

Strength and Perseverance

2018 Trauma Report



EMERGENCY & TRAUMA CENTER

Our Mission | To serve through healing, education and discovery

Acknowledgments

The University of Tennessee Medical Center's Level I Trauma Center works daily to advance trauma care in East Tennessee and beyond. As the only Level I Trauma Center to receive verification from the American College of Surgeons in our region, we are committed to performing at the highest level of care for our patients and their families. We offer comprehensive care, beginning with the first responders and continuing after discharge with physical therapy, support services such as the Trauma Survivors Network, and other vital resources. Our hard-working and humble providers are committed to the best outcomes for our patients, regardless of their ethnic background, gender or social situation. This report acknowledges the Emergency & Trauma staff and their unwavering dedication to their community.



Brian J. Daley, MD, MBA, FACS, FCCP, CNSP
Professor, Department of Surgery
Program Director, General Surgery
Chief, Division of Trauma and Critical Care
Department of Surgery



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Trauma Program Manager



THE
COMMITTEE
ON **TRAUMA**



**American Heart Association
American Stroke Association**
CERTIFICATION
Meets standards for
Comprehensive Stroke Center

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A Survivor's Story

Jimmy Smith, shot 11 times, offers hope to other shooting victims.

Jimmy Smith's faith, and the support of family and peer visitors, helped him recover.

"I know more about gunshot wounds than I ever knew was possible," said Jimmy Smith, 48, of Knoxville.

Three years ago, while standing in front of his apartment with his brother, Jimmy was shot 11 times in the arms, legs and abdomen.

Paramedics rushed him to the Emergency Department at The University of Tennessee Medical Center, where doctors immediately wheeled Jimmy into surgery. The trauma was so extensive – a shredded colon, a hole in the stomach, a broken pelvis, and more – the medical team didn't think he would survive the night.

They induced a medical coma and called his family, telling them to come to the hospital. "My mom refused to believe it," said Jimmy. "She told the doctors, 'My son hasn't made it this far to die now.'"

"My mom refused to believe it," said Jimmy. "She told the doctors, 'My son hasn't made it this far to die now.'"

That faith, Jimmy believes, is what got him through that night and the next 13 months of grueling surgeries and rehab.

Gunshot Wounds on the Rise

According to statistics from the Centers for Disease Control, in the United States, about 300 people a day sustain a gunshot wound. Between 10 and 30 percent of these people will die of their injury, the highest mortality rate since 1968.

Strength and Perseverance

Statistics from The University of Tennessee Medical Center show gunshots are now the third-highest mechanism of injury in our region in two age groups, children aged 0-13 and young adults, aged 18-25. They follow only motor vehicle crashes and other blunt mechanisms in the first group, and motor vehicle crashes and falls in the second.

This makes gunshot wounds one of the top traumas handled at The University of Tennessee Medical Center. It also means more gunshot survivors than ever need someone to talk with about their experience – someone who's been there.

Giving Back to Other Gunshot Survivors

While he was in the hospital, Jimmy received visits from peer visitors with the medical center's Trauma Survivors Network. "My family, while big, couldn't be with me every day. Just when I'd be feeling blue," he said, "here would come a peer visitor to lift my spirits."

Jimmy wanted to return the favor. "I was so blessed," he said. "I wanted to give back something of what they gave me."

Now, when someone comes to the hospital with a gunshot wound, Jimmy listens to them, and tells them about his experience. "I can use my knowledge to help them understand what they're going through and to show them there's hope."

Doctors initially thought Jimmy would be in the hospital for extensive period of time, that he would be unable to walk and that he would wear a colostomy bag for the rest of his life. Jimmy beat the odds in every case, going home after 13



Jimmy Smith visits with gunshot survivor Arvenzio Miles.

months, walking with only the help of a cane or crutches, and living colostomy-free.

Jimmy's story of hope helps other survivors see a way through their traumatic experience.

Now, Jimmy stays busy with his grandchildren and visiting his peers at the medical center. He's even started looking for a part-time job.

"I'm grateful for every day," he said. "And for my family and my friends at the medical center for getting me through."



The Healing Power of Sharing

Jimmy is such a kind-hearted spirit. Through his visits with other gunshot survivors he offers comfort, developing a strong bond of friendship with the patients and their families.

He always makes himself available to visit with the patients, whether in person or over the phone. Jimmy helps trauma patients feel reassured and hopeful.

Therese A. Zaltash, M.S.
Trauma Survivors Network, Clinical Coordinator

Living to the Mack(s)

Mack Johnson's courage and humor help him give hope to other trauma survivors and their families.



Mack Johnson is a junior in accounting at Auburn University and a member of the Auburn Wheelchair Basketball team.

Strength and Perseverance

In 2016, Mack Johnson, 19, fell off a cabin balcony in Gatlinburg. He was flown to The University of Tennessee Medical Center, where doctors told him he was paralyzed from the waist down. He spent nine days in intensive care at the medical center. "Once I realized the gravity of what had happened," Mack said, "I was like, how am I going to get through life?"

While at the medical center, Mack learned how to function in a wheelchair, making transfers from bed to chair, and sitting up for increasingly longer periods of time.

When the medical center released him, Mack traveled to the Shepherd Center in Atlanta, where he spent three months rehabilitating. At Shepherd, Mack learned how to live independently.

During rehabilitation, it became apparent that remaining active would keep him physically and emotionally strong. "Exposure to a variety of activities is crucial throughout therapy," said Mack.



Mack, on a recumbent bike, has been an athlete his whole life.

"If someone offers me an opportunity to do something new, I take it".

So when Shepherd introduced Mack, a former high school football player, to wheelchair basketball, he tried it. Mack found he loved its energy and camaraderie so much that he joined Shepherd's team.

"I had never been exposed to the world of adaptive activities," said Mack, "and it was good therapy for me to have an activity I enjoyed, even though it was different or adaptive." Now, the accounting major, a junior at Auburn, plays with the Auburn Wheelchair Basketball team. "They're the center of my support network," he said.

Mack's support system also includes The University of Tennessee Medical Center's Trauma Survivors Network. As a peer visitor for the program, he talks with other trauma survivors, using his sense of humor to put them at ease.

"When you meet people, at first, they see you as your disability. If you can laugh at your own situation, they're more

comfortable being around you, because they know you're comfortable with yourself."

Mack visits with his peers in Knoxville, via phone and Facetime from the Auburn campus. "Just keeping in touch is so big. Doctors are great, but they give you typical answers. You want to talk to someone who's been there."

He encourages other trauma survivors to keep an open mind and try new things. "If someone offers me an opportunity to do something new, I take it," he said. As a result, since his injury, he's tried tennis, surfing, cycling and water skiing.

But the most exhilarating experience Mack has had since his injury is skydiving. Two years after he fell, Mack and his friends jumped from a plane flying at 14,000 feet.

"I fell from something higher than that balcony and survived".

Supporting the Superheroes

Here's how the Robert F. Lash Endowment Fund helped Team BUSAR, a local search and rescue group, expand their rescue capabilities.

Team BUSAR's motto, "Be the Superhero," is more than just words on their website. The members of Team BUSAR (which stands for Backcountry Search & Rescue) donate their time, and often use their own equipment, searching for and rescuing lost people in the National Park System including the Great Smoky Mountains National Park. The team has been awarded funding from the Robert F. Lash Endowment Fund three years in a row.



Team members during winter training.

Team BUSAR board member, Jenna Beck, said, "The Robert F. Lash Endowment Fund has been incredibly supportive of Team BUSAR. In the last three years, we received funds that provided satellite communicators, Gore-Tex jackets, and helmets designed for professional rescue."

Given the hypothermic conditions, poor visibility and steep terrain that the team often encounters during rescues, this equipment has ensured the safety and comfort of the team's 20 volunteer responders.

"From a safety perspective," said Matt Jernigan, assistant team leader, "this was tremendous."

Grant-Funded Equipment Helps the Rescuers

Andrew Herrington, the driving force behind Team BUSAR, started the organization four years ago, after working as a law enforcement ranger and seeing how challenging it can be to staff rescue efforts. He put together a team of outdoor

athletes including climbers, adventure racers, paddlers and other people with extensive outdoor experience to supplement the parks' search and rescue efforts. Their role is to supplement and assist rangers with the most arduous missions in the Park.

In 2018, this translated to more than 5,000 hours of grueling team training and active missions. "In the past two years, we've been involved in several extensive searches and many carry outs," said Jernigan. That included the search for Susan Clements, a missing hiker from Ohio and Austin Bohanan, a teen that went missing in the Smokies for 11 days, and was later found by boaters on Abrams Creek.

Winning the Robert F. Lash Endowment Fund hasn't just helped Team BUSAR. It's also changing safety culture in the National Parks.

"Climbing across rough country in thick vegetation puts our teams in danger, but few people were wearing helmets," said Jernigan. "So when we got ours, Park team members followed suit."

About the Robert F. Lash Endowment Fund

During his nearly 20-year career with The University of Tennessee Medical Center, Robert F. Lash, MD, served in many roles. Considered by many as an pioneer for emergency medicine, Lash established UT LIFESTAR, one of the first air ambulances

in the United States, and served as its first director.

In addition, he brought a poison control center to the medical center and was responsible for leading the effort to create the UT Family Medicine Department where he served as the first chair.

The Robert F. Lash Endowment Fund supports annual educational programs related to emergency medicine and pre-hospital care.

To find out how you can apply for a Robert F. Lash Endowment Fund, contact Sharon Layne at 865-305-6359. To learn more about Team BUSAR, visit teambusar.org.



Trauma Survivors Network

The Trauma Survivors Network (TSN) is a community of patients and families who are looking to connect with one another and rebuild their lives after a serious injury.

TSN Programs at the Medical Center:

Peer Visitation: Former trauma patients and caregivers are trained to be peer visitors. Peer visitors volunteer their time to visit patients and their families in the hospital and share experiences from the road to recovery after a serious injury. Peer visitors can answer your questions from the perspective of someone who has been there. This year we began incorporating phone peer visits to provide support for patients who have been discharged.

Survivors, Support Group, Let's CHAT: This is a general support group for trauma survivors that is held the first Tuesday of the month from 6-7:30 pm.

