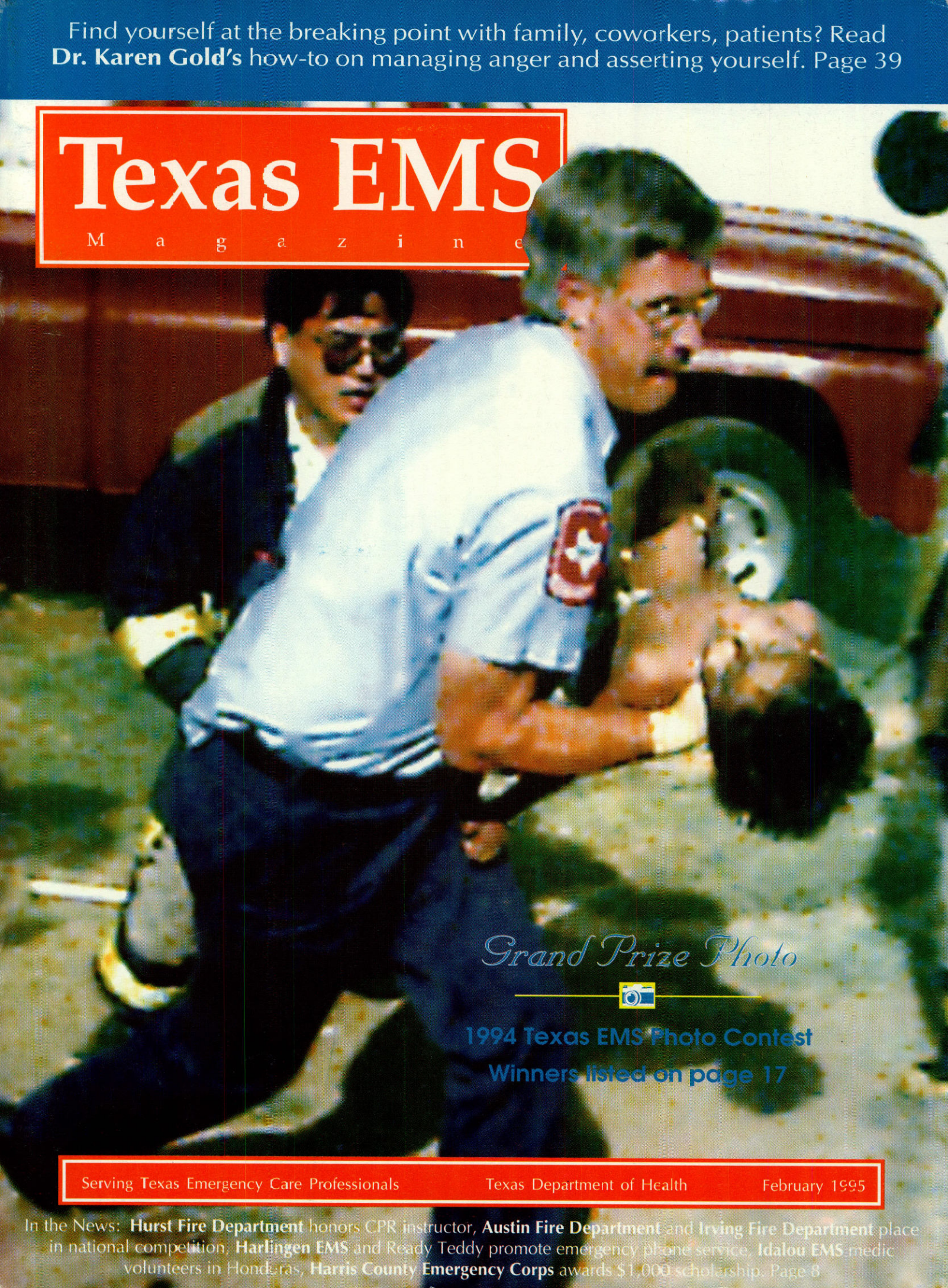


Find yourself at the breaking point with family, coworkers, patients? Read **Dr. Karen Gold's** how-to on managing anger and asserting yourself. Page 39

Texas EMS

M a g a z i n e



Grand Prize Photo



1994 Texas EMS Photo Contest

Winners listed on page 17

Serving Texas Emergency Care Professionals

Texas Department of Health

February 1995

In the News: **Hurst Fire Department** honors CPR instructor, **Austin Fire Department** and **Irving Fire Department** place in national competition; **Harlingen EMS** and **Ready Teddy** promote emergency phone service, **Idalou EMS** medic volunteers in Honduras, **Harris County Emergency Corps** awards \$1,000 scholarship. Page 8

Mail order form to:

Bureau of Emergency Management
Texas Department of Health
1100 West 49th Street
Austin, TX 78756
or Fax to (512) 834-6736

Order these free materials for your community education programs.

Organization _____

Shipping Address _____

Shipping information: City/State/Zip _____

Telephone _____

Contact _____

Amount ordered	Description
_____	National and Texas EMS Week Packet, 1995.
_____	"Ready Teddy" coloring book. Twelve pages of injury prevention and EMS awareness tips by the Texas EMS mascot. (4-61)
_____	"When Minutes Count—A Citizen's Guide to Medical Emergencies" brochure. A foldout first aid guide first distributed in 1988. Can be personalized by the EMS service. (EMS-014)
_____	"Don't Guess, Call EMS" brochure. A reprint of a Department of Transportation brochure updated with Texas photos and logo. Back panel listing of Public Health Region offices and a "for more information call" box, 1989. (EMS-013)
_____	"EMS Lifesavers—Career Information" brochure. Gives types of jobs, paid and volunteer, in various settings and salary ranges. (EMS-007)
_____	"EMS questions and Answers About Citizen participation" brochure. Answers questions about how to call, what to do, how the community can help EMS. (EMS-008)
_____	"EMS—A System to Save a Life" brochure. A 1970's title, 1990's text, and it has public health region office info and "for more information call" box. Explains BLS and ALS, 1989. (EMS-012)
_____	"Ready Teddy" poster. The Texas EMS mascot urges kids to prevent injuries. (4-60)
_____	"Dedicated to Patient Care" poster. EMT and elderly woman pictured; featured during 1988's EMS Week. (EMS-009)
_____	"EMS—It's a Lifesaver" poster. Features the scanned ambulance with an orange stripe and EMT. Our first EMS Week poster, 1985. (EMS-018)
_____	"System to Save a Life" poster. Companion poster to brochure, 1990. (EMS-011)
_____	"When It's A Medical Emergency—You Need EMS" poster. Pictures closeup of EMTs resuscitating a child, 1987. (EMS-010)
_____	"I'm an EMS Friend" sticker. Ready Teddy in a 2-½ inch 2-color sticker.
_____	"Children and Guns: A Deadly Combination" flier. Pictures tot with gun, Texas death stats, 1993.
_____	"What If There Were No Lights At The End of the Tunnel?" poster. Encourages communities to support local EMS, 1993. (EMS-021)
_____	Send information on borrowing the Ready Teddy EMS Mascot suit , available from Austin or the regional offices. Kids love him! And they learn to stay safe.
_____	Send a sample of all public information and education materials—a PIE pack .
_____	"Accidents Don't Just Happen" brochure. Injury prevention tips featuring Dr. "Red" Duke, 1993. Poster and bumper sticker also available. (EMS-003)



Contents

Features

- 32 TDH Labs Link Cause and Effect EMS makes the initial call, but if the cause is viral or environmental, health department laboratories get involved *By Kelly Harrell*
- 42 EMS Local Projects TDH's EMS grant program does the dollars waltz across Texas during December to visit 17 local EMS services *By Alana Mallard*

Continuing Education

- 14 Texas EMS Conference '94 Workshops, exhibits, awards, and registrants make it the best ever *By Kelly Harrell, Jan Brizendine, and Alana Mallard*
- 20 Upper Airway Obstruction in a Child Upper airway obstruction occurs commonly in kids—learn to identify the cause and stabilize your patient in this article worth 1.5 hours of EMS CE *By Collin Goto and Elaine Seamer*
- 41 Learn, Do, Teach Mobile Training Unit takes instructor training a step farther *By Annie Andrus*
- 44 Frequently Asked Questions Straight answers on certification, recertification, and continuing education *By Phil Lockwood and Jeff Jarvis*

EMS Management

- 6 Dear Diary A paramedic talks about teamwork in Point of View, an editorial space for our readers *By Cheryl Strawn*
- 36 Purchasing in EMS How-to on writing specifications, why-to on buying new things *By Mike Garcia*
- 38 Total Quality Management Why? Better employee relations, higher productivity, greater customer satisfaction *By Jeannie Weaver*
- 39 Manage Anger by Asserting Yourself The way we handle anger, conflict, and differences of opinion doesn't need to be by yelling, humiliating, embarrassing, sulking, whining, complaining, tattling, or whimpering *By Karen Gold*



ABOUT THE COVER: Plainview Fire Department EMS medics dash to resuscitate and transport a child pulled from a burning home last August. Gordon Zeigler of the *Plainview Daily Herald* won top honors in the Texas EMS Photo contest this year with this photo.

Departments

- | | | |
|----|--------------------------|--------------------------|
| 5 | From This Side | <i>Gene Weatherall</i> |
| 8 | Local and Regional News | <i>Kelly D. Harrell</i> |
| 46 | Did You Read | <i>Alana S. Mallard</i> |
| 50 | Disciplinary Actions | <i>Vic Dwyer</i> |
| 54 | Calendar | <i>Jan M. Brizendine</i> |
| | Back Page-Bureau Profile | <i>Vic Dwyer</i> |



Texas Department of Health Mission

To protect and promote the health of the people of this state.

Bureau of Emergency Management Mission

To develop a statewide system that provides emergency care to all people through prevention, awareness, and intervention.

EDITORIAL REVIEW BOARD

James Atkins, MD
Southwest Medical School,
Dallas

Richard Best, MEd, EMT-P
Metrocrest Medical Services,
Dallas

Bryan Bledsoe, DO
Baylor Medical Center,
Waxahachie

Scott Bolleter, EMT-P
Baptist AirLife,
San Antonio

Debbie Bradford, MSHP, RRT
Texas Department of Health,
Austin

Neil Coker, EMT-P
Texas Tech University Health Science
Center, Lubbock

Rod Dennison, EMT-P
Texas Department of Health,
Temple

Gene Gandy, EMT-P, Attorney at
Law, Tyler Junior College,
Tyler

Don J. Gordon, MD, PhD
The University of Texas Health
Science Center-San Antonio

Dr. J. Charles Hinds, EMT-P
Cypress Creek EMS,
Houston

Jeffrey L. Jarvis, MS, EMT-P
Texas Department of Health,
Austin

Loretta Jordan, MS, EMT-P
El Paso EMS, El Paso

Doug Key, NREMT-P
MedStar, Fort Worth

James McGraw, MN, CCRN, CEN
Harris Methodist Hospital,
Fort Worth

Jim Moshinskie, PhD, EMT-P
Scott & White Hospital,
Temple

David Rives, MS, EMT-P
Texas Department of Health,
Houston

Virginia Scott, RN, MSN
Ben Taub General Hospital,
Houston

Pauline VanMeurs, BA, EMT-P
Austin Community College,
Austin

Tom Ward, MD
Plano EMS, Plano

Sherrie Wilson, EMT-P
Dallas Fire Department, Dallas

Jim Zukowski, EdD
Texas Department of Health,
Austin

Contributors: Annie Andrus, Kevin Barnes, Jan Brizendine, Tom Cantwell, Vicki Colston, Tonya Douglas, Vic Dwyer, Joe Erwin, Mike Garcia, Karen Gold, Collin Goto, Kelly Harrell, Dennis Hebner, Sean Hughes, Jeff Jarvis, Kenny Jones, Tammy Kettler, Phil Lockwood, Alana Mallard, Bruce Maxwell, David McLagan, Kathy Perkins, Elaine Seamer, Cheryl Strawn, Gene Weatherall, Gordon Ziegler

Texas EMS Magazine says good-bye to Associate Editor Paul Tabor as he joins the Bureau's Disaster Response Program where he will expand his work with statewide Critical Incident Stress Management. Paul will continue to coordinate faculty and workshops for Texas EMS Conference '95.

Texas EMS

M a g a z i n e

February 1995

Vol. 16 No. 2

A bimonthly publication of
TEXAS DEPARTMENT OF HEALTH

RUTH F. STEWART, RNC
Chair, Texas Board of Health

DAVID R. SMITH, MD
Commissioner of Health

CAROL S. DANIELS
Deputy Commissioner for Programs

ROY L. HOGAN
Deputy Commissioner for Administration

RON P. MANSOLO, ASSOCIATE COMMISSIONER
Associateship for Health Care Quality
and Standards

GENE WEATHERALL, CHIEF
Bureau of Emergency Management

KATHY PERKINS, ASSISTANT BUREAU CHIEF
Bureau of Emergency Management

PAM WEST, DIRECTOR
EMS Division

DEBBIE BRADFORD, ASSISTANT DIRECTOR
EMS Division

ERNESTO RODRIGUEZ, ASSISTANT DIRECTOR
EMS Division

Texas EMS Magazine

ALANA S. MALLARD, EMT Editor
KELLY D. HARRELL, ECA Associate Editor
JAN M. BRIZENDINE Art Director
RYAN DAVIS Staff Assistant

Texas EMS Magazine (ISSN 1063-8202) is published bimonthly by the Texas Department of Health, Bureau of Emergency Management, 1100 W. 49th Street, Austin, Texas 78756-3199. The magazine embodies the mission of the Bureau: to help organizations function professionally as EMS providers, to help individuals perform lifesaving prehospital skills under stressful conditions, and to help the public get into the EMS system when they need it. It takes state and national EMS issues and answers to ECAs, EMTs and paramedics serving in every capacity across Texas.

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

Subscriptions to *Texas EMS Magazine* are available for \$20 for two years. Sample copies on request. As provided in Chapter 773, the Emergency Medical Services Act, subscriptions are free to licensed provider firms and course coordinators. To order a subscription or to request a change of address in a current subscription, write to *Texas EMS Magazine* at the address above or call (512) 834-6700.

We will accept telephone and mail queries about articles and news items. Manuscript and photograph guidelines available upon request. Materials will be returned if requested.

Second Class Postage paid at Austin, Texas. POSTMASTER: Send address changes to *Texas EMS Magazine*, 1100 W. 49th Street, Austin, Texas 78756.

National EMS Week scheduled for May 14–20

FROM
THIS
SIDE

Last year when we had so much discussion and debate regarding the continuing education rules, educators offered many new educational avenues to emergency medical services personnel. One of those is the continuing education articles we have begun publishing in *Texas EMS Magazine*. At last count, 672 EMS personnel took advantage of our first continuing education credit article, which was in the November/December issue. We thank Robert Wiebe and Debra Cason for writing that excellent article on pediatric assessment. Dr. Wiebe served as chair of the EMS for Children Advisory Committee in 1993 and he headed up the effort by Southwestern Medical Center in Dallas to write four continuing education articles for *Texas EMS Magazine*. These articles will be shared with other states that have EMS for Children grants.

There is an opportunity coming your way in the form of National EMS Week, scheduled for May 14–20. This is a great opportunity for you to educate your local community about emergency medical service. Many Texas EMS providers always do a great job of scheduling activities during this week. We subscribe to services that gives us copies of every EMS article from every newspaper in the state and always enjoy seeing the pictures and reading about the many activities around the state. We try to share with you the most innovative activities during EMS Week by writing about them in Local and Regional EMS News. Talk with your

local press—I'll bet they will be glad to do a story about your service.

It might be nice during EMS Week this year to remember your local medical director. Without the support we have received from the many dedicated physicians in this state we could not provide advanced life support. I am pleased that I get to go again this year to the Medical Directors Training Program sponsored by the Texas College of Emergency Physicians. Every year they have had this course I have been able to talk with this group. I always thank them for their support on your behalf. As I was doing the paperwork for their course it dawned on me that I might be getting invited because our budget pays for my travel and as a state employee I cannot accept their payment for my talk. Of course, I guess there is never anything wrong with being inexpensive. 🐶



GENE WEATHERALL, CHIEF
BUREAU OF EMERGENCY
MANAGEMENT

TEXAS EMS CERTIFICATIONS AS OF JANUARY 18, 1995	
ECA	8,631
EMT	25,638
EMT-I	3,369
EMT-P	8,918
TOTAL	46,556
COORDINATOR	384
INSTRUCTOR	1,334
EXAMINER	1,602

Texas EMS

M a g a z i n e

\$20 for 2 years

Your point of contact with the agency that regulates Texas EMS - taking state and national EMS issues and answers to emergency medical services professionals serving in every capacity across Texas.

- New subscription
 Renewal subscription

\$20 for 2 years
 Fill in name and address and mail along with payment.

- Change of address
 Include mailing label and fill in name and address below.

Please enter my subscription for two years

Name _____

Address _____

Zip _____

Send a gift subscription for just \$20 to:

Name _____

Address _____

Zip _____

From _____

A 2-Year Subscription for \$20

Amount enclosed \$ _____
 2A284 - Fund 160

Make check or money order
 for \$20 payable to
 Texas Department of Health

Send subscriptions to:
 Texas Department of Health-EMS
 1100 West 49th Street
 Austin, Texas 78756-3199

By Cheryl Strawn, Burnet EMS

Dear Diary

I was rudely awakened at 6 a.m. this morning. Someone fell and couldn't get up. I helped him to his chair. He was fine.

I stepped from the shower and was dressing for work when dispatch notified us of a direct admit from the nursing home to the local hospital. Flu or something, I think.

Midmorning—some lady complains she "doesn't feel right" and wants her blood pressure checked. No complications. A concerned neighbor comes to visit. She feels better.

Lunchtime brought roast beef, mashed potatoes, pea salad. But I don't get to sample. A lady fell—needs help getting up. The only entrance to her home is an unlocked kitchen window about six feet off the ground. I heave myself inside and unlock the door for the crew. The lady is OK.

Midafternoon—"man down" One of our regulars has had too much to drink and passed out in his front yard. Joe helped him inside to sleep it off.

Am late getting home. Some young woman got a Q-Tip stuck in her ear. Needs a ride to the hospital so they can remove the cotton part.

For supper I grab a tuna sandwich. No more roast beef.

Have a council meeting at 7 p.m. Should be out early.

7:30 p.m.—crew needs ALS assistance. Woman with respiratory complications, unconscious, unresponsive. Crew loading patient into ambulance when I arrive on scene. They are bagging the patient. Three minutes to the hospital. I intubate and start a lifeline. They hyperventilate her and do vital signs. Hospital stabilizes patient and calls for helicopter. Woman is now alert. Of course she cannot speak with the ETT inserted. She holds my hand and is able to blink the answers to direct questions. She does not say thank you, but I see it in her eyes.

10:30 p.m.—I return home and go to bed. As I drift off, I feel good.

I awake at midnight. I feel guilty about feeling good. Each small deed throughout the day meant something special to the person we assisted. Anyone could have crawled through that window or helped that man to his chair. But the last call was different somehow.

As I lay in bed awaiting sleep, a curious feeling came over me. I realized it wasn't what I could do, or Joe or Mary or Sue, but what we could do together. We met a challenge head on and we won. Teamwork. I felt good. 🤝

Texas Department of Health-Designated Trauma Facilities



- **University Medical Center**, Lubbock
Comprehensive (Level I), designated October 19, 1993
- **Parkland Memorial Hospital**, Dallas
Comprehensive (Level I), designated December 9, 1993
- **Hermann Hospital**, Houston
Comprehensive (Level I), designated January 4, 1994
- **Eagle Lake Community Hospital**, Eagle Lake
Basic (Level IV), designated January 6, 1994
- **Wood County Central Hospital District**, Quitman
Basic (Level IV), designated January 6, 1994
- **Brownfield Regional Medical Center**, Brownfield
Basic (Level IV), designated January 6, 1994
- **East Texas Medical Center**, Tyler
Major (Level II), designated January 7, 1994
- **Wilbarger General Hospital**, Vernon
Basic (Level IV), designated September 14, 1994
- **Medical Arts Hospital**, Lamesa
Basic (Level IV), designated October 5, 1994
- **Trinity Medical Center**, Brenham
Basic (Level IV), designated October 24, 1994

Trauma facility designation from Texas Department of Health extends for three years.

Comprehensive trauma facilities, Level I, manage major and severe trauma patients, provide educational opportunities in trauma-related topics for health care professionals, and conduct trauma research.

Major trauma facilities, Level II, provide services similar to the Level I trauma facility although research and some medical specialty areas are not required for Level II facilities.

General trauma facilities, Level III, provide resuscitation, stabilization, and assessment of injury victims and either provide treatment or arrange for appropriate transfer to a higher level trauma facility.

Basic trauma facilities, Level IV, provide resuscitation, stabilization, and arrange for appropriate transfer of all major and severe trauma patients to a higher level trauma facility.

If you have an inquiry about trauma facilities, contact Terry McCormack of the Bureau of Emergency Management's Trauma Program at (512) 834-6700.

