



## EMS Team Work Demonstrated In Baltimore Beltway Rescue

The Baltimore beltway was fairly quiet at 8 pm on an especially hot Wednesday evening last summer, but within a few moments, a series of events and coincidences brought the state's entire EMS system together in an extraordinary example of its efficiency and cooperative spirit.

A heavily loaded concrete-block truck, traveling south near the Frederick Road exit, began to go out of control. The sound of rapidly shifting gears was heard as the driver attempted to slow but failed. When the truck finally came to a halt, 12 vehicles had been affected, leaving a complex maze of cars and victims.

Ironically, Jeffrey Mitchell, PhD, instructor in the EHS program at UMBC, was heading off the nearby exit ramp at the time of the crash, and was able to initiate emergency care before additional help arrived. After clearing well-meaning but overzealous bystanders from the scene, he was able to free a woman from an overturned car and bandage her badly injured ankle. As he finished, a shaken bystander approached Dr. Mitchell repeating, "Oh my God."

Following the bystander, Dr. Mitchell found a small sports car that rested on top of a larger car and beneath the loaded concrete-block truck. The car (an MG) was crushed to about two feet in height. Sticking out of the car was an arm which miraculously was found to have a pulse. After the bystanders were finally convinced to cease their potentially danger-

ous attempts at rescue, Dr. Mitchell shouted in, "If you can hear me, wiggle a finger, moan, or show me some sign that you are alive." "I can't breathe very well" came the totally unexpected response. Dr. Mitchell urged the man not to fight the weight of the truck, but to breathe as normally as possible.

The extrication sped up when a state trooper passed by, spotted Dr. Mitchell under the wreckage, and offered assistance. Dr. Mitchell yelled for "a helicopter, heavy duty rescue truck, engine companies, and three ambos."

"You got it!" the trooper responded. Within minutes, equipment from the Baltimore County Fire Department's Catonsville and Westview stations and equipment from the Arbutus Volunteer Fire Department arrived, along with Paramedic Field Coordinator Stephen Gisriel who established medical command and Battalion Chief William Deitz who was the overall scene commander. After being briefed on the situation, Paramedic Field Coordinator Gisriel radioed for the MIEMSS GO team. In another striking coincidence, Ameen Ramzy, MD, associate medical director of field operations at MIEMSS, appeared on the scene within minutes, also passing by on his way home. His beeper sounded just as he got out of his car and headed toward the wreckage.

Dr. Ramzy started an IV for the irjured man in the sports car and kept talking to him. The car was squashed so flat that there was no room for even an oxy-

An MG (middle) is shown on top of a larger car and wedged under a truck that was carrying concrete blocks. Twelve vehicles were involved in the Beltway accident.

gen mask, so just the tubing was passed in to the victim. Initially, only the patient's left arm was visible and able to be assessed. Lt. Gary E. Warren, assistant EMS manager, assumed medical command on his arrival. Lt. Warren ran the medical end of the rescue, staying in touch with Dr. Ramzy and checking how long the patient could survive until freed. He shared this information with Deputy Chief James Judge and Battalion Chief William Deitz, who jointly ran the overall rescue scene, deciding what extrication techniques to use based on the medical information.

"In overseeing an operation, there is usually more than one way to satisfy the requirements, and in this case we wanted to choose the safest and quickest way," Chief Judge explained. They opted to remove the cement blocks from the truck (one by one), remove the tractor from the tractor-trailer, and then prepare to release the MG. Another priority was to determine the contents of a tanker located ominously nearby, and assess its potential danger to the situation.

Six teams of men pitched in for the tedious and back-breaking task of removing the concrete blocks. Another fire-(Continued on page 2)

## Focusing on Field Operations

#### Communications System Update

As many of you know, we are moving toward a plan to totally revise and upgrade the state's communications system. As part of this plan we developed the Spectra Report which delineated changes that need to be made from the existing system configuration and technology to technology in the 1980s. In addition we have been performing a statewide signal strength survey to delineate weak areas of communication so that these can be addressed early in the implementation of the plan. We have also been speaking with all jurisdictions about areas that should be addressed early in the implementation of this plan.

It will be costly to revise and upgrade our state communications system. The consensus from the field is that it should be implemented over the next eight years rather than over a longer timeframe and should totally replace the present system.

