

D53T00
Maryland Institute for Emergency Medical Services Systems

Operating Budget Data

(\$ in Thousands)

	<u>FY 08</u> <u>Actual</u>	<u>FY 09</u> <u>Working</u>	<u>FY 10</u> <u>Allowance</u>	<u>FY 09-10</u> <u>Change</u>	<u>% Change</u> <u>Prior Year</u>
Special Fund	\$11,498	\$12,188	\$12,367	\$180	1.5%
Contingent & Back of Bill Reductions	0	0	-34	-34	
Adjusted Special Fund	\$11,498	\$12,188	\$12,333	\$146	1.2%
Federal Fund	100	100	100	0	
Adjusted Federal Fund	\$100	\$100	\$100	\$0	0.0%
Reimbursable Fund	955	733	772	39	5.3%
Adjusted Reimbursable Fund	\$955	\$733	\$771	\$39	5.3%
Adjusted Grand Total	\$12,553	\$13,020	\$13,205	\$184	1.4%

- The Governor's fiscal 2010 allowance for the Maryland Institute for Emergency Medical Services Systems (MIEMSS) increases by \$0.2 million, or 1.4%, over the fiscal 2009 working appropriation.
- The majority of the budget consists of special funds, primarily from the Maryland Emergency Medical Systems Operation Fund.

Personnel Data

	<u>FY 08</u> <u>Actual</u>	<u>FY 09</u> <u>Working</u>	<u>FY 10</u> <u>Allowance</u>	<u>FY 09-10</u> <u>Change</u>
Regular Positions	94.10	95.10	94.10	-1.00
Contractual FTEs	<u>7.10</u>	<u>7.20</u>	<u>6.20</u>	<u>-1.00</u>
Total Personnel	101.20	102.30	100.30	-2.00

Vacancy Data: Regular Positions

Turnover and Necessary Vacancies, Excluding New Positions	3.76	4.00%
Positions and Percentage Vacant as of 12/31/08	6.00	6.31%

Note: Numbers may not sum to total due to rounding.

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- The fiscal 2010 allowance includes a reduction to both regular and contractual employment due to reorganization of the agency. The savings associated with the abolished regular position will be used to fund an increase in contractual services for data management.
- As of December 31, 2008, there were 6.0 vacant positions within MIEMSS representing 6.31% of the total workforce.

Analysis in Brief

Major Trends

Maryland Trauma Care Exceeds the National Norm: Maryland has demonstrated consistent outcomes above the national norm as measured by the survivability rate of trauma care center admissions.

Emergency Department Overcrowding Is an Issue in Some Regions of the State: Hospitals in region III, consisting of Central Maryland, and region V, consisting of the Washington metropolitan area, experience high levels of emergency department demand and overcrowding.

Issues

Helicopter Fatality Prompts Review of Medevac Helicopter System: A fatal helicopter crash of a Maryland State Police helicopter, Trooper 2, in September 2008 prompted a comprehensive review of Maryland's Medevac helicopter system, including utilization rates, protocol for requesting helicopter transport, and whether or not to use private helicopters in place of Maryland State Police helicopters.

Recommended Actions

1. Concur with Governor's allowance.

Updates

All-terrain Vehicle Safety Task Force: The all-terrain (ATV) task force was created in the 2008 session to identify and study major issues related to ATV safety. The task force completed the work in December 2008 and submitted its findings to the Governor and the General Assembly. The report contained a number of recommendations for potential changes to Maryland law.

D53T00

Maryland Institute for Emergency Medical Services Systems

Operating Budget Analysis

Program Description

The Maryland Institute for Emergency Medical Services Systems (MIEMSS) was established as a State agency under legislation that became effective July 1, 1993. MIEMSS had been in existence for 20 years prior to that – first under the Department of Health and Mental Hygiene and then the University of Maryland, Baltimore.

Under the 1993 law, MIEMSS became a State agency under the direction of an Emergency Medical Services (EMS) Board appointed by, and directly responsible to, the Governor. The EMS Board is tasked with developing, adopting, and monitoring a statewide plan to ensure effective coordination and evaluation of emergency medical services. As structured, the EMS law established a system that encourages statewide participation and feedback through membership on the EMS Board and its advisory body, the State EMS Advisory Council. The EMS Board appoints the Executive Director of MIEMSS, who serves as the administrative head of the State's emergency medical services and of the operations of MIEMSS. Funding for MIEMSS comes primarily from the Maryland Emergency Medical System Operations Fund, created by the 1992 General Assembly. Support for the fund comes from a surcharge on motor vehicle registrations, which was increased from \$8 to \$11 by Chapter 33 of 2001.

MIEMSS' mission is to provide the resources, leadership, and oversight necessary for Maryland's EMS system to function optimally and to provide effective care to patients by reducing preventable deaths, disability, and discomfort. MIEMSS develops a Maryland EMS Plan that is periodically updated and that is designed to enable MIEMSS to fulfill this mission.