Pediatric Prehospital Provider Course

Sponsored across Texas by Texas Department of Health

- *Want more confidence for those "unresponsive child" calls?*
- *Wonder how to do an assessment on an 18-month-old?*
- *Wish you had infant and toddler patients for skills practice?*

PPPC covers these must-knows:

- pediatric assessment
- common medical emergencies
- shock
- trauma
- skills stations
- and more

- ✓ 16-hour basic course
- ✓ for any EMS level
- ✓ 4-hour instructor course

Want more information? Call Ernesto Rodriguez or Annie Andrus at (512) 834-6700. TDH provides registration forms, slide sets, lesson plans, and course completion certificates for approved courses.

PPPC: designed and sponsored by TDH to improve EMS for children

Local and Regional EMS News

Is your EMS service mentioned in Local and Regional EMS News?

It needs to be! Are you planning a fundraiser? A training class? A public education program? Do you have new people on board? Elected new officers?

Send your news to:
Texas EMS Magazine
Alana S. Mallard, Editor
Bureau of Emergency
Management
1100 West 49th Street
Austin, Texas 78756-3199
(512) 834-6700

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

Two Texas firefighting teams place in top ten

Teams representing the Austin and Irving fire departments placed in the top ten teams at the National Firefighters Combat Challenge, held this year in St. Louis. Approximately 40 teams with five members each competed in the timed event. Five exercises that firefighters are trained to do in the line of duty are included: a five-floor stair climb carrying a hose pack that weighs approximately 50 pounds; a 50-pound hose hoist to the fifth floor; "forcible entry" using an eight-pound shot hammer to drive an I-beam a distance of five feet; a hose advance moving a charged 1.5-inch hose forward 75 feet; and a "victim" rescue dragging a 175-pound dummy. All activities are performed wearing full turnout gear with air masks engaged.

The Irving team took seventh place with a time of 6:38; Austin took eighth with 6:39. A

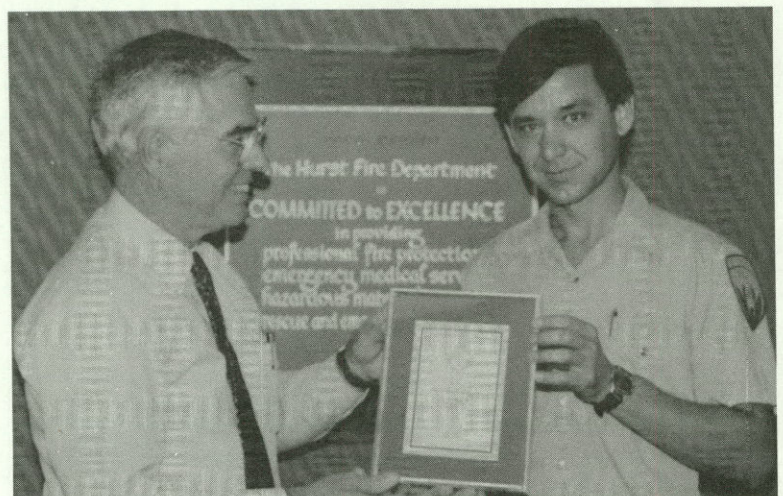
Casper, Wyoming, team took top honors with a time of about six minutes.

New mother learns value of CPR class

Hurst paramedic Howard Hill recently found out that his CPR classes can make a difference, sometimes right away. In response to a request for a CPR class from the county's social services workers, Hill scheduled a CPR class. One of his students had a 6-month-old daughter experiencing a respiratory illness. Just hours after finishing the class, the woman found that her daughter had vomited and was not breathing. The woman began CPR, revived her daughter, and called for an ambulance. She said she would have not known what to do if she had not taken the class.

Fire Chief Joe Erwin gave Hill a Silver Eagle Award for his interest and efforts in teaching the class. The award is given to

Hurst Fire Chief Joe Erwin, left, presents the department's Silver Eagle Award to paramedic Howard Hill. Hill taught a CPR class to county employees that included a young mother who used the knowledge later that same day to resuscitate her baby.



Local and Regional EMS News

anyone in the department who goes "above and beyond normal duty," according to Erwin. "It's not often you can say that a class saved a life, but in this case it may have."

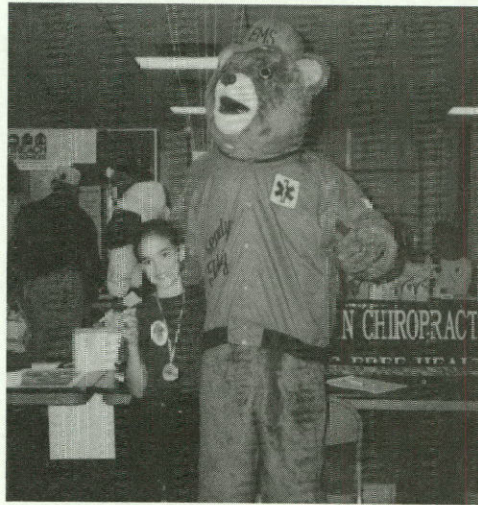
Martin County EMS sponsors booths at health fair

Martin County EMS recently participated in a health fair in Stanton by sponsoring three booths. Displays included information from the American Heart Association, issues of *Texas EMS Magazine*, Ready Teddy coloring books and stickers, and EMS posters and brochures. The highlight of the displays, though, was the new 1994 Ford Type III ambulance the service recently purchased using a Local Projects grant from TDH. Volunteers gave ambulance rides as door prizes, along with other items such as a first responder kit, a CPR mask, and free CPR classes.

The service operates BLS with MICU capabilities in Martin County, extending into parts of Dawson, Howard, Glasscock, and Borden counties. The volunteer service has one paid person, paramedic Kevin Barnes. Last year they made about 300 calls.

Harlingen group enlists Ready Teddy to promote service

Harlingen Community Emergency Care Foundation, Inc., and Ready Teddy are helping Southwestern Bell promote a new dis-



Martin County EMS recently enlisted Ready Teddy's help at a county health fair. The service set up three booths and gave away door prizes that included a CPR mask and ambulance rides.

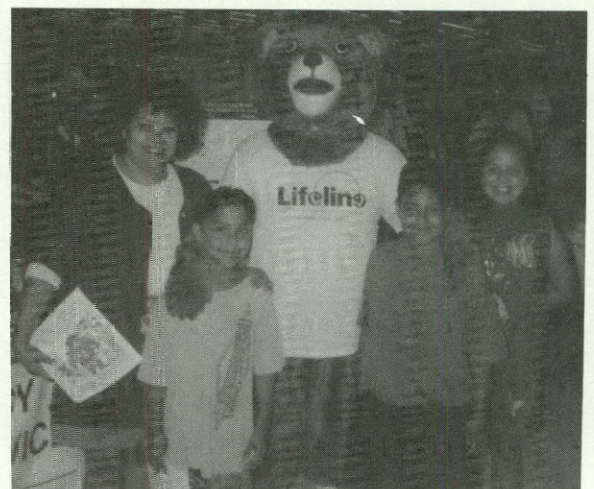
counted phone service to households without telephones. Texas leads the nation in the number of households without telephone service, which provides a vital link to the emergency system. The Lifeline program provides discounted service to Texans who can't afford regular service. The monthly charge on Lifeline ranges from \$2.50 for measured service to \$7.50 for unlimited service. Dennis Hebner, training officer for Harlingen Community Emergency Care Foundation, Inc., writes that the program will

be a valuable addition to the current 9-1-1 educational program and that EMS has the perfect opportunity to get the word out about the Southwestern Bell service. If you would like additional information about Lifeline, call Tom Pagano at 314/982-1702.

Channelview reaps benefit of generous Girl Scout troops

Like many departments, Channelview Volunteer Fire Department found that when they gave

Ready Teddy helps Harlingen Community Emergency Care Foundation, Inc., and Southwestern Bell get the word out about a new discounted phone service for low-income families. Texas leads the nation in the number of households without telephones, which are a vital link to emergency services.



Local and Regional EMS News



Girl Scout troops from Channelview and Sheldon recently donated 100 teddy bears to the Channelview Volunteer Fire Department to use on EMS calls involving children after the department ran out of bears last spring. Holding a few of the new bears are, from left, EMS Deputy Chief Kacey Sammons, Riverview Girl Scout leader Becky Stevens, and CVFD Chief Rich Vendramin.

a stuffed bear to a child involved in an emergency, the child felt more at ease. Unfortunately, the department ran out of bears last spring. That's when Girl Scout troops in Channelview and Sheldon stepped in. The troops handcrafted approximately 100 bears as a service project for the community and presented them to Channelview Volunteer Fire Department Chief Rich Vendramin and EMS Deputy Chief Kacey Sammons.

Power surge knocks out El Paso 9-1-1

A power surge in El Paso in late October shows how much we depend on electrical power—and how emergency operations can be left in the dark when things go awry. A power outage on the west side of the city and subsequent power surge caused the breakdown of the \$9.65 million emergency communications system. The computerized communications system's backup failed to kick in after the break-

down. Most callers to the system received a busy signal.

For about two hours, officials used a makeshift dispatch operation through the sheriff's office using the only two available lines of the 15 in use normally. The sheriff's department, which normally receives calls only from rural areas of the county, had to relay all information for EMS, fire, and police for the entire county.

Officials explained that the backup generator did not work because maintenance crews were in the process of changing its batteries, a process that takes place about every five years. Because of the number of batteries, the process is time consuming. Luckily, no major incidents occurred while the 9-1-1 system was out of service.

NAEMT names award winners at its annual conference

The National Association of Emergency Medical Technicians

presented its annual awards at a conference in October in Mobile, Alabama. Carl Hoppis of Western Grove, Arkansas, received the Robert E. Motley EMT of the Year Award for his contributions to EMS. Hoppis has worked in prehospital care for 20 years and currently works for North Arkansas Medical Center.

Ray Simpson Jr. of El Reno, Oklahoma, was awarded the Asmund S. Laerdal EMT-Paramedic Award for Excellence. The award, sponsored by Laerdal Medical, is given to the paramedic who contributes most significantly to EMS at the community, state, or national level. Simpson is director of Park View Hospital EMS.

Tappahannock Volunteer Rescue Squad of Tappahannock, Virginia, won the Leo R. Schwartz Emergency Medical Service of the Year Award. Sponsored by McCoy Miller Ambulance, this award is presented to a BLS service that exemplifies outstanding service and professionalism.

EMT-Paramedic Service of the Year went to Ottumwa Regional Mobile Intensive Care Service, of Ottumwa, Iowa. The award, sponsored by the Academy of Orthopaedic Surgeons, is given to a service whose professionalism and service sets a positive example.

James A. Judge II of Vero Beach, Florida, received the William K. Klingensmith Award for his excellent administrative skills and leadership.

And Karin L. H. Dickerson of Greenville, South Carolina, ac-

Local and Regional EMS News

cepted the Mary Ann Talley EMS-Instructor/Coordinator of the Year Award.

Idalou medic finds reward in medical mission to Honduras

Talk about a long way to go for a call. EMT-I Charlie Brown of Idalou volunteered to go to Honduras in February of 1994, along with a team of doctors, dentists, and nurses, to provide medical and dental care to the residents of rural Honduran villages. Brown says that most of the health and safety challenges come from polluted water, malarial mosquitoes, snakes, tropical fungi, flies, fleas, and ticks. Last year the teams, who spread out to villages across the country, saw 8,750 patients. Other members of Brown's team came from across the United States

and Canada.

Each volunteer pays his or her own expenses; in Brown's case, he used vacation time to go. His travel expenses were paid by the community service groups including Idalou Lions Club, Idalou EMS, Idalou Volunteer Fire Department, Idalou Security Bank, and the Lubbock Professional Firefighters Association. Brown has been with the Lubbock Fire Department for 20 years; he also volunteers with Idalou EMS, and the Idalou Volunteer Fire Department. Brown has volunteered to go again and leaves February 11.

Ready Teddy shows that bears need immunizations, too

Ready Teddy showed children that even bears need their shots when he attended a press confer-

ence and kick off for the Harris County Hospital District Foundation and Troubleshooters Immunizations Program. Ready Teddy stood in line with the children and received the first immunizations shots.

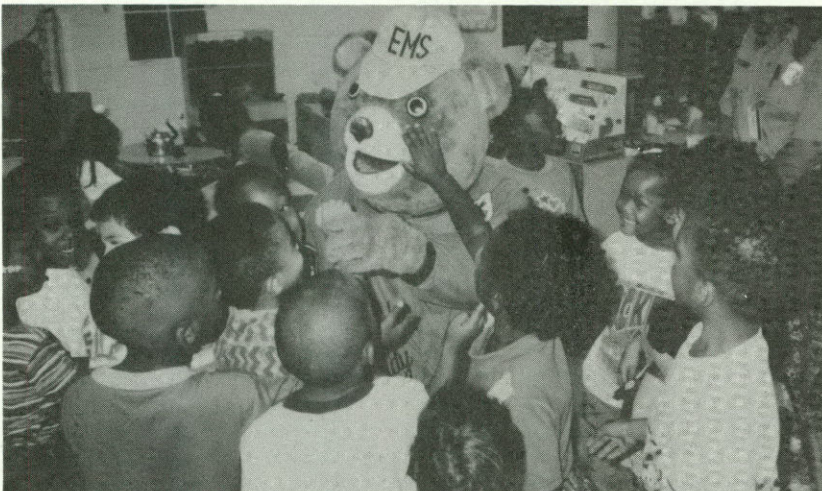
The beamed medic gave out coloring books and provided lots of hugs for children receiving immunizations. EMT Tonya Douglas of the Harris County Hospital District EMS Division writes that a special thanks goes to Harold Jones, a dispatcher with HCHD Transportation, for playing the role of Ready.

North Texas Regional Advisory Council teaches about helmet safety

The North Texas Regional Advisory Council, a group working to develop a trauma system in the Wichita Falls area, also stresses the importance of prevention. The group recently participated in the Hotter'N Hell Hundred consumer trade show in a cooperative effort with the Texas Office for the Prevention of Developmental Disabilities. More than 18,000 attended the show and four bicycle helmets were raffled at the booth.

Mims volunteers get new ambulance

Mims Volunteer Fire Department and Ambulance Service recently purchased a new Dodge ambulance to add to the one unit already in use. The service covers 96 square miles on the north shore of



Ready Teddy proved that bears are not afraid to be immunized when he volunteered to take the first shots at a recent clinic at the Perry HeadStart Center in Houston. The clinic was part of a new program sponsored by the Harris County Hospital District and Troubleshooters Immunization Program.

Local and Regional EMS News

the Lake O' the Pines. Funding for the service comes from a \$25 donation per family in the area, along with a \$3,000 annual donation from the county. Volunteers staff the ambulances and the six fire trucks, and handle dispatching.

Harris County Emergency Corps awards \$1,000 scholarship

Congratulations to Robin Eileen Nichols of Cleveland, Texas, who won a \$1,000 scholarship from Harris County Emergency Corps for her essay, "The Future of EMS." Nichols sees increased education, licensure, and diagnosis in what she calls the aggressive movement of EMS. She will use the money to pay for EMT-Intermediate and EMT-Paramedic training.

The service also sponsored an in-house essay contest to honor the memory Sissy Keifer. Winners of that contest, Debra K. Teague and Michael Jaszowski, won \$500 scholarships.

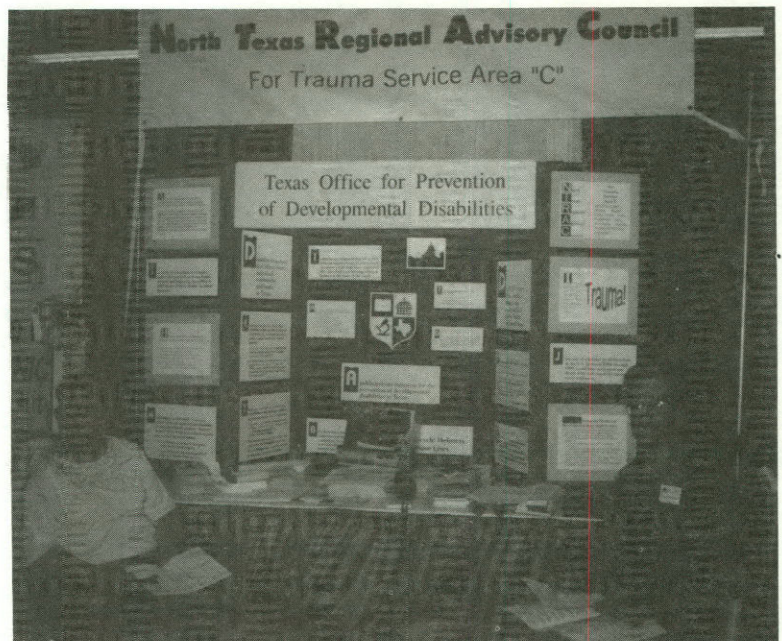
Harris County Emergency Corps offers a scholarship for EMS education in the amount of \$1,000 every year. For information on the scholarship, contact Harris County Emergency Corps at 16825 Northchase, Suite 150, Houston, Texas 77060, or call (713) 875-8000.

H. C. Weigley founded Harris County Emergency Corps in 1928. The service is located in the northern part of Houston and covers a 250-square mile area. Volunteers and a small paid staff average 10,000 runs each year.



North Texas Regional Advisory Council, along with the Texas Office for the Prevention of Developmental Disabilities, recently set up a booth that stressed the important role of prevention in trauma. The Hotter N' Hell Hundred consumer trade show in Wichita Falls drew about 13,000 people. TOPDD's Jerry Ann Robinson, left, staffed the booth with RAC coordinator David MacLagan.

Mims volunteers pose in front of the new ambulance they recently purchased. The service now uses two units to cover 96 square miles on the north shore of Lake O' the Pines.



Local and Regional EMS News

Texas Department of Health EMS Offices

**Bureau of
Emergency Management**
1100 West 49th Street
Austin, Texas 78756-3199
(512) 834-6700

Public Health Region 1
Terry Bavousett
P.O. Box 968, WTSU Station
Canyon, Texas 79016-0968
(806) 655-7151

Denny Martin
1109 Kemper
Lubbock, Texas 79403
(806) 744-3577

Public Health Regions 2 & 3
Jimmy Dunn
2561 Matlock Road
Arlington, Texas 76015
(817) 792-7211

Andrew Cargile
1290 S. Willis, Suite 100
Abilene, Texas 79605
(915) 695-7170

Public Health Regions 4 & 5
Jim Arnold
1517 W. Front Street
Tyler, Texas 75702-7854
(903) 595-3585

Public Health Region 6
C. Wayne Morris
10500 Forum Place,
Suite 200
Houston, Texas 77036-8599
(713) 414-6490

Public Health Region 7
Rod Dennison
2408 S. 37th St.
Temple, Texas 76504-7168
(817) 778-6744

Public Health Region 8
Lee Sweeten
1021 Garner Field Road
Uvalde, Texas 78801
(210) 278-7173

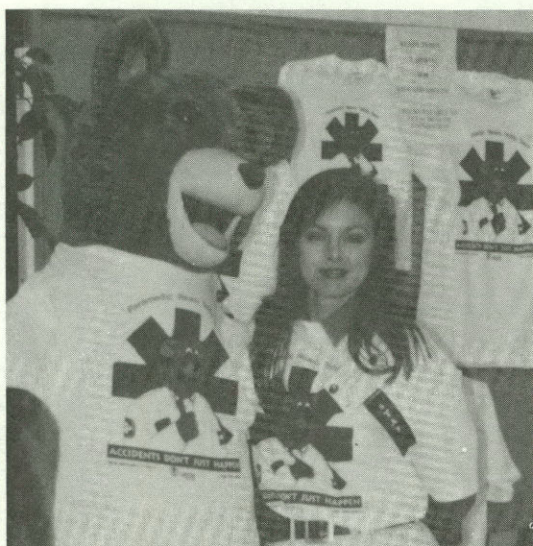
Fernando Posada
1015 Jackson Keller Road,
Suite 222
San Antonio, Texas 78213-3748
(210) 342-3300

Public Health Regions 9 & 10
Tom Cantwell
6070 Gateway East,
Suite 401
El Paso, Texas 79905
(915) 774-6200

Public Health Region 11
Jay Garner
601 W. Sesame Dr.
Harlingen, Texas 78550
(210) 423-0130

Rothy Moseley
1233 Agnes
Corpus Christi, Texas 78401
(512) 888-7762

Paramedic Ready Teddy says ACCIDENTS DON'T JUST HAPPEN



It's the T-shirt you need for the point you want to make: it takes all of us to prevent injuries. You saw them at the conference—order yours now for \$8. Only \$6.50 if you order 10 or more.

Name _____

Street Address _____

City, State, Zip _____

- (CS) Child Small
- (CM) Child Medium
- (CL) Child Large
- (AM) Adult Medium
- (AL) Adult Large
- (AX) Adult Extra Large

Sizes	Quantity	Sub-total
		\$
		\$
		\$

T-shirts are Beefy-T,
100 percent cotton.

