Trauma Care Advisory Council

Trauma Care in Tennessee

2023 Report to the 113th General Assembly

Tennessee Health Facilities Commission
Trauma Care Advisory Council
November 24, 2023

AUTHORSHIP

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Table of Contents *Page*

State of Tennessee
Health Facilities Commission
502 Deaderick Street, 9th Floor, Nashville, TN 37243
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November 24, 2023

Dear Members of the General Assembly,

As required by Tenn. Code Ann §68-59-103, we are pleased to submit our Annual Trauma Report. This report reflects activities and accomplishments of the Trauma Care Advisory Council (TCAC) and Tennessee's designated Trauma Hospitals.

The Trauma Care Advisory Council implemented in 1990 advises the Licensing Health Care Commission and other interested state Boards about the regulatory standards to ensure the adequacy of statewide trauma care. Rule promulgation is guided by national standards.

In 2007, the General Assembly enacted the Trauma Fund Law, providing valuable but limited financial resources to support and maintain Tennessee's statewide Trauma System. We appreciate the legislatures recent recognition of the need to financially bolster our statewide system and offer this report as evidence of not only that need but of the TCAC's ability to be sagacious in spending to solely benefit our fellow citizens.

The data in this publication give an overview of patients cared for in Tennessee designated Trauma Centers and Comprehensive Regional Pediatric Centers. Our state has seen a remarkable growth in number of and level of trauma centers and state-wide system development. Only with your ongoing support, can the TCAC continue to expand access to and assure quality trauma care for all injured Tennesseans.

Respectfully Submitted,

Brian J. Daley, MD, MBA, FACS
Professor of Surgery, UTHSC- Knoxville
University of Tennessee Medical Center at Knoxville
Chair, Trauma Care Advisory Council
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November 24, 2023

Cordell Hull Building
425 Rep. John Lewis Way North
Nashville, TN 37243

Dear Members of the General Assembly:

The Health Facilities Commission is pleased to distribute the Annual Trauma Report prepared by the Tennessee Trauma Care Advisory Council (TCAC) pursuant to Tennessee Code Annotated § 68-59-103. TCAC is devoted to expanding access and quality trauma care for injured Tennesseans. The Health Facilities Commission is particularly grateful to TCAC Chairman Dr. Brian Daley and HFC Trauma System Director Rob Seesholtz for their report on these efforts.

The Health Facilities Commission administers the Board for Licensing Health Care Facilities, which receives guidance from TCAC on the regulatory standards for adequacy of statewide trauma care. This report accurately details the activities and accomplishments of TCAC and its assistance to Tennessee's designated Trauma Hospitals.

Through the support of the General Assembly, the Health Facilities Commission strives to continually improve the delivery of valuable healthcare services in the state of Tennessee.

Logan Grant

Sincerely,
Logan Grant

Executive Director
Health Facilities Commission

CC: Dr. Brian Daley
Rob Seesholtz

2022 EXECUTIVE SUMMARY

Over calendar year 2022, 39,501 patients received care in a state designated trauma center or a Comprehensive Regional Pediatric Center (CRPC) due to a trauma-related injury. After COVID, traumatic injuries and resource consumption stabilized in Tennessee. The trend of patients managed in centers designed to improve the care of the injured has risen over the last nine years, as has the designation of new centers. Such growth and institutional commitment drive a reduction in potential years of life lost, and increases return to family, work, and community. Despite our state-wide system continues growing, the volume of many injuries remains underreported as patients are treated in non-trauma hospitals.

Tennessee Trauma centers not only provide expert care but promote outreach and prevention. In addition, trauma centers are responsible for maintaining trauma center designation and for promoting excellence to ensure optimal care of the injured. Our trauma centers provided care for Tennesseans from every county in the state, as well as patients from nearly every state in the continental US. With the help of the Tennessee Committee on Trauma and other state agencies, the Trauma Care Advisory Council (TCAC) now under the Health Facilities Commission, has been focusing on prevention of both pediatric and adult causes of trauma, teen suicide and seatbelt use, to helmet use, along with fall prevention in the elderly. The TCAC is diligently working to understand the economics of trauma care and its benefits for the citizens and state of Tennessee.