Snack & Chat: Family and friends of patients currently admitted to our Trauma Center are invited to take time to relax, have a snack and learn more about the emotional impact of trauma. The group meets once a week in the Trauma Surgical Intensive Care Unit on Tuesdays at 2 pm. Mobile snack and chat occurs at 10 am on Thursdays on 5, 7 and 10 East to serve visiting family and friends.

iPad lending: TSN has iPad's available to inpatient trauma patients. They can be checked out for one day at a time.

For more information about TSN programs please contact the TSN Coordinators at 865-305-9970, TSNCoordinator@utmck.edu, or visit traumasurvivorsnetwork.org

2018 Stats

96 Patients

TSN's outpatient support group, Let's Chat, averaged 8 participants per meeting, or about 96 patients per year.

1,333 Patients

TSN Coordinators supported 1,333 patients with 29 percent receiving follow-up visits. During the initial visit patients and their families are given the Trauma Patient Handbook, a brochure about the TSN program and any resources or information the patient may need support with.

95 Peer Visits

95 peer visits occurred during 2018. Peer visitors dedicated over 120 hours to the TSN program and conducting peer visits.

trauma survivors
network
provided by **ATS**
survive. connect. rebuild.

Leadership

Trauma Services



Brian J. Daley, MD
FACS, MBA, FCCP, CNSP
Medical Director



Blaine L. Enderson, MD
MBA, FACS, FCCM
Vice President of Emergency
& Trauma Services and
Critical Care

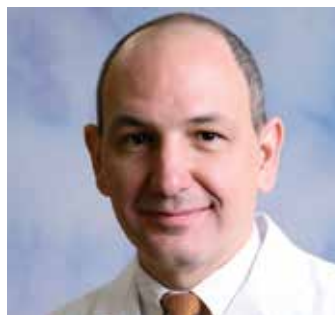


**Karen Pryor, MSN, RN,
CNML**
Director of Emergency
& Trauma Services and
Critical Care

Medical Critical Care



James E. Shamiyeh, MD
MSPH, FCCP
Co-Director



Paul R. Branca, MD
FCCP, D-AABIP
Co-Director

Trauma Surgical Critical Care



Reagan W. Bollig, MD
Medical Director

Neurocritical Care



J. Russell Langdon, MD
Medical Director and
Vice President, Brain &
Spine Institute

Acknowledgments

Department of Oral and Maxillofacial Surgery
Department of Radiology
Department of Surgery
Division of Plastic Surgery
Neurosurgical Associates
University Anesthesiology
University General Surgeons
University Orthopaedic Surgeons
TEAMHealth
UT LIFESTAR
Pastoral Care

Trauma Surgeons



Reagan W. Bollig, MD



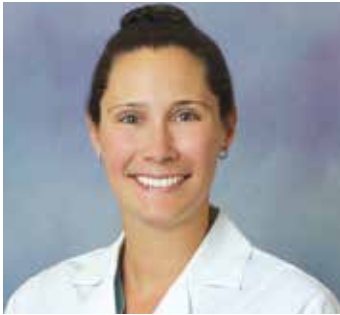
Marc A. Campbell, DO, FACS



Brian J. Daley, MD, FACS, MBA, FCCP, CNSP



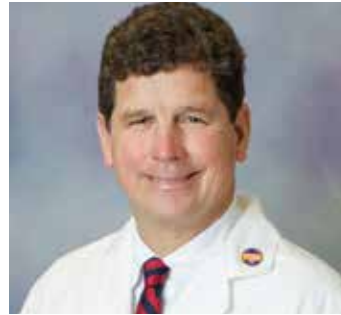
James W. Goodin, MD, FACS



C. Lindsay McKnight, MD



Todd A. Nickloes, DO, MBA, FACOS, FACS



R. Frank Roberts, MD, FACS



Lou M. Smith, MD, FACS

Trauma Multidisciplinary Liaison Team

A multidisciplinary trauma peer-review committee was formed to include liaisons from all the subspecialty groups that are involved in trauma care. This committee meets monthly to review all aspects of trauma care, including systematic review of all mortalities, significant complications and process variances associated with unanticipated outcomes. Our goal is to improve patient care, including prehospital care, acute care issues, post-discharge requirements as well as outreach and injury prevention.



J. Doug Keller, DO
Trauma Anesthesia Liaison



William E. Snyder, Jr., MD
Trauma Neurosurgeon Liaison



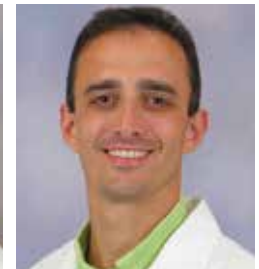
J. Michael McCoy, DDS
Trauma OMFS* Liaison



Brian M. Tonne, MD
Trauma Orthopaedic Surgeon Liaison



Anneliese Cuttle, MD
Emergency Department Medical Director and Trauma Liaison



Steven P. Knight, MD
Trauma Radiology Liaison

*Oral and maxillofacial surgery

Pastoral Care

By Brad Hood, Chaplain

Chaplains are an integral part of the care team at The University of Tennessee Medical Center. Our spiritual care delivery process is one of the first in the nation to be recognized with the HealthCare Chaplaincy Network's Excellence in Spiritual Care Award. Chaplains respond to the needs of our medical center 24/7.

We are dedicated to providing spiritual counseling to the medical center's trauma patients. We demonstrate this by meeting every trauma patient and their family and guests, and caring for their spiritual needs. We are with them from the Trauma Bay until they leave the hospital.

CPE Training

Our medical center has the region's only accredited training center for Clinical Pastoral Education (CPE). Our Trauma Center offers the student and resident chaplains real-life experience to integrate their theological education in a clinical setting.

As a training program, our CPE supervisors and staff chaplains are constantly working towards the best holistic care for our customers. Our program also allows students and residents to grow these skills in an educational environment.

15 on the 15th

In 2016, we announced an initiative called, "15 on the 15th," aimed at supporting our Emergency Department and Trauma staff. On the 15th of every month we offer a 15-minute coffee break with the chaplain.

While we are always available for their team, we have found this intentional, standing break has become a celebrated time to get to know each other better. Many of those conversations have led to supportive relationships that enhance the value of the medical center culture.

Sacred Moments in the Midst of Chaos

The Level I Trauma Center and Pastoral Care Department work together to find sacred moments in the chaotic experience of injury, treatment and recovery.

We are not always aware of the impact we have, but sometimes we are reminded in the most moving of ways. Last spring a hand-written note showed up in the chapel. The writer told a personal story of hope and survival. It was written on the anniversary of an overwhelming and frightening night.



The Pastoral Care staff, left to right: Coy Callicot, Brad Hood, Randy Shoun, Steve Sexton, Benjamin Lewis, George Doebler, Heather Shirey, Lisa Casey and Anne Sprouse

Half of his family had nearly died in a car accident and he had found comfort in our chapel. "Most of the time," he wrote, "I couldn't even form the words — I just cried big, ugly, scared tears." In that moment, a stranger came in and offered to pray with him. "When I opened my eyes," he said, "she was gone."

The note went on to say many times he has prayed for our medical center and the people who find themselves in similar situations. And folded in the note was a five dollar bill. The money was meant to buy a cup of coffee for another person who might find their way to the chapel afraid and overwhelmed. The note ended, "God's Peace be with you."

When I tell people that I am a chaplain at The University of Tennessee Medical Center, their response is often, "That place is like a whole city. I sometimes get lost over there." Notes such as this one remind me of how lost some of our guests feel. And, notes such as this one, remind me of the hope we inspire by caring for our patients.

I gave the money to another father who needed a cup of coffee that very day. He had been up all night with his family, praying. I've kept the note and I often end chapel services with the author's hopeful words, "God's peace be with you."



Stop the Bleed

By Gigi Taylor, Trauma Outreach Coordinator and Debi Tuggle, Injury Prevention/Pediatric Trauma Coordinator

A student in a Bleeding Control Basics Course learns to apply a tourniquet.

The Stop the Bleed campaign was officially launched by the White House in October 2015. This campaign is part of the Presidential Policy for National Preparedness. The policy addresses building national resilience through public awareness, education and training.

In aid of this policy, and supported by the American College of Surgeons, the medical center began offering The Bleeding Control Basic Course in April 2017.

This course recognizes that citizens may be faced with a life-threatening bleeding situation at any time. Massive bleeding from any cause – but particularly from an active shooter, explosive event or natural disaster where a response is delayed – can result in death.

Victims can die from uncontrolled bleeding within five minutes. According to the National Trauma Institute, 35 percent of prehospital deaths are caused by traumatic injury, hemorrhage or major loss of blood. In the same way the general public has learned CPR, medical organizations must also teach people to recognize life-threatening bleeding and apply proper bleeding control techniques.

Bleeding Control Basics Course

In the Bleeding Control Basics Course, attendees learn to apply direct pressure, pack wounds and apply tourniquets.

The course is taught to all age groups with no pre-existing medical knowledge required. Designed as a one-time certification, this course provides the knowledge and skills to help save a life. Through these courses, the trauma staff has found attendees also gain confidence and lose their fear of doing something wrong.



