an internal temperature greater than 107.6°F (42°C) have the poorest prognosis.

Summary

Although EMS personnel cannot prevent summer heat, morbidity and mortality resulting from its effects can be improved through prevention, proper assessment, and prompt and efficacious management. Fortunately, the most common heat-related illnesses are easily managed with rest, relocation and oral rehydration, and they do not result in long-term consequences. However, for those patients who suffer from the most severe form of heat illness, the degree of disability is directly related to the amount of time the patient remains hyperthermic. For those patients aggressive cooling techniques are indicated and may mean the difference between full recovery and death.

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Management of Heat Emergencies Quiz

1. What homeostatic process within the human body attempts to keep the internal temperature within a very narrow range?

- A. Thermoregulation
- B. Heat exchange pump
- C. Frank Starling mechanism
- D. Positive feedback mechanism

2. What process attempts to rid the body of excess heat by emitting infrared energy to the objects around us?

- A. Radiation
- B. Convection
- C. Conduction
- D. Evaporation

3. What percentage of our daily heat loss occurs through radiation?

- A. 20%
- A. 20%
- B. 30%
- C. 40% D. 50%
- D. 30%

4. What process attempts to cool the body by transmitting heat energy directly to a cooler object by physical contact?

- A. Radiation
- **B.** Convection
- C. Conduction
- D. Evaporation

5. What type of heat transfer occurs when a hyperthermic patient sits on a cool plastic bench?

- A. Radiation
- **B.** Convection
- C. Conduction
- D. Evaporation

6. What is the cooling process whereby air molecules are warmed by the body then float away carrying the heat with them?

- A. Radiation
- B. Convection
- C. Conduction
- D. Evaporation

7. What is the most efficient cooling process for the human body on a warm, dry day?

- A. Radiation
- B. Convection
- C. Conduction
- D. Evaporation

8. What happens to peripheral blood vessel size that maximizes the cooling efficiency of radiation, conduction, convection and evaporation on a warm day?

- A. Vasospasm
- B. Vasodilitation
- C. Angiogensesis
- D. Vasoconstriction

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9. You are treating a construction worker who is complaining that he does not have the energy to drive himself home. His boss says he has been working in the sun and the entire crew was profusely sweating in the heat. The patient feels warm to the touch, had no loss of consciousness and no other complaints. How would you classify this heat illness?

- A. Heat stroke
- B. Heat stress
- C. Heat cramps
- D. Heat exhaustion

10. At the finish line at a local charity 10K race, you encounter a male, age 45, complaining of extremely painful muscle spasms in both thighs. The patient is warm to the touch, anxious and must keep moving to prevent to spasms from reoccurring. What is the name for this heat-related illness?

- A. Fever
- B. Heat stress
- C. Heat stroke
- D. Heat cramps

11. You are caring for a female, age 82, at a crowded church service on a very warm Sunday morning. She complains of dizziness, headache, nausea and an overwhelming sensation of being hot. The patient is conscious and alert, warm to the touch and sweating profusely. Family members report that the patient did not pass out but they were afraid that she would not be able to walk to the car. What is the name for this heat-related illness?

- A. Heat stress
- B. Heat stroke
- C. Heat cramps
- D. Heat exhaustion

12. What factor suggests heat stroke instead of heat exhaustion?

- A. Absence of sweat
- B. Neurological dysfunction
- C. Internal temperature of 102°F
- D. Exposure to a hot environment

13. Why are infants at an increased risk from exposure to elevated temperatures?

- A. Large head radiates more heat
- B. Thermoregulatory functions are immature
- C. Lack the physical mobility skills to escape

D. Convection less efficient because of thinner skin

- 14. Which is a common systemic emergency
- that often accompanies heat stroke?
 - A. Rhabdomyolysis
 - B. Malignant hyperthermia

- C. Compartment syndrome
- D. Neuroleptic malignant syndrome

15. What is the most immediately life-threatening complication of rhabdomyolysis?

- A. Protein denaturing
- B. Profound hypotension
- C. Cellular release of potassium
- D. Increasing internal temperature

16. Regardless of which of the heat-related illness is present, what is the first step for EMS professionals to take in the cooling process?

- A. Ice water immersion
- B. Begin evaporative cooling
- C. Remove the patient from the offending environment

D. Place cold packs in the patient's neck, axillae and groin

17. During your assessment of the runner complaining of painful muscle spasms in both thighs, you find a 45-year-old conscious and alert male, warm to the touch, with a heart rate of 150 bpm, a respiratory rate of 32 bpm and a blood pressure of 134/90 mm Hg. Which therapy is *most* appropriate for the field management of this patient?

- A. Intranasal fentanyl
- B. Ice water immersion
- C. Intranasal midazolam
- D. Administration of saline solution

18. You are treating a conscious and alert female age 78 who became dizzy while walking outside. She is warm to the touch, sweating profusely and vomited once prior to your arrival. Her heart rate is 130 bpm, she has a respiratory rate of 38 bpm and a blood pressure of 128/98 mm Hg. The patient has a history of heart disease, hypertension and non-insulin dependent diabetes. Which therapy is *most* appropriate for the field management of this patient?

- A. Ice water immersion
- B. Intranasal phenergan
- C. Intranasal midazolam
- D. Administration of saline solution

19. What is the most important intervention for the prehospital management of heat stroke?

- A. High-flow oxygen
- B. Aggressive cooling
- C. Management of arrhythmia
- D. Correction of acid-base imbalance

20. What is a hazard of administering chilled saline to a patient who suffered a heat stroke?

A. Rhabdomyolysis B. Protein denaturing

C. Electrolyte imbalance

D. Life-threatening arrhythmia

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The U.S. Centers for Disease Control and Prevention issued a warning in February about using methylene chloride, a degreaser and paint remover, to refinish bathtubs after tying it to 13 deaths in 10 states.

The CDC said the alert was based on research that began at Michigan State University. Scientists found 13 deaths between 2000 and 2011 of workers using products

containing methylene chloride to strip paint from residential bathtubs. Three of the deaths were in Michigan, and the remaining 10 were reported in nine other states.

"Each death occurred in a residential bathroom with inadequate ventilation," the CDC said in its Morbidity and Mortality Weekly Report. "Protective equipment, including a respirator, either was not used or was inadequate to protect against methylene chloride vapor."

Using methylene chloride-based products in confined spaces like bathrooms presents great risks, the CDC said. It urged worker safety and public health agencies, manufacturers and trade groups to "communicate the extreme hazards" of their use to employers, workers and the public.