I have written to the medical directors concerning telemetry. EMS radios are extremely expensive, and as we move through the budgetary process, there will be many questions raised as to how we can cut the cost. Some states have moved to abolish telemetry and rely on their ad-

vanced life support providers to interpret all the cardiac rhythms. I have asked the medical directors for their advice on this matter and for their support as we move forward into the funding phase. Early feedback so far indicates that both prehospital personnel and medical control personnel feel that telemetry is extremely important in maintaining the high quality of prehospital care providers within the state. There have been certain questions addressed as to whether we are trying to change the pattern of medical control; this is not our intent - but we want to verify that the direction toward which MIEMSS is moving in implementing this new statewide communications plan is correct.

#### Advanced Life Support Protocols

Based upon input from the many providers and provider agencies in the last year, the advanced life support protocols have been modified slightly and are on their way to the State Board of Medical Examiners. We are recommending:

 The lidocaine regimen should be changed to make the lidocaine drip an option at the regional level rather than a state standard. It was felt that it might be easier for prehospital providers to give repeat doses of Xylocaine rather than monitor a continuous IV infusion to be kept at a close regulated rate.

- Dextrose sticks are no longer required as a state standard. There were concerns that these were an expensive supply for ambulance companies to keep stocked since they deteriorated rapidly on the ambulances. Incorporating the suggestions of the medical directors, the recommendation states that the standard of treatment for unconscious people (not from trauma) is the administration of dextrose and narcan and that perhaps the dextrose sticks might not be time-effective.
- CRTs will be able to start a second IV when patients are in hypovolemic shock under certain circumstances.
- Ipecac is, at the moment, utilized as a medication on EMT-A units and is now mentioned in the ALS protocols.

These changes have been initiated from comments from prehospital providers and personnel working within the health care institutions of Maryland. Hopefully this continued refinement will reflect the current concepts in the rapidly changing field of emergency care.

— Alasdair Conn, MD Medical Director, Field Programs

# EMS Providers Work to Free Victims of 12-Vehicle Accident Two new fare joined the Emergy

(Continued from page 1)

fighter spent the entire time standing poised with a hose line to protect the rescuers from the threat of fire, which would only increase the danger of the precarious situation. Personnel from the three heavy duty rescue trucks positioned railroad jacks to lift the block truck, while other rescue personnel continued their operations to gain access to the trapped victim. Personnel from five medic units prepared the other injured victims for transportation, while rescue operations continued to free the trapped man in the sports car. SYSCOM (System Communications Center) lines were cleared to provide an emergency channel for ongoing communication. In total, more than 50 emergency care-givers crowded onto the scene, each taking a place in an orderly, well-defined fashion.

Even outside of the system a sense of cooperation in the chaos prevailed. A private ambulance from the Al-Lin Company, passing by the scene, stopped and provided oxygen and other needed equipment and assistance before EMS personnel arrived.

"It is not at all unusual for our career and volunteer personnsel to work so well together in the field," Lt Warren said, "since in the [Baltimore] county they have well-defined tasks and they all pull together. Egos are never a problem on rescues as the patient is our paramount concern."

When nearly 300 blocks had been removed from the truck, the rescuers were able to gradually lift the flatbed truck and free the victim. He was sent aboard the Maryland State Police Med-Evac helicopter to the Shock Trauma Center at MIEMSS, nearly 1½ hours after the ordeal began, as was another woman injured in the accident. Five others with varying degrees of injuries were sent to St. Agnes Hospital.

"Excellent communication between the physician and the senior EMS officer is the key to success when there is a seriously injured patient requiring prolonged extrication, and everything comes down to a series of ongoing judgments," Dr. Ramzy explained. "This was not a day of heroes, but of a job well done by all."

— Rochelle Cohen

## **EHS New Faculty**

Two new faculty members have joined the Emergency Health Services Program at the University of Maryland Baltimore County (UMBC).

Dr. Nils Parr will teach courses related to management and organization. Most recently with the Wilkes-Barre campus of Penn State University, Dr. Parr has extensive teaching and administrative experience in academic settings. He holds a bachelor's degree from New York University, a master's from Yale, and a PhD in economics from the State University of New York at Syracuse. He has served on various health-related boards and commissions and is a volunteer EMT.

