

TRAUMA IN GEORGIA

ANALYSIS of TRAUMA SYSTEM DATA



2003

DEPARTMENT OF HUMAN RESOURCES
DIVISION OF PUBLIC HEALTH
OFFICE OF EMERGENCY MEDICAL SERVICES/TRAUMA



Trauma in Georgia

Analysis of 2003 Trauma System Data

Prepared by
Georgia Department of Human Resources
Division of Public Health
Office of Emergency Medical Services/Trauma
Operations Research & Analysis Section

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ABSTRACT

This document provides a basic statistical characterization of trauma in Georgia utilizing data collected from the 14 hospitals participating in the statewide trauma system. The primary data source is National Trauma Registry American College of Surgeons (NTRACS®) data for 2003. The tables and illustrations in this document have been prepared to provide consistency with the American College of Surgeons, National Trauma Data Bank (NTDB) 2003 publication. This publication provides a baseline for the examination, comparison and improvement of the trauma system in Georgia.

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PREFACE

A message from the State Office of Emergency Medical Service/Trauma (OEMS/T)



The State Office of EMS/Trauma is primarily a regulatory department; however, improving statewide emergency preparedness to include EMS, bioterrorism, and trauma requires the development of new ways to collect, link, and analyze data. An understanding of our ability to treat and prevent traumatic injury is fundamental to all of these efforts.

R. David Bean, Director – OEMS/T
(Pictured Left)

Expansion of the Georgia Trauma System requires the development of an effective and efficient statewide infrastructure including data collection, reporting, evaluation and quality improvement initiatives. Understanding the nature of trauma in Georgia and establishing a viable system of trauma care benefits all Georgia citizens.

Ej Dailey, Deputy Director – OEMS/T

(Pictured Right)



During the 1960's, the National Research Council labeled trauma as the neglected disease of the modern society. Since that time, published studies have demonstrated that as much as one third of trauma deaths occurring in areas without an organized trauma care system were preventable. The Georgia Department of Human Resources, Division of Public Health recognizes the importance of developing an organized trauma system in Georgia, which includes both prevention and treatment. In today's modern society, governmental programs are influenced by data. In 2001, a state budget appropriation of \$740,000 allowed for the collection of trauma data. The data is collected quarterly from the designated trauma centers and managed by the Office of Emergency Medical Services/Trauma (OEMS/T). A plan for the development of the Georgia Trauma System has been written and is in the process of being adopted. The data collected will contribute to the success of the future Georgia Trauma System.

Efforts to establish a statewide trauma system so that all seriously injured patients have access to optimal care without regard to socioeconomic status or geographic location in the state began over a decade ago. The publication of this 2003 data marks a major milestone; it is the first publication of trauma data by the State of Georgia summarizing information from the Georgia Trauma Registry. Additionally, it marks Georgia's ability for the first time to participate in submitting data to the National Trauma Data Bank (NTDB).

The mission of the Georgia trauma system is to save lives and provide the best possible outcomes through improved trauma care and injury prevention. Understanding the nature and cause of trauma in Georgia establishes an important knowledge base for legislative policy makers, medical practitioners, public health, law enforcement and emergency management. With this information, Georgia possesses a distinct ability to identify risk factors, foster interventions to prevent injuries and understand how the integrated delivery of optimal resources for patients who need acute care ultimately affects patient outcomes. It also supports evaluation of the statewide demands for trauma care and forms the basis for disaster preparedness.

James P. O'Neal, M.D. currently serves as the EMS Medical Director for the Georgia Office of EMS/Trauma. Since 2000, he has been influential in many facets of EMS, Emergency Preparedness, and Bioterrorism for the Department of Human Resources, Division of Public Health. Dr. O'Neal earned his medical degree from Tulane University School of Medicine in 1968 and finished his formal education as a flight surgeon while serving in the United States Air Force in Vietnam in 1971. Dr. O'Neal retired from DeKalb Medical Center after 29 years of service. He was the Medical Director for the Emergency Department and the Vice-Chairman for the Trauma Committee at that facility. He served as the Medical Director for DeKalb EMS for 16 years and Medical Director for EMS Region III for 7 years. He served on the Region III Trauma Advisory Committee, the Region III Prehospital Care/Medical Direction Committee, the Region III Medical Audit Committee, the Region III EMS Council, and the Greater Atlanta Cardiac Coalition for several years. Dr. O'Neal served as Affiliate Faculty for the American Heart Association's Advanced Cardiac Life Support courses for over ten years and has been a member of the American College of Emergency Physicians for 30 years.



One of the first steps that the OEMS/T undertook for the development of the Georgia Trauma System was the implementation of a statewide trauma registry. This system provides a foundation for the collection of accurate and reliable information regarding the nature of trauma in Georgia.

During 2002, the Georgia Trauma Registry was established. The Georgia Trauma Registry is based on NTRACS® software. NTRACS® is a commercial microcomputer-based software package for the collection, storage, analysis and reporting of trauma patient information on an individual, regional and state level. The development of the NTRACS® software was funded by the American College of Surgeons. The American College of Surgeons, founded in 1913, is committed to the development of improved standards of care for the trauma patient. In addition, the American College of Surgeons maintains a close professional, working relationship with other medical organizations and with government and regulatory bodies such as Health Resources and Services Administration (HRSA), the Centers for Disease Control and Prevention (CDC), and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

The OEMS/T has a strong commitment of keeping pace with the NTRACS® based trauma data registry. In connection with this commitment, the OEMS/T submitted data to the NTDB for the first time in its history in 2004. Submittal of this data and participation in the NTDB marked major operating milestones for the trauma program.

The ongoing goal of the Georgia Trauma Registry is to provide data that supports improvements in the care of the injured patient. The publication of these data is a beginning towards a data-driven, statewide trauma system. The Georgia Trauma Registry offers participating hospitals the opportunity to collect and analyze the critical data pertinent to their respective trauma experience on a daily basis. The NTRACS® software allows for these participating centers to submit data on a quarterly basis. Once received, data is merged, accumulated, and studied on a state, regional, and local level. Aggregated data from the trauma registry have identified a number of strategic considerations where additional focus is needed in order to benefit all citizens of Georgia.

ACKNOWLEDGEMENTS

The Trauma in Georgia - 2003 Publication Team. Pictured front from left to right: Marie Probst, State Trauma Registrar; Dr. J. Patrick O'Neal, State Medical Director Office of EMS/Trauma; Indrani Daseupta, Statistical Analyst; Fred Grant, Manager – Operations Research & Analysis, OEMS/T and the Principal Investigator for this publication. Not pictured: Renee Morgan, State Trauma Program Manager



In August 2003, the OEMS/T set a goal to develop the information capabilities necessary to publish the Georgia Trauma Registry data in 2004. Through diligence and hard work this goal has been attained. No exercise of this scope, complexity or magnitude could have been completed without the hard work and selfless contributions of numerous persons. No attempt to recognize or thank all of those who participated in the development of this publication is adequate. Many who provided the benefits of their thoughts and experience will remain unnamed; however, all who participated and those who are taking the plan forward are playing a strategic role in improving the system of care in Georgia.

Emergency Medical Services (EMS) and medical professionals from the Georgia Department of Human Resources representing all of the ten EMS Regions of the state, along with trauma coordinators and registrars from the participating trauma centers provided information that has been utilized in this publication. The input from each of these groups represented the accumulation of hundreds of years of EMS and medical trauma care experience.

Within the OEMS/T, it is acknowledged that the Operations, Analysis and Research Section (OARS) personnel provided the overall framework for accomplishing the writing, analysis and processing, and presentation of this data. Information technology is one of the most critical tools for taking the trauma system to the “next level” as a public health entity.¹ Data and information permeate every aspect of EMS and

¹ F. J. Grant, MBA, CDP, Manager – Operations, Analysis & Research, Office of EMS/Trauma is the identified principal investigator of this publication.

trauma care. The building of state infrastructure recognizes that people, process and technology must all play a role. Fundamentally sound strategic governance is also essential for trauma system development.

To all who participated—thank you.

INTRODUCTION

Objectives

The objectives of this publication are threefold:

1. Provide an operating description of the Georgia statewide trauma system and related programmatic areas.
2. Establish a context for understanding the 2003 trauma system statistics and information presented from the NTRACS® Georgia Trauma Registry.
3. Provide an overview of some of the issues associated with trauma in Georgia that can drive the future strategic alignment of program areas, technology and public health initiatives consistent with enhancing trauma prevention and optimizing the care of injured patients.

What is Trauma?

When most people hear the word “trauma” they think of very serious injuries--very serious, unplanned injuries that fundamentally threaten life or quality of life. But trauma is more than this.

<i>Definition of Trauma</i>
<p>trau·ma (trô'mə, trou'-) <i>n. pl. trau·mas or trau·ma·ta</i> (-mə-tə)²</p> <ol style="list-style-type: none"> 1. A serious injury or shock to the body, as from violence or an accident. 2. An emotional wound or shock that creates substantial, lasting damage to the psychological development of a person, often leading to neurosis. 3. An event or situation that causes great distress and disruption.

As shown in the illustration below, there is a significant difference between the severity and type of injuries treated in an emergency room and those requiring treatment at a trauma center. But having said this, many typical emergency room injuries can also

² Source: Dictionary.com (2004).

represent traumatic injury. Traumatic injury is not always obvious and does not always immediately manifest itself.

<i>Emergency Room vs. Trauma Center Contrasting Illustrations of Injuries</i>	
Patients cannot diagnose their injuries; therefore, it is important to differentiate between the level of care provided at Emergency Departments vs. Trauma Centers. Below are a few examples:	
<u>Emergency Room</u>	<u>Trauma Center</u>
Minor Wrist fracture	Multiple Fractures
Cut or Laceration	Major Laceration Amputations
Minor Back Sprain	Back Injury with New Onset Paralysis
Potential Loss of Life	Potential Loss of life
Bleeding Head Injury/Concussion	Fractured Skull/Brain Injury
Time is of the essence. Injuries may or may not be life threatening.	Time is of the essence. Death or the inability to recover may result if not treated within certain time parameters, e.g., the “Golden Hour”.

For trauma registry purposes, the American College of Surgeons has established a very specific clinical definition of trauma; this definition is complex, not well understood by laypersons and can vary by state.³ But in the final analysis, experts agree that traumatic injuries cover a broad number of categories and should be treated as very serious disease.

³ The criteria for entry into the NTDB include all patients with at least one injury (ICD-9 diagnosis code between 800.00 and 959.9, including some types of burn injuries 940-949). ICD 905-909, late effects of injuries are excluded, as are 910-924 blisters, contusions, abrasions, and insect bites, 930-939 foreign bodies. Those who were admitted to the Operating Room, who died after receiving any evaluation or treatment, were dead on arrival at the hospital, or who transferred into or out of a hospital are also included in the registry. The Georgia criteria for trauma includes admissions over 48 hours and additionally recognizes those who were admitted to the ICU regardless of length of stay or were readmitted within 72 hours of initial admission. The Georgia criteria does not include isolated burn injuries.

Trauma, as a disease, can be prevented or avoided through behavior modification and the use of safety equipment. And when not prevented, it may be successfully treated—if a systematic approach is taken.

What is a Trauma System?

A trauma system is a strategically organized approach to injury prevention, EMS prehospital response, hospital-based acute care and post hospital rehabilitation that is fully integrated within a state's public health system. According to the National Foundation for Trauma Care, consolidating major injury patients into hospitals—trauma centers--that have a high level of expertise and the specialized resources required for optimum care is highly effective in saving lives. The presence of a trauma system means that there is systematic coordination between injury prevention, EMS (including air and ground medical transports) and regional referring hospitals. It also means that there is a systematic integration of the care provided to the very seriously injured at all stages of their treatment. The resources required for each component of a trauma system are clearly identified, deployed and studied to ensure that all injured patients gain access to the appropriate level of care in a timely, coordinated and cost-effective manner.

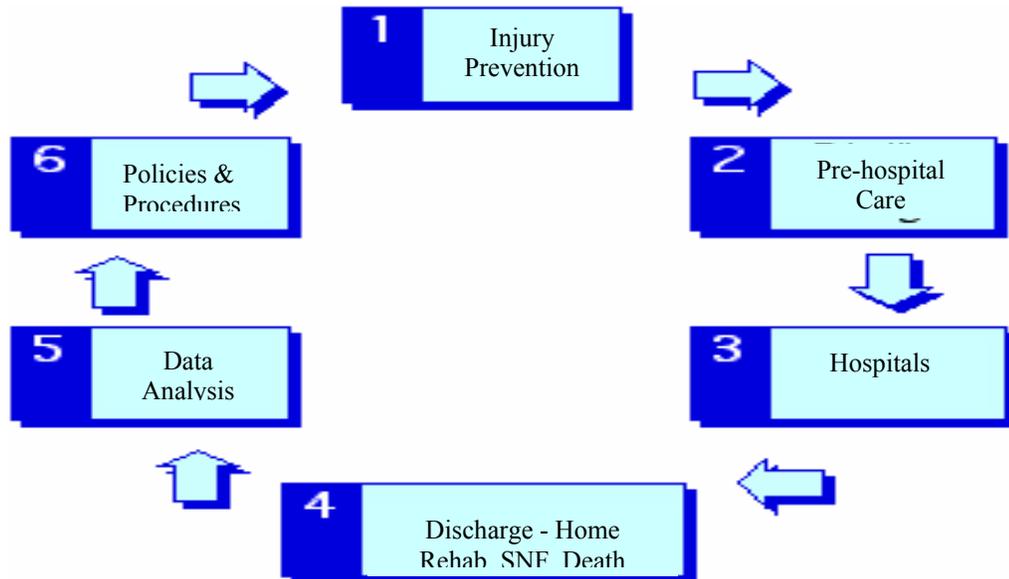
Trauma systems possess the distinct ability to identify risk factors and related interventions to prevent injuries as well as maximize the integrated delivery of optimal resources for patients who need acute trauma care. Trauma systems also address the daily demands of prehospital response. Trauma systems form the basis for disaster preparedness.

Benefits of a Trauma System

Trauma systems can reduce the preventable death rate by 10 - 30 percent; some say even up to 50 percent. Studies of trauma systems in the United States where the most severely injured patients are directed to specialized trauma centers show that the benefit of an organized system of trauma care can reduce the risk of death significantly among

seriously injured trauma patients. As an added benefit, these survivors have shorter hospital stays, freeing up resources for other needs.⁴

Illustration: Trauma System



Understanding the Impact of Trauma in Georgia

In 2003, the number of Georgians affected by trauma can only be estimated and sized in relative terms. Based upon an analysis of 2003 NTRACS® data, relative to the total number of acute care hospitals in Georgia, it is probable that the volume and impact of trauma in Georgia has been significantly underestimated. The data presented by the 14 participating trauma centers provides representative data on 9,612 patients which met the Georgia Trauma Registry criteria for 2003.

⁴ For additional information see the American Trauma Society (2003) publication “When it matters most” as retrieved from <http://www.amtrauma.org/uploads/1083595747675.PDF>

According to the Georgia Hospital Association, there are approximately 152 acute care hospitals in Georgia. Based upon an analysis of various demographic and geographic data sources, Georgia's death rate from trauma is currently estimated to be 65 per 100,000 while the national average is 56 per 100,000.⁵ If we did nothing other than improve to the level of the national average, we would save approximately 624 additional lives annually.⁶ Out of approximately 35,000 to 45,000 cases of trauma occurring each year in Georgia, only 9,612 patients were treated by the fourteen designated trauma centers and met the Georgia trauma registry criteria.

Bed Size Range	Hospitals	Licensed Beds
0 - 49	47	1558
50 - 99	39	2869
100 - 199	28	3981
200 - 299	12	3027
300 - 399	9	2993
400+	17	8949
Total	152	23,377

What is the status of Georgia's Trauma System?

As shown on the table below, 14 trauma centers were designated in Georgia in 2003.

Efforts to further develop Georgia's trauma system are actively being made; however, many additional trauma centers are needed to insure optimal health care for all seriously injured patients.

A truly "inclusive" trauma system for Georgia would involve all acute care hospitals in some manner. Informed discussions among trauma system stakeholders have suggested that Georgia should have approximately 30 designated trauma centers in strategic locations in order to address Georgia's trauma care and emergency preparedness needs.

⁵ Based upon this study's analysis of data, the 2002 NTDB percentage rate for 2002 was 5.2%. Georgia's computed percentage for 2003 is 7.6%.

⁶ Source: Georgia Trauma Plan (Draft) 2004.

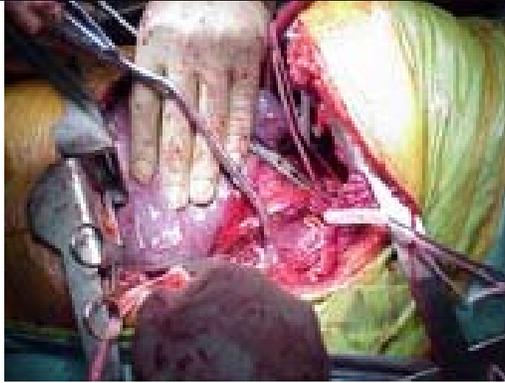
Georgia Designated Trauma Centers –2003⁷				
Trauma Center (Listed Alphabetically)	Level of Designation	Regular Beds	ICU Beds	Pediatric Beds
Archbold Memorial Hospital	2	224	14	0
Atlanta Medical Center	2	460	36	0
Children's Healthcare of Atlanta - Egleston	2 Pediatric	0	21	235
Children's Healthcare of Atlanta - Scottish Rite	2 Pediatric	0	21	181
DeKalb Medical Center	3	525	32	0
Floyd Medical Center	2	252	24	28
Grady Memorial Health	1	1000	80	56
Gwinnett Medical Center	2	175	20	8
Hamilton Medical Center	2	244	18	20
Medical Center of Central Georgia	1	637	54	32, ICU-12
Medical College of Georgia	1	632	104	60
Memorial Health University Medical Center	1	435	60	51, ICU-10
N. Fulton Regional Hospital	2	167	28	0
The Medical Center – Columbus	2	413	32	35
TOTALS		5164	544	728

The Importance of Emergency Medical Services to Trauma Care

Emergency Medical Services (EMS) represents the “front line” of trauma care. The injury clock begins to tick the moment a traumatic event occurs--whether it is a car crash, fall, gunshot wound, or any other serious injury. Many traumatic events will be followed by activation of pre-hospital personnel. In Georgia, the response time may range from 3 minutes to 45 minutes depending on the geographical location of the patient. An additional 10 minutes to 60 minutes may lapse before the patient reaches a medical facility. Even then, the destination may not necessarily be the appropriate facility for optimal care. Factor in that the patient may transfer from one facility to another and it could be 8 to 10 hours before the appropriate level of care is rendered. Participation in a statewide trauma system assures quality of care, promptness of response, and performance improvement of overall patient care.

⁷ Source: Georgia Trauma Center Coordinators (2004).

Illustration: Open Repair of Descending Aorta Injury



An inclusive system of trauma care has provisions for treating this type of injury. Those who have a full-thickness arterial tear from a car crash or other injury and are hemodynamically unstable may also be unstable from hemorrhages from other organs, such as a liver or spleen injury. Hemorrhage control remains a primary priority in these patients. Specialized care is required for this type of injury. A trauma system provides all levels of care from minor to major.

Source: Trauma.org

Emergency Medical Services (EMS) is an “umbrella term” for a continuum of prehospital care activities involving personnel, equipment, procedures, systems and community programs.⁸ In Georgia, EMS represents a broad and complex collection of private, community and governmental organizations, services and environments providing prehospital health care related services. Accordingly, EMS includes the full spectrum of emergency care from prevention to recognition of the emergency, prehospital medical treatment, and patient transportation to a definitive care facility. EMS also includes a number of specialized topical areas such as:

1. Community health care (prevention) education
2. Emergency Medical Services for Children (EMSC)
3. Emergency Medical Technician (EMT) training and certification
4. Ambulances and specialized equipment including Automated External Defibrillators (AEDs)
5. The planning for emergency medical responses to disasters including natural or man-made disease out-breaks and other catastrophes
6. The planning for the provision of emergency medical coverage at mass gatherings

⁸ Source: GAO, 2001, p. 4

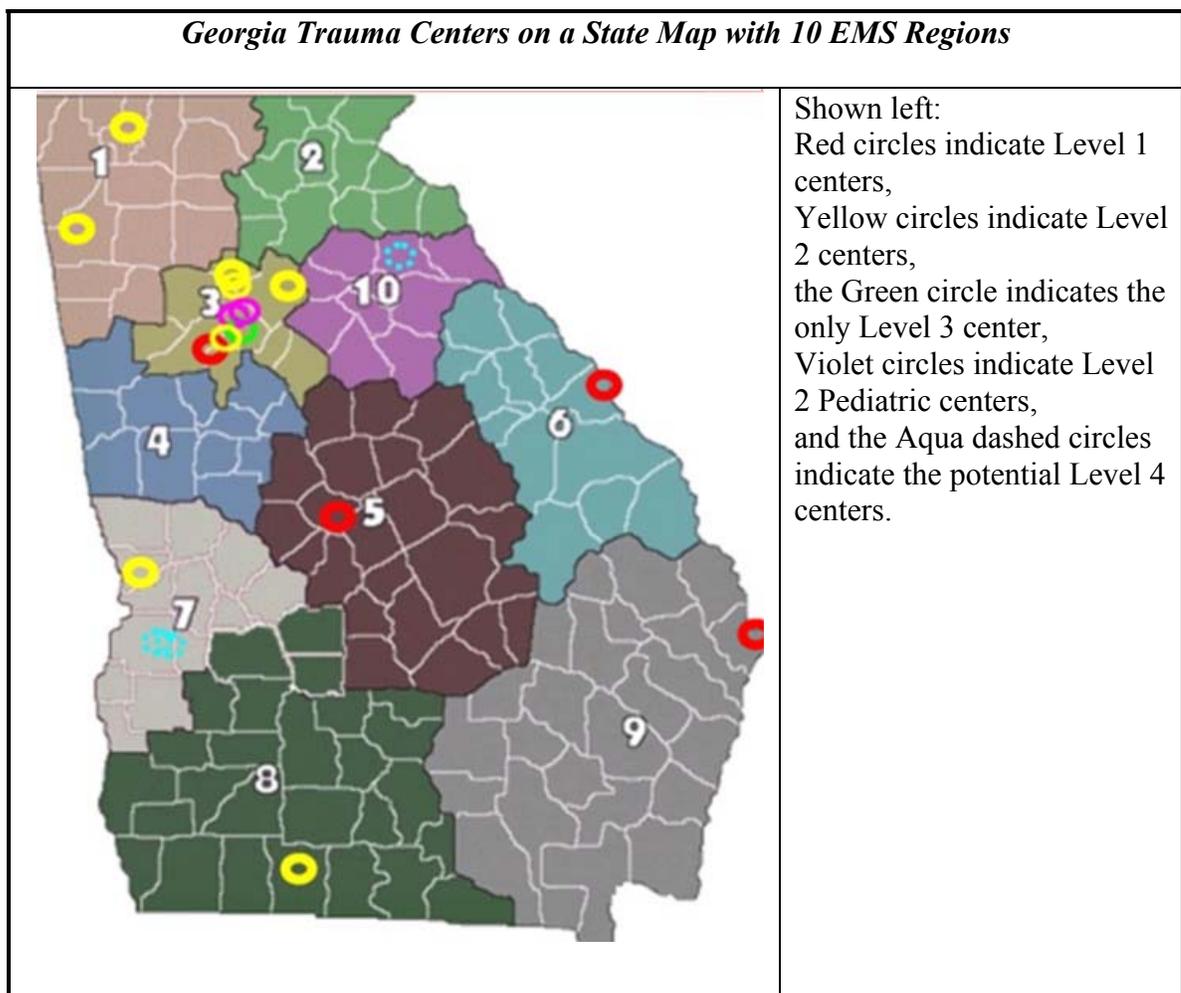
7. Interfacility transfers of patients
8. The longitudinal study of trauma from incident to outcome.

