

# Overcoming Kids' Fears of Ambulances



## Maryland EMS NEWS

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Anyone who works in emergency medicine has probably witnessed the anxiety and fear often expressed by the pediatric patient. The flashing lights, sirens, and unfamiliar atmosphere of an ambulance frequently intimidate an already frightened and perhaps injured child.

To reduce the fear associated with a medical emergency, EMS personnel at the Junior Fire Company in Frederick staged an ambulance tour for children. During the tour, held at the Frederick County Health Fair and judged a huge success, many children and adults gained an understanding of prehospital care.

The ambulance tour consisted of a brief introduction to the equipment used, such as BP cuffs, stethoscope, penlights, oxygen, nasal cannulas, and face masks. A face mask was demonstrated on a large teddy bear, and splints were placed on different stuffed animals.

Children and parents were given Mr. Yuk and 911 stickers, as well as other information. The medical power of attorney—making it possible to provide immediate emergency medical treatment to children if their parents are unavailable to give their consent—was also discussed with parents.

During the next stage of the tour, children assumed the role of ambulance personnel and treated the "injured" stuffed animals. Under the guidance of Junior Fire Company EMTs, they were shown the basics of patient assessment, oxygen therapy, and hospital communications presented at a level they could understand. The children enjoyed the "hands on" approach, and asked many



*(Top) Elizabeth McDonald and Bill Mowczko, from Junior Fire Company in Frederick, set up the "Kids' Ambulance Tour," complete with balloons and stuffed animals. (Below) Children get a chance to try out equipment and talk to EMTs (note the face painted on the IV bag above Bill Mowczko).*

questions, including how Mickey Mouse broke his arm.

As they left the ambulance, children were given Junior Fire Company firefighter/paramedic stick-on badges and balloons. A balloon-covered ambulance, IV bags with faces painted on them, and stuffed animals of all sizes and shapes provided a festive atmosphere

and, combined with explanations and discussions, helped to reduce the fear of some 350 children who passed through the ambulance.

The ambulance tour was a great success for both the children and the parents, many of whom said they would like to return next year for a tour.

—Junior Fire Company



# CFL Adds Occupational Therapy Dept.

With the addition of the Occupational Therapy (OT) Program at the Center for Living (CFL) in March, the rehabilitative services offered by MIEMSS have been further expanded. OT complements the Life Enhancement and Education Program (LEEP), the Cognitive Relearning (CORE) Program, and other CFL services in maximizing the skills and outlook of traumatically injured individuals and in helping those people to adapt to the changes in their lives. Diane Wise supervises the OT program and currently works with approximately 20 clients, most of whom are recovering from head trauma.

The many facets of the CFL were open for public visit at an Open House in April (see photos). The CFL is the psychosocial reintegration program of MIEMSS continuum of care network and is located in a newly renovated building on the grounds of Montebello Rehabilitation Center in northeast Baltimore.

Participants come to the OT program from LEEP and CORE and through individual referrals. OT focuses on perceptual and cognitive skills, community living skills, and motor skills and offers testing and treatment in all of these areas. Development of perceptual/cognitive skills is stressed in the OT component of the CORE program. Skills that are addressed include visual scanning and analysis, nonverbal problem-solving, and visual memory. The language components of these OT exercises vary, enabling people with language ability ranging from minimal to well developed to benefit. For clients who need to improve their use of language, the speech program offers the necessary evaluation and therapy.

Enhancement of community living skills is the aspect of OT that is most obviously and immediately useful to clients. They solve functional problems such as reading maps and bus schedules and using banking procedures—skills that help them become more independent and resume the activities that were part of their lives before injury.

Therapy for motor skill development is planned on an individual basis. OT is designed to help individuals improve the abilities that have been impaired by their injuries, to further develop their strengths, and to learn compensation techniques.



*Visitors try out a computer during the recent Open House at the Center for Living.*

The combined CFL programs help multiply injured people to return to their homes, jobs, families, and friends and to participate in their world to the fullest

extent possible. For more information about these programs, call the Center for Living at 301/243-2800.

—Linda Kesselring



## Field Notes

*By William E. Clark, State EMS Director*

This month we pause to recognize the many thousands of prehospital and in-hospital personnel who make our EMS system a reality.

