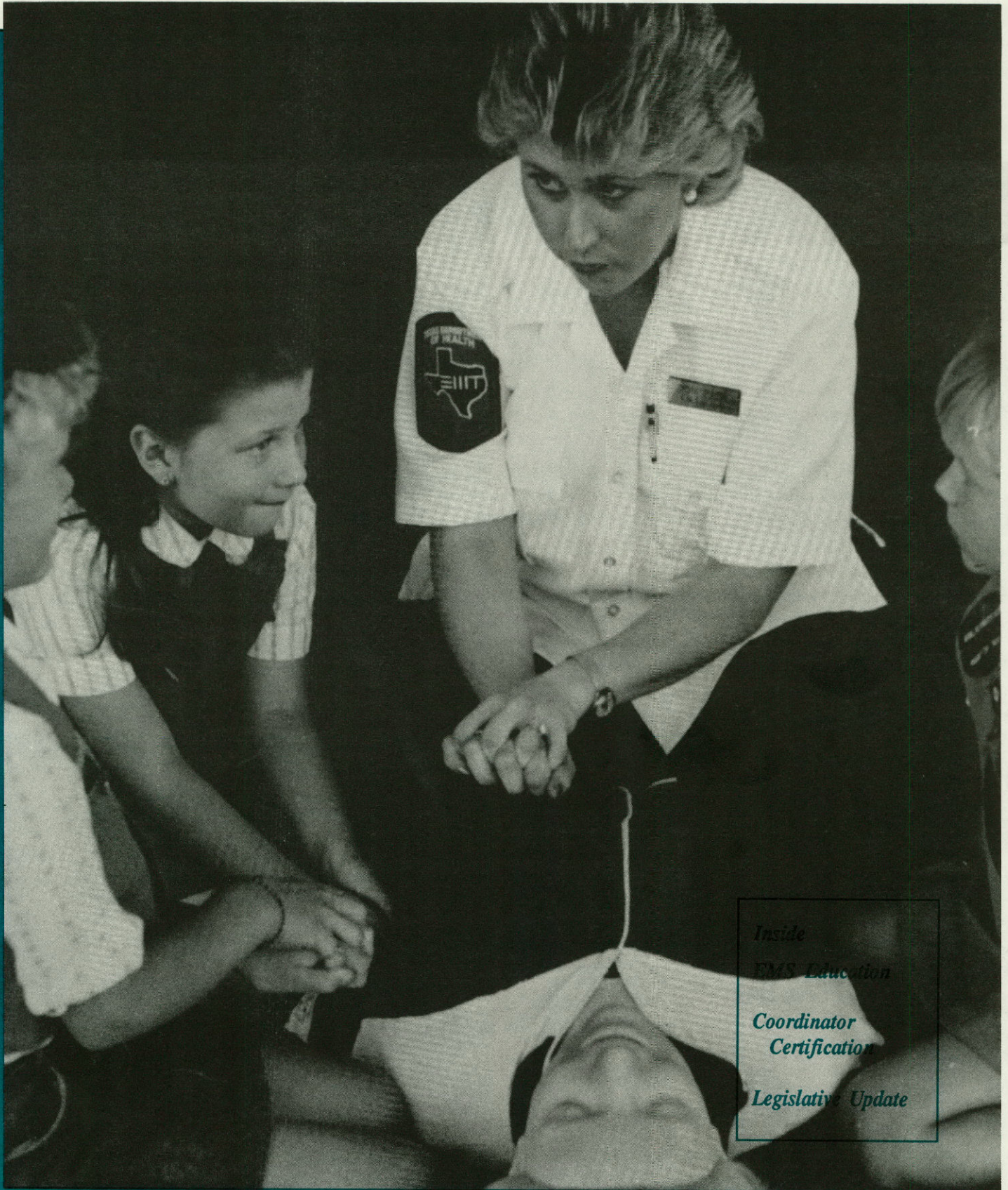


Texas EMS

M e s s e n g e r

ADOLESCENTS ISSUES



Inside
EMS Education
Coordinator
Certification
Legislative Update

About this issue



COVER PHOTO: Joni Parr takes EMS education to the young ones as she teaches CPR. Photo by Charlotte Arendall.

Texas EMS M e s s e n g e r

July 1991

Vol. 12 No. 6

Texas Department of Health

Ron J. Anderson, M.D.
Chairman, Texas Board of Health

Robert A. MacLean, M.D.
Acting Commissioner of Health

Published by the Bureau of Emergency Management

Gene Weatherall	Bureau Chief
Alana Mallard	Editor
Jan Brizendine	Production and Design
Linda Wolfe	Information Specialist

Editorial Review Board

Ted Chinn	Gail McNeely
Rick Harris	Paul Tabor
Jerry Lester	Pam West
Phil Lockwood	Jim Zukowski

Texas EMS Messenger (ISSN 0148-8235) is published January, March, April, May, June, July, August, September, November and December 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) 458-7550, 1100 W. 49th Street, Austin, Texas 78756-3199.

Individual subscriptions to **Texas EMS Messenger** are available for \$15 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 Messenger** at the address above or call (512) 458-7550.

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 Messenger**, 1100 W. 49th Street, Austin, Texas 78756.

-
- 6 EMS Education in Texas Certification Review and Exam Review Committee by *Alana S. Mallard and Richard Best*
 - 8 Coordinator Certification Questions and answers by *Debbie Bradford*
 - 10 Correspondence and CE Tapes Nontraditional learning available for certification and recertification by *Linda Wolfe and Rick Harris*
 - 18 Standardized Exam Development State EMS exams don't just magically appear

Departments

From This Side	3
Local and Regional EMS News	4
Exam Subscales	20
Texas EMS Conference	21
Legislative Update	26
Did You Read...	28
Around the State	31
Bureau Profile	Back Cover

*25 Years of EMS - Texas EMS Conference '91
November 25, 26, 27 1991*

Accreditation recommended by staff

During the past few years there has been much discussion of the educational process for emergency medical service personnel. As you are aware, Texas was the first state to adopt a four-year certification period. At the time this was done Texas came under much criticism from all around the country. There were even some individuals that projected that this four-year certification period would be the demise of emergency medical service in the state of Texas. Obviously EMS in Texas has not had any significant problems as a result of a four-year certification period. In fact some other states have adopted a four-year certification period.

Recently, Dr. F. David Prentice, chairman of the Texas EMS Advisory Council, asked our staff to review some of the current issues and present a report to TEMSAC. After a couple of meetings our staff has developed the following recommendations for the EMS educational process:

1. All regularly scheduled paramedic courses in counties with a population over 20,000 should be CAHEA accredited by 1996.
2. Texas Department of Health EMS exams should be administered by a national testing service by 1994.
3. Completion of training in a CAHEA accredited paramedic school should serve as certification of skills examination proficiency as soon as practical.
4. Texas accreditation for basic EMS courses should be implemented by 1996, with the program developed by 1994 and mandated for counties over 50,000. Educa-

tional programs in counties under 50,000 could participate on a voluntary basis.

5. Completion of training in a Texas accredited EMT or EMT-I school should serve as certification of proficiency in the state skills examination by 1996.

6. A refinement of the continuing education requirements should be conducted, to include a provision for active and inactive EMS certification by 1994.

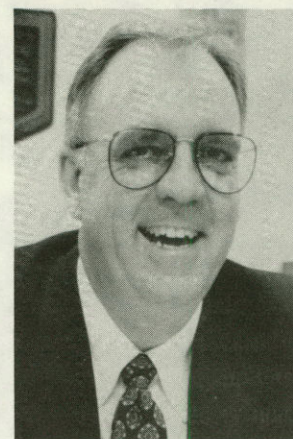
7. A two-year certification should be implemented with certification renewal based on continuing education only by September 1, 1993.

8. All counties over 20,000 should have an EMS medical director by 1995.

County population was used in some of the recommendations to allow for greater flexibility in the rural areas. We understand that it would be more difficult to meet some of these recommended changes in the rural areas, therefore we are proposing to make many of them optional. While we would certainly encourage standardization in all areas of the state we recognize the difficulty some rural areas would have in meeting these proposed standards.

The recommendation for a two-year certification period with renewal based on continuing education is in part in response to a recommendation from the Rural Economic Development Commission. The commission had concerns that continuing retesting of individuals was causing a reduction in the number of volunteers in the rural areas.

These recommendations will be presented to TEMSAC in the near future in the context of the State EMS Plan.



*Gene Weatherall
Chief
Bureau of
Emergency
Management*

Local and Regional EMS News



Paris-Lamar County EMS representatives with Texas Ranger manager Bobby Valentine at home plate during recent pre-game ceremonies in Arlington to induct Valentine into the Think Child Safety program.

Think Child Safety plays ball

Representatives from the Paris-Lamar County Emergency Services met with Texas Ranger Bobby Valentine at home plate during recent pre-game ceremonies in Arlington to induct Valentine into the Think Child Safety program. The Paris paramedics gave Valentine a Think Child Safety T-shirt and the crowd of 26,000 heard a 2-minute loudspeaker explanation of Think Child Safety and EMS Week.

Paris' Stewart Dodson is working with Valentine to distribute EMS and Ready Teddy materials at the stadium as a children's day promotion later in the year.

TAMU develops EMS driving course

Texas A&M University through its engineering extension service recently completed two outreach Emergency Vehicle Operations courses in Texas, one in Brownsville and one in Corpus Christi. Twenty-one students completed the two 16-hour courses.

"Most of the course had to do with hands-on emergency vehicle operations

tactics," said Jay Garner, EMS program administrator for Public Health Region 8 in Harlingen and one of the instructors at the Corpus Christi course. Garner said the certification courses are important for EMS providers because insurers recognize the emergency driving training as good risk management and respond by offering lower fleet insurance rates.

Garner and Bureau employees Debbie Bradford and Richard Best participate on the advisory committee that developed the training course and oversees presentation of courses.

State Department of Highways and Public Transportation funded the Brownsville and Corpus Christi driving courses. You can contact your Public Health Region EMS office for information on scheduling an emergency vehicle operations course in your area.

Dallas EMT revives woman in airport

The **Dallas Times Herald** featured EMT and CPR instructor Brent Hetherington in its **Unsung Hero** column on May 24 for his quick action at Dallas-Fort Worth International Airport in reviving a London woman who had suffered an aneurysm and stopped breathing. According to the article, Hetherington began volunteering at Methodist Medical Center in Dallas while he was in high school and is currently a pre-med student at Baylor University in Waco.

Dallas Fire Department EMS paramedic and EMS instructor Sherrie Wilson passed along the newspaper clipping with the note that "this is one of my students and now one of my instructors."

Besides recognition in the Dallas newspaper, Hetherington also received praise from British Airways and Dorothy Powell, the woman he revived. And the good news

Local and Regional EMS News

is that Hetherington's actions motivated several British Airways employees to take CPR training.

TEMSAC seeks consumer nominations

Six members of Texas EMS Advisory Council cycle off the council effective January 1, 1992. Nominations for five of those positions will come from associations and organizations. However, the sixth position, that of consumer, comes from the general public, and TEMSAC and the bureau want your nominations.

According to the EMS Act a "person is not eligible for appointment as a consumer member of the council if the person or the person's spouse is licensed by an occupational regulatory agency in the field of health care; is employed by or participates in the management of a business entity or other organization that provides health care

services or that sells, manufactures, or distributes health care supplies or equipment; or owns, controls, or has directly or indirectly more than a 10 percent interest in a business entity or other organization that provides health care services or that sells, manufactures, or distributes health care supplies or equipment."

Barbara Gehring fills the expiring consumer position. Other TEMSAC positions expiring January 1 include EMS educators represented by Joe Tyson, local government providers represented by Barbara Dorman, fire department EMS represented by Tommy Nations, and two commissioners courts positions represented by Judge Jay Johnson and Gustavo Barrera.

If you have a nomination for the consumer position, contact Harold Broadbent at (512) 458-7550. He'll help you with the nomination process.

