National Trauma Symposium

More than 750 health-care providers from 39 states and 3 foreign countries attended the 10th National Trauma Symposium, held last November in Baltimore. Conference attendees included nurse clinicians, nurse administrators, physicians, administrators, social workers, and other health-care personnel.

An overview of the symposium follows, as well as an article on the nursing shortage problem. Articles summarizing symposium talks on prehospital liability, JCAH outcome measures, and the effects of alcohol on death and disability will appear in a future issue of this newsletter.

The plenary sessions of the 10th National Trauma Symposium covered a variety of topics, with the common focus of presenting data from studies of the delivery of trauma care. In his welcoming remarks, R Adams Cowley, MD, director of MIEMSS, highlighted the need for collecting and sharing information within the medical community. "You can't tell how well vou're doing or what vou're doing without data." He emphasized the importance of continuing the teamwork among medical personnel, which enhances the quality of care for victims of traumatic injury. "In building systems of trauma care, the resources of all components must be tapped. Continued efforts are needed to resolve frictional issues of turf and prestige between organizations of specialists. Physicians must recognize nurses as knowledgeable professionals who bring essential skills to the care of trauma patients."

Ameen I. Ramzy, MD, Maryland's state EMS director and traumatologist at MIEMSS, presented a review of the tremendous technologic advances of the past two decades that have brought us to the current sophisticated and capable world of scientific endeavor. In the spirit of President Kennedy's 1963 challenge to the nation to "send a man to the moon by the end of the decade," Dr. Ramzy called on emergency medical personnel to adopt a "new agenda for trauma"—the eradication of death and disability due to trauma in this decade. The following elements will require attention in the work toward this goal: prevention (such as the use of seat belts and the control of weapons), legislation, transportation engineering (such as eliminating "dead men's" curves), law enforcement, EMS systems, trauma centers and systems, and rehabilitation. Dr. Ramzy advised trauma care providers to maintain a humanitarian outlook. "Public funding for trauma systems, which

really are luxuries of affluent societies, may be jeopardized if they are not shown to be utilitarian. While we must continue to strive to document the benefits of trauma care, we must maintain a humanitarian focus and goal. We must 'do' trauma care for the right reasons—and we know that good trauma care is the 'right thing to do.' "

Triage Protocols

John A. Morris, Jr., MD, is the director of the division of trauma at Vanderbilt University School of Medicine in Nashville. He presented the strengths and weaknesses of the various triage protocols that are employed in emergency medicine. Trauma scores, based on physiologic or anatomic criteria, are influenced by factors such as age, cardiac disease, and respiratory disorders. "We are only fairly good at predicting which patients need to go to trauma centers," stated Dr. Morris. He spoke in support of continued research into trauma indices to further delineate the criteria used to determine the most appropriate destinations for trauma victims.

Craniofacial reconstruction after trauma was discussed by Paul Manson, MD, associate professor of plastic surgery at the Johns Hopkins University School of Medicine and director of plastic surgery at MIEMSS. "For science fiction writers, the fourth dimension is time. The fourth dimension for plastic surgeons involved in the treatment of trauma victims is restoration of preinjury facial appearance." Guided by preinjury photographs of the patient, these specialists use bone grafts, plates, screws, and wires to reconstruct facial features even after devastating injury. Dr. Manson likened plastic surgery techniques to building construction: the small plates and screws affixed by the surgeon are the equivalent of girders within a building, ready for an outer covering of the appropriate material.

Limb Salvage

The work of other "carpenters of the body" —orthopedic surgeons—was described by Andrew Burgess, MD, who is the chief of orthopedic surgery at MIEMSS. In his talk on limb salvage in the multiply injured patient, Dr. Burgess compared the amounts of kinetic energy transferred during several kinds of impact: a misstep from a curb involves an impact of 100 ft lb, a gunshot delivers 2000 ft lb, and an auto accident at 20 mph transfers 100,000 ft lb of energy. He advocated the fixation of long bone fractures very soon



after resuscitation, citing studies that indicated that embolic fat in the lung originates in the marrow. He noted the potential for the development of compartment syndrome after fixation and closure and cautioned medical specialists to remain alert to the development of this complication.