From an EMS perspective, Georgia has many factors that set it above other states. The overall quality of Georgia's pre-hospital care is excellent. The skill level and training of rescue, first responders, EMS and air medical service personnel is ranked among the highest in the nation. The commitment of many hospitals, physicians, surgeons, nursing and other support staff involved in Georgia's trauma system is unsurpassed. Many facilities not currently participating in the organization of an inclusive system are still rendering excellent care to the citizens of Georgia.

Collectively, these services and programs comprise the EMS gateway to healthcare and certain types of medical emergency preparedness for the public in Georgia. EMS is an important function within Public Health.

TRAUMA SYSTEM DEVELOPMENT

Interest in establishing a statewide trauma system began in Georgia more than twenty years ago. Georgia designated its first trauma center in 1981. Twenty-two years later in 2003, Georgia had fourteen designated trauma centers. The first re-designation evaluations were completed in 2001. In connection with this, several key committees and individuals with statewide representation play a key role in developing Georgia's trauma system.



Medical Review Committee

The Medical Review Committee, established in 2002, has the responsibility to review and evaluate all aspects of patient care and make recommendations for appropriate system-wide quality improvement.

Georgia Committee for Trauma Excellence

The Georgia Committee for Trauma Excellence (GCTE) is comprised of trauma coordinators and trauma registrars who meet to discuss trauma guidelines and policy and procedures, as well as the educational needs and opportunities within the facilities they represent and across the state. Their participation is fundamental and provides the foundation for both the need for and substantive discussion of trauma data collection.

Georgia Trauma System Development Committee

The Georgia Trauma System Development Committee (GTSDC) is a group of stakeholders from across the state with a mission to develop and implement a statewide, patient-focused trauma initiative. The committee fosters the development of policies, procedures, and practices which assure that injuries are prevented when possible. When prevention has not been successful, the goal is then that all injured individuals receive the best possible pre-hospital, emergency and definitive care. The role of the GTSDC is to develop an integrated, inclusive, regionalized trauma system for Georgia, which without regard to socioeconomic status permits optimal care to the injured patient, family and community. This statewide committee was established in 2001 and has a multi-disciplinary representation of healthcare professionals and various community representatives.

Emergency Medical Services Advisory Council

Emergency Medical Services Advisory Council (EMSAC) is an advisory council established pursuant to the provisions of O.C.G.A., Section 50-4-4 and Georgia Department of Human Resources Administrative Order No. 9, the purpose of which is to

advise the Department in matters essential to its operations with respect to emergency medical services.⁹

Regional Emergency Medical Services Program Directors

The Program Directors in each of the ten regional EMS offices are an extension of the OEMS/T. They are responsible for developing specific goals and objectives for the systematic implementation and evaluation of a comprehensive EMS and Trauma System at the local level. Program Directors utilize laws, rules, regulations, policies and procedures to provide direct oversight of regional data in the assessment of the prevailing health status and emergency healthcare needs of a community.

Working Towards Injury Prevention

Injury prevention needs to be integrated into the strategic focus of trauma system development. Community-based injury prevention programs have been demonstrated to decrease injury-related morbidity and mortality and to reduce health care costs. On a national basis, prevention programs are often not targeted or evaluated in a systematic review of actual injury data. In Georgia, the OEMS/T provides its analysis of injury data upon request to other state agencies. This forms the basis for data driven responses to community public health.

⁹ Source: Rules and Regulations Chapter 290-5-30-.02,ii. The rules and regulations also state that any variance from the guidelines for designated trauma centers must be approved by the department based on recommendations from the Emergency Medical Services Advisory Council (EMSAC).

THE IMPACT OF TRAUMA ON GEORGIA

Economic Pressures

Georgia is facing a very serious situation. The ability of hospitals to participate in Georgia's trauma system has never been more important; yet, financial and other constraints are actually diminishing the abilities of hospitals to participate.¹⁰

Recent statistics indicate that approximately two-thirds of Georgia's hospitals are operating in the "red". The recent economic downturn has accentuated an already-significant problem for hospitals. The tremendous increase in uninsured patients and reductions in Medicare/Medicaid reimbursement are bringing about the closure of some hospitals and a significant reduction in services at others. The increased penetration of managed care and the escalating costs of malpractice coverage for hospitals and individual practitioners are additional economic challenges. Is it any wonder that hospitals find it difficult to make the costly commitment that trauma center designation requires or that many physicians resist participation at trauma centers?

The Cost of Traumatic Injury

It is estimated that traumatic injury is producing approximately \$170 million of uncompensated hospital care annually in Georgia. This uncompensated care is being provided by a healthcare system that is already fragile fiscally and in danger of collapse. The cost of "shoring up" the system is high, but the potential yield is worth the expenditure in productive lives and dollars saved.

Some well-designed, integrated, statewide trauma systems have shown as much as a 500% return on investment.¹¹ Dollars spent on a well-designed, integrated, statewide trauma system, though large on the front end, can provide an even larger yield on the back end where lives are saved and productive capabilities are maintained.

It is anticipated that with appropriate funding, these goals can be obtained.

¹⁰ According to the U. S. Department of Health & Human Services (2002, p. 39.) National Assessment of State Trauma System Development, finance was the category cited as the top threat to the continued viability of state trauma systems.

¹¹ Source: Dr. O'Neal (2004) unpublished notes supporting the Trauma Plan.

Understanding Other Related Health Care Issues

There are many types of injuries and syndromes that are closely related to trauma. It is important to recognize what these related health care issues are because they affect the long-term quality of life of many people in Georgia.

Many of the injuries that are classified as trauma are preventable. Even those that are not preventable, stand to have a better outcome if high quality care is rapidly available. The prevention of traumatic injury is an area that is still understudied on a nationwide basis. In particular, traumatic brain injury and post-traumatic stress syndromes have high frequencies of occurrence and warrant efforts of prevention.

Traumatic Brain Injury (TBI)

There are a number of possible consequences for the head injured person with brain injury. Physically, damage to parts of the brain can result in gait, balance, and coordination problems. Head injured persons may be unaware of one-half of their vision field, also known as “visual neglect.” Some are left with double vision (diplopia) and other visual disturbances. Motor problems occur such as paralysis and an inability to use a limb. The cognitive changes can be significant and include deficits in short-term memory, decreased problem-solving ability, and coordination of eye-hand movements, problems attending to multiple things occurring at the same time. The survivor may have a shallow awareness of their own deficit areas and thus not benefit from verbal feedback or may not learn from experience and end up repeating mistakes.¹²

TBI is associated with a host of physical, cognitive, personality, emotional, interpersonal, social, and recreational consequences that can greatly impact both the head injured person and that person’s family. Because these consequences often last over a period of months and sometimes years, changes occur in the family to adjust to the changes in the head-injured person. TBI represents an opportunity of greater utilization of data as the system matures.

TBI is unlike some other medical problems such as bone fractures or systematic illnesses like the flu, in that recovery from head injury takes a very prolonged period of

time, and in more severe cases, the problem does not fully remit. During the period of recovery, the family and/or spouse of the head-injured person are left with the task of coping, managing, and enduring the stresses and burdens that caring for the individual requires. Emotional and behavioral changes will often be very stressful to family members. Some survivors of severe injuries may experience minimal psychological disturbance while others may exhibit serious post-traumatic stress symptoms after a slight accident.

These consequences can linger long after the physical wounds have been treated and healed. Symptoms of post-traumatic stress are believed to have a high prevalence among survivors. There are many variations to the problems that become stressors to family members and can lead to changes in the family system.

On a national basis, TBI is often described as the leading cause of disability in children, but data to support this assertion are lacking. It is known that each year an estimated 3,000 children and youth die from TBI; 29,000 are hospitalized; and 400,000 are treated in hospital emergency departments.¹³ Currently, no population-based studies of the outcomes of TBI among children and youth exist to provide national estimates of TBI-related disability and document the need for services. In Georgia, TBI remains understudied as well.

Post-Traumatic Stress.

Many factors appear to increase an individual's risk for post-traumatic stress following an injury, including a history of psychiatric disorder, previous trauma, substance abuse, parental divorce and separation from parents, and physical or sexual abuse. Individual "patient variables" help explain why one person may develop post-traumatic stress disorder while another person experiencing the same trauma may not.

¹² Source: TBI Foundation Public Education Materials (2003).

¹³ Source: CDC (2000). Traumatic Brain Injury in the United States: Assessing Outcomes in Children. Expert Working Group, Atlanta, GA. Department of Health and Human Services.

Organ Donation Awareness

When a traumatic event occurs that results in death, there is a positive effect that can follow. This positive effect begins with the individual's or family's consent for organ donation. The act of "Giving the Gift of Life" is respected and accepted by many people in the United States regardless of their faith. In the first quarter of 2004, there were 3,422 donors resulting in 6,542 transplants being performed.¹⁴ While this may sound like an accomplishment for our country, the national Organ Procurement and Transplant Network (OPTN) database shows there are still 86,121 candidates awaiting a single or multiple organ transplant as of July 9, 2004. Like a traumatic event, the diseases that result in the need for an organ transplant do not differentiate between age, gender, ethnicity, economic or social status. In Georgia, there are an estimated 1465 patients waiting for a transplant.¹⁵ If one is not received, the disease may cause the patient to die or become disabled resulting in more loss of life and loss of productive years.

Based on the 2003 trauma registry data, there were 59 recorded organ donors out of the 768 trauma deaths. These numbers reveal a need for education in our communities, churches and hospitals to increase the awareness of Georgia's need for organ donors. There are professional organizations available to train and educate the appropriate staff and/or individuals to facilitate organ donations.

"Awareness is no longer the public issue: the issue is action – family discussion regarding organ and tissue donation. Even if you have the organ donor label on your driver's license, to ensure your wishes are carried out, discuss your intentions to be a donor with your family. Regardless of written intentions, your family's decision is important because family consent is part of the donation process".¹⁶

It is noted that The Honorable Sonny Perdue, Governor of the State of Georgia, signed a proclamation supporting organ donation and designated the month of April as the "Donate Life Month in Georgia".

¹⁴ Source: www.optn.org (2004). As retrieved July 9, 2004.

¹⁵ Source: www.lifelinkfound.org (2004). As retrieved July 9, 2004.

¹⁶ Source: LifeLink of Georgia (2004).

Trauma Care & Homeland Security

Looking at recent events, Georgians, like all Americans, recognize that the world has entered a new age—an age of terrorism. An effective trauma system is an essential part of Georgia’s emergency preparedness efforts. Most terrorism against the U.S. has involved conventional trauma. A trauma system can be key infrastructure in our preparedness efforts not only for the unnatural acts of terrorism, but also for those natural disasters such as tornadoes, floods, hurricanes, and newly emerging infectious challenges such as Severe Acute Respiratory Syndrome (SARS). An integrated, statewide trauma system is fundamentally important in our efforts to improve Homeland Security.

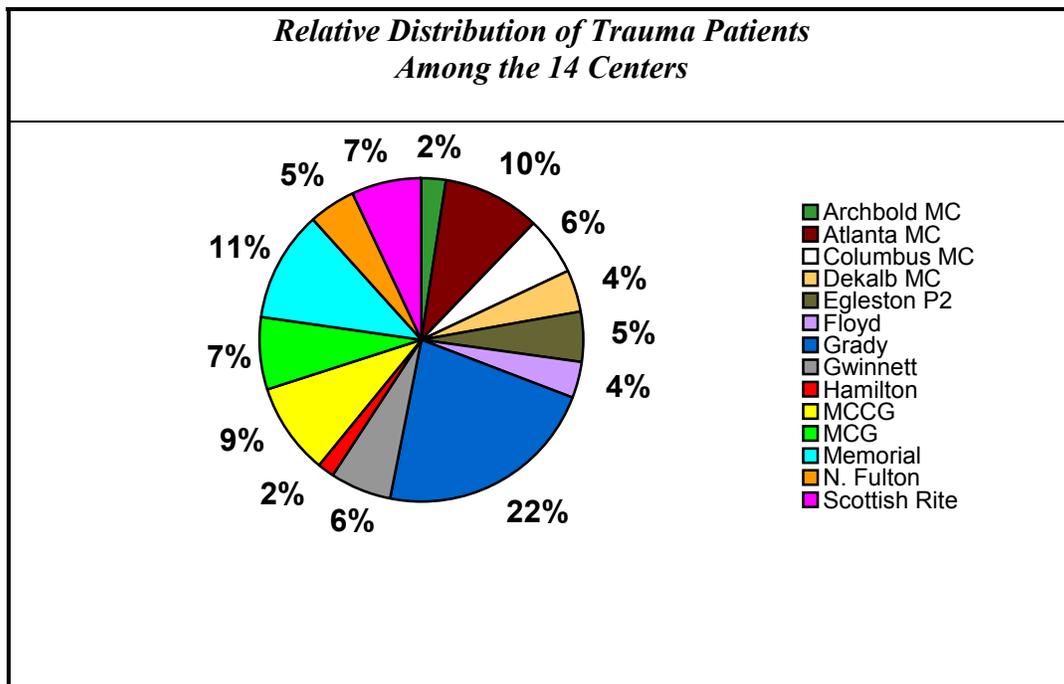


Today, the threat of terrorism requires the activities of preparedness and response to minimize harm and resulting fear and panic. Preparedness to deal with terrorism is now within the domain of Public Health, and trauma systems are a resource with which to strengthen capabilities to prepare for and respond to terrorism.¹⁷

¹⁷ Source: Jacobs, L. M. (2003). Terrorism: A Public Health Threat with a Trauma System Response. *The Journal of Trauma*, Vol 55, No 6. p. 1014 – 1021.

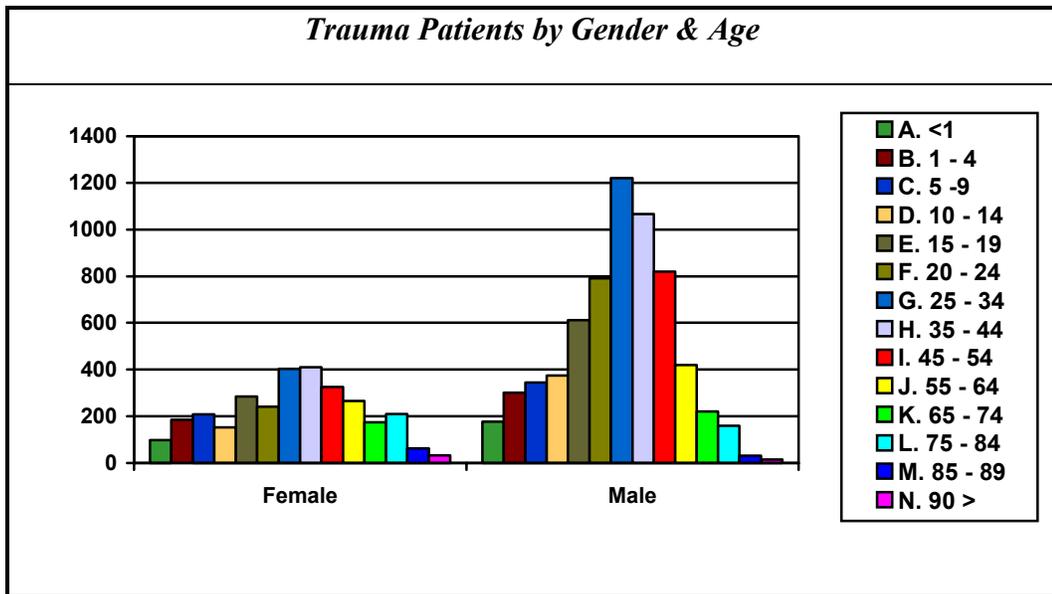
ANALYSIS OF STATEWIDE TRAUMA DATA

- The Georgia Trauma Registry (GTR) for 2003 contains 9,612 patient records from 14 participating trauma centers.
 - The illustration below shows the relative distribution of trauma patients reported by the 14 Georgia designated trauma centers.
 - 9,612 patient records represent approximately 20-30% of the trauma patients that are treated in Georgia. Because there are only 14 participating hospitals in the Georgia trauma system, the exact number of trauma patients is unknown.
 - The 9,612 patient records analyzed meet the strict American College of Surgeons trauma registry criteria.¹⁸ A less strict definition of trauma, based upon an analysis of Georgia’s local conditions, would significantly increase the number of seriously injured patients reported by these centers.



¹⁸ See The American College of Surgeons definition of trauma.

- Trauma is the number one killer in the 1-44 year age group and the 3rd highest cause of death for all age groups.
 - The loss of life, disability and rehabilitation increasingly place tremendous hardships not only on society but also on the entire economic stability of Georgia’s healthcare system.
 - The mean age for trauma patients in Georgia is 34.2 years.



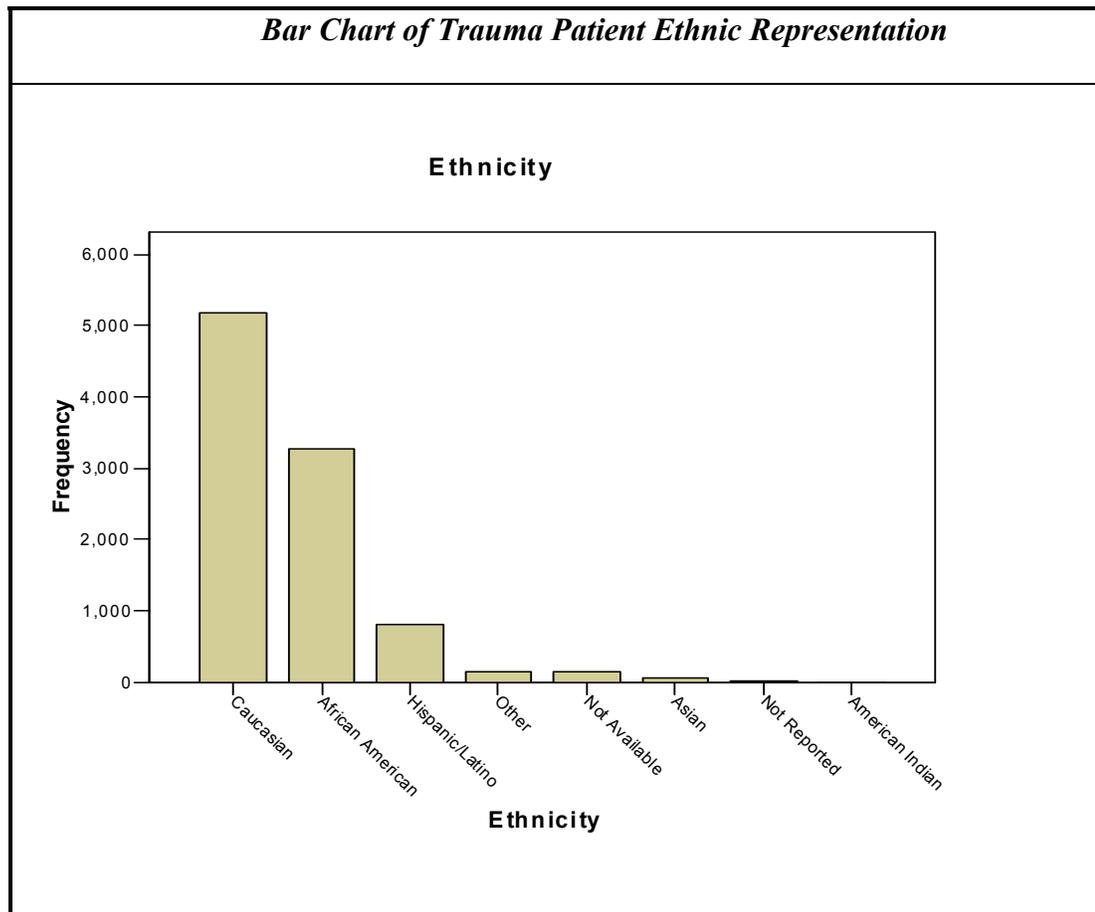
- Trauma is a disease that impacts both genders. Females represent 31.8% of the trauma patient records; males represent 68.2%.

Trauma by Gender

	Frequency	Percent
Male	6553	68.2
Female	3056	31.8
Uncoded	3	.0
Total	9612	100.0

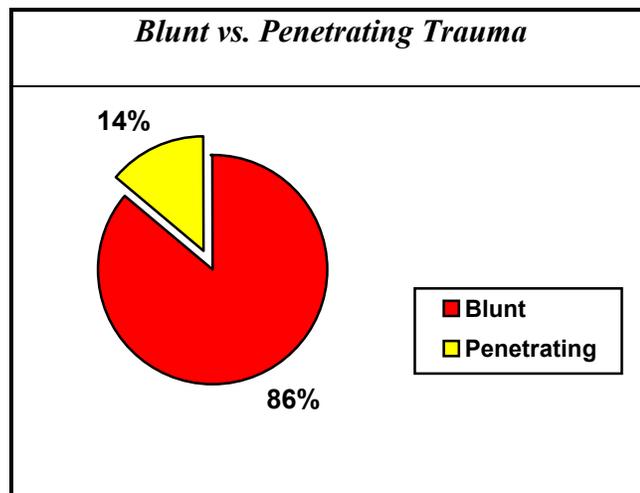
- ❑ Trauma is a disease that impacts all ethnic groups.