The public has come to depend on the sophisticated network of emergency care that is available throughout our state. And with the emergency 911 citizen access number now operational statewide, more precious seconds are gained because people know this universal number in time of emergency.

The public is so used to our advanced EMS system that people hardly blink an eye when a med-evac chopper lands on the highway to pick up a seriously injured patient. In other areas of the country, such an event would be big news and highly unusual. Here in Maryland it is a daily routine event.

Here in Maryland we have a true networking and integration of all our prehospital and in-hospital resources that is second to none in this nation.

Many areas of the country are still struggling with trying to develop systems of emergency care but are having great difficulty developing a true system like the one we have here in Maryland and take for granted.

Think about it for a minute. We have a uniform system of training and certification, a uniform system of alert and dispatch, a uniform system of fire

department ambulance response and mutual aid, a uniform system of med-evac helicopter support, a uniform medical communications system, and a full networking of all the in-hospital resources.

Our complex but fully integrated EMS system allows us to quickly respond to any location in Maryland, to provide the best care, and to transport rapidly to the closest appropriate medical facility for definitive care.

The various individual parts of our system are not extraordinary on their own. What is extraordinary, and indeed unique in many aspects, is the networking together of all the components into a highly effective EMS system.

As we pause to reflect during EMS week (September 29–October 5), one thing becomes patently obvious. It is you, the provider, who makes our system work . . . the thousands of volunteer and career prehospital and in-hospital professionals. It is your individual personal dedication and sacrifice and caring for others that make the system come to life. And through your skill and hard work, you help ensure that the public we serve can indeed count on the “Best Care Anywhere” here in Maryland.

Thank you for your loyalty and support.



# Dr. Miltenberger Sees EMS Evolving

The role of the Region I medical director is changing dramatically.

In the future, the role of the Region I medical director will be to maintain the high quality of emergency care that has been achieved and to coordinate the efforts of hospital and prehospital providers of emergency care, says Frederick W. Miltenberger, MD, medical director of Region I.

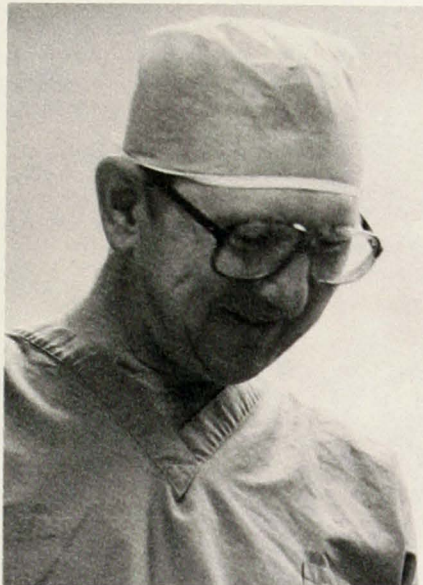
In contrast, Dr. Miltenberger says that, as medical director and previously as president of the Region I EMS Advisory Council, he has functioned primarily as a catalyst and developer.

Dr. Miltenberger has been a guiding force in the development of the EMS system in Region I from its very beginning. His association with the system goes back to 1974, when hearses were still used to transport patients to the hospital and when prehospital treatment was in its infancy.

EMS development in the Baltimore-Washington area progressed rapidly during the 1970s, but that progress was fueled by the needs of large urban populations. The implementation of comparable EMS services in rural western Maryland has been an "extraordinary accomplishment," Dr. Miltenberger says proudly. He counts his role in the development of EMS in Region I as a personal triumph in community relations.

Negotiations to implement the 911 emergency telephone system, which was completed in 1979, were a major EMS advance in Region I. At the first meeting of the Region I EMS Advisory Council, during Dr. Miltenberger's term of office as president, it was determined that establishing a 911 central emergency dispatching service was a practical and feasible step in improving the region's EMS system. Even though Region I had a central alarm at that time, police, fire, and rescue companies were usually called directly for assistance. There was no coordination between these agencies in their responses to emergencies.

Getting these agencies to cooperate with a central dispatching center "required a major persuasion job," says Dr. Miltenberger. The police, firemen, and ambulance personnel were worried how central dispatching would affect them, he says.