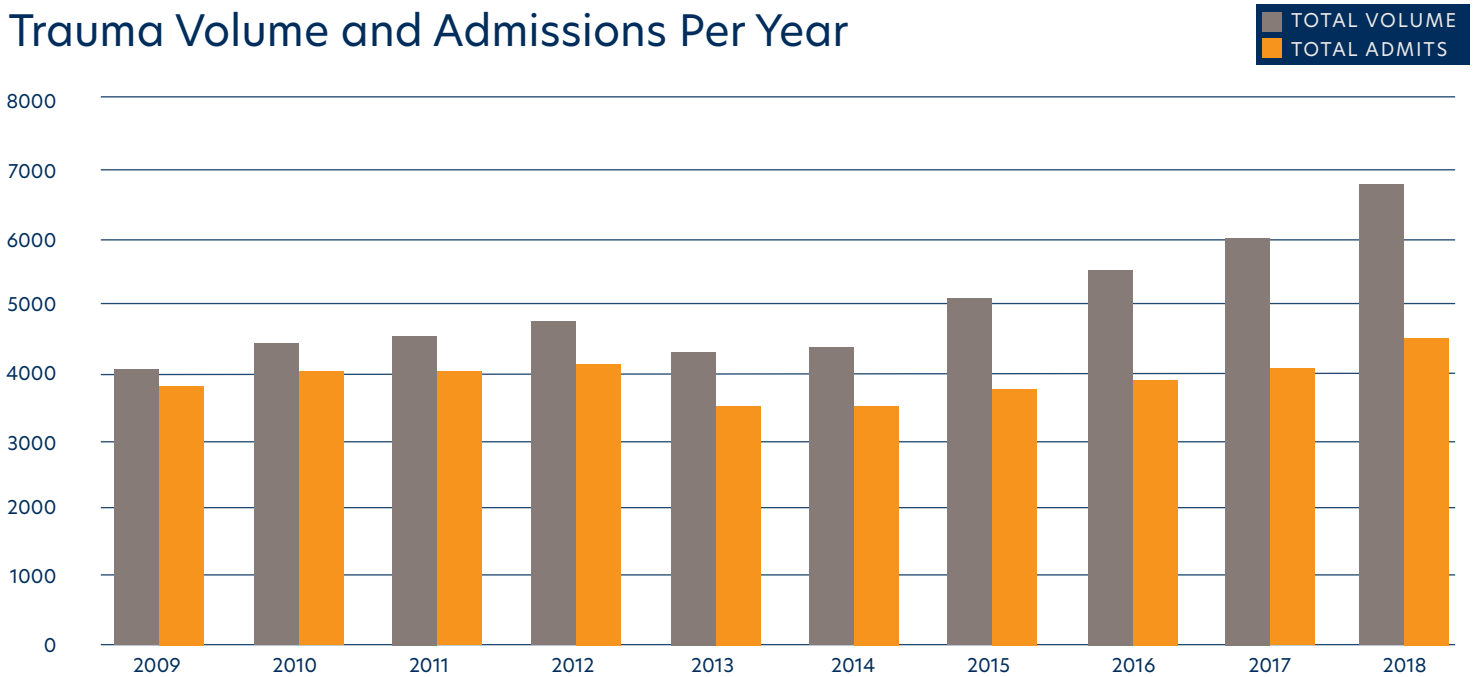
As a Level I Trauma Center, our injury prevention and outreach initiatives encompass the East Tennessee region. Since the launch of our Stop the Bleed initiative, we have held 138 courses and trained over 3,182 individuals. We have also recruited 250 additional instructors from health care, EMS services and law enforcement. Partnering and collaborating with agencies throughout our region has brought unity to the program offerings.

One main goal of the Stop the Bleed campaign is to place bleeding control kits in public locations, such as schools, churches and businesses. Through efforts like these, we are striving to bring this life-saving training to everyone in our region.

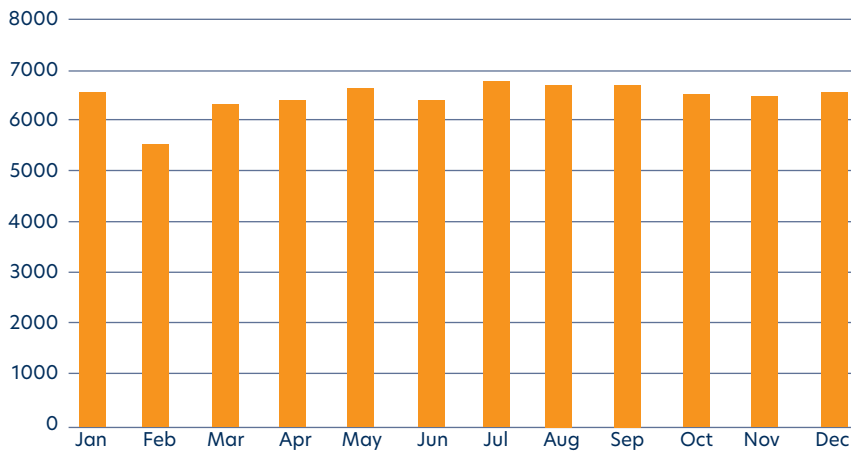
For more information: UTMedicalCenter.org/stopthebleed

Admissions and Visits

Trauma Volume and Admissions Per Year



Emergency Department Patient Volumes by Month

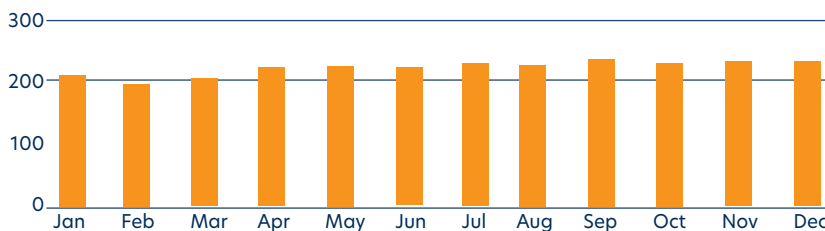


On-Call Specialists

Top 3 Groups Receiving the Most Consults		
Specialty	Consultations	Operations
OMFS*	1076	779
Neurosurgery	1766	663
Orthopaedics	2839	1870

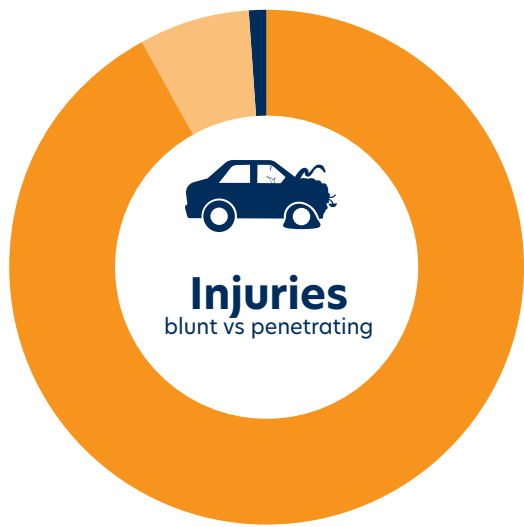
*Oral and maxillofacial surgery

Emergency Department Patient Daily Volumes by Month

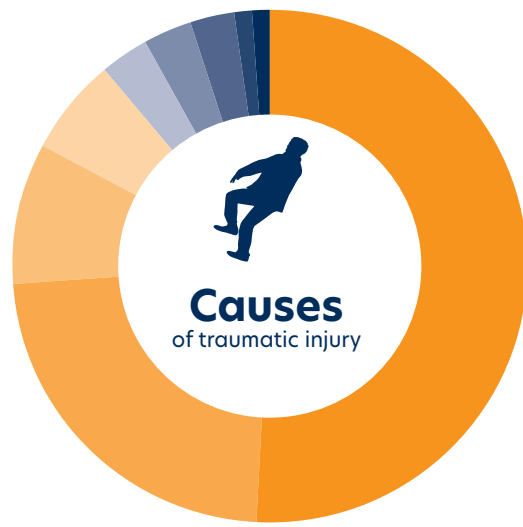


As a Level I Trauma Center, the University of Tennessee Medical Center is required to have general surgeons, Emergency Medicine physicians, Intensive Care physicians and anesthesiologists in-house at all times. Other specialists and a full range of equipment must also be available 24 hours a day, 7 days a week, 365 days a year.

Causes of Traumatic Injury



- 92% Blunt
- 7% Penetrating
- 1% Other



- 51% Falls
- 23% Motor Vehicle
- 9% Other
- 6% Motorcycle
- 3% Gunshot
- 3% Assault
- 3% ATV
- 2% Pedestrian
- 1% Stab Wound

Top 3 Mechanisms of Injury by Age Group

Age	0-13	14-17	18-25	26-45	46-65	>65
#1	Motor Vehicle Crash	Motor Vehicle Crash	Motor Vehicle Crash	Motor Vehicle Crash	Falls	Falls
#2	Other Blunt Mechanism	Falls	Falls	Falls	Motor Vehicle Crash	Motor Vehicle Crash
#3	Gunshot	All-Terrain Vehicle	Gunshot	Motorcycle Crash	Motorcycle Crash	Other Blunt Mechanism

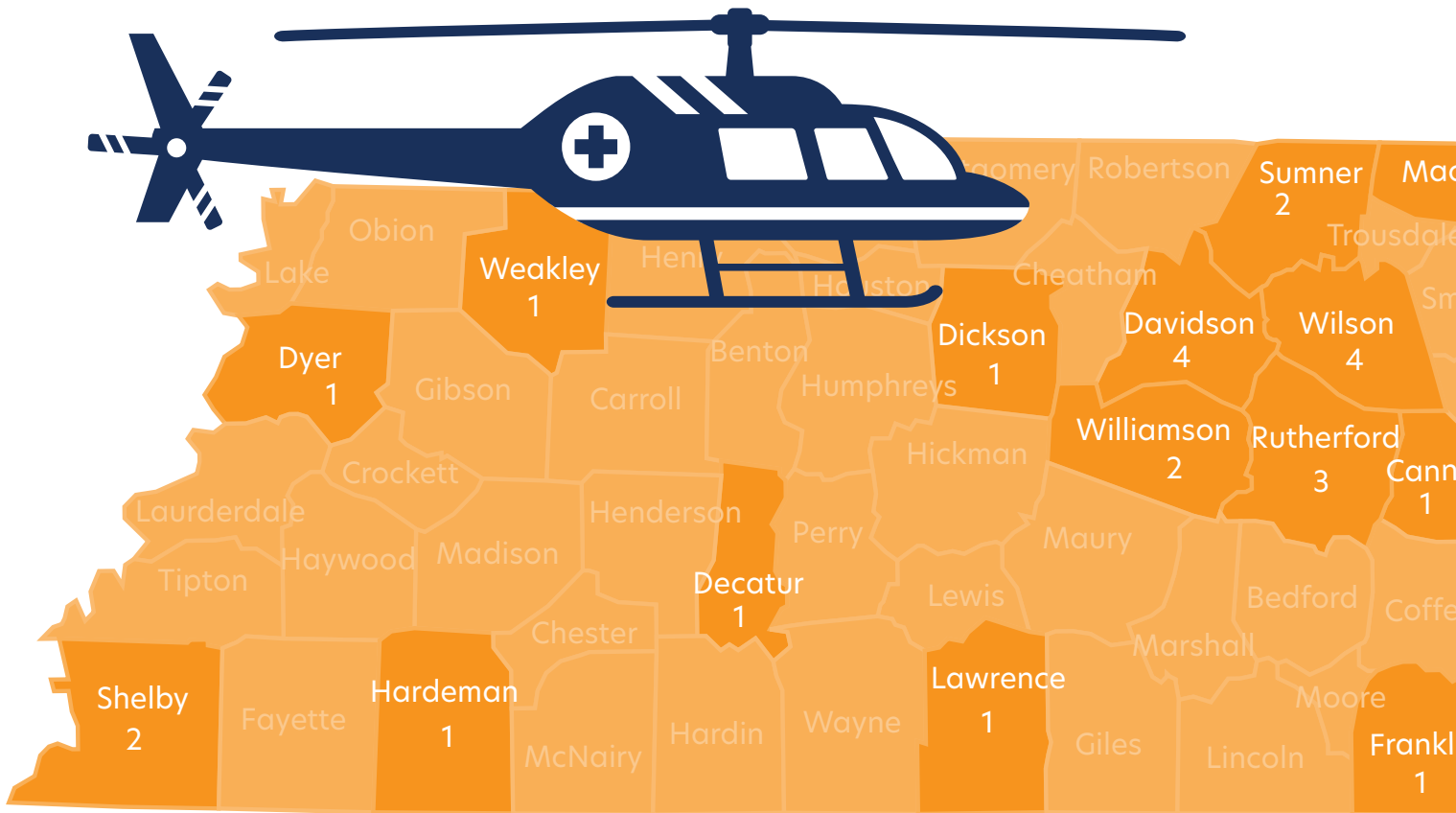
Injury Severity Score

All Level I trauma centers are required to admit at least 1,200 trauma patients yearly or admit 240 with an Injury Severity Score of more than 15. The injury severity score (ISS) is a scoring system that applies a numerical value to a patient's anatomic injuries.