The other faculty member joining the program is Paul McCarthy from Fairfax, Virginia. Mr. McCarthy holds a bachelor's degree from California State College and a master's degree in public administration from George Mason University. He most recently headed the EMT-P program at Northern Virginia Community College and will be responsible primarily for the development of the paramedic track within the bachelor's degree program at UMBC.

Mr. McCarthy is a registered EMT-P, a certified ACLS instructor, and has written several publications related to EMS.

## Regional EMS Advisory Council Minutes

A Regional Emergency Medical Services Advisory Council (REMSAC) meeting was held at the Frederick Sheraton Inn on September 22.

George Atkinson, MIEMSS associate administrative director, reported that the block grant awards have been made and recipients notified. The DOT grant process is also starting and, as promised at the last REMSAC meeting, new forms are available for DOT grant applications for next year.

Alasdair Conn, MD, medical director of MIEMSS field programs, noted that the Olympics held September 18 were a great success. He indicated that the format of next year's Olympics might be changed, perhaps incorporating an educational track. Dr. Conn also reported on the formation of the EMT-A Task Force under the chairmanship of Chief Jim Estepp of Prince Georges County and stated that its first meeting would probably be in November. The task force will be looking into the entire EMT training and testing program. Dr. Conn reminded REMSAC that

the DOT EMT course has been expanded from 81 to approximately 100 hours minimum and includes an additional 10 hours of clinical experience. The curriculum includes MAS Trousers but not EOA or IV.

Ron Schaefer, MIEMSS associate director of prehospital education and training, reported that the EMT-A tests for the remainder of this year will be unchanged and will consist of five-station/five skill sessions, as well as the written exams. He also outlined how changes in standards and regulations will be handled in the future, stating that the distribution of any proposed documents in draft form will be handled in an informal hearing process. Then there will be a formal hearing process as announced through the "Maryland Register" and in accordance with the Annotated Code of Maryland. The existing CRT standards are, at the moment, being examined by the State Board of Medical Examiners.

Dr. Conn reported that the upgrading of the communications system was in the

planning process. On the basis of an outside consultant's report generated a year ago which recommended changes, this report has been scrutinized and dollars placed upon the costs. This plan will probably be initiated within the next year and he asked REMSAC for their support in obtaining funding. (For more on communications, see Dr. Conn's column on page 2 and the article on page 4.)

Dr. Conn explained the planning process of the Department of Health and Mental Hygiene for their five-year plan that addressed some functions of emergency medical services. Dr. Conn also stated that this was in draft form at this time.

The meeting concluded with the regional reports.

## Rescue Skills Demonstrated

A school bus loaded with children collides with a passenger vehicle. Car and bus are overturned with children pinned beneath the wreakage. Clouds of smoke and flames spew forth from the bus engine. Screams rend the air and then are drowned out by the sirens as ambulances and rescue vehicles from the Wheaton Rescue Squad and Kensington Fire Department approach the accident scene.

Fortunately the above scenario was not a tragedy for the residents of Wheaton but a demonstration of extrication, triage, and emergency care at an accident. This demonstration was staged by Wheaton Rescue Squad as the highlight of their fourth annual Rescue Day at Wheaton Plaza. Throughout the day a variety of EMS-related demonstrations were offered in the Plaza which was made more colorful with balloons and a clown or two. Squad members also offered blood pressure screenings and guided tours of their new ambulances.

The day-long public information program culminated in the afternoon bus accident demonstration which drew crowds to the far comer of the Plaza parking lot to watch the full-scale rescue operation. Program chairman Bob Miller of the Wheaton Rescue Squad carefully explained each step of the rescue to the crowd, pointing out special equipment such as Vetter bags and Hurst tools as well as the procedures to protect both patients and rescue workers.





— Marie Warner

## **Aging EMSCS Needs Remodeling**

For three hours last March 3, prehospital care providers in Region III were cut off from the rest of the emergency medical community.

They could neither obtain guidance in treating their patients, nor transmit the ECG patterns of cardiac patients to a consultation center.

The communications link between prehospital and hospital personnel — the Emergency Medical Resource Center (EMRC) — malfunctioned. Prehospital personnel could still call EMRC by radio, but the calls could not be patched through to hospitals or consultation centers over the public telephone lines.