MIEMSS coordinates a statewide emergency medical services system that includes over 30,000 licensed or certified EMS providers and works to integrate the delivery of pre-hospital emergency care with the State's 48 hospital emergency departments, 9 adult and 2 pediatric trauma centers, as well as specialty referral centers, primary stroke centers, and perinatal centers. MIEMSS regulated the dispatch of 4,172 Medevac helicopter transports from accident scenes in fiscal 2008 – 3,932 by the Maryland State Police Medevac helicopter system, 187 by U.S. Park Police helicopters, 34 by Delaware State Police helicopters, and 19 by private carriers. In addition to the commercial air transport services, MIEMSS also regulates commercial ground ambulance services.

The Emergency Medical Resource Center (EMRC), responsible for coordinating medical consultation between emergency personnel at the scene and hospital physicians, handled just over 362,360 telephone and radio calls in fiscal 2007; the System Communications Center (SYSCOM), responsible for helicopter dispatch and monitoring of the transport of critically ill or injured patients by helicopter to area hospitals, handled almost 77,962 telephone and radio calls.

Operationally, the EMS system is divided into five regions:

- Region I: Allegany and Garrett counties;
- Region II: Frederick and Washington counties;
- Region III: Central Maryland, including Baltimore City;
- Region IV: the Eastern Shore; and
- Region V: Metropolitan Washington.

The MIEMSS mission addresses the need to:

- provide high quality medical care to individuals receiving emergency medical services; and
- maintain a well-functioning EMS system.

Performance Analysis: Managing for Results

MIEMSS collects a wide array of data concerning the State's EMS system. The Managing for Results measures reflect the various roles of MIEMSS:

- as promulgator of standards for EMS personnel and emergency departments with a measure monitoring compliance with those standards;
- as a facilitator/communications center for EMS services with measures about handling of calls for assistance by EMRC/SYSCOM for appropriate transportation of seriously injured patients; and
- as the leader of the EMS system with outcome measure related to overall system performance.

The first goal of MIEMSS is to provide high quality, systematic medical care to individuals receiving emergency medical services. The agency measures the achievement of this goal by maintaining the system's trauma patient care performance above the national norm and monitoring the survivability rate of patients that are admitted to a trauma center, as shown in **Exhibit 1**.

Maryland's nine adult- and two pediatric-designated trauma centers maintain electronic registry data on all patients transported for trauma care services. Patients are coded according to a Trauma and Injury Severity Score (TRISS). TRISS data is used to run reports to show mortality/morbidity among trauma center patients. These reports are reviewed by both the hospitals and MIEMSS to monitor trends in outcomes and to identify any deviations. Notable deviations are flagged and reviewed with the respective trauma center.

Exhibit 1
Program Measurement Data
Maryland Institute for Emergency Medical Services Systems
Fiscal 2004-2008

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Maryland Trauma Patient Care Exceeds National Norm	Yes	Yes	Yes	Yes	Yes
Survivability Rate for Trauma Center Admissions (%)	94.7%	94.3%	96.0%	94.9%	95.3%

Source: Maryland Institute for Emergency Medical Services Systems

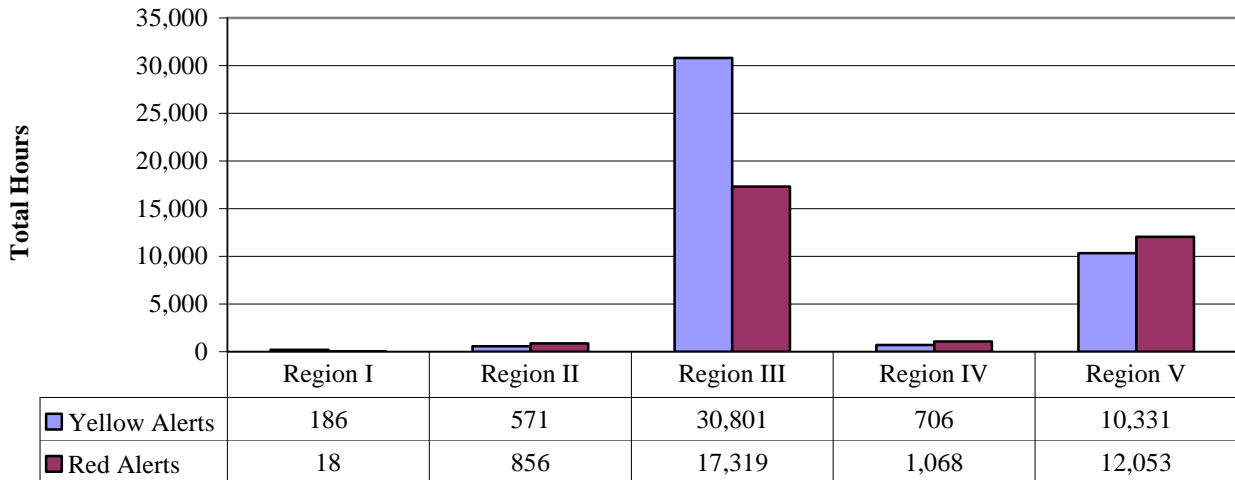
Emergency Department Overcrowding

The County Hospital Alert Tracking System (CHATS) is a real-time computerized monitoring system of emergency department status throughout Maryland. Hospital emergency departments that are temporarily unable to accept ambulance-transported patients due to overcrowding or hospital overload are identified so that ambulances can be diverted to other, less crowded emergency department facilities.