In 2018, the Trauma Service at The University of Tennessee Medical Center admitted 930 patients with Injury Severity Scores greater than 15, which is almost four times the national requirement for a Level I Trauma Center.

Trauma Patient Distribution by Injury Severity Score		
	ISS	Number of Patients
Minor	<8	1440
Moderate	8-15	1927
Serious	16-24	772
Severe	25-40	297
Critical-Maximum	41-75	31

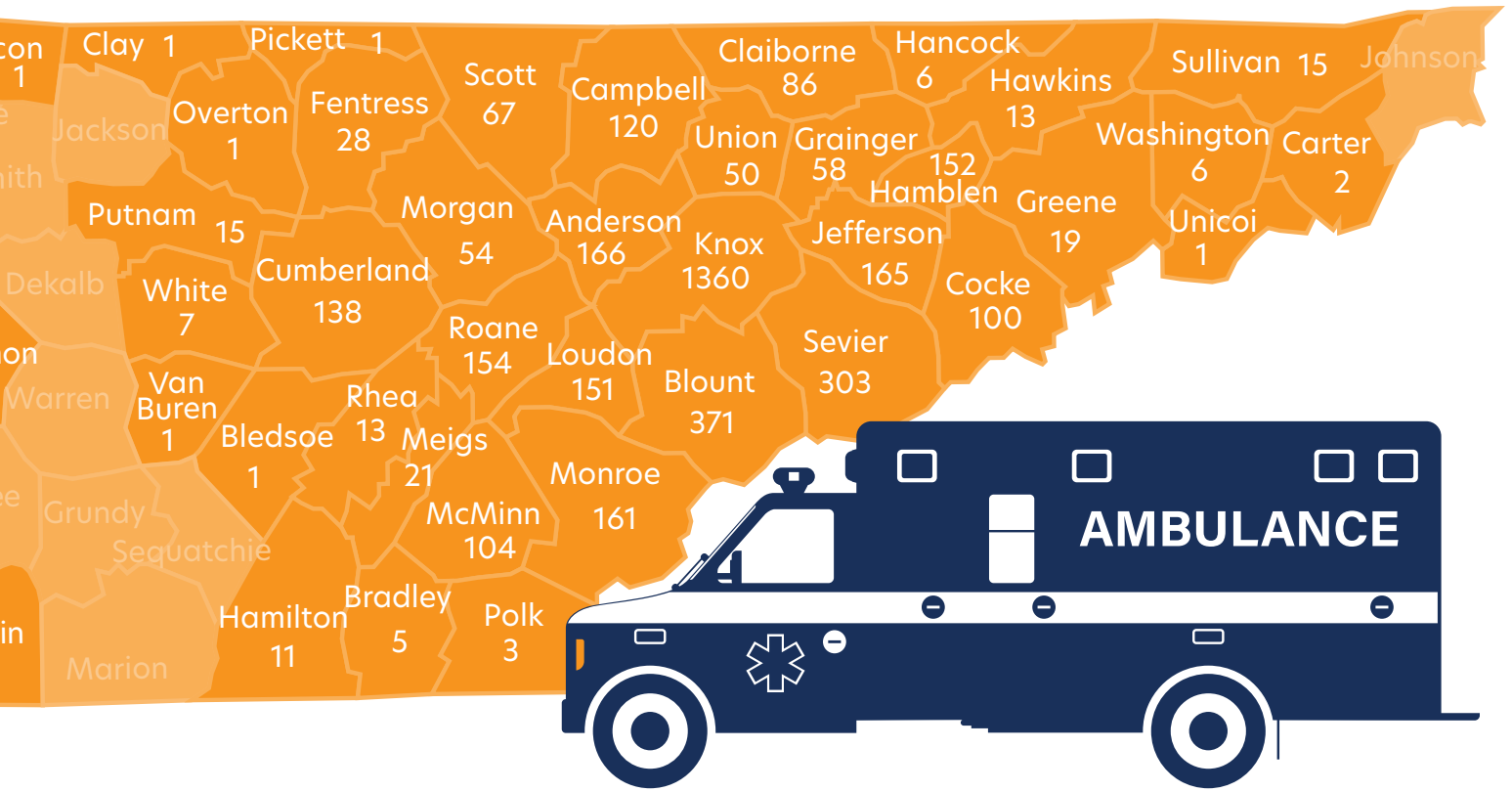
2018 Trauma Report



Referring Hospitals

Big South Fork Medical Center	93	Johnson City Medical Center	10	Rhea Medical Center	3
Blount Memorial Hospital	238	LaFollette Medical Center	72	Roane Medical Center	84
Claiborne Medical Center	55	Lakeway Regional	28	Starr Regional Medical (Athens)	74
Cumberland Medical Center	167	Laughlin Memorial	10	Starr Regional Medical (Etowah)	19
East Tennessee Children's	2	LeConte Medical Center	201	Sweetwater	126
Fort Loudon Medical Center	68	Methodist Medical Center	129	Takoma Regional Hospital	3
Fort Sanders Regional	77	Morristown-Hamblen	110	Turkey Creek Medical Center	28
Medical Center		Healthcare System		Wellmont Bristol Regional	2
Hancock County	2	Newport Medical Center	97	Wellmont Holston Valley	2
Jamestown Regional	29	North Knoxville Medical Center	82		
Medical Center		Parkwest Medical Center	171	Kentucky hospitals	102
Jefferson Memorial	93	Physician's Regional	73	North Carolina hospitals	3
Jellico Community	44	Medical Center		Virginia hospitals	1

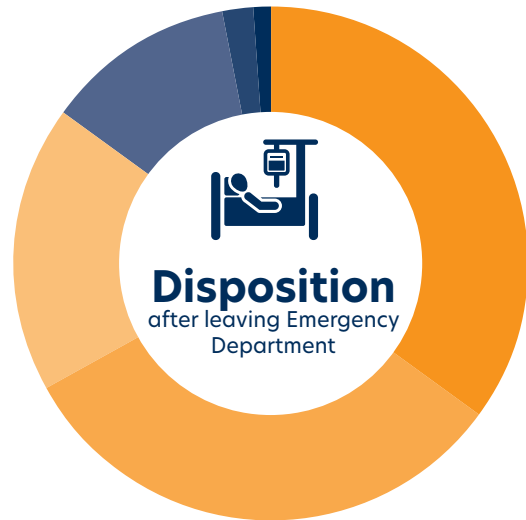
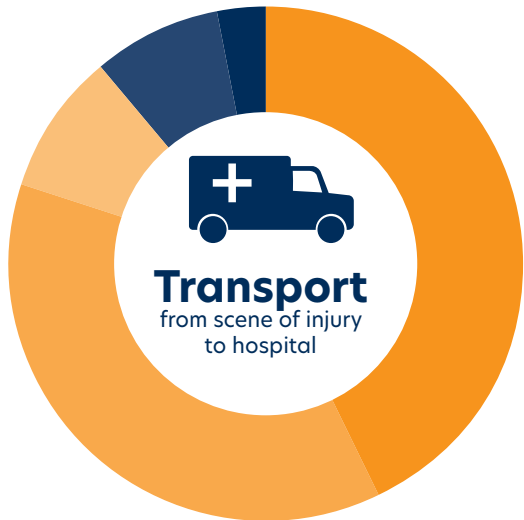
Trauma Patients by County of Origin