— *Alana S. Mallard*

Top 10 ECA Classes January -- March 1991

Includes initial/refresher testing classes of 10 or more.

PHR/Coordinator	Class Average
1. PHR2/Coker	89.20
2. PHR3/Alexander	88.40
3. PHR1/Frick	85.67
4. PHR3/Andrus	84.90
5. PHR1/Plumlee	82.63
6. PHR1/Mahlen	81.38
7. PHR4/Reichel	81.37
8. PHR4/Gaines	80.00
9. PHR5/Hare	78.67
10. PHR4/Rudnick	78.44

A total of 509 students tested during the quarter, showing a mean score of 79.35.

Top 10 EMT Classes January -- March 1991

Includes initial/refresher testing classes of 10 or more.

PHR/Coordinator	Class Average
1. PHR5/Murray	89.37
2. PHR5/Murray	88.64
3. PHR3/Ayub	88.28
4. PHR5/Petty	88.19
5. PHR3/Daughter	88.14
6. PHR6/Rakowitz	86.80
7. PHR8/Rodriquez	86.23
8. PHR5/Murray	86.20
9. PHR2/Coker	86.00
10. PHR5/Murray	85.83

A total of 1,457 students tested during the quarter, showing a mean score of 80.64.

EMS education in Texas is a consensus process

by Alana S. Mallard

When Debbie Bradford took over the job of managing the educational process of Texas ECAs, EMTs, and paramedics last year, she immediately began gathering ideas and expert advice from people across Texas who had served as EMS course coordinators, instructors, medical directors, emergency physicians, nurses and field medics. The result has been an educational system that is less controversial, more professional, and aimed at helping EMS personnel save lives.

Two committees that have been the mainstay of the exam process are the Certification Review Committee and the Exam Review Committee. Dr. Donovan Butter, an emergency physician with the University of Texas Health Science Center at San Antonio and who serves on the Texas EMS Advisory Council, chairs both committees. There is a certain amount of irony there, because Butter was a paramedic before he attended medical school and he helped author the first paramedic exam in the 1970s when he was a staff member with Texas Department of Health EMS Division.

The review committees receive staff support from Bradford, who now administers both the testing and registry functions of the EMS Division in a combined program called the Certification Program. Three other members of the Certification Program, Rick Harris, Richard Best, and Kaylene Farthing, also provide support to the committees.

The Certification Review Committee meets in Austin every two months and provides ongoing review of exam databank questions.

The committee members write pilot exam questions and review exam statistics such as the analysis of each exam item, or question. Committee members rewrite

problem exam questions or remove them from the exam databank.

Because of heavy involvement of medical directors on the Certification Review Committee, exam databank reports are often included by Butter as part the Medical Directors Committee report at Texas EMS Advisory Council meetings. Over the last year and a half, the committee has reviewed more than 1,000 test items.

See Figure 1 for EMS experts who serve on the Certification Review Committee.

The Exam Review Committee organized approximately 18 months ago and meets twice a year to review and revise each new set of state certification exams for the four levels of EMS personnel. Membership on the committee rotates to include educators, street paramedics, and Public Health Region EMS program administrators from every area of the state.

Figure 2 lists people who have been

Figure 1 - Certification Review

Dr. James Atkins UT Southwestern Medical Center, Dallas	Mark Reger Victoria Jr. College Victoria
Dr. Donovan Butter UT Health Science Center San Antonio	Jerry Rhodes Houston Fire Department Houston
Larry Croy Amarillo Junior College Amarillo	Sal Robles Texas Southmost College Brownsville
Dr. Donald Gordon San Antonio EMS and UT Health Science Center San Antonio	Dr. Tom Ward HCA Medical Center Plano
Joe Linstrom UT Health Science Center San Antonio	Dr. Michael Wainscott UT Southwestern Medical School Dallas

included on the Exam Review Committee over the past year and a half.

Two other committees which help build consensus in EMS education are the Coordinator and Instructor Cut Score Committees which met in March and May to determine passing grades for coordinators and instructors.

Besides developing and grading exams for EMS certification, the education arm of the Certification Program provides state-wide continuing education programs and approves continuing education credit.

The Certification Program implements the certification and provider licensing rules of the EMS Act; maintains the registry and notification systems of certified EMS personnel and licensed providers; and processes certification applications, provider licenses, and vehicle authorizations submitted by Public Health Region EMS offices.

Figure 2 - Exam Review

Dr. Donovan Butter, DO San Antonio EMS and UT Health Science Center	Stephen Hanneman Public Health Region 6, Uvalde
Larry Clark Cypress Creek EMS	George Hatch Houston Community College
Neil Coker Texas Tech, Lubbock	Jane Montgomery Austin Community College
Rod Dennison Public Health Region 1, Temple	Jim Moshinskie Scott & White, Temple
Yvonne Erwin Texarkana College	Donna Pleasant Scott & White Hospital, Temple
Jay Garner Public Health Region 8, Harlingen	Jerry Rhodes Houston Fire Department
Carol Goodykoontz UT Southwestern Dallas	David Rives Public Health Region 4, Houston
	David Stone Austin EMS

What Does the Exam Review Committee Do??

The Exam Review Committee, organized almost two years ago to help increase the quality and validity of the state certification exams, consists of educators, providers and a medical director from various regions around the state. The Exam Review Committee assists the EMS Certification Program staff in exam development by reviewing new exams for content, medical accuracy, occupational relevance, difficulty and sentence structure/terminology. Members are paired and given different sections from each exam level to review. Each pair reviews approximately 150 active exam questions and all pilot questions. After reviewing their respective sections, the group joins back together to review and arrive at a consensus concerning their revisions, deletions and additions for each exam.

The committee meets twice a year, approximately two months prior to a new exam series being published, and members on the committee are rotated every meeting. If you wish to serve on the committee, you must be a certified, advanced-level EMS instructor or coordinator and submit a resume with a cover letter and brief letter

of recommendation from your regional program administrator to Debbie Bradford, Certification Program Administrator, Texas Department of Health, EMS Division, 1100 W. 49th Street, Austin, Texas 78756. Your interest and participation is needed for the continued improvement in quality and validity for all levels of certification exams.

— *Richard Best*

A typical day for committee members includes getting up as early as 3 a.m., traveling to Austin, working through lunch until 4 p.m. and traveling home. The commitment from these volunteers who serve on the ERC is much appreciated. We would like to recognize and thank the people who served on the committee in June:

Donovan Butter, DO UT Health Science Center San Antonio	Carol Goodykoontz UT Southwestern Medical School Dallas	Jim Moshinskie Scott and White Hospital Temple
Yvonne Erwin Texarkana College Texarkana	George Hatch Houston Community College, Houston	David Stone Austin EMS
Jay Garner TDH Region 8 Harlingen		

The Certification Program receives many questions about the new rules for coordinators, instructors, and examiners. The Certification Program's Debbie Bradford explains many of the questions she frequently receives.

What About Certification for Coordinators, Instructors, Examiners?

New applications for initial and recertification coordinator, instructor, or examiner candidates may be obtained by calling your regional office.

All 180-day notices of expiration are automatically generated from the central TDH office, along with a recertification application enclosed for your convenience.

All initial and recertification applications with attached documentation need to be sent to the central TDH office in Austin for processing and approval.

Final approval or disapproval of applications, processing of certifications and printing and mailing of certificates are responsibilities of the central TDH office. Results of certification exams will be reported on a pass/fail basis, and subscale breakdowns will not be utilized.

Each application must be submitted with a \$25 nonrefundable fee; however a fee will not be required if compensation is not received as a coordinator, instructor, or examiner. If you are both a coordinator and examiner, or an instructor and examiner, you should recertify on both levels concurrently with one application for two reasons: (1) your cost for recertification for two levels on one application is a total of \$25 instead of \$50 for two separate applications; and (2) your dual certification levels have concurrent expiration dates from that time forward.

All initial and recertifying coordinator, instructor, and examiner candidates must have at least the state mean (average) score on their most recent EMS personnel certification exam to be eligible for certification.

Instructor teaching privileges are included in the coordinator certification. Instruction may be at, or below, the level of the person's EMS personnel certification. Therefore, a candidate may apply for a coordinator and examiner certification, or an instructor and examiner certification, or for one level of certification. Dual coordinator/instructor certification is not an option.

All recertifying instructors must pass the instructor certification exam, one time only, to be eligible for instructor recertification. Contact the central TDH office or your regional office for study material and a test date. Exceptions to this are noted below.

All instructors who desire to become certified coordinators must have passed the instructor certification exam and have been a certified instructor for at least one year to be eligible to take a coordinator course.

Initial instructor applicants, recertifying instructors, and instructors applying for coordinator certification should note the following information pertaining to the Instructor Training Program and Instructor Certification Exam.

The EMS Instructor Training Program and/or certification exam can be waived if the candidate completed another TDH recognized educational program which addressed adult learning methodology.

TDH recognizes a certificate of completion from the TCLEOSE Instructor Training Program, the Commission on Fire Protection Instructor Training Program, or a college transcript showing completion of a degree in education, including courses that addressed adult learning methodology. Applicants should attach the certificates of completion or college transcript to the application.

To request approval of other adult instructional courses, attach a certificate of course completion with an outline of the course contents, including contact hours and dates, and the exam score achieved, to the application. The Bureau determines whether the TDH training program and/or the certification exam may be waived.

Once an application is submitted, and an approval letter sent from the central TDH office, a candidate can attend any Department-approved coordinator, instructor, or examiner course in Texas. It is the candidate's responsibility to contact the approved course sponsor and/or regional office to verify course openings.

For those who sponsor coordinator, instructor, and examiner training programs, course approval applications must be completed and sent to your regional office at least 6 weeks before the desired starting date for department approval. TDH has adopted standardized course requirements necessary for course approval to be granted. Contact your regional office for course requirements.

As part of our TDH preconference workshops on November 23 and 24, an Instructor Training Program and Course Coordinator Training Program will be offered. Contact Debbie Bradford, Certification Program Administrator, at (512) 458-7550 for more information. Enrollment is limited due to course content.

If your questions were not answered here, please call your regional office or the EMS Certification Program in Austin.

EMS Instructor and Coordinator Committee Determine Cut Scores

The new coordinator and instructor rules state that TDH will determine the passing grade on both the new coordinator and instructor exams (rules 157.61 and 157.62). In order to comply with these rules, the EMS Certification Program conducted meetings March 20 and May 21 to determine the cut score, or passing grade, for the EMS Instructor and EMS Coordinator examinations. Before these meetings, the exam questions were pilot tested on new and current instructors and coordinators, revised, and validated to ensure quality. A group of instructors and coordinators representing various regions from around the state was invited to participate in determining the cut scores for their respective examinations.

A statistical method to determine the cut score, the Angoff method, was directed by the EMS Certification Program Educational Consultant, Jim Zukowski, EdD. To use the Angoff method, subject matter experts (the instructors and coordinators) were selected to serve as evaluators. These subject matter experts reviewed the course requirements, knowledge objectives, and test content blueprint, then mutually agreed upon a definition of an entry-level, minimally competent instructor or coordinator. The evaluators read each test item and made their best decision as to how many instructors or coordinators out of 100 would answer the question correctly. Values were averaged for each question and used to compute the cut score or passing grade for the exam.

This was a time-consuming process and we would like to give our thanks to the experts who graciously gave their time and expertise to serve on the following committees.

If you have questions concerning the cut scores of the two exams or the method used to make the determinations, contact the EMS Certification Program at (512) 458-7550.