	Frequency	Percent
Caucasian	5174	53.8
African American	3274	34.1
Hispanic/Latino	801	8.3
Asian	70	.7
American Indian	7	.1
Other	139	1.4
Not Available	138	1.4
Not Reported	9	.1
Total ¹⁹	9612	100.0



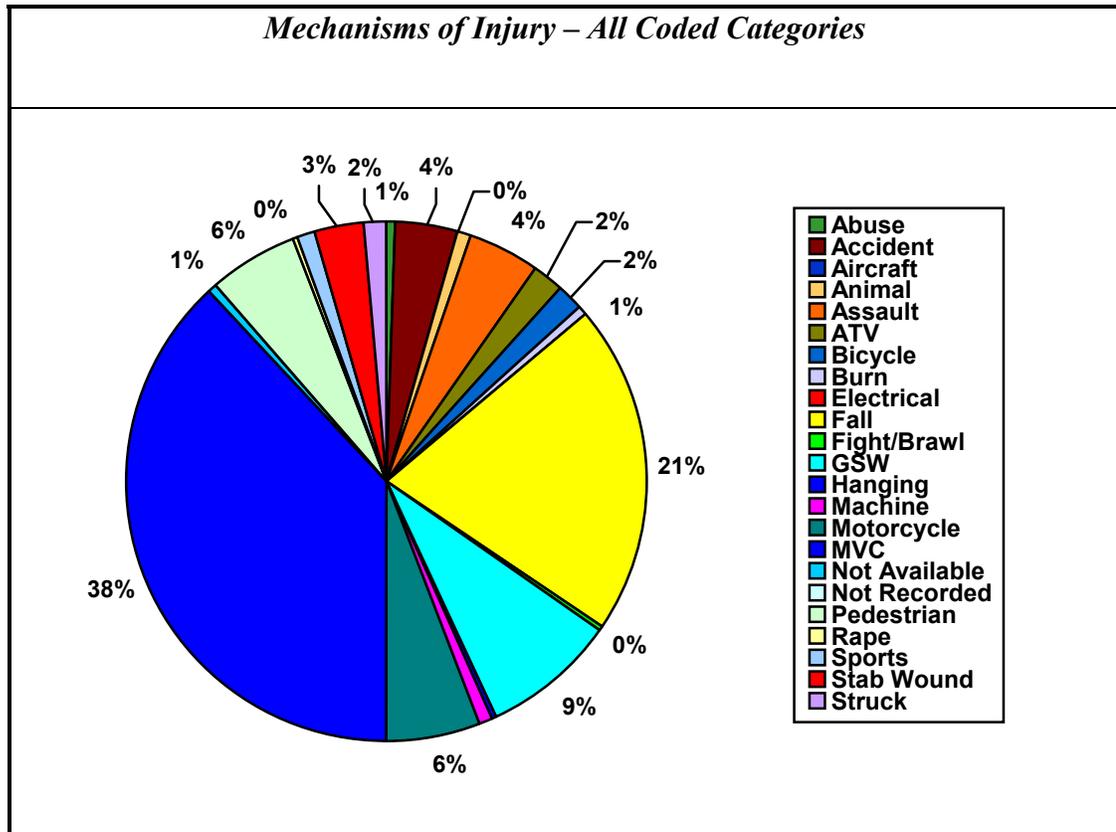
¹⁹ Not Available and Not Recorded are standard default options in the NTRACS® database for the data element, Race.

- From a medical perspective, the gross mechanisms of traumatic injury can be divided into two general categories: blunt and penetrating mechanisms. The majority of trauma, approximately 86% is the result of blunt injury. Approximately 14% is the result of penetrating mechanisms of injury.



- Another way of understanding trauma is to examine the major categories of specific injuries in more detail. Nine mechanisms account for 91.9% of trauma.

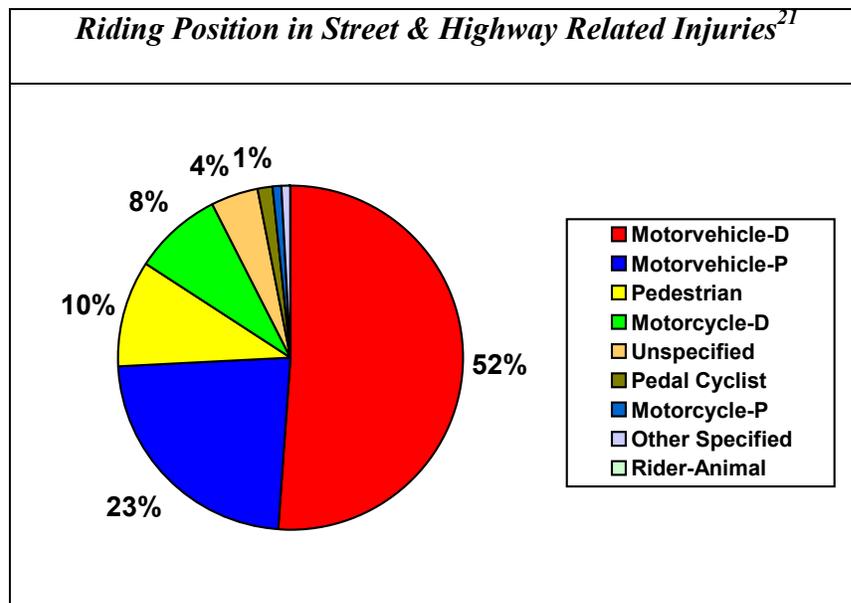
	Mechanism	Frequency	Percent	Cumulative Percent
1	Motor Vehicle Crash (MVC)	3654	38.0	38.0
2	Fall	1976	20.6	58.6
3	Gun Shot Wound (GSW)	819	8.5	67.1
4	Motorcycle	580	6.0	73.1
5	Pedestrian	540	5.6	78.7
6	Assault	407	4.2	83.0
7	Accident	387	4.0	87.0
8	Stab Wound	276	2.9	89.9
9	All Terrain Vehicle (ATV)	193	2.0	91.9



- Motor vehicle crashes²⁰ (MVC) are a predominate mechanism of injury and represent 38% of all traumatic injury reported.
- Falls represent 20.6% of mechanisms of injury. Falls are the second highest cause of injury after MVCs.
- Gunshot wounds (GSW) represent 8.5% of mechanisms of injury. GSWs represent the third highest cause of injury after MVCs and falls.
- Motorcycle crashes represent 6%. ATVs account for 2%.
- Most traumatic injuries occurred on streets and highways (52.2%).

<i>Where Injury Occurred</i>		
E-Codes	Frequency	Percent
E849.5 - Street/Highway	5021	52.2
E849.9 - Unspecified Place	1881	19.6
E 849.0 – Home	1494	15.5
E849.4 - Recreation & Sports Location	364	3.8
E849.3 - Industrial Place	287	3.0
E849.8 - Other Specified Place	252	2.6
E849.6 - Public Building	174	1.8
E849.7 – Residential	101	1.1
E849.1 – Farm	38	.4
Total	9612	100.0

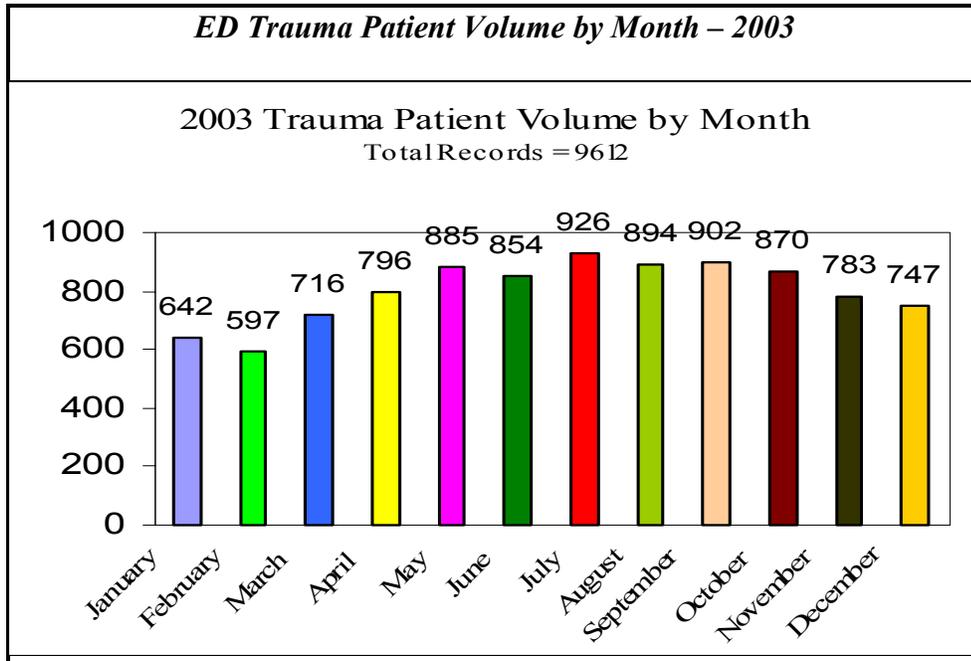
- Within E-Code 849.5, Street & Highway, motor vehicle drivers and passengers were the most frequently injured.



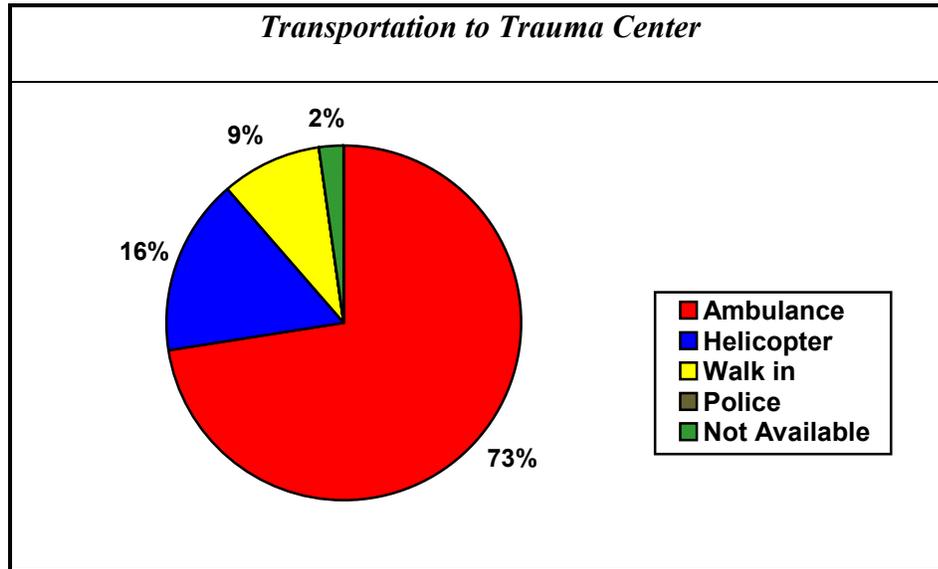
²⁰ Motorcycle and ATV crashes are not included in this number and are reported separately.

²¹ D represents Driver, P represents Passenger

- ❑ Trauma can strike any month or season of the year. July (9.6%) is the month with the most number of visits to the Emergency Department for a traumatic injury that met the inclusion criteria for the trauma registry.



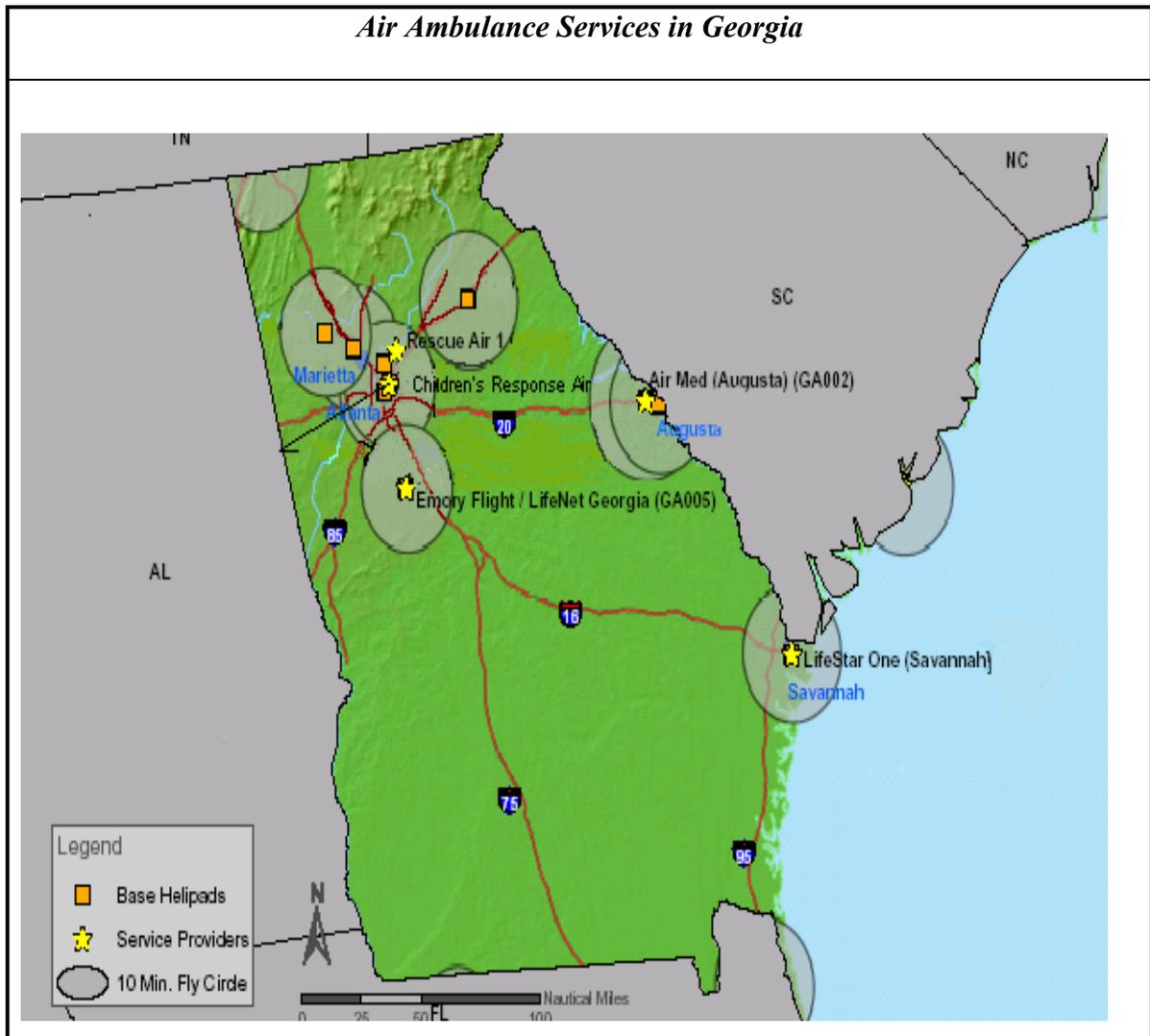
- 73% of patients reach a trauma center by ground ambulance.
 - Georgia has 263 licensed ambulance providers.
 - Georgia has approximately 2300 vehicles licensed as ambulances.
 - There are approximately 12,300 licensed EMS professionals in Georgia.



- 9% of trauma patients “walk-in” to trauma centers.
- 16.3% of patients reach a trauma center by helicopter. Helicopters and air transportation represent unregulated emergency transportation in Georgia.²²

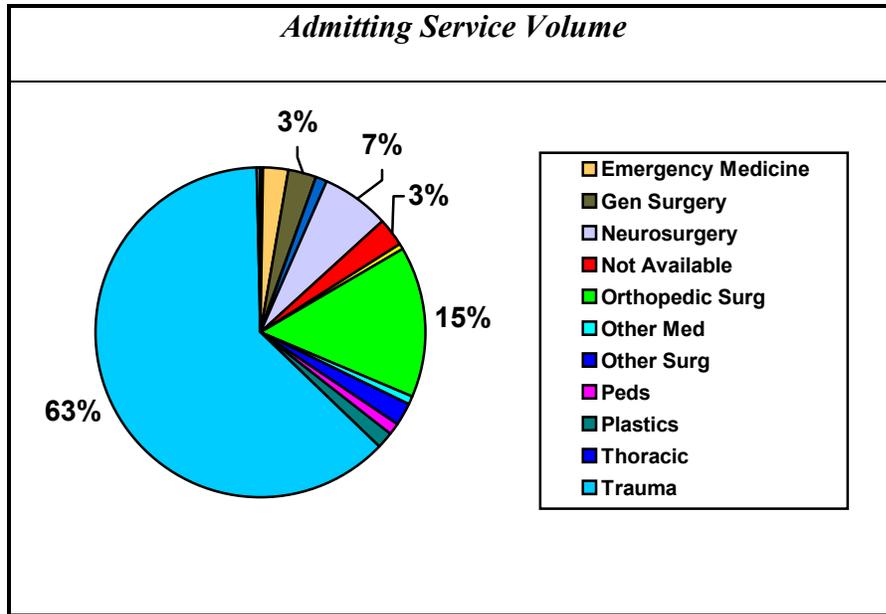
²² It is noted that in 2002 The Georgia General Assembly passed legislation to amend Chapter 11, Title 31 of the OCGA so as to provide for the licensure and regulation of air ambulance services.

- Five air ambulance services are based in Georgia²³
 - (Air Med (Augusta), Children’s Response Air, Emory Flight/LifeNet Georgia, Life Star One, and Rescue Air 1)
 - Air transportation can also originate outside of Georgia.
 - Air ambulance services play a major role in pre-hospital trauma care.
 - Some areas of Georgia are not yet covered.

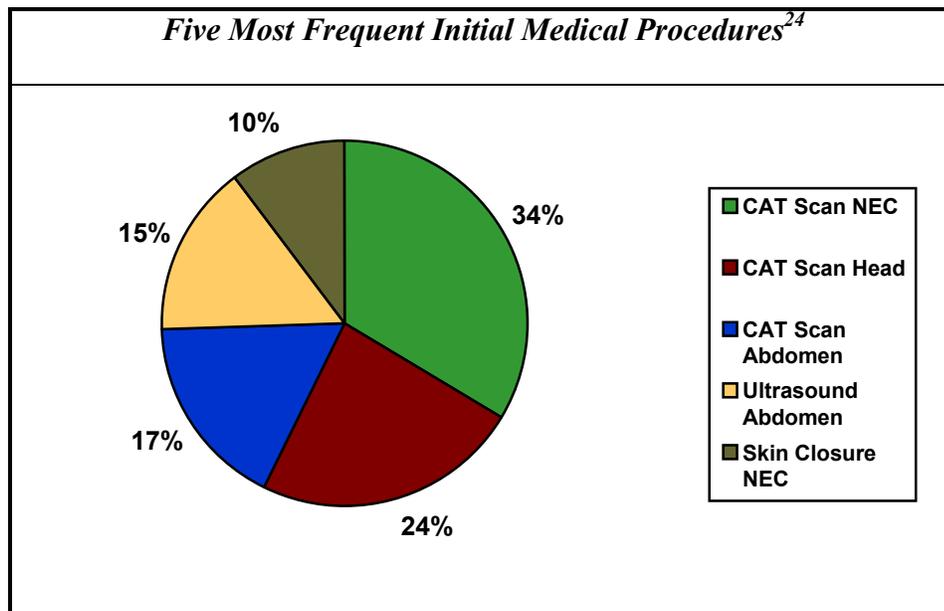


²³ Other Helicopter services not on the map include: Aero Medical Transport Services and Skycare 1. Their services may vary from the air ambulance services on the map. The source of the map is Flight Services Atlas and has been revised to reflect the current air ambulance services.

- ❑ No matter how patients arrive at the trauma center, they are usually admitted by the trauma service.

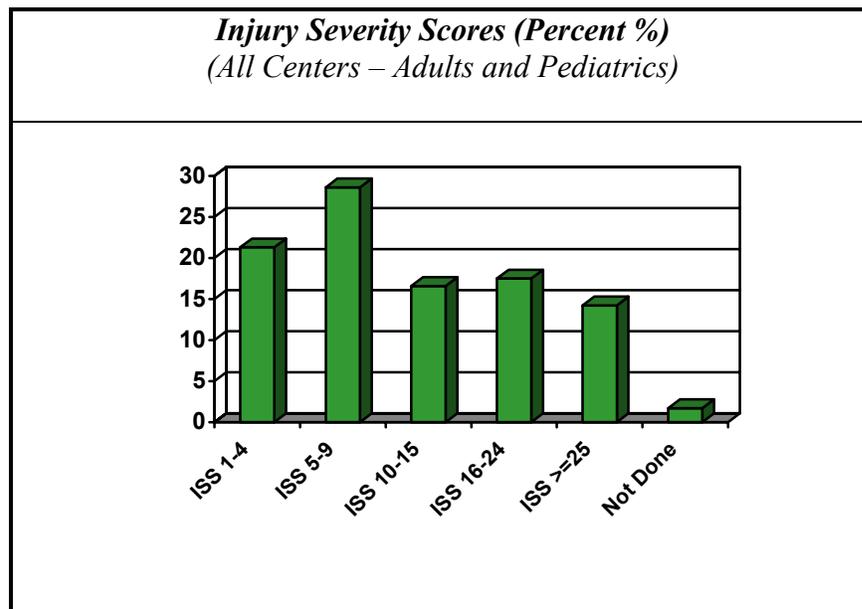


- ❑ The most frequent medical procedures initially performed are imaging techniques to help determine severity of injury.



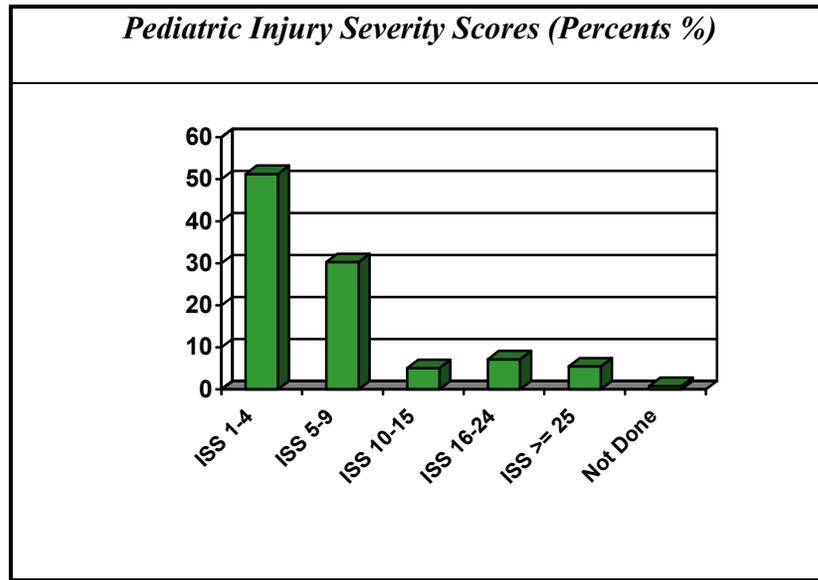
²⁴ Note: The term NEC (Not Elsewhere Classifiable) is used as standard terminology by NTDB. NOS (Not Otherwise Specified) is more commonly used in Georgia among trauma stakeholders.