MIEMSS utilizes CHATS to determine hospital bed availability, and while participation is not mandatory, the reporting system aids MIEMSS in diverting ambulances to hospitals with adequate capacity. MIEMSS tracks “yellow” alerts when an emergency room requests to receive absolutely no patients in need of urgent medical care by ambulance with the exception of certain priority cases and “red” alerts when a hospital has no inpatient electrocardiogram monitored beds available.

Exhibit 2 shows the total number of hours of yellow and red alerts across the five regions of Maryland. Region III and Region V show considerably higher overcrowding outcomes.

**Exhibit 2
Yellow and Red Alerts
Fiscal 2008**



Region I: Garrett and Allegany Counties

Region II: Washington and Frederick Counties

Region III: Baltimore City and Carroll, Harford, Baltimore, Howard, and Anne Arundel Counties

Region IV: Cecil, Kent, Queen Anne’s, Caroline, Talbot, Dorchester, Wicomico, Somerset, and Worcester Counties

Region V: Montgomery, Prince George’s, Charles, Calvert, St. Mary’s Counties

Source: Maryland Institute for Emergency Medical Services Systems

Communications Center

Another goal of the agency is to maintain a well-functioning emergency medical services system. A key component of the operational coordination of MIEMSS is the statewide EMS communications system. From the communications center in Baltimore, Medevac helicopters and ground ambulance services are dispatched and hospitals are alerted to incoming patients. Reliable and quality radio communications from the scene of an accident to the nearest appropriate hospital facility is essential to quality medical direction and the coordination of resources to ensure a positive outcome for the patient.

MIEMSS uses SYSCOM and EMRC to link EMS providers in the field with hospital-based consultation. Consultation facilities and multiple hospitals can be patched into a single line of communication. The EMS communication system ensures a coordinated response to major incidents or catastrophic events. In fiscal 2008, EMS radio communications were successfully completed 98% of the time, which is consistent with level experienced over the past three years. The percent is based upon the number of EMS responses that were discernible and did not require repeated transmission beyond normal operations. Preventive maintenance to the SYSCOM and EMRC communication system is the main reason for the high reliability rate.

Fiscal 2009 Actions

Impact of Cost Containment

Cost containment actions taken by the Board of Public Works in June 2008 reduced the special fund appropriation by \$46,737 for personnel expenses.

Proposed Budget

The fiscal 2010 allowance as proposed by the Governor increases by \$0.2 million over the fiscal 2009 working appropriation, as shown in **Exhibit 3**. Special fund support increases by \$145,618 and reimbursable fund support increases by \$38,669 over the working appropriation.

Personnel

Personnel expenses decrease by \$71,545 compared to the fiscal 2009 working appropriation. Employee and retiree health insurance is the largest increase in the budget (\$0.2 million). Other increases include employee retirement (\$70,796) and overtime costs (\$30,000). These costs are offset by savings in the budget due to elimination of Other Post Employment Benefit Funding liability (\$0.2 million), decreased salary (\$0.1 million), an abolished position (\$70,531), and elimination of the deferred compensation match for state employees (\$34,522).

Operating

Operating costs for MIEMSS increases by \$0.1 million in the fiscal 2010 allowance. The agency contracts with the University of Maryland, Baltimore for building maintenance, electric costs, cleaning, and other building-related services. Expenditures for this contract increase by \$130,000 in fiscal 2010, primarily due to increased electricity costs. Also, MIEMSS plans to upgrade the software program that tracks certification and licensure status of all ambulance providers in Maryland, resulting in an \$85,000 increase. The software tracks continuing education credits and ambulance company affiliations as well as expiration dates of the providers' certifications.

Other increases include upgrading the agency's data management capabilities (\$75,000); increased electricity and utility costs at the various tower sites throughout the State (\$39,923); contractual physicians and nurses used to designate hospitals as trauma or other specialties (\$38,000); and ongoing vehicle replacement and associated gas and oil costs (\$18,630).

MIEMSS entered into a contract with SMART Associates in the fiscal 2009 interim to study the helicopter utilization rates in Maryland and to recommend any changes to the current operating procedure. The contract was for \$210,710 and represents a decrease in the fiscal 2010 allowance as the contract was a one-time expenditure. The agency also lost a contractual position, resulting in a \$37,596 decrease to the budget. The individual in the contractual position will be converted to a regular employee and will fill a currently vacant position.