*Dr. Frederick Miltenberger*

To bring it off, Dr. Miltenberger and others had numerous meetings with these various providers as well as with the region's county commissioners, Cumberland's and Frostburg's city officials, and telephone company representatives. A year later, during the last week of Dr. Miltenberger's term of office, an agreement was reached, clearing the way for the 911 system to be implemented. The following year, Dr. Miltenberger urged the legislature to establish a statewide 911 emergency telephone system.

The next big accomplishment, says Dr. Miltenberger, was the designation of the areawide trauma center for Region I. The turmoil created by that issue continued for almost three years, he adds.

In 1978, Dr. Miltenberger convinced the Region I EMS Advisory Council to endorse the concept of an areawide trauma center. Getting the council's endorsement was not simple because some of the council members were opposed to the concept, he notes.

Dr. Miltenberger then tried to gain support for the concept from the two largest hospitals in Region I, Cumberland Memorial and Sacred Heart hospitals, both in Cumberland. The medical staffs and governing bodies were ambivalent from the outset. The dialogue went on for a year and a half.

Finally, Dr. Miltenberger wrote a position paper on an areawide trauma center in Region I and submitted it to the medical staffs and boards of trustees of

Cumberland Memorial and Sacred Heart hospitals.

There was an agreement to establish a trauma center, and MIEMSS conducted site visits to determine which of the two hospitals should be designated as the trauma center.

Three years after the issue was first broached, Cumberland Memorial was designated as Region I's areawide trauma center. "This has had a significant impact on the quality of trauma care," says Dr. Miltenberger.

Another "horrendous undertaking" was the establishment of the region's medical command system, according to Dr. Miltenberger. The issue again required medical community and hospital acceptance.

The medical command system provides physician supervision of prehospital care through direct radio contact between hospital-based physicians and prehospital care providers. During these radio conversations, therapy in the field is provided by the ambulance personnel according to protocol established by the Board of Medical Examiners and the Region I EMS Advisory Council, and the appropriate receiving hospital is determined.

Resistance to the medical command concept was resolved in two ways. The cooperation of the medical community, one specialty at a time, was gained by enlisting their help in writing patient triage protocols. By basing triage on preestablished staging criteria, apprehension that physicians providing prehospital guidance would show partiality in deciding where to send patients was allayed.

Upon implementation of medical command, it was fully agreed by all parties that after one year of operation the system would be reevaluated by an outside consultant. That evaluation took place in June 1983 and resulted in focusing on the deficiencies, misunderstandings, and disagreements of the system then in place.

With some revisions resulting from this survey, the medical command system was strengthened and better accepted. The system still has problems but in general is accepted by the medical community and most of the hospitals as

*(Continued on page 7)*



# Parent's Program Fights Alcohol/Driving

Those concerned about death, injury, and disability caused by teen drinking/driving accidents soon will have one more reason to hope they can help make their streets safer—thanks to a new educational program developed under the auspices of MIEMSS.

The new program, called the Parent Alcohol Program (PAP), was created by MIEMSS and the National Public Services Research Institute—the traffic-safety research and development organization that last year developed for MIEMSS the Traffic Accidents and Trauma (TAT) program directed toward teenagers. As the name indicates, PAP is targeted to reach the parents of teenagers, providing them with factual and motivational information—as well as learning experiences—geared to help them take reasonable actions to reduce their children's risks of being killed or maimed in alcohol-related traffic crashes.

Developing a program for teenagers' parents was the "most logical next step," William E. Clark, state EMS director, said. "Not only are parents the people most immediately affected by and concerned about teen drinking/driving," he noted, "but they're in a unique position to *do* something about it."