Total	\$
--------------	-----------

Make checks to: Texas Health Foundation
Mail to: EMS T-shirts
PO Box 142694
Austin, Texas 78714-2694

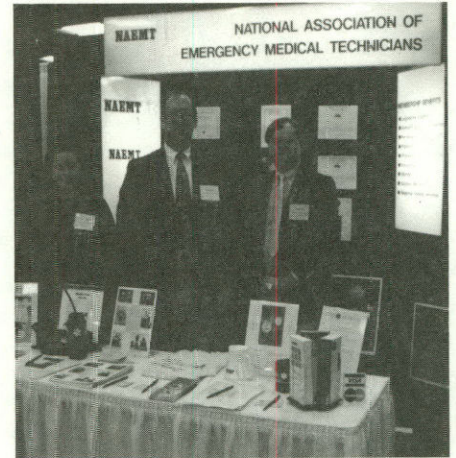
Underwritten by Laerdal Medical



Texas EMS Conference '94 Shatters Attendance Records



Twenty-two vehicles rolled into the exhibit hall at Texas EMS Conference '94, but the Horton exhibit had the only living room. They'll be back with double the space this year.

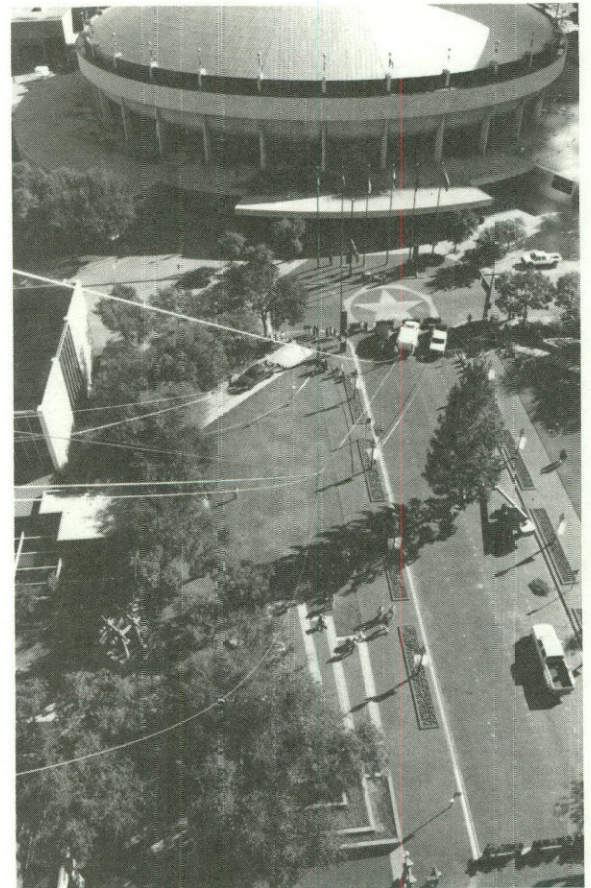


National Association of Emergency Medical Technicians joined 140 other exhibitors at last year's conference.

What has 4,582 legs, 35,000 hours of continuing education, and eats thousands of doughnuts, fajitas, chicken fried steaks, and ice cream bars over the course of five days? Texas EMS Conference '94, of course. From the pre-conference workshops to the closing sessions, this was a conference of firsts. This is the first time TDH's EMS conference

- had so many attendees—2,291, about 700 more than last year!
- made the front page of the local newspaper
- welcomed 150 exhibitors over 80,000 square feet of exhibit space
- demonstrated a new kind of technical rescue off the Radisson

- included TAEMT's Texas State Skills Championship all day Sunday
 - inducted a volunteer and a medical director into the EMS Hall of Fame
 - opened registration all day Sunday in the convention center
 - listed content areas for all CE courses
 - expanded CE classes into the theater all day
 - used nearly 2,700 hotel rooms over five nights
- Kelly Harrell



An up-close-and-personal photo of Babe Aycock during this rescue demonstration appeared on the Star Telegram's front page, shining positive light on everyone in EMS.

Congratulations to Texas Department of Health's 1994 EMS Award Winners



Donovan Butter, DO
San Antonio
EMS Medical Director Award

Karen Yates, EMT-P, RN
Dallas
EMS Educator Award

Henry Barber, EMT-P
Calhoun County EMS
EMS Administrator Award

WD Herrington, EMT-P
Live Oak County EMS
EMS Public Information Award

Jerry Pitcock,
Paris
EMS Citizen Award

Don Gibson, EMT-I
Premont
EMS Telecommunicator Award

Scott Springfield, EMT-P
Houston
Medal of Honor

Texas EMS Conference wouldn't be Texas EMS Conference without the exhibit show: vehicles, textbooks, patient care supplies, associations, medical equipment, and training abounded.

The San Antonio area boasted three winners of EMS awards: Donovan Butter as medical director, Fiesta Texas EMS as first responder, and Anderson Ambulance as private provider.



Hueco Volunteer Fire and Rescue
EMS Volunteer Provider Award

Fiesta Texas EMS
EMS First Responder Award

Anderson Ambulance
San Antonio
EMS Private Provider Award

Williamson County EMS
EMS Public Provider Award

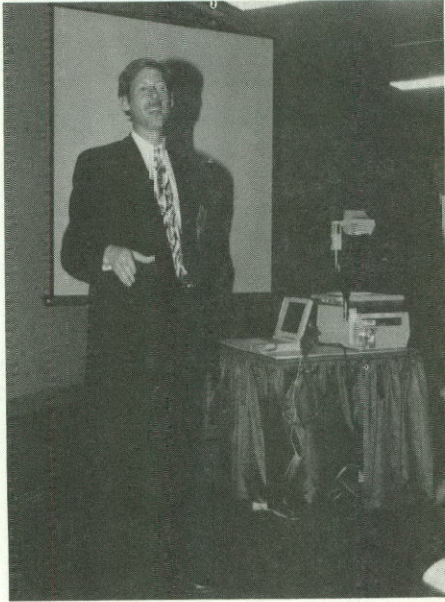
Central Texas Regional Advisory Council
Outstanding RAC

South Plains EMS
Outstanding RAC





Faculty Presents Top Quality Education



MedStar CEO Doug Key talked about new roles for paramedics in primary care and prevention.

Thanks to our 85 workshop and general session instructors, the conference offered national-caliber EMS continuing education. Returning instructors Scott Bolleter, Mark Warren, Joan Shook, Paul Pepe, Joseph Coppola, Doug Key, Karen Yates, and Mike Wainscott were some of your favorites and we'll ask them to return in November.

And first-time instructors at the conference like Cindy

Crocker, Tarek Souryal, Gary Purdue, and Brian Wilson will have to return too, according to your evaluations. One evaluation said the best thing about the conference was "the life and humor within the instructors."

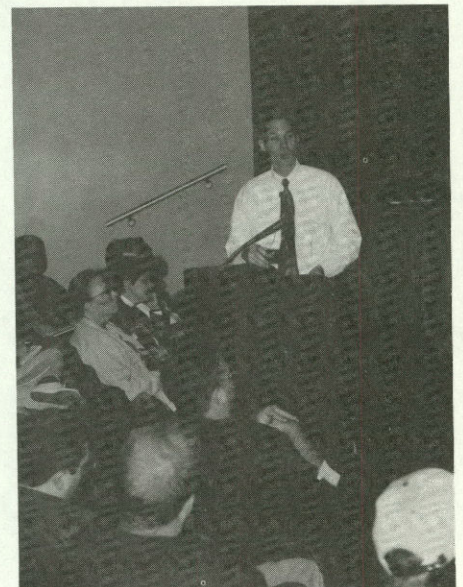
Besides new instructors, the conference offered new concepts: a 24-hour emergency medical dispatch course, a five-workshop trauma coordinators track, a 16-hour critical incident stress management course, two prosection cadaver labs, and a five-workshop agriculture rescue track.

The Texas Trauma Coordinator Forum presented a one-day track on Monday designed for its membership but open to all conference registrants, and organizer Jorie Klein plans to sponsor a two-day track for trauma coordinators this year. —Alana Mallard



South Texan Don Gibson held the attention of his 12 students in TDH's first emergency medical dispatch course.

Houston's Paul Sirbaugh joined Texas EMS Conference faculty for the first time in the popular pediatrics track. Use the form on page 18 to order audio tapes of workshops



Photographers Capture EMS on Film for '94 Conference



Photos entered in the conference photo contest appear in *Texas EMS Magazine* and other TDH publications. TDH has publications rights to photos but ownership of the photos remains with the photographers.

Humble, Brownsville, Dalhart, Burleson, Arlington, El Paso, and, yes, even Australia and Malaysia—photo entries came from all these places and more. Nearly a hundred photographers captured EMS on film.

Carl Thompson and Bob Humphrey of Road Rescue Emergency Vehicles sponsored the cash awards, ribbons, and plaques.

Gordon Ziegler of the *Plainview Daily Herald* snapped a photo that won a grand prize and the special award.

Repeat winner Sally Muir of Austin EMS won a grand prize and a second place. Linda Gheen of Dallas won a second place and an honorable mention.

Joel Andrews of Palestine and Bruce Maxwell of Arlington each won a third place award and John Huseh of New Braunfels won an honorable mention for his photo.

Gordon Ziegler's winning photo covers the front of this issue of *Texas EMS Magazine*—the Special Award for this photo came from Ron Mansolo, Associate Commissioner for Health Care Quality and Standards, of which the Bureau of Emergency Management is part.

Judges for the 1994 photo contest were Bryan Bledsoe, Donovan Butter, Sean Hughes, Ron Mansolo, Carl Thompson, Capt. J. Mark Warren, and Pam West.

Look for the photo contest entry form in the May issue of *Texas EMS Magazine*—the subject is EMS, the photographer can be you.—*Jan Brizendine*

Some of the people that made Texas EMS Conference '94 successful

Conference Committee

Alana Mallard	Conference Coordinator
Debbie Bradford	Assistant EMS Division Director
Jan Brizendine	Exhibits Coordinator/Design
Harold Broadbent	Medical Advisory Board Division Director
Vic Dwyer	Security
Kelly Harrell	Facilities and Catering Coordinator
Debby Hilliard	Administrative Assistant
Jeff Jarvis	Continuing Education
Kathy Perkins	Assistant Bureau Chief
Ernie Rodriguez	Assistant EMS Division Director
Billy Sladek	Registration/Financial
Paul Tabor	Agenda Coordinator
Gene Weatherall	Bureau Chief
Par West	EMS Division Director
Linda Williams	Registration/Financial

Thanks also to

Kay Allen	Rural Issues Track
Mariah Baesel	Registration
Terry Bavousett	Announcer
Sharon Browder	Exhibits/Photo Contest
Ryan Davis	Videotaping
Jackie Dingley	Nursing CEU
Heather Godinez	Registration
Sean Hughes	Photography
Jorie Klein	Trauma Coordinator Forum Track
Shawna Lee	Exhibits
MedStar	Golf Tournament
Terry McCormack	Registration
Jeanne McGinley	Exhibits
Kent Hunt	Cadaver Labs
Cindy Ochoa	Exhibits
Mike Polk	Exhibits
Becky Potts	Exhibits
Texas Assoc. of EMTs	Valsalva Bowl Skills Competition
Polli Williams	Technical Rescue Equipment

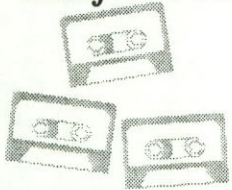


TEXAS DEPARTMENT OF HEALTH

NOVEMBER 19 - 23, 1994

FORT WORTH, TEXAS

Reinforce what you've already learned, or hear what you missed at the Conference!



AUDIO TAPE ORDER FORM



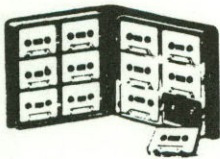
All programs were recorded "LIVE" and are available on audio cassette!

Phone Orders: (214) 638-8273

Fax Orders (214) 638-0954



\$9.00 PER TAPE



BUY 12 TAPES & ALBUM

GET 10% OFF

BUY 24 TAPES & ALBUM

GET 15% OFF

BUY ENTIRE SET & ALBUM

GET 20% OFF

PAYMENT: (Payment must accompany order!)

-Outside U.S. Pay in U.S. Funds or AMX Only!

Check Enclosed Charge to: AMX MC VISA DISCOVER

Acct. # _____

Signature _____ Exp. Date _____

\$25.00 MINIMUM ON ALL CREDIT CARD ORDERS!

Office Hold Send Picked Up
Use Only Check Charge Card

PRINT NAME OR ATTACH BUSINESS CARD

Name _____

Title _____

Company _____

Address _____

City/State/Zip _____

Phone # (____) _____

ALBUMS (to store cassettes)

Holds 8.....\$6.00

Holds 12.....\$7.00

Holds 16.....\$8.00

No. Audio Tapes ____ x \$9.00..... = \$ _____

Albums (see cost above).....\$ _____

Discounts.....\$ _____

POSTAGE & HANDLING COST

U.S.A. \$1 per tape + \$2.00 per order (handling)\$ _____

Canada \$1 per tape + \$3.00 per order (handling).....\$ _____

Overseas \$1 per tape + \$15.00 (Air Mail)\$ _____

GRAND TOTAL\$ _____

(Unless proper mailing payments are made, orders will be delayed!)

Allow 2 - 3 Weeks Delivery

Mail this form with your payment!

To: **NATIONWIDE RECORDING SERVICES, INC.**

8500 N. STEMMONS, SUITE 3060

DALLAS, TEXAS 75247

(214) 638-8273

Fax (214) 638-0954



AUDIO TAPE ORDER FORM

AUDIO TAPE ORDER FORM

✓ CHECK SELECTIONS

GENERAL / SPECIAL SESSIONS

- ___ GS1 PEDIATRIC EMERGENCY MEDICINE REVIEW GAME SHOW WITH VICK & VERN
- ___ GS2 NEW TRENDS IN EMS
Doug Key
- ___ GS3 PRIMARY CARE AND THE PARAMEDIC (TWO TAPES)
Doug Key
- IMPROVED CRITERIA FOR BOTH TERMINATION AND WAIVER OF RESUSCITATION EFFORTS
Paul Pepe, M.D.
- ___ GS4 DNR/ TRANSPORT REFUSALS
Jack Ayers, J.D.
- ___ T3 OVERVIEW OF HEALTH & MEDICAL DISASTER PLANNING
Sam Wilson
- ___ T4 PRE-HOSPITAL DOCUMENTATION
Vic Dwyer
- ___ T5 NEUROMUSCULAR BLOCKING AGENTS IN THE PRE-HOSPITAL ENVIRONMENT
Preston Love, R.N.

ADMINISTRATORS

- ___ T6 GRANT WRITING AND GRANT RESOURCES
Bill Aston
- ___ T7 OSHA TB REGULATIONS
Mike Frick
- ___ T9 PRINCIPALS OF RISK MANAGEMENT
John Rinard
- ___ T10 COMMUNITY-BASED EMS
Eddie Callender, Judge Carla Garner, Ernie Rodriguez
- ___ T12 EMS UTILIZATION OF ICS: CAN WE AFFORD NOT TO?
John Murray
- ___ T13 TX 1 DISASTER MEDICAL ASSISTANCE TEAM
Steven Kastl, D.O.
- ___ T14 EMPLOYEE RELATIONS
Ernie Rodriguez, John Rinard

TRAUMA NURSES

- ___ T15 BURN TRAUMA MANAGEMENT
Gary Purdue, M.D.
- ___ T16 FAMILY PRESENCE DURING RESUSCITATION
Theresa Meyers, R.N., Dezra Eichhorn, R.N.
- ___ T17 IMPACT OF MANAGED CARE ON THE TRAUMA SYSTEM
John Weigelt, M.D.

PI & E

- ___ T20 PREVENTION: LEADING EDGE OF TRAUMA CARE
Cynthia Crocker, R.N.
- ___ T21 THE THINK CHILD SAFETY PROGRAM
Stewart Dodson
- ___ T22 WRITING FOR PUBLICATION
Bryan Bledsoe, D.O.
- ___ T23 DEVELOPING A PUBLIC EDUCATION PROGRAM FOR YOUR AGENCY
Jeff Rubin

CISM

- ___ T25 HANDLING STRESS: OTHER ISSUES THAN JUST CISM
Mike Fitts, Psy.D.
- ___ T26 WHEN THE DANCE BECOMES A DIRGE: CISM AS NEUROTRAUMA
Jack Hinds, D.Min.

- ___ T27 CISM AND THE AFTER BURN
Ed Stauffer
- ___ T28 EMERGENCY SCENE STRESS MANAGEMENT
Terry Bloss

HOW-TO

- ___ T29 INNOVATIONS IN EMS EDUCATION (TWO TAPES)
Jeff Jarvis
- ___ T30 HAZ-MAT MADE EASY?
Penny Psencik, R.N., Mike Ellis
- ___ T31 SEXUAL ASSAULT EVIDENCE PRESERVATION
Cecilia McKenzie
- ___ T32 THE ROLE OF EMS IN SEARCH AND RESCUE
Kenneth Larsen
- ___ T33 ESTABLISHING YOUR OWN COMMUNITY AWARENESS PROGRAM
Bonnie Liles, Ed Strout

DRIVING AND EMS

- ___ T35 MEDICAL CONDITIONS AFFECTING DRIVING (TWO TAPES)
Dan Bailey III
- ___ T36 EMERGENCY VEHICLE OPERATIONS IN THE REAL WORLD (TWO TAPES)
Mike Paulus

PEDIATRICS

- ___ T37 PEDIATRIC TRAUMA
Donovan Butter, D.O.
- ___ T38 PEDIATRIC BASICS
Joan Shook, M.D., Paul Sirbaugh, D.O.
- ___ T40 COMMON PEDIATRIC MEDICAL EMERGENCIES
Joan E. Shook, M.D.
- ___ T41 NEONATAL RESUSCITATION IN THE PRE-HOSPITAL ENVIRONMENT
Alex Stadthagen

EMS FAVORITES

- ___ T42 HOW TO FAIL IN FIVE EASY STEPS
Captain J. Mark Warren
- ___ T43 GERIATRIC EMERGENCIES
Bryan Bledsoe, D.O.
- ___ T44 LEGAL AND ETHICAL ASPECTS OF RESUSCITATION
Donald J. Gordon, M.D.
- ___ T45 STAINS ON THE HOUR GLASS: A VIEW OF PATIENT ASSESSMENT
D. Scott Bolleter
- ___ T46 TNT - FROM TALK-DOWN & NEGOTIATION TO TAKE-DOWN: SOLUTION TO MANAGING COMBATIVE PATIENTS
D. Freeman
- ___ T47 NEW GUIDELINES TO THE EARLY MANAGEMENT OF POST- TRAUMATIC HEMORRHAGE
Paul Pepe, M.D.
- ___ T48 CASE PRESENTATIONS: EMS GRAND ROUNDS (SESSION I)
Mike Wainscott, M.D.
- ___ T49 CASE PRESENTATIONS: EMS GRAND ROUNDS (SESSION II)
Mike Wainscott, M.D.
- ___ T50 SKYDIVING THROUGH LIFE
Rich Obertots

RURAL

- ___ T52 SNAKES AND OTHER CRITTERS THAT BITE AND STING
Michael Yudizky, Lena C. Day, R.N.
- ___ T54 EMS ROLE IN PROMOTING TRAFFIC SAFETY IN RURAL COMMUNITIES
Tonna Polk, Jacque Magill
- ___ T55 THE COMBITUBE
Brian J. Wilson
- ___ T56 AGRICULTURE HAZARDS: IS IT SAFE FOR YOU TO BE IN THE AREA?
Anne McGowan
- ___ T57 AGRICULTURE INCIDENTS: RESCUE AND TREATMENT
Anne McGowan
- ___ T58 AGRICULTURE INJURY WITH MACHINES AND EXTRICATION (PART I)
Anne McGowan

MEDICAL

- ___ T61 OBSTETRIC COMPLICATIONS
Bryan E. Bledsoe, D.O.
- ___ T62 HAZARD AWARENESS FOR EMS RESPONDERS
Ed Strout
- ___ T63 BEANS AND BRUITS: OH, WHAT A THRILL!
Karen L. Yates, R.N.
- ___ T64 THE APPROACH TO THE UNRESPONSIVE PATIENT
Bill Moore, M.D.
- ___ T65 NEW ACLS PHARMACOLOGY: A PRE-HOSPITAL PERSPECTIVE
Carl Voskamp
- ___ T66 ACUTE MI THERAPY AND CONTROVERSY
Joseph Coppola, M.D.
- ___ T67 DNR ORDERS & REFUSAL TO TRANSPORT: THE LEGAL IMPLICATIONS
William E. Gandy, J.D.
- ___ T68 PATIENT MANAGEMENT IN CONFINED SPACES
Rod Dennison
- ___ T69 TRAUMATIC CARDIAC ARREST
Brian J. Wilson

TRAUMA

- ___ T71 ALL IN THE FAMILY: AN INTRO TO DOMESTIC VIOLENCE
Ron Hilliard, R.N.
- ___ T72 DRUG OVERDOSES, GANGS AND AUTOMATIC WEAPONS
Joseph C. Coppola, M.D.
- ___ T73 TRAUMA SYSTEMS DEVELOPMENT ISSUES
Doug Key, Alan Helberg
- ___ T74 CURRENT MANAGEMENT OF BLUNT AND PENETRATING TRAUMA
Mark E. Hinson
- ___ T75 MANAGING THE MOTOR VEHICLE CRASH
Daniel T. Kistner
- ___ T76 EVALUATION & TREATMENT OF SPORTS INJURIES
Tarek O. Souryal, M.D.