Exhibit 3
Proposed Budget
Maryland Institute for Emergency Medical Services Systems
(\$ in Thousands)

How Much It Grows:	Special Fund	Federal Fund	Reimb. Fund	Total
2009 Working Appropriation	\$12,188	\$100	\$733	\$13,020
2010 Allowance	<u>12,367</u>	<u>100</u>	<u>772</u>	<u>13,239</u>
Amount Change	\$180	\$0	\$39	\$219
Percent Change	1.5%		5.3%	1.7%
Contingent Reductions	-\$34	\$0	\$0	-\$35
Adjusted Change	\$146	\$0	\$39	\$184
Adjusted Percent Change	1.2%	0.0%	5.3%	1.4%
Where It Goes:				
Personnel Expenses				-\$72
Employee and retiree health insurance				\$184
Employee retirement.....				71
Overtime				30
Tuition waiver.....				8
Other fringe benefits				5
Other Post Employment Benefits funding				-173
Regular earnings				-91
Abolished position (1.0)				-71
Elimination of deferred compensation.....				-35
Operations				\$145
Building maintenance performed by University of Maryland, Baltimore				130
Software upgrade.....				85
Increase data management capabilities.....				75
Electricity and utility expenses.....				40
Contractual physicians and nurses that perform hospital designations for trauma centers and specialty centers.....				38
Ongoing motor vehicle replacement.....				19
Other				7
Helicopter utilization consultant contracted in fiscal 2009 – SMART Associates.....				-211
Loss of contractual position.....				-38
Grants				\$111
Grant to University of Maryland Medical System.....				200
Educational grants				-89
Total				\$184

Note: Numbers may not sum to total due to rounding.

Grants

MIEMSS disburses a variety of grants for training, continuing education, and equipment purchases for local jurisdictions. In fiscal 2010, MIEMSS will disburse a grant to the University of Maryland Medical System (UMMS) in the amount of \$200,000 to support research and educational program costs incurred by the Shock Trauma Center. The grant was previously disbursed directly to UMMS but now is budgeted through MIEMSS; this is the same amount as was disbursed in fiscal 2009.

Issues

1. Helicopter Fatality Prompts Review of Medevac Helicopter System

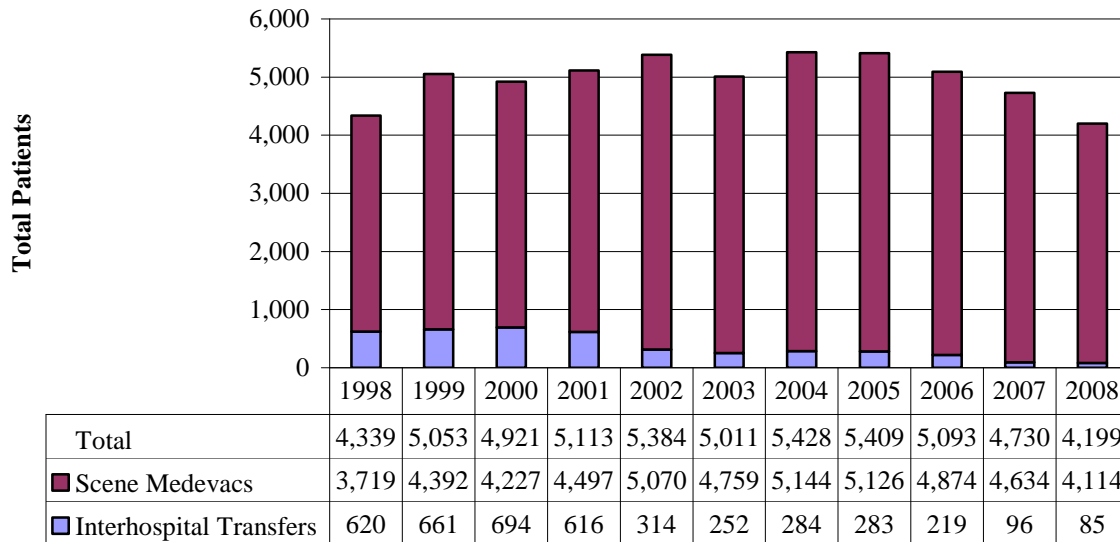
A fatal helicopter crash of Maryland State Police (MSP) helicopter, Trooper 2, in September 2008 prompted a comprehensive review of Maryland's Medevac helicopter system, including utilization rates, current protocol for requesting helicopter transport, and whether or not to use private helicopters in place of MSP helicopters. Prior to the crash of Trooper 2, the MSP Aviation Command had not had a fatal accident in 22 years.

MIEMSS relies primarily on MSP Aviation division helicopters to transport victims from accident scenes. In fiscal 2008, MSP flew 94% of all Medevac missions from accidents scenes. U.S. Park Police, Delaware State Police, and Pennsylvania State Police are also used as part of the public transportation system for Maryland victims near the Washington DC metro area, Western Maryland, and Eastern Shore of Maryland. In a small number of cases, private air ambulance services are used to back up the public fleet.

Exhibit 4 shows the total number of Medevac transports conducted by MSP Aviation Command only between fiscal 1998 and 2008. As the graph indicates, interhospital transports make up only a small percentage of the total flights taken by MSP. The vast majority of trips taken originate from the scene of an accident. The total number of transports by MSP dipped below 5,000 in fiscal 2007 and 2008, explained in part by a 60% drop in interhospital transports since fiscal 2006.

EMS providers on the scene of an accident follow strict protocol when requesting a Medevac transport. According to the Maryland EMS triage protocol, patients with mechanism injuries only and who are within a 30-minute drive time of the trauma center shall go by ground unless there are extenuating circumstances. An air transport is requested only when it is quicker and of clinical benefit.

