

TRAUMA SYSTEM/INCREASING EMS CAPABILITIES



The mission of the Georgia Office of EMS and Trauma is to encourage, foster, and promote the continued development of an optimal system of emergency medical and trauma care which provides the best possible patient outcome. To accomplish its mission, the Georgia Office of EMS and Trauma utilizes ten regional EMS offices to provide statewide coordination and leadership for the planning, development, and implementation of Georgia's prehospital care system.

The Georgia Office of EMS and Trauma responsibilities include:

- The development of regional zoning plans for the distribution of requests for emergency ambulance service received through public safety answering points;
- The development and review of statewide standards for prehospital EMS and trauma center designations; and
- The designation and re-designation of trauma centers to ensure compliance with the minimum standards established by the American College of Surgeons' Committee on Trauma.

The Georgia Office of Emergency Medical Services and Trauma licenses 359 service providers and with 2,981 licensed aircraft/vehicles:

- Air ambulance services – 4 services with 28 aircraft.
- Ground ambulance services – 254 services with 2,131 ambulances.
- Medical first responder services – 93 services with 807 response vehicles.
- Neonatal ambulance services – 8 services with 15 specialty care ambulances.

Additionally, the Georgia Office of EMS and Trauma has 18,113 active licensed medics, with 1,000-2,000 new medics licensed every year.

The Georgia Office of EMS and Trauma also secures and administers the on-going funding needed to collect and aggregate Georgia's EMS and trauma registry data. In support of its mission and responsibilities, Georgia Office of EMS and Trauma has implemented the Georgia Emergency Medical Services Information System (GEMSIS). <http://dph.georgia.gov/EMS>

Georgia Emergency Medical Services Information System

GEMSIS, Georgia's statewide Emergency Medical Services data system, it is an electronic system that provides timely, accurate and efficient data from the EMS patient care reports. The goal of GEMSIS is to develop an effective and efficient statewide infrastructure, data collection and reporting, evaluation and quality improvement initiative that focus on Emergency Medical Services as an integrated component of the overall healthcare system. EMS providers can enter their Patient Care Reports (PCR) directly into the database or transmit aggregated PCR data files online into the state GEMSIS database.

Emergency Medical Services for Children is also a specific consideration; GEMSIS provides the methodological and data foundations needed to advance this important area. 2006 begins the implementation of new web-based GEMSIS online system. This system directly supports the analysis of statewide data and supports Emergency Medical Services for Children Grant initiatives.

GEMSIS is an ambitious plan with clear priorities for infrastructure improvement. Objectives achieved to date include electronic reporting of patient care reports and web based direct entry. At this time an estimated 98 percent of the reporting agencies are either directly entering their PCRs on GEMSIS or electronically importing their PCR files via one of the GEMSIS data ports.

There are over 1.6 million PCRs in GEMSIS for 2013. GEMSIS has been becoming more complete each year both in the number of PCRs submitted to GEMSIS and the completeness of key fields of the PCR.

Unknown Values on 911 Emergency Treat and Transport Calls									
Year	Destination Type			Primary Symptom			Provider Primary Impression		
	Total	Unknown	Percent	Total	Unknown	Percent	Total	Unknown	Percent
2009	438,410	333,888	76.16	438,410	376,035	85.77	438,410	225,552	51.45
2010	484,370	205,283	42.38	484,370	332,746	68.70	484,370	210,060	43.37
2011	560,762	80,201	14.30	560,762	301,069	53.69	560,762	189,597	33.81
2012	660,957	73,283	11.09	660,957	260,054	39.35	660,957	159,145	24.08
2013	641,557	23,322	3.64	641,557	116,131	18.10	641,557	71,674	11.17
2014*	359,556	6,533	1.82	359,556	30,792	8.56	359,556	17,249	4.80

*2014 January to June

The provisions for web-based content, information, and web based information dissemination are in place and being utilized by the EMS agencies. Each EMS agency has the ability to use the reports on GEMSIS for presentations to their local county commissioners or to obtain funding for needed equipment. The best way to reach our goal of accurate, reliable data is for those submitting it to actually use it. If the data has value to them then they will correct it. GEMSIS produces a secondary benefit of ensuring database stability. If the EMS providers use the data they will be sure to continue submitting and correcting their data. At this time almost 65 percent of the EMS and First Responder agencies are routinely using the GEMSIS reports either for PCR quality review or for agency needed activities. Our goal is to increase data usage by EMS providers each year to ultimately have 75 percent of the reporting agencies actively utilizing GEMSIS reports thus greatly increasing database accuracy.