- ❑ Trauma patients are given an Injury Severity Score (ISS). ISS is a numerical value from 1 to 75. The higher the number the more severe the overall injuries. This score is the sum of the squares of the Abbreviated Injury Scale (AIS) scores of the three most severely injured body regions.²⁵ This scoring system is widely accepted in trauma literature.

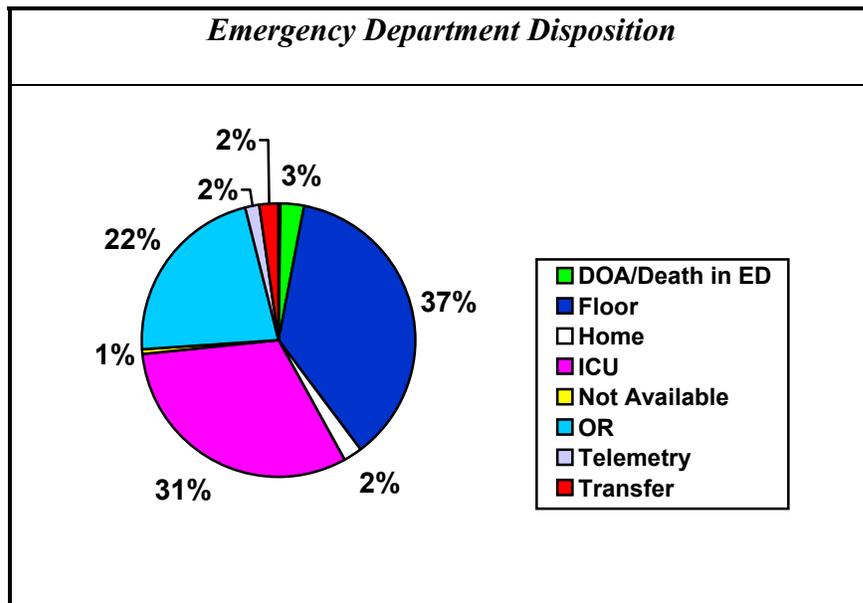


- ❑ Impact of age on Injury Severity Scores. Age can be an important variable in relationship to injury severity. It is well documented that older patients will have a higher probability of unfavorable outcome than a healthy younger person given the same injury severity. However, very young children may be similarly worse off.

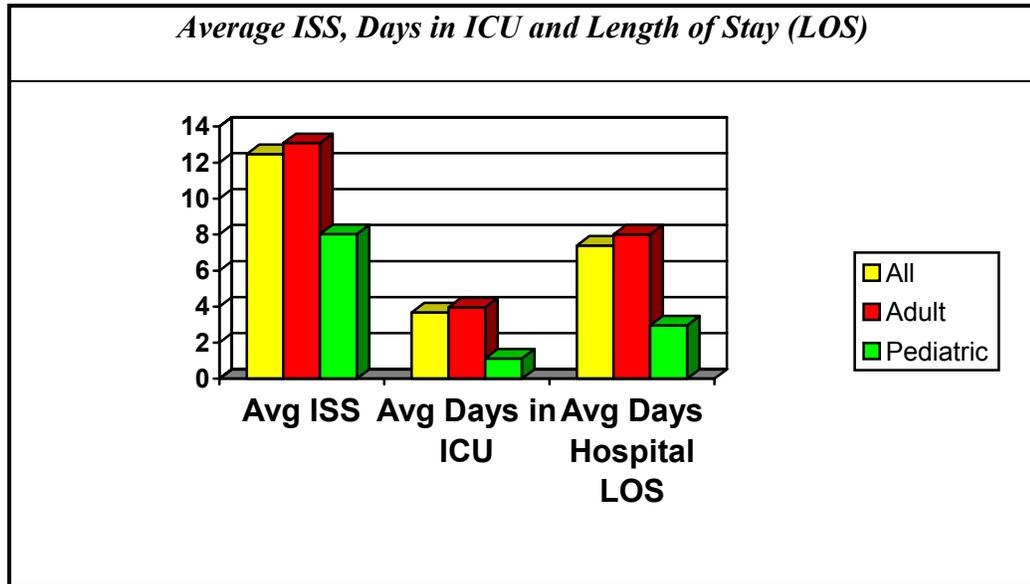
²⁵ There is a relationship between ISS length of hospital stay and long-term patient outcome. Source: The Abbreviated Injury Scale (1990), Association for the Advancement of Automotive Medicine.



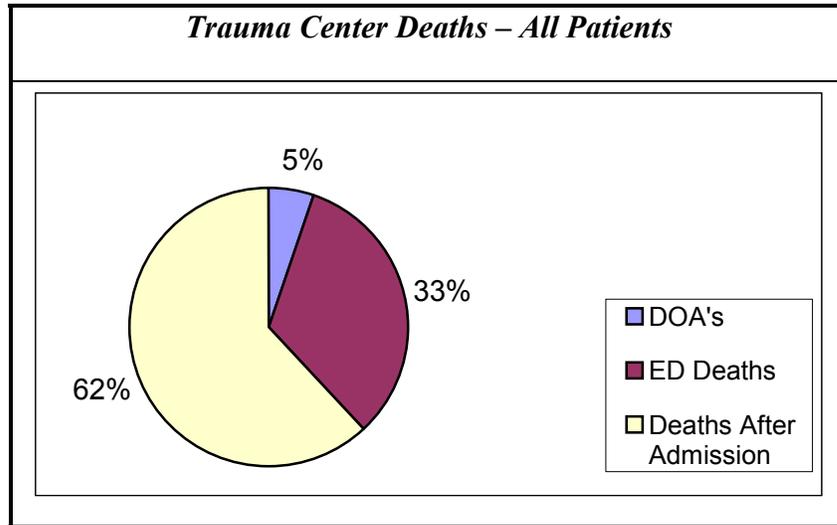
- ❑ From the Emergency Department, 31% of patients require treatment in an Intensive Care Unit (ICU) and 37% are taken to standard hospital rooms for additional care.



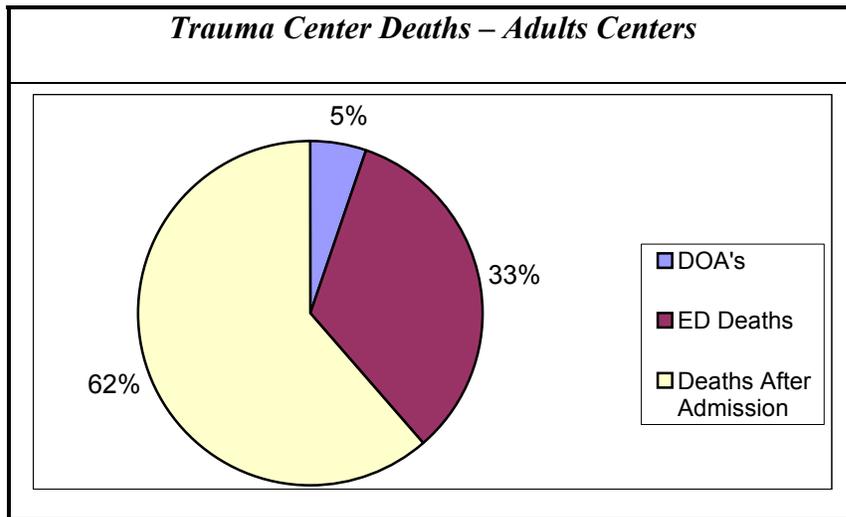
- ❑ Average ISS, days in ICU and length of stay are all factors which have bearing on overall patient outcomes. In studies, it is important to break out adult and pediatric data.



- ❑ Total trauma-related deaths reported by the 14 participating centers equaled 768. These deaths include DOA (Dead on Arrival)²⁶, deaths in the ED (Emergency Department), and deaths after admission.

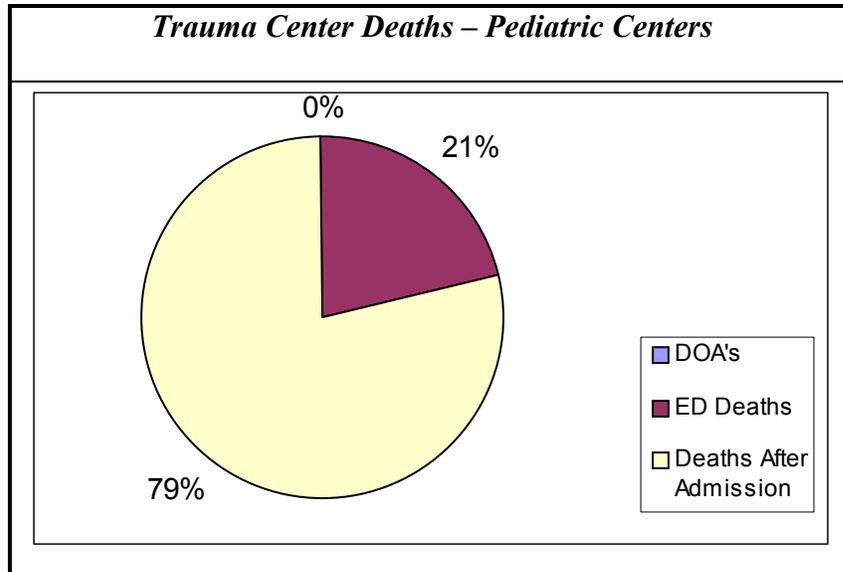


- ❑ Causes of death after admission vary by patient.



²⁶ Some trauma centers do not recognize the DOA category, i.e., an effort is made to resuscitate all patients that arrive at the center.

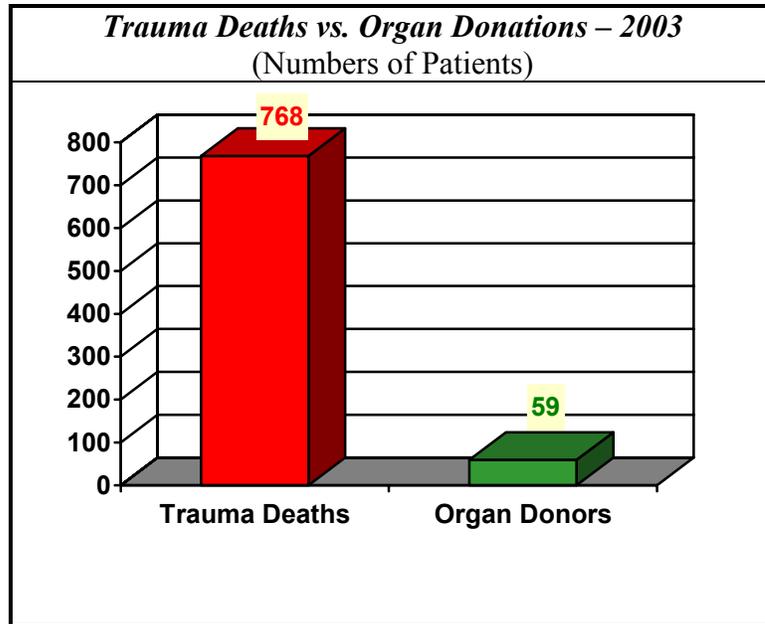
- ❑ Pediatric Trauma Centers reported zero DOAs in 2003; an effort was made to resuscitate all pediatric patients.



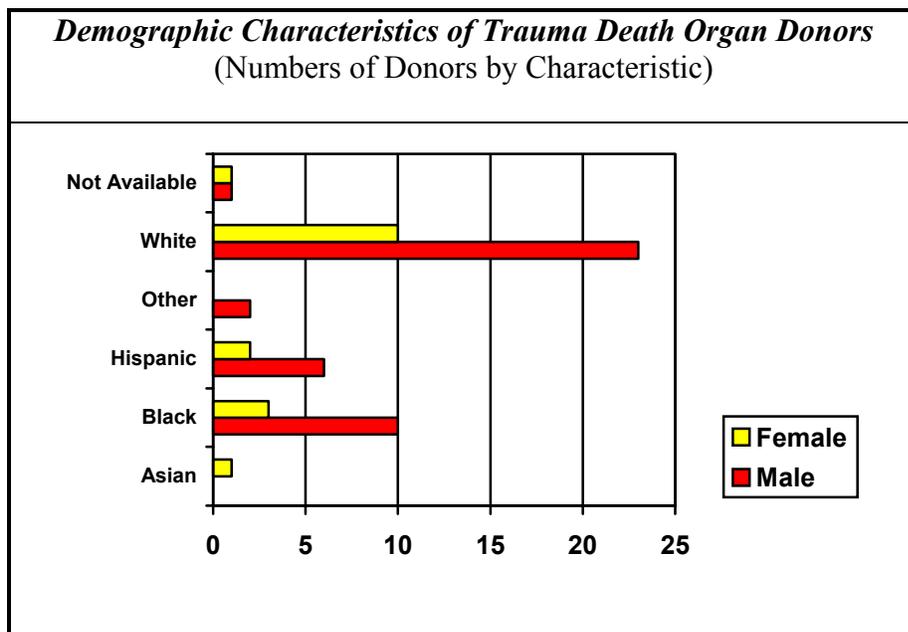
- ❑ Analysis of the death statistics indicates that Georgia trauma centers have an 8.0% death rate. These statistics indicate that Georgia trauma center patients have an excellent chance for survival after they are admitted to a trauma center.²⁷

²⁷ At this time no equivalent data is available for comparisons of Georgia Trauma Centers against national averages except on a category by category basis. The OEMS/T will be conducting a follow-on study of Trauma Deaths in Georgia in 2005.

- ❑ Georgia organ donations for trauma death numbered 59. Only 7.7% of deceased patients donated organs. 92.3% were not organ donors.²⁸



- ❑ Organ donors from trauma deaths represented all ethnic groups and both genders.



²⁸ For additional information regarding the Georgia Organ Donors Program, see www.lifelinkfound.org.

TRAUMA CENTER PROFILES

**Georgia Trauma Centers
(In Alphabetical Order)**



Source: <http://www.gwinnetthealth.org/programs/trauma/trauma.asp>

John D. Archbold Memorial Hospital



John D. Archbold Memorial Hospital
 P.O. Box 1018
 Thomasville, Georgia, 31799-1018
 229-228-2000
<http://www.archbold.org>

Trauma Medical Director

Gregory K. Patterson, MD, FACS, CWS

Trauma Coordinator

Kelli Vaughn, RN, BSN, CEN

Highlights of Trauma Program:

John D. Archbold Memorial Hospital has provided trauma care to the surrounding area since its initial trauma center designation in 1986. Upgraded to a Level II Trauma Center in 2002, Archbold continues to offer optimal resources to traumatically injured patients by providing acute care, rehabilitation, and injury prevention services.

Description of facility:

John D. Archbold Memorial Hospital is a not-for-profit, 264-bed hospital accredited by the Joint Commission on Accreditation of Healthcare Organizations. It is the anchor of an 800-bed regional network comprising five hospitals, four nursing homes, and primary and specialty clinics, serving 15 counties in south Georgia and north Florida. Archbold provides comprehensive cancer care, a multi-site inpatient and outpatient rehabilitation program, home health, dialysis, behavioral care, and outreach to underserved populations.

Mission: Archbold Medical Center is committed to providing high quality, compassionate, cost-effective healthcare for our patients.

Vision: The vision of John D. Archbold Memorial Hospital is to be a regional health system recognized for healthcare excellence and exceptional service to our patients.

Values: Compassion – fostering a caring environment in which the patient comes first
 Integrity – conducting ourselves in an ethical and honest manner.

Commitment – We are committed to our patients, employees, medical staff, and community.

Excellence – Meeting and exceeding expectations of those we serve. We value continuously improving everything we do to achieve excellence in performance.

Teamwork – Achieving a cooperative spirit among employees, medical staff, volunteers, and the community.

Effectiveness – Providing value-added, cost-effective care and appropriate services.

Atlanta Medical Center

Atlanta Medical Center



Atlanta Medical Center

303 Parkway Drive N.E.
Atlanta, GA 30312-1212
(404) 265-4000

www.atlantamedcenter.com

Trauma Medical Director

Dr. Vernon Henderson, MD, FACS

Trauma Coordinator

Rochella Mood, RN, MSN

Highlights of Trauma Program:

Since 1997, Atlanta Medical Center (AMC) has been a key player in trauma care in the state. Our Level II trauma center is committed to excellence in the care of trauma patients from admission through rehabilitation. Our medical center has committed the resources to meet the demands of staffing, specialty services and surgical capabilities required 24 hours a day, seven days a week. Last year AMC treated over 1,250 critically injured trauma patients.

Despite the growing financial challenges facing designated trauma centers in Georgia, Atlanta Medical Center has remained committed to caring for trauma victims. AMC is a regional referral center for facilities that are not equipped to deal with significantly injured patients and accepts patients from around the state. Last year more than 20% of AMC's patients were transfers from other facilities.

AMC uses the latest technologies available, combined with skill and compassion to ensure that patients have the best possible recovery.

Description of facility:

Since its founding in 1901, Atlanta Medical Center (AMC) has been serving the medical needs of the community and the region. The 460-bed tertiary care hospital, which is part of Tenet Georgia, is located at 303 Parkway Drive in Atlanta, Ga. Specialties include advanced surgery, cardiology, neurology, oncology, women's health, orthopedics, trauma and rehabilitation.

The level II trauma center is supported by aeromedical services providing immediate transportation to critical patients throughout the state.

The hospital campus also comprises a comprehensive cancer center, a Diabetes Metabolic Center, Sheffield HealthCare, a neighborhood community health center, as well as the Wellness Center, which houses the Highland Athletic Club, Atlanta Surgical Weight Loss Center and outpatient rehabilitation program.

Atlanta Medical Center is accredited by the Joint Commission on the Accreditation of Healthcare Organizations, the nation's oldest and largest hospital accreditation agency. To learn more about Atlanta Medical Center, visit www.atlantamedcenter.com.

Mission: Atlanta Medical Center has a two-fold mission: First of all, to meet the health-care needs of the community in which we are located. Secondly, to serve as a tertiary referral hospital for the Southern Crescent of the Atlanta area. Services are provided to all patients for whom the capability exists within the hospital to render those services in a quality, cost-efficient manner.

Vision: "Extraordinary Service by Extraordinary People". This vision gives meaning to the work of all of our people – employees, physicians, and volunteers. It is a purpose toward which we can all strive and aspire. The vision describes where we are going as an organization. It is what we stand for.

Values: Quality is the cornerstone of everything we do. It is our passion to provide exceptional care to every patient we serve. We value this commitment to quality and service. We value the rights of every patient to be treated with skill, dignity and respect.

Children's Healthcare of Atlanta – Egleston and Scottish Rite**Children's Healthcare of Atlanta at Egleston**

1405 Clifton Road NE
Atlanta, GA 30322-1062
404-325-6000

Trauma Medical Director

Paul Parker, MD

Trauma Program Coordinator

Mary Shepherd, RN, CCRN

Trauma Registrar

Dana Burrell

Children's Healthcare of Atlanta at Scottish Rite

1001 Johnson Ferry Road NE
Atlanta, GA 30342-1605
404-785-5252

Trauma Medical Director

John Bleacher, MD

Trauma Program Coordinator

Teresa Fox-Paone, RN, BS, BSN

Trauma Registrar

Pamela Jones-Jackson, C.C.B.S.

<http://www.choa.org>

Highlights of Trauma Program:

- Level II Pediatric Trauma Center
- Treats over 19,900 trauma related injuries/year
- Trauma Resource and Trauma Specialist Program
- All services provided from prevention to rehab
- Wide variety of trauma education offerings

Hospital Mission: To enhance the lives of children through excellence in patient care, research and education.

Vision: To be the model for addressing children's health needs by defining, then providing or advocating for: accessible, innovative and excellent patient care; integrated teaching and research; and partnerships in wellness and prevention programs.

Values: -- Integrity: Being honest, ethical and committed to all we do.

Respect: Appreciating all people, work and ideas.

Nurturing: Fostering the care, growth and development of the individual. Excellence:

Delivering the highest level of care and service.

Teamwork: Working together to achieve our goals.

Trauma Mission: The mission of the Trauma Program at Children's Healthcare of Atlanta is to provide excellent clinical care, education, research, and to maintain designation as a Level II Pediatric Trauma Center with campus specific capabilities.

Description of facility:

- 58 ED beds/ 42 PICU beds
- 4 trauma rooms/ 4 helipads
- ECMO capabilities / CV Surgery
- Comprehensive Inpatient Rehabilitation
- Children's Response Transport Team: Ground, Helicopter, Fixed wing. 1-800-325-6540
- Child Life, Child Injury Prevention and Advocacy Program

DeKalb Medical Center

Address
 2701 N. Decatur Road
 Decatur, GA 30033
 Main hospital telephone #
 404-501-1000
 Website address
www.dekalbmedicalcenter.org

Trauma Medical Director
William R. Hardcastle, M.D.
404-296-0148

Trauma Coordinator
Kelly Nadeau, R.N., M.N.
404-501-5651

Trauma Registrar
Karen Johnson
404-501-5663

Highlights of Trauma Program:

DeKalb has been designated as a Level 3 Trauma Center since 1990. We are the primary trauma care provider for DeKalb County and are proud of our close relationship with DeKalb Fire and Rescue Services for prehospital care. Seven general/trauma surgeons provide trauma coverage with subspecialists available for consult. A monthly trauma lecture series is offered to any health care provider with an interest in trauma care. Trauma Nursing Core Courses and the Course in Advanced Trauma Nursing are offered regularly. Advanced Trauma Life Support courses are planned for 2005.

Mission: Our mission is to improve lives through the delivery of excellent health and wellness services in partnership with our physicians.

Vision: DeKalb Medical Center will be the recognized leader in clinical and service excellence and employee satisfaction.

Values: Diversity
 Respect
 Healing
 Service

Description of facility:

DeKalb Medical Center is a not-for-profit hospital system that includes three hospitals: the 525 bed DeKalb Medical Center, the 102 bed DeKalb Medical Center at Decatur, and DeKalb Medical Center at Hillandale, a new 100 bed hospital scheduled to open in fall 2005. A leader in progressive medical technology delivered by a highly qualified and caring staff, the hospital system serves approximately 500,000 patients, including 75,000 emergency and trauma patients, and provides the community with more than \$40 million in free care.

Floyd Medical Center

304 Turner McCall Blvd
Rome, Ga 30165
706-509-5000

Trauma Medical Director

Louis Dinatti, MD, FACS

Trauma Coordinator

Tifani Kinard, RN

Trauma Registrar

Cindy Holman

Mission:

Floyd's mission is to be responsive to the communities we serve with a comprehensive and technologically advanced health care system committed to the delivery of care that is characterized by continually improving quality, accessibility, affordability and personal dignity.

Vision:

Floyd's vision is to be the regional health care provider of choice and the employer of choice, to deliver patient and family centered care that is compassionate, sensitive and respectful of each individual's needs.