**Exhibit 4
Transport by Maryland State Police Aviation Command
Fiscal 1998-2008**



Source: Maryland Institute for Emergency Medical Services Systems

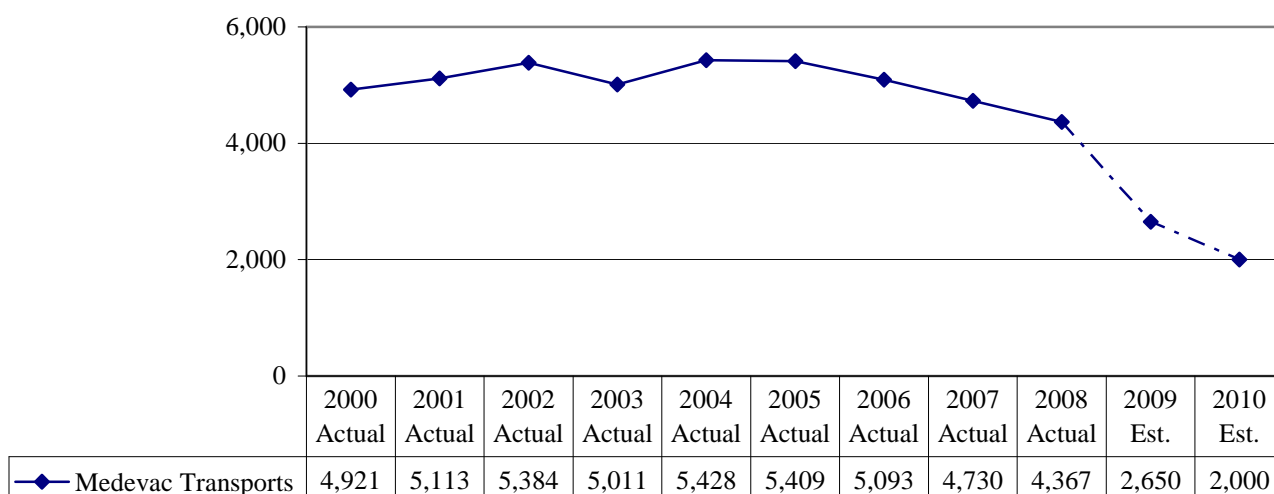
Protocol Change for Trauma Scene Medevac

In the aftermath of the crash of Trooper 2, the Maryland Medical Protocols for EMS Providers were modified to require field providers to consult with personnel at the receiving trauma center for Category “C” and “D” patients before a flight is requested. Patients with Category “C” or “D” injuries may not be visibly injured, but due to the nature of the accident, internal injuries may be present. This change was made to give EMS providers working under difficult field conditions the opportunity to review with medical personnel the patient's condition and to discuss the most appropriate transport mode and destination, given the patient's condition.

The requirement for medical consultation prior to helicopter dispatch for Category “C” and Category “D” patients is being implemented to provide an additional resource to EMS personnel responding to an incident. The medical consultation will allow EMS providers and first responders to review the indications for and potential benefits of helicopter transport with medical professionals at the receiving trauma center prior to dispatch of a helicopter to the scene.

Exhibit 5 shows the change in helicopter utilization following the protocol change. As the exhibit shows, there has been a steep decline in the number of Medevac transports requested since the protocol change. However, it is unclear at this time whether the trend will continue. The frequency of accidents increases as the weather improves. Because the protocols were instituted at the beginning of the winter season, it is unclear whether the drop in requests is due only to the protocol change or a combination of the protocol change and seasonal change.

Exhibit 5
Medevac Transports Before and After Protocol Change
Fiscal 2000-2010



Source: Maryland Institute for Emergency Medical Services Systems

The agency should comment on the long-term outlook of flight requests and missions given the change in EMS protocol. The agency should also provide an opinion as to whether the number of flights taken between fiscal 2000 and 2008 seems appropriate and if it expects the number of flights to rebound in fiscal 2009 and 2010 to prior levels.

Panel Reviews Maryland Medevac System

In November 2008, a panel of national experts convened to review and make recommendations regarding Maryland’s emergency transport protocol in light of the September crash. The panel declared a Helicopter Emergency Medical Services (HEMS) system an essential component of a contemporary EMS system as it improves outcomes in a high risk population of trauma patients. The focus of HEMS programs nationally has evolved from an emphasis on rapid transportation to a shared emphasis on rapid transportation and the early delivery of critical care. The panel also cited the need to over-triage trauma patients in order to minimize patient morbidity and mortality.

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At the conclusion of the meeting, the panel announced its findings and several recommendations.

Findings

- Maryland's publicly funded trauma and HEMS system is nationally recognized model that integrates all of the components of the system from first responder to tertiary care.
- Survival outcomes for trauma patients in Maryland are at or above national norms.
- MSP Aviation Command has an established safety record and has been recognized nationally, but improvements are necessary to continue its leadership role in the HEMS system.
- The role of the SYSCOM communications center is unique and a national model. The role of SYSCOM should be strengthened as Maryland's trauma and EMS system evolve.
- Field trauma triage protocols are consistent with national guidelines.
- Current utilization review of compliance with triage guidelines and HEMS transport decisions appears to be occurring primarily at the local medical director's level; however, the degree to which utilization review is occurring is uncertain. Variability in compliance with triage guidelines may account for some over-triage and use of HEMS for non-critical patient transport.
- A comparison of the rates of 24-hour patient discharge in Maryland with that of other regions in the United State suggests that a level of over-triage is occurring that exceeds that of comparable systems.