The alert's co-author, Michigan State's Kenneth Rosenman, said it is better to keep the chemical out of the bathroom. Its vapors are heavier than air and likely remain in bathtubs after each application.

"To use products containing methylene chloride safely, work areas must be well-ventilated, and when levels of methylene chloride exceed recommended exposure limits, workers must use protective equipment," said Rosenman, chief of the school's Division of Occupational and Environmental Medicine.

From The Dallas Morning News, CDC issues warning after 13 deaths tied to use of common paint-stripping chemical to refinish bathtubs, by David N. Goodman, February24, 2012.

T eens who use synthetic marijuana, also called "K2" or "spice," could end up in the emergency room experiencing serious side effects, according to a new case report published in March in the journal Pediatrics. Researchers looked at three cases of teens admitted to the emergency room who they suspect were using synthetic marijuana. In each case, they found that teens showed signs of unexpected behaviors, ranging from agitation and increased sweating to an inability to speak and hallucinations.

"These drugs are unregulated," said study co-author Dr. Joanna Cohen, a pediatric emergency physician at the Children's National Medical Center. "Symptoms can be unpredictable because the drug is mixed with other types of chemicals and substances."

"It's important to be able to recognize the signs of drug use and be on the lookout with teenagers," Cohen said. But because synthetic marijuana products vary enormously in terms of the ingredients they contain, recognizing the signs of use may be especially difficult.

Synthetic marijuana contains a blend of plants and herbs which are then sprayed with an active ingredient, such as JWH-018, a synthetic cannabinoid. The active ingredients are similar to cannabis in that they give a marijuana-like high.

The ingredient JWH-018 and four chemicals similar to it were declared controlled substances by the Drug Enforcement Administration in March 2011. However, there are other variations of the drug that remain legally available at convenience stores, gas stations and on the Internet.

The case report includes three teens who arrived at the emergency room showing signs of abnormal behavior. One 16-year-old girl was catatonic, unable to speak or respond to any touch, when she arrived in the emergency room. A urine drug test showed she had cannabinoids in her system. A 16-year-old boy, had problems with movement and trouble with his speech. Although he was alert, he seemed confused, and could only answer simple questions. And an 18-year-old boy was brought to the emergency room agitated and excessively sweating. He was restless, aggressive and uncooperative. All three teens were treated with anti-anxiety or anti-histamine medications that seemed to help with their symptoms. They recovered from their states.

There is a growing body of evidence reporting the complications of synthetic

marijuana, Schnei said, but it's still not known how many people are using it and not having complications. This could explain why the drug continues to be popular. According to the National Institute on Drug Abuse, 11 percent of nearly 15,000 high school seniors surveyed reported using K2 in 2011.

From MSN.com, Side effects of synthetic pot—aka "Spice"—may be missed by ER docs, Linda Thrasybule, March 19, 2012.

The number of calls to poison centers concerning teens ingesting cinnamon as part of a "cinnamon challenge" has increased dramatically in the first three months of this year, according to the American Association of Poison Control Center's National Poison Data System.

From January to March, poison centers received 139 calls regarding teen exposure to cinnamon, and 30 required medical evaluation. In 2011, poison centers received 51 calls regarding cinnamon exposure.

As a result of the increase, poison control experts are now warning parents and teens about the health risks associated with the intentional misuse or abuse of cinnamon, according to Alvin C. Bronstein, MD, managing and medical director for the Rocky Mountain Poison and Drug Center.

"Although cinnamon is a common flavoring, swallowing a spoonful may result in unpleasant effects that can pose a health risk," Bronstein said.

When kids go digging into the spice drawer they may be looking for the cinnamon, which they want to attempt to swallow, without water. Spitting, gagging, coughing—and often vomiting—follows. The "cinnamon challenge," is an old dare game that's resurfaced in popularity and gone viral thanks to YouTube videos showing people of all ages attempting it.

"Any fine powder, if inhaled, can cause irritation to the lungs," says Dr. Russell Migita, Clinical Director of Emergency Services at Seattle Children's Hospital. "Cinnamon is a pretty drying agent and has some heat to it. Anyone who gets that kind of powder in their lungs, it doesn't feel good." People who cough that hard can have problems that can range from collapsing a lung to having lungs that get really inflamed, or pulmonary edema. People with asthma or respiratory-compromised conditions are also more at risk.

From MSN.com, Poison centers warn about cinnamon challenge, Kavita Varma-White, March 29, 2012.

A ccording to the Department of Agriculture's Economic Research Service, food imports to the U.S. grew to \$86 billion in 2010 from \$41 billion in 1999. Most of that came in fruits and vegetables, but an estimated 85 percent of the seafood consumed in the U.S. is also imported, often from fish farms. Altogether about 16 percent of the food eaten in the U.S. comes from other countries—and given some of the many holes in the food safety net for imports, that should be a little concerning.

In a report published in March, the CDC estimated that foodborne disease outbreaks caused by imported food appeared to rise in 2009 and 2010, and that nearly half of the outbreaks implicated foods imported from areas that had not before been associated with outbreaks.

Hannah Gould, an epidemiologist at the CDC's division of foodborne, waterborne and environmental diseases and the lead author of the research, put the work in perspective:

As our food supply becomes more global, people are eating foods from all over the world, potentially exposing them to germs from all corners of the world, too. We saw an increased number of outbreaks due to imported foods during recent years, and more types of foods from more countries causing outbreaks.

The CDC experts reviewed reported foodborne illness outbreaks from 2005 to 2010 and found that during that period, 39 outbreaks and 2,348 illnesses were linked to imported food from 15 countries—with nearly half of the outbreaks occurring in 2009 and 2010. Fish were the biggest source of the outbreaks with spices coming up next. And nearly half of the outbreaks originated in Asia.

From healthland.time.com, Bad Food: Illnesses from Imported Food Are on the Rise, CDC Says, Bryan Walsh, March 15, 2012.



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FYI

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

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

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

Abdullah, Basil O., Missouri City, TX. August 3, 2011, three (3) month suspension for violating EMS Rules §157.36(b)(2), 157.36(b) (29) and 157.36(b)(30) related to a positive urinalysis drug screen for marijuana. A-Blessed EMS, LLC, dba A-Blessed EMS, Nacogdoches, TX. February 9, 2012, assessed a \$250.00 administrative penalty for violating EMS Rules §157.11(d)(1) and 157.11(j)(1)

related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times.

