

MIEMSS' EMERGENCY MEDICAL MILESTONES

- 1969:** The Center for the Study of Trauma (now the R Adams Cowley Shock Trauma Center) was officially opened.
- U. S. Department of Transportation funding was obtained for the first civilian air Med-Evac program in the United States.
- An immediate autopsy program was developed to allow researchers to study the effects of shock at the cellular and subcellular levels.
- The concept of specialty referral centers was born with the designation of the Hyperbaric Medicine Center at the Center for the Study of Trauma as the first such center in the Maryland EMS system.
- 1970:** The first Med-Evac helicopter transfer was made to the Shock Trauma Center in March.
- 1971:** The nation's first Tri-State EMS Council, involving Maryland, Pennsylvania, and West Virginia, was established.
- Maryland was one of the charter members of the newly formed American Trauma Society.
- 1972:** Standardized training for emergency medical technicians (EMT-A) and cardiac rescue technicians was established.
- The first 911 communications center in Maryland was opened in Charles County.
- 1973:** The first statewide EMS system in the United States was initiated by executive order by the governor of Maryland. The order created the Maryland Institute for Emergency Medicine (MIEM), formerly the Center for the Study of Trauma, and the Division of Emergency Medical Services (DEMS) within the Maryland Department of Health and Mental Hygiene.
- The Mid-Atlantic EMS Council was established to resolve common problems and develop a compatible six-state EMS system.

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Regional advisory councils were set up in each of the five EMS regions in Maryland to plan system improvements, coordinate operations, and conduct public education programs.

- 1975:** The first statewide EMS continuing education program for nurses was established.

The first emergency medical communication system in Maryland became operational in the Baltimore metropolitan area. The system originally consisted of the Emergency Medical Resources Center, which arranged ambulance transports, and the Systems Communication Center, which coordinated Med-Evac transports by Maryland State Police helicopters.

- 1976:** The first International EMS/Traumatology Symposium was sponsored by MIEM.

The first harbor disaster exercise in the United States was conducted in Baltimore City.

- 1977:** To ensure a continuum of care from the field to the trauma center, the Maryland Legislature amalgamated MIEM (the Shock Trauma Center) and DEMS (the state's lead EMS agency) into a unique entity named the Maryland Institute for Emergency Medical Services Systems (MIEMSS).

- 1978:** The concept of areawide trauma centers was established with the designation of three such centers.

The nation's first statewide EMS telecommunications system, incorporating electrocardiogram telemetry, was completed in March.

Medical control groups were established in all five Maryland EMS regions.

The adolescent Trauma Prevention Program was started to reduce the incidence of life-threatening injuries among teenagers.

- 1979:** The Emergency Medical Guide, developed by MIEMSS, appeared in the Baltimore Metropolitan Yellow Pages for the first time.

A voluntary ambulance inspection program was started.

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1980: A neonatal transport service was initiated to transfer infants to neonatal intensive care units.

The Emergency Health Services Program was started at the University of Maryland Baltimore County.

1981: The first aviation trauma technicians, who accompany patients on Maryland State Police Med-Evac transports, completed their training in trauma management.

The first psychiatric bed registry in the nation was started to expedite the proper placement of patients with psychiatric emergencies.

The Maryland Comprehensive Trauma Registry--the nation's first computerized registry of serious trauma patients--was established.

The Center for Living, a community-based program for trauma patients during the post-rehabilitation phase of recovery, was opened.

1982: A comprehensive rehabilitation program was started by MIEMSS at the Montebello Center for patients needing extended rehabilitative care following discharge from the Shock Trauma Center.

Machine-read ambulance runsheets were introduced in Maryland.

MIEMSS helped develop a civilian/military contingency hospital system in Baltimore to respond to overseas conflicts involving the United States.

1983: The National Study Center for Trauma and Emergency Medicine was established by MIEMSS.

A reciprocity agreement was signed by Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia, allowing prehospital care providers to cross state lines to render care.

A clinical trauma registry on the patients treated at the Shock Trauma Center became operational. This comprehensive database is used to analyze factors affecting patient morbidity and mortality.

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1984: The first head injury rehabilitation unit in Maryland devoted exclusively to the needs of head-injured patients was opened at the Montebello Rehabilitation Center.

A statewide EMS Disaster Planning Committee was organized.

A computerized Maryland Prehospital Provider Registry was implemented.

The Maryland Way: EMT-A Skills Manual was published, establishing a standard format for skills training and evaluation.