The presentation by John Siegel, MD (director of the MIEMSS clinical center), was titled "Patterns of Trauma and Their Effects on Disability." Forty percent of the patients admitted to the Shock Trauma Center sustained their injuries during vehicular crashes. Deceleration accounts for most of this trauma. Drivers experience knee and pelvic injuries when their legs hit the dashboard; chest injuries are caused by impact with the steering wheel; and head injuries result from contact with the windshield. Passengers often sustain knee and head injuries during vehicular crashes. Deceleration accounts for most injuries after similar impacts within the vehicular compartment. Records from the MIEMSS Shock Trauma Center show that chest injuries are often associated with liver injuries. The majority of patients admitted to trauma centers have high scores on trauma indices. "Triage is based not just on life and death decisions but on the need for restoration by a team of experts," stated Dr. Siegel.

In a presentation on trauma in the elderly, C. William Schwab, MD, chief of the division of traumatology and surgical critical care at the Hospital of the University of Pennsylvania in Philadelphia, noted that the elderly population is the fastest growing segment of America. The average life expectancy for Americans is 72 years and is increasing rapidly. There are twice as many women as men in the

(Continued on page 2)

10th National Trauma Symposium

(Continued from page 1) elderly population.

Trauma ranks fifth of the most common causes of death among the elderly. As in other age groups, motor vehicular incidents are the leading cause of admission of elderly people to a trauma center. Drivers older than 65 years account for 9.3 percent of the driving population. This group has the second highest collision rate, surpassed only by male teenagers.

Two thousand of the 9,400 deaths due to auto/pedestrian injuries in 1979 occurred among the population older than 65 years. The majority of those elderly pedestrians were struck in intersections. Diminished physical abilities (sight, hearing, and movement) place the elderly at greater risk in those traffic areas.

Physiologic aging begins around the age of 20. Manifestations of this process include myocardial degeneration, conduction atrophy, and decreases in response times. Changes in kidney, liver, and lung function as well as in fluid electrolytes have also been documented. Normal changes in brain function associated with aging are some loss of hearing and visual acuity (both are evident in 73 percent of people over 65), decreased balance, cerebral degeneration (100,000 cells are lost each day), and altered cognitive function; however, intelligence is spared.

From a medical perspective, Dr. Schwab noted that "with increasing age, we become less like each other physically. Within one individual, the rate of decline of various organs is also substantially different."

The following conclusions were drawn from a study conducted on elderly patients admitted to a level 1 trauma center in Camden, New Jersey: The mechanisms of injury leading to admission to the facility were parallel in older and younger populations. The death rates from CNS injury were also parallel in those groups. The number of deaths from multiple organ failure and sepsis was higher in geriatric patients and associated with less severe injuries.

Because elderly patients are so sensitive to posttrauma complications, Dr. Schwab advocates aggressive treatment of shock, rapid assessment of internal injuries, and liberal interpretation of the indications for computerized tomography to detect head injuries. With an aggressive approach to diagnosis and treatment,

it is hoped that the high mortality within this patient population can be minimized.

Ake Grenvik, MD, recipient of the Dr. T. Crawford McAslan Award, gave an overview of ethical problems in organ donation. A leader in the field of bioethical issues. Dr. Grenvik is a professor of anesthesiology/critical care medicine at the University of Pittsburgh School of Medicine. The major problems associated with donation are identification of potential donors, certification of brain death, evaluation and maintenance of donors, and acquiring permission to remove organs from donors. Dr. Grenvik called for the definition of brain death to be changed to "irreversible loss of consciousness and cognition."

In a historical account of transplantation, Dr. Grenvik stated that the first kidney transplant was performed in 1954; the recipient's twin donated the organ. The first heart transplant was done in Japan in 1968. The donor was a drowning victim who was declared brain dead, and the surgeon was charged with murder! The Uniform Anatomical Gift Act is now 20 years old; although many people have stated their desire to participate in this program in the event of their death, certain ethical problems remain in its implementation (for example, who makes the decision to initiate the donation process?).

Dr. Grenvik supports the fostering of a public attitude toward the opportunity to donate organs. He called for enhancement of public and professional education about the process and for certification of organ procurement agencies and specialists.