— Richard Harris

Instructor cut score committee

Vicky Smith
UT Health Science Center
San Antonio

Larry Croy
Amarillo College

Karen Less
Austin Community College

Carol Goodykoontz
Southwestern Allied
Health Sciences School
Dallas

Jerry Hutchinson
Texarkana Fire Department

Joe Hamilton
Fort Bend County EMS
Rosenburg

Charla Louis
Howard College
Big Spring

Coordinator cut score committee

Kay Allen
UT Austin

Richard Rogge
Abilene Fire Department

Sherrie Wilson
Emergency Management
Resources
Richardson

Neil Coker
Texas Tech University
Lubbock

Gary Waites
Amoco Chemical Company
Alvin

Linda Adams
Texarkana College

Doug Stevenson
Houston Community
College

Jim Arnold
TDH-Region 7
Tyler

UT offers ECA correspondence course

by Linda Wolfe

ECA classroom courses can be offered only when and where there are enough people in a group to make it practical. Now you can complete your precertification course for Emergency Care Attendant by correspondence. The University of Texas at Austin offers an independent study course approved by the Texas Department of Health as an alternative to the standard classroom course required for state certification. This course is open to individuals who are located where groups are too small to make a class or where classes form only infrequently or are nonexistent.

ECA training by independent study cuts structured class time to approximately half, reduces the hours and expense of traveling to and from class, and lets you schedule your skills training in timesaving blocks. This course allows you to study the information part of the ECA curriculum on your own at home or at any other convenient location and time. Only the skills training must be taken in the classroom. Because you can study a large portion of the course material when and where you choose, you save much of the time and expense of traveling to a central location to attend class.

"If you live in a geographically remote area and must travel many miles to take the course, live in a sparsely populated area where courses are offered infrequently, cannot attend class on a regular basis or just prefer the flexibility of independent study, have good reading skills, can discipline yourself to study without the motivation of class attendance . . . then this course is designed for you!" stated Kay Allen, an

EMT with North Hays County EMS and Director of the Extension Instruction and Materials Center of the UT Division of Continuing Education.

Working at a standard pace, you can expect to complete the course in 10 weeks. To complete the course, you will:

- *Study the textbook part* at your convenience.
- *Complete 19 written assignments* and mail them to a TDH-certified instructor, who will grade and return them, along with comments and suggestions. Seventeen of the assignments are short answer and two are multiple-guess format practice exams, similar to the state written exam. Credit is given for completing the 17 short-answer assignments and grades that do not count toward the final exam score are given on the two practice exams. A limit of 3 assignments per week has been established as the maximum that an instructor can accept from a student to ensure student learning is not compromised.
- *Pass a supervised exam* with a minimum score of 80 percent. Students may go to an approved local testing center or make arrangements with a TDH-certified course coordinator, examiner, or instructor for proctoring.
- *Master the skills training* in a traditional face-to-face setting, either in your area or in Austin. You may make arrangements with a local skills instructor or UT will help locate one in your area, if necessary. (Instructor certifications are verified by UT.) Otherwise, you must come to Austin for a 2-1/2 day weekend to complete the skills requirement.

"After completing this course, you are

Linda Wolfe, a paramedic with Northeast Hays County Volunteer EMS, joined the Texas EMS Messenger staff in June.

nontraditional learning methods

\$50,000 in new CE tapes available to EMS educators

by Rick Harris

The Meadows Foundation awarded a grant to the Texas Department of Health for \$50,000 to purchase videotapes and slides for use primarily by rural EMS providers for continuing education. The number of CE hours granted varies from program to program.

The programs are intended for classroom use rather than individual use, and a qualified instructor must present the material in order for the student to receive CE credit. The instructor who orders and presents the program must keep a list of the students who view the program for CE credit.

In order to receive credit for the program,

students must keep a copy of the evaluation letter included with each program and provided to the students by the instructor. This letter can be used as proof of CE.

Listed by category on pages 12-16 are the titles available on loan from the Texas Department of Health Film Library. There is no charge to borrow these or any other tapes or films from the library. However, the Film Library requires that you return materials by insured mail for \$200.00 for each tape unless otherwise specified. You are responsible for seeing to it that no program is lost or damaged during use or during shipment. You may schedule use of the materials by using the form on page 17 or calling the Film Library at (512) 458-7260.

The Meadows Foundation

The Meadows Foundation was established by Algur H. Meadows and his wife, Virginia, in 1948. Al Meadows founded General American Oil Company of Texas, one of the nation's most successful independent oil and gas companies. Today, the Meadows Foundation benefits programs throughout Texas in areas ranging from health to the arts. Over 1,150 institutions and their subdivisions have been awarded grants since the Foundation's creation. Endowments, capital projects, programs, operations, and research have all been funded by Meadows Foundation grants.

(UT offers ECA correspondence course)

eligible to take your state certification examination the same as students who got their training by classroom methods," said Ms Allen. You must deal directly with your TDH regional office to make arrangements for taking the state examinations. If you haven't finished in 9 months, you can apply for an extension of 3 months. Your time expires at the end of 12 months."

There are no prerequisites to take the ECA correspondence course, but teenaged students are reminded that they must test within 90 days of course completion and they must be at least 18 to test. No references are required.

The cost of the course is \$150 plus approximately \$38 for textbook, workbook, and study guide. A videotape for skills training is available for a \$25 deposit, \$20 of which is refundable upon return of the tape. There is no price break or fee waiver

for volunteers, and no financial assistance is available through the UT EIMC-Independent Learning Center at this time. Although the cost of this course is somewhat more than the price of most classroom courses, the time and money saved by not traveling to class should offset much, if not all, of the additional expense. Limited refunds are available up to 60 days after enrollment.

This correspondence course also is approved for ECA recertification and for continuing education hours for EMTs (but not as an EMT refresher course). The program was established in October 1990 and has 60 students enrolled; 3 have completed the course and passed the state exams.

More information and application materials are available through the ECA Coordinator, EIMC-Independent Learning, P. O. Box 7700, Austin, Texas 78713. Phone numbers are (512) 471-7716 or 1-800-252-3461.

TEXAS DEPARTMENT OF HEALTH
FILM LIBRARY
1100 WEST 49TH STREET
AUSTIN, TEXAS 78756
(512) 458-7260

EMS MEDIA INDEX
for continuing education credit

ACCIDENT PREVENTION AND SAFETY

LIFTING AND MOVING THE PATIENT (1/2"-4659)

ACQUIRED IMMUNE DEFICIENCY SYNDROME

EMERGENCY MEDICAL UPDATE VOL. 1, # 1
(1/2"-4163)

EMERGENCY MEDICAL UPDATE VOL. 2, # 3
(1/2"-4585)

EMERGENCY MEDICAL UPDATE VOL. 4, # 2
(1/2"-4725)

* INFECTION CONTROL SERIES (1/2"-4617)

ADOLESCENCE

NO EASY ANSWERS (1/2"-4532)

AGING

EMERGENCY CARE FOR THE ELDERLY (1/2"-4632)
EMERGENCY MEDICAL UPDATE VOL. 1, # 5
(1/2"-4575)

ALCOHOL AND ALCOHOLISM

EMERGENCY MEDICAL UPDATE VOL. 3, # 7
(1/2"-4436)

AUTOMOBILE SAFETY

AIR BAGS: A CRASH COURSE FOR RESCUE
PERSONNEL (1/2"-4727)

DRIVING THE AMBULANCE (1/2"-4633)

DRIVING THE AMBULANCE SAFELY (1/2"-4631)

EMERGENCY MEDICAL UPDATE VOL. 1, # 3
(1/2"-4574)

EMERGENCY MEDICAL UPDATE VOL. 3, # 1
(1/2"-4397)

EMERGENCY MEDICAL UPDATE VOL. 4, # 2
(1/2"-4725)

CHILD ABUSE

* PEDIATRIC EMERGENCIES (1/2"-4597)

CHILDBIRTH

EMERGENCY MEDICAL UPDATE VOL. 3, # 2
(1/2"-4396)

EMERGENCY OBSTETRICS (1/2"-4567)

CHILDREN - CARE AND HYGIENE

EMERGENCY MEDICAL UPDATE VOL. 4, # 4
(1/2"-4724)

PEDIATRIC ADVANCED LIFE SUPPORT (1/2"-4572)

DIABETES

EMERGENCY MEDICAL UPDATE VOL. 1, # 6
(1/2"-4576)

EMERGENCY TREATMENT OF THE DIABETIC
(1/2"-4651)

DISASTERS

EMERGENCY MEDICAL UPDATE VOL. 1, # 1
(1/2"-4163)

EMERGENCY MEDICAL UPDATE VOL. 1, # 2
(1/2"-4573)

EMERGENCY MEDICAL UPDATE VOL. 1, # 8
(1/2"-4578)

EMERGENCY MEDICAL UPDATE VOL. 1, # 11
(1/2"-4581)

EMERGENCY MEDICAL UPDATE VOL. 1, # 12
(1/2"-4582)

EMERGENCY MEDICAL UPDATE VOL. 2, # 2
(1/2"-4584)

EMERGENCY MEDICAL UPDATE VOL. 2, # 3
(1/2"-4585)

EMERGENCY MEDICAL UPDATE VOL. 2, # 4
(1/2"-4586)

EMERGENCY MEDICAL UPDATE VOL. 2, # 5
(1/2"-4587)

EMERGENCY MEDICAL UPDATE VOL. 2, # 7
(1/2"-4588)

EMERGENCY MEDICAL UPDATE VOL. 2, # 10
(1/2"-4619)

EMERGENCY MEDICAL UPDATE VOL. 2, # 12
(1/2"-4398)

EMERGENCY MEDICAL UPDATE VOL. 3, # 1
(1/2"-4397)

DISASTERS (Continued)

- EMERGENCY MEDICAL UPDATE VOL. 3, # 4
(1/2"-4400)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 5
(1/2"-4434)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 6
(1/2"-4435)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 8
(1/2"-4437)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 10
(1/2"-4439)
- EMERGENCY MEDICAL UPDATE VOL. 4, # 1
(1/2"-4729)
- EMERGENCY MEDICAL UPDATE VOL. 4, # 5
(1/2"-4719)

DRUGS

- EMERGENCY MEDICAL UPDATE VOL. 2, # 10
(1/2"-4619)
- EMERGENCY MEDICAL UPDATE VOL. 2, # 12
(1/2"-4398)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 7
(1/2"-4436)
- EMS: AUTONOMIC NERVOUS SYSTEM AND
DRUGS (1/2"-4142)

EPILEPSY

- EMERGENCY MANAGEMENT OF SEIZURES
(1/2"-4566)

EYES AND VISION DISORDERS

- EMERGENCY MANAGEMENT OF EYE INJURIES
(1/2"-4565)

FIRE SAFETY

- EMERGENCY RESPONSE GUIDEBOOK
(1/2" Eng-4639) (1/2" Sp-4640)
- PREPARING FOR INCIDENT COMMAND (S/T-3110)

HAZARDOUS MATERIAL TRAINING/DISASTER RESPONSE

- ACCIDENTS WILL HAPPEN (1/2"-4684)
- * ALWAYS SUSPICIOUS ALWAYS PREPARED
(1/2"-4638)
- * COMMANDING THE INITIAL RESPONSE (S/T-3108)
- EMERGENCY MEDICAL UPDATE VOL. 1, # 10
(1/2"-4580)
- EMERGENCY MEDICAL UPDATE VOL. 1, # 11
(1/2"-4581)
- EMERGENCY MEDICAL UPDATE VOL. 1, # 12
(1/2"-4582)