Price: \$9.00 Per Audio Tape





Upper airway obstruction in a child

What causes it? How do you manage it?

Introduction Partial upper airway obstruction, typically manifested by stridor and a prolonged inspiratory phase, is a significant cause of respiratory distress in children. Patients presenting with stridor or evidence of airway obstruction require the highest priority for rapid assessment, stabilization, and transport.

When recognized early and managed appropriately, the outcome for these patients is usually good. However, by the time respiratory arrest and resultant cardiac arrest occurs, the prognosis becomes extremely dismal. Any child with partial upper airway obstruction has the potential for sudden deterioration, and rapid airway management must be anticipated.

Complete upper airway obstruction may be considered a prehospital disease. Only those with witnessed obstruction who receive immediate bystander or emergency medical service intervention are likely to benefit from subsequent hospital care. The prehospital provider must be skilled in

both recognition of upper airway obstruction and rapid stabilization and support of the pediatric airway.

Pathophysiology The increased risk for infants and small children to develop acute upper airway obstruction may be explained by a few developmental principles. First, the small airway diameter in this population is easily compromised when soft tissue swelling occurs secondary to such diseases as epiglottitis, viral croup, and inhalational injuries. This is easily understood when one considers that the narrowest portion of a newborn infant's airway, the cricoid ring, is a mere 5 mm in diameter. Further, the connective tissue of the upper airway structure is only loosely supported, allowing rapid swelling and acute onset of symptoms.

The incidence of foreign body aspi-

Objectives

After completing this article, the reader should be able to:

1. Identify anatomical characteristics of small children which make them high risk for airway obstruction.
2. Describe causes and pathophysiology of pediatric upper airway obstruction.
3. Describe the rapid assessment of a child with upper airway obstruction.
4. Describe indications for and management of pediatric airway obstruction.
5. Describe use of the management algorithm and life-support techniques for pediatric upper airway obstruction.

By

Collin Goto, MD,
and

Elaine Seamer, RN, EMT-P

PHOTO BY

BRUCE MAXWELL, FORT WORTH STAR-TELEGRAM

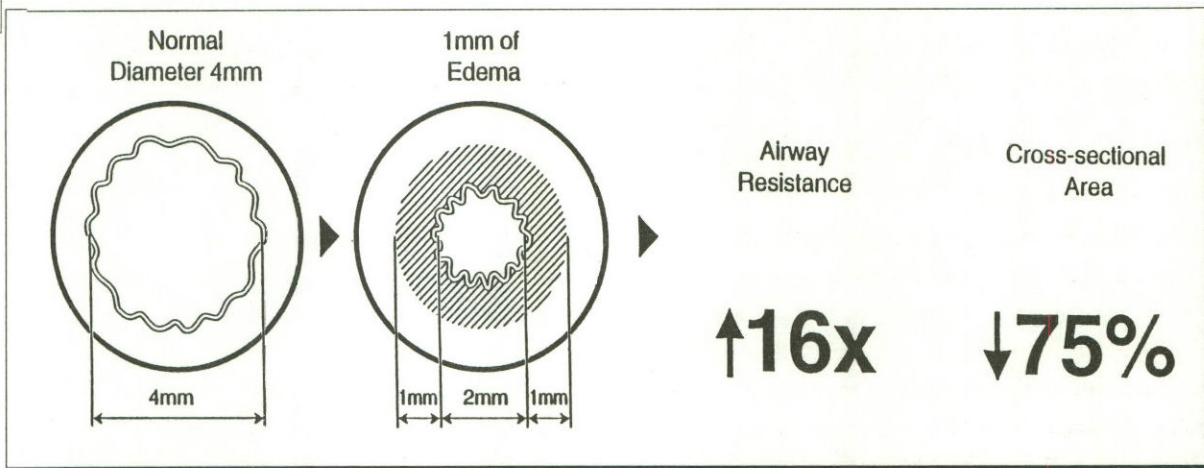


Figure 1.

Poiseuille's law: Resistance to airflow is proportional to $1/\text{radius}^4$. If 1mm of edema is superimposed on the normal circumference of an infant's 4mm diameter airway, the resistance will increase 16-fold and the cross-sectional area will be decreased by 75 percent.

ration is greatest among infants and toddlers because of their natural curiosity, tendency toward oral exploration of their environment, lack of fully developed teeth, and less developed protective oral reflexes.

Stridor is produced by vibration of the airway due to turbulent airflow through an area of partial obstruction. It is typically a high-pitched sound heard during inspiration, but it may be present during both inspiration and expiration if the site of obstruction is in the lower portion of the upper airway. Airflow must be present for stridor to occur. In fact, the sudden absence of stridor may be the first clue that complete upper airway obstruction has occurred.

A high degree of obstruction can exist before respiratory distress is noted clinically. Since near-critical anatomic narrowing can result in only mild obstructive symptoms, clinical deterioration may be rapid and dramatic when the airway is further compromised by increased swelling or a mucous plug. With upper airway obstruction, the inspiratory phase is prolonged and the depth of breathing is typically decreased, while the respiratory rate is increased.

Two laws of physics help us to understand the mechanics of upper airway obstruction in infants and small

children.

Poiseuille's Law states that resistance to smooth flow of gas through a tube is inversely proportional to the radius of the opening to the fourth power. With turbulent flow, the resistance is further increased. Thus, even a minor reduction in the already small diameter of the pediatric airway results in a large reduction in the cross-sectional area (Figure 1).

Bernoulli's Law states that when gas flows through a narrowing in a collapsible tube, the pressure that holds the tube open will decrease as the velocity of flow through the obstruction increases, thereby causing collapse of the tube. This creates a dynamic obstructive process and explains the worsening of upper airway obstruction in the agitated or crying child (Figure 2).

Etiology Upper airway obstruction in the pediatric patient may be caused by a wide variety of disease processes, including respiratory tract infections, aspiration of foreign bodies, allergic reactions, trauma, congenital airway anomalies, *neoplastic growths*, and neurologic impairment (Table 1).

Airway obstruction may occur anywhere in the anatomic pathways of air movement. In spite of the wide differential diagnosis, the major diag-

nostic challenge for the prehospital provider that will affect management in the field is to determine whether the obstruction is intrinsic (internal), such as croup and epiglottitis, or extrinsic (external), implying a foreign body.

Usually, the specific cause of the obstruction will not be determined until after stabilization and transport to a medical facility where diagnostic procedures such as x-rays, fluoroscopy, bronchoscopy, or other imaging studies can be performed.

Common Obstructions Foreign body aspiration is a management problem that differs significantly from most other causes of upper airway obstruction. About 3,000 deaths occur annually in the United States from airway obstruction secondary to aspirated foreign bodies, and about 85 percent of cases occur in children under three years of age.

Foreign body aspiration at home is a major cause of death in this age group. This diagnosis should be suspected in any previously well, afebrile child with sudden onset of respiratory distress and associated coughing, choking, stridor, or wheezing. The majority of cases will not have a history of witnessed or suspected foreign body aspiration.

The severity and nature of symptoms varies with the location of the foreign body in the respiratory tract. In about 75 percent of cases, the foreign body lodges in a mainstem or lobar bronchus. In the remaining 25 percent of cases, the object lodges in the upper airway. The laryngeal location is particularly important in children under one year of age.

Esophageal foreign bodies can also cause airway compromise by external compression of the trachea. *Laryngomalacia* is the most common congenital

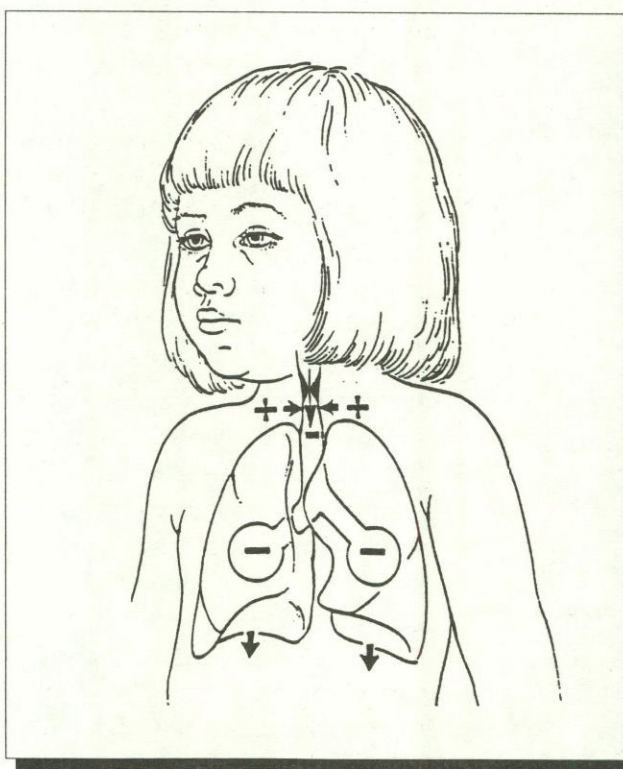
malformation of the larynx. It is characterized by a long narrow epiglottis and floppy *aryepiglottic folds*. Although stridor is typically present from birth, it may first appear after weeks or months, and may only appear with crying. However, critical airway obstruction may occur quickly in the presence of a superimposed respiratory infection.

Subglottic *stenosis* may be congenital or acquired, as seen in the increasing numbers of surviving premature infants who were intubated and ventilated following birth. Stridor may appear after weeks or months. However, since maximal narrowing occurs just below the cricoid cartilage, slight inflammation can lead to abrupt obstruction.

Obligate nasal breathing can be another cause of upper airway obstruction in young infants when their nasal passages become obstructed by mucus and secretions. Only about 40 percent of full-term infants demon-

Figure 2.

Bernoulli's Law: During inspiration in the child with a partial upper airway obstruction, the airway collapses as airflow accelerates across the site of narrowing. This effect is greatly increased in the agitated or crying child, resulting in worsening obstruction.



strate the ability to switch from nasal to oral breathing when the nares are obstructed. It normally takes three to five months before the ability to coordinate respiratory and oral function develops, and by this age most infants are able to breathe adequately through the mouth.

Epiglottitis is a life-threatening bacterial infection of the epiglottis and surrounding structures that characteristically has a dangerously rapid onset of drooling, sore throat, high fever, muffled voice, inspiratory stridor, pain on swallowing, and respiratory distress. The child will often appear anxious, with a toxic appearance. Preference for the tripod position with the neck extended and mouth open, retractions, and cyanosis, all indicate an advanced degree of obstruction. Complete obstruction and respiratory arrest may suddenly occur spontaneously, or as a result of agitation, positioning, or airway manipulation. The typical age is three to seven years, however all ages may be affected, including adults.

Viral croup is the most common infectious cause of upper airway obstruction in children. It is characterized by initial onset of upper respiratory symptoms for several days, followed by the development of a variable degree of respiratory distress, seal-like barking cough, hoarse voice, and crowing inspiratory stridor. The symptoms are often worse at night. Viral croup occurs more commonly during the winter months and children aged six

months to three years are most commonly affected.

Retropharyngeal abscess is a bacterial infection of the lymphoid tissue of the

retropharyngeal space, which can become life-threatening due to airway compromise, invasion of adjacent structures, or sepsis. In 96 percent of cases, the child is under the age of six years. There is usually an initial onset of upper respiratory symptoms progressing to dysphagia, variably high fever, neck extension, drooling, and stridor. There may be a visible bulge in the posterior pharynx, neck swelling, and neck pain. The onset of symptoms is not as rapid as with epiglottitis.

Bacterial tracheitis is a life-threatening bacterial infection of the trachea and bronchi characterized by purulent secretions. The typical patient is a child between one and five years of age with an onset of upper respiratory symptoms for about one week, followed by a period of rapid deterioration. The child is highly febrile and appears anxious and toxic, with tachypnea, retractions, and stridor. Copious purulent secretions may be seen upon intubation of the trachea.

Facial trauma is another common cause of upper airway obstruction that will be encountered by the prehospital provider. The most common causes of facial trauma in children are automobile injuries and falls. Intraoral bleeding, vomitus, or fragments of teeth and bone may result in aspiration and airway obstruction. A fractured mandible may slip backward, allowing the tongue to obstruct the airway.

Associated head injuries may result in unconsciousness and loss of muscle tone with obstruction of the airway by the tongue and soft tissues of the lower pharynx. It is important to maintain spinal motion restriction during the airway management of all trauma victims.

Neck trauma may result in laryngeal fracture or cricothyroid separation, manifested by stridor, difficulty

Table 1.

Differential Diagnosis of Pediatric Upper Airway Obstruction

- Allergic
 - Anaphylaxis
 - Hereditary angioneurotic edema
- Congenital
 - Choanal atresia
 - Laryngeal web
 - Laryngomalacia
 - Vascular ring
- Foreign Body
 - Airway
 - Esophageal
- Infections
 - Adenotonsillar enlargement
 - Bacterial tracheitis
 - Diphtheria
 - Epiglottitis
 - Peritonsillar abscess
 - Viral croup
- Metabolic
 - Hypocalcemia
- Neoplasms (abnormal tissue growth)
 - Head, neck, and chest tumors
- Neurologic
 - Poor pharyngeal muscle tone
 - Vocal cord paralysis
- Trauma
 - Facial trauma
 - Ingestion of corrosive
 - Inhalation injury
 - Laryngeal fracture
 - Post-intubation
 - Retropharyngeal hematoma

speaking, dysphagia, hemoptysis, and subcutaneous emphysema. Airway obstruction may also be caused by compression of the trachea by retropharyngeal hematomas or anterior neck hematomas resulting from disruption of the carotid arteries. Stridor may also be caused by damage to the recurrent laryngeal nerve.

Inhalation injuries, usually as a result of inhaled smoke from a house fire, may affect all levels of the respiratory tract. Damage to the airway depends on the thermal, chemical, or irritant properties of the inhaled products of combustion as well as the intensity and duration of exposure. Upper airway obstruction may occur rapidly after smoke inhalation. Within hours of exposure to toxic fumes, the mucosa of the upper airway becomes denuded with edema and *sloughing* of cellular debris. The mucosa of the upper airway structures is loosely attached to the underlying tissue, allowing for massive swelling and rapid obstruction of the airway.

Assessment A brief, concise history is essential, but neither the history nor the physical examination should preclude immediate airway management if the child is unstable.

It is important to try to differentiate foreign body aspiration from other causes of upper airway obstruction, as this has a major impact on field treatment decisions. A history of choking after eating or playing with a small object suggests the possibility of foreign body aspiration. However, the diagnosis should be suspected in any previously well, afebrile child with sudden onset of respiratory distress and associated coughing, choking, stridor, or wheezing. Many children will not have a history of witnessed or suspected foreign body aspiration.

A history of fever and progressive respiratory symptoms suggests an infectious etiology such as viral croup, epiglottitis, bacterial tracheitis, or retropharyngeal abscess. There may be a history of trauma or the ingestion or inhalation of noxious substances. A child with a congenital airway abnormality such as laryngomalacia may normally have a mild degree of stridor or retractions with crying, but may become acutely distressed when respiratory infection is also present.

The first and most important aspect of the physical examination is careful observation from a distance, being careful not to frighten or agitate the child, since this may worsen any existing respiratory distress. Almost all of the critical information can be obtained first by observation, often as the medic enters the room. Subsequent physical examination of the child in respiratory distress should be efficient and limited to the essentials.

The level of consciousness is a sensitive indicator of oxygen delivery to the brain. Restlessness, agitation, or confusion may all reflect cerebral hypoxia. Lethargy, obtundation, and decreasing level of consciousness are ominous signs of impending respiratory arrest.

The child's preferred position of comfort should be noted and maintained. Preference for the upright position with neck extension, or the tripod position, suggests critical upper airway obstruction. The child instinctively assumes a position that provides maximal airway patency. Forcing the child to lie down may result in complete obstruction with disastrous consequences.

Increased work of breathing is manifested as tachypnea, head bobbing, nasal flaring, grunting, and supraclavicular, sternal, intercostal, and subcostal retractions. There may also

This article is worth 1.5 hours of CE in Pediatric Assessment and Management

Dr. Collin Goto is with The University of Texas Southwestern Medical Center at Dallas. He works in the Division of Pediatric Emergency Medicine.

Elaine Seamer, an RN and paramedic, is an instructor with the Emergency Medicine Foundation in The University of Texas Southwestern Medical Center at Dallas School of Allied Health.

be use of the accessory muscles of respiration, such as the sternocleidomastoids, *scalenes*, and abdominal musculature. Severe fatigue with decreasing respiratory rate is another warning sign of impending respiratory arrest.

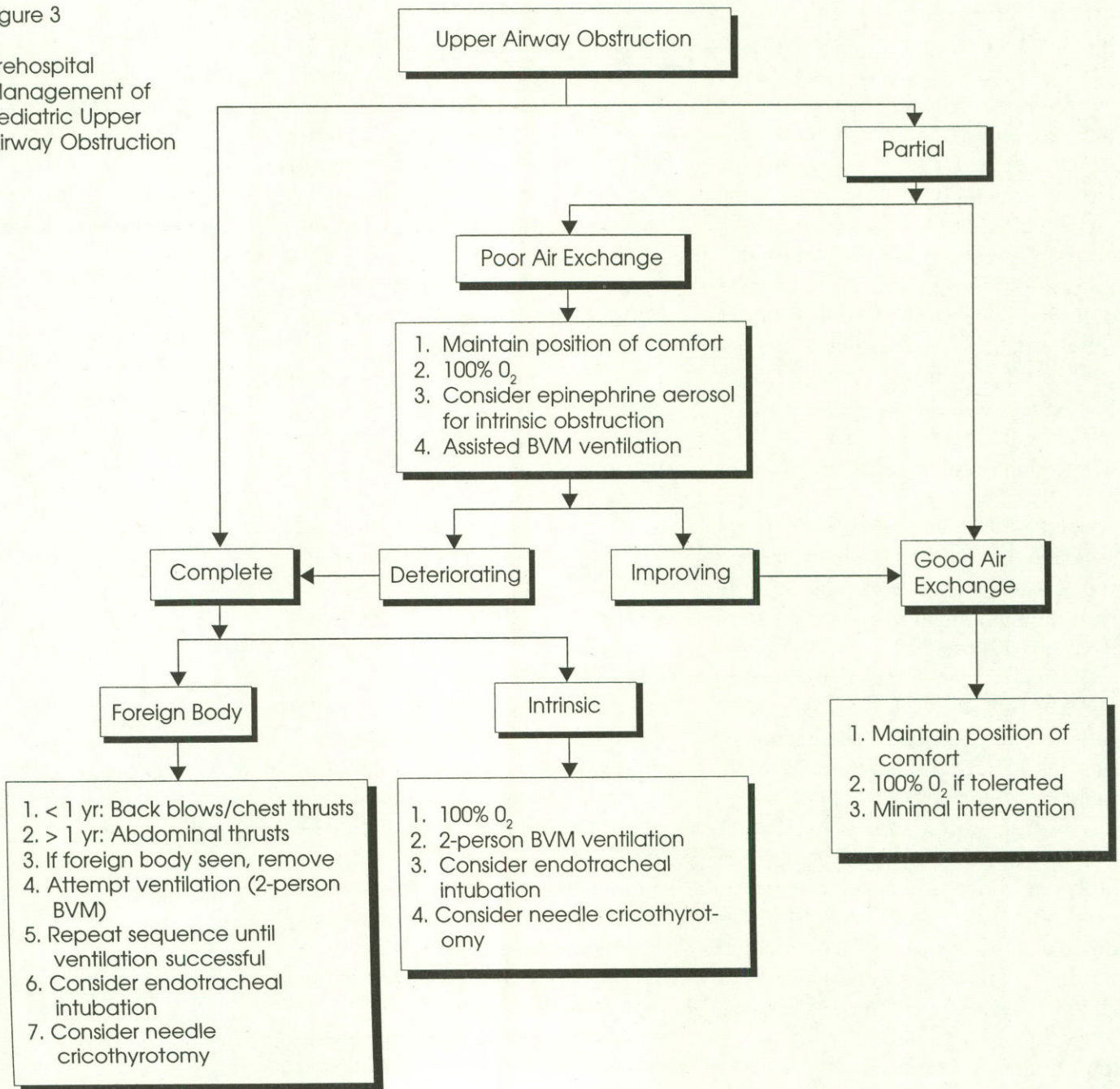
Listening to the child's breathing from a distance may reveal signs of upper airway obstruction such as stridor,

sonorous breathing, croupy cough, and a hoarse or muffled voice.

Once a quick assessment of the level of consciousness and airway has been completed, a comparative assessment of the circulation should take place. This can be accomplished by checking central and peripheral pulses at the same time. Checking rate, regularity, and quality while also assessing

Figure 3

Prehospital Management of Pediatric Upper Airway Obstruction



skin temperature and capillary refill can make a vital difference.

Skin color is important to note. Pallor and poor tissue perfusion may be seen with hypoxia. Cyanosis is a late and unreliable sign of hypoxia in children, and it may be absent when severe anemia and hypoxia coexist.

Although noisy conditions in the field may make auscultation difficult, the presence of decreased or asymmetric breath sounds, wheezing, or rales should be assessed. Auscultation over the nose, mouth, neck, and chest may help to localize the site of the obstruction. A prolonged inspiratory time is characteristic of upper airway obstruction.