"AIDS Issues in the Emergency Department" was the title of the presentation by Keith Sivertson, MD, director of emergency medicine at the Johns Hopkins Medical Institutions. The risk of acquiring HIV can be expressed as the multiplicative product of the infectivity of the source, the degree of exposure, and the susceptibility of the host. Many factors of this equation are still unknown as they apply to the transmission of HIV. For most diseases, patients are most infectious just before and just after they manifest symptoms; it is not known if this pattern applies to HIV. The degree of exposure for health care workers translates to the product of the number of HIV-positive patients seen and the probability of contamination. Caregivers can decrease their exposure to the virus by following dress and sterilization guidelines; however,

some people may be inherently more susceptible to the virus than others.

Dr. Sivertson stated "the risk of AIDS for health care workers is very small. Individuals' after-hours social habits put them at greater risk for AIDS than their jobs."

He and other investigators at Johns Hopkins have published (JAMA, May 1987) the results of a study of HIVpositive patients treated at the Johns Hopkins Medical Institutions emergency department in Baltimore. From blood samples drawn routinely from critically ill and injured patients admitted to the facility within a 100-day period in 1986. they determined that 6 (3 percent) of 203 were HIV positive. All six were the victims of trauma and all were between 25 and 34 years of age. Although this incidence of HIV positivity seems high (compared with the 0.48 percent incidence in the Baltimore population), the investigators point out the likelihood of bias in their conclusions: their sample was small, and the incidence of seropositivity may be a reflection of the inner-city location of the hospital and the socioeconomic characteristics of the patients in the study.

These clinicians expanded their study to 2302 consecutive patients admitted to the emergency department for any reason (not just trauma patients). Again, they found that a high number of young trauma patients are HIV positive though asymptomatic for the manifestations of the infection.

In addition to educational programs, the Johns Hopkins Medical Institutions provides opportunities for emergency health workers to participate in the control of injury and infectious diseases. Hepatitis B vaccines are offered. Lockers for storage and quick retrieval of protective gear are placed outside the resuscitation area. The hospital also has shower facilities for prehospital personnel.

Dr. Sivertson noted that unsafe work habits can evolve among any group of employees. "We must instill safe work habits and create safe work environments."

Ellis Caplan, MD, chief of the infectious disease department at MIEMSS, described techniques that EMS personnel can use to minimize their exposure to the human immunodeficiency virus (HIV). The acquired immunodeficiency syndrome (AIDS) has already affected 1.5 million Americans; 50,000 have illnesses associated with HIV infection and more than

(Continued on page 3)

Where Have All the Nurses Gone?

Where have all the nurses gone? Fifteen percent of the budgeted nursing positions in the United States are unfilled. The vacancy in the New York/Philadelphia/Washington corridor averages 20 to 25 percent. The rate in Maryland has been increasing 5 percent annually since 1984.

The shortage of nurses—the nursing crisis—was the focus of two forums at the 10th National Trauma Symposium. In a morning plenary session, Connie R. Curran, EdD, MSN, FAAN, described the national perspective on the status of nurses and followed the image of nurses from the time before Florence Nightingale's work during the Crimean War to today's high-tech milieu. The evening before, trauma nurses had gathered in a workshop to discuss their problems and challenges in a medical world that places increasingly sophisticated demands on a

Trauma Symposium

than 40

(Continued from page 2)
half with an AIDS-related disease have
died. AIDS is replacing trauma as the
leading cause of death in people younger

Dr. Caplan listed the procedural dress guidelines that health care workers should follow to protect against exposure to patients' blood and secretions that might contain HIV. (This information was presented in a previous edition of this newsletter [Maryland EMS News, August 1987].) He suggested that health care workers assume that all blood is contaminated with HIV; the appropriate precautions against exposure should always be observed. He also advised caution about equipment and clothing manufacturers' claims in regard to the effectiveness of their products in protecting users from exposure to the virus; no standards or regulatory agencies are monitoring

Several agencies (the Centers for Disease Control, the National Institutes of Health, and others) have studied approximately 1500 health care workers for the possibility of transmission of the virus: four have possible infection but none has developed disease. No reports have been issued of prehospital providers acquiring the disease from on-the-job exposure.

vendors' statements.

-Linda Kesselring

dwindling, yet enthusiastic and dedicated, pool of nurses.