Trauma Patients' Home States

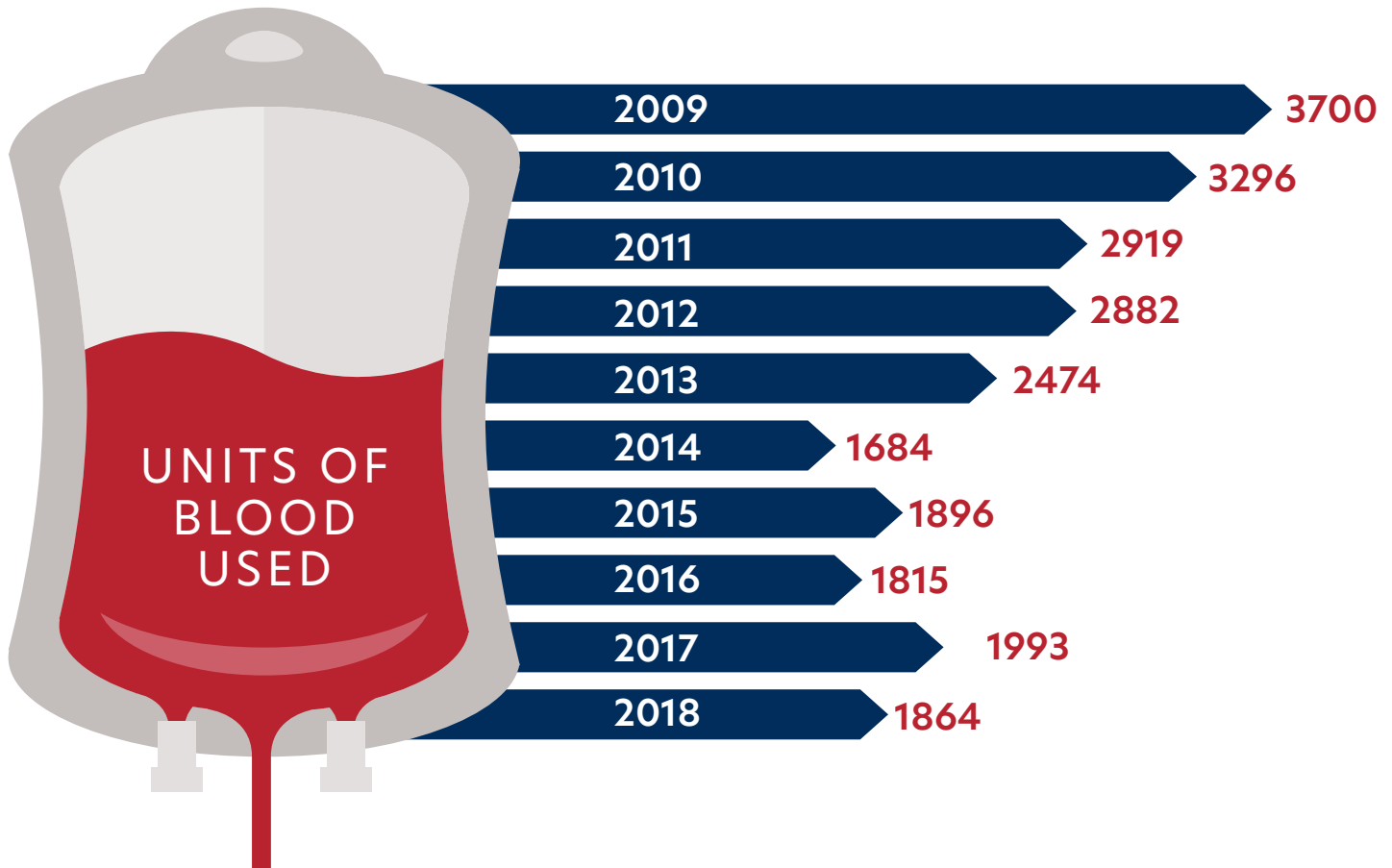
Alabama	24	Massachusetts	1	Oregon	1
Arkansas	3	Maryland	4	Pennsylvania	9
Arizona	3	Michigan	23	South Carolina	25
California	5	Minnesota	4	South Dakota	1
Colorado	2	Mississippi	8	Tennessee	6,037
Delaware	1	Missouri	7	Texas	12
Florida	71	North Carolina	73	Utah	2
Georgia	50	Nebraska	2	Virginia	28
Iowa	2	Nevada	1	Washington	1
Illinois	22	New Hampshire	1	Wisconsin	5
Indiana	28	New Jersey	3	West Virginia	8
Kansas	1	New Mexico	4		
Kentucky	301	New York	4		
Louisiana	7	Ohio	30		

Arrivals and Hospitalizations

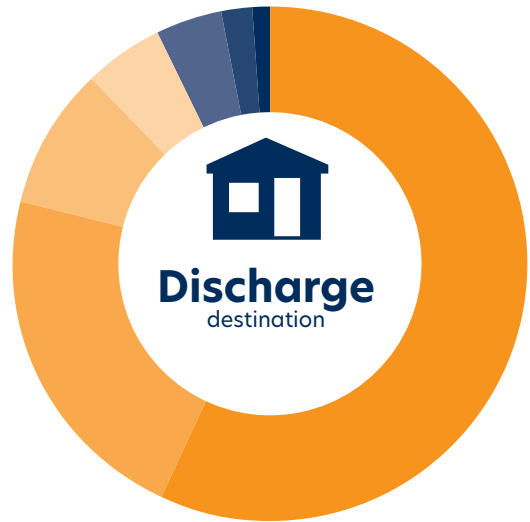


- 43% Ambulance
- 37% Referring Hospital
- 9% UT LIFESTAR
- 8% Private Vehicle
- 3% Other Helicopter

- 36% Floor
- 32% Home
- 18% ICU
- 12% OR
- 2% Transfer
- 1% Death



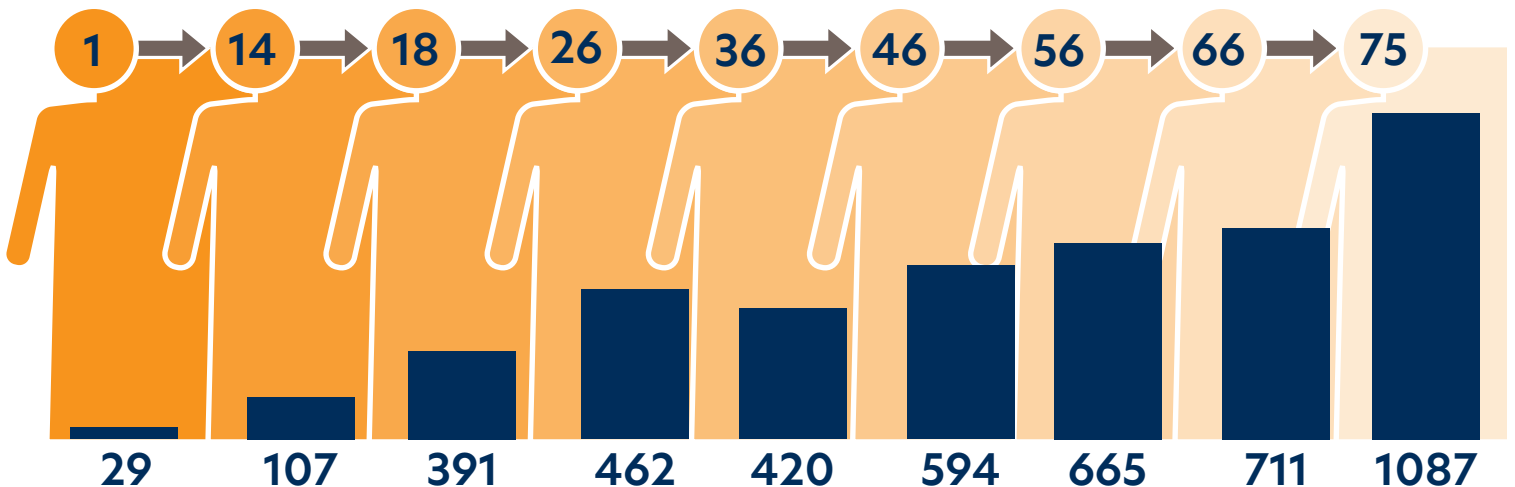
Trauma Center Statistics



- | | | | |
|----------------------------|--------------------|--------------------|---------------------------|
| ● 43% Medicare | ● 7% Commercial | ● 57% Home | ● 4% Other |
| ● 14% Medicaid/TN Care | ● 4% Other | ● 22% Nursing Home | ● 2% Rehab |
| ● 11% BlueCross BlueShield | ● 3% Workers' Comp | ● 9% Home Health | ● 1% Long Term Acute Care |
| ● 8% Self Pay | ● 1% Military | ● 5% Death | |
| ● 8% Auto | ● 1% HMO/PPO | | |

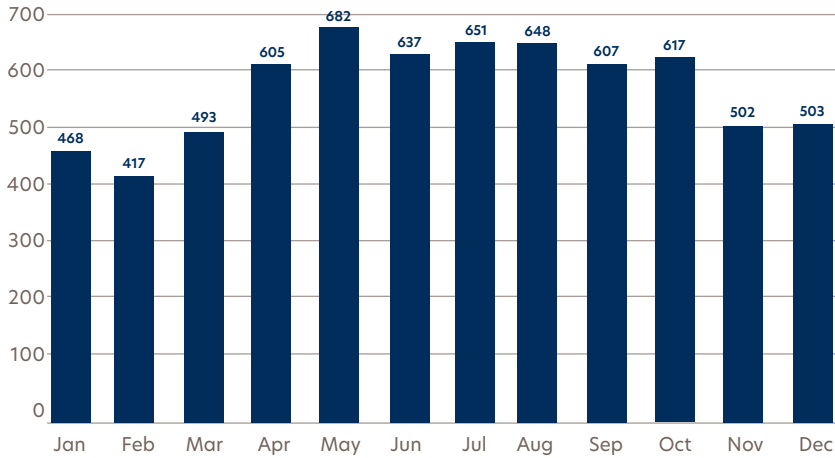
The Trauma Service at The University of Tennessee Medical Center provided uncompensated care to over 996 severely injured patients in 2018. The average gross charges for each of these cases was \$35,025.