- EMERGENCY MEDICAL UPDATE VOL. 2, # 8
(1/2"-4594)
- EMERGENCY MEDICAL UPDATE VOL. 2, # 9
(1/2"-4589)
- EMERGENCY RESPONSE GUIDEBOOK
(1/2" Eng-4639) (1/2" Sp-4640)
- FIRST ON THE SCENE (1/2"-4642)
- HANDLING HAZARDOUS MATERIALS INCIDENTS
(1/2"-4593)
- * HAZARDOUS MATERIAL INCIDENT ANALYSIS
(S/T-3113)
- * HAZARDOUS MATERIALS: FIRST RESPONDER
AWARENESS LEVEL TRAINING PROGRAM
(1/2"-4637)
- * HAZARDOUS MATERIALS: THE PESTICIDE
CHALLENGE (S/T-3114)
- * HAZARDOUS MATERIALS DECONTAMINATION
SERIES (1/2"-4624)
- * HAZARDOUS MATERIALS INCIDENT, A:
EMERGENCY MEDICINE (1/2"-4630)
- * HAZARDOUS MATERIALS INCIDENT, A: THE
FIRST RESPONDER (1/2"-4629)
- HAZCHEM 5: PESTICIDES (1/2"-4455)
- * HAZMAT COMMAND (1/2"-4457)
- HAZMAT EMERGENCY (1/2"-4458)
- * INCIDENT COMMAND SYSTEM (S/T-3109)
- PREPARING FOR INCIDENT COMMAND (S/T-3110)
- PULSE: INCIDENT COMMAND AND E.M.S./24-ON...
THE EMT-TACTICAL PROGRAMS (1/2"-
4564)
- RADIOLOGICAL MONITOR COURSE (S/T-3063)
- RECOGNIZING AND IDENTIFYING HAZARDOUS
MATERIALS (S/T-3066)
- * SURVIVING THE HAZARDOUS MATERIALS
INCIDENT (1/2"-4625)
- TEAMWORK: SAFE HANDLING OF A HAZARDOUS
MATERIALS INCIDENT (1/2"-4641)

HEART DISEASE AND HYPERTENSION

- * ADVANCED CARDIAC LIFE SUPPORT (1/2"-4571)
- EMERGENCY MEDICAL UPDATE VOL. 1, # 10
(1/2"-4580)
- EMERGENCY MEDICAL UPDATE VOL. 2, # 6
(1/2"-4592)
- EMERGENCY MEDICAL UPDATE VOL. 2, # 12
(1/2"-4398)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 6
(1/2"-4435)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 11
(1/2"-4620)

HOSPITALS

- CRISIS INTERVENTION: FAMILIES UNDER STRESS
(1/2"-4596)

IMMUNIZATION

- * INFECTION CONTROL SERIES (1/2"-4617)

INCEST

NO EASY ANSWERS (1/2"-4532)

INFANTS - CARE AND HYGIENE

NEO-NATAL CARE (1/2"-4646)

INSECT CONTROL

EMERGENCY MEDICAL UPDATE VOL. 1, # 9
(1/2"-4579)

MENTAL HEALTH

EMERGENCY MEDICAL UPDATE VOL. 2, # 11
(1/2"-4395)

NURSING

CRISIS INTERVENTION: FAMILIES UNDER STRESS
(1/2"-4596)

OCCUPATIONAL HEALTH AND SAFETY

HAZCHEM 5: PESTICIDES (1/2"-4455)
HAZMAT COMMAND (1/2"-4457)
HAZMAT EMERGENCY (1/2"-4458)
LIFTING AND MOVING THE PATIENT (1/2"-4659)

PATIENT CARE/SKILLS

- * ADVANCED CARDIAC LIFE SUPPORT (1/2"-4571)
- AIR BAGS: A CRASH COURSE FOR RESCUE PERSONNEL (1/2"-4727)
- AIRWAY ADJUNCTS (1/2"-4657)
- AIRWAY MANAGEMENT (1/2"-4634)
- AIRWAY MANAGEMENT WITH DR. LINDA RICE (1/2"-4281)
- ASSESSMENT: THE MOST IMPORTANT SKILL (1/2"-4621)
- BANDAGING AND SPLINTING (1/2"-4656)
- * CARBUSTERS # 1: PRINCIPLES OF EXTRICATION (1/2"-4275)
- * CARBUSTERS # 2: TECHNIQUES OF EXTRICATION (1/2"-4276)
- * CARBUSTERS # 3: HAND TOOLS AND PNEUMATICS (1/2"-4277)
- * CARBUSTERS # 4: PATIENT CONSIDERATIONS AND PACKAGING TECHNIQUES (1/2"-4528)
- * CARBUSTERS # 5: COMMON PHILOSOPHIES AND SPECIAL SITUATIONS (1/2"-4279)
- * CARBUSTERS # 6: SCHOOL BUS RESCUE (1/2"-4362)
- * CPR SERIES (1/2"-4645)

DEALING WITH DEATH AND DYING (1/2"-4654)
DR. ROLPH HABERSANG, MODULE 1: PEDIATRIC ASSESSMENT (1/2"-4105)

DR. ROLPH HABERSANG, MODULE 2: PEDIATRIC MEDICAL AND RESPIRATORY EMERGENCIES (1/2"-4106)

DR. ROLPH HABERSANG, MODULE 3: PEDIATRIC POISON AND OVERDOSE (1/2"-4107)

- * EMERGENCY CARE AND TRANSPORTATION OF THE SICK AND INJURED (Slides- 3115 through 3128)

EMERGENCY CARE FOR THE ELDERLY (1/2"-4632)

EMERGENCY MANAGEMENT OF DROWNING ACCIDENTS (1/2"-4650)

EMERGENCY MANAGEMENT OF EYE INJURIES (1/2"-4565)

EMERGENCY MANAGEMENT OF SEIZURES (1/2"-4566)

EMERGENCY MANAGEMENT OF STROKE (1/2"-4652)

EMERGENCY MEDICAL UPDATE VOL. 1, # 1 (1/2"-4163)

EMERGENCY MEDICAL UPDATE VOL. 1, # 3 (1/2"-4574)

EMERGENCY MEDICAL UPDATE VOL. 1, # 4 (1/2"-4618)

EMERGENCY MEDICAL UPDATE VOL. 1, # 5 (1/2"-4575)

EMERGENCY MEDICAL UPDATE VOL. 1, # 6 (1/2"-4576)

EMERGENCY MEDICAL UPDATE VOL. 1, # 7 (1/2"-4577)

EMERGENCY MEDICAL UPDATE VOL. 1, # 8 (1/2"-4578)

EMERGENCY MEDICAL UPDATE VOL. 1, # 9 (1/2"-4579)

EMERGENCY MEDICAL UPDATE VOL. 1, # 10 (1/2"-4580)

EMERGENCY MEDICAL UPDATE VOL. 1, # 11 (1/2"-4581)

EMERGENCY MEDICAL UPDATE VOL. 1, # 12 (1/2"-4582)

EMERGENCY MEDICAL UPDATE VOL. 2, # 1 (1/2"-4583)

EMERGENCY MEDICAL UPDATE VOL. 2, # 2 (1/2"-4584)

EMERGENCY MEDICAL UPDATE VOL. 2, # 3 (1/2"-4585)

EMERGENCY MEDICAL UPDATE VOL. 2, # 4 (1/2"-4586)

EMERGENCY MEDICAL UPDATE VOL. 2, # 5 (1/2"-4587)

EMERGENCY MEDICAL UPDATE VOL. 2, # 6 (1/2"-4592)

EMERGENCY MEDICAL UPDATE VOL. 2, # 7 (1/2"-4588)

EMERGENCY MEDICAL UPDATE VOL. 2, # 8 (1/2"-4594)

PATIENT CARE/SKILLS (Continued)

- EMERGENCY MEDICAL UPDATE VOL. 2, # 9
(1/2"-4589)
- EMERGENCY MEDICAL UPDATE VOL. 2, # 10
(1/2"-4619)
- EMERGENCY MEDICAL UPDATE VOL. 2, # 11
(1/2"-4395)
- EMERGENCY MEDICAL UPDATE VOL. 2, # 12
(1/2"-4398)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 3
(1/2"-4399)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 4
(1/2"-4400)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 5
(1/2"-4434)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 6
(1/2"-4435)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 7
(1/2"-4436)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 8
(1/2"-4437)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 9
(1/2"-4438)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 10
(1/2"-4439)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 11
(1/2"-4620)
- EMERGENCY MEDICAL UPDATE VOL. 4, # 1
(1/2"-4729)
- EMERGENCY MEDICAL UPDATE VOL. 4, # 2
(1/2"-4725)
- EMERGENCY MEDICAL UPDATE VOL. 4, # 3
(1/2"-4728)
- EMERGENCY MEDICAL UPDATE VOL. 4, # 4
(1/2"-4724)
- EMERGENCY MEDICAL UPDATE VOL. 4, # 5
(1/2"-4719)
- EMERGENCY MEDICAL UPDATE VOL. 4, # 5
(1/2"-4719)
- EMERGENCY MEDICAL UPDATE VOL. 4, # 6
(1/2"-4733)
- EMERGENCY OBSTETRICS (1/2"-4567)
- EMERGENCY TREATMENT OF THE DIABETIC
(1/2"-4651)
- EMS: AUTONOMIC NERVOUS SYSTEM AND
DRUGS (1/2"-4142)
- EMT DEFIBRILLATION (S/T-3111)
- EMT DEFIBRILLATION (1/2"-4658)
- * EXTENDING PATIENT ASSESSMENT SKILLS
(1/2"-4623)
- HEAT AND COLD EMERGENCIES (1/2"-4649)
- * INFECTION CONTROL SERIES (1/2"-4617)
- INTRODUCTION TO ROPE RESCUE (1/2"-4685)
- KINEMATICS: UNDERSTANDING MECHANISMS OF
INJURY (1/2"-4688)
- LIFTING AND MOVING THE PATIENT (1/2"-4659)
- * MANAGING SPINE TRAUMA (1/2"-4660)
- MATTER OF PROTECTION: BARRIER TECHNIQUES
FOR HEALTHCARE WORKERS (1/2"-4677)
- NEO-NATAL CARE (1/2"-4646)
- PATIENT ASSESSMENT (1/2"-4636)
- * PEDIATRIC ADVANCED LIFE SUPPORT (1/2"-4572)
- * PEDIATRIC EMERGENCIES (1/2"-4597)
- PEDIATRIC EMERGENCIES: GENERAL
ASSESSMENT GUIDELINES (S/T-3057)
- PEDIATRIC EMERGENCIES: MEDICAL
EMERGENCIES PART I (S/T-3058)
- PEDIATRIC EMERGENCIES: MEDICAL
EMERGENCIES PART II (S/T-3059)
- PEDIATRIC EMERGENCIES: THE ABC'S AND CPR
(S/T-3057)
- PEDIATRIC EMERGENCIES: THE NEWBORN, SIDS
AND CHILD ABUSE (S/T-3061)
- PEDIATRIC EMERGENCIES: TRAUMA (S/T-3060)
- PEDIATRIC PRIMARY TRAUMA ASSESSMENT
WITH DR. MARTIN EICHELBERGER
(1/2"-4280)
- * PRE-HOSPITAL TRAUMA CARE (S/T-3112)
- PRE-HOSPITAL TRAUMA CARE (1/2"-4598)
- PRESERVATION OF CRIME SCENE (1/2"-4647)
- PULSE: EDITION 10, MARCH 1991 (1/2"-4706)
- SAY IT RIGHT (1/2"-4653)
- SHOCK: EARLY RECOGNITION AND
MANAGEMENT (1/2"-4687)
- * SIMPLIFIED INTRODUCTION TO LUNG SOUNDS
(Model-0003)
- * SPECIAL COMMUNICATIONS PARTS I & II
(1/2"-4648)
- SPINE MANAGEMENT (1/2"-4635)
- SPINE TRAUMA: ARE YOU MEETING THE
PATIENT'S NEEDS? (1/2"-4686)
- S.T.A.R.T. - A TRIAGE TRAINING MODULE
(1/2"-4110)
- STREET MEDICINE: ADVANCED AIRWAY
MANAGEMENT (1/2"-4364)
- STREET MEDICINE: ADVANCED SHOCK
MANAGEMENT (1/2"-4366)
- STREET MEDICINE: BASIC AIRWAY
MANAGEMENT (1/2"-4363)
- STREET MEDICINE: BASIC SHOCK MANAGEMENT
(1/2"-4365)
- STREET MEDICINE: PEDIATRIC EMERGENCIES
(1/2"-4369)
- STREET MEDICINE: PRE-HOSPITAL BURN CARE
(1/2"-4370)
- STREET MEDICINE: THE PRIMARY SURVEY
(1/2"-4367)
- STREET MEDICINE: THE SECONDARY SURVEY
(1/2"-4368)
- VERBAL JUDO (Audiocassettes-0001)
- VERBAL JUDO REVIEW, A (1/2"-4622)
- VITAL SIGNS (1/2"-4655)