Dr. Curran's talk, entitled "High Tech, High Touch Professional or Helpless Handmaiden: Will the Real Nurse Please Stand Up?" was the first annual Pam Bell Lectureship, Pam Bell, RN, was a primary care nurse who worked for seven years in the intensive care unit of the MIEMSS Shock Trauma Center and who died prematurely in 1980. The careers of Ms. Bell and Dr. Curran share an emphasis on maintaining a humanistic touch in nursing as a companion to the increasing technology of critical care. Dr. Curran currently serves as the vicepresident of health-care management and patient services for the American Hospital Association. Because of her leadership in nursing, she was named the recipient of the award in its inaugural year.

According to Dr. Curran's statistics, each of the 48 contiguous states is experiencing a shortage of nurses. Since 1983, nursing school enrollments have decreased 30 to 40 percent. In 1986, more women entered medical schools than nursing schools. However, with an 80 percent employment among RNs, this profession has the highest labor participation rate of jobs held by women.

So the crisis is a result of the interplay of several factors. With a greater variety of occupations now open and accessible to women than ever before, fewer women are pursuing a career in "traditional" women's fields such as nursing. The high employment rate among women trained as nurses means that there is not a reserve of women outside the field to whom appeals can be made to draw them into the workplace. And the image of nurses as angels, handmaidens, nurturers, and mothers is not as attractive to young women making career choices and entering educational institutes in the 1980s as it was earlier in this century.

That image of who nurses are and what nurses do surfaced as a major problem in the recruitment of nurses. Dr. Curran named the television, movie, and pornography industries as primary contributors to the public's skewed vision of nurses. Their portrayals of nurses in passive, playful, uninformed roles do not mirror the real-life responsibilities of nurses. In actual hospital situations, nurses are coordinators of patients' daily care, the medical professionals with whom patients have the most involved contact and on

whom great pressures are placed to remain informed of and competent with the latest advances in medical technology. Dr. Curran congratulated the series M.A.S.H. for presenting the most positive image of nurses on television: "Its cast of nurses are competent and confident and never lose their great compassion for their patients."

In the workshop on the nursing shortage, chaired by Peggy Trimble, MA, RN, director of MIEMSS Field Nursing, a workshop participant from Pennsylvania challenged nurses to improve their own image. She suggested that nurses identify themselves as nurses to the patients they treat and explain the treatments being administered. Then patients leave the clinic or hospital with a clearer sense of nurses' roles in their medical care and recovery.

Nurses from Ohio, Michigan, Florida, Illinois, Arkansas, and the military services described shortages in their locales. Many nurses are being drawn from hospitals toward "agency work," which offers comparatively high hourly wages (\$30 to \$40 in some cities) and short shifts, sometimes with prorated weekly benefits. Several participants noted that salary is not the only issue: self-scheduling and autonomy are increasingly important.

Elizabeth Scanlan, MS, RN, director of nursing at MIEMSS, is a member of the Governor's Task Force on the Nursing Crisis, which was convened to examine the nursing shortage in Maryland and to ascertain the status of schools of nursing. She reported that six hearings were held across the state, and 1000 nurses spoke during those sessions. A primary issue of concern voiced during that study was salary compression: on average, only \$5000 separates the salaries of new and experienced nurses, which leads to diminished morale. Other concerns were the lack of ancillary support (such as housekeeping and clerical staffs) and lack of opportunities for educational practice for new nurses.

Several speakers called for the establishment of a professional model for nurses. Others pointed out the importance of having a hospital's director of nursing on the board of directors.

In response to the crisis in nursing, hospitals are offering creative staffing patterns: shifts can begin at any hour and last 8 or 12 hours. The appeal of these (Continued on page 4)

10th Anniversary: PG County ALS, STATT







Dinner at the Officers Club at Andrews Air Force Base and the presentation of plaques marked the 10th anniversary of the areawide trauma center STATT (Shock Trauma Advanced Treatment Team) at Prince Georges Hospital Center (PGHC) and of the Prince Georges County Advanced Life Support Program. (In December 1977, MIEMSS officially designated PGHC as the second areawide trauma center in the state.)

Shown in the photo at top-left are Richard Graham, PGHC administrator; Winfield Kelly, chairman of the board, Dimensions Health Care Corp. and Secretary of State; John Ware, PhD, chairman of the board of directors, PGHC; Willie C. Blair, MD, director of traumatology, PGHC; and M.H. "Jim" Estepp, chief of Prince Georges County Fire Department.