Ameen Ramzy, MD, an attending surgeon at the MIEMSS Shock Trauma Center, went to EMRC to provide medical consultation directly by radio. However, system operation was restored before he arrived.

Fortunately, no lives were lost as a result of the communications shutdown. But the opposite could have happened. Malfunctions like this one rarely occur in the Maryland EMS Communications System (EMSCS).

However, Richard Neat, director of communications for MIEMSS, says such incidents could become more common if the state's aging and overburdened EMSCS is not updated and remodeled. That communications shutdown would not have occurred if EMRC had a backup communications console, he says.

There are two major problems with the EMSCS, according to Mr. Neat. First, it was designed more than eight years ago, when EMS communications traffic was much less than it is today. Second, much of the currently used communications gear and transmitting equipment is obsolete, or malfunctions frequently due to wear

Other changes that must be made in the EMSCS are being dictated by cost factors. It simply has become too expensive to keep operating in the same manner.

Since the EMSCS was established in 1975, the communications traffic in Region III has tripled, but the number of accessible medical channels has remained the same. Consequently, during peak periods of emergency medical service, the calls that come in to EMRC are stacked (put on hold) until one of the medical channels becomes available. This results in about a two-minute wait to get medical assistance during those periods.

To remedy the communications overloads that sometimes occur at EMRC, Mr. Neat said Region III must be given access to the medical communications channels used in the rest of the state. This change would necessitate expanding the capacities of all the base stations in Region III from one to ten channels, as well as renovating or replacing the control center.

However, the solution to Region III's problem creates a problem for the state's other EMS regions. If EMRC needs to use one of the medical channels normally used by an adjacent control center to facilitate prehospital communications in Region III, that channel temporarily would not be available to the adjacent center. Therefore, a more efficient and dynamic method of assigning medical communications channels to regions will have to be devised.

EMS communications traffic in the states surrounding Maryland also is increasing. Consequently, Mr. Neat says another problem experienced at EMRC is that the EMS communications from York and Adams counties in Pennsylvania sometimes interfere with the EMS communications in Region III. To block out the EMS broadcast signals from Pennsylvania, Mr. Neat wants to add a tone code system to the communications system in Region III.

Communications overloads occur at the central alarms outside of Region III as well, says Mr. Neat. The communications consoles at many of those central alarms will have to be modified or replaced because they have been expanded to the limit of their capacities to handle the increased communications traffic in their respective counties, he explains.

The console at the Prince Georges County Central Alarm already is being replaced and major modifications have been made to the consoles at the Wicomico and Garrett county alarms. The console at the Allegany County Central Alarm is next on the list for an overhaul, adds Mr. Neat.

Another way of attacking the overload problem outside of Region III is to cut down on the amount of time that medical channels are occupied. The portable radios presently used outside of Region III require prehospital personnel to get access to a medical channel before leaving the vehicle. As a result, that channel is tied up, but not used, from the time the prehospital care provider leaves the vehicle to the time he or she requests a consultation. Mr. Neat says he would like to modify the portable radio system so that prehospital care providers could wait until they were at the patient's side and ready for medical consultation to get access to a medical channel. To make this possible, he says, the base stations outside of Region III also would have to be modified or replaced.

Adding greatly to EMS communications traffic in recent years are the calls originating from the Med-Evac helicopters operated by the Maryland State Police. In addition, Med-Evac calls create a problem unique to flight communications.

Radio contact, whether from a Med-Evac helicopter or a ground vehicle, is always established on a call channel. The same two call channels are used throughout the state. This arrangement does not cause interference between counties when the call originates from a ground vehicle because the range of the signal is limited by natural and man-made barriers, explains Mr. Neat.

However, when the call originates from a Med-Evac helicopter flying 500 or more feet above the ground, the range of the radio signal is significantly increased. Consequently, when a Med-Evac pilot or aviation trauma technician is using a call channel, no one else in the entire state can use it without creating mutual interference, according to Mr. Neat.

A proposed solution to this problem is to implement a split-channel system of communications for use by Med-Evac crews, claims Mr. Neat. Split channel simply means that a radio frequency between two regular channels would be reserved for Med-Evac communications.