Acklin, Teddy G., Amarillo, TX. May 30, 2011, revocation for violating EMS Rule 53.021(b) related to a felony conviction and imprisonment for aggravated sexual assault of a child and indecency with a child.

Adeniran, Bashiru A., dba Maximus Ambulance Services, Missouri City, TX. May 23, 2011, denial of EMS provider license for violating EMS Rules §157.11(i) (1), 157.11(m)(15) and 157.16(e)(5) related to falsified medical director's signature on EMS equipment, supply and medication lists. **Adrian VFD, dba Adrian EMS**, Adrian, TX. September 29, 2011, reprimanded for violating EMS Rules §157.11(c)(2)(D), 157.11(j)(1), 157.11(j)(7)(A) and 157.11(m)(1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times. **Advanced Cardiac and Trauma EMS**,

Inc., Weslaco, TX. December 19, 2011, reprimanded for violating EMS Rules

§157.11(c)(2)(D), 157.11(d)(7), 157.11(i)(2), 157.11(j)(1), 157.11(j)(7)(A) and 157.11(m) (1) related to failing to prominently display vehicle authorization and failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times.

Advanced Care Ambulance Service, Weslaco, TX. May 23, 2011, assessed an administrative penalty of \$250.00 for violating EMS Rules \$157.11(c)(2)(D), 157.11(i)(2) and 157.16(m)(1) related to failing to have EMS ambulance vehicle(s) adequately equipped and/ or supplied at all times.

Albers, Josh R., Dalhart, TX. August 23, 2011, reprimanded for violating EMS Rules §157.36(b)(7) and 157.36(b)(26) related to failing to provide appropriate level of patient care by performing advanced and/or invasive treatment without medical direction.

Alves, Penny, Merkel, TX. September 18, 2011, twelve (12) month probated suspension for violating EMS Rules §157.36(b)(3), 157.36(b)(26) and 157.36(b)(28) related to failing to follow medical direction protocols for RSI.

Ambulance Transportation Services, LLC, McAllen, TX. December 30, 2011, reprimanded for violating EMS Rules §157.11(i)(2), 157.11(j)(1), 157.11(m)(1) and 157.11(m)(5) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times and failing to have crew members properly identified by name, certification level and /or provider name.

Americare EMS, LTD dba Americare, Lufkin, TX. July 10, 2011, reprimanded for violating EMS Rules §157.11(d)(1), 157.11(i) (2), 157.26(j)(5)(A) and 157.11(m)(11) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times. AMR-Dallas, Farmers Branch, TX. February 9, 2012, assessed a \$500.00 administrative penalty for violating EMS Rules §157.11(d) (1), 157.11(i)(3) and 157.11(j)(5) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times, and failing to store and maintain all solutions and pharmaceuticals in accordance with FDA recommendations.

Angele, James W., Vidor, TX. May 8, 2010, twenty-four (24) month probated suspension

for violating EMS Rules 157.36(c)(2) and 157.36(c)(3) related to a felony conviction on or about August 24, 2007, for a controlled substance.

Border Ambulance Service, LLC, McAllen, TX. July 10, 2011, assessed a \$250.00 administrative penalty for violating EMS Rules \$157.11(i)(2), 157.11(j)(5) and 157.11(m) (1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times.

Bovina EMS, Bovina, TX. December 19, 2011, assessed a \$500.00 administrative penalty for violating EMS Rules §157.11(j) (5), 157.11(j)(7)(A) and 157.11(m)(1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times. **Burton, James A. Jr.**, Spring Branch, TX. November 20, 2011, revocation for violating Chapter 53 of the Texas Occupations Code, Section 53.021(b) related to a second degree felony conviction and imprisonment for indecency with a child.

Cates, Kenneth W., Alpena, AK. July 10, 2011, twelve (12) month suspension for violating EMS Rules §157.36(b)(7), 157.36(b)(18), 157.36(b)(26) and 157.36(b) (28) related to misrepresentation as an EMT-Paramedic student while responding to calls and performing advanced level and/or invasive treatment on a patient without medical direction and/or supervision.

Chernosky, Richard W., Plum, TX. February 11, 2012, Three (3) month suspension for violating EMS Rules§157.36(b)(6), 157.36(b)(7) and 157.36(b)(30) related to using excessive force and/or pressure while attempting to apply gauze around patient's head and violating medical director's protocols by incorrectly administering Versed instead of Valium without verifying medication and/or dosage with partner.

City of Farwell, Farwell, TX. September 13, 2011, reprimanded for violating EMS Rules §157.11(d)(1), 157.11(j)(5), 157.11(j) (7)(A) and 157.11(m)(1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times.

City of Grapevine Fire Department, dba Grapevine Fire Department, Grapevine, TX. November 30, 2011, assessed a \$1,400.00 administrative penalty for violating EMS Rules \$157.11(m)(1), 157.11(m)(4), 157.16(d) (14) and HSC \$773.050(a) related to failing to staff an EMS ambulance vehicle deemed to be in-service and/or response ready with appropriately and/or currently certified personnel.

Cobb, James, Benbrook, TX. May 23, 2011, reprimanded for violating EMS Rules §157.36(b)(3), 157.36(b)(26) and 157.36(b)

(28) related to failing to perform and/or properly assess the patient.

Copperas Cove Fire Department/EMS, Copperas Cove, TX. September 30, 2011, assessed a \$2,200.00 administrative penalty for violating EMS Rules §157.11(m)(1), 157.11(m)(4), 157.16(d)(14) and HSC §773.050(a) related to failing to staff an EMS ambulance vehicle deemed to be in-service and/or response ready with appropriately and/ or current certified personnel.

Cox, James M., North Richland Hills, TX. December 21, 2011, reprimanded for violating EMS Rules §157.34(a)(3), 157.36(b)(30) and HSC §773.041(b) related to staffing an EMS ambulance vehicle with an expired DSHSissued license and/or certificate.

Cox, Robert E., Anson, TX. March 13, 2012, revocation for violating EMS Rules §157.36(b)(2), 157.36(b)(19), 157.36(b)(28) and 157.36(b)(30) related to three counts of for felony deferred adjudication for fraudulently obtaining quantities of the prescription drug hydrocodone from various physicians on numerous occasions.

Crosbyton Clinic Hospital EMS, Crosbyton, TX. July 25, 2011, assessed a \$500.00 administrative penalty for violating EMS Rules §157.11(m)(1), 157.11(m)(4), 157.(16)(c) and 157.16(d)(14) related to failing to staff an EMS ambulance vehicle deemed to be in-service and/or response ready with appropriately and/ or current certified personnel.