(Photo, top-right) Members of the first class of paramedics in Prince Georges County who have 10 years of service in the county's ALS program (both volunteer and career) are shown here with PGHC Director of Critical Care, Joseph Colella, MD (far left) and Chief Jim Estepp (second from right).

(Photo, bottom-left) State EMS Director Ameen Ramzy, MD, presents a "recognition" plaque to Chief Jim Estepp.

Nursing Shortage

(Continued from page 3)

options for recruiting nurses is offset by the dilemmas they create for administrators.

In Ohio and Maryland, programs in trauma have been started for student nurses. Nursing school seniors are given evening and weekend shifts in trauma operating rooms and other patient care areas. These programs have shown a high retention rate, and further success is anticipated when educational credits are offered for the program.

-Linda Kesselring

Physical Therapy Conference

"Physical Therapy for Trauma/Critically III Patients," sponsored by MIEMSS, will be offered March 3-5 at the Medical School Teaching Facility on the University of Maryland at Baltimore campus.

Presentations will focus on key issues in the management of head- and spine-injured, multitrauma, and orthopedic patients. Research and advanced-level discussions on respiratory physical therapy will be included.

For further information, contact Deborah Fink or Karen Murdock, at MIEMSS, 301-328-7667.

Cowley Wins National Award

MIEMSS Director, R Adams Cowley, MD, recently received the Stanley W. Gustafson Award, presented by the Highway Users Federation. The nation's largest business coalition promoting improved highway transportation safety and efficiency, the federation honored Dr. Cowley for his pioneering work and achievements



4TH NATIONAL TRAUMATIC BRAIN INJURY SYMPOSIUM The Neglected Disease

March 24 - 25, 1988

Maryland Institute for Emergency Medical Services Systems Shock Trauma Center — Montebello Rehabilitation Hospital University of Maryland at Baltimore

"So you saved my life . . . What now?

This increasingly frequent question from survivors of brain injury will be addressed at this national conference. An outstanding nationally recognized faculty of research and clinical experts will address recent research findings, innovative rehabilitation techniques, and medical, surgical, and psychological repercussions of head injury. Featured speakers include:

Leonard LaPointe, Ph.D. Audrey Holland, Ph.D.
Roberta Capey, Ph.D. Mark Ylvisaker, M.A.
Ronald Ruff, Ph.D. Catherine Keating, Ph.D

and more than fifty other prominent presenters from around the country

The conterence, located at the University of Maryland Medical School Teaching Facility, is sponsored by the Speech-Communication Disorders Program of the Maryland Institute for Emergency Medical Services Systems, a leader in the medical and rehabilistative care of trauma patients. In addition, the 1988 Shock Trauma Communication Disorders Program Research Award will be presented.

For information on conference registration, transportation, and accommodations, call Andrew K. Gruen, CCC-SLP at (301) 328-6101 or write:

Roberta Schwartz, M.Ed., C.C.S.P., Director SPEECH-COMMUNICATION DISORDERS PROGRAM Maryland Institute for Emergency Medical Services Systems University of Maryland at Baltimore 22 South Greene Street, Baltimore, Maryland 21201 as founder and director of MIEMSS.

In accepting the award at the federation's annual meeting in November, Dr. Cowley urged business leaders to press for development of EMS systems throughout the nation as a means of saving an estimated 25,000 lives a year. He urged them to support pending Senate legislation for federal funding of EMS systems and to notify local government officials "that you expect the kind of EMS systems that you, your families, your employees, and—yes—your customers deserve."

The Gustafson Award is presented annually to the person who has made the most significant contribution to the safety, efficiency, or energy effectiveness of the nation's highway system.

Trauma Symposium Audio Tapes Available

Each of the 43 presentations at the 10th National Trauma Symposium were recorded live and are now available on audio cassette.

For information and an order form, contact Recorded Resources Corp., 1468 Crofton Parkway, Crofton, MD 21114. (Phone: 301-858-0026).



The Program

The fifth annual EMS Care conference will top all the previous four, even last year's blockbuster! This year, which is the 15th anniversary of the statewide EMS system in Maryland, the Baltimore County Fire Department is teaming up with the Maryland Institute for Emergency Medical Services Systems to co-sponsor the largest capacity symposium to date. With over 20,000 square feet of conference space, the new Sheraton in Towson provides ample room for 500 participants. Region III invites EMS providers from Maryland and other states to attend EMS Care '88 to hear presentations from the area's trauma and specialty centers, the Maryland chapters of the American College of Emergency Physicians and the Emergency Nurses Association, and prehospital instructors, which will focus on specialty care topics.