TCAC was established in 1990, to promote trauma care policy and regulation. Currently, Tennessee has 5 Level I trauma centers, 10 level III centers, 1 provisional Level I center, and 1 provisional Level IV center for 17 total adult centers. There are an associated 4 Comprehensive Regional Pediatric Centers (CRPC), treating those injured under the age of 16. TCAC constantly reviews the designation rules and integrates the verification process of the American College of Surgeons Committee on Trauma to assess the programs at the highest national standard for trauma care. TCAC has also provided support to the Council on Pediatric Emergency Care (CoPEC) to update the rules for pediatric trauma. Two of the CPRCs, three of the adult Level 1 centers have been verified by the American College of Surgeons Verification Committee of the Committee on Trauma in addition to holding state designation, and the other centers are in the process of verification to keep Tennessee at the forefront of best trauma practice.

Low energy falls in our older citizens is the number one cause of trauma admission and mortality. The admissions and death rates continue to climb as our population ages, accounting for greater than 50% of admissions in several trauma centers. Unfortunately, motor vehicle crashes (MVCs) remain lethal and are the second highest cause fatality rate in the state. Gun-related suicide deaths continues to overshadow homicides at a rate of 2 to 1 at both the

state and national level. These are urgent issues we as Tennesseans need desperately to address, and members of TCAC have focused on these issues locally.

This report provides information on not only injury patterns across the state, referral patterns, but financial statistics. Other key aspects of this report include Injury Prevention actions and statewide research efforts – defining the outreach and prevention missions throughout our system. It is the goal of the TCAC to target future outreach and prevention activities through data from the state registry and to continually strive to improve patient outcomes through an array of performance improvement initiatives, research activities, and outcomes-based evidence research. Many centers have devised programs to educate the elderly on fall risk, The 'Stop the Bleed' education is perhaps the flagship program and continues to be actively taught so bystanders to any traumatic event know a simple method to stop active hemorrhage and alert the trauma system. The efforts of the trauma programs have led to the education of countless individuals across the state, such as school nurses, teachers, Scouts, first responders and many members of the legislature and state offices.

This report also reflects the ongoing effort of the Trauma Centers as dedicated to caring for the injured patient. As the number of trauma centers and patients continues to increase in the state, we believe the efforts of TCAC are focused to improve the outcomes of our citizens across the entire state. We are aware that there are areas of the state that remain outside the contiguous counties of the major metropolitan areas that are not within easy reach of a designated trauma center. We continue to advocate for formal universal system designation of all hospitals as Level I, II, III or IV, ensuring not just to capture data, but assuring the highest possible level of trauma care for all Tennesseans, in a state-wide system. To create this system, state dedicated funding remains desperately needed to preserve the infrastructure to grow the smaller, rural hospitals in our state and to improve our trauma system beyond that of our neighboring states, especially in the face of rising costs to centers and decreasing revenue to the Trauma Fund.

Lastly, the income and disbursement of the Trauma Fund monies is reported. The Trauma Fund, designated by the Trauma Center Funding Law of 2007, allocates funds for Trauma Center readiness, for uncompensated care for all eligible hospitals, and to support a state-wide, multidisciplinary Trauma Symposium, focusing on the latest improvements in trauma care. The TCAC, state Committee on Trauma and all the participants of the state trauma system appreciate the legislature's recent efforts, but frankly much more is needed. The TCAC realized the responsibility of spending taxpayers' money and has demonstrated a keen concern to spending judiciously and demonstrating not only the need but providing a mechanism to show fiduciary responsibility.

With your ongoing support and endorsement, we cannot just continue but grow our mission of providing the highest level of care, injury prevention, education, and research to minimize the

death and disability occurring because of injury across the state of Tennessee. As the Chair of the TCAC and TN Committee on Trauma and working alongside Rob Seesholtz and the many other members of the state team, I marvel every day at their selfless dedication to the care of the injured in Tennessee.

Brian J. Daley, MD, MBA, FACS
Chair, Trauma Care Advisory Council
Chair, Tennessee Committee on Trauma

TRAUMA CENTER FUNDING

With the passage of the Tennessee Trauma Center Funding Law of 2007, the Trauma Care Advisory Council was charged with developing recommendations on how to distribute Trauma System Fund reserves. In keeping with the intent of the statute, three broad categories for disbursement were identified:

1. Money to support the **trauma system infrastructure** at the state level:
   - The State Trauma System Director is responsible for providing general oversight for Tennessee's system of trauma care. Responsibilities include oversight of Tennessee's trauma fund, trauma registry, administrative support to the Trauma Care Advisory Council, and the coordination of site visits for new and existing trauma centers. Trauma system infrastructure has been bolstered as monies were approved for the expenditure on trauma education, trauma registry improvements and for a state-wide trauma symposium.