PHYSIOLOGY AND BIOLOGY

- EMERGENCY MEDICAL UPDATE VOL. 1, # 2
(1/2"-4573)
- EMERGENCY MEDICAL UPDATE VOL. 2, # 6
(1/2"-4592)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 5
(1/2"-4434)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 11
(1/2"-4620)
- EMS: AUTONOMIC NERVOUS SYSTEM AND
DRUGS (1/2"-4142)

POISONS AND POISONING

- DR. ROLPH HABERSANG, MODULE 3: PEDIATRIC
POISON AND OVERDOSE (1/2"-4107)
- EMERGENCY MEDICAL UPDATE VOL. 4, # 5
(1/2"-4719)

PRENATAL AND POSTPARTUM CARE

- EMERGENCY MEDICAL UPDATE VOL. 3, # 2
(1/2"-4396)

RAPE

- NO EASY ANSWERS (1/2"-4532)

SEX EDUCATION

- NO EASY ANSWERS (1/2"-4532)

SEXUAL ASSAULT PREVENTION/CRISIS SERVICES

- CRISIS INTERVENTION: FAMILIES UNDER STRESS
(1/2"-4596)
- HOW FAR IS TOO FAR? (1/2"-4173)
- NO EASY ANSWERS (1/2"-4532)
- RAPE AFTERMATH: HOW CAN I HELP HER?
(1/2"-4689)

SEXUAL HARASSMENT

- HOW FAR IS TOO FAR? (1/2"-4173)

STRESS

- EMERGENCY MEDICAL UPDATE VOL. 1, # 6
(1/2"-4576)
- EMERGENCY MEDICAL UPDATE VOL. 3, # 1
(1/2"-4397)

SUDDEN INFANT DEATH SYNDROME

- EMERGENCY MEDICAL UPDATE VOL. 4, # 3
(1/2"-4728)
- PEDIATRIC EMERGENCIES (1/2"-4597)
- PEDIATRIC EMERGENCIES: THE NEWBORN, SIDS
AND CHILD ABUSE (S/T-3061)

SUICIDE

- EMERGENCY MEDICAL UPDATE VOL. 2, # 11
(1/2"-4395)

TUBERCULOSIS

- EMERGENCY MEDICAL UPDATE VOL. 4, # 6
(1/2"-4733)

WATER SAFETY

- EMERGENCY MANAGEMENT OF DROWNING
ACCIDENTS (1/2"-4650)
- EMERGENCY MEDICAL UPDATE VOL. 1, # 9
(1/2"-4579)

All programs are 1 hour of CE
credit unless indicated by *.

MEDIA ORDER BLANK
TEXAS DEPARTMENT OF HEALTH
FILM LIBRARY
1100 W. 49TH STREET
AUSTIN, TEXAS 78756-3199
(512) 458-7260

WE MUST HAVE YOUR SOCIAL SECURITY NUMBER TO PROCESS YOUR ORDER.

CHECK SQUARE FOR CHANGE OF ADDRESS

Individual Responsible _____ Social Security # _____

Organization _____ Business Phone (____) _____

Address _____ County _____

City _____ Zip _____ Home Phone (____) _____

I acknowledge financial responsibility to the State of Texas should items requested below be lost, stolen or damaged from the date I receive the items until the materials have been received in the library. I understand that it is strongly recommended items be insured on their return to the library, and that if I fail to do so I will be charged the full replacement cost for all lost, stolen or damaged items. I have read and agree to the terms listed in the Statement of Responsibility

Signature _____ Date _____

WHICH MEDIA FORMATS CAN YOU USE? (circle all that apply)

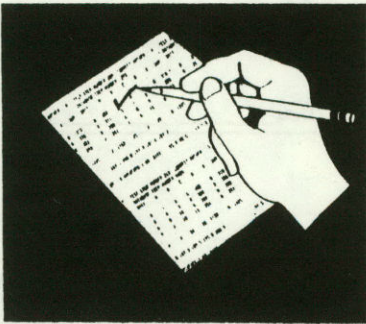
16mm film 1/2" VHS video slide/tape 3/4" U-Matic video

**ORDERS SHOULD ARRIVE AT THE FILM LIBRARY
 10 DAYS PRIOR TO YOUR RECEIVE DATE**

	CATALOG NUMBER	DATE TO RECEIVE	DATE TO MAIL BACK
1) 1st Choice			
----- Alternate Title or Date			
2) 1st Choice			
----- Alternate Title or Date			
3) 1st Choice			
----- Alternate Title or Date			
4) 1st Choice			
----- Alternate Title or Date			
5) 1st Choice			
----- Alternate Title or Date			
6) 1st Choice			
----- Alternate Title or Date			
7) 1st Choice			
----- Alternate Title or Date			
8) 1st Choice			
----- Alternate Title or Date			

Form No. D-1 (revised Dec. 1990)

Standardized Exam Development



Texas state EMS written exams don't just magically appear out of a filing cabinet somewhere. They are constantly changing entities in the search for the fairest, most comprehensive tests.

We ask two major questions during exam development: Does the exam meet the objectives of a criterion-referenced examination? Is the exam valid? A *criterion-referenced exam* determines whether a student has achieved mastery of preset standardized objectives. Texas certification exams are based upon the Department of Transportation National Standard Curriculum for EMS Training Programs. *Validity* refers to the truthfulness of the test. When we say a test or test question is valid, we say that it does measure what it is supposed to measure or that the exam represents the field accurately.

A standardized, ongoing process is used by the EMS Division's Certification Program to develop valid and reliable exams. Seven areas are involved from inception to final product.

Question Development

Test questions are developed, based upon Department of Transportation knowledge objectives, by EMS educators, providers, and medical directors. These individuals serve on the two committees that are responsible for writing and reviewing questions.

Pilot Questions

Pilot questions are newly written questions placed on an examination for statistical purposes. These questions are not counted toward exam scores. The resulting statistics form an item analysis, which includes several components:

- The *Difficulty Index* is the percentage of students who picked the correct answer for a particular question.
- The *Reliability* component refers to whether the question or test is yielding consistent, similar results over a period of time with a wide range of students.
- The *Answer Breakdown* refers to how many students chose a particular answer for a particular question.
- The *Discrimination Index* shows how effectively each question distinguished the "good" students from the "poor" ones. A question is discriminating consistently and positively if the students with the top scores get it correct, students with the lower scores miss it, and students in the middle are evenly split.

Exam Building

The actual exam is created by selecting questions based on DOT knowledge objectives, specific content areas, item analysis review, and type of question (scenario vs. recall).

Exam Results

Exam results are analyzed based upon mean average scores, which are the averages of all students' scores. The mean averages are a measure of overall performance, determined for each exam by subscale, region, and the entire state. The exam results are analyzed further based upon subscale breakdowns and the item analysis.

Question Status

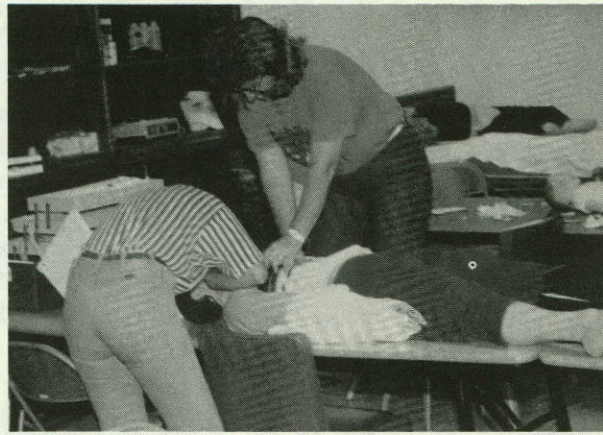
Exam question status is based upon a review of statistical item analysis. Pilot questions are either rejected or moved to an active status. If active, the questions remain on the exam and do count toward exam scores.

Committee Reviews

The Certification Review Committee and Exam Review Committee meet periodically and review questions for medical accuracy, occupational relevance, readability, type of question, and statistical performance. Their recommendations determine the future of particular questions.

Educational Consultant

An educational consultant provides techni-



cal assistance and reviews and approves draft examination materials throughout the exam development process.

This ongoing process ensures an up-to-date examination that is fair to students at all testing levels. Recent examinations have received kudos from students, particularly from those recertifying who have had an opportunity to compare exams over the years. The EMS community is encouraged to provide feedback to the EMS Certification Program. Written comments may be sent to the Bureau of Emergency Management, 1100 West 49th Street, Austin, Texas 78756.

Help with January 1 requirement for operational policies

The Bureau's EMS/Trauma Systems Development Program has produced a publication called **Texas EMS: Sample EMS Operational Policies** to assist licensed providers in the development of written operational policies.

Copies of the 111-page document are available from the EMS office of each Public Health Region.

The publication contains 50 sample policies ranging from "Consent to Treatment/Transport," to "Helicopter Evacuation," to "Third Rideouts in EMS Units," to "Weapons Policy." The one-page "Employee Immunizations" policy, for

instance, lists necessary immunizations and frequency of inoculation. Each page in the document is clearly marked EXAMPLE.

According to Paul Tabor, the EMS/Trauma Systems Development Program member who edited the publication, the policies are offered only as examples and do not represent official policy of any EMS provider organization nor of the Texas Department of Health. The samples are to be used as guidelines with careful review and revision for local needs.

Public Health Region 1 staff assisted in the development of **Texas EMS: Sample EMS Operational Policies**.

Paramedic and Intermediate Exam Subscale Averages

January - March, 1991

These test results include initial and refresher training testing for groups of 5 or more.

Intermediate subscales are: Subscale 1: Patient Assessment and Initial Management; Subscale 2: Airway Management and Ventilation; Subscale 3: Assessment and Management of Shock; and Subscale 4: Prehospital Environment. The critical subscales are 1-3. Subscale 4 is non-critical and the test has 100 questions.

Paramedic subscales are: Subscale 1: Assessment, Airway, Shock, Pharmacology (30 questions); Subscale 2: Trauma, Burns, Rescue (30 questions); Subscale 3: Cardiovascular (60 questions); Subscale 4: Medical (45 questions); Subscale 5: OB/GYN, Pediatrics, Geriatrics, Behavioral (25 questions); Subscale 6: Prehospital Environment (10 questions). The critical subscales are 1-5, Subscale 6 is non-critical. The test has 200 questions; no more than 15% are basic level questions.