Mr. Neat says permission to use a split-channel system has been obtained from the Federal Communications Commission and a base station at Sideling Hill in Washington County is being installed to operate in this manner.

Most of the radios used in Region III need to be replaced because they are eight years old. Frequent failures occur due to wear on the equipment and, because of its age, spare parts are getting hard to obtain, says Mr. Neat. Another reason for replacing the radios is that they would have to be disassembled and modified to operate in a tone code system, which would only add to their wear, he adds.

Finally, in an effort to hold down operating costs, reliance on C&P Telephone Company equipment and service is being reduced, Mr. Neat says. Due to the divesti-

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## ChildRestraint Law:What's Acceptable?



Rearward facing shell for infants. The harness attached to the child restraint should be buckled according to the manufacturer's intructions.

Editor's Note: In part 2 of our series on child restraint legislation, we discuss acceptable methods of restraint under the new law.

Ideally, a car seat should be a major part of a new baby's layette. Beginning with the first ride home from the hospital, and until children weigh at least 40 pounds, they should ride in appropriately designed car seats to ensure their safety.

A newborn or infant weighing less than 20 pounds should be restrained in a rearward facing shell. This may convert into a toddler seat, but always cradles the child in a semi-erect position. A harness holds the baby securely in the carrier, and the adult seat belt secures the seat in the car. Experts recommend placing the infant carrier in the rear of the car for the best protection, and using rolled up blankets or towels to support very small infants.

Once the baby can sit alone and weighs at least 20 pounds, a toddler seat or infant seat converted to toddler position is necessary. The two types of toddler seats are harness and shield. This shield type consists of a seat and slightly padded shield that contours close to the child's stomach and away from the head and neck. This seat is held in place by an adult

### **Kerry Smith Resigns**

Kerry Smith, Region III administrator, recently resigned his position with MIEMSS. His enthusiasm and dedication to his work and to the improvement of EMS in Region III will be missed.

Kerry and his wife will be relocating to Syracuse, NY. Kerry will enroll in the nursing program at Syracuse University, while his wife joins the administrative team at the university. lap belt, fastened around the child. Shields are reputedly easy to climb in and out of, and thus should be used with caution.

The harness type of seat secures the child to the safety seat with a five-part belt system. Generally, it is more difficult for a child to wiggle out of, yet allows more freedom of movement.

Importantly, if a seat requires a tether (anchor) strap, it must be secured to a rear seat belt or the rear window shelf. Otherwise, the extra impact of the seat against the car could cause additional injury to the child.

Booster seats are a new type of car seat, designed to fill the gap between the toddler seat and adult safety belt. Boosters must be used with lap and shoulder belts or supplied baby harness for adequate



Shield seat for toddler.

protection. A booster seat without upper torso suport is less effective than using an adult lap belt alone.

Adult safety belts may be used by children who have reached 4 years or 40 pounds or who can sit up by themselves when no car seats are available.

The child should be placed in the back seat, and the seat belt should be slung as low around the child's hips as possible. If the shoulder belt crosses the child's face or neck, it should be placed behind the child's back (not under the arm) for maximum protection.

Remember these two important rules:

- If there are more children than seat belts, never secure more than one in a belt.
- Pillows or cushions should never be used to boost a child. They can slide out during an accident, causing the child to slide under the seat belt, or allowing the child's head to move so far forward that it strikes the car's interior.

For futher information, contact Margaret Widner-Kolberg, (301) 528-3931.

- Rochelle Cohen



Five-point harness seat for toddler. The harness attached to the child restraint should be buckled according to the manufacturer's instructions.

### Rehabilitation Program Marks 1st Anniversary

On August 1, 1983, the Trauma Rehabilitation Program at Montebello celebrated its first anniversary. Many changes have occurred during this first year. All patient care, physical and occupational therapy, and administrative areas previously located on Montebello's third floor have relocated to the first floor. Additional patient care space and therapy gyms were made available to allow for the expansion to a 50-bed rehabilitation program and to provide space more appropriate for the delivery of therapies.