2. **Readiness costs** to designated trauma centers and comprehensive regional pediatric centers:
   - Tennessee trauma centers and CRPC's are ready at a moment's notice to treat those suffering from traumatic injury and are required to maintain life critical services 24 hours a day, 7 days a week, 365 days a year. While readiness costs disbursed from the trauma fund cannot realistically compensate centers for all their costs, readiness funds help to ensure that these necessary life critical services are maintained. Readiness cost amounts for state designated trauma centers and CRPC's, are found in **appendix III**.

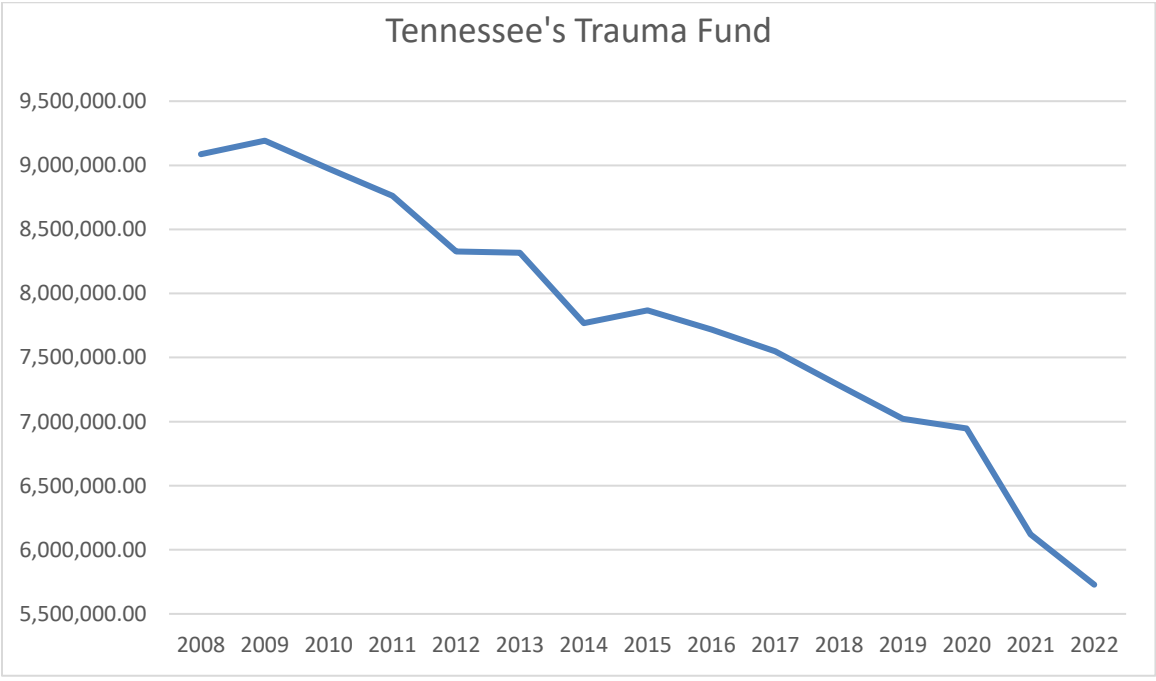
3. Money for **uncompensated care**:
   - The trauma funding law provides for uncompensated care funding to be distributed to: 1) designated trauma centers 2) comprehensive regional pediatric centers and 3) other acute care hospitals functioning as a part of the trauma system.
   - Distribution to eligible hospitals is based on: 1) the level of funding within the reserve account following infrastructure and readiness costs and 2) the documented level of each hospital's uncompensated trauma cost. Though this amount will vary from year to year, at the end of 2022, trauma fund disbursements totaled $5,727,920.14 to eligible facilities. **Appendix III** shows quarterly payments made to eligible hospitals for calendar year 2022.

Trauma Fund disbursement totals have seen a steady decline since the fund's inception. Since then, the trauma fund has decreased over 3.3 million dollars. In 2022, trauma centers and CRPC's saw $4.7 billion in billed hospital charges making finding alternative sources of funding a priority to ensure the viability of Tennessee's Trauma System.