PHR	Coordinator	Class Type	Size	Average	Averages by Subscale					
<u>Intermediate Courses</u>										
PHR 3	Daniels	Initial	13	84.84	85	84	85	88		
PHR 4	Hatch	Initial	07	85.86	81	88	88	85		
PHR 4	Gaines	Initial	20	83.20	78	85	85	84		
PHR 4	Hill	Initial	15	79.27	77	82	77	81		
PHR 4	Hill	Initial	06	82.33	80	83	79	91		
PHR 4	Brant	Initial	16	80.68	73	84	85	86		
PHR 4	Robinson	Initial	22	83.31	81	85	84	83		
PHR 5	Nelson	Initial	09	80.33	72	80	83	88		
PHR 5	Koonce	Initial	10	81.90	82	82	78	90		
PHR 5	Peacock	Initial	24	77.67	72	79	78	83		
PHR 5	Tobin	Initial	08	84.63	81	87	87	82		
PHR 5	Pickard	Initial	25	86.44	88	85	87	86		
PHR 7	Elbert	Initial	09	85.44	83	90	89	75		
PHR 7	Elbert	Initial	15	80.53	80	84	79	77		
PHR 7	Manuel	Initial	05	80.80	82	78	83	81		
PHR 7	Lanier	Initial	07	80.43	79	79	81	84		
PHR 7	Howland	Initial	07	82.71	79	83	83	86		
PHR 7	Vaught	Initial	21	86.95	88	89	85	86		
PHR 8	Carrion	Initial	11	75.00	77	77	72	74		
Statewide Averages			313	82.43	80	83	83	84		
<u>Paramedic Courses</u>										
PHR 1	Haussecker	Initial	11	82.50	80	80	80	85	83	93
PHR 1	Moshinski	Initial	13	81.15	76	80	80	82	83	96
PHR 1	Moshinski	Initial	07	85.64	85	84	86	84	88	96
PHR 2	Coker	Initial	06	87.00	83	84	89	86	88	98
PHR 2	Brown	Initial	05	84.50	83	85	85	83	82	98
PHR 3	Staggs	Initial	05	78.99	78	79	74	78	86	92
PHR 4	Stevenson	Refresher	05	91.30	87	90	94	91	88	100
PHR 4	Holt	Initial	11	87.59	83	88	89	86	87	98
PHR 4	Hatch	Initial	05	89.00	91	85	90	89	86	96
PHR 4	Hill	Initial	07	83.50	81	84	85	80	83	97
PHR 5	Nelson	Initial	12	80.79	81	83	80	78	80	93
PHR 5	Meeks	Initial	05	87.40	88	80	91	85	87	98
PHR 5	Goodykoontz	Initial	27	87.56	86	85	88	87	89	92
PHR 5	Moore	Initial	16	85.25	80	88	87	82	86	93
PHR 6	Garoni	Initial	23	88.26	89	87	87	89	87	97
PHR 7	Barcheers	Initial	08	72.25	66	77	70	70	75	94
PHR 7	Manuel	Initial	06	78.25	79	74	78	79	75	98
PHR 7	Gandy	Initial	20	82.52	78	83	85	79	76	94
PHR 8	Reger	Initial	09	82.50	81	84	80	83	82	98
PHR 8	Bolleter	Initial	12	81.08	84	78	81	79	80	92
PHR 8	Gonzalez	Initial	07	87.29	84	88	89	86	86	96
PHR 8	Espinol	Initial	21	82.69	80	80	81	83	87	94
Statewide Averages			293	84.32	84	84	85	85	85	96

Clinical topics headline Texas EMS Conference '91

by Alana S. Mallard

From early Monday morning when James Page begins talking about excellence in EMS until late Wednesday morning when Gene Gandy closes out the medical-legal panel, Texas EMS Conference is committed to bringing you quality educational programs from Texas' most respected EMS educators and experts. Okay, okay, so JEMS publisher Page isn't a Texan! But he likes Texas.

On Monday and Wednesday mornings we will meet in general sessions for Dr. Paul Pepe and Lt. Mark Warren, and for the closing panel on legal issues in EMS. Lt. Warren will reprise his Verbal Judo presentation, the first one he did for us in 1986. Dr. Pepe, who had standing room only **even outside his meeting room and in the foyer** last year, will give his presentation where we can all see it. Pepe moves into what Gene Weatherall likes to call "the big room" because of last year's popular demand.

The six-track workshop breakout format on Tuesday has been expanded into an almost seven-track format with the addition of three hours on third-party billing. Tuesday's programs will number at least 28 one-hour workshop presentations and two two-hour panel presentations. Registrants will be able to choose and attend five hours of presentations such as these:

For the Pediatric Emergencies track, physicians specializing in emergencies, pediatrics and neurosurgery will present programs on stabilizing pediatric cardiac emergencies, treating shocky kids, and head injury management. Dr. Donovan Butter, always a favorite of conference registrants, and a physician new to our conference, Deborah Callanan, MD, will do two of the workshops. Presentations on injury prevention education programs and child abuse will also be featured in the pediatric track.

Austin EMS's David Wuertz, a PHTLS faculty member, will present a program on managing gunshot wounds in the Trauma Emergencies track; Amarillo emergency nurse

Jamie Ferrell will present a program on EMS response to sexual assault victims; and a representative of the FBI will talk about crime scenes.

Medic Systems' Dr. Michael Stafford will present a workshop on offshore medicine, and Sherrie Wilson has prepared two workshops she calls Back to the Basics -- shock and diabetes are the topics. Bryan Bledsoe, DO and author of EMS's newest paramedic textbook, and Dallas' Michael Wainscott, MD, will both return to our conference to do clinical workshops.

The Bureau's Steve Hosford has arranged to have Medicaid and Medicare representatives at the conference to give EMS administrators a hand with the intricacies of third party billing. Bureau communications specialist Henry Nevares has arranged a Communications track with two panel presentations. The panel on emergency medical dispatch will be chaired by San Antonio's Dr. Don Gordon. Dr. Dennis Cantu, Laredo Fire Department EMS medical director, will chair the panel on medical direction.

A sampling of workshop topics from the Quality Management and Rescuer Survival tracks includes protection against communicable diseases, surviving search and rescue missions, crisis intervention, initiating a quality management process, instructor training how-to, and air evacuation considerations.

In your registration packet you will receive a thorough description of each workshop so you can be sure of the content of the workshops you choose to attend. We've tricked you before with those cutesy, punny titles, but we'll try not to do it again.

A registration form and agenda follow, as do EMS Awards and Photography Contest information. It is definitely time to fill out your registration form, write us a check, mail the two to us, and call the Hyatt to make your overnight reservations. If you fly, please make your plane reservation now and avoid the Thanksgiving rush. Gobble, gobble. See you in November.

*Editor
Alana Mallard also
serves as conference
coordinator.*

Texas EMS Conference '91

25 Years of EMS in Texas

November 25, 26 and 27

Austin, Texas

Palmer Auditorium on Town Lake

\$50 Registration -- 14 hours CE

(\$75 after November 1)

Please print or type

Name _____

Mailing Address _____

City _____ State _____ Zip _____

Employer Name _____

Level of Certification or Licensure _____

Phone: Home _____ Work _____

Make check payable to: Texas Health Foundation

Mail form and payment to: Texas EMS Conference
P.O. Box 26399
Austin, Texas 78755-0399

Hotel Information

Make hotel room reservation at Hyatt
Regency Austin (\$55 single/\$65 double) by
calling 512/477-1234.

Sponsored by
Texas Department of Health, Texas Health Foundation and Texas EMS Messenger
For more information call (512) 458-7550

Texas EMS Conference '91

Agenda

Preconference Activities

Saturday and Sunday, November 23 and 24

- 8:00am - 5:00pm Instructor Training
(contact Debbie Bradford, 512/458-7550, for registration)
- 8:00am - 5:00pm PHTLS Course (contact David Wuertz at Austin EMS, 512/469-2050, for registration)

Sunday, November 24

- 8:00am - 5:00pm Coordinator Training
(contact Debbie Bradford, 512/458-7550, for registration)
- 8:00am - 5:00pm Basic Rappelling Course
(contact Alana Mallard, 512/458-7550, for registration)
- 11:00pm - 5:00pm EMS Golf Tournament
(contact Chris Bell or Rhonda Blackmore, 512/458-7550, for registration)
- 3:00pm - 7:00pm Registration, Hyatt Regency
- 7:00pm - 8:30pm Welcome Reception, Hyatt Regency

- 12:50pm - 1:00pm Official Opening of Exhibit Area
- 1:00pm - 5:00pm Exhibit Area Open
- 1:30pm - 2:30pm Demonstration in Exhibit Area
- 3:30pm - 4:30pm Demonstration in Exhibit Area
- 6:00pm - 8:00pm 25th Birthday Celebration

Tuesday, November 26

- 7:00am - 8:00am Continental Breakfast, Exhibit Area
- 8:00am - 9:00am 6 Workshop Breakouts
- 9:00am - 9:15am Refreshment Break, Exhibit Area
- 9:15am - 10:15am 6 Workshop Breakouts
- 10:15am - 10:30am Refreshment Break, Exhibit Area
- 10:30am - 11:30am 6 Workshop Breakouts
- 12:05pm - 2:30pm Awards Luncheon at Hyatt Regency
- 3:00pm - 4:00pm 6 Workshop Breakouts
- 4:15pm - 4:30pm Refreshment Break, Exhibit Area
- 4:30pm - 5:30pm 6 Workshop Breakouts
- 5:30pm - 7:00pm Reception honoring EMS Award winners

Workshop Tracks on Tuesday include Pediatric Emergencies, Trauma, Medical, Quality Management, Rescuer Survival, and Communications. Five workshop breakouts in each track will be taught.

Conference Activities

Monday, November 25

- 7:00am - 8:00am Registration, Palmer Auditorium
- 8:00am - 8:30am Opening Session and Welcome - Gene Weatherall
- 8:30am - 9:30am Keynote Address
- James Page
- 9:45am - 11:00am Clinical Issues in EMS
- Paul Pepe
- 11:15am - 12:30pm Verbal Judo
- Mark Warren

Wednesday, November 27

- 7:00am - 8:00am Continental Breakfast, Exhibit Area
- 8:00am - 9:00am Medical Legal Panel
- 9:15am - 9:30am Refreshment Break, Exhibit Area
- 9:30am - 10:30am Medical Legal Panel (continued)
- 10:30am - 10:45am Refreshment Break, Exhibit Area
- 10:45am - 11:45am The Next 25 Years - Time Capsule
- 11:45am - 11:55am Drawing for Teddy Bear Fundraiser and Adjourn

1991 EMS Awards

Each year the Texas Department of Health recognizes outstanding achievement in the EMS field.

Recipients are chosen from nominations made by EMS personnel, organizations, or individual citizens. Nominations should be no more than 5 pages typed or printed. Each nomination should also have a cover letter which lists:

1. Category for which nomination is being made;
2. The name of the individual or organization being nominated; and
3. The name of the individual or organization submitting the nomination (include complete address and daytime phone number).

You may include letters of support from people or organizations who know the nominee's accomplishments, including the EMS Program Administrator in your

Public Health Region.

The nomination package should describe the significant accomplishments for which the nominee should be considered as a recipient.

Deadline for nomination is September 1, 1991. An EMS organization may nominate itself. You must submit 5 copies of your nomination to:

1991 EMS Awards
Bureau of Emergency Management
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756-3199

If you have any questions, contact Steve Hosford at (512) 458-7550. Winners will be announced at Texas EMS Conference '91 during the Awards Banquet on November 26, 1991.

Deadline for nominations is September 1, 1991.

Awards are divided into the following categories:

EMS Educator Award honors a state-certified EMS Instructor or Course Coordinator who has advanced EMS education in Texas.

EMS Medical Director Award honors a physician who has served as a medical director, on-line or off-line, for either a BLS or an ALS service in Texas.

EMS Administrator Award honors an administrator, researcher, or manager on the local, city, county, COG, or State level who has made a positive contribution to EMS.

Public Information Award honors an EMS group or individual for outstanding achievement in public education, injury prevention, or health promotion.

Citizen Award honors a private citizen for heroic lifesaving act or unique advocacy of EMS.

Private Provider Award honors a

privately-owned commercial organization which assumed a leadership role in EMS by achievement in areas of patient care, public access, medical control, disaster preparedness, public education, and training.

Public Provider Award honors an organization operated by a county, municipality, tax-based hospital, or state or local government agency which assumed a leadership role in EMS by achievement in areas of patient care, public access, medical control, disaster preparedness, public education, and training.

Volunteer Provider Award honors an organization staffed by volunteers which assumed a leadership role in EMS by achievement in areas of patient care, public access, medical control, disaster preparedness, public education, and training.

1991 Texas EMS Photography Contest

The American College of Emergency Physicians came up with a marvelous idea for EMS Week this year. Though EMS Week is past, we want to keep the team theme going a bit longer by using "The Team That Cares" idea for our 1991 Texas EMS Photography Contest.

EMS is a team that cares. Dispatchers, EMTs, paramedics, first responders, emergency physicians, medical directors, emergency nurses, flight crews, fire-fighters, educators, rescue teams, and administrators -- we need them all to care for the lives of the people we serve.