Dallam Hartley Counties Hospital District, dba Dalhart EMS, Dalhart, TX. September 6, 2011, assessed a \$2,700.00 administrative penalty for violating EMS Rules §157.11(m) (1), 157.11(m)(3), 157.11(m)(4), 157.16(c), 157.16(d)(14) and HSC §773.050(a) related to failing to staff an EMS ambulance vehicle deemed to be in-service and/or response ready with appropriately and/or current certified personnel and monitoring the quality of patient care provided.

Eagle Mountain Fire Department, Fort Worth, TX. February 9, 2012, reprimanded for violating EMS Rules §157.11(m)(1), 157.11(m) (4), 157.16(d)(14) and HSC §773.050(a) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times, and staffing an EMS ambulance vehicle with a person that had an expired DSHS-issued license and/or certificate. **ESHNA, Inc., dba Lake Whitney Medical**

Center EMS, Whitney, TX. March 21, 2012, assessed a \$500.00 administrative penalty for violating EMS Rules §157.11(d)(1), 157.11(g) (3), 157.11(i)(3), 157.11(j)(5) and 157.11(m) (5) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times, failing to have crew members

properly identified by name, certification level, and /or provider name and failing to store and maintain all solutions and pharmaceuticals in accordance with FDA recommendations. **Faris, Kenneth**, Joshua, TX. October 7, 2011, reprimanded for violating EMS Rules §157.34(a)(3), 157.36(b)(28) and HSC §773.041(b) related to staffing an EMS ambulance vehicle with an expired DSHSissued license and/or certificate.

Fletcher, Matthew, Spring, TX. May 23, 2011, reprimanded for violating EMS Rules §157.36(b)(4), 157.36(b)(14) and 157.36(b) (28) related to falsifying a controlled substance inventory record.

Freeman, Gena L., Woodville, TX. February 29, 2012, Six (6) month suspension for violating EMS Rules §157.36(b)(7) and 157.36(b)(28) related to advising partner to discontinue CPR, which violated medical director's protocols, and failing to call for online medical control to obtain proper medical direction and/or supervision to authorize termination of CPR.

Garay Vidal, Gustavo, El Paso, TX. March 23, 2011, one-month suspension and 23-month probated suspension for violating EMS Rules §157.36(b)(2), 157.36(b)(19), 157.36(b) (21), 157.36(b)(25), 157.36(b)(27), 157.36(b) (29) and 157.37(a) related to an arrest for possession of the controlled substance cocaine, an arrest for driving while intoxicated, failure to notify the department and receiving deferred adjudication misdemeanor possession of the controlled substance cocaine.

Garcia, Alfredo L., Weslaco, TX. March 16, 2012, Twelve (12) month probation with conditions for violating EMS Rules §157.36(c) (1) and 157.36(c)(3) related to two convictions for the state jail felony offense of driving while intoxicated with a child passenger under 15 years of age and conviction of the misdemeanor offense of driving while intoxicated.

Goen, Jimmy, Palo Pinto, TX. September 13, 2011, revocation for violating EMS Rules §157.36(b)(2), 157.36(b)(21), 157.36(b)(23), 157.36(b)(28), 157.36(b)(29) and 157.36(b) (30) related to an arrest on or about March 21, 2011, for DWI with open container and failing to notify the Department within 10 days; and on or about November 17, 2010, assessing and/ or giving medical treatment while under the influence of alcohol.

Gonzalez, Luis O., Eagle Pass, TX. July 31, 2011, reprimanded for violating EMS Rules §157.43(j)(2), 157.43(j)(3)(A) and 157.43(k) (2) related to coordinating a course without holding a current Department-issued license and/or certificate.

Hagelberg, Toney D., Lumberton, TX.

March 1, 2012, six (6) month suspension for violating EMS Rules §157.36(b)(2), 157.36(b)(14), 157.36(b)(23), 157.36(b)(26), 157.36(b)(29) and 157.36(b)(30) related to illegally possessing a dangerous substance and public intoxication, failing to notify the department within 10 days of two arrests, and misappropriating and/or tampering with and/or adulterating nalbuphine and promethazine by improperly removing said expired medications. **Halo Medical Services, LLC.**, DeSoto,

TX. October 31, 2011, assessed a \$500.00 administrative penalty for violating EMS Rules §157.11(d)(1), 157.11(j)(5)(A), 157.11(j)(7) (A) and 157.11(m)(11) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times.

Henry, Virginia L., Tahoka, TX. September 22, 2011, twenty-four (24) month probated suspension for violating EMS Rules §157.36(b) (2), 157.36(b)(14), 157.36(b)(22), 157.36(b) (23), 157.36(b)(28) and 157.36(b)(29) related to a third-degree felony conviction and five (5) years community supervision for theft by a public servant.

Hernandez, Gustavo C., El Paso, TX. December 30, 2011, reprimanded for violating EMS Rules §157.36(b)(2), 157.36(b)(23), 157.36(b)(27) and 157.36(b)(28) related to a misdemeanor conviction for assault, two misdemeanor convictions for driving while intoxicated and misdemeanor possession of marijuana.

Hickman, Teddy, Lubbock, TX. September 22, 2011, three (3) month suspension followed by nine (9) month probated suspension for violating EMS Rules §157.36(b)(3), 157.36(b) (26) and 157.36(b)(28) related to failing to follow medical direction protocols for RSI. Higgins, Gregory T., Fort Worth, TX. February 22, 2012, reprimand for violating EMS Rules §157.34(a)(3), 157.36(b)(30) and HSC §773.041(b) related to staffing an EMS ambulance vehicle with an expired DSHS-issued license and/or certificate.

Horn, James C., Haltom City, TX. August 3, 2011, revocation for violating EMS Rules §157.36(b)(2), 157.36(b)(21), 157.36(b)(23), 157.36(b)(26), 157.36(b)(28) and 157.36(b) (29) related to an arrest for second-degree felony of possession with intent to promote child pornography and failing to notify the department within 10 days of arrest.

Houston First Respond EMS, Houston, TX. July 10, 2011, assessed a \$500.00 administrative penalty for violating EMS Rules §157.11(i)(2), 157.11(j)(1), 157.11(m)(1) and 157.11(m)(5) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times and failing to staff an EMS ambulance vehicle deemed to be in-service

and/or response ready with appropriate and/or current certified personnel.