Trauma Patients Distribution by Age

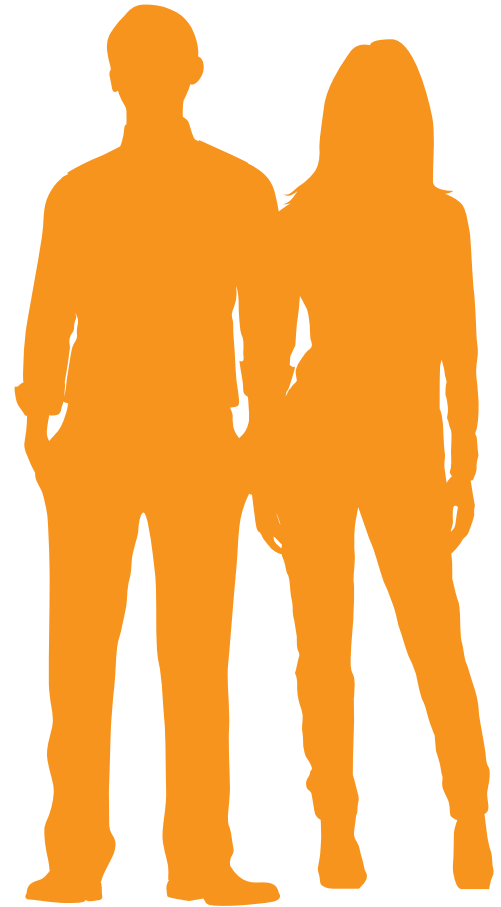


Patient Distribution

Patient Distribution by Month



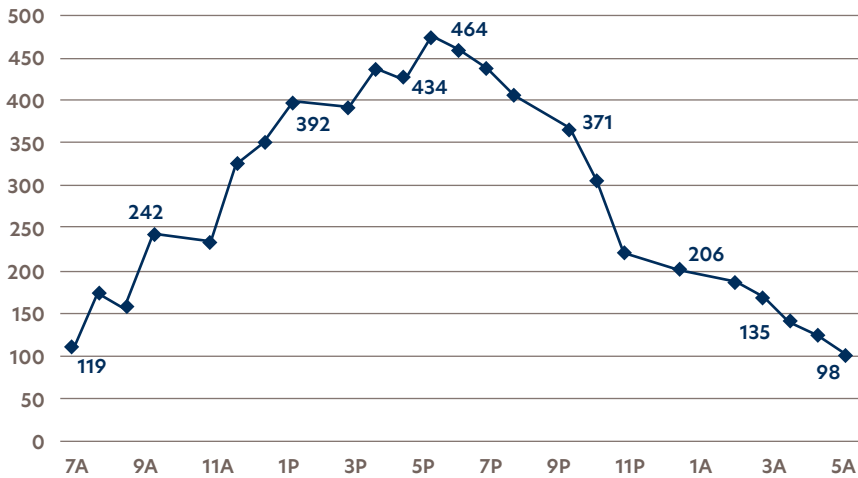
Gender Distribution



56%
Male

44%
Female

Patient Distribution by Hour of Day



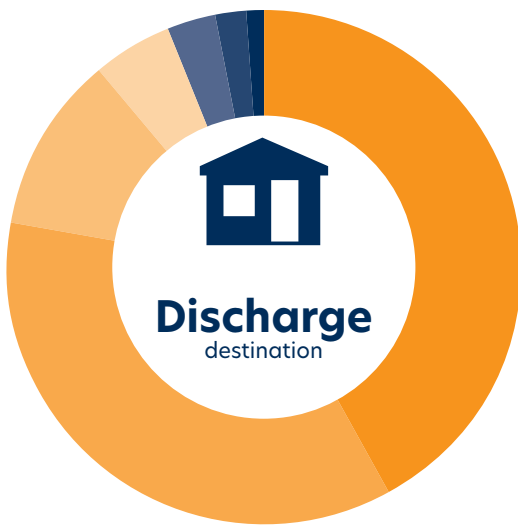
Patient Distribution By Day of the Week



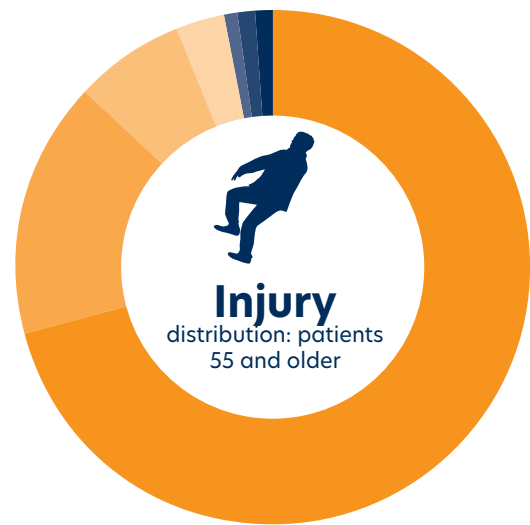
Patients 55 and Older

People aged 55 and older are the fastest-growing segment of the population, as the Baby Boomers age and enter their "golden years." This has resulted in a steady increase in trauma-related admissions in this population. Consistent with patterns across the nation, at The University of Tennessee Medical Center falls are now the leading cause of unintentional injury in the older adult population, accounting for nearly 60 percent of the admissions. Numerous studies show an increased death and disability in older adult trauma patients when compared to a younger population; therefore, it is imperative for older adults to be rapidly transported to a trauma center – ideally during the first hour.

Injury Severity Score Age 55 and Older		
	ISS	Number of Patients
Minor	<8	750
Moderate	9-15	1228
Serious	16-24	409
Severe	25-40	146
Critical-Maximum	41-75	8

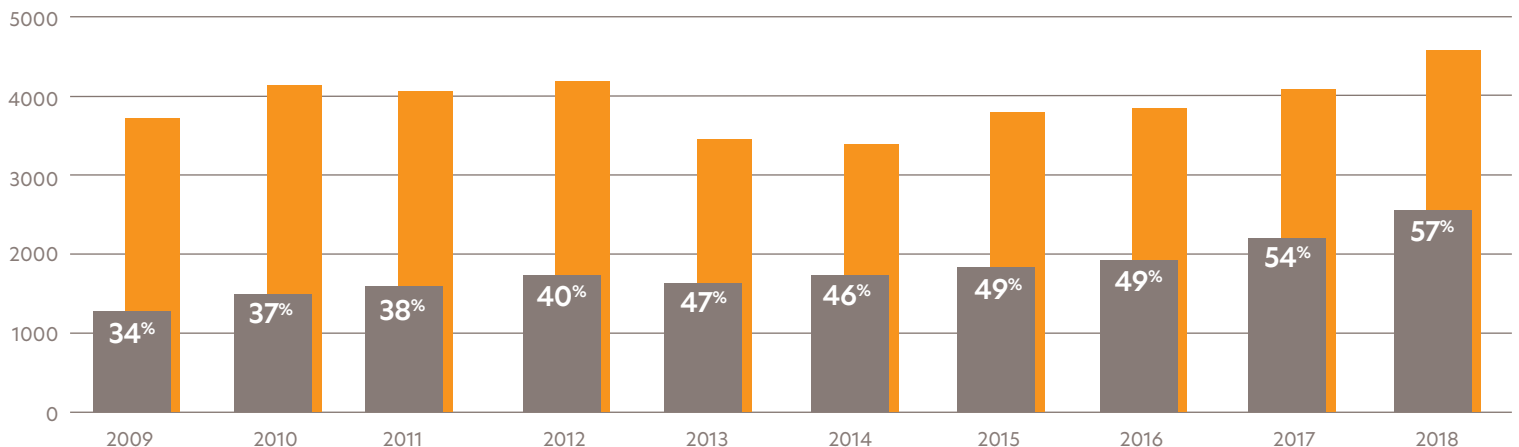


- 42% Home
- 36% Nursing Home
- 11% Home Health
- 5% Death
- 3% Other
- 2% Rehab
- 1% Long Term Acute Care



- 71% Fall
- 16% Motor Vehicle
- 7% Other
- 3% Motorcycle
- 1% Gunshot
- 1% ATV
- 1% Assault

Percentage Admissions 55 or Older



Trauma Services Program Staff



Trauma Program Manager

Niki Rasnake, BSN, RN, CEN

The trauma program manager is fundamental to the development, implementation and evaluation of the Trauma Program. In addition to administrative responsibilities, the trauma program manager must show evidence of educational preparation, certification and clinical experience in the field of trauma care. Key responsibilities include: organization of performance improvement activities; management of the trauma registry; and coordination of outreach education and injury prevention activities at the community, state and national levels. The trauma program manager is also involved with research, analysis and facilitating protocol development within the trauma program. The trauma program manager represents the trauma program on hospital and state committees to enhance trauma care delivery and management for our patients.



Injury Prevention/Pediatric Trauma Coordinator

Debi Tuggle, RN, CEN

The injury prevention/pediatric trauma coordinator is instrumental in the development, implementation and evaluation of the pediatric trauma service and injury prevention in our community. Key responsibilities include: coordinating pediatric trauma performance improvement programs and participating in education and outreach programs, including injury-prevention programs. The injury prevention/pediatric trauma coordinator represents the pediatric trauma service on hospital committees and represents the medical center on community and state committees.



Trauma Performance Improvement Coordinator

Kelly McNutt, BS, RN, CEN, TCRN

The trauma performance improvement coordinator's primary responsibility is to monitor and continually improve structures, processes and outcomes within the institution in collaboration with the trauma medical director and trauma program manager. Other duties include trauma registry data validation and generation of performance reports. The reports generated support a number of functions, including performance improvement activities; development of research projects for publication and presentations at national meetings; and providing information to support legislative and educational initiatives, which impact the safety of our community. The trauma performance improvement coordinator collaborates with the multidisciplinary team in the daily care of trauma patients to enhance continuous quality improvement for the trauma program.



Trauma Outreach Coordinator

Gigi Taylor, MSN, RN, TCRN, CEN

The trauma outreach coordinator plays a significant role in assuring that the Trauma Center serves as a community and regional resource. Outreach programs are an integral part of Trauma Center services. These programs are designed to help improve outcomes from trauma and prevent injury through public and professional dissemination of information, and the facilitation of access to the clinical and educational resources of the Trauma Center. The components of an outreach program may include public awareness, injury prevention education or professional education. The scope of education and outreach programs depends on a variety of factors for the region, including the needs of the region as well as available resources.



Brief Intervention Coordinator

Kayla Aloisi, LMSW

The brief intervention coordinator is the newest position in Trauma Services. The brief intervention coordinator is responsible for Screening Brief Intervention and Referral to Treatment (SBIRT) program. Key responsibilities include: conducting drug and alcohol assessments and providing brief interventions to trauma patients that screen positive for risky behavior, build and maintain partnerships with area treatment programs and to follow up with trauma patients who were referred to a treatment program. The brief intervention coordinator also works with the trauma clinic to collect Post-traumatic stress disorder (PTSD) screens and follows up with those who screen in a high range to provide information and resources.

Strength and Perseverance

TRAUMA REGISTRARS

The trauma registrar is an integral member of the Trauma Center. Trauma registry data is abstracted and entered by the trauma registrar. Trauma registry data is used internally in the continuous performance improvement process at the medical center. Data is reported to the National Trauma Data Bank and the Tennessee State Trauma Registry. High-quality data begins with high-quality data abstraction and entry – it is the trauma registrar who performs this task and then analyzes the data and prepares it for distribution in its most useful format.



Becky A. Kali,
RHIT, CPC, CSTR
Lead Registrar



Mandi Finchum,
RHIT



Jennifer King



Linda Bushong,
RHIT



Jan Ely



Karen Jenkins



Vicki Harness



Traonna Smith,
RHIT

TRAUMA SURVIVORS NETWORK

The Trauma Survivors Network (TSN) is a national program developed by the American Trauma Society. It helps trauma patients and their families connect with one another and rebuild their lives after a serious injury. The TSN coordinators at the medical center act as a liaison for patients and their families, introducing them to the program and giving them access to resources aimed at helping them rebuild their lives. The TSN is a free service to trauma survivors and their families.