As varied as the EMS team members are, so are the situations. Whether you're starting a line on a multi-trauma patient, consoling a survivor, telling the kids good-bye as you start

your 24-on shift, taking a call in the dispatch center, or doing a Ready Teddy injury prevention program for first-graders, you're part of "The Team That Cares."

So let's celebrate our team that cares. Challenge yourself to capture in photography the spirit that is "The Team that Cares."

All entries in the 1991 Texas EMS Photography Contest will be displayed in a special "The Team that Cares" exhibit November 25, 26, and 27 at Texas EMS Conference '91 in the Palmer Auditorium Exhibit Area. Some entries may be selected for publication in the Texas EMS Messenger and in educational brochures published by the Bureau of Emergency Management. Photographers will receive photography credit and complimentary copies.

The Rules (This format worked for Parade Magazine; I think it's clear enough for us.)

- Anyone is eligible.
- No entry fee is required.
- Entries must be received **no later than November 1, 1991**, and the winners will be announced at the Texas EMS Conference, November 25-27, and in the January 1992 issue of the Texas EMS Messenger.
- Unmatted prints **8x10 inches** or **5x7 inches** may be submitted, in color or black-and-white. Fill out the entry form on this page, tape it to the back of your photograph, and mail your entry to Texas Department of Health, Bureau of Emergency Management, 1991 Texas EMS Photography Contest, 1100 W. 49th Street, Austin, Texas 78756. Every photograph must be identified with an entry form taped to the back of the photograph.
- Entries become the property of Texas Department of Health, Bureau of Emergency Management and will not be returned.
- Three grand prize winners will receive \$100 each and an award certificate and fifteen honorable mention winners will receive award certificates. Judges will select winning photographs based on artistic composition, originality, visual appeal, and consistency with the theme "The Team that Cares."

1991 Texas EMS Photography Contest Entry Form

Photographer's
Name _____

Address _____

City _____ State _____ Zip _____

Telephone (home) _____ (work) _____

Deadline for entering: November 1, 1991

Tape this form to the back of photograph entry.

Mail to: Texas Department of Health, Bureau of Emergency Management, 1991 Texas EMS Photography Contest, 1100 W. 49th Street, Austin, Texas 78756.

For more information contact Alana Mallard 512/458-7550.

The 72nd Legislature passed several bills impacting delivery of emergency medical services and trauma care in Texas

Transfers, confidentiality, first responders, violators addressed in new EMS laws

The 72nd Legislature passed several bills impacting delivery of emergency medical services and trauma care in Texas. The Bureau of Emergency Management wishes to commend those who worked diligently on issues of interest to the EMS community. Your interest in and support of EMS legislation is vital.

EMS Act amendments

SB 1129 by Senator Frank Tejada resulted in several important changes to EMS in Texas through the EMS Act, Chapter 773, Health and Safety Code. SB 1129, signed by the Governor on June 15, 1991, becomes effective on September 1, 1991. Proposed rules to implement SB 1129 will be published in future issues of the **Texas EMS Messenger**.

Previous EMS legislation excluded transfer vehicles and staff from regulation. New legislation further clarifies EMS Act exclusion by exempting only ground or air transfer providers that do not advertise as ambulance services and are not licensed by TDH. This means that an ambulance operated by an EMS provider licensed by TDH is subject to the EMS Act at all times.

Under SB 1129, TDH recognizes "first responder organizations." The bill defines a first responder organization and gives the Texas Board of Health authority to adopt rules for minimum standards for first responder organizations. Minimum standards will require formal agreements between first responder organizations and EMS providers and registration by first responder organizations.

New legislation also extends the recertification period for certain military personnel for one year after demobilization. This provision applies in conjunction with the provisions of HB 1393, which requires a state agency that issues a license or certification to adopt rules exempting an individual from an increased fee or other penalty if that individual's active military duty causes failure to renew in a timely manner.

SB 1129 also gives TDH authority to assess administrative penalties of up to \$250 per day per violation against any EMS provider who violates EMS laws or rules. The bill outlines procedures for TDH to follow in assessing and collecting administrative penalties.

Under the new law, TDH is entitled to

access and obtain certain criminal history records maintained by the Department of Public Safety, the Federal Bureau of Investigation, or other law enforcement agencies to investigate applicants for an EMS provider license or EMS personnel certification. The Board of Health will adopt specific rules governing the custody and use of criminal history information. The law provides TDH with an option of requiring fingerprints for licensure/certification.

Another amendment to the EMS Act also establishes as confidential certain communications between EMS personnel and/or a physician providing medical direction and a patient receiving prehospital care. The provisions of confidentiality do not extend to information regarding the presence, nature of injury or illness, age, sex, occupation, and city of residence of the patient receiving emergency medical treatment. SB 1129 outlines the procedures for disclosure of confidential records under certain circumstances.

SB 1129 also establishes as confidential the records or proceedings of organized committees of hospitals, medical societies, or EMS providers and first responder organizations relating to the review, evaluation, or improvement of an EMS provider, a first responder organization, or EMS personnel. The legislation restricts use of records and proceedings and provides for limited immunity for committee members.

SB 1129 recodifies the EMS and trauma care systems and poison control center subchapters of the Health and Safety Code. Terms for members of the Trauma Technical Advisory Committee are set at six years.

SB 404 by Senator Brooks recodifies Chapter 773 of the Health and Safety Code and makes clean-up amendments.

SB 1412 also by Senator Tejeda defines emergency medical care and amends the membership qualifications for the Texas Emergency Medical Services Advisory Council. The number of members does not change.

Other EMS Legislation

In addition to the revisions to the EMS Act, several other bills passed which relate to the provision of EMS and trauma care. Bills tracked by the Bureau of Emergency Management during the legislative session that became law are included here.

HB 50 by Rep. Cuellar provides a defense to the offense of criminal trespass if it involves firefighters or EMS personnel while performing official duties.

HB 399 by Rep. Thomas clarifies previous legislation regarding use of private vehicles operated by a volunteer firefighter as an authorized emergency vehicle and the use of "Kojak" lights.

SB 44 by Senator Barrientos amends the Emergency Services Districts (ESD) law to allow for the removal of territory in an ESD that has been annexed by a municipality. It provides the municipality the authority to disannex the territory from the ESD. Territory disannexed is not released from the payment of its pro rata share of ESD indebtedness.

SB 94 by Senator Truan allows metropolitan transit authorities in cities of less than 300,000 to operate emergency medical services.

SB 188 by Senator Green amends the emergency services districts law to exempt an unincorporated area of the county that is within the extraterritorial jurisdiction of a municipality in a county of 2.4 million or more from meeting the consent requirements of a municipality's governing body.

SB 195 by Senator Ratliff authorizes a fee of \$25 for offenses under Article 67011-1, DWI, and a fee of \$5 under Section 166 of Article 6701d, speeding, for use by the Texas Rehabilitation Commission for funding rehabilitation services.

SB 420 by Senator Montford allows qualified technicians to draw blood for determining alcohol or drug presence upon request or order of a peace officer. The definition of qualified technician does not include EMS personnel.

Billy Sladek, Director of Staff Services, represented the Bureau of Emergency Management at the Capitol during the 72nd Legislature.

Did You Read...

The technologically advanced nation of Japan has no paramedics.

A firefighter, doing CPR on an infant, was infected with "toxic strep" syndrome, through an abrasion on his hand.

"Have you finished your education? I certainly hope not!"

. . . about the state of emergency medical care in the technologically advanced nation of Japan, which appeared in the May 30, 1991, issue of **Beach Safety News**? Japan has no paramedics, and doctors disdain ambulance work but also believe only they should perform anything other than the simplest first aid. Therefore, ambulance crews (firefighters who receive 135 hours of training) are limited to such tasks as applying bandages, putting on oxygen masks, and mouth-to-mouth resuscitation. Emergency rooms in Japan are typically staffed by interns and nurses instead of doctors, who avoid the duty because it does not provide the pay and prestige of other medical work. Of Japan's 66 university hospitals, only two have full-time doctors working solely as emergency staff; 26 do not even have emergency departments. Hospitals often refuse to accept ambulances; a Tokyo college student died of blood loss after being refused emergency treatment at five hospitals. The director of the Health and Welfare Ministry's emergency care division estimates 15,000 paramedics with at least 1,000 hours of training are needed so at least one can ride with each of the 4,600 ambulances.

. . . about the Austin EMS paramedic and supervisor who were quick to respond when they were called upon to help a mother in distress during labor? But this was no average mom -- it was a cow. According to a story in the **Austin American Statesman**, EMT-P Joe Granberry and Supervisor Gordon Bergh stopped at a small country store on the way home from Texas A&M, where an elderly farmer was seeking someone to assist one of his cows, which had been in labor all night. Bergh slipped his hand inside the birth canal, grabbed the calf's feet, gave it a few tugs, and broke the calf loose. Fearing that the calf had died during the ordeal, Granberry

got the cow to stand up and she nudged her calf into nursing within 15 minutes. This was Granberry's first in-field (as it were) delivery . . . be sure to ask to see his pictures!

. . . about transmission of "toxic strep" syndrome from an infected infant to a firefighter during CPR (**Annals of Emergency Medicine**, 20:1)? This article presents a case of transmission of a toxic shock-like syndrome to a firefighter during resuscitation of a 3-year-old boy. While the firefighter provided ventilation with a bag-valve mask during an unsuccessful resuscitation attempt on the child, his hands became covered with the child's sputum. When cleaning the equipment, he received a small abrasion on his hand after hitting it on a wall. The next day, he experienced nausea, vomiting, chills, and high fever. He developed more vomiting and diarrhea, abdominal tenderness, and a diffuse rash the following morning. The abrasion on his hand became infected, with red streaking. Upon admission to the hospital, his blood pressure and pulse were 92/50 and 142. Later, the BP dropped to 80 systolic. He responded well to IV fluids and a prolonged course of antibiotic therapy. This life-threatening infection may have been prevented by the simple infection control techniques of wearing gloves and hand-washing. Remember, AIDS and Hepatitis B are not your only worries.

. . . "Have you finished your education? I certainly hope not!" is addressed in the June 1990 **Pryor Report**. The author, Fred Pryor, recommends that we each discover the excitement that comes with learning something new on a daily basis. His recommendations are: (1) Set aside a few minutes for reading every day, then jot down something of value from what you read. (2) Listen to tapes, and do it with ac-

by Linda Wolfe

countability in mind. Be able to tell yourself what you heard when it's over. (3) If you watch TV, attempt to evaluate the time you spend; if you can't find a reason to watch a program again, don't. (4) Examine your circle of friends and work associates. If you haven't added anyone new lately, look around. New people usually bring new ideas and perspectives with them. (5) Consider a hitherto unknown subject to study. If you are a right-brain person, try a left-brain topic. (6) Look at the ways you do your job; find at least two things you can do to change and improve your procedures.

. . . The May/June 1991 issue of **Rescue-EMS** magazine features several articles on infectious diseases and their control. "HIV, Hepatitis B and C," "A New Epidemic: Tuberculosis," "Infectious Disease Exposure Notification," and "Infection Control Through Proper Vehicle and Equipment Disinfection" are the featured and very informative topics.

. . . how the first several minutes of your encounter with a pediatric patient will set the tone for how that child will respond throughout his course of care? "Kid Stuff" in the June 1991 issue of **Emergency Medical Services** magazine gives in-depth coverage to strategies for effectively managing young patients, thus making emergency care less traumatic for the patient, the family, and the EMS personnel involved.

. . . about the possibility that EMTs and even some paramedics are living below the government-established poverty level? Anecdotal evidence and actual pay studies would suggest that the answer may be yes. For a history of EMS compensation progress (or non-progress?) and a state-by-state salary comparison, see the June 1991 issue of **Emergency Medical Services** magazine.

The first several minutes of your encounter with a pediatric patient will set the tone for how that child will respond.

Are EMTs and some paramedics living below the government-established poverty level?