Hulbert, Paul, Victoria, TX. July 10, 2011, reprimanded for violating EMS Rules §157.36(b)(2), 157.36(b)(29) and 157.36(b) (30) related to a positive urinalysis drug screen for marijuana.

Jenkins, Stephen H., Corsicana, TX. November 5, 2011, reprimanded for violating EMS Rules §157.34(a)(3), 157.36(b)(30) and HSC §773.041(b) related to staffing an EMS ambulance vehicle with an expired DSHSissued license and/or certificate.

Jennings, Brenda, dba Cotulla EMS, Cotulla, TX. January 27, 2012, reprimanded for violating EMS Rules §157.11(m)(2)(A), 157.11(m)(2)(E) and 157.16(d)(8) related to allowing a minor to ride out on EMS ambulance, failing to monitor the quality of patient care and failing to take appropriate corrective action on personnel after personnel performed advanced level of care without calling for online medical control.

Jireh EMS, LLC, Pharr, TX. June 13, 2011, assessed a 1,000.00 administrative penalty for violating EMS Rules 157.11(c)(2)(D), 157.11(d)(1), 157.11(j)(2)(A) and 157.11(m) (1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times.

Julian Leija, dba Christian EMS, Elsa, TX. September 26, 2011, assessed a \$250.00 administrative penalty for violating EMS Rules \$157.11(i)(2), 157.11(j)(4) and 157.11(m) (1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times.

Karva, Kathleen A., Longview, TX. November 5, 2011, reprimanded for violating EMS Rules §157.36(b)(4), 157.36(b)(18) and 157.36(b)(30) related to submitting falsified EMS skills appraisal forms by forging the preceptor's signature.

Keefer, Javier, Alamo, TX. August 23, 2011, twenty-four (24) month probation for violating EMS Rules 157.36(c)(1), 157.36(c)(2), 157.36(c)(3), 157.36(b)(1), 157.36(b)(2), 157.36(b)(4), 157.36(b)(14), 157.36(b)(19), 157.36(b)(23), 157.36(b)(26), 157.36(b)(27) and 157.36(b)(28) related to two (2) convictions for DWI and previous conduct during the performance of duties relating to EMS personnel that is contrary to accepted standards of conduct.

Kimbrell, Sharlene D., Dalhart, TX. August 23, 2011, reprimanded for violating EMS Rules §157.34(a)(3), 157.36(b)(13), 157.36(b) (28) and HSC §773.041(b) related to staffing an EMS ambulance vehicle with an expired DSHS-issued license and/or certificate. Kinsman, Randy M., Ovilla, TX. October 31, 2011, reprimanded for violating EMS Rules §157.36(b)(2), 157.36(b)(15) and 157.36(b) (28) related to pleading guilty to two counts of indecent assault and battery on a person 14 years of age or over and failure to disclose on renewal application.

Lazbuddie Volunteer Fire Department, Inc., dba Lazbuddie EMS, Lazbuddie, TX. December 2, 2011, reprimanded for violating EMS Rules §157.11(d)(1), 157.11(j)(5) and 157.11(m)(1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times.

Lillie, Christopher W., Denton, TX. November 16, 2011, reprimanded for violating EMS Rules §157.34(a)(3), 157.36(b)(30) and HSC §773.041(b) related to staffing an EMS ambulance vehicle with an expired DSHSissued license and/or certificate.

McGill, William S., Grapevine, TX. November 15, 2011, reprimanded for violating EMS Rules §157.34(a)(3), 157.36(b)(30) and HSC §773.041(b) related to staffing an EMS ambulance vehicle with an expired DSHSissued license and/or certificate.

McGuire, John M., Copperas Cove, TX. September 26, 2011, reprimanded for violating EMS Rules §157.34(a)(3), 157.36(b)(30) and HSC §773.041(b) related to staffing an EMS ambulance vehicle with an expired DSHSissued license and/or certificate.

Med-Care EMS, Inc., McAllen, TX. February 17, 2012, assessed a \$750.00 administrative penalty for violating EMS Rules §157.11(d) (1), 157.11(d)(7), 157.11(h)(2), 157.11(i) (2), 157.11(j)(5)(A), 157.11(m)(1), and 157.11(m)(11) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times, failing to store and maintain all solutions and pharmaceuticals in accordance with FDA recommendations, failing to display provider name and license number on ambulance, and failing to have current protocols, current equipment, supply and medication lists, and the correct original vehicle authorization.

Medex Transportation Services, Inc., McAllen, TX. January 19, 2012, reprimanded for violating EMS Rules §157.11(h)(2), 157.11(i)(2), 157.11(j)(1) and 157.11(m)(11) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times.

Medical and Trauma Specialist, LP, McAllen, TX. December 19, 2011, assessed a \$500.00 administrative penalty for violating EMS Rules §157.11(i)(2), 157.11(j)(4), 157.11(j)(5), 157.11(m)(1), 157.11(m)(5) and 157.11(m)(11) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times and failure to properly identify crew by name, certification level and/ or provider name.

Medical and Trauma Specialist, LP,

McAllen, TX. May 23, 2011, reprimanded for violating EMS Rules §157.11(m)(1), 157.11(m) (4), 157.16(d)(14) and HSC §773.050(a) related to failing to staff an EMS ambulance vehicle deemed to be in-service and/or response ready with appropriate and/or current certified personnel.

Medtran Services, LLC, dba Medtran Service Company, Houston, TX. December 19, 2011, assessed a \$500.00 administrative penalty for violating EMS Rules §157.11(m) (20) and 157.16(d)(19) related to failing to notify the department within one day of a change in medical director.

Miller, Jennifer J., Tyler, TX. February 29, 2012, revocation for violating EMS Rules §157.36(b)(2), 157.36(b)(14), 157.36(b) (15), 157.36(b)(18), 157.36(b)(21), 157.36(b) (27) and 157.36(b)(30) related to receiving a deferred adjudication for misdemeanor theft of property, failing to disclose the criminal history on recertification application and failing to give the department true and complete information when asked.

Miller, Mollie M., Point Blank, TX. June 26, 2010, twenty-four (24) month probated suspension for violating EMS Rules §157.36(b) (2), 157.36(b)(26), 157.36(b)(27) and 157.36(b)(28) related to misappropriation of controlled substances from an EMS employer. Music, Darleen, Kerrville, TX. December 21, 2011, six (6) month probated suspension for violating EMS Rules §157.36(b)(1), 157.36(b)(2), 157.36(b)(18), 157.36(b)(22) and 157.36(b)(28) related to a state jail felony conviction for fraudulent use of identifying information, felony conviction for false statement to obtain property or credit and failure to notify the department within 30 days of said conviction.