As the only source for EMS data in GEORGIA, GEMSIS has been able to provide information to a number of researchers and agencies including the Georgia Trauma Commission. Through GEMSIS the number and severity of injuries as well as the response times for those injuries was made available to them. In addition we are exploring collaboration with the Georgia Department of Transportation to provide them with clinical information on the severity of the injury for motor vehicle crash injuries.

Funding for the support of GEMSIS has been awarded by the Governor's Office of Highway Safety and the Georgia Department of Transportation. This allows for continuation of GEMSIS and periodic improvements to increase data accuracy and timeliness.

The Georgia Office of Emergency Medical Services and Trauma has implemented the Digital Innovations, formally National Trauma Registry American College of Surgeons (NTRACS), at twenty-seven designated trauma centers and specialty care centers as well as several non-designated hospitals. This implementation began in 2002 and has enabled the State of Georgia to submit data to the National Trauma Data Bank (NTDB).

The Georgia Trauma Registry needs to expand so that all acute care health facilities that receive injured patients that meet trauma criteria can participate in an optimal system of patient care and provide data. Expanding the system in Georgia offers a tremendous opportunity for protecting the health of every Georgia resident and visitor in our State. Trauma is the number one killer of Americans between the ages of one and 44, and the number three cause of death across all age groups. Trauma survivors, regardless of age, often face intensive rehabilitation, lifelong disabilities, and increasingly expensive long-term care.

Georgia Trauma Commission

In 2007, the Georgia Legislature through Senate Bill 60 established the Georgia Trauma Care Network Commission ("the Trauma Commission"). The bill charges the Trauma Commission to create a trauma system for the State of Georgia and to act as the accountability mechanism for distribution of trauma system funds appropriated each fiscal year by the legislature.

In February 2009, the Trauma Commission approved a vision for the Georgia Trauma System and identified steps to move forward over a five-year period from 2009 through 2014. Pursuant to a review of Georgia's trauma system by the American College of Surgeon's Trauma System Consultation Program, the Trauma Commission identified a need for a comprehensive state trauma system plan that defines the system, its subsystems and structure, and establishes procedures and standards for implementation, monitoring and system performance improvement. It is also essential that the Georgia Office of Emergency Medical Services and Trauma support the trauma system plan through established trauma system rules and regulations providing for system accountability, oversight and compliance to a statewide standard of care.

The Trauma Commission's vision also identifies the need for a statewide trauma communications system. This need was the genesis for a Georgia Trauma Communications Center that will eliminate the time-consuming search for an appropriate Trauma Center with available resources in response to serious injuries.

At the conclusion of the five-year period, the Georgia Trauma System will be comprised of regional systems and plans with a centralized and statewide Trauma Communications Center as the common component of a state trauma system. It is envisioned each region will represent a trauma service area, which will accommodate overlapping and traditional patient catchment areas, transfer patterns, long-standing geographical service regions, and the locations of the state's major trauma centers. Each regional trauma system will operate according to a Regional Trauma System Plan developed by the region's Regional Trauma Advisory Committee and approved by the Trauma Commission and monitored by the Georgia Office of Emergency Medical Services and Trauma. The Plan will organize existing and identify additional resources needed to provide a comprehensive trauma care system to care for trauma patients from the moment of injury through rehabilitation. The Committee will develop data-driven injury prevention programs appropriate for the local community and provide for regional system performance improvement and system plan maintenance. At the core of the Georgia Trauma System is a single statewide Trauma Communications Center established to coordinate the needs of EMS providers to transport the seriously injured in each region with the capacity of all Trauma Centers in the state.

A regional Plan is to be developed by each Committee using the guidance provided in the Regional Trauma System Planning Framework. The Framework is a planning guide for the development of regional Plans. Within the Framework is guidance on the components, organization and function of regional trauma systems, as well as an appendix on the suggested Plan development process.

As of January 2012, there are Regional Trauma Advisory Committees in EMS Region 3, 5 and 6 and Regions 9 and 1 are in the development stages.

Overarching FY2013 Georgia Trauma Commission Performance Measures: Effectiveness, Efficiency and Workload developed in collaboration with the Governor's Office of Planning and Budget:

Effectiveness: Number of EMS Regions (out of 10 possible) participating in Trauma System Regionalization activities

Efficiency: Average time in minutes and by Injury Severity Score for a Trauma System Patient to reach definitive care from scene of injury.

Death rates in Georgia from trauma are significantly higher than the national average. In Georgia, 62 of every 100,000 people are likely to die of traumatic injury. Nationally, the death rate is lower – 54 people per 100,000. If Georgia achieved trauma system improvement rate to 54 people per 100,000, approximately 712 additional lives would be saved every year.