1985: A 24-hour Spinal Cord Injury Hotline was established to disseminate information about local and national programs and facilities for spinal-cord-injured patients.

An Eye Trauma Registry was established to provide optimum clinical management of patients with severe eye injuries and to gather data relating to the epidemiology and natural history of eye injuries.

Two additional levels of advanced life support--aviation trauma technician and emergency medical technician-paramedic--were approved by the Board of Medical Examiners of Maryland.

A statewide 911 emergency system of communication was implemented in July.

1986: MIEMSS coordinated the emergency medical services in Maryland, Virginia, and the District of Columbia in responding to a mock earthquake, which was part of a disaster drill conducted in Missouri by the National Disaster Medical System.

Statewide regulations on helicopter safety and communication went into effect.

1987: MIEMSS established an EMS Critical Incident Stress Debriefing Program for state personnel who work under extremely stressful conditions.

A new communications system, using a law enforcement radio channel, was installed to establish direct communication between the Systems Communications Center (SYSCOM) and every Maryland State Police Med-Evac helicopter in the state.

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1988: A statewide protocol was developed to ensure the appropriate palliative care of hospice patients needing emergency medical care.

1989: The R Adams Cowley Shock Trauma Center was opened.

MIEMSS participated in "Telemedicine Spacebridge," which used satellite communications to provide medical consultation to the Soviet Union for the survivors of the Armenian earthquake.

R Adams Cowley, M.D. resigned his post as director of the Shock Trauma Center to become the first director of the National Study Center for Trauma and Emergency Medical Services.

Maryland State Police Med-Evac helicopters started to be replaced with new, larger 365N-1 Dauphin 2 aircraft.

MIEMSS researchers started developing an expert system for the U.S. Navy to determine the severity of injury or illness of sailors aboard ships traveling under orders of radio silence. This system will help the ship's captain decide whether to break radio silence to ask for outside help.

MIEMSS started a three-year study, funded by the National Highway Traffic Safety Administration, to determine the medical consequences of car crashes with the goal of improving the safety features of motor vehicles.

1990: The first electronic flight-tracking system designed for Med-Evac and law enforcement helicopters was installed. It updates the location of every Maryland State Police Med-Evac helicopter every 30 seconds of flight.

*Suggested training
for a few
years*

MIEMSS "Firsts"

1987

o A new communications system using a law enforcement radio channel established direct contact from SYSCOM to every MSP med-evac helicopter around the state. (This radio channel is the basis of the flight-following and centralized helicopter dispatch systems developed later.)

1988

o A statewide Hospice/EMS Protocol was developed to aid in the appropriate palliative care of hospice patients who access the EMS system.

1989

o Transition to the new larger 365N-1 Dauphin 2 med-evac helicopters began early this year when the first new helicopter was dedicated on May 18. ✓

o R Adams Cowley, MD, resigned to become the first Director of the National Study Center for Trauma and EMS; James P.G. Flynn, MD, was appointed as acting director of MIEMSS. ✓

o MIEMSS was invited to participate in a humanitarian effort, "Telemedicine Spacebridge," which was organized with U.S. and Soviet cooperation to give medical consultation for survivors of the Armenian earthquake. Communications were transmitted via satellite by NASA. Other US medical centers involved were the Uniformed Services University of the Health Sciences, LDS Hospital in Utah, and the University of Texas Medical School at Houston. ✓

o Over a period of a few years, MIEMSS is developing an expert computerized system for the US Navy to determine the severity of injury or illness of a sailor in a ship traveling under orders of

radio silence. Based on comparisons with MIEMSS patients, a Navy pharmacist's mate will ascertain the treatment needed and give the ship's captain the information. This will enable the captain to make an informed decision about whether to break radio silence to ask for outside help.

o The National Highway Traffic Safety Administration (NHTSA) funded the first year of a 3-year study to determine the medical consequences of car crashes. It is hoped that the data learned will lead to USDOT regulations for improved safety features in the manufacture of motor vehicles. ✓

1990

o An electronic flight-following system shows the location of every MSP med-evac helicopter during every 30 seconds of flight; coordinates are recorded and available for search & rescue personnel if needed. This is the first system tracking EMS med-evac and law enforcement helicopters. ✓

o Using the flight-following system, centralized dispatch of helicopters has begun in Region III and Region V. The MSP duty officer at SYSCOM chooses the helicopter closest to the patient, regardless of where it is based, to provide the quickest response. The system is being expanded around the state.

o All nine of the new helicopters were in service by the end of 1990.