TSN CLINICAL COORDINATOR
Therese Zaltash, MS

The TSN clinical coordinator serves as a point of contact for program participants, office and clinical support personnel. Key responsibilities include: facilitating educational and support groups, coordinating outreach and educational efforts, and educating the hospital staff about the program. The clinical coordinator trains and manages TSN volunteers as peer visitors and community educators. The clinical coordinator recruits trauma survivors for support group and the peer visitation program.



TSN DEVELOPMENT COORDINATOR
Elizabeth Waters, LAPSW

The TSN development coordinator is responsible for submitting and managing grant proposals for foundation and corporate sources. Key responsibilities include: coordinating day-to-day operations of the TSN program with the clinical coordinator; creating and maintaining database information for program evaluation and reporting; and co-facilitating the Survivor Support Group with the clinical coordinator. The TSN development coordinator also serves as a field instructor for social work students who provide support to the TSN and other Trauma Center initiatives.

Injury Prevention

Injury Does Not Occur by Accident



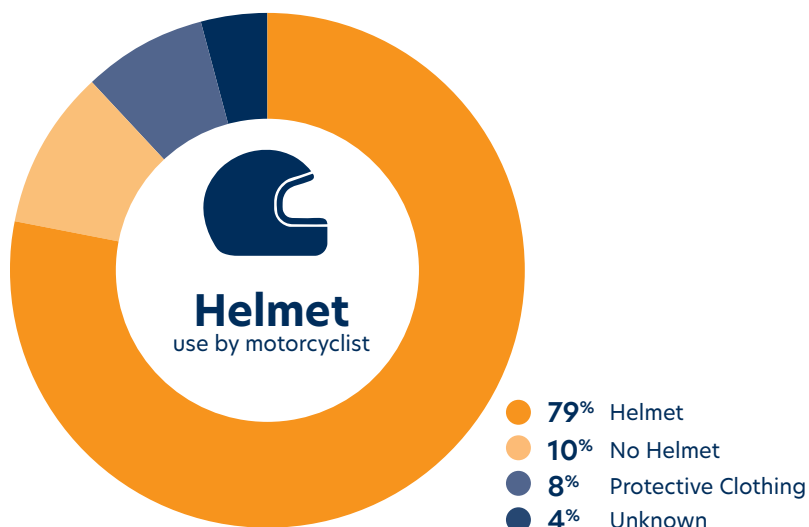
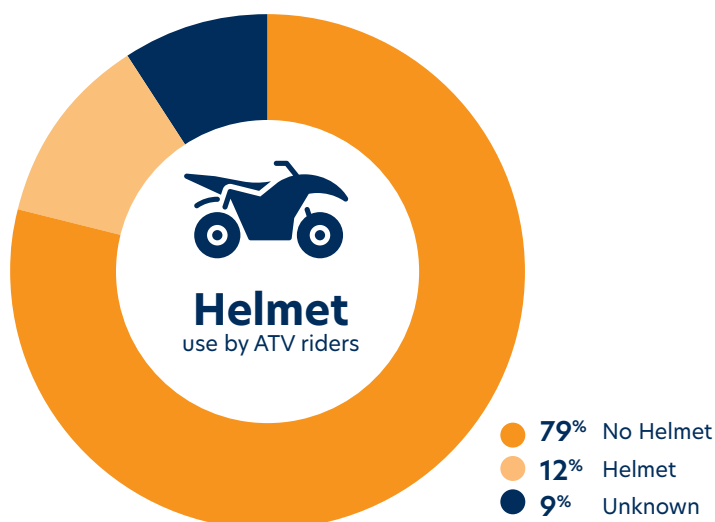
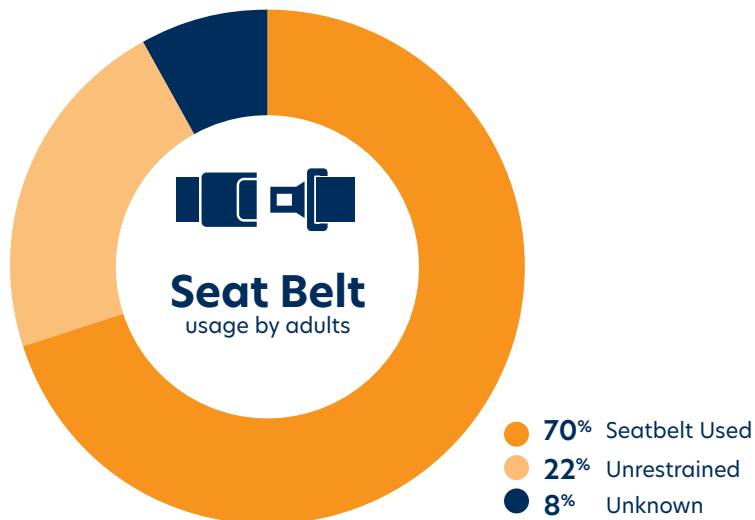
Though it may be unintentional, injury does not occur by accident. Trauma Centers have an important role in identifying injury patterns and risk factors in patients, families and communities. For many injuries, prevention is the best means of dealing with a public health problem.

Protective Equipment Saves Lives

Use of protective equipment has been proven to increase survivability if you are involved in a crash. At the medical center, we treat many patients that do not use protective equipment when driving or participating in recreational activities. Over 70 percent of the patients involved in motor vehicle crashes were wearing seatbelts at the time of their accident.

An alarming number of ATV enthusiasts do not wear a helmet while riding; only 12 percent of the riders admitted to the Trauma Center were wearing a helmet when their accident occurred.

Motorcyclists are more likely to wear a helmet when they are involved in a collision; after all it is the law. However only 79 percent of the motorcyclists were helmeted, leaving room for improvement.





Tragedy Brings New Life

Jenni Fuentes was killed in a car crash, but she lives on with organ donation.

"Jenni was a very special person — someone you could count on," said Jenni's father, Bernardo Orive. This proved true after a car crash took Jenni Fuentes' life, because she saved the lives of four others through organ donation.

On July 14, 2018, Jenni attended a gathering of family and friends. On her way from the party, she lost control of her car and crashed. Family members saw her wreck and pulled her to safety as the ambulance arrived. She was rushed to The University of Tennessee Medical Center's Level I Trauma Center.

Family and friends set up a vigil in the Trauma Center waiting room. Over the next week, her health declined, and her doctors confirmed she would not recover. The family discussed Jenni's wishes to be an organ donor. After deciding to direct donate, or give Jenni's organs to specific recipients, they asked those at the vigil to recommend potential recipients.

Jenni brought so much joy to everyone's life, and continues to do as she lives on through organ donation.

Out of three names given, two were matches. One recipient was registered as number 559 on the national list through the medical center. Science teacher Dr. Marcus Randolph had just learned the devastating news that his girlfriend, who was a match for a kidney donation, had developed a kidney stone and wouldn't be able to donate.

Less than a week later, he heard he would receive a kidney from Jenni. He said, "I am grateful beyond words for this chance, and yet so sorrowful for the Orive family's loss."

Marcus' sister, Christi Kirk, worked with Jenni after she arrived in Knoxville from Mexico City, Mexico. Christi said that Jenni's life goal was to be a registered nurse because she wanted to help people.

Even in death, Jenni was able to help people, changing four lives through organ donation.

In addition to the kidney donated to Dr. Randolph, Jenni's other kidney was donated to an 18-year-old man who is a senior in high school. Her liver went to a 52-year-old assistant principle who pastors part-time, and her heart was given to a 33-year-old woman. Their surgeries went well, and they are all recovering fully.

In August 2018, Jenni's family attended the medical center's monthly flag ceremony wearing matching t-shirts to honor her. This ceremony is held monthly, honoring those who have given and received the gift of life.

For more information about this ceremony or organ donation, please contact Tennessee Donor Services at 888-234-4440 or tds.info@dcids.org.



Donating the Gift of Life

donatelifetn.org

An Extraordinary Commitment to Science, Health and Hope

Tennessee Donor Services (TDS) serves nearly five-and-a-half million people in Tennessee and Southwest Virginia. We are a team of professionals dedicated to saving and improving lives by connecting organ and tissue donors with patients who need them. We strive to extend the reach of each generous donor's gift to those who are profoundly grateful for them.

Core Values

Our performance is measured by the impact we have on the lives of families who make transplantation possible, and the patients whose lives are saved and improved by their gifts. Each TDS employee commits every day to be:

- Selfless
- Hardworking
- Passionate
- Dependable

Our Work

We are proud of our partnership with The University of Tennessee Medical Center. Our work together in 2018, resulted in 29 organ donors with 112 lifesaving organ transplants. In addition, the medical center also had 58 tissue donors in 2018.



Tennessee Donor Services
an extraordinary commitment to science, health and hope



Facts & Figures



patients are currently **waiting** in Tennessee



36,500

organ transplants **occurred** in the United States last year



114,000

people are currently **waiting** for a lifesaving organ



patients **die** every day waiting for a lifesaving transplant

8

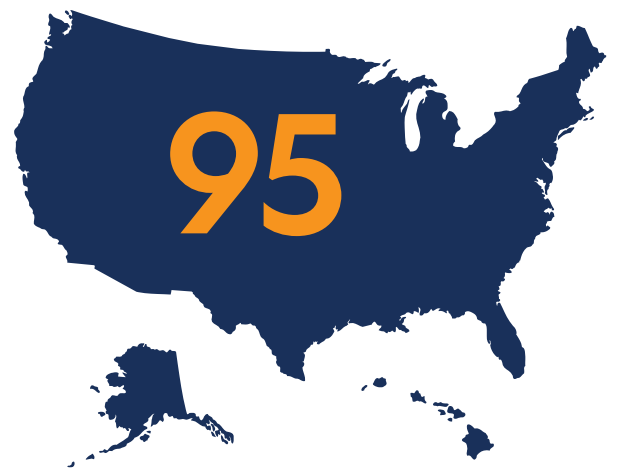


Lives that can be saved through one person's organ donation

1



Person is **added** to the waiting list every 10 minutes



transplants take place each day in the United States, on average

305



patients are currently waiting for a kidney transplant at The University of Tennessee Medical Center