Values:**Floyd Patients**

...are our highest priority ...are provided high quality, state-of-the-art health care ...are treated with respect and dignity, and treated equally
...are provided education and information for themselves and their families.

Floyd Employees

...are our most valuable asset ...are offered an environment that attracts and retains highly

qualified personnel ...are encouraged and supported to reach their maximum potential through education, and are recognized for a job well done ...are provided an environment of open communication, participation in planning, and respect for each employee's contribution to our mission.

Floyd's Medical Staff

...are our valued customers as well as partners in health care ...are provided an environment that attracts and maintains high caliber physicians

...are involved in the direction of the hospital community.

Description of facility:

A 304-bed full-service, acute care hospital and regional referral center, Floyd provides sophisticated medical services and the latest technology to support centers of excellence in trauma and emergency care, as well as women and infants, pediatrics, inpatient and outpatient rehabilitation specialties, inpatient and outpatient surgery, cancer, diabetes, home care and hospice, neurosciences, orthopedics and cardiology.

Highlights of the Trauma Program:

Floyd Medical Center is a state-designated Level II Trauma Center treating 56,000 people each year in our Emergency Care Center. Highlights of the program include: Community wide injury prevention program seeing over 2000 students/year, EMS of the year three times, most recently in 2003, and hospital wide trauma education.

Grady Health System

80 Jesse Hill Jr Drive
 Atlanta, GA 30303-3050
Main hospital telephone #
 404-616-4307
Website address
<http://www.gradyhealthsystem.org>

Trauma Medical Directors
 Grace S. Rozycki, MD FACS
 Emory University School of Medicine

L. Leon Dent, MD FACS
 Morehouse School of Medicine

Trauma Coordinator
 Fran H. Lewis, RN MS

Highlights of Trauma Program:
 Grady Health System is one of the largest public hospitals in the Southeast -- and includes the 900+ bed Grady Memorial Hospital, Hughes Spalding Children's Hospital, 10 neighborhood and airport health centers and the only level one trauma center within a 100-mile radius.

Description of facility:
 Grady is an internationally recognized teaching hospital, staffed exclusively by physicians from Emory and Morehouse schools of medicine, many who could be categorized as some of the leading doctors in the country. Twenty-five percent of all physicians practicing medicine in Georgia received some or all of their training at Grady. Grady maintains its historic commitment to the health needs of those most vulnerable and offers a broad range of state-of-the-art services and medical expertise to all segments of the greater metropolitan area – and beyond. Grady shields other Atlanta hospitals from a massive burden of uncompensated care. Grady is also one of Atlanta's largest downtown employers, generating more than \$1.6 billion for the Atlanta economy.

Mission: The Grady Health System is a comprehensive health services delivery system that includes affiliations with public health organizations, medical education programs, and community advocates to provide quality, cost-effective and customer-focused health care to all residents of metropolitan Atlanta, and citizens of the state of Georgia. The Grady Health System maintains its commitment of offering medical services to the underserved, including governmentally sponsored populations. Grady's services will be provided in a compassionate, respectful and dignified manner to all its customers.

Vision: The Grady Health System will continue to be a world-renowned leader in health services through its commitment to quality care, medical education and research.

Values: Our core values (compassion, excellence, teamwork, integrity, and commitment) are critical to achieving the mission of the Grady Health System. All employees, physicians, affiliated staff members, volunteers and the Fulton-Dekalb Hospital Authority Board of Trustees accept and embrace these five Core Values.

Gwinnett Medical Center

1000 Medical Center Blvd.
Lawrenceville, GA 30045
678-442-4321
www.gwinnettmedicalcenter.org

Trauma Medical Director

Barry Renz, MD

Trauma Coordinator

Deb Battle MS, RN, CEN, CCNS

Trauma Registrar

Mary Lou Dennis

Mission:

We exist to provide quality health services to our community.

Vision:

To be the Health System of choice in our community by enhancing the health of our patients and other customers.

Values:

The customer is first and foremost.
Respect for the individual.
The pursuit of excellence.
The promotion of positive change.
Service to the community.

Highlights of Trauma Program:

- Gwinnett Medical Center is designated by the Georgia State Office of EMS & Trauma as a Level II adult trauma center
- Gwinnett Medical Center is the only trauma center in Gwinnett County
- In addition to providing inpatient care to trauma patients, we also provide:
 - continuing trauma education to EMS, hospital and medical staff
 - injury prevention education to the community
 - community trauma web page at www.gwinnetthealth.org

Description of Medical Center:

Gwinnett Medical Center is part of Gwinnett Hospital System, a 479-bed not-for-profit healthcare network providing high quality facilities and services to Gwinnett and the surrounding area. Gwinnett Medical Center offers state-of-the-art inpatient, outpatient and intensive care, maternity services and comprehensive specialty care, including orthopedics and neuroscience.

Hamilton Medical Center

Address: 1200 Memorial Drive
Dalton, GA 30720

Main hospital telephone #: (706) 272-6000

Website address: www.hamiltonhealth.com

Trauma Medical Director

Richard Fromm MD FACS

Trauma Coordinator

Jennie Banks RN CEN EMT-P

Trauma Registrar

Byron Wynkoop

Description of facility:

Centered in the heart of the Hamilton Health Care System is Hamilton Medical Center, a 282-bed hospital dedicated to providing premium health care. Twice named one of the Top 100 Hospitals in the United States by HCIA and Mercer Consulting, Hamilton Medical Center continually receives the maximum 3-year accreditation by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Hamilton's technologically advanced diagnostic facility includes a fully-accredited laboratory, a magnetic resonance imaging center and outpatient neurodiagnostic center. The medical center is also home to an advanced computer radiology system and outpatient women's pavilion featuring mammography, ultrasound and bone densitometry capabilities.

Mission: Hamilton Medical Center is dedicated to quality health care that serves the needs of area residents without discrimination. Working in partnership with trustees, professional staff and the medical community, Hamilton Medical Center will be the region's leading provider of a continuum of health care services that are high in quality, that promote effectiveness and efficiency, and that advance the quality and dignity of life. As a not-for-profit organization, Hamilton Medical Center will manage its resources with integrity and in a manner which ensures continued financial viability.

Vision: Hamilton Medical Center will achieve outstanding customer satisfaction and clinical excellence in all of its services and build a premier reputation throughout northwest Georgia for selected specialty services.

Guiding Principles: Hamilton Medical Center's staff is committed to these guiding principles: Customer Centered Care; Competent Care; Compassionate Care and Cost Effective Care.

Highlights of Trauma Program: The state-designated Level II trauma center, among the state's busiest, provides outstanding immediate and ambulatory emergency care. Hamilton remains a dedicated resource for all aspects of trauma care, such as prevention, access, pre-hospital evaluation, acute hospital care, surgical and critical care, as well as, rehabilitation services.

Medical Center of Central Georgia

The Medical Center of Central Georgia

Address: 777 Hemlock Street
Macon, GA 31201
Main hospital telephone #478-633-1000
Website address: www.MCCG.org

Trauma Medical Director*Dennis W. Ashley, MD, FACS***Trauma Program Manager***Debra Kitchens, RN, CEN, NREMT-P***Trauma Registrar***Brenda Norris, NCMA***Highlights of Trauma Program:**

In June of 1993, the trauma attending began staying in-house in order to provide efficient, expedient care to the most critically injured trauma patients. This marked the birth of the first organized Trauma Service at MCCG. In October of 1998, the Medical Center became designated as a Level One Trauma Center. There are currently 8 trauma surgeons on service in addition to Dr. Ashley with a designated attending on call each night and weekends. The Trauma Service admits approximately 1500 trauma patients a year.

Description of the facility:

MCCG is a tertiary-level referral hospital serving the residents of central and south Georgia. It's a licensed capacity is 637 beds, including medical-surgical, obstetric, pediatric, psychiatric, cardiac surgery intensive care. The Medical Center performs approximately 31,800 surgical procedures and 3,000 deliveries per year. It is the major provider of open-heart surgery procedures in the region and has more than 29,000 inpatient admissions and 400,000 outpatient visits per year.

Mission: To enhance the health status of those we serve in partnership with medical staff and community organizations by providing wellness services, health education and training, and access to safe, high quality health care.

Vision: To be a national leader in providing the safest, highest quality community-centered health care and wellness services through our highly skilled, diverse, and valued workforce to meet the changing needs of those we serve.

Values: We are a national healthcare leader committed to the following values:

Excellence: We continually strive to provide the highest quality Service at the lowest possible cost, with the best utilization of our resources. Integrity We act honestly and ethically in all relationships.

Diversity: We value and respect the uniqueness and dignity of all individuals. Service We responsibly anticipate the needs of our community and cooperatively work with our medical staff and community entities to provide a safe and seamless continuum of care.

Integrity: We act honestly and ethically in all relationships.

Compassion: We respond through a caring environment to the holistic needs of those we serve.

Medical College of Georgia Health System

Address: 1120 15th Street
Augusta, GA 30809

Main Hospital Telephone #: 706-721-0211

Website Address: MCGHealth.org

Trauma Medical Director:

Michael L. Hawkins, MD, FACS
Director: Trauma/Critical Care Service
Professor of Surgery, Anesthesiology and Emergency
Medicine

Trauma Coordinator:

Regina S. Medeiros, RN, MHSA, CCRN

Trauma Registrars:

Sandra Lowe
Melissa Brown

Highlights of Trauma Program:

MCG Health System's trauma team specializes in the treatment of traumatic, critical care injuries 24-hours a day, seven days a week. Designated in 1981 as Georgia's first Level I trauma center, MCG also houses a pediatric trauma center located in the Children's Medical Center. The physicians and nurses in the trauma center serve a 13-county region including Augusta. With the recent addition of helicopter transport, the center also treats trauma patients beyond the 13-counties. The trauma center coordinates care for more than 1,500 trauma victims each year by following them through their hospital stay and coordinating their care after leaving MCG. The center includes a 12-bed shock/trauma intensive care unit and a specialized trauma resuscitation area within the emergency department. The specialized team includes a trauma nurse coordinator, trauma clinical nurse specialist, trauma registrar and one of the most highly trained physician teams in the Southeast. The interdisciplinary team also includes many other health care professionals from pastoral care to pharmacy services. The goal is to provide comprehensive care to ensure the best possible outcomes for trauma victims and their families.

Mission: To Care, To Serve, To Educate, To Discover

Vision: To achieve excellence in compassionate patient care, life-long learning, dedicated public service and leading edge research.

Values: We are committed to the following values:

- **Respect**
- **Service**
- **Communication**
- **Quality**
- **Collaboration**
- **Cost Efficiency**

Description of facility:

MCG Health System is composed of three separate organizations -- MCG Health, Inc. and the clinical services offered by the faculty employees of the Medical College of Georgia and the members of the Physicians Practice Group. The physicians of MCG Health System are community physicians and faculty employees of the Medical College of Georgia and the Physicians Practice Group, not employees of MCG Health Inc. MCG Health, Inc. is a not-for-profit corporation operating the MCG Medical Center, MCG Children's Medical Center, the MCG Sports Medicine Center, MCG Ambulatory Care Center, the Georgia Radiation Therapy Center and related clinical facilities and services. MCG Health, Inc. was formed to support the research and education mission of the Medical College of Georgia and to build the economic growth of the CSRA, the state of Georgia and the Southeast by providing an environment for faculty employees of the Medical College of Georgia and the Physicians Practice Group and community physicians to deliver the highest level of primary and specialty health care. For more information, please visit www.MCGHealth.org.

Memorial Health University Medical Center

Memorial Health
4700 Waters Avenue
Savannah, GA 31404
(912) 350-8000

Trauma Medical Director
M. Gage Ochsner, MD, FACS

Trauma Services Manager
Daisy Gantt, RN, MS

Trauma Registrar
Kim Clark

Highlights of Trauma Program:
Memorial Health University Medical Center has been a designated Level I Trauma Center since 1980. There are five physicians who have been specially trained in trauma surgery and surgical critical care who provide 24/7 coverage. Each of these physicians has membership in numerous national trauma associations and is often sought out for their expertise in the care of the injured patient. Additionally, Memorial Health operates MedStarOne, a ground ambulance service serving the majority of Chatham County and LifeStarOne, emergency helicopter service. The Trauma Services Department consists of Trauma Department Manager, Trauma Nurse Coordinator, Social Worker, Registrar and Administrative Coordinator. The Department is involved in community injury prevention programs within Chatham County.

Mission: We help people feel better.

Vision: We will be the healthcare partner of choice, empowering people to achieve physical, emotional, and spiritual well-being.

Values: Trust, Respect, World-Class, Enjoyment, My Memorial

Description of facility:

Memorial Health University Medical Center opened in October 1955 as a 300 bed general hospital dedicated in honor of the nation's war dead. MHUMC has grown into a two-state corporation, including 530 licensed beds in the medical center providing tertiary care for residents in 35 counties in southeast Georgia and southern South Carolina. MHUMC is a regional referral center for cancer care, trauma, rehabilitation, high-risk obstetrics, neonatology, pediatrics and cardiac care. Memorial Health has a strong relationship with Mercer University School of Medicine providing medical rotations to junior and senior medical school students. Memorial Health also has a General Surgery residency program with 3 residents at each year level for a total of 15 residents. Residents from Eisenhower Army Medical Center at Fort Gordon rotate through the facility for training in trauma and surgical critical care.

North Fulton Regional Hospital



North Fulton Regional Hospital
 3000 Hospital Blvd
 Roswell, GA 30076
 (770) 751-2500
 (770) 751-2912
www.northfultonregional.com

Trauma Medical Director
 John Harvey, M.D.

Trauma Coordinator
 Judy McDaniel, RN

Highlights of Trauma Program:

North Fulton Regional Hospital is a designated Level II Trauma Center. This designation was first obtained in the mid 80's. North Fulton meets the standards set forth by the State of Georgia and in many instances exceeds these standards. They take pride in serving their community.

North Fulton Regional Hospital



Mission: “North Fulton Regional Hospital, in partnership with our medical staff, will provide quality, cost effective healthcare to our patients in a kind, caring, and respectful environment.”

Vision: Our Commitment to Quality consists of a comprehensive set of initiatives that address issues surrounding patient safety and reporting, physician excellence, nursing excellence and patient throughput.

Values: NFRH's core values are an organizational focus on: Service, Quality, People, Growth and Cost.

Description of facility:

North Fulton Regional Hospital (NFRH), opened in 1983, is a 167-bed, acute-care community hospital located on Highway 9 (Alpharetta Highway) in Roswell, Georgia. NFRH serves North Fulton and surrounding counties through its team of over 1000 employees, 450 affiliated physicians and 250 volunteers. North Fulton Regional Hospital is proud to be celebrating its twenty-year anniversary serving North Georgia. More information on services offered at North Fulton Regional Hospital can be found at www.northfultonregional.com

The Medical Center – Columbus

The Medical Center



710 Center Street
Columbus, Georgia 31901
(706) 571-1000
columbusregional.org

Trauma Medical Director

R. Scott Hannay, MD

Trauma Coordinator

Cathy Maxwell, RN, CCRN

Trauma Registrar

Imogene Willis

Highlights of Trauma Program:

Located in West Central Georgia, The Medical Center is the only state designated trauma center within a 90 mile radius. The Trauma Program provides care to trauma patients from 19 counties in Georgia and Alabama and is dedicated to excellence in care for all patient. 6 trauma surgeons from a single practice (Surgical Associates) direct care on the trauma service and provide oversight to residents. The Trauma Program also strives to serve the community through education, outreach and injury prevention activities.

Mission: Columbus Regional will be the region's leader in providing quality health-care services, caring for those we serve compassionately and with respect for their needs, dignity and the quality of their lives.

Vision: We envision serving a community and region where the people are strong and healthy. We envision a health-care system focused solely and completely on excellence, care and compassion. We will build a workforce, manage our resources and develop collaborative relationships in our community to ensure this vision is realized.

Values: We value life and we value people. We strive for excellence in all we do. We are ethical, professional and dedicated to serving our community and our region. We value diversity, innovation and creativity in our employees.

Description of facility:

The Medical Center offers highly specialized acute care services, many of which are available nowhere else in the region. These include the John B. Amos Cancer Center, the region's only advanced maternity services and neonatal intensive care unit, a dedicated pediatric service and pediatric intensive care unit and a dedicated trauma center and highly regarded emergency services for children and adults.

APPENDIX A: GEORGIA 2003 TRAUMA STATISTICAL TABLES

<i>Table 1, Summary of Georgia Designated Trauma Centers</i>				
Trauma Center (Listed Alphabetically)	Level of Designation	Regular Beds	ICU Beds	Pediatric Beds
Archbold Memorial Hospital	2	224	14	0
Atlanta Medical Center	2	460	36	0
Children's Healthcare of Atlanta – Egleston	2 Pediatric	0	21	235
Children's Healthcare of Atlanta – Scottish Rite	2 Pediatric	0	21	181
DeKalb Medical Center	3	525	32	0
Floyd Medical Center	2	252	24	28
Grady Memorial Health	1	1000	80	56
Gwinnett Medical Center	2	175	20	8
Hamilton Medical Center	2	244	18	20
Medical Center of Central Georgia	1	637	54	32, ICU-12
Medical College of Georgia	1	632	104	60
Memorial Health University Medical Center	1	435	60	51, ICU-10
N. Fulton Regional Hospital	2	167	28	0
The Medical Center –Columbus	2	413	32	35
TOTALS		5164	544	728

<i>Table 2, Summary of Georgia Acute Care Hospitals by Size</i>		
Georgia Acute Care Hospitals By Size		
Bed Size Range	Hospitals	Licensed Beds
0 - 49	47	1558
50 - 99	39	2869
100 - 199	28	3981
200 - 299	12	3027
300 - 399	9	2993
400+	17	8949
Total	152	23377

Table 3, Summary of Trauma Registry Records by Center

Alphabetic List by Name – Level Designation		Number of Trauma Registry Records (n =)	Percent
1	Archbold MC – 2	242	2.5
2	Atlanta MC – 2	918	9.6
3	Columbus MC – 2	578	6.0
4	Dekalb MC – 3	392	4.1
5	Egleston - P2	495	5.1
6	Floyd – 2	356	3.7
7	Grady – 1	2124	22.1
8	Gwinnett MC – 2	573	6.0
9	Hamilton – 2	178	1.9
10	MCCG – 1	875	9.1
11	MCG – 1	679	7.1
12	Memorial – 1	1069	11.1
13	N. Fulton MC – 2	469	4.9
14	Scottish Rite - P2	664	6.9
	Total	9612	100.0

Table 4, Georgia Trauma Registry Records – Ordered by Patient Counts

Ranked by Patient Counts	Frequency	Percent	Cumulative Percent
Grady – 1	2124	22.1	22.1
Memorial - 1	1069	11.1	33.2
Atlanta MC - 2	918	9.6	42.8
MCCG – 1	875	9.1	51.9
MCG – 1	679	7.1	58.9
Scottish Rite - P2	664	6.9	65.8
Columbus - 2	578	6.0	71.9
Gwinnett MC - 2	573	6.0	77.8
Egleston - P2	495	5.1	83.0
N. Fulton - 2	469	4.9	87.8
Dekalb MC - 3	392	4.1	91.9
Floyd – 2	356	3.7	95.6
Archbold - 2	242	2.5	98.1
Hamilton - 2	178	1.9	100.0
Total	9612	100.0	

Table 5, Georgia Trauma Registry Records Bar Chart

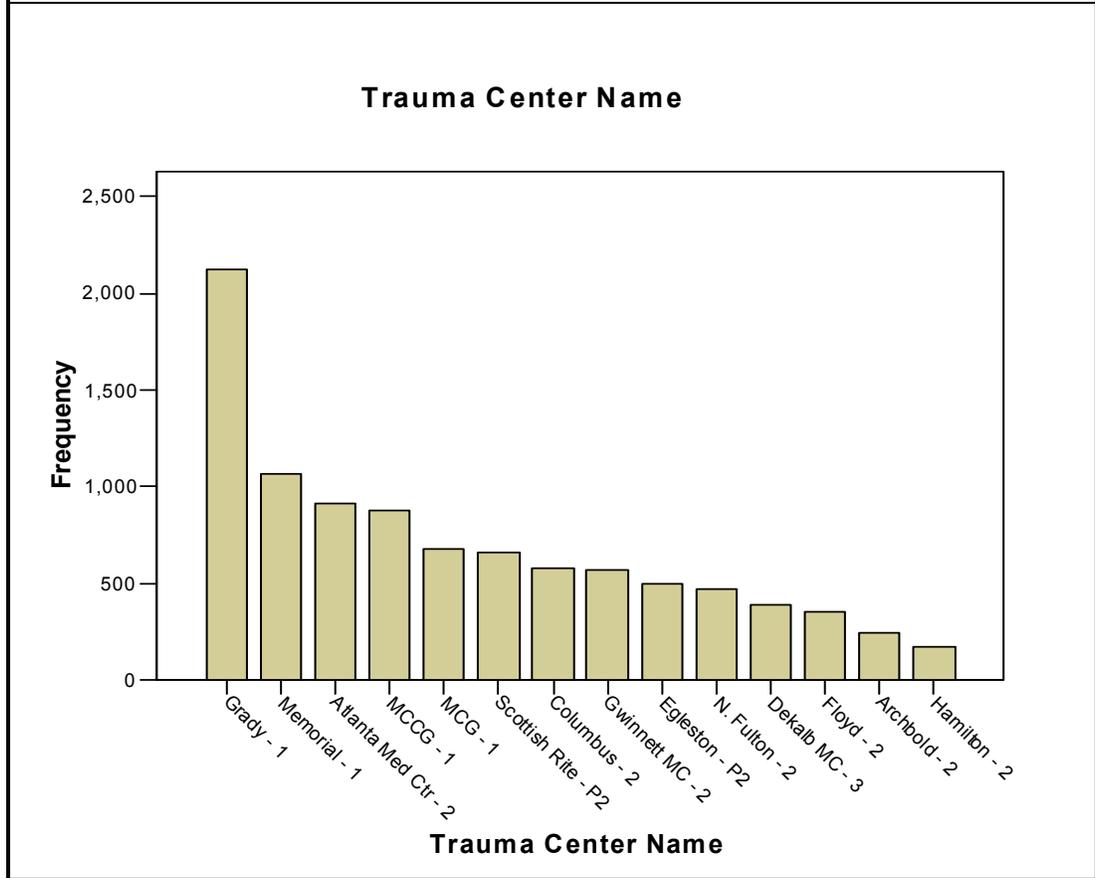


Table 6, 2003 Patient Gender

	Frequency	Percent	Cumulative Percent
Female	3056	31.8	31.8
Male	6553	68.2	100.0
Uncoded	3	.0	100.0
Total	9612	100.0	