Texas EMS

M e s s e n g e r

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

\$15 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 _____

Please enter a two-year gift subscription for

Name _____

Address _____

Zip _____

From _____

\$ 15 for 2 Years

Amount enclosed \$ _____
2A284 - Fund 160

*Make check or money order
for \$15 payable to
Texas Department of Health*

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

Bites & Stings

The World of Venomous Animals

Book Review
by Susan Kollath

Author John Nichol is a zoologist who now works for the BBC producing nature shows, after spending 7 years in India studying the local wildlife. His book is a broad overview of the subject of poisonous members of the animal kingdom. Chapters cover insects, snakes, amphibians, fish, mammals, and every other species imaginable. There are chapters on trade, conservation, and myths about venomous animals (e.g., snakes hypnotize their victims; a Black Mamba snake can outpace a man on a motorcycle). A chapter of definite interest to Texans is titled, "Rattlesnake Roundups and Killer Bees."

The author recommends following standard trauma guidelines, with a few exceptions such as a bite from a Red-backed Spider or Blue-ringed Octopus or a sting from one of the cone shells. Nichol offers no surprises in the area of preferred treatment for snakebite. Discussions of the types of ingredients found in animal venoms are broken down into eight areas:

- Neurotoxins which act on the central nervous system
- Hemorrhagins which destroy the walls of the blood vessels
- Thromboses which produce blood clots
- Hemolysins which destroy red blood cells
- Cytolysins which act on leukocytes and other cells
- Anticoagulants which prevent blood clotting
- Ferments which prepares food for digestion and
- Antibacterial substances

On the subject of antivenoms, the author includes descriptions of available antivenoms and how they are obtained, including manufacturers and price ranges.

On the lighter side of venom, Nichol describes such things as how snake charm-ers work, why a snake is more likely to strike when shedding its skin, and how a small town in England achieved total gridlock by large numbers of school children watching a man sitting in a glass box while covered with spiders. (The man was not injured, but did request a gin and tonic after being released!)

The publisher is Facts on File.

Next month

**Exam Blueprint
Ready Teddy Back
to School
Air Bags**

Who gives?

A survey conducted by the University of San Francisco in 1990 reported that small, privately owned businesses made charitable donations for the following reasons:

96% to get involved in the community;

76% for public relations;

64% at the request of a friend or colleague;

60% know the organization;

53% made a previous donation; and

34% for tax benefits.

The survey included 75 firms with 100 employees or fewer in the San Francisco area, and was reported in the February, 1991 issue of *Inc.*

Around The State

Grant Writing Workshops, Tyler, July 31 & August 1; and Angleton, August 2 & 3. Need a new EMS vehicle? Communication equipment on vacation, permanently? No defibrillator? Garage and office burned last week? Consider private foundations that provide funds to worthwhile nonprofit 501(c)(3) organizations.

Maximum of 40 participants available on a first come, first serve basis and costs \$85 per participant. Contact Michelle with the Texas Historical Commission at 512/463-6092.

August 7-9, 1991, **Injury in New Mexico Conference**. Clovis Community College. 1-800-421-1433.

August 9-11, 1991, **Specialty Rescue Training**, Vertical Rescue I. UTHSC-SA. Vicky Smith 512/699-6074.

August 10-11, 1991, **Critical Incident Stress Debriefing training course**. Sponsored by Cypress Creek EMS. \$65. Contact David Chapman 713/440-5122.

August 16-18, 1991, **Swiftwater Rescue Technician I Training Programs**, \$150. Kerrville, TX. Arthur Verona 512/257-5255.

August 19-20, 1991, **Swiftwater Rescue Technician II Training Programs**, \$100. Kerrville, TX. Arthur Verona 512/257-5255.

September 4-7, 1991, **Emergency Vehicle & Fleet Management Conference & Exposition**. Hyatt Orlando, Kissimmee, Florida. The Conference Corporation 619/431-8088.

September 6-8, 1991, **Specialty Rescue Training**, Swiftwater Rescue I. UTHSC-SA. Vicky Smith 512/699-6074.

September 7, 1991, **When Every Minute Counts**, Beaumont, TX. Contact Air Rescue, P.O. Drawer 1591, Beaumont, TX 77704. 409/839-5620.

September 14-15, 1991, **Basic Vertical Rescue**. \$75. Rappelling fundamentals. EMS Coordinator, McLennan Community College, Waco TX 76708. 817/750-3512.

September 19-20, 1991, **Texas EMS Advisory Council meeting**, contact Harold Broadbent 512/458-7550.

October 17-19, 1991, **Specialty Rescue Training**, Vertical Rescue II. UTHSC-SA. Vicky Smith 512/699-6074.

October 19-20, 1991, **EMS Law & Policy Conference**. Hyatt on Capitol Hill, Washington, DC. The Conference Corporation 619/431-8088.

October 19-20, 1991, **Basic Vertical Rescue**. \$75. Rappelling fundamentals. EMS Coordinator, McLennan Community College, Waco TX 76708. 817/750-3512.

October 31, 1991, **Advanced Vertical Rescue**. \$130. Rappelling, rescue organization, rough terrain. EMS Coordinator, McLennan Community College, Waco TX 76708. 817/750-3512.

November 1&2, 1991, **Advanced Vertical Rescue**. \$130. Rappelling, rescue organization, rough terrain. EMS Coordinator, McLennan Community College, Waco TX 76708. 817/750-3512.

November 14-16, 1991, **10th Annual WBAMC Trauma Symposium**. Marriott Hotel, El Paso, TX. Contact Marty May, William Beaumont Army Medical Cntr, El Paso, TX 79920-5001.

November 25-27, 1991, **Texas EMS Conference '91**, Austin, TX 512/458-7550.

December 5-6, 1991, **Texas EMS Advisory Council meeting**, contact Harold Broadbent 512/458-7550.

Prof. Liability available to EMS organizations, Contact Bert Peterson at 713/622-7161 or 1-800-537-7497.

EMT-I, EMT-Ps needed offshore: \$795/week + overtime. Texas or Nat'l Certification. Resume: OPI, Health Services, 96 W. Front St, Orange, TX 77630.

EMT-I/Paramedic: TX Dept. of Corrections. \$1622/mo. Texas certification EMT-I/Paramedic. TDC, Box 99, Personnel, Huntsville, TX 77342 409/294-2755.

Paramedics: Offshore oil production. Texas or National Registry. ACLS, BTLs. Resume: Medic Systems, P.O. Box 690928, Houston, TX 77269.

Executive director: Volunteer EMS in Harris County, Texas. Manage operations. 25K(+). Resume (mark confidential) E. Ortega, P.O. Box 2521, 3752, Houston, TX 77252-2521.

EMTs: All levels of EMS certification in all areas of the state. Tech-Star, P.O. Box 7, Stamford, TX 79553, 915/773-5691.

Job Opening: Hi-Tech Stat Ambulance service. Immediate part-time/full-time openings for quality drivers holding EMS certification. Jim Becka, 713/790-9002.

Coordinator EMS continuing education division. Texas certification as a paramedic required. Experience as a teacher required. \$25,000/benefits. Send completed application to Personnel Office, McLennan Community College, 1400 College Drive, Waco, TX 76708.

Flight nurses and paramedics: Immediate opening for part-time on call experienced Flight Medics in Houston, Dallas and Austin. ACLS certified; 2 years critical care/ICU/CCU experience; bilingual; previous flight experience. \$18-\$25/hour. Resume: Mark Monte Mitchell, MD, Air Ambulance America, P.O. Box 4051, Austin, TX 78765.

Paramedics: Hi-Tech Stat Ambulance service. Full-time openings on 24 hour units. ER & fluid pump experience helpful. 20K starting. Jim Becka, 713/790-9002.

For Sale: Wheeled Coach ambulance. 903/723-5285.

For Sale: 1990 Ford First Response Type II Ambulance, 52,000 miles. Wrecked. John Anderson. 512/491-5900.

For Sale: 1984 Chevrolet Atlantic Type I Modular Ambulance, \$12,000; 1981 Ford EVF Type II, \$8,000; 1979 Ford Prestige Type II, \$6,000; All three units have new engines. Must sale. Mike 915/837-7471/leave message.

For Sale: 1984 Type I walk-through Wheel Coach. 1985 Type II van Wheel Coach. Both units are offered with all BLS and ALS equipment. Units ready for patient use. These units are immaculate with low mileage, new tires. 512/786-3873.

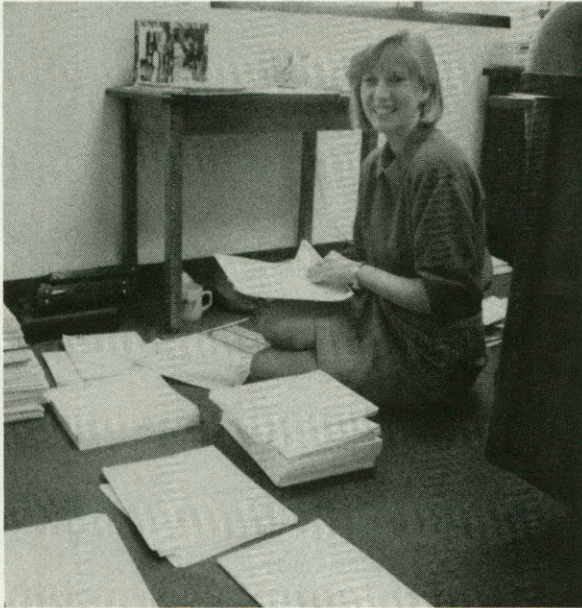
For Sale: Thumper, cardiopulmonary resuscitator, soft pack w/case. \$2,500, 2-Mars 888 lights, good shape, \$700. Roland Hobbs, Jacinto City Fire Dept., 1126 Mercury Dr., Houston, TX 77029. 713/674-1841.

For Sale: LifePac5 monitor, defibrillator 713/623-2253.

For Sale: 1987 Ford Type I Select ambulance. New paint, good condition. David Cleveland. 409/294-0949.

For Sale: 1985 Dodge Type I modular ambulance. New motor/transmission. Jerry Woods funeral home. \$9,200/negotiable. Nocona, TX. 817/825-3285.

Bradford heads up education rebuilding program



Debbie Bradford works with stacks of database questions preparing for a Certification Review Committee meeting.

“We want people to talk about the EMS exams,” says Debbie Bradford, administrator of the Bureau’s Certification Program. “We need people to talk about what they like and what they don’t like when they take the certification exams, because the exams need to be relevant to their jobs.” It’s this kind of openness, both

with students and with educators, that Debbie hopes will continue to improve EMS certification exams.

Debbie is no stranger to educators, students or exams. She is a registered respiratory therapist and taught at Southwest Texas University in San Marcos for ten years. At St. David’s Hospital in Austin, Debbie served as assistant director of the respiratory therapy department. She also worked at Austin’s Brackenridge Hospital ER and ICU while she worked on her graduate degree in education.

Feedback from students and educators

in the form of telephone calls and letters and in the form of service on the review committees will help improve our EMS educational process, according to Debbie. She encourages students and educators to contact her office and the Public Health Region EMS offices with comments and suggestions on all levels of certification exams. Every few months the review committees have new members, so if you are interested in serving on a committee, you can let Debbie know you are interested. But it’s no piece of cake. Check the workday description on page 7 -- those people work!

Over the past 18 months the education program for Texas EMSers has been rebuilt on a state level with Debbie being the chief architect. Over that same time period, Debbie and her family -- husband Wayne and their three children -- rebuilt an older home in northwest Austin. “We gutted it,” said Debbie, “and rebuilt it from the ground up.” At least EMS education in Texas didn’t have to have windows and walls repositioned, just a thousand test questions reworded.

If you want to join the education rebuilding effort, call Debbie at (512)458-7550 about volunteering for exam review or certification review committee work.

**Bureau of Emergency Management
Texas Department of Health
Austin, Texas 78756-3199**

**Second Class Rate Paid
At Austin, Texas**