Trauma Fund Disbursement Totals Since Inception

	Calendar Year	Trauma Fund Disbursement Totals
*Start of Trauma Fund	**2008**	$9,086,822.57
	2009	$9,192,013.69
	2010	$8,973,548.13
	2011	$8,762,345.31
	2012	$8,328,132.57
	2013	$8,316,610.13
	2014	$7,768,758.15
	2015	$7,867,741.77
	2016	$7,717,970.86
	2017	$7,548,708.50
	2018	$7,283,384.96
	2019	$7,022,767.11
	2020	$6,946,577.34
	2021	$6,120,234.30
	2022	$5,727,920.14

$3,358,902.43 below initial disbursement when trauma fund started



The Trauma Care Advisory Council (TCAC) is currently in the process of reevaluating how trauma funds are distributed to hospitals that function as part of Tennessee's system of trauma

care. In fiscal year 2022-2023, the General Assembly allocated $5 million dollars in reoccurring monies to Tennessee's trauma fund in addition to the regular cigarette tax apportionment allocated to the fund. These newly appropriated funds help to bolster funding that have seen a reduction in funding year after year since its inception. This will help to provide greatly needed funding to trauma centers and comprehensive regional pediatric centers that are responsible for treating the most critically injured Tennesseans and visitors to our state. The current $5M allocation has been processed and distributed to the appropriate entities following the existing distribution methodology. Future disbursements will be based on approval from the TCAC. HFC is working with F&A to ensure that future TSF appropriations do not revert to the general fund.

TRAUMA REGISTRY

The Tennessee Trauma Registry is the data repository for patients presenting for care at Tennessee's 17 participating trauma centers and 4 CRPC's. The registry allows for an in-depth review of injury related codes, comorbidities and complications to better determine the consequences of trauma in Tennessee. This report is based on registry abstractions completed through 2022. Contained registry reports represent injuries sustained and related hospital admissions in 2022 with additional volume trend reporting that includes the 11 years prior.

RESEARCH

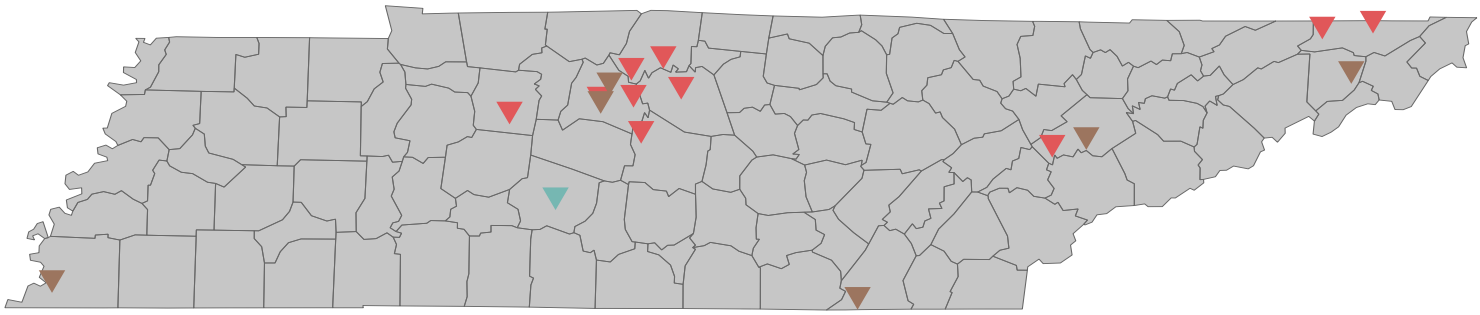
Level 1 trauma centers are charged with performing research. These endeavors allow ongoing improvements in trauma care on a continuous basis. **Appendix IV** represents a sample of these state-wide research publication efforts.