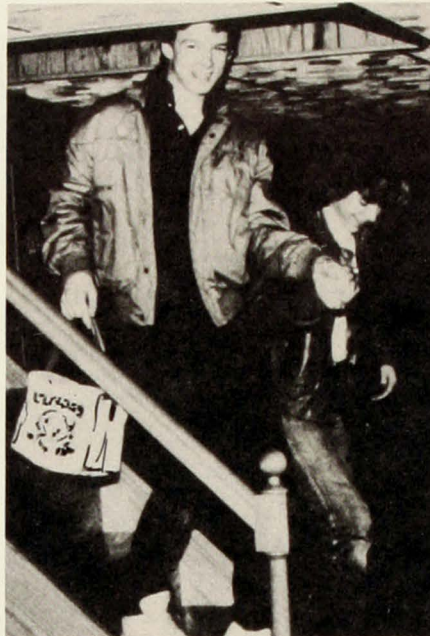
To ensure that the new program would address parents' most pressing concerns about adolescent drinking/driving—and what, exactly, they could do as parents—project staff convened a series of focus groups. Some of these groups consisted solely of parents, some solely of teenagers (both with and without drinking problems), and others of educators and public service groups expected to use the new program.

The result was a short (one-hour, fifteen-minute) program capable of being used by a variety of civic and educational organizations. Key materials developed include:

- "While You Lay Sleeping"—a 15-minute slide/tape show featuring Maryland teenagers discussing how widespread teen drinking has become (even among "good kids") and the mother of a teenaged drinking/driving crash victim telling how her child's accident shattered her whole family's lives
- a take-home fact book on teenaged drinking/driving documenting the pervasiveness and seriousness of the

problem and suggesting effective approaches that parents may use to protect their children

- a parent workbook supporting several learning exercises (a self-test,



*A scene from the slide/tape show "While You Lay Sleeping."*

group discussions, and role-playing) designed to help parents come to grips with their own attitudes toward drinking and to explore and practice specific actions that can help reduce their children's chances of falling victim to an alcohol-related crash

Pilot testing of PAP revealed that the new program generated the same enthusiastic appreciation among parents and prospective group leaders as the TAT program had elicited earlier among its target audiences. More than 90 percent of all parents and teachers participating in the program during the tests rated it as either "helpful" or, more commonly, "very helpful."

This positive response has encouraged the Maryland Alcoholism Control Administration to cooperate with MIEMSS in undertaking an ambitious project—statewide implementation of PAP.

According to Mr. Clark, MIEMSS hopes to fuse the two programs, PAP and TAT, to form the nucleus of a comprehensive, community-wide program.

—Ken McPherson, National Public Services Research Institute

## MSP Enforce Safety Seat Law

Maryland law requires that any child under three years of age must be in a federally approved safety seat, and any child three or four years of age must be in an approved safety seat or safety belt. The Maryland State Police have enforced the law since it went into effect on January 1, 1984, in instances when either through direct observation, or when a car was stopped for another violation, or during the course of an accident investigation they found a child without the proper protection. According to 1st Lt. Raymond D. Cotton, commander of the State Police Traffic Program Planning Unit, troopers issued 2139 citations and 2500 warnings during 1984. State Police citations are up 30 percent in 1985, with 1556 citations and 1683 warnings having been issued through July.

Any person driving a class A (passenger) or class M (multipurpose) vehicle is responsible for properly buckling in the children in his vehicle. Children who are not able to use a car safety seat because of medical problems are excused from the law, with a written note

from a doctor. A driver will not be fined if the number of children riding in the car exceeds the number of safety belts, and all safety belts are being used.

All safety seats manufactured after July 1, 1981 are approved seats. They have passed a "crash" or "dynamic" test. The date of manufacture is stamped on the seat. Some car seats made before that date are also approved and safe. They will have the words "crash tested" or "dynamically tested" in the instructions.

The \$25 fine may be waived if it can be shown that the person charged with the violation has acquired a child safety seat prior to the hearing date. There are loaner programs available throughout the state, through Project KISS. Information is available at most public libraries.

Lt. Cotton, who is the current president of the Maryland Child Passenger Safety Association, explains, "This law is meant to be educational, not punitive. People should comply with the law not only because it is the law, but be-

*(Continued on page 6)*



## Region IV



*Units from ambulance, fire, and rescue departments (top), as well as the Maryland State Police Med-Evac helicopter (bottom), were displayed during the 20th anniversary of the Queen Anne's County Emergency Operations Center (EOC). During the celebration, the Region IV Office presented a plaque to Philip Hurlock, supervisor of the EOC.*

On September 28–29, Ocean City will host an EMS weekend. EMS, fire, fire marshal, police, and beach patrol representatives will be present, and there will be various displays by vendors and games for kids of all ages. There will also be a dinner and dance Saturday night, September 28, at North Side Park. All activities, with the exception of the dinner and dance, will take place in the area of the beach parking lot on the inlet.