Recommendations

- The EMS Board should establish a multidisciplinary task force to determine the optimal number and distribution of Medevac helicopters based on population needs, geography and current location, and capabilities of existing hospitals.
- MSP Aviation Command should become certified by the Commission for the Accreditation of Medical Transport Systems (CAMTS) to ensure that the Maryland HEMS program maintains processes and procedures consistent with national standards.
- MSP Aviation Command and MIEMSS operations should be conducted under Part 135 of the Federal Aviation Regulations, including Federal Aviation Administration's (FAA) Air Ambulance Operations Specifications.

- MIEMSS should perform rigorous and regular utilization review on pre-hospital transport to ensure compliance with triage process.

While Maryland's EMS and HEMS systems are national models, continuing improvements are necessary to ensure ongoing patient safety and appropriate use of helicopter resources. One of the recommendations made by the panel requires MSP Aviation Command to operate in accordance with Part 135 of the FAA regulations. The FAA and the National Transportation Safety Board have recommended the use of centralized helicopter dispatch centers. This means that personnel need to be appropriately trained and have a level of knowledge and skill to dispatch helicopters safely and effectively; however, it is not currently a requirement for Part 135.

To be certified under Part 135, MSP Aviation Command would have to add additional operations and maintenance staff, including a maintenance technician at each of the four regions of the Command, and increase the operational, training, and maintenance recordkeeping. MSP Aviation Command recently received approval from the EMS Board to enact the changes necessary to be in compliance with Part 135.

In order to become CAMTS certified, MSP Aviation Command must operate in accordance with Part 135 and have two medical care providers on each helicopter mission. Current policy allows for only one medical care provider per patient aboard the helicopter.

While MIEMSS already operates in compliance with many of the requirements, in order for the MSP Aviation Command to be CAMTS certified, the SYSCOM operators will need to receive certified flight communications training. MSP's Duty Officer, who is stationed in SYSCOM and dispatches the helicopters, will also be trained at the same time.

The helicopter deployment study recommended by the panel is being conducted by SMART Associates to review mission data and response time. The study will also analyze the number and distribution of helicopters and bases throughout Maryland.

The agency should comment on the steps taken by MIEMSS to incorporate panel recommendations, particularly as it pertains to communications training, so that MIEMSS can support MSP Aviation Command.

Privatization

Although the majority of Medevac transports are conducted by publicly funded helicopters, Maryland does rely on commercial helicopter services to supplement the public fleet. Currently, three private commercial helicopter services have entered into a memorandum of understanding with the State for the commercial service to serve as back-up to MSP for scene response to a severely injured patient if MSP response is likely to be greater than 25 minutes. The three services are MedSTAR, PHI and StatMedevac. In the larger EMS system, the major role of the private carriers is in the interfacility transport between hospitals. MIEMSS does not coordinate the interfacility transfers conducted by private carriers; MIEMSS requires that a patient care report be completed for each patient who is transported by air ambulance between hospitals.

Exhibit 6 shows the distribution of flights taken in fiscal 2008 by carrier. As Exhibit 6 demonstrates, commercial helicopter services account for less than 1% of the total scene transports. Patients that are flown by private carriers are billed for their transportation, whereas patients flown by public carrier are not billed.

Exhibit 6
Medevac Scene Transports by Carrier
Fiscal 2008

<u>Scene Medevacs</u>	<u>Number</u>
MSP Scene Missions	3,932
MSP Scene Patients	4,114
USPP Scene Missions	187
USPP Scene Patients	200
DSP Scene Missions	34
DSP Scene Patients	34
Private Company Scene Missions	19
Private Company Scene Patients	19
Total Missions	4,172
Total Patients	4,367

DSP: Delaware State Police
MSP: Maryland State Police
USPP: U.S. Park Police

Source: Maryland Institute for Emergency Medical Services Systems

Debate is currently underway as to whether to switch from a system that relies on MSP Aviation Command to conduct scene transports to one that utilizes private carriers. Issues of safety and cost effectiveness are at the heart of the debate. The Speaker of the House convened a special workgroup, the House EMS Workgroup, to study this issue in the 2009 session.

Maryland is also in the process of replacing the MSP helicopter fleet. The current plan calls for the purchase of eight Dauphin helicopters to replace MSP's aging fleet between fiscal 2010 and 2014. The 2010 capital budget includes \$40.0 million for the purchase two new Dauphin helicopters which will begin the replacement process. A full discussion of the replacement of MSP helicopters will be undertaken during the analysis of the capital budget submitted for MSP.

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The results of the study by SMART Associates on utilization trends and Medevac needs, the final recommendations of the expert panel convened in November 2008, and the findings of the House EMS Workgroup may inform the General Assembly as to the appropriate schedule to replace the MSP helicopters.

Additionally, bills have been introduced in the 2009 session that address Medevac safety issues, replacement of the current fleet with private helicopters, and reform of the EMS system.