52

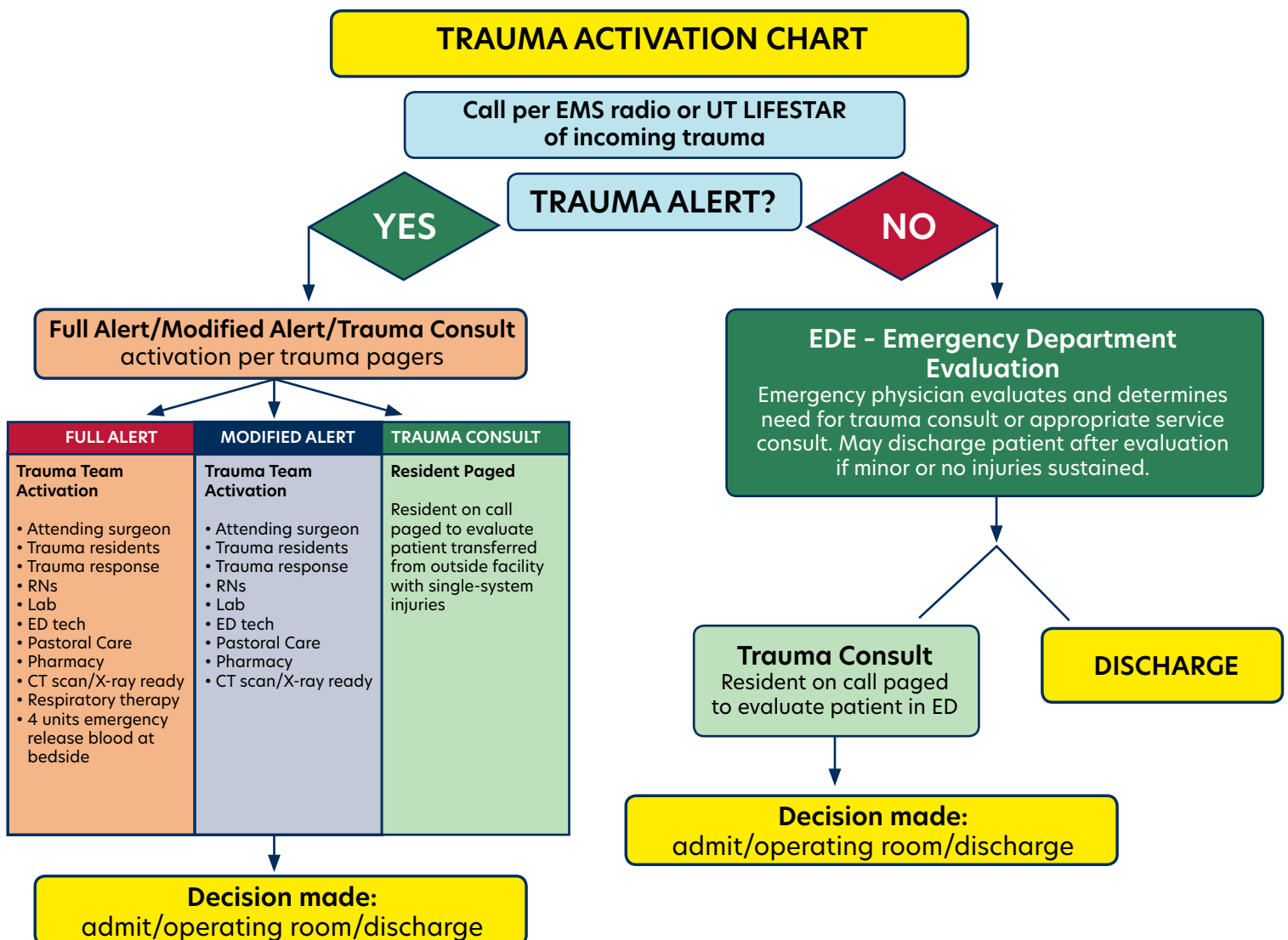
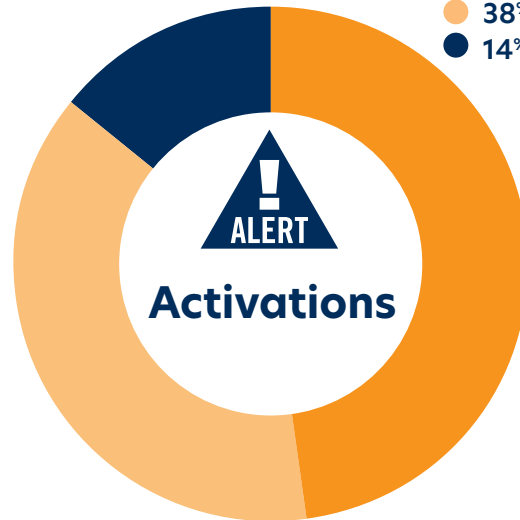


patients **received** kidney transplants at The University of Tennessee Medical Center in 2018

Trauma Alert Activation

Trauma alert activation is assessed as Emergency Medical Service crews transport patients to the Trauma Center and they communicate patient information to the Emergency Department. This vital on-scene information allows the activation of one of our three-tiered trauma team responses. Levels of activation are determined by the local, state or American College of Surgeons field triage criteria, and applied based on the medical condition of the patient. Once the trauma team is activated, a multidisciplinary team unites and awaits the injured patient's arrival to ensure rapid evaluation and treatment.

- 48% Modified Alert
- 38% Trauma Consult
- 14% Full Alert



Auto-Acceptance Guidelines

This summary is intended to help emergency doctors and staff in understanding which patients can be automatically accepted, and when an attending physician must be involved in making the decision to accept or deny a transfer.

ADULT TRAUMA

(age 14 and older)

Auto-accepted through UT LIFESTAR

FULL ALERT

- Confirmed BP <90 at any time
- Significant deterioration of previously stable patient
- UT LIFESTAR patients requiring blood products to maintain vital signs
- Respiratory rate <10 or >29, or intubated due to respiratory distress
- Penetrating wounds in head, neck, chest or abdomen
- Glasgow Coma Scale ≤ 8 , due to trauma

MODIFIED ALERT

- Obvious long bone fractures, proximal to the wrist/ankle
- Flail chest
- Pelvic fractures
- Paralysis
- Spinal fractures with signs and symptoms of neurologic deficits or paralysis
- Burns >15 percent total body surface area
- Vascular injury proximal to wrist/ankle
- Traumatic pneumothorax
- Traumatic amputation proximal to wrist/ankle
- Glasgow Coma Scale >8 but <13
- >20 weeks gestation involved in a traumatic incident
- Fall >10 feet
- Auto-pedestrian crash >5 mph
- High-speed motorcycle crash estimated >40 mph
- High-risk auto crash: MVC with co-occupant death or ejection, high rate of speed (≥ 40 mph), ejection from automobile/motorcycle/ATV without self-extrication, long extrication ≥ 20 minutes

TRAUMA CONSULT

Single-system injuries including but not limited to:

- Fractures from a ground-level fall
- Rib fractures
- Closed head injury with Glasgow Coma Scale 14 or greater
- Spinal fractures without signs and symptoms of paralysis, radiographic evidence of retropulsion or cord involvement
- Distal long-bone fractures, appropriately splinted and no neurovascular compromise
- Facial fractures (patient can protect airway and there is no active bleeding)
- Snakebite with envenomation

NOT auto-accepted: Single-system injury distal to ankle or wrist

NOTE:

- All acceptance criteria are affected by and may differ when medical center in-patient beds are at capacity.
- Trauma patients can be auto-accepted with partial workups when a major life-threatening injury is identified (e.g., head bleed) and/or with obvious injury (e.g., obvious fractures, paralysis on clinical exam) and/or with hemodynamic instability identified early in the initial resuscitation at the referring facility. Patient should be stabilized according to transfer requirements as capable at referring facility.
- Call UT LIFESTAR at 865-305-9112 for connection to appropriate admitting service or referral to Patient Placement Center.



2018 TEE Up for Trauma Golf Tournament

Benefiting the Trauma Survivors Network at The University of Tennessee Medical Center

Thank you to the event chair, David Sumilas, our corporate sponsors and more than 115 golfers in the community for supporting the region's only Level I Trauma Center.

For more information regarding sponsorship opportunities, how you can get involved, or if you would like to donate in support of our Emergency and Trauma Center, please contact the Development Office at 865-305-6611 or by email at development@utmck.edu.

EAGLE SPONSORS



CART SPONSOR



LUNCH SPONSOR



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ADDITIONAL SPONSORS

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- Hanger Clinic
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- LHC Group
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- Messer Construction
- O'Neil, Parker & Williamson, PLLC
- Pinnacle Financial Partners
- Regions Bank
- SunTrust
- University Orthopedic Surgeons
- Wakefield & Associates

THE UNIVERSITY OF TENNESSEE MEDICAL CENTER

GUARDIAN ANGEL



Who's Touched Your Life Today?

Make a gift in honor of a physician, faculty member, nurse, housekeeper or another caregiver who made a difference in your stay.

WHO made a difference?

"I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel."

- Maya Angelou

Our team members are dedicated to serving our patients and their families with care and compassion. If a doctor, faculty member, volunteer or other caregiver has made a difference in the care you or a loved one received, we encourage you to recognize and honor that compassion through our Guardian Angel program.

HOW to say thank you?

Our patients often express their gratitude for the excellent care they received in a variety of ways—through kind words, smiles, letters of thanks and financial contributions.

By donating a minimum of \$10, the team member that you choose to acknowledge will receive a notification of your honor and a custom-crafted guardian angel lapel pin to wear proudly throughout the medical center.

WHY is your support important?

Acknowledging an individual for a job well done is one of the most meaningful forms of support you can offer. Your donation demonstrates an understanding of the important role our team members play in enabling us to continue fulfilling our mission of excellence in patient care, education and research.

THANK YOU!

Make A Donation

Visit UTMedicalCenter.org to learn more ways to donate, or contact the Development Office at 865-305-6611 or development@utmck.edu.

UTMedicalCenter.org/give-back/donate



The University of Tennessee Medical Center is the home of the Knoxville campus of UT Graduate School of Medicine, UT College of Pharmacy and University Health System, Inc. Together, these entities embody the medical center's philosophy and mission to serve through healing, education and discovery.

We Value | Integrity • Excellence • Compassion
Innovation • Collaboration • Dedication

ED0119001 EEO/Title VI/Title X/Sec.504/ADA

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