Tachycardia is commonly present with respiratory distress and hypoxia. Bradycardia occurs with severe hypoxia and acidosis due to respiratory failure. Bradycardia in a child with respiratory distress signals imminent cardiopulmonary arrest.

Management Regardless of the etiology of the upper airway obstruction, early recognition and intervention to correct inadequate oxygenation and ventilation are necessary for a good outcome. Transport should be as rapid and safe as possible. However, a stable airway must be ensured before transport is initiated. The receiving hospital should be notified early, and BLS units should consider ALS rendezvous if the child is unstable.

Frequent reassessment for signs of deterioration must be performed and appropriate action taken as problems are identified. The algorithm in Figure 3 outlines the prehospital management of pediatric upper airway obstruction. Spinal motion restriction should be assured for all trauma patients.

As noted earlier, complete upper

airway obstruction is a prehospital disease. Only those with witnessed obstruction who receive immediate intervention are likely to benefit from subsequent hospital care.

In the case of foreign body aspiration, relief of the obstruction should be attempted according to the Pediatric Basic Life Support Guidelines. For infants younger than one year of age: five back blows with the heel of the hand between the shoulder blades, followed by five chest thrusts using two fingers over the sternum are recommended. For children older than one year of age: five rapid inward and upward abdominal thrusts are substituted for the five back blows and chest thrusts.

The patient's mouth should then be opened by grasping the tongue and lower jaw between the thumb and finger, and lifting. If the foreign body is visualized, it may be manually extracted by a finger sweep. However, blind sweeps may cause further obstruction and should be avoided. If no spontaneous breathing occurs, attempt two breaths of rescue breathing or bag-valve-mask ventilation. The sequence is repeated until ventilation is successful.

It is important to realize the value of persistence, as the likelihood of the maneuver being effective increases as the patient's muscle tone decreases.

If the foreign body is not expelled by the above measures after a reasonable amount of time, perform laryngoscopy and remove any visible foreign body with a magill forceps. If the foreign body is not visualized, consider intubation, which may push the foreign body down one mainstem bronchus and allow ventilation of one lung via the other mainstem bronchus. If the child cannot be intubated, needle cricothyrotomy may be considered

Glossary

Angioneurotic edema

A condition characterized by development of edematous areas of skin, mucous membranes, or viscera; thought to be an allergy

Aryepiglottic folds

Folds of mucous membrane that extend around the margins of the larynx from a junction with the epiglottis

Chonal atresia A congenital anomaly in which bony or membranous occlusion blocks the passage-way from the nose to the pharynx

Laryngomalacia Softening of the tissues of the larynx

Laryngeal web A congenital defect involving a membrane across the larynx, presents at birth; usually a partial obstruction, rarely a total obstruction

Neoplastic growth Any abnormal growth of new tissue, benign or malignant; tumor

Peritonsillar abscess An infection of the tissue between tonsil and pharynx

Retropharyngeal Behind the pharynx

Scalene muscles Four muscles arising from the cervical vertebrae with insertions in the first or second ribs; accessory muscles of breathing

Sloughing Necrosed tissue separating from living tissue

Stenosis Narrowing of a canal

1. Small children are prone to airway obstruction because:
 - A. their airways are narrow and collapsible.
 - B. small amounts of airway swelling cause significant obstruction.
 - C. foreign body aspiration is common in this age group.
 - D. All of the above

 2. Foreign body aspiration should be suspected in which patients?
 - A. 1-year-old with seal bark cough and 102° temperature
 - B. 3-year-old with sudden stridor, wheezing and choking, 98.8° temperature
 - C. 5-year-old with stridor, muffled voice, painful swallowing, 104° temperature
 - D. 2-year-old with retractions, stridor, and decreased level of consciousness after removal from a house fire, 96.7° temperature

 3. Which of the following children most likely has a partial upper airway obstruction?
 - A. Unconscious 3-year-old with cyanosis and absent breath sounds; pulse 68, respirations 6
 - B. Alert 4-year-old without sore throat; clear breath sounds; pulse 104, respirations 20; playing
 - C. Pale 18-month-old with grunting, stridor, tripod position, and retractions; pulse 155, respirations 44
 - D. All of the above

 4. Repeated attempts to establish an airway on an unconscious patient with complete airway obstruction from foreign body aspiration are:
 - A. more likely to be effective as airway muscles relax.
 - B. less likely to be effective as airway muscles relax.
 - C. more likely to be effective as airway muscles contract.
 - D. less likely to be effective as airway muscles contract.

 5. Children have a narrower tracheal lumen (diameter) than adults. Which of the following may cause this narrower airway to obstruct?
 - A. Edema
 - B. Mucus
 - C. Foreign body
 - D. All of the above

 6. Forty percent of newborns cannot tolerate obstruction of the nares. This is referred to as:
 - A. obligate anaerobic breathing.
 - B. obligate nasal breathing.
 - C. obligate oral bypass breathing.
 - D. obligate pseudo-oral breathing.
- Match the presentations to the airway illnesses and injuries in questions 7-10:
7. Foreign body airway obstruction
 8. Anaphylaxis
 9. Epiglottitis
 10. Croup (laryngotrachealbronchiolitis)
 - A. Febrile, barking cough, stridor
 - B. Febrile, drooling
 - C. Sudden onset of stridor, afebrile
 - D. Afebrile, sudden onset of dyspnea, wheezing
-
11. You have just arrived at a scene with the only dispatch information given to your unit being "an unresponsive child." Your first consideration will be:

- A. rapid access to the patient.
 B. aggressive airway control.
 C. ensuring a safe scene.
 D. gathering subjective information.
12. Refer to question 11. Your patient is a four-year-old male with a severe head injury, and you suspect abuse. Your first action will be:
 A. reconfirmation of the accident history.
 B. collecting evidence of abuse.
 C. securing the airway.
 D. starting an IV.
13. Fever in a pediatric patient with a partial airway obstruction may be caused by:
 A. trauma.
 B. epiglottitis.
 C. asthma.
 D. anaphylaxis.
14. What is the best sign of cerebral perfusion?
 A. Distal capillary refill
 B. Skin temperature
 C. Level of consciousness
 D. Fingernail bed cyanosis
15. Stridor is best described as:
 A. low-pitched, continuous, rumbling sounds.
 B. high-pitched, inspiratory, crowing sounds.
 C. high-pitched, expiratory, musical sounds.
 D. wet, gurgling, expiratory sounds.
16. You make a call to a 10-month-old infant with a sudden onset of respiratory distress after eating popcorn. He is unconscious, cyanotic, and apneic on your arrival. Treatment until an airway is established should include:
 A. chest and abdominal thrusts, finger sweep.
 B. abdominal thrusts, finger sweep, attempt two-person ventilation.
 C. back blows, chest thrusts, finger sweep if object seen, two-person ventilation.
 D. immediate transport with two-person ventilation.
17. If repeated attempts to establish an airway in the above patient are unsuccessful, you should:
 A. attempt to visualize airway/obstruction with laryngoscope.
 B. remove any visualized object with magill forceps.
 C. attempt endotracheal intubation.
 D. All of the above
18. A prolonged inspiratory phase and stridor are characteristics of:
 A. complete upper airway obstruction.
 B. partial upper airway obstruction.
 C. partial lower airway obstruction.
 D. complete lower airway obstruction.
19. Rapid assessment of the child in respiratory distress attempts to determine:
 A. if airway obstruction is complete or incomplete.
 B. presence of a foreign body rather than infection or edema.
 C. if airway stabilization treatment must be done prior to transport.
 D. All of the above
20. Obstruction of the upper airway in pediatric patients may be caused by:
 A. allergic reactions.
 B. respiratory tract infections.
 C. neoplastic growths.
 D. All of the above

if it is within the prehospital provider's scope of practice.

If the complete obstruction is intrinsic in nature, such as epiglottitis or croup, ventilation should be attempted with 100 percent oxygen and two-person bag-valve-mask technique (Figure 4). High inspiratory pressures may be required to overcome the obstruction, necessitating a tight mask seal with the two-person technique, and the pop-off valve may need to be taped down to be overridden to allow delivery of an adequate tidal volume. Monitor the patient's chest rise to assess the adequacy of the delivered tidal volume. In the majority of cases, this technique will allow adequate oxygenation and ventilation until the child can be transported to the nearest emergency facility.

If two-person bag-valve-mask ventilation is unsuccessful, intubation should be attempted using an endotracheal tube that is one or two sizes smaller than that anticipated for the patient's age. If the patient cannot be intubated, needle cricothyrotomy

should be attempted if it is within the prehospital provider's scope of practice.

If partial upper airway obstruction is present with poor air exchange and severe respiratory distress, the child should be allowed to maintain the position of comfort, as this is generally the position of maximal airway patency. The child should be provided with 100 percent oxygen, and an epinephrine aerosol should be administered if an intrinsic obstruction such as croup is suspected. If the child's spontaneous respiratory efforts are inadequate, assisted bag-valve-mask ventilation may be coordinated with the child's own breaths. If the child's condition continues to deteriorate, then the situation should be managed as a complete upper airway obstruction as described above.

In the case of partial upper airway obstruction with good air exchange, the child will appear pink and alert with minimal respiratory distress. The child should be allowed to sit in the parent's lap and maintain a position of comfort. Delivery of oxygen is usually best tolerated by allowing the parent to administer blowby oxygen. Interventions are to be minimized and intravenous lines should not be started unless clearly indicated, as this may cause agitation and worsening airway obstruction. In this way, the stable child may be safely observed en route to the receiving emergency facility.


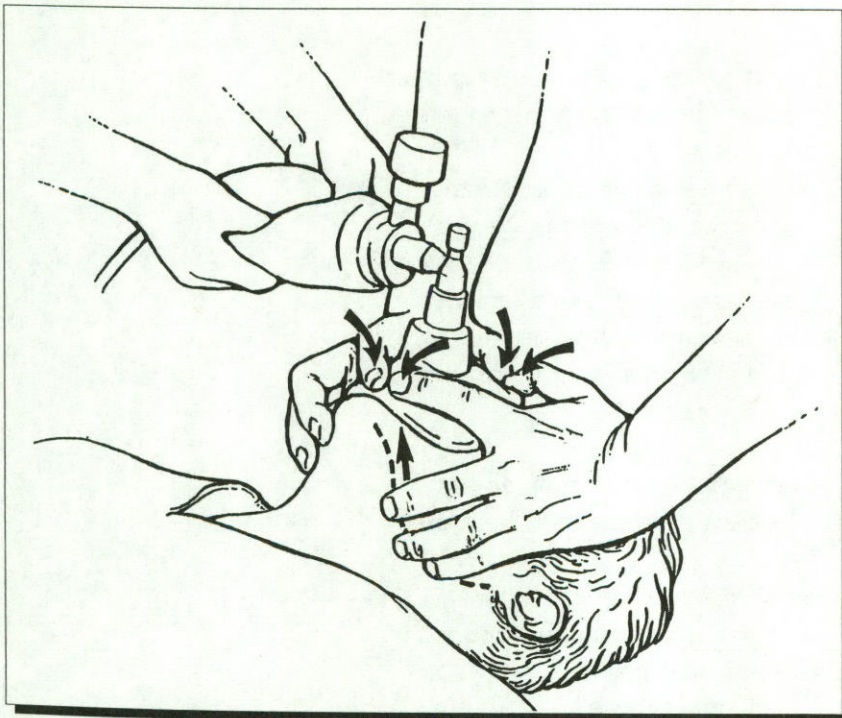
Summary Upper airway obstruction occurs commonly in the pediatric population. Morbidity and mortality can be minimized if the prehospital provider is skilled in the rapid assessment and stabilization of the obstructed pediatric airway. A management algorithm shown as Figure 3 can be used by prehospital personnel. 

Figure 4.

Technique for 2-person bag-valve-mask ventilation. The first rescuer creates a tight seal by simultaneously lifting the mandible up and pushing the mask down against the face. The second rescuer uses both hands to squeeze the bag and generate the high inspiratory pressures needed to ventilate the patient with an upper airway obstruction.



This answer sheet must be postmarked by April 10, 1995.

CE Answer Sheet #2—February *Texas EMS Magazine*
"Upper Airway Obstruction" Pages 20-30

Name _____ SSN _____

Certification Level _____ Expiration Date _____

Organization _____ Work Phone _____
area code

Address _____ City _____
street

State _____ Zip _____ Home Phone _____
area code

For TDH CE credit, mail your completed answer sheet to:

Debra Cason, RN, MS
EMS Training Coordinator
The University of Texas
Southwestern Medical Center
5323 Harry Hines Boulevard
Dallas, Texas 75235-8890

You will receive your certificate for 1.5 hours of CE within six weeks. A grade of 70 percent is required to receive CE credit.

Answer Form

Check the appropriate box for each question. EMTs answer 1–15;
paramedics answer 1–20.

- | | | | | | | | | | |
|-----|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> | 11. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> |
| 2. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> | 12. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> |
| 3. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> | 13. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> |
| 4. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> | 14. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> |
| 5. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> | 15. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> |
| 6. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> | 16. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> |
| 7. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> | 17. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> |
| 8. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> | 18. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> |
| 9. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> | 19. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> |
| 10. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> | 20. | a. <input type="checkbox"/> | b. <input type="checkbox"/> | c. <input type="checkbox"/> | d. <input type="checkbox"/> |

Sponsored in part
by a U.S.
Department of
Health and Human
Services grant to the
Texas Department
of Health for
Emergency Medical
Services for
Children

Whether a disaster or a single patient, EMS medics and TDH lab technicians play vital roles in public health

TDH labs link cause and effect

By Kelly Harrell

And the rains came. The rivers around Houston rose and crept over the houses, businesses, and roads. Pipelines exploded in a column of fire as the water ate away the stream beds under oil and gas pipes. Wastewater treatment facilities brimmed with river water, spilling effluent into homes and businesses.



And still, the rains came.

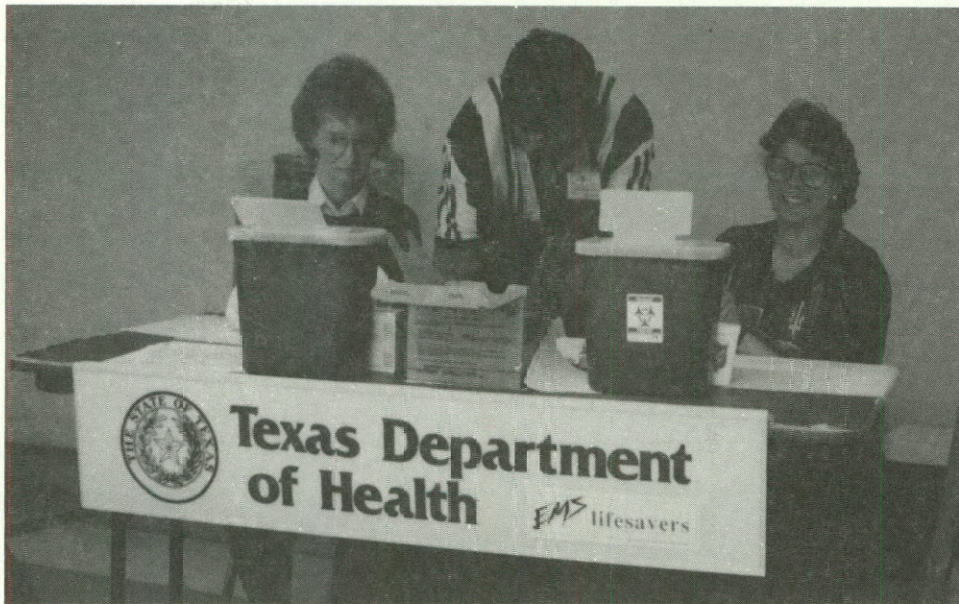
Floods can test government and emergency services like few other events. Some help to the area was obvious: emergency medical care, rescues, and law enforcement. Other government help, like that of the TDH labs, played a more behind-the-scenes role.

When Liberty well water came up contaminated, the TDH Tyler lab tested 258 water samples from kits distributed by the agency. More than a third of the samples tested positive for fecal coliform; sanitarians from TDH were then able to clean up the wells.

"That's what public health is for," says David Maserang, PhD, who heads the TDH laboratory division in Austin, "to make sure wells are clean so that you don't have a big outbreak of typhoid and cholera."

The lab also found something fishy in the fish around the San Jacinto River: contamination from industrial pollution and wastewater treatment facilities. TDH sent out a public health alert warning people not to eat the fish.

In Beaumont, a subdivision's water treatment plant flooded, contaminating the water with raw sewage. For the plant to reopen, the water had to test clean for three consecutive days. TDH Austin staff worked through the weekend to test the samples, and saved the expense of trucking in wa-



Paramedic Chris Carver, center, helped out at the Disaster Relief Center in Livingston along with nurses Gwen Ray, left, and Christine Smith. The group gave immunizations and handed out sample bottles for well water. TDH then took the water to the Tyler lab for testing.

ter to the soggy subdivision. Outside the glare of television cameras, the TDH labs quietly worked throughout the crisis to keep citizens healthy.

If you drink water, eat in restaurants, have children, or do any number of routine activities in a day, chances are the TDH laboratories play an unseen but important part in your life. The labs test for many viruses, toxins, and other substances that live hidden in our world until they make headlines. To put it another way, if New York's Love Canal, that toxic subdivision built over a chemical dump site, had been in Texas, the soil would have come to TDH for testing. Or if the tainted fast food hamburger meat that killed the toddler in the Northwestern U.S. had been in Texas, that meat would have come to the TDH labs for *E. coli* 0157 testing.

In the past few years, TDH labs found lead in candy wrappers and brightly colored dishes from Mexico,

Legionnaire's Disease on a San Antonio motel's showerhead, pesticides in fish from the Rio Grande River, and *E. coli* bacteria in a salad bar at Baylor University, to name a few.

Almost everything you touch that makes you sick ends up under a microscope at the TDH labs. EMS may make the initial medical call, but if the cause is viral or environmental, the story will eventually involve TDH labs. That's not to say that other labs in the state don't test; many private labs test viruses and other substances such as HIV, hepatitis and influenza. But many items—viral encephalitis, diphtheria, tuberculosis, newborn screening—remain the sole domain of TDH. The labs are also solely responsible for chemically testing all the water from municipal water sources in Texas under the Safe Drinking Water Act. And all that makes for a lot of samples.

Early on a Tuesday morning the boxes have already begun to pile up in the receiving area for the laboratories. Small bottles of water, odd-shaped boxes, and cardboard tubes stack up in the small room on the main TDH campus. Heads of animals

(Far left) When the truck rolls in at 8 a.m., lab personnel begin sorting the hundreds of samples they receive every day. TDH labs, which employ about 300 people in Austin, run tests on 1.6 million samples every year.

suspected of having rabies go down the hall to be opened and tested, as many as 70 every day. Every Texas newborn sends a little blood to the TDH lab for tests designed to detect problems early enough to prevent mental retardation or other problems such as chronic infection. All public water systems—whether a major city or a trailer park—have to submit a certain number of samples each year to be tested for things such as chlorine, metals, and pesticides. Items like fish, sludge, paint, spices, meat, and

New threats emphasize importance of protective gear

With the help of airplanes and automobiles, each of us is rarely more than 24-hours travel time from exposure to a deadly bacteria, virus, or other microorganism. And new and reemerging diseases such as Legionnaires', filovirus infections, diphtheria, plague, and streptococcus A—the so-called flesh-eating bacteria—are being discovered with increasing frequency throughout the world. Texas' proximity to Mexico may mean even greater risk Texans, especially health care workers. For instance, El Paso's rate of multi-drug resistant tuberculosis makes up about 4 percent of all cases. Just across the border in Juarez, the number jumps to 44 percent. With about 62 million border crossings each year in that region alone, El Paso's rate could easily begin to mirror the rate south of the border.

What does that mean to Texas EMS? Keep yourselves safe by taking universal precautions, wearing respirators and other protective gear, and keeping up to date on your immunizations.—*Kelly Harrell*

human tissue also find their way to TDH to be tested for *E. coli*, metals, shigella, lyme disease, uranium, mold and a laundry list of other substances that you don't want. Even the insects that carry *Yersinia Pestis*, the bacteria that causes bubonic plague, take a few turns around the TDH lab each year. All this adds up to 1.6 million samples each year tested in millions of tests.

"There's a lot of disease in Texas," says Maserang. "It's a very rich state for this kind of practice."

Screening makes up a large part of what the TDH lab does. Some of the tests, like the newborn screening, are designed to find problems early to prevent greater health problems later. For instance, early detection phenylketonuria (PKU), an inborn error of metabolism, can head off mental retardation and even death.

"We calculate that every PKU that we catch saves the state \$3 million dollars in institutional costs over the child's lifetime," says Maserang. "We feel very good about the work we do here."

Other screenings include diabetes, cholesterol, HIV, gonorrhea, syphilis, hepatitis, and chlamydia. Screenings alone make up millions of the tests the lab does each year.