New Deal Volunteer Fire Department, dba New Deal Fire/EMS, New Deal, TX. September 22, 2011, reprimanded for violating EMS Rules §157.11(m)(1), 157.11(m)(4), 157.16(d)(14) and HSC §773.050(a) related to failing to staff an EMS ambulance vehicle deemed to be in-service and/or response ready with appropriately and/or current certified personnel.

Nichols, James J., Lavon, TX. November 2, 2010, eight (8) month suspension followed by a forty (40) month probated suspension for violating EMS Rules §157.36(b)(2), 157.36(b) (19), 157.36(b)(27), 157.36(b)(28) and 157.36(b)(29) related to utilizing fraudulent prescriptions for controlled substances while on duty and pleading guilty to a felony deferred adjudication for fraudulent possession of a

controlled substance/prescription.

Noletubby, Rusty, Colorado City, TX. June 14, 2011, three (3) month suspension followed by twenty-one (21) month probated suspension for violating EMS Rules §157.36(b)(2), 157.36(b)(26), 157.36(b)(27) and 157.36(b) (28) related to a positive urinalysis drug screen for alcohol while on duty.

O'Hara Flying Service II LP, dba Air Ambulance Stat, Amarillo, TX. February 24, 2012, assessed a \$3,751.00 administrative penalty for violating EMS Rules §157.11(d) (1), 157.11(i)(3), 157.11(j)(5), and 157.11(m) (11) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times, failing to store and maintain all solutions and pharmaceuticals in accordance with FDA recommendations and failing to have current protocols, current equipment, supply and medication lists and the correct original vehicle authorization.

Olague, Matthew E., New Caney, TX. October 31, 2011, revocation for violating EMS Rules §157.36(b)(2), 157.36(b)(14), 157.36(b)(18), 157.36(b)(19), 157.36(b)(28), 157.36(b)(29) and 157.36(b)(30) related to tampering with and/or removing medication patches containing fentanyl from patients and ingesting.

Outen, Shaun Jason, Denton, TX. August 23, 2011, revocation pursuant to Chapter 53 of the Texas Occupations Code, Section 53.021(b) related to a felony conviction and imprisonment for conspiracy to commit health care fraud.

Palm Valley EMS, dba Texas Medical Transport, McAllen, TX. December 19, 2011, reprimanded for violating EMS Rules §157.11(c)(2)(D), 157.11(j)(7)(I) and 157.11(m)(1) related to failing to prominently display vehicle authorization, failing to have present emergency response guide book and failing to assure that vehicles are maintained, operated, equipped and staffed.

Pargas, Joe M., Cotulla, TX. February 18, 2012, reprimanded for violating EMS Rules §157.36(b)(5), 157.36(b)(7), 157.36(b)(28) and 157.36(b)(30) related to allowing his minor son to ride out on ambulance calls and performing advanced level treatment without proper medical direction.

Patriot EMS Group, Inc., dba Patriot EMS, Houston, TX. February 11, 2012, assessed a \$7,600.00 administrative penalty for violating EMS Rules § 157.11(m)(1), 157.11(m)(4), 157.16(d)(14) and HSC §773.050(a) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times and staffing an EMS ambulance vehicle with a person that had an expired DSHS-issued license and/or certificate. **Paul K. Ozoigbo, dba County Ambulances,** Garland, TX. February 3, 2012, assessed a \$3,750.00 administrative penalty for violating EMS Rules \$157.11(c)(2)(D), 157.11(d)(1) and 157.11(j)(1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times and failing to have current protocols, current equipment, supply and medication lists, and the correct original

Phillips, Lawrence C., Odessa, TX. February 23, 2012, reprimanded for violating EMS Rules §157.36(b)(4) and 157.36(b)(30) related to submitting untruthful and/or inaccurate statements and/or information during an official investigation.

vehicle authorization.

Pitts, Evan M., North Richland Hills, TX. September 29, 2011, revocation for violating EMS Rules Chapter 53 of the Texas Occupations Code, Section 53.021(b) related to a felony conviction and imprisonment for possession with intent to deliver the controlled substance methamphetamine.

Powers, Jacob D., Clute, TX. November 5, 2011, reprimanded for violating EMS Rules §157.36(b)(9) and 157.36(b)(26) related to allowing an EMT-Basic to perform advanced levels of care.

Pro-Med EMS, LLC, San Juan, TX. January 17, 2012, assessed a 22,500.00 administrative penalty for violating EMS Rules 157.11(m) (2), 157.11(m)(2)(A), 157.11(m)(3), 157.11(m) (8), 157.11(m)(9), 157.11(m)(10), 157.11(m) (12), 157.16(c), 157.16(d)(12) and 157.16(d) (19) related to failing to monitor staff by not adhering to a continuous quality improvement plan and/or not reviewing patient care reports and failure to give the department information upon request.

Pro-Med EMS, LLC, San Juan, TX. August 23, 2011, assessed a \$450.00 administrative penalty for violating EMS Rules §157.11(d) (7), 157.11(j), 157.11(j)(7)(A) and 157.11(m) (1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times; failing to have written protocols with equipment, supply and medication list present on EMS ambulance vehicle(s); and failing to have provider name and license number displayed on EMS ambulance vehicle(s).

Pyse, Christopher J., Houston, TX. February 29, 2012, revocation for violating EMS Rules §157.36(b)(2), 157.36(b)(14), 157.36(b)(18), 157.36(b)(21), 157.36(b)(22), 157.36(b)(23), 157.36(b)(24) and 157.36(b)(28) related to receiving a deferred adjudication for a Class B misdemeanor offense of theft and failing to give the department true and complete information when requested.

Ramirez, Enrique, Weslaco, TX. February 23, 2012, reprimanded for violating EMS Rules

§157.36(b)(9), 157.36(b)(21), 157.36(b)(26) and 157.36(b)(28) related to failing to provide appropriate level of patient care and failing to give the department true and complete information when requested.

Reddington, Todd, Jasper, TX. October 7, 2011, reprimanded for violating EMS Rules §157.36(b)(2), 157.36(b)(29) and 157.36(b) (30) related to a positive urinalysis drug screen for marijuana.