Continuing Education Credits

This program is accredited to fulfill the 12 hours of lecture credits required of Maryland EMT/As. To receive all 12 hours, you must

- Attend one of the preconference workshops on Friday and the entire conference on Saturday and Sunday and...
- Ensure that you have 4 hours of trauma category credits AND 4 hours of medical category credits. (Approved credits are indicated on the schedule.)

CRT, EMT/P, and national registry credits are also available. All credits are subject to approval by your local program.

Social Activities

The ample breaks and continental breakfasts will allow participants many chances to interact and to visit displays of the latest EMS equipment and educational materials. A dinner and dance on Saturday will feature a live band.

Hotel Accommodations

The new Sheraton Towson Conference Hotel provides an exciting location for EMS Care '88, With the many large conference rooms and banquet facilities, we are granted the flexibility to make this year's symposium the best yet! The hotel has given us a special room rate of \$68 per night (single or double); you must reserve a room no later than March 29 to receive the reduced rate. Call 301-321-7400 and be sure to mention EMS Care '88 or send the attached reservation form to Sheraton Towson Conference Hotel, 903 Dulaney Valley Road, Towson, MD 21204.

Directions: Take Interstate Route 695 toward Towson. Take exit 27 (Dulaney Valley Road, MD Route 146) south to Towson. The hotel is on the left, in less than a mile.

Fees

A \$55 registration fee includes the following:

- Workshops and lectures all day Saturday and Sunday
- An optional preconference workshop on Friday
- Continental breakfast on Saturday and Sunday
- Lunch on Saturday
- Refreshments during the many breaks
- Vendor displays

Early Bird Special: Free EMS Care '88 T-shirts will be reserved for those who register prior to April 11, 1988.

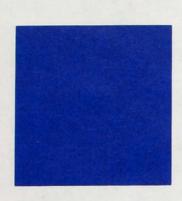
Make all checks and money orders payable to EMS Care '88.

Cancellation Policy

Refunds, excluding a nonrefundable \$10 processing fee, will be mailed for cancellations received in writing by May 3, 1988.

Additional Information

For further information about EMS Care '88, contact the MIEMSS Region III Office, 22 S. Greene Street, Baltimore, MD 21201, 301-328-3996.







PRECONFERENCE OPTIONS FRIDAY, MAY 13, 1988 1:00 - 5:00 PM

- 12:30 Registration
- 1:00 A. Street Survival—strategies for maximizing personal safety when responding to dangerous situations (4 hours local CEUs)
 - B. EOA/MAST—a class leading to Maryland certification in EOA/MAST
 (2 hours medical CEUs and 2 hours trauma CEUs or 4 hours local CEUs)

SATURDAY, MAY 14, 1988

- 7:30 Registration
 Continental Breakfast
 Vendor Displays
 8:30 Opening Ceremonies
 9:00 Current Issues in Mary
- 9:00 Current Issues in Maryland EMS (1 local CEU)

F. Treatment of the Neonate

- 10:00 Break
- 10:30 Workshops and Lectures
 (each 1.5 medical CEUs)
 C. HAZ MAT Toxicology
 D. Pediatric Medicine Issues
 E. Hyperbaric Medicine
- 12:00 Lunch

Tom Clancy (author of Hunt for Red October, Red Storm Rising, and Patriot Games)

- 2:00 Workshops and Lectures (each 1.5 trauma CEUs)
 - G. Immobilization of the Pediatric Patient
 - H. Burn Management
 - I. Management of Hand Trauma
 - J. Management of Eye Trauma
 - K. The Neurotrauma Patient
- 3:30 Break

4:00 Workshops and Lectures

- (each 1.5 local CEUs)

 L. EMT Responsibility
 in Child Abuse Cases
- M. Mock Trial
- N. Safety Considerations During Med-Evac Operations
- O. EMS Response to Hazardous Materials Incidents
- 5:30 Vendor Reception
- 8:00 Dinner/Dance