The agency should comment on the possibility of privatizing Maryland’s helicopter emergency services system. The agency should discuss the pros and cons of the current system, compared to a system that relies on private providers.

Recommended Actions

1. Concur with Governor's allowance.

Updates

1. All-terrain Vehicle Safety Task Force

The task force was charged with developing a consensus approach to reduce risks associated with use of all-terrain vehicles (ATVs) including (1) implementing registration requirements to track the use of ATVs and disseminate safety information; (2) requiring ATV owners and operators to meet certain safety requirements; (3) broadening current regulation of ATVs beyond publicly owned land; (4) imposing age limits on the use of ATVs; (5) improving data collection on ATV-related incidents; and (6) increasing public awareness on the risks associated with ATVs.

The task force met four times beginning in June 2008 and produced a dual interim and final report with the following recommendations:

- **Definition of ATV:** There should be a uniform definition of “All-terrain Vehicle” set forth in statute. The task force recommended that the definition include a motorized off-highway vehicle with three or four low-pressure tires, having a seat designed to be straddled by an operator and no more than one passenger.
- **Titling:** All newly purchased ATVs should be titled through the Electronic Registration and Titling system.
- **Training:** The completion of an ATV safety training program should be required for all operators of ATVs under the age of 18. A safety training program should be recommended but not required for operators over the age of 18. Effective July 1, 2010, a safety training program should be required for all new ATV operators, regardless of age. The safety training program should meet or exceed the course content provided by the ATV Safety Institute.
- **Age Restrictions:** Use of an ATV as an operator or passenger should be prohibited for anyone under the age of 6. Operation of an ATV by an individual between the ages of 6 and 16 should be age and size appropriate.
- **Protective Equipment:** An approved safety helmet and eye protection should be required for both the ATV operator and passenger. The task force suggested that additional safety gear, including long pants, gloves, and boots be recommended for operators and passengers, but not required.
- **Passengers:** A passenger should be prohibited from riding on an ATV unless the ATV has been expressly identified by the manufacturer for use by an operator and one passenger.
- **Applicability of ATV Safety Requirements:** The task force recommends that the safety requirements be applicable to operation of an ATV throughout the State, including privately owned property.

- **Operation:** The operation of ATVs should continue to be prohibited on roads and highways, except to cross a road or highway at a 90 degree angle. The crossing of any interstate or limited access highway shall not be permitted.
- **Public Education:** The task force recommends that a portion of any fees associated with ATV titling should be directed to increase public education and to maintain public areas for the safe use of ATVs.

Because the report satisfies the interim and final reporting requirements, the task force has deemed its work complete and will meet again only if needed to review pending legislation in the 2009 session.

Proposed Legislation in the 2009 Session

Two bills have been proposed during the 2009 session that deal directly with safety standards for all-terrain vehicles. Senate Bill 547/House Bill 1169 prohibits an individual from operating or riding on an ATV unless the individual is wearing protective headgear and an eye protective device that meet specified standards. Senate Bill 548/House Bill 817 requires the EMS Board to establish criteria for ATV safety programs and approve qualifying programs; prohibits individuals under the age of 6 to ride or operate an ATV and prohibits individuals under 12 from operating ATVs with certain engine sizes; and prohibits specified individuals from operating ATVs unless specified requirements related to ATV safety training are met.

Current and Prior Year Budgets

Current and Prior Year Budgets Maryland Institute for Emergency Medical Services Systems (\$ in Thousands)

Fiscal 2008	<u>General Fund</u>	<u>Special Fund</u>	<u>Federal Fund</u>	<u>Reimb. Fund</u>	<u>Total</u>
Legislative Appropriation	\$0	\$11,184	\$100	\$692	\$11,976
Deficiency Appropriation	0	0	0	0	0
Budget Amendments	0	556	0	283	839
Cost Containment	0	0	0	0	0
Reversions and Cancellations	0	-242	0	-20	-262
Actual Expenditures	\$0	\$11,498	\$100	\$955	\$12,553
Fiscal 2009					
Legislative Appropriation	\$0	\$11,766	\$100	\$733	\$12,599
Cost Containment	0	-47	0	0	-47
Budget Amendments	0	468	0	0	468
Working Appropriation	\$0	\$12,188	\$100	\$733	\$13,020

Note: Numbers may not sum to total due to rounding.

Fiscal 2008

In fiscal 2008, the budget for MIEMSS closed at \$12.6 million, an increase of \$0.6 million over the original legislative appropriation.

According to the budget books, the special fund appropriation increased by \$0.3 million during fiscal 2008. Budget amendments increased the budget for a cost-of-living adjustment (\$121,830); to begin the procurement process for and replacement of the Medevac fleet (\$48,800); to reflect additional funds collected for licensing, inspection fees, and the EMS Providers Program (\$77,500); and to reflect a grant received from the American Heart Association, Inc. in recognition of MIEMSS initiative to designate primary stroke centers (\$25,000).

Although the budget books indicate \$0.6 million in total budget amendments to the special fund appropriation, one amendment for Voice over Internet Protocol (VoIP) infrastructure (\$282,900) was cancelled and reclassified as a reimbursable fund budget amendment. However, the full amount of the budget amendment was not removed from the special fund appropriation. Therefore, the \$242,034 in cancelled special funds offsets the error. An additional \$40,866 had to be cancelled after the books were closed on fiscal 2008.