New equipment such as the \$300,000 electron microscope and new techniques such as DNA electrophoresis may change the face of lab work by making it possible to test samples more quickly and to identify strains of viruses. The electron microscope, which is the roughly the size of a small room, can magnify a cell up to 500,000 times. Microbiologists can now break a virus down into genetic stands and compare the patterns against a database of thousands of different strains of similar organisms. The newborn screening program already uses the technology to confirm

sickle cell anemia and to trace epidemics or the carriers of epidemics. In the future, microbiologists may be able to identify genes that cause breast cancer before cancer develops.

Environmental health is another rapidly expanding field, and one Maserang thinks will keep the labs busy well into the 21st century. Environmental chemists test many of the diseases or illnesses caused by environmental contaminants.

"The face of public health as we know it is really changing," says Maserang. "This is an area I'd really bet on for the future."

The work that the labs do won't be slowing down anytime soon. The Texas population keeps growing, and that means more screenings each year. Many of the diseases once thought eradicated are coming back. Because they have been dormant for many years, TDH is often the only lab that

still tests for diseases like diphtheria, malaria, and viral encephalitis. Cases of encephalitis, for instance, may increase as we eliminate pesticide spraying because of health and environmental concerns. Carried by mosquitoes, encephalitis causes brain inflammation and sometimes death.

And the problem is not confined to Texas. With widespread travel, Texas may be threatened with diseases old and new from anywhere in the world. Labs will have to shift their focus as borders blur.

"The problem is that there is no one on this earth farther than 24 hours from a major airport. And there's not a major airport on the face of this earth that's not within 24 hours of every other place on the face of the earth," says Maserang. "If you've got 50,000 cases of diphtheria in south Russia, that's not going to remain in south Russia." 🗺️

Emergency medical services and TDH laboratory activities converge on the public health continuum in the identification, treatment, and prevention of communicable diseases.

Photo by Kenny Jones




Purchasing Widgets and Gadgets in EMS

By Mike Garcia

When considering the purchase of medical equipment or supplies, you should follow some basic rules to get the most from your budget dollar.

- EMS priorities are rescuer safety, airway, breathing, and circulation. Everything else is diagnostic, patient packaging, delivery, or infection control—each with ethical and legal responsibilities. Use these same priorities when justifying a purchase.
- Never purchase a product because you or your medics cannot adequately assess patient needs without it. Unless your people have good patient care training, even the best instrument or device will fail to meet your needs and possibly hinder patient care.
- Do you want the product or do you need the product? Performing a task analysis of medic skills or procedures will help you identify which products will meet your task goals. Just because another EMS administrator likes the product does not mean that it will work for you.
- Don't let salespeople drive your buying process. Instead, use them as a resource to evaluate equip-

ment and changes in technology. Beware of companies or salespeople who cannot back product claims with written documentation, independent studies, or user references. The best companies will demonstrate or allow you to evaluate the product before you buy.

- The value of a product may not be directly related to its price when you consider reusable versus disposable items. Disposable bag-valve-masks are about 15 percent of the price of reusable bag-valve-masks, and disposable bedding can be purchased for a little more than the price of cleaning reusable sheets. No cleaning, no contact with undesirable fluids, and no major expense when a disposable is lost.
- Write specifications for everything you purchase. Good specifications allow you to compare products of similar construction and function without being distracted by inferior or knock-off products
- Purchase on contract. A contract protects price and ensures availability. If you cannot contract, request bids and compare price, quality, and credibility. 

Mike Garcia is an EMT-Intermediate with nine years of field work in New Mexico. In his work with a Texas-based firm that sells a full line of EMS products he sees every kind of purchase order.

How to Write Specifications

You can write equipment purchase specifications two ways: as general descriptions or as specific descriptions. If your main concern is price, a general description will do. But if you've looked at the market and know exactly what performance you want, you'll write a specific description.

General Descriptions Indicated when you have no preference on a product: bandages, dressings, oral airways, suction tubing, ammonia inhalants. Simply state your concerns, i.e., alcohol preps packaged to resist drying out, in a quantity sufficient to last a year. "Alcohol preps, 200/box, 40 boxes, foil-packaged to resist drying, 1-year shelf life."

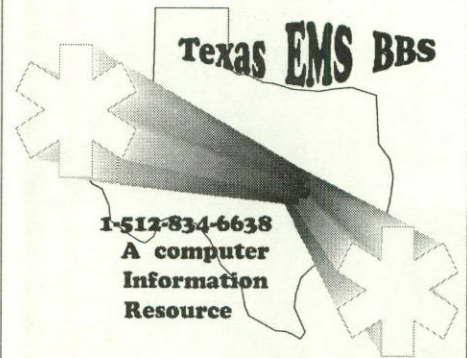
If you want a generic oxygen cannula that won't kink, try this: "Oxygen nasal cannula, 50/ case, 84" in length, crush resistant tubing, sample requested."

For suction canisters you might say, "Suction canister, 10 each, 1000 ml." But you may save time and money if your description says more: "Suction canister, disposable, 10 each, 1000 ml, for Laerdal suction unit."

Specific Descriptions Lets you compare products that fit into a certain category. You'll include more information and a detailed description from the size dimensions to almost anything you wish to include.

For example, you need a bag-valve-mask resuscitator that incorporates a carbon dioxide detector built into the exhaust valve of the device: "Bag-valve-mask resuscitator/pulmonary manual resuscitator with self-contained end tidal CO₂ detector, 24 each, end tidal CO₂ detector incorporated into a nondetachable 6.5 cc patient port, capable of monitoring for 2 hours, 1300 cc volume. Submit sample for evaluation and inspection, sample will be returned within 4 weeks if rejected, vendor awarded the bid will be reimbursed for the sample submitted upon the first billing. Terms: 30 days net. Delivery: 14 days after receipt of order."

In all your specifications, put as much pertinent information as you can so that you get bids on what you really want. —*Mike Garcia*



- **What is Texas EMS BBS?** A computerized on-line bulletin board system with information from Texas Department of Health's Bureau of Emergency Management and the EMS Division.
- **How can I use it?** From your computer and modem dial (512) 834-6638. Texas EMS BBS supports modem speeds up to 14,400 bps; no parity, 8 databits, 1 stopbit, full duplex, with download data in DOS text and Word-perfect, zipped and unzipped. A V.32/V.32bis modem is best and simple menus will guide you.
- **What will I learn?** You'll read news about Texas EMS Advisory Council, the Pediatric Advisory Council, the Trauma Technical Advisory Committee, and proposed and adopted rules. Bulletins offer current events, jobs, and program activities. Forums give you question-and-answer sessions with TDH staff and other BBS users.
- **Is it free?** You pay only for your long distance time if you call from outside Austin, Texas.

For more information call Texas EMS BBS System Operator at (512) 834-6700.

“Quality” is the name of the game

By Jeannie Weaver

What is total quality management? Total quality management—or TQM—is the name given to a bundle of management philosophies and practices that was first made popular in Japan by J. Edwards Deming in the 1950s. Deming, considered to be the father of modern-day quality concepts, believed that the elements of quality are similar to those of prevention.

First, these elements are only truly effective when they are employed at the beginning of a process or project in the same way that preventive measures are most effective when practiced before someone gets sick.

Secondly, prevention works best when the whole system is taken into consideration. Healing one sore spot does not guarantee a healthy patient. Quality, likewise, takes a systemic view. Fixing one problem does not guarantee a better organization overall.

In TQM terms, this kind of spot repair is referred to as sub-optimization. It means that we are not working to our best capacity. We must learn how to optimize our entire system. Implementing the tools and skills associated with total quality management offers us a way to accomplish this.

What is continuous quality improvement? Continuous quality improvement—or CQI—is basically the same thing as TQM, just under a different name. The quality movement is loaded with terminology that essentially means the same

thing. For instance, Texas Gov. Ann Richards referred to the quality movement within state agencies and supported by the governor’s office as TQS, which stands for Texas quality service. The state Parks and Wildlife Department refers to its version of quality as NQS, or natural quality service. Even the federal Census Bureau gets into the act with its CQM, or census quality management. The list goes on and on.

Deming did not like the term total quality management. He felt that it was a misnomer. He believed that it is impossible to totally manage quality and is self-defeating to describe an effort in such a way. In fact, he went so far as to refuse to talk to people who used the terms TQM or total quality management.

Feeling that continuous improvement was a worthy goal, the Texas Department of Health deliberately chose to use continuous quality improvement to describe the quality initiatives within our agency.

Why should anyone get onto another management-philosophy bandwagon? The Baldridge Award, TQM’s national award for quality, goes annually to the organization that best meets strict requirements and guidelines. Organizations that rank highest in this competition share these characteristics:

- Better employee relations.
- Higher productivity.
- Greater customer satisfaction.
- Increased market share.
- Improved profitability.

Jeannie Weaver is Quality Coordinator for Texas Department of Health. She originally wrote this article for *Texas WIC News*. We reprint it with permission. (Next time: What TQM/CQI means to you.)

Managing Anger and Asserting Your Rights

By Karen L. Gold

**THE CARE AND
FEEDING OF
EMERGENCY
RESPONDERS**

How angry are you?

Believe it or not, anger can be calibrated. A popular scale used to quantify anger is the SUDS Scale: Subjective Units of Distress. A zero SUDS rating indicates that you are unfazed, unruffled, unaffected. A description of 100 SUDS, on the other hand, signals that you are speechless with fury, overwhelmed, ballistic, bazonkers, insane with rage.

Karen L. Gold, PsyD, has a counseling practice in El Paso. This series of articles grew out of her talk to a paramedic graduating class last year. Gold has served on Texas EMS Advisory Council and the Texas Critical Incident Stress Management Network Advisory Committee.

How many SUDS would you give yourself in these situations? Rate yourself on a 0–100 scale:

- Your mechanic overcharges you
- Someone accuses you of lying
- Someone insults your mother
- A runaway shopping cart in a parking lot dings your car
- You step in doggiè excrement
- Your supervisor publicly criticizes you
- Someone tailgates you
- Your spouse tries to send you on a guilt trip
- Someone “puts the moves” on your mate
- Someone “puts the moves” on you despite the wedding ring on your finger

Anger varies culturally as well as from individual to individual. In the

Believe it or not, anger can be calibrated.

Orient, anger may manifest itself in icy politeness; in Italy, it may be made obvious through animated gesturing. In Texas alone, there are regional variations.

Anger is not bad. Conflict is not bad. Disagreement is not bad. However, the way we handle anger, conflict, and differences of opinion may be malignant. Healthy anger is a cue that something is amiss. Anger is also a powerful energy source. Harnessing that anger and acting constructively is the difficult part. Swallowing it is wrong. Unleashing it viciously is wrong. The only right way to deal with anger is to acknowledge it and confront it in any relation-

ship that is meaningful to you. An anonymous reformed hothead puts it this way: "Now I lose my temper only with control of my voice and my choice of words."

There is much folk wisdom about coping with other people's

Anger varies culturally and individually—in the Orient, anger may manifest itself in icy politeness; in Italy, through animated gesturing.

anger directed against you. What can you gather from these maxims?

Fight fire with fire. Or? When you fight with pigs, you get dirty and the pigs enjoy it.

Don't ever walk away from a fight. Or? To take the wind out of an angry man, sail calmly away.

If anger control is a problem for you, learn the Rules for Clean, Fair Fighting as stated by noted anger expert Dr. George Bach.

1. Don't play psychologist.
2. Don't play archaeologist.
3. You can't refuse a fight.
4. You can't fight without words.
5. Fight about only one thing at a time.
6. You must respond to what the other person says.
7. You can't filibuster.
8. No name-calling.
9. When fighting about opinions, they must be recognized as such.
10. When fighting about facts, you must get the correct information.

(Next time: Harnessing time and unleashing your sense of humor)

11. You must accept complete responsibility for your own actions.
12. You must fight in good faith.

So, go ahead. Lose your temper. I dare you... to do it with control.

Don't get angry, get assertive

Anger control often is an unexpected and welcome bonus when you begin to assert yourself rather than bulldoze aggressively or pout passively. In any interactive situation, you can choose to:


1. Blow your stack, humiliate, embarrass, pulverize, etc.
2. Sulk, whine, complain, tattle, whimper, moan, etc.

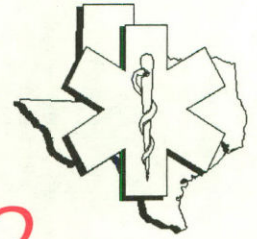
Or

3. Assert yourself. Stand up for your rights. Express yourself honestly, maturely, openly. The payoffs are self-respect and the respect of others.

To deal with conflict assertively:

1. Make eye contact, but do not stare at your opponent.
2. Stand a reasonable distance apart
3. Gesture, but not threateningly.
4. Match your words to your mood. Don't deny, with clenched jaw, that you are angry.
5. Speak in a level, clear voice. Don't shout, don't whisper.
6. Speak privately. Don't put on a show for others' entertainment.
7. Start your statements with "I" rather than "you." Say, "I am upset (angry, mad) because..." Don't say, "You make me upset (angry, mad) because..."

Own your emotions. Take responsibility. Set an example. Others may follow and everyone will benefit. 



MOBILE TRAINING UNIT TAKES 'LEARN, DO, TEACH' MOTTO

The Mobile Training Unit program has been expanded to become the Education System Access and Support Program, which supports rural education by teaching classes, developing instructors, and assessing the educational needs of rural areas.

Instructor training will emphasize techniques and methods such as the use of scenarios in skills practice. Because of the large number of potential students in Texas—nearly 50,000—the Bureau is making instructor training a priority by using the MTUs along with long distance learning, interactive computer software, and other outreach programs.

A second MTU was launched in November at Texas EMS Conference '94, when a fully stocked vehicle left for the Tyler office. The first training begins soon in Region 4/5 with EMS Program Specialist Ray Oatley teaching MTU course and qualifying local instructors.

Would you like to volunteer as a Mobile Training Unit instructor? Contact Ernie Rodriquez at (512) 834-6700.

And speaking of educational assessments, a new needs assessment



By
Annie Andrus

will be completed in 1995—but not without your help. When you see a survey in an upcoming issue of *Texas EMS Magazine* or in the mail, please fill it out and return it.

MTU News Annie Andrus, MTU instructor, followed the floods and the tornadoes to teach courses in regions 2, 4, and 5 during 1994's last three months. A Trauma Life Support class had to use a generator after two tornadoes knocked out the town's power. And that's after many of the students had come from volunteering for flood relief in neighboring counties. Andrus, along with a public health nurse, also immunized people in San Jacinto County as part of the flood relief.

Students in Center practice skills during their Trauma Life Support class in November.

Mobile Training Units

October - December 1994, 12 courses, 259 students

October

START
Jessie Cline
Quitman

Trauma Life Support
Mary Thompson
Newton

November

Trauma Life Support
Harold Honeycutt
Avinger

Trauma Life Support
Lila Gaddy
Center

START
Bobby Howard
Linden

Trauma Life Support
Barbara Dickerson
Henderson

Trauma Life Support
Sharon Kuhlman
Coldspring

December

PPPC
Norman Atha
Comanche

🎵💵 A Waltz Across Texas with EMS Local Projects

David Smith, MD, Texas Commissioner of Health, recently gave ceremonial checks to 17 EMS services who re-

ceived EMS Local Projects grants. The grants will purchase ambulances, patient care equipment, radios, EMS training, and a cardiac monitor.

On December 14, Smith and Texas Board of Health Chair Ruth Stewart made five presentations at the meeting of the

Texas Board of Health in McAllen. The EMS grants totaled \$52,700.

Later in the month on December 22, the commissioner visited Dell City, Pecos, Alpine, and Eagle Pass to present grants totalling \$105,726 to 13 area EMS organizations.

These EMS grants are a partnership between Texas Department of Health and Texas Department of Transportation to improve emergency patient care in Texas communities. In this fifth year of EMS grant funding, 115 groups across the state received a total of \$690,000 for local projects to improve training, coverage areas, response times, and emergency treatment.

Additional presentation trips will be scheduled for other parts of the state. For information on submitting requests for the funding cycle that begins September 1, 1995, contact John Singleton or Penny Workman of the EMS Local Projects Grant Program (512) 834-6700. —Alana Mallard



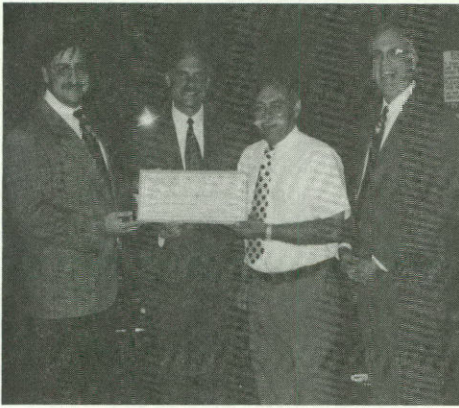
Chihuahuan Desert RC&D, represented by Merle Lutrick (right), and Dell City EMS, represented by Val Call (center), received a check for \$25,000 from Dr. David Smith (left) to purchase an ambulance.



Representatives of Pecos First Responders, Pecos Volunteer Ambulance Service, Balmorhea Volunteer EMS, Saragosa Mission First Responders, Wink EMT First Responders, and Winkler County EMS received grant checks and safe-and-sober holiday driving red ribbons from Commissioner Dr. David Smith and Bureau Chief Gene Weatherall.



In Alpine, Big Bend Regional Medical Center and Presidio EMS received checks for training and patient care equipment as Dr. Smith continued his pre-holiday trip across West Texas.



State Representative Pete Gallego (left) helped Chief Guadalupe Cardona of Eagle Pass Fire Department EMS accept a matching grant for \$25,000 to purchase a \$69,000 ambulance. Uvalde EMS and Dimmit County EMS received grants for \$5,253 and \$2,370, respectively.



Mike Fry (right) and Chris Barrera from Mathis EMS brought their EMS Local Projects grant vehicle to Austin in mid-December to show it off to Local Projects Administrator John Singleton (left) and Gene Weatherall.



Willacy County EMS received \$25,000 to purchase an ambulance and Director Frank Torrez called on Public Health Region 11 employees Petra Vidales, Noemi Sanchez, and Jay Garner to accept part of the credit for submitting the grant request. From left, Texas Board of Health member Dr. Ramiro R. Casso, Dr. David Smith, Torrez, Vidales, Texas Department of Transportation District Engineer Amadeo Saenz Jr., Sanchez, Garner, Texas Board of Health Chair Ruth Stewart.

South Texas Community College in McAllen received a \$6,904 grant for training equipment and will be the first college in South Texas to be part of EMS training coming by satellite from Texas Tech in Lubbock. Bonnie Gonzalez, Cesar Garcia, and Shirley Reed accepted the check for the college.



Charlotte Knox accepted a check on December 14 for Mercy Zapata EMS to purchase a vital signs monitor. Other grants given on that day included La Feria Volunteer Fire Department, \$3,303, and Bi-County Area Volunteer Emergency Response Team in Premont, \$25,000.

Call (512) 834-6700 to learn how to apply for a Local Projects grant.

Frequently Asked Questions: Certification, Recertification, Continuing Education

By
Phil Lockwood
and Jeff Jarvis

Phil Lockwood heads the EMS Certification Program, and Jeff Jarvis heads the EMS Education Program. They will answer questions about certification, recertification, and education regularly in *Texas EMS Magazine*. Contact Lockwood or Jarvis at Texas Department of Health at (512) 834-6700 or on Internet at ems.tdh.texas.gov.

I received Texas EMT-Paramedic certification last year based on my out-of-state certification. I am due to recertify in the next couple of months. I am eligible for the state written CE evaluation, right?

Wrong. Because reciprocity candidates do not sit for the exam when initially certified in Texas, you must pass the certification examination (after completing the required application process) to receive a four-year certificate.

The new rules say that I must turn in my CE every two years. How often do I have to take the CE evaluation?

At least once every four years.

May I take the CE evaluation more often than once every four years?

Yes. You may take a reevaluation once any time up to 180 days prior to your 2-year CE reporting date. You may also take an evaluation and evaluation anytime within 180 days before or after your 2-year CE reporting date.

My expiration date is coming up fast. Do I have to turn in a CE summary form prior to taking the CE evaluation?

Yes. The evaluation is meant to be an assessment of your continuing education. Therefore, it is necessary for you to complete your CE and the summary form prior to sitting for the evaluation.

How long do I have to complete my mandatory 4-year CE evaluation?

Ninety days from your expiration date.


If I wish to take the CE reevaluation, is there a fee?

Yes, \$25.

If I wish to take the CE evaluation at my 2-year CE reporting date, is there a fee?

Yes, the regular certification fee for your level certification.

Do I need to turn in a Skills Proficiency Verification form at my 2-year CE reporting date?

No. 

Thanks from the Bureau of Emergency Management to these members of the Item Review Task Force

*Carol Goodykoontz
Dallas*

*Cathy Farmer
Aransas County*

*Doug Hooten
Montgomery County*

*Joni Parr
Sweetwater*

*Pauline VanMeurs
Austin*

*Donovan Butter, DO
Luling*

*Donald Gordon, MD
San Antonio*

*Jeff McDonald
Fort Worth*

*Scott Moreland
Corpus Christi*

*Joseph Lindstrom
San Antonio*

At the January 6 work session of the newly restructured Item Review Task Force, these ten members reviewed pilot questions on the health department's current EMTS certification exams. The group considered medical accuracy, relevance to EMTS practice, readability, and statistical performance of the questions and discussed the mean scores of the exams. In addition to reviewing pilot questions during the Austin meeting, these educators reviewed all questions marked

incorrectly by more than 50 percent of the candidates.