OUTREACH & INJURY PREVENTION EFFORTS

Tennessee's trauma centers and CRPC's provide many different outreach and injury prevention opportunities for both the public and for those who are responsible for the specialized care of injured Tennesseans and visitors in our state. These outreach and injury prevention efforts are in part targeted to injury trends seen by trauma centers and CRPC's with the goal of reducing the incidence of traumatic injury through targeted outreach and education. Examples of outreach efforts include:

- Child passenger safety
- Fall Prevention
- Gun Safety & Suicide Prevention
- Stop the Bleed
- Traumatic Brain Injury Prevention
- Trauma Nurse Core Course
- Summer Safety
- Burn Care & Fire Safety
- Trauma Survivor Day
- Advanced Trauma Operative Management
- Advanced Surgical Skills for Exposure in Trauma
- Advance Trauma Care Nurse
- Safe Sleep
- Distracted Driving

Appendix I:
Current Adult Trauma Center Location & Level of Designation



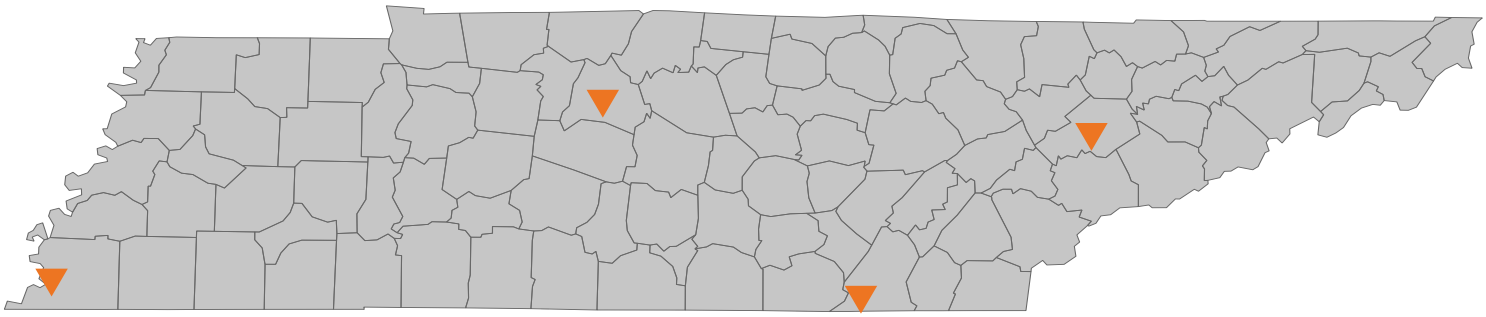
I	Erlanger Medical Center*	975 E 3rd St Chattanooga TN 37403
I	Johnson City Medical Center	400 N State of Franklin Rd Johnson City TN 37604
I	Regional One Health	877 Jefferson Ave Memphis TN 38103
I	University of Tennessee Medical Center*	1924 Alcoa Hwy Knoxville TN 37920
I	Vanderbilt University Medical Center*	1211 Medical Center Dr Nashville TN 37232
I	TriStar Skyline Medical Center	3441 Dickerson Pike Nashville TN 37207
III	Bristol Regional Medical Center	1 Medical Park Blvd Bristol TN 37620
III	Holston Valley Medical Center	130 W Ravine Rd Kingsport TN 37660
III	Sumner Regional Medical Center	555 Hartsville Pike Gallatin TN 37066
III	TriStar Stonecrest Medical Center	200 StoneCrest Boulevard Smyrna TN 37167
III	TriStar Horizon Medical Center	111 U.S.70 Dickson TN 37055
III	TriStar Summit Medical Center	5655 Frist Blvd Hermitage TN 37076
III	TriStar Hendersonville Medical Center	355 New Shackle Island Rd Hendersonville TN 37075
III	Tennova Healthcare - Turkey Creek Medical Center	10820 Parkside Dr Knoxville TN 37934
III	Vanderbilt Wilson County Hospital	1411 W Baddour Pkwy Lebanon TN 37087
III	Metropolitan Nashville General Hospital	1818 Albion St Nashville TN 37208
IV	Maury Regional Medical Center	1224 Trotwood Ave Columbia TN 38401

Provisionally Designated

*The following facilities have also been verified as a Level I Trauma Center through the American College of Surgeons:

- Erlanger Medical Center
- University of Tennessee Medical Center
- Vanderbilt University Medical Center