Approximately \$130,000 of therapy, nursing, physician, and administrative supplies and equipment have been ordered and most have been received. Approximately 90 of the 106.75 positions designated for the program have been filled. The program currently has allocated 73 nursing staff, 22 therapy staff, 3 social workers, 5 physicians, 1 recreational therapist, and 2 psychologists. The program is still actively recruiting primarily for registered nursing staff and another physical medicine and rehabilitation specialist with experience in the teatment of head injuries.

The program is now handling a 50-bed patient census with a 4-bed head injury unit. Over the next several months, the head injury unit will expand to 12 patients.

— Tony Zipp

## Infectious Diseases: Are You at Risk?

Editor's Note: Many prehospital personnel have expressed their concerns regarding their risk of exposure to diseases such as AIDS, hepatitis, meningitis, and herpes. Lou Jordan, MIEMSS associate director of prehospital care, relayed their questions to Ellis Caplan, MD, chief of infectious diseases at MIEMSS, who has written the following.

Although definitive studies have not been done, it is apparent to me that the likelihood of an emergency care provider acquiring an infectious disease from contact with patients is remote. I should like to discuss the areas of meningitis, hepatitis, herpes, and AIDS.

#### Meningitis

The transmission of meningitis is specially limited to two predominant types, that of Hemophilus influenzae B and that of Neisseria meningitidis. It is somewhat unusual to find either in the adult population, and certainly Hemophilus influenzae is rare in the adult population. Both of these are transmitted by the respiratory route and are transmitted only on intimate contact. Current medical opinion suggests that only those with intimate contact (that is, sharing the same household, same bedroom, etc..) are at risk to acquiring these diseases. In my experience, health care providers — both prehospital and hospital are generally at no risk and need not worry about contracting any type of meningitis from a patient. The exception would be those who give mouth-to-mouth resuscitation; however, in both of these diseases, there are no prophylactic antibiotics with demonstrated effectiveness available to these individuals.

#### Hepatitis

With regard to hepatitis, secretions (particularly blood) have been shown to be infectious if inoculated into a susceptible host. As far as we know, this is true only for hepatitis type B, serum hepatitis. Less than 1 percent of the population in the United States is a carrier for this particular type of hepatitis. It is prudent whenever one is exposed to someone else's blood to either wear gloves or wash one's hands as soon as feasible. There is a vaccine for hepatitis type B available that will protect the individual (probably for a lifetime) if he is vaccinated prior to exposure to anyone with hepatitis type B. Although this will continue to be a problem in all types of patients and there is a recognized risk for health providers, the actual number of health providers contracting the disease is relatively small in comparison with the number of times health care workers come into contact with body secretions.

#### Herpes

There are two main herpetic diseases that concern us. The type receiving much media attention is the herpetic lesions of the genital tract which are transmitted with direct contact, almost always direct sexual contact. Obviously this does not pose a problem in the emergency care situation. The other type of herpes infection is of the brain and, as far as we know, cannot be transmitted by personal contact. Health care providers are not at risk to contract any type of herpes from patients with this particular infection.

#### AIDS

Finally, we come to AIDS (Acquired Immune Deficiency Syndrome). This is an

extremely uncommon disease and the health care provider will be rarely in contact with an AIDS patient. The cause of AIDS and whether this disease can be transmitted to health care providers have not been determined. Since data are not available, we can only make what appear to be logical recommendations — that is, to limit contact between secretions of AIDS patients and health care providers. Casual contact should not impart any infectious risk on the health care provider. Since we do not always know whether a patient has AIDS, I would recommend the precautions that one takes for preventing hepatitis — that is, using gloves or washing one's hands if one is exposed to a patient's blood.

- Ellis Caplan, MD

## **Nursing Watch**

#### **Continuing Education Credits**

The MIEMSS field nursing department has been granted provider status for continuing education by the Eastern Regional Accreditation Committee of the American Nurses Association. Effective September 1983, all nursing programs offered through this department will grant continuing education units according to ANA guidelines.

#### Critical Care Medicine

Nursing's active participation in the Society of Critical Care Medicine was the focus of a luncheon meeting for nurses at the annual convention last May. During this meeting, it was decided to form a nursing section of the society. Primary goals of the nursing section include: increased nursing involvement at the annual meeting, increased communication and collegial relationships among nurse members, and increased nursing membership in the society.