For more information, contact David Collins, EMS, assistant supervisor for the Ocean City Volunteer Fire Department at 301/289-4340.

The Memorial Hospital at Easton, Inc., which has been instrumental in the initiation of ALS in Talbot County, is the newest ALS consultation center to be designated in Region IV. The efforts of Robert Hahn, MD (chief of emergency services), David Davis, MD and Chaz Schoenfeld, MD (ALS directors), and Marge Callahan, RN (EMS nurse liaison) must be singled out. Region IV is

pleased to add Memorial Hospital to our ALS consultation centers.

The Region IV Office, in cooperation with the Memorial Hospital at Easton, Inc., recently completed a successful physicians' base station course. Physicians participated from all three Region IV consultation centers—Union Hospital of Cecil County, Memorial Hospital at Easton, and Peninsula General Hospital Medical Center.

The Region IV EMS Advisory Council held its first council banquet, which included the installation of new officers. These include: Bill Bounds, chairman; Colleen Waring, RN, vice-chairman; and Clay Stamp, secretary. Special thanks and congratulations to John T. Bulkeley, MD, past chairman, for all his hard work and accomplishments. Dr. Bulkeley not only served the past two years as council chairman but, prior to that, was the Region IV medical director. The regional council hopes to make the banquet an annual event.

Students who attended the first CRT training program at the Memorial Hospital at Easton, Inc., were tested during the July State Board exam. All who took the exam passed. Chuck Barton of Ocean City was the course instructor.

The Easton Volunteer Fire Department went on-line August 13. This is the first ALS company in Talbot County and it is hoped that there will be many more to follow. Congratulations to the ALS students and the Easton Volunteer Fire Department.

On July 10, "Helicopter 6," which was dedicated July 1, received its first transport request (for a neonatal transport) from Dorchester General Hospital to Francis Scott Key Hospital in Baltimore. Nurse Carol Dean provided care for the infant during the transport. On July 11, the first "off-the-road" med-evac transport was completed from Federalsburg in Caroline County. The patient, who was trapped in the vehicle, was extricated by the Federalsburg Volunteer Fire Department and med-evaced to Peninsula General Hospital Medical Center.

Helicopter 6 can be reached by telephone: 822-3915 or through Talbot County Emergency Management Agency (822-2222), and through SYSCOM.

—Marc Bramble, John Barto  
301/822-1799

## Region II

### New Officers

Officers of the Frederick County Volunteer Fire & Rescue Association include Charles E. Smith (Brunswick Volunteer Rescue Squad, Inc.), president; Vaughn Zimmerman (Walkersville Community Ambulance Service), first vice-president; Robert Wilhide (Guardian Hose Company, Thurmont), second vice-president; Terry Shook (Thurmont Community Ambulance Service), secretary; John Droneburg (Uniteds), assistant secretary; Paul Burrier (Walkersville), treasurer; and Raymond Stull (Lewistown), assistant treasurer.

### ALS Designation

Smithsburg EMS Inc. was recently designated an ALS company by Region II's EMS Advisory Council. CRTs for the new company are Robert Foltz, Kathy Bingaman, Margaret Kline, Mac Hutto, Ron Miehl, and Park Punt.

—George Smith, 301/791-2366



# Using Child/Adult Defib Paddles

Since the implementation of the Maryland Medical Protocols for Cardiac Rescue Technicians and Emergency Medical Technician/Paramedics on July 1, 1985, several jurisdictions have asked whether they must purchase pediatric defibrillator paddles in order to comply with the defibrillation countershock protocol (appendix E). This question was considered in discussion with the Johns Hopkins pediatricians who advise us on pediatric matters.

Although pediatric paddles are ideal in situations requiring defibrillation of a pediatric patient, these situations are quite rare and, therefore, it is not essential to require all ALS units statewide to purchase pediatric paddles.