Appendix I:
Comprehensive Regional Pediatric Center Location



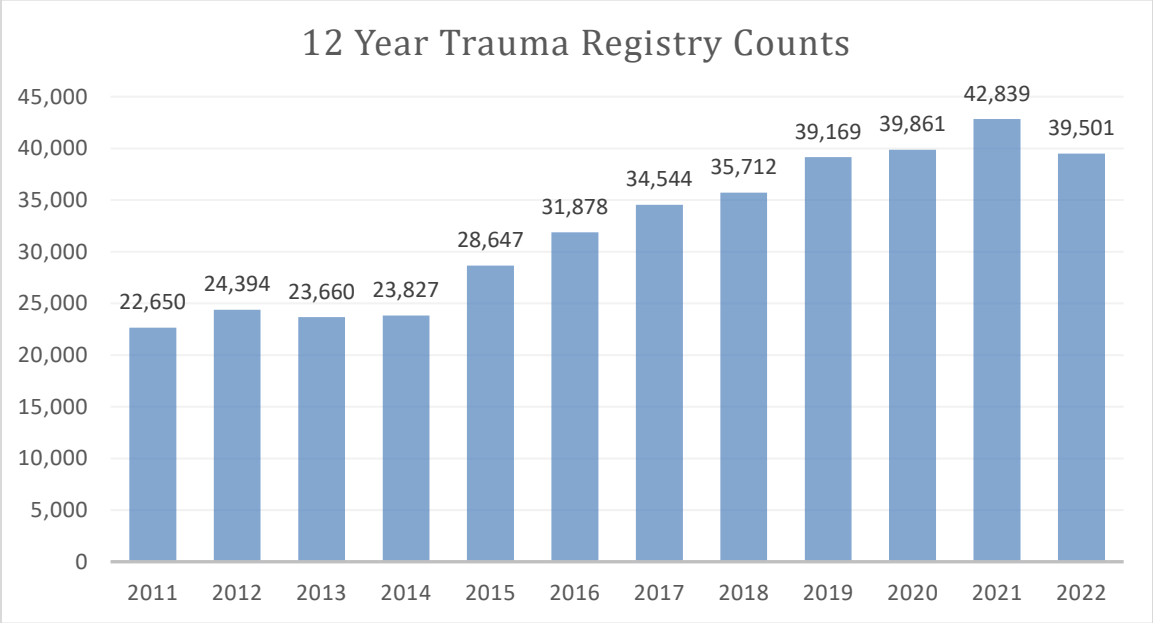
Monroe Carell Jr. Children's Hospital*	2200 Children's Way Nashville TN 37232
East Tennessee Children's Hospital	2018 W Clinch Ave Knoxville TN 37916
LeBonheur Children's Hospital*	848 Adams Ave Memphis TN 38103
Children's Hospital at Erlanger Medical Center	910 Blackford St Chattanooga TN 37403

*The following facilities have also been verified as a Level I Pediatric Trauma Center through the American College of Surgeons:

- Le Bonheur Children's Hospital
- Monroe Carell Jr. Children's Hospital at Vanderbilt

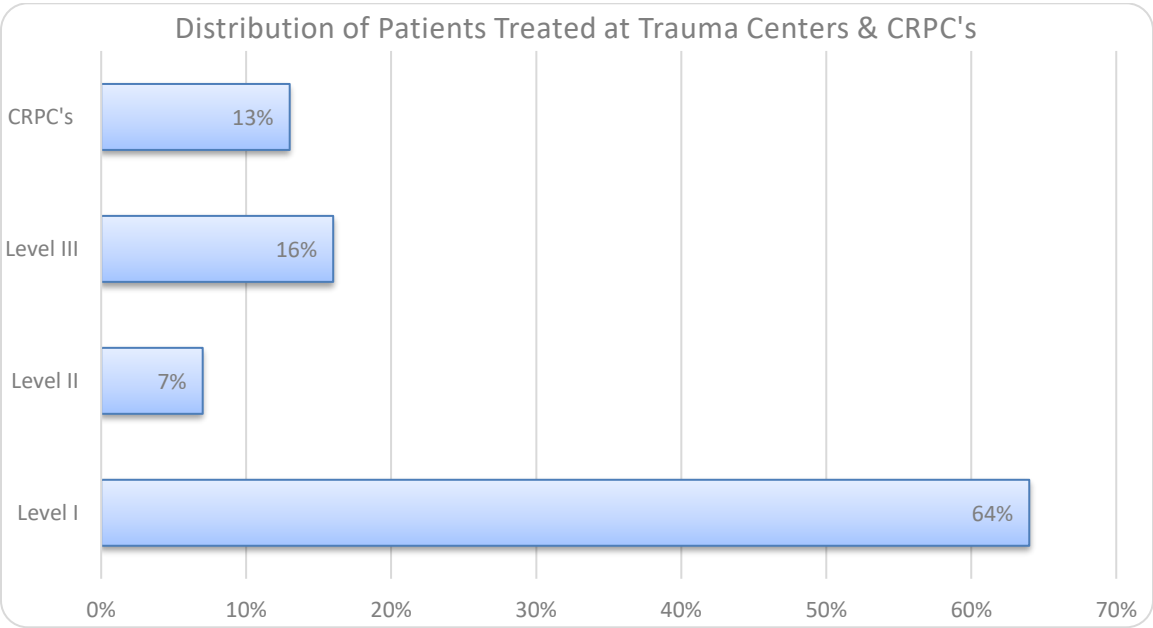
Appendix II:
2022 Trauma Registry Reports