Membership benefits include a subscription to *Critical Care Medicine*, reduced rates at the annual symposium, the SCCM newsletter, and a membership directory. Candidates for membership must be sponsored by two SCCM members from any discipline. For further information, contact Peggy Trimble-Bullock at (301) 528-3930.

#### Neonatal Nurse Coordinator

Kathy Aoki, RN, BSN has recently filled the neonatal nurse coordinator posi-

tion for the Maryland Regional Neonatal program (MRNP). Prior to this position Kathy was on the neonatal transport team at the University of Utah Medical Center. Her primary responsibilities with MRNP will be supervision of the neonatal transport nurses and participation in outreach education activities.

#### Neurotrauma Nurse Coordinator

The nurse coordinator for neurotrauma is Karen Traut, RN, BSN. This is a 50-percent position funded through a block grant. Karen will participate in protocol development and outreach education, as well as providing consultation regarding neurotrauma patients. Her past experience includes consultation in primary nursing and a primary nurse II position at MIEMSS intermediate care unit.

#### **Nursing Workshops**

A reminder that insufficient registration is a cause for cancellation of a workshop! In order to avoid this, registration forms must be received by the nurse coordinators office one week prior to the scheduled date of the workshop. Persons who wish to attend a workshop but do not have time to register through the mail should call the office of nurse coordinators (301) 528-3930. On-site registrations are acceptable only if space is available.

— MIEMSS Field Nursing Staff

# Anne Arundel Co. 'Lifeline' Helps Mother Revive 2-Year-Old Child

When Paramedic LeRoy Jones answered the phone at the emergency communications center of the Anne Arundel County Fire Department, he initially thought a prank caller was on the line. A little girl was calmly telling him that her baby sister had nearly drowned in the family swimming pool. Only the barely audible anguished screams of the mother assured him that this was truly an emergency call.

When the child, 10-year-old Deborah Ronk, held the phone up to her mother's ear, Paramedic Jones went to work. After getting the name and address and dispatching an ambulance, he coached the mother on how to save the two-year-old child, who was blue and barely breathing. He recalled that he "really wanted to hear that baby cry."

program in the state with a paramedic on duty 24 hours a day, according to Lt. Robert Stevens, public information officer for the Anne Arundel County Fire Department.

"Initially calls come to the fire department communication line, the essential information is recorded, and the equipment dispatched," Lt. Stevens said. "If the situation is life-threatening, the paramedic on duty is called to the phone to instruct in the life-saving techniques he actually performs in the field."

Most calls handled by Lifeline involve choking, bleeding, or full cardiac arrest. In heart attacks, the verbal instruction in CPR has proven useful. Lt. Stevens said he believes the program has been a great success and has handled more than 375 of the 10,000 calls for an ambulance from January through June this year.



Ten-year-old Deborah Ronk, Paramedic LeRoy Jones, and Mrs. Ronk each played a vital part in the rescue of two-year old Mary Ronk.

Describing the steps of CPR to Mrs. Ronk, he told her "how to drain the water out of the baby over the sink first, and then to blow into the baby's mouth." At first he wasn't sure she was doing it, but then the hysterical mother obeyed, and shortly he could hear the baby's cries. The mother kept crying profusely as he assured her that if the baby was crying, she was breathing. Jones then stayed on the phone with her until the paramedics arrived at the door.

Paramedic Jones' participation in that life-saving telephone conversation was part of a three-year-old Anne Arundel county program called Lifeline. It was designed to help persons with life and death medical emergencies, and is the only Paramedic Jones said his field experience with life-threatening situations helps him to quickly assess the situation, determine the best course of action, and then guide the caller as precisely as possible. "Children," he said, "like the Ronk baby, are toughest for everyone. You just have to keep remembering that something must be done, and just hope that you can do it.

"The real hero in this case was the 10-year-old sister [Deborah] who missed her sister upon waking from a nap, ran outside and saw her floating face down in the pool and instinctively dove in and pulled her out. If she hadn't done that, no one could have saved her."

— Rochelle Cohen

## MIEMSS Gets Block Grants

Disaster planning for a mass casualty incident is the most expensive of 18 EMS projects for which MIEMSS will receive \$281,577 in block grants from the Maryland Department of Health and Mental Hygiene in fiscal year 1983.