SUNDAY, MAY 15, 1988

- 7:30 Continental Breakfast
- 8:30 Future of EMS Education (0.5 local CEU)
- 9:00 Update on Infectious
 Disease Control in EMS
 (1 medical CEU)
- 9:45 Break
- 10:00 Workshops and Lectures
 (each 1.5 medical CEUs)
 P. Treatment of the Neonate
 - Q. Obstetrics
 R. Seasonal Emergencies

- S. Medical Case Review
- 11:30 Lunch (on your own)
- 1:00 Workshops and Lectures (each 1.5 trauma CEUs)
 - T. Immobilization of Pediatric Patients
 - U. Helmet Removal
 - V. Trauma in the Elderly W. Trauma Case Review
- 2:30 Break
- 3:00 Workshops and Lectures

- X. Medical Case Review (1.5 medical CEUs)
- Y. Current Issues in Trauma (1.5 trauma CEUs)
- Z. Significance of Prescription Medicine in Patient Assessment (1.5 medical CEUs)
- AA. Orthopedic Case Review (1.5 trauma CEUs)
- BB. Pediatric Trauma (1.5 trauma CEUs)

THE SHERATON TOWSON CONFERENCE HOTEL

903 Dulaney Valley Road • Towson, MD 21204 • 301-321-7400

EMS CARE '88 RESERVATION REQUEST FORM

To ensure proper room registration for your stay, please complete this reservation request and return to the hotel before March 29. Requests received after this date will be accepted based on space and rate availability. All reservation requests must be accompanied with a one-night room tariff plus tax by check or credit card guarantee. Requests received without a one-night deposit will not be honored.

Address		
	State	Zip
	e occupancy): \$68 per night (\$10 extra ing room:	
 All hotel accounts are payable at departure, subject to prior credit arrangements at time of registration. Room registration will be after 3 pm on date of arrival. Check-out time is noon. No charge for children under 18 years of age when sharing room with parent. Please send hospitality suite, food, and beverage information. I desire room equipped for handicapped persons. 	 For reservations not claimed on date of arrival, hotel will retain first night deposit and tax. To cancel a reservation, call the hotel prior to 4 pm on day of arrival. Retain cancellation number until you receive a refund of your deposit. Check for first night deposit and tax enclosed. Check for tax-exempt status (applies to state tax, not hotel tax). 	□ Charge my credit card for first night's deposit and tax. ■ Indicate credit card: □ VISA □ Master Card □ Diners □ AMEX □ Carte Blanche Card No □ Expiration date □ Inderstand that I am liable for one night's room tarif

EMS CARE '88 REGISTRATION FORM

	ME DAY PHONE DRESS										
AFFILIATION											
CIRCLE ONE: EMT-A CRT	E	MT-P	01	HER (olease specify)						
CERTIFICATION NUMBERCOUNTY									and the		
Friday Program 1:00 to 5:00 A. Street Survival				(Check one optional program) B. EOA/MAST Class							
Saturday Program				Sunday Program							
(Circle one from ea				lot)	(Circle one f	rom e	ach	tin	ne s	lot)	
10:30 - 12:00 C	D	E	F		10:00 - 11:30	P	Q	R	S		
2:00 - 3:30 G	н	1	J	K	1:00 - 2:30	T	U	٧	W		
4:00 - 5:30 L	M	N	0		3:00 - 4:30	X	Y	Z	AA	ВВ	

Fee for EMS CARE '88 program — \$55.00 ● Make checks payable to EMS CARE '88.

Return this form and your check to: John Donohue, Region III Office, MIEMSS, 22 S. Greene Street, Baltimore, MD 21201-1595

Address Correction Requested MIEMSS, Maryland EMS News, 22 S. Greene St., Baltimore, MD 21201-1595

Editor: William E. Clark, (301) 328-7800 Managing Editor: Beverly Sopp, (301) 328-3248

Director: R Adams Cowley, MD EMS Director: Ameen I. Ramzy, MD

22 S. Greene St., Baltimore, MD 21201-1595

Published Monthly Copyright® 1988 by the **Maryland Institute** for **Emergency Medical Services Systems** University of Maryland at Baltimore

and the Baltimore County Fire Department Maryland Institute for Emergency Medical Services Systems

Present



at the Sheraton Towson Conference Hotel

8861, C1 - E1 YAM

Free T-shirts for Early Bird Registrants. 12 hours of continuing education credit for one low price — \$55.