This was the first session of the volunteer task force, which replaces three previous standing committees. The task force will meet periodically and will add new members for each work session. If you would like to volunteer to work on the Item Review Task Force, send a letter of request with your resume to Jeff Jarvis at 1100 W. 49th Street, Austin, Texas 78756. You can contact Jarvis at (512) 834-6700.

By Debbie Bradford

EMS Certification Process: We hear you . . . and we're really listening

We are listening to what you have said about the EMS certification process. Here's what we heard January 13 at the public hearing on proposed rules:

"It takes longer to get certified."

"It costs \$20 extra dollars to get the same service we used to get."

If I put myself in your shoes, as the customer, I would not want to hear all the steps, reasons, and justifications that led us to the current certification process. Although we made an earnest attempt to simplify the process, the bottom line is, it did not work for you or for us.

To quote FDR: "Well, that one did not work, let's try something else." And that is exactly what we are doing. But because we want that "something else" to stay around for the long haul—for your sake and for ours—we want to look closely at each alternative.

Believe it or not, because of the changes in skills testing timelines, standardized continuing education, and individual course completion documentation, we can now streamline the certification and recertification process—something we couldn't have done six months ago.

Let me tell you how this streamlined process will work for the beginning or initial certification candidate and for the recertification candidate.

A candidate for initial certification will need only two things to schedule the test:


1. the application with the fee
2. the course completion document

A recertifying candidate will need only three things to schedule the CE evaluation:

1. the application with fee
2. the CE Summary
3. the Skills Proficiency Verification

We plan to allow you to take the necessary documents—two for initial certification and three for recertification—directly to the test site and separately mail your fee to the department. This accomplishes several important things:

1. Dramatically shortens the time from course completion to certification
2. Eliminates the need for special handling, thus we will retract the proposed rule to charge a \$20 processing fee for special handling
3. Allows us to process each candidate's paperwork one time
4. Saves taxpayer money as we will send only the necessary notices
5. Decreases paperwork and fee confusion

We are determined to find sensible and efficient answers to the paperwork process of EMS certification. Please bear with us and continue using the current process for the eight to twelve weeks it will take us to turn things around. We'll publish details of the plan and the implementation date in the March/April issue of *Texas EMS Magazine*. Please call me at (512) 834-6700 if you want to comment on this plan. 

Debbie Bradford is EMS Division Assistant Director and manages EMS certification. Contact her at Texas Department of Health at (512) 834-6700.

Did you read...

By Alana Mallard, EMT

On an average day in Texas in 1993, the population increased by 514 people, 368 people died and 882 babies were born.

Call your patients at home or in the hospital and find out how they're feeling and how their EMS experience was—recommends Scott Bourn, in his *JEMS* column.

The American Academy of Orthopaedic Surgeons and the National Highway Traffic Safety Administration launched a new program called Drive It Safe! to educate people to wear safety belts and drive sober.

The Drive It Safe! program includes stats about drinking and driving and safety belt use, and provides information about child safety seats and defensive driving tips for everyone—including mature drivers.

For a brochure and poster call AAOS at (800) 824-BONES.

From Emergency Services Newsletter, Fall '94/Winter '95, a publication of the EMS Advisory Board of the American Academy of Orthopaedic Surgeons.

Scott Bourn, in his Controversies in Clinical Care column in *JEMS* gives tips—and some may surprise you—for clinical excellence in EMS:

1. Make sure you're clinically competent by keeping your continuing education up to date and using your system's quality improvement system to identify your weaknesses so you can improve.
2. Twice a year ride with a system far away from yours. Spend time with your counterparts and take home good ideas you can modify to work for you.
3. Attend a customer service seminar that focuses on an industry other than EMS.
4. Call your patients at home or in

the hospital and find out how they're feeling and how their EMS experience was.

5. Buy *In Search of Excellence* and read it cover to cover each year.

6. Spend a few shifts each year in the ED and with the fire department, police department, or whatever service you don't work for so you can see the world through their eyes.

7. Be a patient at least once a year by having your colleagues show up at the house, give you an exam, and transport you to the hospital.

8. Spend one day each year volunteering in a nursing home and child care center, not to practice medical procedures, but to learn from the staffs and improve your communication skills with those who make up a large percentage of our patients.

9. Attend a program, read a book, or listen to a tape on listening.

10. Recognize that what you do is a privilege because people invite us into their lives during their darkest moments and they deserve more than competence. They deserve excellence.

From JEMS, "So You Want to Be a 'Most Excellent' Medic," by Scott Bourn, January 1995, Vol. 20, No. 1, pp 41-42.

In 81 out-of-hospital deliveries by paramedics in Pittsburgh, Pennsylvania, over a five-year period, complications were encountered in 31 of the deliveries—38 percent. The researchers conclude that it is likely that paramedics will encounter complications to mothers or newborns in prehospital deliveries and that pa-

Citations used with permission

tient care protocols, hospital destination policies, CE programs, and CQI measures need to be in place for obstetrical and neonatal patients. The 81 deliveries occurred from 1981–1984 during a time when the Pittsburgh EMS responded to a total of 62,000 calls. The 31 deliveries with complications were these: nuchal cord - 10; cyanotic - 7; apneic and pulseless - 5; apneic - 3; feet-first breech - 2; toilet bowl retrievals - 2; amniotic sac intact - 1; twins - 1.

From *Prehospital and Disaster Medicine, "Out-of-Hospital Deliveries: A Five-Year Experience"* by Vincent P. Verdile, Gregory Tutsock, Paul M. Paris, and Robert A. Kennedy, January–March 1995, Vol. 10 No. 1, pp. 10–12.

On an average day in Texas in 1993, the population increased by 514 people, 368 people died and 882 babies were born, there were 486 marriages and 265 divorces. Of the births, 34 babies had no prenatal care, 63 were low birth-weight babies, and 53 were born to teenage mothers. Of the deaths, 113 were due to heart disease, 85 were due to cancer, and 17 due to unintentional injuries.

Texas' top ten leading causes of death in 1993 remained the same as in 1992:

- Heart disease 41,231
- Cancer 30,989
- Cerebrovascular disease 8,974
- Unintentional injuries 6,164
- Pulmonary disease 6,002
- Diabetes 4,428
- Pneumonia and influenza 3,668
- HIV 2,551
- Homicide 2,268
- Suicide 2,267

From *Texas Vital Statistics Annual Report 1993* published by Texas

Department of Health. Copies available from TDH Bureau of Vital Statistics, (512) 458-7509.

An item in *Harvard Heart Letter* reports that women who have many pregnancies may be more likely to have a heart attack at an older age. Results from data taken from two groups of women found that women who had six or more pregnancies had higher risks of developing heart disease. There was no significant difference in risk between women who had fewer pregnancies and those who had never been pregnant.

How to reduce risk of a heart attack in general? Lower sodium and fat intake, monitor blood pressure, quit smoking, exercise regularly, and eat a diet with plenty of fruits, vegetables, grain, and legumes.

From *Texas WIC News, November 1994, Vol 3 No 11, p 23*. Texas WIC News is a free monthly publication of Texas Department of Health.

California saw a 37.5 percent drop in fatalities from motorcycle collisions during the first year of the state's motorcycle helmet law, according to University of California researchers. As many as 122 lives have been saved since the law went into effect in January, 1992. Nonfatal head injuries also decreased significantly. Although fewer than 0.5 percent of the injured motorcyclists did not wear helmets, they accounted for 15 percent of the deaths and serious injuries.

The American Medical Association issued a new report after the California study calling for adoption of nationwide mandatory helmet laws

Women who have six or more pregnancies have higher risks of developing heart disease.

California saw a 37.5 percent drop in fatalities from motorcycle collisions during the first year of the state's motorcycle helmet law, according to University of California researchers.

Residents in six states were urged to wear red clothing on Red-Out Day, December 1, to tie in with the red ribbon campaigns from Mothers Against Drunk Driving and National Highway Traffic Safety Administration.

The death rate from asthma in the U.S. population rose 40 percent from 1982 to 1991—one official speculated that asthma cases may have increased because of air pollution, cigarette smoking, and secondhand smoke.

for motorcyclists and bicyclists.

From NAGHSR News, "California Study Finds Lives Saved," December 12, 1994, Vol 6 No 4, published by National Association of Governors' Highway Safety Representatives, 750 First Street, NE, Ste 720, Washington DC 20002, (202) 789-0945.

Firetrucks Northwest of Parachute, Colorado, sponsors the "\$14 for 14" campaign to help the families of the 14 firefighters who died on Storm King Mountain in Glenwood Springs, Colorado, on July 6. Every firefighter in the U.S. is asked to donate \$14, one dollar for each of the fallen firefighters. Almost half of the \$1 million goal has been raised. Send donations to: Canyon Creek Firefighters' Disaster Relief Fund, Alpine Bank & Trust, PO Box 10,000, Glenwood Springs, Colorado 81602.

From Rescue, "News from the Rescue Field," Jan/Feb 1995, Vol 8 No 1, published bimonthly by Jems Communications.

A 14-year-old boy from Edinburg, Texas, died of rabies in a San Antonio hospital on November 27, 1994. Texas Department of Health and Centers for Disease Control and Prevention continue to investigate the boy's exposure history. The boy's two-month-old puppy became ill and died several weeks before the boy's onset of illness, but the puppy was not tested for rabies and had not been immunized. The puppy's mother and littermates are healthy.

CDC test results of a skin biopsy and saliva sample from the boy confirmed the rabies diagnosis, and preliminary results received on

December 1 indicated the rabies strain was Texas Fox/Mexican Dog, definitely not skunk or bat.

South Texas has reported rabies cases since 1988, and two human rabies cases have been reported since 1990. One case resulted from a bat bite. In the second case the rabies strain was confirmed as Texas Fox/Mexican Dog

From Disease Prevention News, "Rabies Death in South Texas" by Michael Kelley and Richard Chapman, December 12, 1994, Vol 54 No 25, published by Texas Department of Health. Disease Prevention News is a free, biweekly publication of TDH Public Health Professional Education.

Maryland, Delaware, District of Columbia, Pennsylvania, Virginia, and West Virginia sponsored Red-Out Day on December 1. Residents in the six states were urged to wear red clothing on that day to tie in with red ribbon campaigns from Mothers Against Drunk Driving and National Highway Traffic Safety Administration.

Red-Out Day was designed to focus public attention on safe and sober driving during the heavy traffic holiday season. The significance of the color? One, to stop red ambulance and police cruiser lights from flashing in response to vehicle crashes caused by alcohol or drugs. Two, to stop the blood flowing from victims of crashes involving impaired drivers.

From Maryland EMS News, "Red-Out Day Encourages Safe, Sober Driving," November 1994, Vol 21 No 2, published by Maryland Institute for EMS Systems, 636 W. Lombard St., Baltimore, Maryland 21201-1528, (410) 706-3248.

A new analysis of health care expenditures shows injury second only to cardiovascular disease as the most costly medical problem in the U.S. A study published August 19 in the Centers for Disease Control and Prevention's *Morbidity and Mortality Weekly Report* concludes that injuries account for 12 percent, or \$69 billion, of the \$572 billion spent nationally in 1993 for medical services (excluding dental care, nursing home care, and insurance claims processing). Cardiovascular disease accounted for 14 percent or \$80 billion of the total medical spending.

The study says injury is the largest contributor to health care expenditures for people between the ages of 5 and 49, and the second-largest contributor to medical spending for people aged 5 to 85 years.

From the Bulletin of the American College of Surgeons, "Dateline Washington," October 1994, Vol 79 No 10, p 7.

Asthma cases in the U.S. have increased more than 40 percent in the past decade, according to a report released January 5, 1995, by the Centers for Disease Control and Prevention. And the greatest increases occurred among blacks and women, said the report. CDC said the rate of asthma cases rose 42 percent from 1982 to 1992. The death rate from asthma in the U.S. population rose 40 percent from 1982 to 1991. But the death rate rose 59 percent among women. Blacks are seven times as likely to die from asthma as whites, according to CDC.

One official speculated that asthma cases may have increased because of air pollution, cigarette smoking,

and secondhand smoke. In 1991, 63 percent of asthma sufferers lived in areas where at least one federal air quality standard was exceeded.

Five percent of the nation's population, or 13,000 people, suffer from asthma, which caused 5,106 deaths in the U.S. in 1991.

From the Houston Chronicle, January 6, 1995.

Cardiovascular disease, the most costly medical problem in the U.S. accounted for 14 percent or \$80 billion of the total spent nationally in 1993 for medical services.

EMS EXPO at Dallas Convention Center, April 27-29

EMS EXPO returns to Dallas in April with more workshops, sessions, and exhibits than ever before, giving Texas EMS professionals the opportunity to learn from instructors from other parts of the country.

Sponsored by *Emergency Medical Services* magazine, EMS EXPO will feature more than 90 sessions and workshops oriented to all levels and functions of EMS. Core program tracks include prehospital, emergency department, administrator, instructor, and general sessions. Two days of special preconference workshops offer intensive instruction in hands-on vehicle extrication, pediatric trauma, farm rescue, leadership, hazmat, and more.

EMS EXPO also features a complete 3-day conference for emergency vehicle maintenance and operations, with workshops on diesel engine troubleshooting, electrical and charging systems, heating and air conditioning, and structural chassis issues.

The International Association of Fire Chiefs EMS Section Conference, offered as an EMS EXPO preconference program, covers topics of interest to fire chiefs and others interested in fire service-based EMS operations: the future of fire service EMS, urban survival, tox medics, mobile health care, civil/criminal liability for paramedics, and much more.

EMS EXPO's exhibit hall will be the world's largest collection of EMS equipment, products, and services, assembling 500 booths of equipment of all types including the latest ambulances, medical equipment, rescue gear, training and educational aids, uniforms, communications. Meet vendors and test equipment in several complimentary events as Laerdal sponsors the Second Annual CPR Challenge, Physio Control presents its Learning Center of on-floor mini-sessions that offer CE credit, and Rescue Engineering demonstrates vehicle extrications.

For more information about EMS EXPO contact CMC, 200 Connecticut Avenue, Norwalk, CT 06856, or call 1-800-243-3238. Fax requests for information to (203) 857-4075. EMS EXPO conference program will offer CEUs from CECBEMS, Texas Department of Health, Emergency Nurses Association, and American Ambulance Association Management Training Institute.

THE INFORMATION IN THIS SECTION IS INTENDED TO PROVIDE PUBLIC NOTICE OF DISCIPLINARY ACTION BY THE TEXAS DEPARTMENT OF HEALTH AND THE BUREAU OF EMERGENCY MANAGEMENT AND IS NOT INTENDED TO REFLECT THE SPECIFIC FINDINGS OF EITHER ENTITY.

THIS INFORMATION MAY NOT REFLECT ANY NUMBER OF FACTORS INCLUDING, BUT NOT LIMITED TO, THE SEVERITY OF HARM TO A PATIENT, ANY MITIGATING FACTORS, OR A CERTIFICANT'S DISCIPLINARY HISTORY. THIS LISTING IS NOT INTENDED AS A GUIDE TO THE LEVEL OF SANCTIONS APPROPRIATE FOR A PARTICULAR ACT OF MISCONDUCT.

FOR INFORMATION, CONTACT THE BUREAU'S CHIEF INVESTIGATOR, VIC DWYER, AT (512) 834-6700.

* **A.C.S. Ambulance**, Houston, Texas. Agreed to administrative penalty of \$500. Chapter 773, Health and Safety Code, Section 773.050, failure to staff emergency medical service vehicle, when in service, with at least two certified personnel.

Beard, Roxanne, Freeport, Texas. Twelve months probation of Emergency Care Attendant certification through March 31, 1995. EMS rule 157.44(b)(1)(2) and 157.53, misdemeanor conviction.

* **Brown, Vickie Lee**, Hungerford, Texas. Eighteen months probation of EMT certification through March 15, 1996. EMS rule 157.44 (b)(1) and (c), and 157.53, felony convictions.

* **Chenault, Larry James Jr.**, Forresteron, Texas. Six months probation of EMT certification through May 8, 1995. EMS rule, 157.44 (b)(1) and (c), and 157.53, misdemeanor conviction.

* **Chisum, John**, Leakey, Texas. Decertification of EMT certification. Conviction of a felony in accordance with EMS rule 157.44, relating to certification of persons with criminal backgrounds to be EMS personnel.

Cochran, Jackie R., Willow Park, Texas. Twelve months suspension of EMT certification through March 25, 1995. EMS rule 157.51(2)(N), cheating or assisting another to cheat on the department examinations for certification or recertification.

Communicare Ambulance Service, Thicket, Texas. Twenty-four months probation of provider license from December 8, 1993, until December 8, 1995. EMS rule 157.11, (a)(1)(E) and (F), improper personnel listing and staffing plan.

Dandois, John M., Jr., Carrollton, Texas. Emergency suspension of EMT-Paramedic certification. EMS rule 157.51 (1), imminent danger to health and safety.

* **Easley, John Robert**, San Antonio, Texas. Decertification of EMT-Paramedic certification. EMS rule 157.51 (2)(P), conviction of a felony in accordance with 157.44, relating to certification of persons with criminal backgrounds to be EMS personnel.

* **Eastex EMS**, Kirbyville, Texas. Agreed to administrative penalty of \$5,000. EMS rule 157.19 (L), operating a subscription service, failure to comply with 157.16, relating to subscription service.

EM-Care Ambulance, Donna, Texas. Administrative penalty of \$250. EMS rule 157.18, failing to allow inspection of records.

Evans, Guy P., Roanoke, Texas. Six months suspension of EMT-Paramedic certification. EMS rule 157.44, misdemeanor conviction while certified.

Fenley, William J., Beaumont, Texas. Decertified as EMS examiner. EMS rule 157.64 (c)(1)(B), failing to conduct the department skills examinations in an objective manner.

* **Gregory, Fleta**, May, Texas. Agreed to twelve months probation of EMS coordinator certification through December 20, 1995. EMS rule 157.64 (a)(4), falsifies course completion documents.

Hanna, Elmer Joe, Jr., Galveston, Texas. Twelve months probation of EMT certification through May 23, 1995. EMS rule 157.44 (b)(1)(2) and 157.53, misdemeanor conviction.

Hart, Joel, Beaumont, Texas. Eighteen months agreed probation of EMT-Paramedic certification through September 30, 1995. EMS rule 157.51 (2)(A), failing to follow EMS standards in the management of a patient.

Hull, Kevin B., Clarendon, Texas. Twelve months probation of EMT cer-

* THESE LISTINGS ARE NEW THIS ISSUE. DENIALS AND REVOCATIONS WILL BE PRINTED IN THREE CONSECUTIVE ISSUES. SUSPENSIONS AND PROBATED SUSPENSIONS WILL BE PRINTED UNTIL SUSPENSION OR PROBATION EXPIRES.

tification through May 11, 1995. EMS rule 157.51(2)(Q), practice beyond the scope of certification without medical direction.

Hunter, Brandy L., Granbury, Texas. Twelve months suspension of EMT certification through March 25, 1995. EMS rule 157.51(2)(N), cheating or assisting another to cheat on the department examinations for certification or recertification.

Hurt, Morgan Lee, Kingwood, Texas. Twenty-four months probation of ECA certification through December 21, 1995. EMS rule 157.44 (b)(1), misdemeanor conviction.

* **Itasca EMS**, Itasca, Texas. Administrative penalty of \$250. Chapter 773, Health and Safety Code, Section 773.050, failure to staff emergency medical service vehicle, when in service, with at least two certified EMS personnel.

* **Jasso, Steven James**, Harlingen, Texas. Twelve months probation of EMT certification through September 28, 1995. EMS rule 157.44 (b)(1) and (c), and 157.53, misdemeanor conviction.

* **Johnson, Gregory Carl**, Bellaire, Texas. Six months agreed suspension of EMT certification through June 14, 1995, and six months probation of certification from June 14, 1995, to December 14, 1995, subject to conditions. Conviction of a misdemeanor in accordance with EMS rule 157.44, relating to certification of persons with criminal backgrounds to be EMS personnel.

King, Diane Charlene, Azle, Texas. Twelve months probation of EMT certification through March 31, 1995. EMS rule 157.44(b)(1)(2) and 157.53, misdemeanor conviction.

Lake Whitney Hospital EMS, Whitney, Texas. Administrative penalty of \$500. EMS rule 157.19, failing to maintain proper ambulance supplies.

Lastinger, Lawrence Wayne, Victoria, Texas. Twelve months probation of EMT certification through September 22, 1995. EMS rule 157.44(b)(1) and (c), and 157.33, felony conviction.

Long, Jackie Don, Hallettsville, Texas. Eighteen months probation of Emergency Care Attendant certification through September 30, 1995. EMS rule 157.44(b)(1)(2) and 157.53, felony conviction.

Maxwell, Luther, Ranger, Texas. Emergency suspension of EMT-Intermediate certification. EMS rule 157.51 (1), imminent danger to health and safety.