Some \$24,000 has been earmarked for developing the first statewide disaster plan by the end of the current fiscal year. The plan will outline strategies for handling mass casualty incidents involving highway safety, hazardous materials, and national disasters.

Several of the funded projects, totaling \$39,500, are aimed at training EMTs and CRTs to the EMT-paramedic level, meeting the standards of the paramedic training program developed by the U. S. Department of Transportation. One of the paramedic training programs funded by the block grants will be based at Essex Community College; one of the training programs to be offered to CRTs will be limited to rural volunteers; and another will be restricted geographically to Prince Georges County.

In addition, numerous continuing education programs, costing \$45,470, were funded. One of these programs will involve providing emergency room nurses with training in the management of headand spinal-cord-injured patients. Advanced cardiac life support courses will be held in Regions I. II. and IV. and courses in both basic and advanced life support will be held in southern Maryland counties. Another program will train fire and rescue services dispatchers to give self-help instruction over the telephone. Finally, two 2-day workshops will be held within the next year; one will be devoted to rural and wilderness EMS management, the other to various aspects of rural EMS programs.

To meet the need for coordinating advanced life support (ALS) services in Region II, \$7,500 has been allocated to pay part of the salary of an ALS coordinator, who will be based at Washington County Hospital. An additional \$16,400 has been awarded to Regions I and II for ALS coverage by means of a two-tiered response system. A second ambulance will be leased to expand the existing system in Frederick County and a pilot test of a two-tiered system will be conducted in Region I to evaluate the feasibility of using the system in that area.

The prevention of accidental deaths is the goal of three other projects, for which a total of \$57,500 has been

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## **MIEMSS Awarded Grants**

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granted. One of these projects involves a study to determine the extent to which mortality in trauma patients results from inappropriate prehospital and hospital medical care. The other two projects are directed at the general public. An educational program on preventing traffic accidents will be developed for high-school students by community-based teams of trauma care providers and school personnel. A media campaign will also be conducted to raise public awareness of injury prevention and of how to gain access to the Maryland EMS system.

The high-risk perinatal program started at MIEMSS and the University of Maryland Hospital will be expanded with a \$15,500 grant. The program, in which women who develop complications prior to delivery are transported to specialty care centers, will be coordinated on a statewide basis for the first time.

Finally, an equal amount of money will go toward setting up a MIEMSS nursing component of the existing behavioral emergencies program to handle such problems as child abuse, psychosocial maladjustment following trauma, family crises, and behavioral problems in critical

care patients. Currently, the program serves only patients who need immediate attention.

— Dick Grauel

### **EMSCS Pitfalls Cited**

(Continued from page 4)

ture of the telephone company, local phone rates may rise more than 300 percent in January 1984.

Therefore, Mr. Neat says MIEMSS plans to purchase its own telephones and to switch from using EMSTEL to communicating by microwave in the state's EMS regions that already have microwave communications systems. EMSTEL stands for EMS dedicated telephone network, which is owned by C&P.

These and other improvements have been outlined in a 15-year renovation plan for the Maryland EMSCS, which Mr. Neat recently submitted to MIEMSS for approval. The total cost of implementing all of the projects listed in the proposal would be \$10.2 million in 1983 dollars.

Having developed the plan, MIEMSS is contacting local jurisdictions for their input before proceeding toward implementation.

- Dick Grauel

### **Blood Pressure Course**

Blood Pressure: Its Control and Measurement is a one-day course designed to instruct EMTs, fire and rescue personnel, dentists, pharmacists, nurses, and those who have an ongoing role in some phase of blood pressure control. Participants are taught the latest concepts of measurement technique, referral methodology, and patient education.

For information on courses in your area, contact your local chapter of the American Heart Association or Ann E. Smith, Maryland Affiliate Office, (301) 685-7074.

### **ACLS Held at UMBC**

An ongoing program of advanced cardiac life support (ACLS) courses for providers and instructors is being developed at UMBC and it is anticipated that four to six courses will be offered each year. Persons interested should call or write Office of Special Sessions, UMBC, Catonsville, MD 21228 (301) 455-2335.

The ACLS courses are cosponsored by UMBC Special Sessions, the Emergency Health Services Program at UMBC, MIEMSS, and the Metropolitan Baltimore affiliate of the Heart Association.