A brief review of pediatric physiology may help explain this further. Children rarely fibrillate. In the neonate, the response to hypoxia is bradycardia. In children above the neonatal age group, the response to hypoxia is a tachyarrhythmia which then reverts to a bradycardia in response to further hypoxia. It is very unusual in the prepubertal pediatric age group to see ventricular fibrillation. Therefore, it is reasonable, in the very rare situations in which a pediatric patient may fibrillate, to use adult paddles. Anterior/posterior chest placement of paddles may be utilized as long as there is not some contraindication to positioning the patient in this way. When prehospital care providers treat larger pediatric patients, standard paddle placement may be utilized as long as the paddles or conductive medium do not come in contact with each other and firm paddle pressure is utilized to prevent arcing.

To summarize, ventricular fibrillation in the pediatric age group is a very rare occurrence. In those rare situations in which it does occur, pediatric paddles should be utilized if available. However, the rare occurrence mitigates against requiring all units to purchase pediatric paddles, and adult paddles may be used as described above.

Another question which has been raised involves the maximum delivered energy for adult patients. The current medical protocols call for the initial countershocks/defibrillation to occur with 200–300 joules delivered energy, and subsequent countershocks/defibrillation to be at the maximum output of

the defibrillator but not to exceed 360 joules delivered energy. The problem is that some equipment currently in use in the field today does not contain settings that allow for 360 joules but rather reads at either 300 or 400 joules. Here the 400 joules delivered energy setting may be used.

This discussion responded to constructive questions of prehospital care providers who are closely studying the protocols in order to provide optimum patient care. By thoughtful dialogue, we can together continue toward this goal.

—Ameen Ramzy, MD  
State Medical Director, Field Program

## Paramedic of the Year Chosen

Donald A. Taylor, Baltimore City Fire Department's senior paramedic in terms of years served, has been named Paramedic of the Year by the Ladies Auxiliary of the Box 414 Association.

Since 1966, Mr. Taylor has been a crew member of Medic Unit 14, stationed at Glen Avenue and Cross Country Boulevard. Speaking about him, one of his supervisors stated, "In the Upper Park Heights community he has become a fixture symbolizing all the virtues of a conscientious civil servant. To his patients, he always displays a sympathetic, yet knowledgeable approach to their needs."

This year, in honoring Paramedic Taylor, the Ladies Auxiliary selected a medical technician with a long and distinguished career rather than singling out a crewman for one heroic or unusual deed.



Donald Taylor

## GBMC Designated As Neonatal Backup Center

"Due to an expanding need for bed space for critically ill neonates, the Greater Baltimore Medical Center (GBMC) has been designated as a secondary neonatal center within the Maryland system," states Ameen I. Ramzy, MD, state medical director for MIEMSS field program. "This designation follows a review of several months, in conjunction with the recommendations of the Maryland Regional Neonatal Program."

The Maryland Regional Neonatal Program, which encompasses the entire state, transported 650 neonates last year.

## Safety Seat Law

(Continued from page 4)  
cause it is safer for their children. We are working hard to have the current law expanded to protect older children as well. Ideally all motor vehicle occupants should wear safety belts." —Erna Segal

## Region III

### EMS Week

The main event during Region III's EMS Week activities will be an exhibit of EMS services provided by local jurisdictions. Scheduled for October 5 at Baltimore's Inner Harbor from noon to 6 pm, the Region III EMS Awareness Day will feature numerous displays and demonstrations centered in the area near the Science Center. Members of fire department, ambulance, or rescue associations from each county and Baltimore City will be on hand to explain equipment and various life-saving techniques. Spectators will also have a chance to ask questions of representatives from numerous health and EMS-related organizations who are planning to have educational exhibits as part of EMS Awareness Day.

### New Officers

New officers for Region III's EMS Advisory Council include: Michael Jachelski, chairman; Michael Armacost, vice-chairman; and Richard Freas, secretary.

—George Pelletier, John Donohue  
301/528-3997



## Treating the EMT Personality

EMS providers are strong during other people's crises. But they're human, too, and participating in stressful situations sometimes causes burnout or post-traumatic stress disorders (PTSD). George Everly, PhD, associate professor of psychology at Loyola College in Baltimore, spoke about treatment strategies for stressed emergency personnel at the Stress and Behavioral Emergencies Conference held recently at UMBC.