* **Medi-Trans Ambulance Service**, San Antonio, Texas. Agreed to administrative penalty of \$1,000. Chapter 773, Health and Safety Code, Section 773.050, failure to staff emergency medical service vehicle, when in service, with at least two certified EMS personnel.

Meza, Alfredo, Laredo, Texas. Emergency suspension of EMT-Paramedic certification. EMS rule 157.51 (1), imminent danger to health and safety.

Morrison, Wayne, Avinger, Texas. Twelve months agreed suspension of Emergency Care Attendant through August 18, 1995. EMS rule 157.51 (2)(A), failure to follow EMS standards of care in the management of a patient.

Mullens, Paul, Henderson, Texas. Emergency suspension of EMT-Intermediate certification. EMS rule 157.51 (1), imminent danger to health and safety.

Munoz, Cecilia, McAllen, Texas. Eighteen months probation of EMT certification through September 30, 1995. EMS rule 157.44(b)(1)(2) and 157.53, misdemeanor conviction.

McCoy, Dennis M., Saint Jo, Texas. Eighteen months probation of EMT-Paramedic certification through May 12, 1995. EMS rule 157.51 (a)(2)(A), failing to follow the EMS standards of care in the management of a patient.

McHam, Ronald Carl, Tyler, Texas. Nine months probation of EMT-In-

intermediate certification through March 14, 1995. EMS rule 157.44 (b)(1)(2) and 157.53, misdemeanor conviction.

Oney, David, Avinger, Texas. Twelve months agreed suspension of EMT certification through August 18, 1995. EMS rule 157.51 (2)(A), failure to follow EMS standards of care in the management of a patient.

Penney, Marty, Whitney, Texas. Eighteen months probation of EMT certification. EMS rule 157.51, failing to follow EMS standards of care in the management of a patient.

Reidenbach, Michael David, San Antonio, Texas. Eighteen months probation of EMT certification through June 28, 1995. EMS rule 157.44 (b)(1), misdemeanor conviction.

Rising Star EMS, Rising Star, Texas. Administrative penalty of \$100. Chapter 773 of Health and Safety Code, Section 773.050, failing to staff in-service emergency medical service vehicle with at least two certified EMS personnel.

* **Ritzou, Peter**, Humble, Texas. Emergency suspension of EMT-Intermediate certification. EMS rule 157.51 (1), imminent danger to public health or safety.

* **Russell, Teresa Leann**, Channing, Texas. Twelve months probation of EMT certification through November 9, 1995. EMS rule 157.44 (b)(1) and (c), and 157.53, misdemeanor conviction.

Schulze, Clarence, La Grange, Texas. Twelve months probation of EMT-Paramedic certification. EMS rule 157.51 (2)(W), failing to remain certified in EMS.

* **Sisneros, Daniel Keith**, Amarillo, Texas. Twelve months probation of EMT certification through November 9, 1995. EMS rule 157.44 (b)(1) and (c), and 157.53, misdemeanor conviction.


* **Stevens, Sanns Renee**, Houston, Texas. Twelve months probation of EMT certification through September 29, 1995. EMS rule 157.44 (b)(1) and (c), and 157.53, misdemeanor conviction.

* **Valley Mills EMS**, Valley Mills, Texas. Administrative penalty of \$250. Chapter 773, Health and Safety Code, Section 773.050, failure to staff emergency medical service vehicle, when in service, with at least two certified EMS personnel.

Ward, Tonia Donetta, Houston, Texas. Twelve months probation of EMT certification through September 15, 1995. EMS rule 157.44 (b)(1) and (c), and 157.53, felony conviction.

Watts, Joel Andrew, Bridge City, Texas. Eighteen months probation of EMT certification through September 30, 1995. EMS rule 157.44(b)(1)(2) and 157.53, misdemeanor conviction.

* **Westerfield, Terry K.**, Waco, Texas. Emergency suspension of EMT certification. EMS rule 157.51 (1), imminent danger to public health or safety.

Wilkerson, David, Matthew, Houston, Texas. Twelve months suspension of EMT-Paramedic certification through September 21, 1995. EMS rule 157.51 (2)(K), appropriates or possesses personal items of a patient without authorization. 

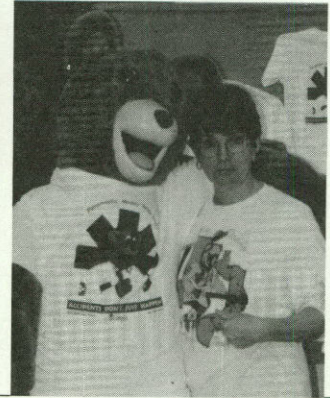
G O O D W O R K



The 87 disciplinary actions taken in FY94 represent less than one-fifth of one percent of the total 46,500 certified EMS personnel. Our thanks to the huge majority for providing quality patient care.



Plan a bicycle safety event with Ready Teddy during EMS Week



My good friend Paramedic Ready Teddy will busy himself between now and EMS Week with organizing Ready Teddy Bicycle Safety Day or Weekend in local communities.

Bicycle safety and EMS Week make a good match because it's a way for you to use the furry paramedic to teach necessary prevention behaviors to adults and children. In 1991 in Texas 54 bicyclists were killed. Nearly 3,000 bicyclists were injured. Nationwide more than half a million bicycle-related injuries receive treatment in hospital emergency departments every year.

It's not too early to meet with other children's advocates, safety groups, and emergency responders in your town to plan your bicycle safety event. Some of the things you can do during your event: check kids' bikes for safe maintenance; teach maintenance tips; set up roads and intersections with cones in a parking lot and teach young riders to ride on the right, ride single file, look left-right-left, signal, and stop safely; teach traffic laws that apply to bicyclists; distribute low-cost bicycle helmets donated by local stores.

Once you set your Ready Teddy Bicycle Safety event, include educational material each time you publicize the events date, location, and activities. Use Ready Teddy's Bicycle Safety Tips on posters or in your local newspaper to get you started.

Ready Teddy's Bicycle Safety Tips for Parents

- Buy your child an approved bike helmet
- Let your child pick out the helmet because bicyclists need to wear their helmets every time they ride their bikes
- Make certain your child's bike is the correct size, safely maintained, and has reflectors—and make certain your child's bike helmet fits also
- Children under age nine should not ride their bikes in the street
- Teach your child to always stop and look left-right-left before entering the road or crossing an intersection
- Never allow your child to ride at night or with headphones
- Enroll your child in a bike safety education program

And call your public health region EMS office or the Austin EMS office to reserve the Ready Teddy costume for your event. If you want information on purchasing a costume, call me at (512) 834-6742—the suits cost about \$600. For September we're planning a Ready Teddy Back-to-School Safety Weekend. 🐻

*ALANA S. MALLARD,
EDITOR
TEXAS EMS MAGAZINE*

Calendar

Meetings

March 3, 1995. **Emergency Medical Seminar.** \$35. One day seminar offered for prehospital and acute care settings. Contact Kathy Jordan, Texarkana College, 903/838-4541 ext. 382.

March 11, 1995. **Management of Assaultive Behavior.** \$35. One day seminar offered for human service professionals, nurses, and emergency caregivers. Contact Kathy Jordan, Texarkana College, 903/838-4541 ext. 382.

March 11-14, 1995. **13th Annual EMS Today Conference and Exposition.** Baltimore, Maryland. Sponsored by JEMS. Call Sheri Pearson at 1-800-266-JEMS.

March 28-September 7, 1995. **EMT-Paramedic class.** Contact Mark Hinson, at Metrocrest Medical Services, 2997 LBJ Freeway, Suite 139, Dallas, TX 75234 or 214/484-1158.

March 31-April 1, 1995. **Critical Incident Stress Debriefing Course.** \$25. Dallas, TX. Contact Ozro Henderson at 214/947-8411 to register. For informa-

tion on CISD training or stress prevention education, call Paul Tabor at 512/834-6700.

April 1 & 8, 1995. **CPR Instructor Course.** Brookhaven College. Dallas, TX. Call 214/620-4715.

April 25-26, 1995. **Critical Incident Stress Debriefing Course.** \$25. Borger, TX. Contact Percilla Newberry at 806/274-5311 to register. For information on CISD training or stress prevention education, call Paul Tabor at 512/834-6700.

April 27-29, 1995. **EMS EXPO** at Dallas Convention Center, Contact CMC, 200 Connecticut Avenue, Norwalk, CT 06856, or call 1-800-243-3238.

April 1995. **National Registry Advanced Testing.** Contact Mark Hinson, at Metrocrest Medical Services, 2997 LBJ Freeway, Suite 139, Dallas, TX 75234 or 214/484-1158.

May 12-13, 1995. **Second Annual "Trauma: The Challenge of the 90's" conference.** The Radisson Hotel, Fort Worth, TX. Carole Rush, Trauma Nurse Coordinator Diana Washington, Trauma Registrar, Trauma Services, John Peter Smith Hospital. 817/927-1392.

May 13-21, 1995. **Wilderness First Responder.** Arkansas. \$495-includes lunch and lodging. Sponsored by Kiamichi Experimental Education Program. Call 918/647-9205 or 1-800-742-2931.

July 13-16, 1995. **ClinCon '95-The 17th Annual Clinical Conference on Out of Hospital Emergency Care.** Hyatt Orlando, Kissimmee, Florida. Call 407/281-7396 or 1-800-766-6335.

Grantwriting Classes. \$25. You'll learn how to apply, who gives money to EMS, how the process works, what terminology to use. For information on hosting or attending a class in your area, call John Singleton or Penny Workman at (512) 834-6700.

Paramedic Ready

Teddy. Don't forget to use Texas' furry EMS mascot to help you with these local activities... **Child Passenger Safety Week** in February, **Poison Prevention Week** in March, **Sexual Assault Awareness Month** in April, **EMS Week and Trauma Awareness Month** in May, **Drowning Prevention Week** in June, **Summer Safety** in July, **Back-to-School Safety Weekend** in September, **DWI Awareness** in November, **Holiday Safety** in December. Call Kelly Harrell or Alana Mallard at (512) 834-6700 to schedule the Ready Teddy costume or request activity packets.

For a free conference listing or ad send a fax to *Texas EMS Magazine*, 512/834-6736.

Jobs

EMT: Driving positions. Applicants must be 23 years old and have a clear driving record and EMT certification. Apply at 11300 South Post Oak, Houston, TX from 9am-4pm. Contact Jim Becka for more information at 721-8882.+

EMT-I: Full-time needed for hospital-based EMS service. Experience preferred. Contact Madison County Hospital Human Resources office at 409/348-2631.*

Paramedic: Kerrville Fire/EMS. \$1,709/month. Must be TCFP certified firefighter. Apply or send resume to: City of Kerrville, Personnel Dept., 800 Junction Hwy., 78028. Fax 210/792-3850 or 210/257-8000.+

Paramedic: Llano County EMS. County coverage for 9-1-1 emergency calls, MICU service. Contact Kelly Oestreich, Llano Co. EMS, 200 W. Ollie St., Llano, TX 78643 or 915/247-3088.+

Administrator: To manage progressive MICU system in beautiful Canyon Lake EMS. Applicant should possess extensive experience in ALS-EMS system. Minimum requirements: Texas paramedic certification, ACLS, BTLs, EMS Instructor/Coordinator. College degree preferred but experience may be substituted. Mail applications to President, Canyon Lake EMS, 1425 Sattler Road, Canyon Lake, TX 78133.*

Instructor: Potential for department chairman. Master degree with commu-

NETWORKING



WORLDWIDE

Networking Worldwide

The Sixth International Conference of Fire Service Women

April 19-23, 1995
Hyatt Regency Reston
Fairfax County, Virginia

A special focus of this conference will be to bring together women firefighters from around the world. All women and men in the fire and rescue services -- firefighters and officers, paramedics and EMT's, career and volunteer -- are invited to attend.

The conference will offer four days of workshops on subjects such as fire officer development, hands-on training in firefighting skills, networking and problem-solving with peers, and education in managing the dramatically changing fire service workforce. A group of special one-day pre-conference seminars will provide in-depth presentations of a selected group of subjects.

Make your plans now to join us in Fairfax County in April.

For registration information, contact:

Women in the Fire Service
P.O. Box 5446 • Madison, Wisconsin 53705 • (608) 233-4768

Calendar

nity college teaching experience preferred. Associate degree and three years work experience with active EMS required. Current TDH certification as EMT-P and advanced EMS coordinator or advanced EMS-I and EMS-S eligible for EMS-C credential. Current AHA ACLS-I/C. Contact Human Resources, San Jacinto College, 4624 Fairmont Parkway, Suite 201, Pasadena, TX 77504, or 713/998-6126 or 713/998-6127.*

Communications Specialist/Dispatcher: Must be a certified registered EMT with 1 year experience. Excellent verbal/written communication skills are a must. Prefer a background in dispatch. Call Methodist Medical Center at 214/947-6510.+

1st Responder Coordinator: Coordinates education, training, education and research. Must be EMT-P or RN with 7 years experience in health care and associate degree or have a bachelor's degree with experience teaching EMTs. Reply to: David Edwards, TX Tech Univ. HSC, Dept. of Human Resources, 4800 Alberta Ave, El Paso, TX 79905.+

Work Wanted: Paramedic seeking job in Denton/DFW area. ACLS, BTLs-A, B.S. from A&M. Resume and references on request. 409/740-2990 or E-mail TimJWolf@aol.com*

For Sale

For Sale: Life Pak 5 heart monitor/defibrillator in excellent condition. Battery/pak charger and side pouch included. \$5,000. Call Kenneth at 806/396-2844.*

For Sale: 3 MiniPack 911-S B.P. monitor and pulse oximeters by Pace Tech. 3 years old. Call 1-817-322-1506 ext. 312.*

Fundraising: Portrait fundraisers. Volunteer EMS, rescue squads, and dive teams are a specialty. We do all the work. Graphic Promotions, Inc. 1-800-280-9977.*

For Sale: Motorola APCOR low power telemetry units, MICOR UHF telemetry repeaters, MOCOM 70 VHF-HI, SYNTOR x9000 VHF-HI dual head, Minitor pagers and other radio gear. Call C. A. Counts 713/488-3078.*

For Sale: AIM ambulance billing software with upgrades. \$1,500 OBO. Send bids to: Crosby EMS, PO Box 134, Crosby, TX 77532.*

For Sale: 1979 Type II extended body ambulance. 72,500 miles, new tires. \$5,000. Spicewood VFD-EMS 210/693-2801 or 693-6218.+

For Sale: 1980 Superior Type III, Ford Chateau chassis with code 3 light bar and Federal PA 200 siren. Ferno model cot included. Unit also has floor plates for Ferno mounts and model 29-M cot. \$5,000. Call Kenneth at 806/396-2844.*

For Sale: 1984 Ford Road Rescue Type III MICU. 32,000 miles. Sealed bids by 12/15/94. For an information packet call 214/559-9495.*

For Sale: 1984 Wheeled Coach Type 2 ambulance. 460 gas engine. 98,600 miles. Good condition. Graham EMS, Cord Coyle, PO Box 1390, Graham, TX 76450. 817/549-3400.*

For Sale: 1988 Wheeled Coach Type 2 ambulance. 7.3 diesel engine. Excellent condition. Graham EMS, Cord Coyle, PO Box 1390, Graham, TX 76450. 817/549-3400.*

For Sale: 1988 Chev. Type II Collins, \$10,000. Contact Yvonne Smith at 915/446-2766.

For Sale: 1989 Ford 7.3 diesel, Type II Collins extended body. ALS configuration. 409/345-2390.*

For Sale: 1989 Type III Road Rescue, very good condition. Road Rescue Emergency Vehicles. 1-800-228-7738.+

For Sale: 1990 Type III Road Rescue, very good condition. Road Rescue Emergency Vehicles. 1-800-228-7738.+

+ This listing is new to this issue.

* Last issue to run.

Announcements

Needed: One basket-type stretcher donated to Elkhart Volunteer Fire Department. Also, red and white flashers from a wrecked ambulance. Write to: Philip O'Neal, Elkhart Volunteer Fire Department, PO Box 962, Elkhart, TX 75839.

Needed: Used monitor/defibrillators, automatic ventilators, and fluid pumps. Contact Jim Becka at 713/721-8882.

Ambulance Service For Sale: Rural East Texas, retirement community, established 12 years, money maker. 318/752-1933.-

RESCUE 911 We need your stories and 9-1-1 calls; all types of rescues. Fax your story to RESCUE 911 at 213/466-5345 to: RESCUE 911, c/o Kelly McPherson, 1438 North Gower Ave, Bldg. 48, Hollywood, CA 90028.

CPR manikins for rental use. Contact Steve Cutler at 214/270-0857.

CPR Instructor training courses will be conducted throughout the year at Brookhaven College. Call 214/620-4715 for information.

Fundraising: Door to door portrait fundraising. Letters of recommendation available. Contact Jason 1-800-741-1187 or Morris 1-800-381-3411, Treasure Fundraising, Inc.

Moving? Renewing your subscription? Placing an ad?



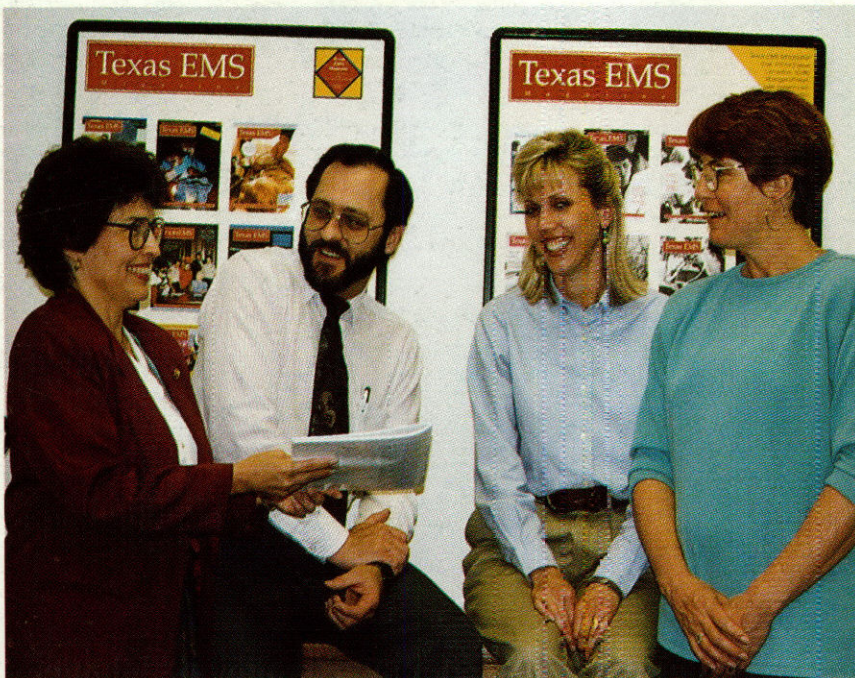
Moving? Let us know your new address—the post office does not forward this magazine to your new address. Use the subscription form in the magazine to change your address and mark the change of address box or write to us. We don't want you to miss an issue!

Renewing your subscription? Paid subscriptions have a 4-digit number on the mailing label. Example: 9510 means the subscription expires with the April, '95 issue. Use the subscription form in the magazine to renew your subscription and mark the renewal box.

Placing an ad? To place an ad in the calendar section, write the ad (keep the words to a minimum, please) and fax to *Texas EMS Magazine*, 512/834-6736 or send to the address below. Ads will run in two issues and then be removed.

For circulation and calendar information contact Jan Brizendine at 512/834-6700 or *Texas EMS Magazine*, 1100 West 49th, Austin, Texas 78756-3199.


Texas EMS Conference '94: *The best-laid plans of Alana Mallard, Kelly Harrell, Paul Tabor, and Jan Brizendine*



The Bureau's Public Information and Education Program staff, (from left): Jan Brizendine, Paul Tabor, Kelly Harrell, and Alana Mallard, helped bring the best in education and information to Texas emergency medical services with Texas EMS Conference '94 and Texas EMS Magazine.

The ninth annual Texas EMS Conference sponsored by Texas Department of Health has come and gone, and it is past time to recognize the conference planners for their roles in assuring the success of the conference. We of the Bureau of Emergency Management would like you to join us in extending special thanks to Alana Mallard who has organized all nine conferences, to Jan Brizendine who managed the exhibit show, to Kelly Harrell who worked with caterers, hotels, and the convention center to work out every detail, and to Paul Tabor, who coordinated faculty to present outstanding educational workshops.

This year these four Bureau employees planned the largest EMS conference in our history and one of the largest in the United States. With the tremendous support and attendance of EMS people from across the state, we have come a long way from the TDH conference in 1986 attended by 194 people. This year more than 2,200 people earned recertification credit at workshops and preconference sessions and visited 130 exhibits.

Few people know the time and effort it takes behind the scenes to produce a conference of this size. Alana, Paul, Kelly, and Jan spent hours of evening and weekend work to make Texas EMS Conference '94 an affordable and enjoyable meeting for the EMS personnel of Texas. And they were back in the office Monday after the conference continuing their preparations for Texas EMS Conference '95, November 19-22, at the Fort Worth-Tarrant County Convention Center. We hope you'll be there. 

Bureau of Emergency Management
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756-3199

Second Class
Rate Paid
At Austin, Texas