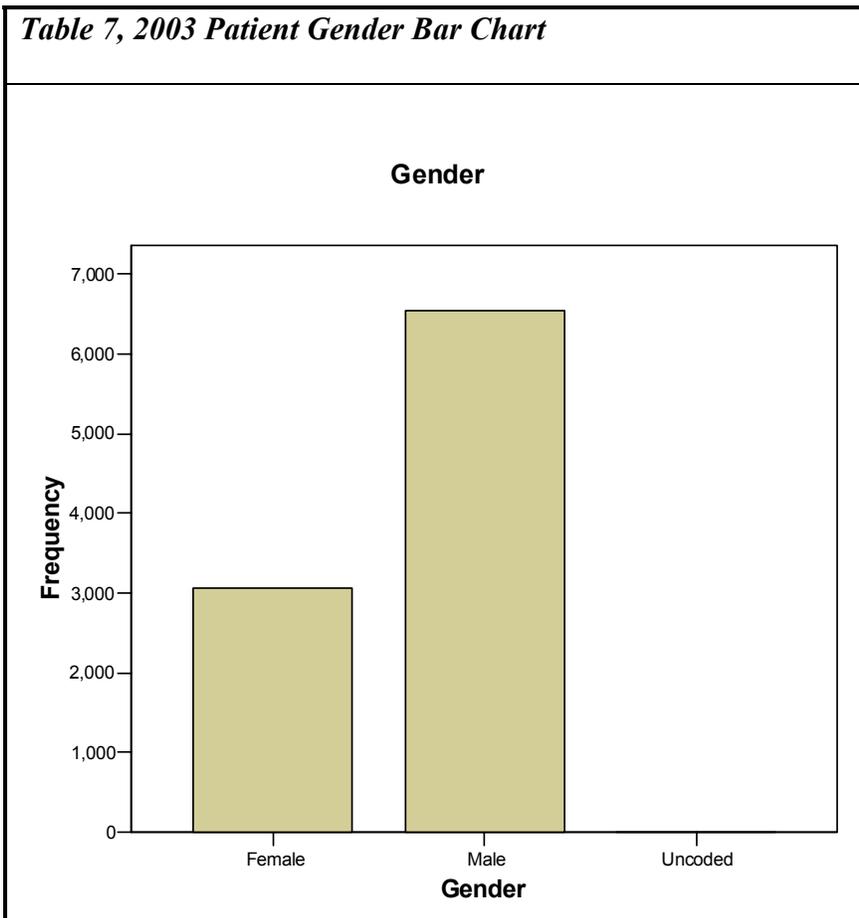
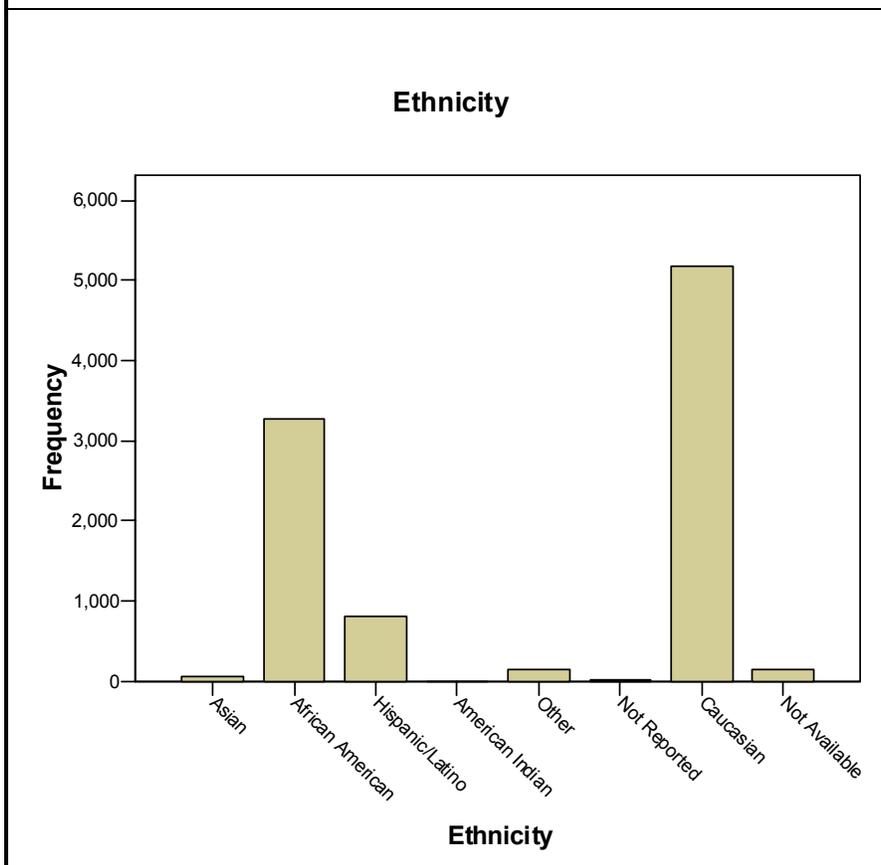


Table 8, Trauma Patient Ethnic Representation

	Frequency	Percent	Cumulative Percent
Asian	70	.7	.7
African American	3274	34.1	34.8
Hispanic/Latino	801	8.3	43.1
American Indian	7	.1	43.2
Other	139	1.4	44.6
Not Reported	9	.1	44.7
Caucasian	5174	53.8	98.6
Not Available	138	1.4	100.0
Total ²⁹	9612	100.0	

Table 9, Trauma Patient Ethnic Representation Bar Chart



²⁹ Not Available and Not Recorded are standard default options in the NTRACS® database for the data element, Race.

Table 10, Georgia Trauma Center Patients by NTDB Age Groups

	Number (n =)	Percent	Cumulative Percent
A. < 1	275	2.9	2.9
B. 1 - 4	486	5.1	7.9
C. 5 - 9	554	5.8	13.7
D. 10 - 14	529	5.5	19.2
E. 15 - 19	896	9.3	28.5
F. 20 - 24	1032	10.7	39.2
G. 25 - 34	1623	16.9	56.1
H. 35 - 44	1477	15.4	71.5
I. 45 - 54	1146	11.9	83.4
J. 55 - 64	686	7.1	90.6
K. 65 - 74	396	4.1	94.7
L. 75 - 84	369	3.8	98.5
M. 85 - 89	95	1.0	99.5
N. 90 >	48	.5	100.0
Total	9612	100.0	

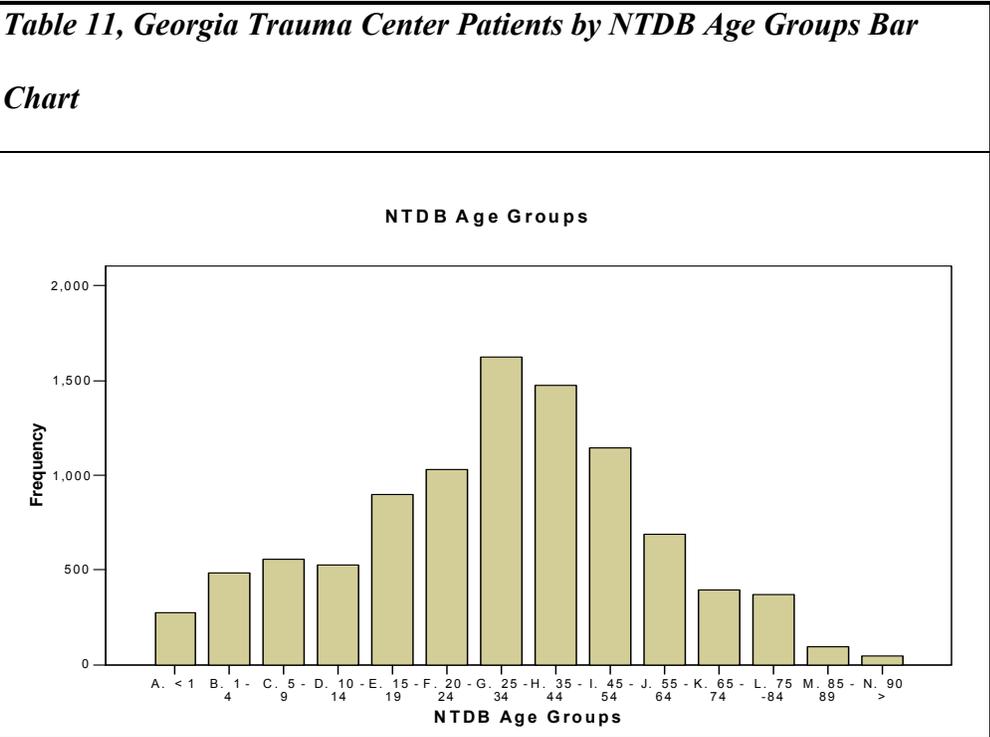


Table 12, Georgia Trauma Patient Age Descriptive Statistics

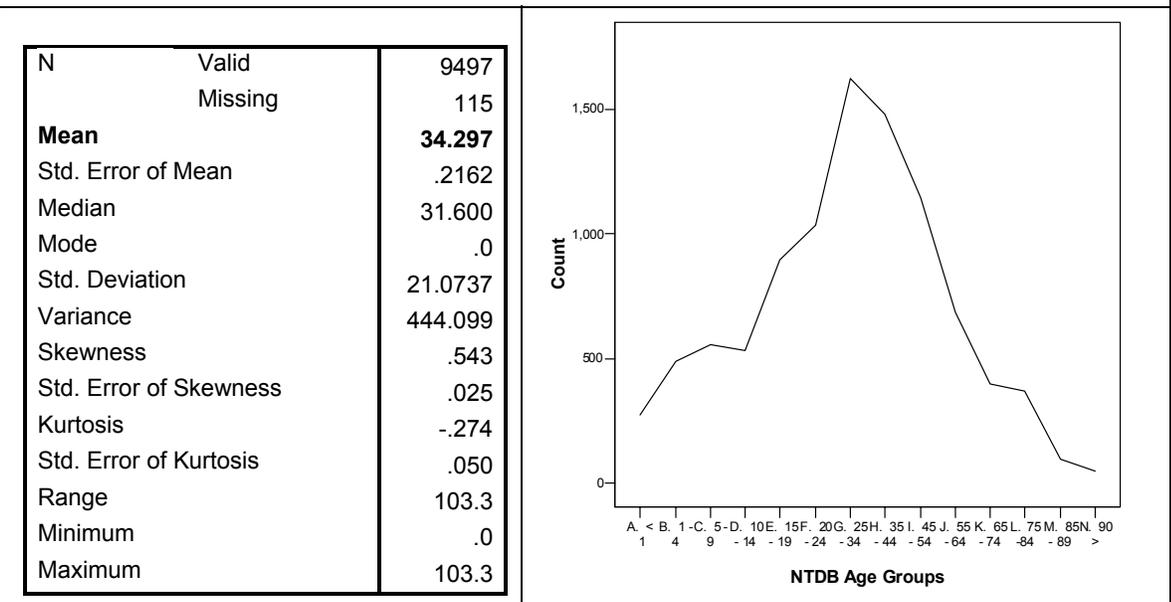


Table 13, Georgia Trauma Patients Represented by NTDB Age Groups, Sorted by Frequency of Presentation

Ranked Order	Frequency	Percent	Cumulative Percent
G. 25 - 34	1623	16.9	16.9
H. 35 - 44	1477	15.4	32.3
I. 45 - 54	1146	11.9	44.2
F. 20 - 24	1032	10.7	54.9
E. 15 - 19	896	9.3	64.2
J. 55 - 64	686	7.1	71.4
C. 5 - 9	554	5.8	77.1
D. 10 - 14	529	5.5	82.6
B. 1 - 4	486	5.1	87.7
K. 65 - 74	396	4.1	91.8
L. 75 - 84	369	3.8	95.7
A. < 1	275	2.9	98.5
M. 85 - 89	95	1.0	99.5
N. 90 >	48	.5	100.0
Total	9612	100.0	

Table 14, Georgia New Driver Trauma Patient Representation

	Number (n =)	Percent
A. 0 - 15.4 (Not of Age/Passengers)	1906	19.8
B. 15.5 - 18 New Drivers Group (See related crosstabulations)	631	6.6
C. 19 - 21 (See related crosstabulations)	634	6.6
D. 22 – 64	5533	57.6
E. 65 >	908	9.4
Total	9612	100.0

Table 15, New Drivers * Riding Position Crosstabulation

(Extracted from variable crosstabulations)

		Motorcycle Driver	Motorcycle Passenger	Motorvehicle Driver	Motorvehicle Passenger
B. 15.5 - 18 (New Drivers)	Count	18	3	226	144
	% within Riding Position	4.2%	6.0%	8.7%	12.1%
	% of Total Trauma (n/9612)	.2%	.0%	2.4%	1.5%
C. 19 - 21	Count	22	3	222	90
	% within Riding Position	5.1%	6.0%	8.5%	7.6%
	% of Total Trauma (n/9612)	.2%	.0%	2.3%	.9%

			Gender			Total
			Female	Male	Uncoded	
Ethnicity	Asian	Count	37	33	0	70
		% within Ethnicity	52.9%	47.1%	.0%	100.0%
		% within Gender	1.2%	.5%	.0%	.7%
		% of Total	.4%	.3%	.0%	.7%
	African American	Count	870	2404	0	3274
		% within Ethnicity	26.6%	73.4%	.0%	100.0%
		% within Gender	28.5%	36.7%	.0%	34.1%
		% of Total	9.1%	25.0%	.0%	34.1%
	Hispanic/Latino	Count	150	651	0	801
		% within Ethnicity	18.7%	81.3%	.0%	100.0%
		% within Gender	4.9%	9.9%	.0%	8.3%
		% of Total	1.6%	6.8%	.0%	8.3%
	American Indian	Count	6	1	0	7
		% within Ethnicity	85.7%	14.3%	.0%	100.0%
		% within Gender	.2%	.0%	.0%	.1%
		% of Total	.1%	.0%	.0%	.1%
	Other	Count	39	100	0	139
		% within Ethnicity	28.1%	71.9%	.0%	100.0%
		% within Gender	1.3%	1.5%	.0%	1.4%
		% of Total	.4%	1.0%	.0%	1.4%
	Not Reported	Count	3	6	0	9
		% within Ethnicity	33.3%	66.7%	.0%	100.0%
		% within Gender	.1%	.1%	.0%	.1%
		% of Total	.0%	.1%	.0%	.1%
	Caucasian	Count	1893	3281	0	5174
		% within Ethnicity	36.6%	63.4%	.0%	100.0%
		% within Gender	61.9%	50.1%	.0%	53.8%
		% of Total	19.7%	34.1%	.0%	53.8%
Not Available	Count	58	77	3	138	
	% within Ethnicity	42.0%	55.8%	2.2%	100.0%	
	% within Gender	1.9%	1.2%	100.0%	1.4%	
	% of Total	.6%	.8%	.0%	1.4%	

Table 16, Ethnicity * Gender Cross tabulation

		Gender			Total
		Female	Male	Uncoded	
Total ³⁰	Count	3056	6553	3	9612
	% within Ethnicity	31.8%	68.2%	.0%	100.0%
	% within Gender	100.0%	100.0%	100.0%	100.0%
	% of Total	31.8%	68.2%	.0%	100.0%

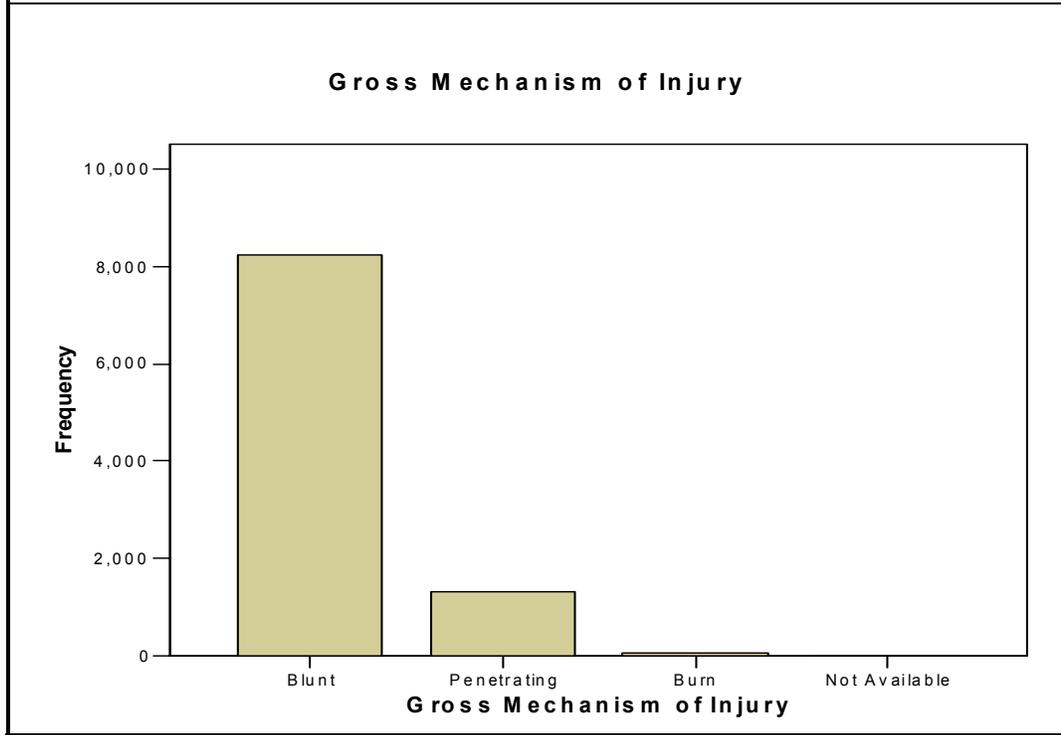
Table 17, Gross Mechanism of Injury

	Frequency	Percent	Cumulative Percent
Blunt	8230	85.6	85.6
Burn ³¹	49	.5	86.1
Not Available	7	.1	86.2
Penetrating	1326	13.8	100.0
Total	9612	100.0	

³⁰ Not Available and Not Recorded are standard default options in the NTRACS® database for the data element, Race.

³¹ In general, the Georgia Trauma Registry does not track burn patients.

Table 18, Gross Mechanism of Injury Bar Chart



<i>Table 19, Mechanisms of Injury - Alphabetical</i>			
Alphabetical Listing	Frequency	Percent	Cumulative Percent
Abuse	49	.5	.5
Accident	387	4.0	4.5
Aircraft	4	.0	4.6
Animal	90	.9	5.5
Assault	407	4.2	9.7
ATV	193	2.0	11.8
Bicycle	168	1.7	13.5
Burn	47	.5	14.0
Electrical	4	.0	14.0
Fall	1976	20.6	34.6
Fight/Brawl	18	.2	34.8
GSW	819	8.5	43.3
Hanging	9	.1	43.4
Machine	80	.8	44.2
Motorcycle	580	6.0	50.3
MVC	3654	38.0	88.3
Not Available	48	.5	88.8
Not Recorded	1	.0	88.8
Pedestrian	540	5.6	94.4
Rape	5	.1	94.5
Sports	112	1.2	95.6
Stab Wound	276	2.9	98.5
Struck	145	1.5	100.0
Total	9612	100.0	

Table 20, Bar Chart of Patients by Mechanism of Injury (Frequency)

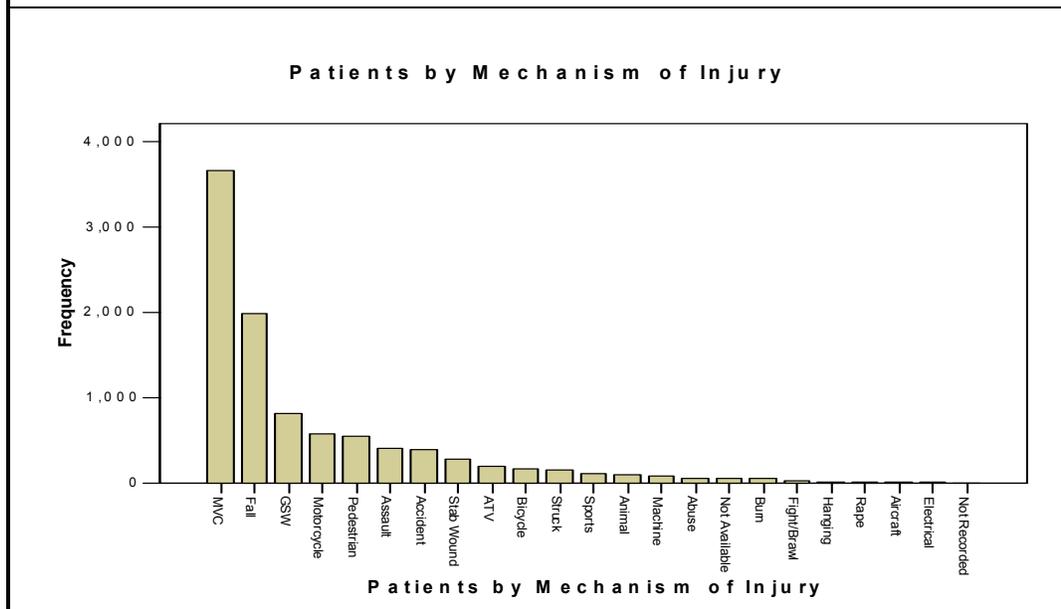


Table 21, NTDB Age Group * Selected Mechanisms of Injury – Vehicles

			ATV	Bicycle	Motorcycle	MVC
NTDB Age Groups	A. < 1	Count	3	0	15	70
		% within Patients by Mechanism of Injury	1.6%	.0%	2.6%	1.9%
		% of Total	.0%	.0%	.2%	.7%
	B. 1 - 4	Count	15	12	3	89
		% within Patients by Mechanism of Injury	7.8%	7.1%	.5%	2.4%
		% of Total	.2%	.1%	.0%	.9%
	C. 5 - 9	Count	20	42	15	116
		% within Patients by Mechanism of Injury	10.4%	25.0%	2.6%	3.2%
		% of Total	.2%	.4%	.2%	1.2%
	D. 10 - 14	Count	42	46	21	97
		% within Patients by Mechanism of Injury	21.8%	27.4%	3.6%	2.7%
		% of Total	.4%	.5%	.2%	1.0%
	E. 15 - 19	Count	36	16	44	488
		% within Patients by Mechanism of Injury	18.7%	9.5%	7.6%	13.4%
		% of Total	.4%	.2%	.5%	5.1%
	F. 20 - 24	Count	12	4	76	485
		% within Patients by Mechanism of Injury	6.2%	2.4%	13.1%	13.3%
		% of Total	.1%	.0%	.8%	5.0%
	G. 25 - 34	Count	39	9	156	643
		% within Patients by Mechanism of Injury	20.2%	5.4%	26.9%	17.6%
		% of Total	.4%	.1%	1.6%	6.7%
	H. 35 - 44	Count	14	10	125	542
		% within Patients by Mechanism of Injury	7.3%	6.0%	21.6%	14.8%
		% of Total	.1%	.1%	1.3%	5.6%
	I. 45 - 54	Count	8	16	74	450