Reimbursable fund appropriation increased due to a budget amendment expanding the VoIP infrastructure (\$282,900). The funds were attained from the Maryland Emergency Management Agency. Subsequently, \$19,838 of that appropriation was cancelled due to a lower contract amount.

Fiscal 2009

The budget for MIEMSS has increased by \$0.4 million of special funds since the fiscal 2009 legislative appropriation. The major changes in the budget include \$0.5 million of budget amendments for a consulting contract for SMART Associates on the helicopter procurement plan (\$210,710); the Widows and Orphans Fund, administered by the Maryland State Fireman's Association (\$127,000); the fiscal 2009 cost-of-living adjustment (\$126,591); and an annual salary review adjustment (\$3,984).

Cost containment actions taken by the Board of Public Works in June 2008 reduced the special appropriation by \$46,737 for personnel expenses.

Audit Findings

Audit Period for Last Audit:	November 8, 2005 – June 1, 2008
Issue Date:	November 2008
Number of Findings:	4
Number of Repeat Findings:	4
% of Repeat Findings:	100%
Rating: (if applicable)	n/a

Finding 1: MIEMSS lacked effective controls over ambulance licensing fee collections.

Finding 2: MIEMSS did not adhere to State law and related budgetary requirements applicable to certain special funds.

Finding 3: Proper internal controls were not established over purchasing and disbursement transactions.

Finding 4: Adequate controls and accountability were not maintained over equipment.

*Bold denotes item repeated in full or part from preceding audit report.

**Object/Fund Difference Report
Maryland Institute Emergency Medical Services Systems**

<u>Object/Fund</u>	<u>FY08 Actual</u>	<u>FY09 Working Appropriation</u>	<u>FY10 Allowance</u>	<u>FY09 - FY10 Amount Change</u>	<u>Percent Change</u>
Positions					
01 Regular	94.10	95.10	94.10	-1.00	-1.1%
02 Contractual	7.10	7.20	6.20	-1.00	-13.9%
Total Positions	101.20	102.30	100.30	-2.00	-2.0%
Objects					
01 Salaries and Wages	\$ 7,409,883	\$ 7,798,038	\$ 7,761,369	-\$ 36,669	-0.5%
02 Technical and Spec. Fees	337,614	296,069	294,108	-1,961	-0.7%
03 Communication	1,200,972	1,479,609	1,488,087	8,478	0.6%
04 Travel	107,474	97,350	100,850	3,500	3.6%
06 Fuel and Utilities	123,467	91,277	131,000	39,723	43.5%
07 Motor Vehicles	232,119	200,728	204,495	3,767	1.9%
08 Contractual Services	1,588,831	1,312,610	1,397,187	84,577	6.4%
09 Supplies and Materials	142,529	133,600	136,060	2,460	1.8%
10 Equipment – Replacement	54,690	35,800	58,500	22,700	63.4%
11 Equipment – Additional	5,846	105,500	86,100	-19,400	-18.4%
12 Grants, Subsidies, and Contributions	1,264,047	1,392,000	1,502,694	110,694	8.0%
13 Fixed Charges	85,633	77,679	78,639	960	1.2%
Total Objects	\$ 12,553,105	\$ 13,020,260	\$ 13,239,089	\$ 218,829	1.7%
Funds					
03 Special Fund	\$ 11,498,443	\$ 12,187,540	\$ 12,367,317	\$ 179,777	1.5%
05 Federal Fund	100,000	100,000	100,000	0	0%
09 Reimbursable Fund	954,662	732,720	771,772	39,052	5.3%
Total Funds	\$ 12,553,105	\$ 13,020,260	\$ 13,239,089	\$ 218,829	1.7%

Note: The fiscal 2009 appropriation does not include deficiencies. The fiscal 2010 allowance does not include contingent reductions.

Fiscal Summary
Maryland Institute Emergency Medical Services Systems

<u>Program/Unit</u>	<u>FY08 Actual</u>	<u>FY09 Wrk Approp</u>	<u>FY10 Allowance</u>	<u>Change</u>	<u>FY09 - FY10 % Change</u>
01 General Administration	\$ 12,553,105	\$ 13,020,260	\$ 13,239,089	\$ 218,829	1.7%
Total Expenditures	\$ 12,553,105	\$ 13,020,260	\$ 13,239,089	\$ 218,829	1.7%
Special Fund	\$ 11,498,443	\$ 12,187,540	\$ 12,367,317	\$ 179,777	1.5%
Federal Fund	100,000	100,000	100,000	0	0%
Total Appropriations	\$ 11,598,443	\$ 12,287,540	\$ 12,467,317	\$ 179,777	1.5%
Reimbursable Fund	\$ 954,662	\$ 732,720	\$ 771,772	\$ 39,052	5.3%
Total Funds	\$ 12,553,105	\$ 13,020,260	\$ 13,239,089	\$ 218,829	1.7%

Note: The fiscal 2009 appropriation does not include deficiencies. The fiscal 2010 allowance does not include contingent reductions.