Depression is one of the most common symptoms of burnout and PTSD. According to Dr. Everly, the single, most powerful predictor of the outcome of treating depressed patients is not the level of depression, not how long they have been depressed, not education, not gender, not socioeconomic status, not experience in the field, but the basic personality style of the patient.

Success on the job is largely a function of the "fit" between the personality of the individual and the demands of the job. "I started out as an accountant," Dr. Everly recalls. "I realized almost immediately that it was the wrong profession for me. When I worked on a 14-column spread sheet and found I was two cents off, my reaction was, 'So what! That's really pretty good, isn't it?' When I was told 'We have to find those two cents—it has to balance,' my feeling was, 'I'll give you the two cents!' I didn't have the personality required for the job—it was a personality mismatch."

Dr. Everly and his colleagues in psychology questioned whether there is a personality profile that seems to underlie individuals who pursue certain occupations. In collaboration with Jeffrey T. Mitchell, PhD, assistant professor of emergency health services at UMBC, Dr. Everly gave a battery of tests to 70 medics to determine whether an occupational profile would emerge.

Preliminary data point to characteristics that recur significantly among EMS personnel, although not all in every person. According to the results of the personality scale testing, EMS providers tend to be loyal and dedicated to whatever they perceive to be a worthwhile cause. They have a greater sense of obligation than the average person; are action-oriented; and somewhat easily bored. They prefer structured as opposed to ambiguous situations (they have a low tolerance for ambiguity); like to be in control of the situation; and

prefer to be the center of attention, particularly in a crisis. They have a remarkably high degree of loyalty to a cause that often transcends personal goals or motives, and might be likely to sacrifice their welfare for that of others. They have a compelling need to do things right; when they can't, they get frustrated, and tend to say, "why bother?" They are logical. They tend to resent rules and bureaucracies that seem to interfere with their performance. They are prone to frustration and anger when a superior gives directions that seem illogical. They have a tendency to be their own worst enemies, hating "stupid" mistakes, looking back with 20/20 hindsight. They are somewhat harsh in their evaluations, mostly of themselves, with excessively high expectations for their own performance.

Medics are better than the average person in accepting constructive criticism. They have some difficulty expressing feelings. When feelings are ultimately expressed, they roll out in a cascade. These personality traits often affect the type of treatment that medics suffering burnout or PTSD need.

Because these medics are experiencing guilt, a loss of self-efficacy, and helplessness, therapy such as biofeedback, that tries to help them establish a sense of control, often works best.

Initially, medics suffering burnout or PTSD should be encouraged to express their feelings by talking, screaming, or crying—repressed feelings get in the way of healing. Once the feelings have been released, some degree of stabilization occurs within 48 to 72 hours or so. They should be reassured that what they went through is not a manifestation of the loss of manhood or womanhood, and they are not rotten professionals. They are having a predictable reaction, and it is a fairly common occurrence.

Education—helping people understand what they are going through and why—is effective in helping these medics overcome burnout. Providing a rationale to make sense of their feelings is like taking a weight off their shoulders. It is motivating for these medics to work with others in the field who have overcome similar feelings; it reduces doubt. And it should be explained that they are setting excessively high standards for themselves—no one is "Supermedic."

—Erna Segal

## Dr. Miltenberger

(Continued from page 3)

being a valuable and possibly life-saving function of the EMS system in Region I.

Presently, physicians at Cumberland Memorial Hospital provide initial medical consultation to field providers but control is turned over to the chosen receiving hospital if a physician at that hospital is available.

Settling the medical command issue paved the way for the most recent improvement in the region's EMS system—that is, Maryland State Police Med-Evac helicopter service.

Getting a Med-Evac helicopter would have been impossible without a medical command system, says Dr. Miltenberger. Once that system was in place, Region I was able to obtain a \$200,000 grant from the Maryland Department of Health and Mental Hygiene. Part of those funds were used to expand the local EMS communications system to permit Med-Evac crews to communicate with dispatchers and hospital personnel. Again it was necessary to establish dialogue between the providers and the hospitals to mesh the Med-Evac system with the prehospital triage protocols previously established. This has been accomplished satisfactorily and with minimal disagreements.