			ATV	Bicycle	Motorcycle	MVC
		% within Patients by Mechanism of Injury	4.1%	9.5%	12.8%	12.3%
		% of Total	.1%	.2%	.8%	4.7%
	J. 55 - 64	Count	3	11	29	299
		% within Patients by Mechanism of Injury	1.6%	6.5%	5.0%	8.2%
		% of Total	.0%	.1%	.3%	3.1%
	K. 65 - 74	Count	1	2	13	188
		% within Patients by Mechanism of Injury	.5%	1.2%	2.2%	5.1%
		% of Total	.0%	.0%	.1%	2.0%
	L. 75 - 84	Count	0	0	7	151
		% within Patients by Mechanism of Injury	.0%	.0%	1.2%	4.1%
		% of Total	.0%	.0%	.1%	1.6%
	M. 85 - 89	Count	0	0	1	23
		% within Patients by Mechanism of Injury	.0%	.0%	.2%	.6%
		% of Total	.0%	.0%	.0%	.2%
	N. 90 >	Count	0	0	1	13
		% within Patients by Mechanism of Injury	.0%	.0%	.2%	.4%
		% of Total	.0%	.0%	.0%	.1%
Total		Count	193	168	580	3654
		% within Patients by Mechanism of Injury	100.0%	100.0%	100.0%	100.0%
		% of Total	2.0%	1.7%	6.0%	38.0%

Table 22, NTDB Age Group * Selected Mechanisms of Injury - Violence

			Abuse	Assault	Fight Brawl	GSW	Rape	Stab Wound
NTDB Age Groups	A. < 1	Count	30	7	0	24	0	4
		% within Patients by Mechanism of Injury	61.2%	1.7%	.0%	2.9%	.0%	1.4%
		% of Total	.3%	.1%	.0%	.2%	.0%	.0%
	B. 1 - 4	Count	17	0	1	4	1	4
		% within Patients by Mechanism of Injury	34.7%	.0%	5.6%	.5%	20.0 %	1.4%
		% of Total	.2%	.0%	.0%	.0%	.0%	.0%
	C. 5 - 9	Count	0	1	0	9	2	1
		% within Patients by Mechanism of Injury	.0%	.2%	.0%	1.1%	40.0 %	.4%
		% of Total	.0%	.0%	.0%	.1%	.0%	.0%
	D. 10 - 14	Count	0	3	2	12	0	4
		% within Patients by Mechanism of Injury	.0%	.7%	11.1%	1.5%	.0%	1.4%
		% of Total	.0%	.0%	.0%	.1%	.0%	.0%
	E. 15 - 19	Count	0	22	6	97	1	16
		% within Patients by Mechanism of Injury	.0%	5.4%	33.3%	11.8 %	20.0 %	5.8%
		% of Total	.0%	.2%	.1%	1.0%	.0%	.2%
	F. 20 - 24	Count	0	33	0	198	0	46
		% within Patients by Mechanism of Injury	.0%	8.1%	.0%	24.2 %	.0%	16.7%
		% of Total	.0%	.3%	.0%	2.1%	.0%	.5%
	G. 25 - 34	Count	0	83	3	231	0	93
		% within Patients by Mechanism of Injury	.0%	20.4%	16.7%	28.2 %	.0%	33.7%
		% of Total	.0%	.9%	.0%	2.4%	.0%	1.0%
	H. 35 - 44	Count	0	128	4	131	1	60
		% within Patients by Mechanism of Injury	.0%	31.4%	22.2%	16.0 %	20.0 %	21.7%

Table 22, NTDB Age Group * Selected Mechanisms of Injury - Violence

		Abuse	Assault	Fight Brawl	GSW	Rape	Stab Wound
	% of Total	.0%	1.3%	.0%	1.4%	.0%	.6%
I. 45 - 54	Count	0	94	2	67	0	34
	% within Patients by Mechanism of Injury	.0%	23.1%	11.1%	8.2%	.0%	12.3%
	% of Total	.0%	1.0%	.0%	.7%	.0%	.4%
J. 55 - 64	Count	0	21	0	24	0	6
	% within Patients by Mechanism of Injury	.0%	5.2%	.0%	2.9%	.0%	2.2%
	% of Total	.0%	.2%	.0%	.2%	.0%	.1%
K. 65 - 74	Count	0	8	0	9	0	8
	% within Patients by Mechanism of Injury	.0%	2.0%	.0%	1.1%	.0%	2.9%
	% of Total	.0%	.1%	.0%	.1%	.0%	.1%
L. 75 - 84	Count	1	4	0	11	0	0
	% within Patients by Mechanism of Injury	2.0%	1.0%	.0%	1.3%	.0%	.0%
	% of Total	.0%	.0%	.0%	.1%	.0%	.0%
M. 85 - 89	Count	0	3	0	2	0	0
	% within Patients by Mechanism of Injury	.0%	.7%	.0%	.2%	.0%	.0%
	% of Total	.0%	.0%	.0%	.0%	.0%	.0%
N. 90 >	Count	1	0	0	0	0	0
	% within Patients by Mechanism of Injury	2.0%	.0%	.0%	.0%	.0%	.0%
	% of Total	.0%	.0%	.0%	.0%	.0%	.0%
Total	Count	49	407	18	819	5	276
	% within Patients by Mechanism of Injury	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	% of Total	.5%	4.2%	.2%	8.5%	.1%	2.9%

Table 23, Riding/Running/Position

		Frequency	Percent	Cumulative Percent
Valid	Motorvehicle-D	2599	27.0	73.9
	Motorvehicle-P	1190	12.4	86.3
	Pedestrian	508	5.3	91.6
	Motorcycle-D	428	4.5	96.0
	Unspecified	219	2.3	98.3
	Pedal Cyclist	74	.8	99.1
	Motorcycle-P	50	.5	99.6
	Other Specified	35	.4	100.0
	Rider-Animal	3	.0	100.0
	N/A	4506	46.9	46.9
	Total	9612	100.0	

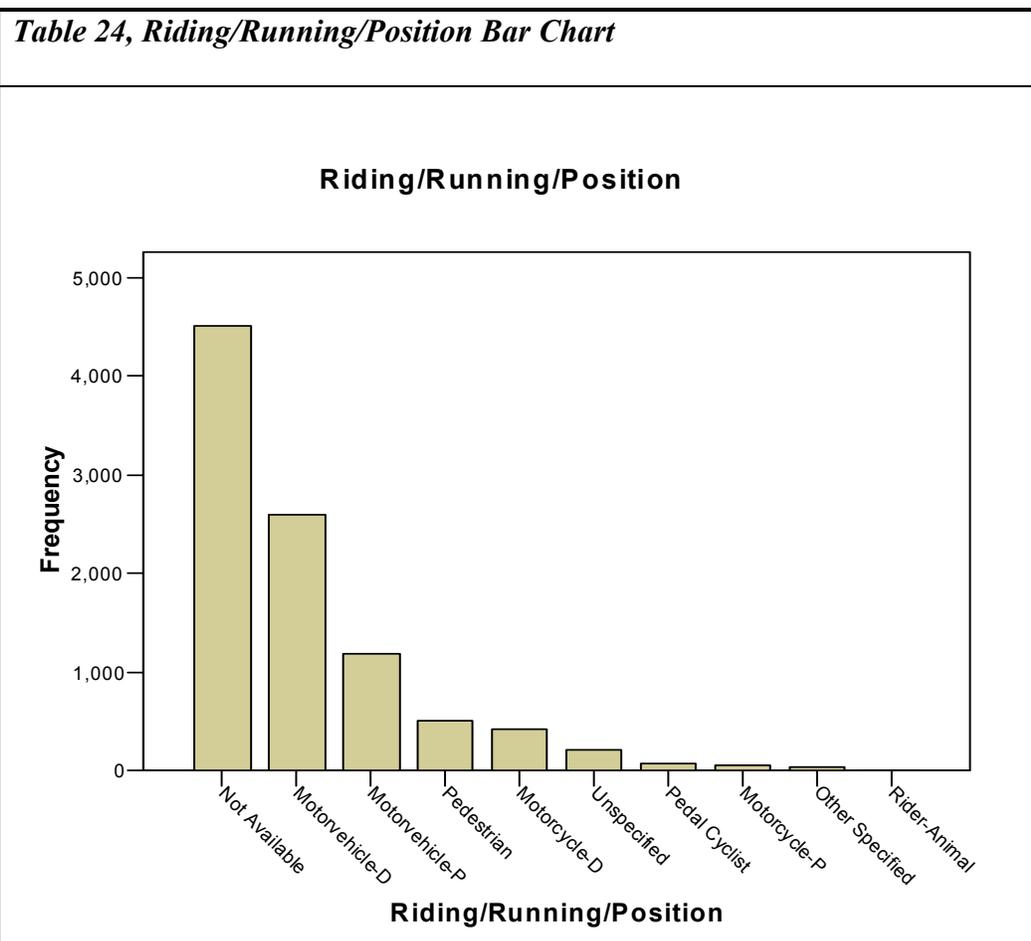


Table 25, Where Injury Occurred

E-Code (Numerical Order)	Frequency	Percent	Cumulative Percent
E849.5 - Street/Highway	5021	52.2	52.2
E849.9 - Unspecified Place	1881	19.6	71.8
E 849.0 - Home	1494	15.5	87.3
E849.4 - Recreation & Sports Location	364	3.8	91.1
E849.3 - Industrial Place	287	3.0	94.1
E849.8 - Other Specified Place	252	2.6	96.7
E849.6 - Public Building	174	1.8	98.6
E849.7 - Residential	101	1.1	99.6
E849.1 - Farm	38	.4	100.0
Total	9612	100.0	

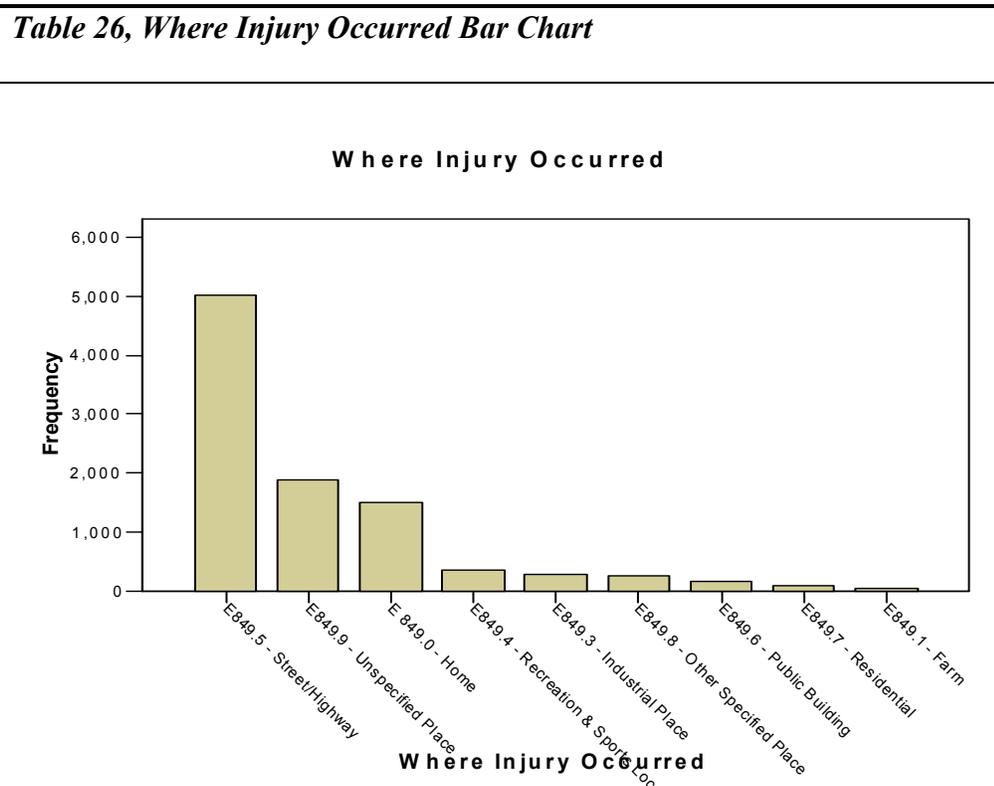


Table 27, ED Trauma Patient Volume by Month

Month	Frequency	Percent		
JAN 2003	642	6.7		
FEB 2003	597	6.2		
MAR 2003	716	7.5		
APR 2003	796	8.3		
MAY 2003	885	9.2		
JUN 2003	854	8.9		
JUL 2003	926	9.6		
AUG 2003	894	9.3		
SEP 2003	902	9.4		
OCT 2003	870	9.0		
NOV 2003	783	8.1		
DEC 2003	747	7.8		
Total	9612	100.0		

Table 28, Transportation to ER

Ranked by Frequency	Frequency	Percent	Cumulative Percent
Ambulance	6961	72.4	72.4
Helicopter	1564	16.3	88.7
Walk in	861	9.0	97.6
Other	6	.1	100.0
Police	3	.0	100.0
Not Available	206	2.1	99.8
Not Recorded	11	.1	99.9
Total	9612	100.0	

Table 29, Transportation to ER Bar Chart

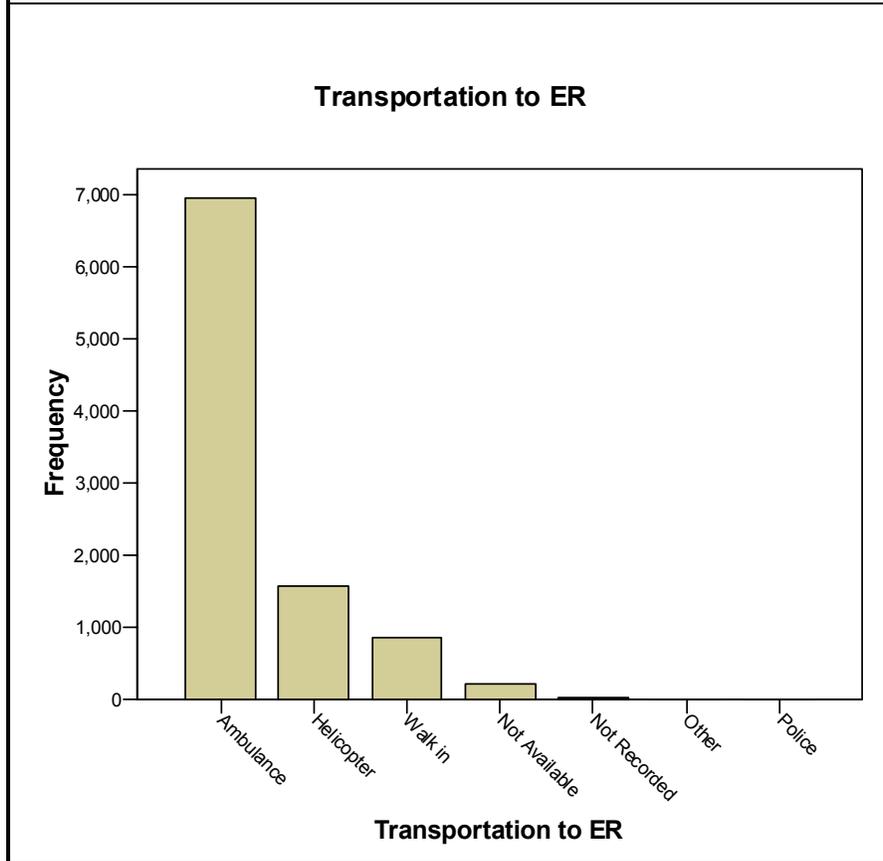


Table 30, ED Disposition (SPSS Raw Output)

	Percent	Frequency
Death	2.6	252
DOA (Death)	0.4	40
Floor	36.8	3540
Home	2.2	214
ICU	31.2	3000
Not Available	0.8	78
OR	22.2	2130
Telemetry	1.5	141
Transfer	2.3	217
Total	100	9612

Table 31, Admitting Service Frequency & Percentage

Admitting Service	Frequency	Percentage
Burn	2	0.0%
Cardiology	1	0.0%
ENT	27	0.3%
Emergency Medicine	234	2.4%
Gen Surgery	265	2.8%
Hand	14	0.1%
Medicine	105	1.1%
Neuro	634	6.6%
Not Available	282	2.9%
Ophtha	35	0.4%
Ortho	1409	14.7%
Other Med	77	0.8%
Other Surg	218	2.3%
Peds	105	1.1%
Plastics	153	1.6%
Thoracic	5	0.1%
Trauma	6023	62.6%
Urology	14	0.1%
Vascular	9	0.1%
	9612	100.0%

Table 32, ISS Range – All Patients

ISS Range	Frequency	Percentage
ISS 1 - 4	2394	24.9%
ISS 5 - 9	2770	28.8%
ISS 10 - 15	1465	15.2%
ISS 16 - 24	1566	16.3%
ISS >= 25	1264	13.2%
Not Done	153	1.6%

Table 33, ISS Range – Adult Facilities Only

ISS Range	Frequency	Percentage
ISS 1 - 4	1800	21.29%
ISS 5 - 9	2419	28.62%
ISS 10 - 15	1406	16.63%
ISS 16 - 24	1483	17.54%
ISS \geq 25	1201	14.21%
Not Done	144	1.70%

Table 34, ISS Range – Pediatric Facilities Only

ISS Range	Frequency	Percentage
ISS 1 - 4	594	51.25%
ISS 5 - 9	351	30.28%
ISS 10 - 15	59	5.09%
ISS 16 - 24	83	7.16%
ISS \geq 25	63	5.44%
Not Done	9	0.78%

Table 35, Average ISS, Days in ICU & LOS

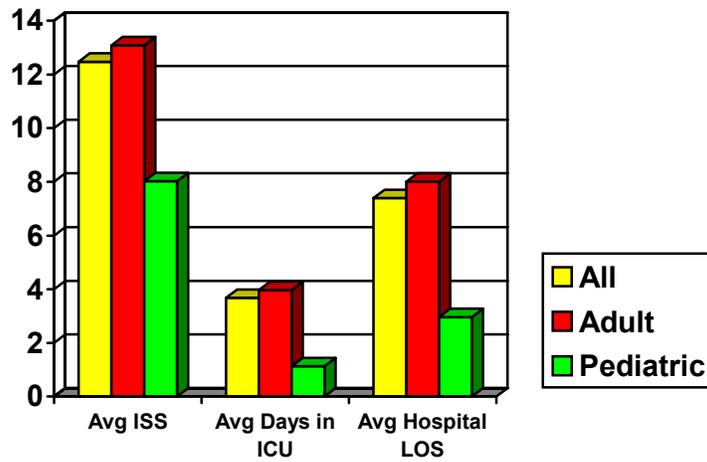


Table 36, Top 5 Initial Medical Procedures

Procedure	Count
CAT Scan NEC	3292
CAT Scan Head	2304
Abdomen CAT Scan	1685
Abd & Retroperitoneal US	1516
Skin Closure NEC	998

Table 37, Average Length of Stay by Admitting Service**(LOS in Days)**

Medical Service	Average LOS Days
Burn	21
Cardiology	1
ENT	4
Emergency Medicine	0
General Surgery	7
Hand	4
Maxillo/Facial	12
Medicine	5
Neurosurgery	6
Not Available	1
Ophthalmology	2
Orthopedic Surgery	4
Other Med	11
Other Surg	9
Pediatrics	4
Plastics	3
Thoracic	8
Trauma	9
Urology	2
Vascular	5

Table 38, Average Length of Stay by Mechanisms of Injury**(LOS in Days)**

Injury Mechanism	Average LOS Days
ATV	6
Abuse	6
Accident	9
Aircraft	12
Animal	3
Assault	6
Bicycle	4
Burn	2
Electrical	5
Fall	5
Fight/Brawl	3
GSW	9
Hanging	3
MVC	8
Machine	6
Motorcycle	7
Not Available	7
Not Recorded	1
Pedestrian	8
Rape	6
Sports	2
Stab Wound	5
Struck	4

Table 39, Place of Injury vs. Gross Mechanism of Injury – Adults

Place of Injury	Total Count	Blunt	Penetrating	Burn	Not Available
E849.0 - Home	1077	761	289	27	0
E849.1 - Farm	33	32	1	0	0
E849.3 - Industrial Place	285	253	29	3	0
E849.4 - Place of Recreation and Sports	190	183	7	0	0
E849.5 - Street & Hwy	4736	4600	134	2	0
E849.6 - Public Building	97	65	32	0	0
E849.7 - Residential Institution	100	82	18	0	0
E849.8 - Other Specified Place	232	165	64	3	0
E849.9 - Unspecified Place	1703	1010	677	14	2
Total	8453	7151	1251	49	2