Rio Care EMS, LLC, Weslaco, TX. July 10, 2011, assessed a \$1,000.00 administrative penalty for violating EMS Rules §157.11(i)(3), 157.11(j)(5) and 157.11(m)(1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times. **Rivas, Brittany**, Texas City, TX. January 25, 2011, eighteen (18)-month probated suspension for violating EMS Rules §157.36(b)(2), 157.36(b)(22), 157.36(b)(23), 157.36(b)(26) and 157.36(b)(28) related to being convicted of misdemeanor burglary of a vehicle, misdemeanor driving while intoxicated, misdemeanor assault causing bodily injury, and deferred adjudication for misdemeanor

criminal trespass. **Rock, Richard**, Dallas, TX. May 23, 2011, revocation of EMT-Basic certification for violating EMS Rules §157.36(b)(2), 157.36(b) (14), 157.36(b)(18), 157.36(b)(28) and 157.36(b)(29) related to receiving a deferred adjudication for theft of property. **Rojas, Harold**, McAllen, TX. January 2, 2011, 18-month probation for violating EMS

Rule 157.36(f) related to receiving a deferred adjudication for felony aggravated assault. **Rojas, Pablo M.**, San Benito, TX. January 20, 2012, reprimanded for violating EMS Rule §157.36(b)(21) related to failure to give the department information upon request.

Royalty Ambulance Service Inc., Pharr, TX. November 5, 2011, assessed a \$500.00 administrative penalty for violating EMS Rules \$157.11(d)(1), 157.11(j)(4) and 157.11(m) (1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times.

Safe Response Medical Transportation, Pearland, TX. March 22, 2012, assessed a \$10,000.00 administrative penalty for violating EMS Rules §157.11(m)(20), 157.16(d)(12) and 157.16(d)(19) related to failing to notify the department when a change of medical director had occurred and failing to give the department true and complete information when asked. Safford, Scott, Fort Worth, TX. July 31, 2011, reprimanded for violating EMS Rules §157.36(b)(2), 157.36(b)(23), 157.36(b)(25), 157.36(b)(27) and 157.36(b)(28) related to a conviction on or about November 28, 2007, and August 21, 2009, for DWI and failing to

notify the Department within ten days. Saldana, David, McAllen, TX. November 20, 2011, eighteen (18) month probated suspension for violating EMS Rules §157.36(b) (2), 157.36(b)(19), 157.36(b)(26), 157.36(b) (27) and 157.36(b)(28) related to a positive urinalysis drug screen for cocaine and marijuana after causing a motor vehicle accident while driving an ambulance. Sauceda, Randy, Rio Grande City, TX. December 21, 2011, twenty-four (24) month probated suspension for violating EMS Rules §157.36(b)(2), 157.36(b)(19), 157.36(b) (25) 157.36(b)(26) and 157.36(b)(30) related to receiving a deferred adjudication for a second degree felony offense of possession of marijuana.

Scar De Los Santos, dba Express Care Ambulance Service, San Antonio, TX. July 17, 2010, assessed a \$6,100.00 administrative penalty for violating EMS Rules §157.11(d) (1), 157.11(d)(19), 157.11(i)(3)(A), 157.11(l) (1), 157.11(l)(2), 157.11(l)(3) 157.11(m) (1), 157.11(m)(4), 157.16(d)(14) and HSC §773.050.(a) related to failing to staff an EMS ambulance vehicle deemed to be in-service and/or response ready with appropriate and/ or current certified personnel and failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times. Schaake, Denver G., New Braunfels, TX. January 26, 2012, three (3) month suspension for violating EMS Rules §157.36(b) (2),157.36(b)(26) and 157.36(b)(28) related to a conviction for the state jail felony offense of improper photography or visual recording. Skoog, Michael R., Abilene, TX. March 22, 2012, Six (6) month probated suspension with conditions for violating EMS Rules §157.36(b) (2), 157.36(b)(18), 157.36(b)(19), 157.36(b) (25), 157.36(b)(26) and 157.36(b)(28) related to receiving a deferred adjudication to a Class A misdemeanor offense of attempt to obtain controlled substance by fraud.

Sosa, Jenny R., New Deal, TX. September 29, 2011, reprimanded for violating EMS Rules §157.34(a)(3), 157.36(b)(30) and HSC §773.041(b) related to staffing an EMS ambulance vehicle with an expired DSHS-issued license and/or certificate.

Souffront, Tamara, El Paso, TX. May 23, 2011, reprimanded for violating EMS Rules §157.36(b)(2), 157.36(b)(22), 157.36(b)(23), 157.36(b)(28) and 157.36(b)(29) related to a conviction and three (3) years probation for a federal felony offense of making a false statement.

South Star Ambulance Service Inc., Weslaco, TX. December 16, 2011, assessed a \$250.00 administrative penalty for violating EMS §157.11(j)(1), 157.11(i)(2) and 157.11(m) (1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times.

St. Michaels Ambulance, LLC, Weslaco, TX. September 29, 2011, assessed a \$500.00 administrative penalty for violating EMS Rules §157.11(i)(3), 157.11(j)(5) and 157.11(m) (1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times and failing to store and maintain all solutions and pharmaceuticals in accordance with FDA recommendations.

Stonewall County Ambulance Service, Aspermont, TX. February 16, 2012, reprimanded for violating EMS Rules §157.11(d)(1), 157.11(i)(3), 157.11(j)(5) and 157.11(m)(11) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times, failing to store and maintain all solutions and pharmaceuticals in accordance with FDA recommendations and failing to have current protocols, current equipment, supply and medication lists, and the correct original vehicle authorization.

Tiger EMS, Inc., dba Tiger EMS, Longview, TX. March 16, 2012, assessed a \$250.00 administrative penalty for violating EMS Rules \$157.11(d)(1), 157.11(j)(1) and 157.11(m) (5) related to related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at all times, and failing to have crew members properly identified by name, certification level, and/or provider name.

Turner, Vicky Jo, Rhome, TX. March 22, 2012, Six (6) month probated suspension for violating EMS Rules §157.36(b)(5), 157.36(b) (6) and 157.36(b)(30) related to disclosing confidential patient information to the public without consent.

Valdez, Frank, Eagle Pass, TX. May 23, 2011, revocation for violating EMS Rules §157.36(b)(2), 157.36(b)(19), 157.36(b)(25), 157.36(b)(28) and 157.36(b)(30) related to using ambulance vehicle to illegally possess and/or transport approximately 53 pounds of marijuana, resulting in an arrest for felony possession of marijuana, and failure to timely notify the department of arrest.