Region I EMS implementation has weathered many storms but has remained on a straight and steady course to high quality EMS care. Dr. Miltenberger deserves a lot of credit for his perseverance, says Dave Ramsey, the Region I EMS administrator.

But Dr. Miltenberger says he feels the same commitment to civic responsibility as do the prehospital care providers, who give generously of their time and energy in training and answering calls.

Looking back on his first 10 years of involvement with the Region I EMS system, Dr. Miltenberger says: "It's been a gratifying experience."

—Dick Grauel

### In Memoriam

Maryland EMS lost one of its great supporters when John Hicks died July 26. A member of the Arbutus Volunteer Fire Department for many years before he retired, Mr. Hicks was also active with the Red Cross. He inspired many EMS providers to work toward better patient care. His enthusiasm and concern will be missed.



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## Fast Response Needed for Anaphylaxis

"Persons with known allergy to bee or yellow jacket stings would be wise to carry an epinephrine kit when they might be exposed to those insects, so they can self-administer the injection immediately. Even with a fast response from the medic unit, it might arrive too late to save the person from severe anaphylactic shock," explained Patricia Epifanio, MS, RN, nurse coordinator at MIEMSS, at EMS Care '85 in June.

Anaphylactic shock is an immediate, violent, systemic allergic reaction to a sensitizing agent (antigen). On the first contact with the substance the body does not have a violent reaction, but it builds up antibodies to the antigen. On subsequent exposure, the antigens and antibodies combine, causing cell breakdown (degranulation) and the release of mediators such as histamines, SRS-A, bradykinin, and serotonin. These mediators rapidly produce respiratory distress and decreased cardiac output. If treatment does not reverse the shock process, decompensation and death will follow.

The signs of an allergic reaction—redness, itching, teary eyes, running nose, and stuffiness—occur, but in anaphylaxis there are also apprehension, edema of the neck and head, and bronchospasms. The airway closes and

it does no good to use an EOA, because the airway will close around the tube making it ineffective. The patient may require endotracheal intubation or even a surgical tracheostomy.

Among the most common causes of allergic reaction are insect stings, antibiotics, shellfish, eggs, and pollen. If a person is allergic to something he will be allergic to it in all forms and by all routes. (If one is allergic to the iodine in seafood, he must be wary of the iodine in diagnostic test injections.)

In an effort to save hospital costs, antibiotic therapy is now often given at home. Ms. Epifanio points out that for some types of antibiotic administration there should be epinephrine and a person skilled in CPR available, in case of an allergic reaction. As a health care provider, do not give injections to a neighbor; if anything goes wrong, you can be held liable.

According to Ms. Epifanio, "If you have to treat someone who might be in allergic reaction, you should ask whether he has allergies to shellfish, eggs, or antibiotics. Determine the presence and degree of the reaction. A mild reaction will have swelling and itching at the site; with a moderate reaction there will be hives and wheezing; and a severe reaction will present with respir-

atory distress, systolic blood pressure of below 80, poor perfusion, unconsciousness, and neck and facial edema.

"Oxygen is helpful. If the patient has moderate-to-severe respiratory distress, adrenalin is administered 1:1000—.3 cc subcutaneously." Ms. Epifanio also notes that prehospital care providers should put the patient on a cardiac monitor, watch the vital signs, and listen to the breath sounds. "Start an IV with Ringer's lactate, and establish communication. Know the new protocols. A MAST garment may be applied and inflated; with a decreased systolic blood pressure it may raise his peripheral resistance enough to be able to do an IV. Many people are lost because they can't get an airway fast enough—it is worth a try.

"Maintain a high index of suspicion about anaphylaxis. This is not like cardiac arrest, because there is no airway. CPR is ineffective without a good airway and adequate ventilation. The public needs education on this subject, because help may not come in time. And people with known allergies to insect stings should not wear perfume, hair spray, aftershave lotion, talcum powder, or brightly colored clothes that attract bees and yellow jackets."

—Erna Segal