Table 40, Place of Injury vs. Gross Mechanism of Injury – Pediatrics

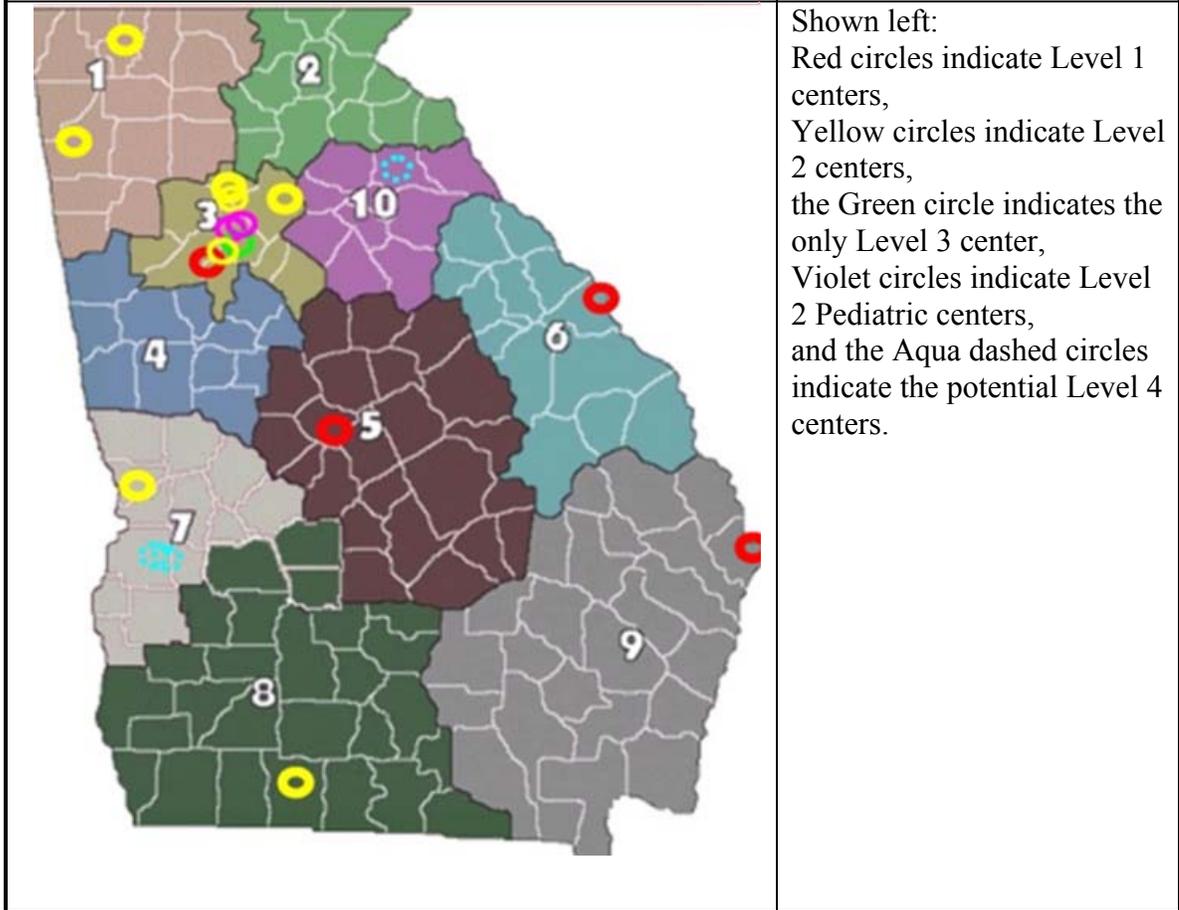
Injury Site	Count	Blunt	Penetrating	Burn	Not Available
E849.0 – Home	417	365	52	0	0
E849.1 – Farm	5	5	0	0	0
E849.3 - Industrial Place	2	1	1	0	0
E849.4 - Place of Recreation and Sports	174	168	5	0	1
E849.5 - Street & Hwy	286	286	0	0	0
E849.6 - Public Building	77	75	2	0	0
E849.7 - Residential Institution	1	1	0	0	0
E849.8 - Other Specified Place	20	19	1	0	0
E849.9 - Unspecified Place	177	160	13	0	4
Total	1159	1080	74	0	5

Table 41, EMS Regional Summary – Trauma Centers Treatments of Injury³²

	1	2	3	4	5	6	7	8	9	10	TOTAL
ATV	13	0	79	0	29	17	10	9	36	0	193
ABUSE	0	0	40	0	0	1	0	0	8	0	49
ACCIDENT	16	0	267	0	12	19	16	16	42	0	388
AIRCRAFT	0	0	1	0	1	1	0	0	1	0	4
ANIMAL	10	0	52	0	4	4	1	4	15	0	90
ASSAULT	6	0	268	0	36	21	24	9	43	0	407
BICYCLE	3	0	126	0	10	7	2	2	18	0	168
BURN	8	0	3	0	8	1	3	0	24	0	47
ELECTRICAL	1	0	1	0	1	0	0	0	1	0	4
FALL	133	0	1343	0	116	52	82	81	169	0	1976
FIGHT	2	0	6	0	6	0	0	2	2	0	18
GSW	30	0	529	0	69	53	55	9	73	0	818
HANGING	1	0	4	0	0	1	0	0	3	0	9
MVC	233	0	1762	0	421	392	292	83	472	0	3655
MACHINE	10	0	53	0	6	2	7	2	0	0	80
MCC	22	0	393	0	51	37	20	9	48	0	580
NOT AVAILABLE	1	0	12	0	0	5	23	3	4	0	48
NOT RECORDED	0	0	1	0	0	0	0	0	0	0	1
PEDESTRIAN	19	0	350	0	49	36	31	3	52	0	540
RAPE	0	0	2	0	0	0	1	0	2	0	5
SPORTS	6	0	83	0	8	3	1	3	7	0	111
SW	7	0	168	0	29	27	10	5	30	0	276
STRUCK	14	0	92	0	19	0	0	2	18	0	145
TOTAL	535	0	5635	0	875	679	578	242	1068	0	9612

³² Note: Some EMS Regions do not have a designated trauma center within their geographies.

Table 42, Georgia Trauma Centers on a State Map with 10 EMS Regions



ISS Range	Example	Description
1 - 4	1	Ankle sprain
	2	Cornea laceration, closed nose fracture, superficial scalp laceration
	3	Superficial penetrating abdominal injury, superficial penetrating thorax injury, superficial penetrating upper and lower extremity injury
	4	Cerebral concussion
5 -9	5	Tibia and fibula fracture, chest wall abrasion
	6	Cerebral concussion, superficial facial laceration, closed nose fracture, upper and lower extremity abrasion
	8	Simple liver laceration, major neck laceration, major upper extremity laceration
	9	Open ulna fracture, closed radius fracture
10 - 15	10	Brachial plexus contusion, superficial face avulsion, scalp contusion, unknown length of unconsciousness with neurological deficit
	11	Basilar fracture, cervical spine disc fracture without cord contusion, cornea contusion, facial abrasion, facial bone fracture, shoulder contusion, unconsciousness known to be less than 1 hour.
	12	Closed nose fracture, closed orbit fracture, closed ulna fracture, talus fracture, chest wall contusion, contusion of abdomen skin, unconsciousness known to be less than 1 hour.
16 - 24	16	Basilar fracture, compound vault fracture, subdural and pneumocephalus hematoma of cerebrum
	17	Unilateral lung contusion, cerebral concussion, hand fracture
	19	Lower extremity amputation, open femur fracture, flail chest, abrasions on the face and abdomen
	21	Subdural cerebrum hematoma, lumbar spine fracture, rib fracture, scalp laceration
	24	Thoracic aorta injury, kidney laceration, liver laceration, closed pelvis fracture, thoracic cavity injury with hemo/pneumothorax
> or = 25	25	Cerebrum hematoma, unilateral lung contusion
	30	Diffuse axonal cerebrum injury, vault fracture, tibia shaft fracture, superficial facial laceration
	75	Massive destruction, crush injury of brain stem, massively depressed vault fracture

Table 44, Trauma Deaths – All Trauma Centers

	Total	Blunt	Penetrating	Burn	Not Available
DOA's	40	23	16	0	1
ED Deaths	252	159	91	2	0
Deaths After Admission	476	391	85	0	0
Total	768	573	192	2	1

Table 45, Deaths – Adult Trauma Centers Only

	Total	Blunt	Penetrating	Burn	Not Available
DOA's	40	23	16	0	1
ED Deaths	246	153	91	2	0
Deaths After Admission	454	370	84	0	0
Total	740	546	191	2	1

Table 46, Deaths – Pediatric Trauma Centers Only

	Total	Blunt	Penetrating	Burn	Not Available
DOA's	0	0	0	0	0
ED Deaths	6	6	0	0	0
Deaths After Admission	22	21	1	0	0
Total	28	27	1	0	0

Table 47, Final Patient Disposition

Disposition	Number of Patients
DOA	40
Death	728
Home	6836
Home Health	109
Incomplete Treatment/AMA	53
Jail	108
Nursing Home	189
Rehab	956
Transfer to Other Hospital	465
Transfer to Other Trauma Center	119
Not Available	9
	9612

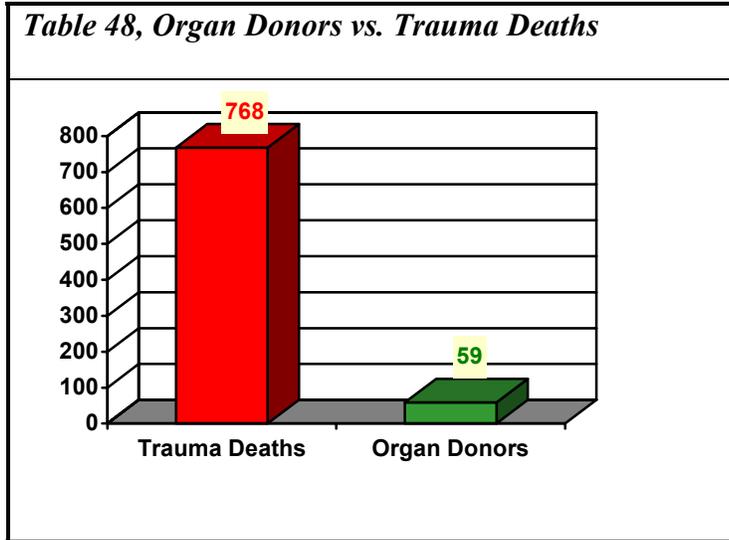


Table 49, Organ Donors by Gender & Race – Georgia Trauma Centers³³

Gender	Asian	Black	Hispanic	Other	White	Not Available	Total
Male		0	10	6	2	23	42
Female		1	3	2	0	10	17
Totals		1	13	8	2	33	59

³³ Not Available is the NTRACS® default option for the data element, Race.

APPENDIX B: GEORGIA DEMOGRAPHICS*Georgia Age Demographics: 2002-2003*

	Number	Percent
Total Population:	8,186,453	100.0 %
Sex & Age		
Male	4,027,113	49.2 %
Female	4,159,340	50.8 %
Under 5 years	595,150	7.3 %
5 to 9 years	615,584	7.5 %
10 to 14 years	607,759	7.4 %
15 to 19 years	596,277	7.3 %
20 to 24 years	592,196	7.2 %
25 to 34 years	1,299,256	15.9 %
35 to 44 years	1,353,508	16.5 %
45 to 54 years	1,079,992	13.2 %
55 to 59 years	375,651	4.6 %
60 to 64 years	285,805	3.5 %
65 to 74 years	435,695	5.3 %
75 to 84 years	261,723	3.2 %
85 years and over	87,857	1.1 %
Median age(years)	33.4	N/A
18 years and over	6,017,219	73.5 %
Male	2,915,524	35.6 %
Female	3,101,695	37.9 %
21 years and over	5,646,535	69.0 %
62 years and over	948,821	11.6 %
65 years and over	785,275	9.6 %
Male	311,231	3.8 %
Female	474,044	5.8 %

Source: <http://georgia.usl.myareaguide.com/census.html>

Georgia Ethnic Demographics: 2002-2003

Race		
White	5,412,371	67.0 %
Black or African American	2,393,425	29.6 %
American Indian and Alaska Native	53,197	0.7 %
Asian	199,812	2.5 %
Native Hawaiian and Other Islander	9,689	0.1 %
Some other race	241,298	3.0 %
Hispanic or Latino	435,227	5.3 %

Source: <http://georgia.usl.myareaguide.com/census.html>

Georgia Household Demographics: 2002-2003

Total Population	8,186,453	100.0 %
In households	7,952,631	97.1 %
Householder	3,006,369	36.7 %
Spouse	1,548,800	18.9 %
Child	2,439,098	29.8 %
Own child under 18 years	1,899,303	23.2 %
Other relatives	522,651	6.4 %
Under 18 years	218,208	2.7 %
Non-relatives	435,713	5.3 %
Unmarried partner	145,743	1.8 %
In group quarters	233,822	2.9 %
Institutionalized population	126,023	1.5 %
Non-institutionalized population	107,799	1.3 %

Source: <http://georgia.usl.myareaguide.com/census.html>

APPENDIX C: STATE OFFICE OF EMS/TRAUMA CONTACTS³⁴

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Jennifer Benoskie Budget /Contract Specialist	2600 Skyland Drive Lower Level Atlanta, Georgia 30319	jlbenoskie@gdph.state.ga.us O: 404-679-0527 F: 404-679-0526
Rhonda Griffin Executive Secretary	2 Peachtree Street NW Suite 13.204 Atlanta, Georgia 30303	rlgriffin@gdph.state.ga.us O: 404-657-2594 F: 404-651-8036

³⁴ Appendixes C, D, E, F, and G are current as of September 2004.

APPENDIX D: STATE TRAUMA CENTER CONTACTS

Trauma Center	Trauma Coordinator	Trauma Registrar
Archbold Memorial Hospital Gordon Avenue at Mimosa PO Box 1018 Thomasville, Ga 31792	Kelli Vaughn kvaughn@archbold.org O: 229-228-8087 P: 229-225-0685 F: 229-228-8390	
Atlanta Medical Center 303 Parkway Drive, NE Box, 408 Atlanta, Ga 30312	Rochella Mood rochella.mood@tenethealth.com O: 404-265-6577 P: 404-866-4940 F: 404-265-3954	
Children's Healthcare of Atlanta at Egleston 1405 Clifton Road, NE Atlanta, Ga 30322	Mary Shepherd mary.shepherd@choa.org O: 404-785-6530 P: 404-225-3633 F: 404-785-1495	Dana Burrell dana.burrell@choa.org O: 404-785-1921
Children's Healthcare of Atlanta at Scottish Rite 1001 Johnson Ferry Road Atlanta, Ga 30342	Teresa Fox-Paone Teresa.Fox-Paone@choa.org O: 404-785-4955 P: 404-225-0246 F: 404-785-4942	Pamela Jones-Jackson pamela.jones-jackson@choa.org O: 404-785-4956
Columbus Regional Medical Center 710 Center Street Columbus, Ga 31902	Cathy Maxwell cathy.maxwell@crhs.net O: 706-571-1225 P: 706-320-1542 F: 706-571-1744	Imogene Willis Imogene.willis@crhs.net O: 706-571-1524
DeKalb Medical Center 2701 N Decatur Road Decatur, Ga 30033	Kelly Nadeau knadeau@dkmc.org O: 404-501-5651 P: 404-837-6069 F: 404-501-1631	Karen Johnson Johnson_Karen@dkmc.org O: 404-501-5663
Floyd Medical Center 304 McCall Blvd Rome, Ga 30162	Tifani Kinard tkinard@floyd.org O: 706-509-6135 P: 770-773-1244 F: 706-292-4747	Cindy Holman cholman@floyd.org O: 706-509-6135 F: 706-509-4750

Trauma Center	Trauma Coordinator	Trauma Registrar
Grady Memorial Hospital 80 Jessie Hill Jr. Drive, SE Atlanta, Ga 30335	Fran Lewis FLEWIS@gmh.edu O: 404-616-4584 P: 404-619-3457 F: 404-616-7333	
Gwinnett Medical Center 1000 Medical Center Blvd Lawrenceville, Ga 30045	Deb Battle dbattle@ghsnet.org O: 678-442-3742 P: 404-743-3133 F: 678-442-3282	Mary Lou Dennis mldennis@ghsnet.org O: 678-442-3291 F: 678-442-3282
Hamilton Medical Center 1200 Memorial Drive PO Box 1168 Dalton, Ga 30722	Randy Casteel rcasteel@hhcs.org O: 706-272-6154 F: 706-272-6557	Byron Wynkoop bwynkoop@hhcs.org O: 706-272-6154 F: 706-272-6648
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Medical College of GA Health System 1120 15 th Street, Room BA 4411 Augusta, Ga 30912	Regina Medeiros rmedeiro@mail.mcg.edu O: 706-721-3153 P: 706-721-7243, # 1155 F: 706-721-6271 Trauma CNS Brendell Collins, RN O: 706-721-3153	Melissa Brown mebrown@mail.mcg.edu O: 706-721-3153 Sandra Lowe slowe@mail.mcg.edu O: 706-721-3153
Memorial Health University Medical Center 4700 Waters Avenue PO Box 23089 Savannah, Ga 31404	Daisy Gantt Trauma Program Manager O: 912-350-5902 F: 912-350-3122	
North Fulton Regional Hospital 3000 Hospital Blvd Roswell, Ga 30075	Judy McDaniel Judy.mcdaniel@tenethealth.com O: 770-751-2758 P: 770-388-5367 F: 770-410-4209	

APPENDIX E: GEORGIA REGIONAL EMS OFFICES

Regional Emergency Medical Services Offices		
Name and Title	Address	Contact Information
Region 1 David Loftin EMS Program Director James Cutcher EMS Training Coordinator	Northwest Georgia Region 1 EMS Northwest Georgia Regional Hospital 1305 Redmond Circle – Bldg 614 Rome, Georgia 30165-1391	cdloftin@gdph.state.ga.us jlcutcher@gdph.state.ga.us O: 706-295-6175 F: 706-802-5292
Region 2 Earl McGrotha EMS Program Director B. Jack Mundy EMS Training Coordinator	North Georgia Region 2 EMS 1280 Athens Street Gainesville, Georgia 30507-7000	ehmcgrotha@gdph.state.ga.us bjmundy1@gdph.state.ga.us O: 770-535-5743 F: 770-535-5958
Region 3 Marty Billings EMS Program Director Bill Harvey EMS Training Coordinator	Region 3 EMS 2600 Skyland Drive Upper Level Atlanta, Georgia 30319	wmbillings@gdph.state.ga.us harv100@aol.com O: 404-248-8995 F: 404-248-8948
Region 4 Billy Watson EMS Program Director Russ McGee EMS Training Coordinator	West Georgia Region 4 EMS 122 Gordon Commercial Drive Suite A LaGrange, Georgia 30240-5740	brwatson@gdph.state.ga.us ramcgee@gdph.state.ga.us O: 706-845-4035 F: 706-845-4309
Region 5 Chris W. Threlkeld EMS Program Director Kristal Claxton EMS Training Coordinator	Central Georgia Region 5 EMS 158-1 Sammons Industrial Pkwy Eatonton, Georgia 31024	cwthrelkeld@gdph.state.ga.us oconeeemsc@yahoo.com O: 706-484-2993 F: 706-484-2994

Regional Emergency Medical Services Offices		
Name and Title	Address	Contact Information
Region 6 Lawanna Mercer-Cobb EMS Program Director Wes Simonds EMS Training Coordinator	East Central Georgia Region 6 EMS 1916 North Leg Road Augusta, Georgia 30309-4402	lmcobb@gdph.state.ga.us wgsimonds@gdph.state.ga.us O: 706-667-4336 F: 706-667-4594
Region 7 Sam R. Cunningham EMS Program Director Darrell R. Enfinger EMS Training Coordinator	West Central Georgia Region 7 EMS 2100 Comer Avenue Post Office Box 2299 Columbus, Georgia 31902-2299	srcunningham@gdph.state.ga.us us drenfinger@gdph.state.ga.us O: 706-321-6150 F: 706-321-6155
Region 8 Robert D. Vick EMS Program Director	Southwest Georgia Region 8 EMS Post Office Box 3637 319 North Main Street Moultrie, Georgia 31776-3637	rdvick@dhr.state.ga.us O: 229-891-7034 F: 229-891-7031
Region 9 Shirley Starling Acting EMS Program Director	Southeast Georgia Region 9 EMS Post Office Box 1877 Brunswick, Georgia 31521	sdstarling@gdph.state.ga.us O: 912-262-3035 F: 912-264-2504
Region 10 Earl McGrotha EMS Program Director	Northeast Georgia Region 10 EMS 1551 Jennings Mill Road Bogart, Georgia 30622-2565	ehmcgrotha@gdph.state.ga.us O: 706-583-2862 F: 706-227-7960

APPENDIX F: TRAUMA SYSTEM DEVELOPMENT COMMITTEE

Trauma System Development Committee		
Name	Department or Title	Company
Dennis Ashley, MD	Trauma Medical Director	Medical Center of Central Georgia
Jennie Banks, RN	Trauma Coordinator	Hamilton Medical Center
Deb Battle, RN	Trauma Coordinator	Gwinnett Medical Center
Ken Beverly	CEO, Archbold Memorial Hospital	Georgia Hospital Association and CEO at John D. Archbold Memorial Hospital
Chad Black, EMT-P	Flight Paramedic	Emory Flight
Chris Bonham	Chief Executive Officer	Morgan Memorial Hospital
Phillip Coule, MD	Emergency Physician	Medical College of Georgia
Robert Cox, MD	Emergency Physician	Spalding Regional Hospital
Sam Cunningham	EMS Program Director	West Central Georgia Region 7 EMS
Darrell Enfinger	EMS Training Coordinator	West Central Georgia Region 7 EMS
Lance B. Duke	Chief Executive Officer	Columbus Regional Medical Center
Jane Garbish		First Responder
William Hardcastle, MD	Trauma Medical Director	DeKalb Medical Center
John Harvey, MD	Trauma Medical Director	North Fulton Regional Hospital
Michael Hawkins, MD	Trauma Medical Director	Medical College of Georgia
Gail Helmly, EMT-P, R	Flight Nurse	Emory Flight
Vernon Henderson, MD	Trauma Medical Director	Atlanta Medical Center
Glen Henry	Transport Team Program Manager	Children's Healthcare of Atlanta
George Houlditch, MD	EMS Regional Medical Director	North Georgia Medical Center
Arthur Kellerman, MD	Department of Emergency Medicine	Emory University
Zsolt Koppanyi, MD, MPH.	District Health Director	Georgia Division of Public Health
Jeff Linzer, MD	Emergency Pediatric Group	Children's Healthcare of Atlanta at Egleston

Trauma System Development Committee		
Name	Department or Title	Company
Isiah Lineberry	Rural and Critical Access Hospital Coordinator	Office of Rural Health
Regina Medeiros, RN	Trauma Coordinator	Medical College of Georgia
Dan Miers	Regional Marketing Manager	Shepherd Center
Wendell Myers	Consumer Advocate	
Gage Ochsner, MD	Trauma Medical Director	Memorial Health University Medical Center
Stanley Payne	Region I EMS Council	Floyd Medical Center EMS
Nancy Peed	Administrator	Peach Regional Medical Center
William G. Pike	Chief Operations Officer	Rescue Air
Wayne Reece	Attorney at Law	Reece and Associates
Grace Rozycki, MD	Director of Trauma and Surgical Critical Care	Grady Memorial Hospital
Doug Skelton, MD	District Health Director	Georgia Division of Public Health
Kurt Stuenkel	Chief Executive Officer	Floyd Medical Center
Kelli Vaughn, RN	Trauma Coordinator	John D. Archbold Memorial Hospital
Robert D. Vick	EMS Program Director	Southwest Georgia Region 8 EMS
Arthur Yancey, II, MD	Department of Emergency Medicine	Emory University School of Medicine

APPENDIX G: MEDICAL REVIEW COMMITTEE

Name	Department or Title	Organization
Chad Black, EMT-P	Flight Paramedic	Emory Flight
Vernon Henderson, MD	Trauma Medical Director	Atlanta Medical Center
Tifani Kinard, RN	Trauma Coordinator	Floyd Medical Center
Natalie Lane, MD	Department of Emergency Medicine	Medical College of Georgia
Lawanna Mercer-Cobb	EMS Program Director	East Central Georgia Region 6 EMS
Greg Patterson, MD	Trauma Medical Director	Archbold Memorial Hospital
Doug Skelton, MD	District Health Director	Georgia Division of Public Health
Chris Threlkeld	EMS Program Director	Central Georgia Region 5 EMS
Larry Vandegriff	EMS Educator	
Arthur Yancey, MD	Department of Emergency Medicine	Emory University School of Medicine



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