Veliz, Juan G., Mission, TX. March 13, 2012, revocation for violating EMS Rules §157.36(b) (2), 157.36(b)(19), 157.36(b)(25), 157.36(b) (28) and 157.36(b)(30) related to using an ambulance to illegally possess and/or transport approximately 237 pounds of marijuana. Vitalis Healthcare System, Inc., dba Vitalis Medical Transport Service, McAllen, TX. September 13, 2011, assessed a \$500.00 administrative penalty for violating EMS Rules §157.11(i)(2), 157.11(j)(1) and 157.11(m) (1) related to failing to have EMS ambulance vehicle(s) adequately equipped and supplied at All postings will remain on the website and in the Texas EMS Magazine listing:

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

all times.

Ward, Tonia D., dba Ward's Emergency Service, Houston, TX. March 19, 2012, assessed a \$45,000.00 administrative penalty for violating EMS Rules \$157.11(m)(20), 157.16(d)(12) and 157.16(d)(19) related to failing to notify the department when a change of medical director has occurred and failing to give the department true and complete information when asked.

Weisel, Charles A., Silsbee, TX. July 25, 2010, twenty-four (24) month probated suspension for violating EMS Rules §157.36(b) (14), 157.36(b)(18), 157.36(b)(19), 157.36(b) (26), 157.36(b)(27), 157.36(b)(28) and 157.36(b)(29) related to misappropriation of medications and controlled substances from an EMS employer.

Wolfforth EMS, Wolfforth, TX. December 30, 2011, reprimanded for violating EMS Rules §157.11(m)(1), 157.11(m)(4), 157.16(d) (14) and HSC §773.050(a) related to failing to staff an EMS ambulance vehicle deemed to be in-service and/or response ready with appropriately and/or current certified personnel.

Younger, Wendy M., El Paso, TX. September 26, 2011, reprimanded for violating EMS Rules §157.32(c)(4)(C), 157.43(h)(16) and 157.43(m) (3)(b) related to allowing an EMT-Paramedic student to perform clinical and/or ambulance rotations without being EMT-Basic certified. **Zajicek, Beverly J.**, Ganado, TX. May 9, 2008, placed on a forty-eight (48) month probated suspension for violating EMS Rules §157.36(b)(2), 157.36(b)(14), 157.36(b) (18) and 157.36(b)(28) related to engaging in any activity that betrays the public trust and confidence in EMS.

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Meetings & Notices

Calendar

STEMI Texas 2012: Innovation, Technology, Processes. May 31–June 1, 2012, in partnership with AHA Dallas Caruth Initiative, offering national and statewide expert faculty and leaders in STEMI. Join thought leaders at the new Omni Dallas this spring. Optional one-day (May 30) preconference session for EMS/nursing. Visit www.stemitexas2012.com/ STEMItexas2012/Welcome.html for more details. +

2012 Emergency Care Conference: August 11-12, 2012. Please join us for the presentation of compelling topics in the dynamic arenas of emergency and critical care practice. Go to www. txairlife.com for further details and registration information. +

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, MC0285, PO Box 149347, Austin, TX 78714-9347. Call 512/834-6700 if you have a question about the meetings and notices section.

Austin Trauma & Critical Care Conference: Hosted by University Medical Center Brackenridge, May 31-June 1 at the AT&T Executive Education and Conference Center. Offers basic and cutting-edge guidelines and technology for evaluation, diagnosis and management of critically-ill and injured patients. Curriculum designed for physicians, nurses, allied health and prehospital personnel, including EMTs, paramedics and emergency dispatchers. For more information please contact Katie Foarde at kfoarde@seton.org. *

Texas Injury & Violence Prevention Conference: June 20-22, Austin. Join us in beautiful Austin, Texas, to learn from state and national experts on injury and violence prevention. This conference is focused on providing attendees with training on the core competencies for injury and violence prevention at all levels. Register online at www.dellchildrens.net/ injurypreventionconference. *

Jobs

Dalhart EMS is currently taking applications: Dalhart EMS is seeking full-time and PRN positions for EMT-B, EMT-I and paramedic. 24- and 48-hour shifts available. Candidates must have current, valid Texas EMS cert/ licensure and driver's license. For more information contact personnel at (806) 244-4571 or visit www. dhchd.org for an application. +

Peninsula Emergency Medical Services, Inc. (PEMSI): Peninsula EMS is seeking part-time medics and dedicated volunteers. We need ECAs, EMT-Bs, EMT-Is and EMT-Ps for 9-1-1 service covering the Bolivar Peninsula in Galveston County. Flexible shifts and competitive wages available. Contact Robert Isaacks, Peninsula EMS Director, at (409) 466-1928 or Johnette Bouse at (409) 789-2930 for more information. *

Miscellaneous

Formal refresher/ recertification courses: EMR (ECA) and EMT-B National Registry and Texas DSHS. LifeStart Training & Consulting, LLC, offers DSHS-approved formal recertification courses twice a month in our school in Austin. Texas. In just a few days of class you can meet all the requirements for either Texas or National Registry recertification. Classes include lecture, skills, scenarios and discussion. Sample the Austin night-life while meeting your certification requirements. Visit www.lifestart.us for more details or call (512) 614-7556. +

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Meetings & Notices

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Audio Visual Training Materials: The Texas Commission on Fire provides materials for fire protection professionals, as well as EMS professionals. Topics include airway management, spinal injuries, triage and more. They can be borrowed for free by any Texas resident. Visit the TCFP library website for more information at www.tcfp.state.tx.us/library.asp +

Looking for an EMS billing company? Health Claims Plus is an EMS/fire billing company located in Liberty, TX. Health Claims Plus performs all levels of EMS/fire billing from the small to the large. Excellent rates, unmatched service and training to enhance revenue and build sound business practices. ePCR and manual PCR accepted. Contact Rodney Reed at (888) 483-9893 ext 234 or Rodney@healthclaimsplus. com. Visit our website at www. HealthClaimsPlus.com. *

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National Registry skills testing: TEEX is proud to announce that we are an NREMT Advanced Practical Exam site, able to accommodate Intermediate 85, Intermediate 99, and Paramedic exams. For more information about exams or to register, please contact Stacey Elliott at (979) 458-2998 or email at Stacey.Elliott@teexmail. tamu.edu. +

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. +

TEEX Training: TEEX offers training for EMS responders and management especially in rural areas; training for WMD/EMS operations and planning; as well as training for natural disaster and terrorist incidents. For more information visit www.teex.org/ ems. +

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