Figure 1a:



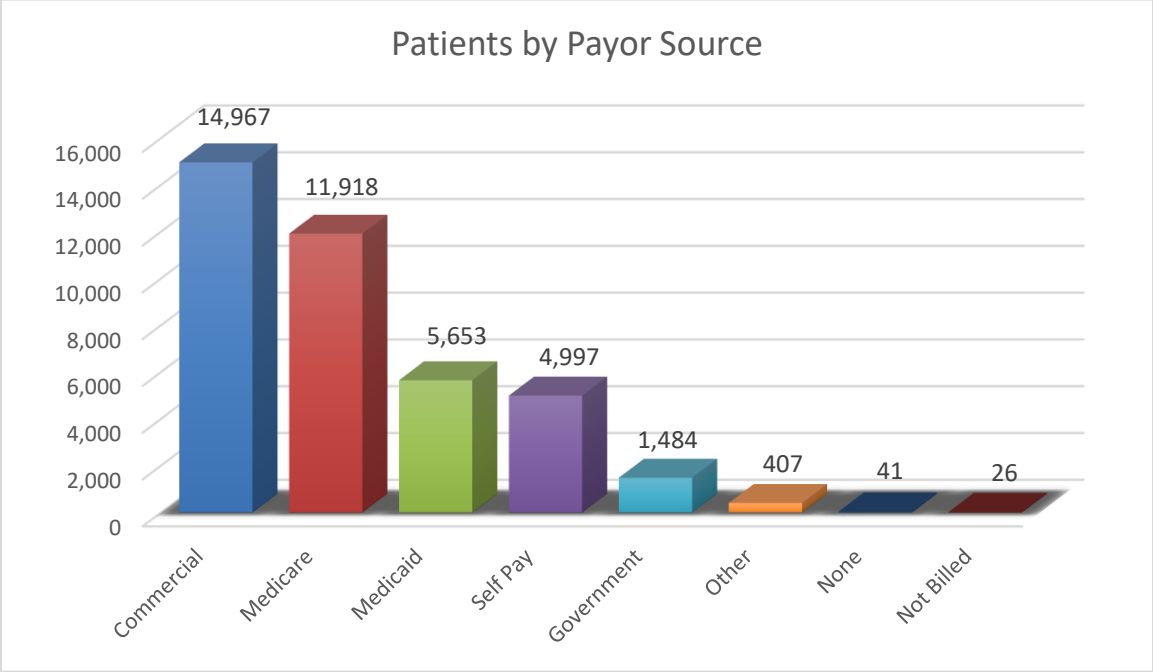
In 2022, 39,501 patients were entered in the state trauma registry because of meeting inclusion criteria related to traumatic injury. The growth pattern of traumatic injury patient totals recorded in the registry since 2011 is shown above.

Figure 1b:



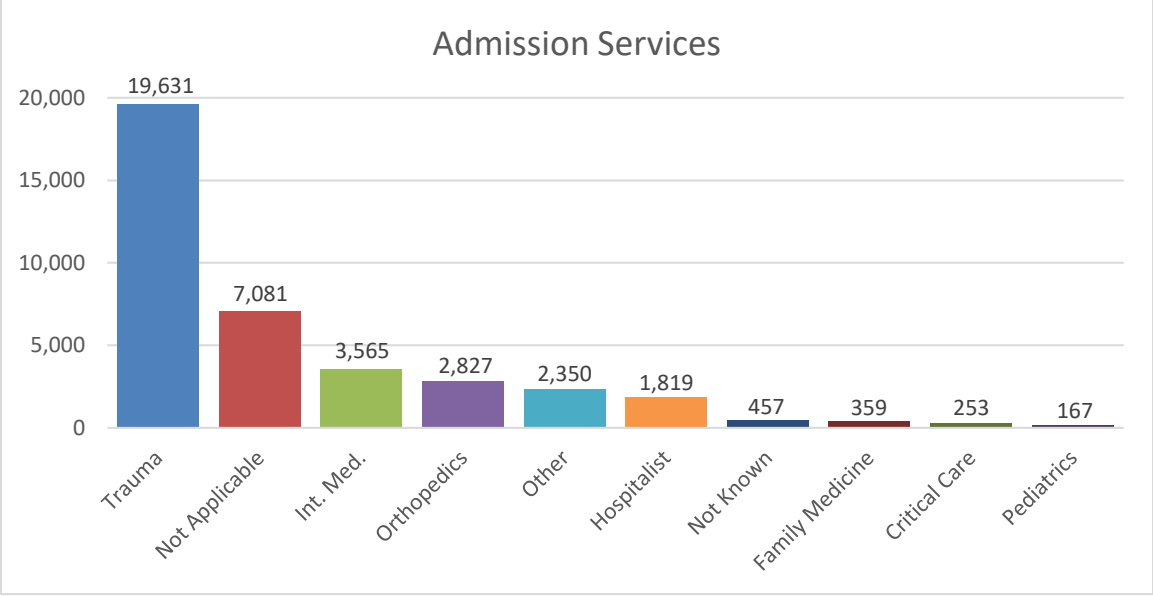
The chart above reflects the distribution of patients who received care at trauma centers and CRPC's for calendar year 2022.

Figure 2a:



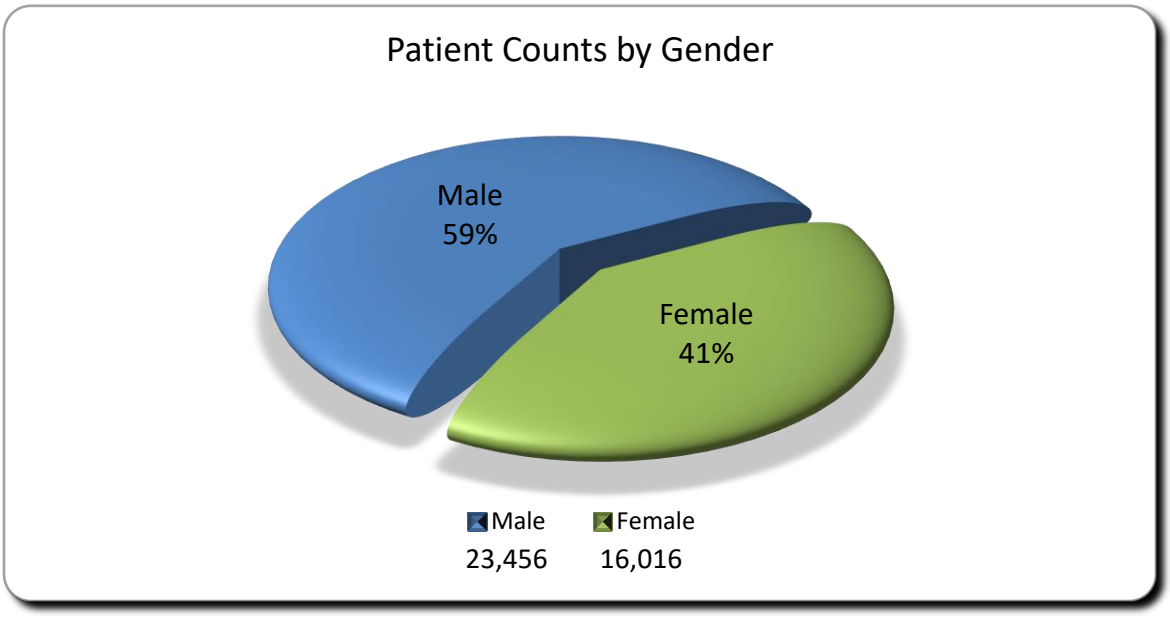
Commercial Insurance continues as the number one payor source for those receiving care at a trauma center or CRPC in 2022.

Figure 2b:



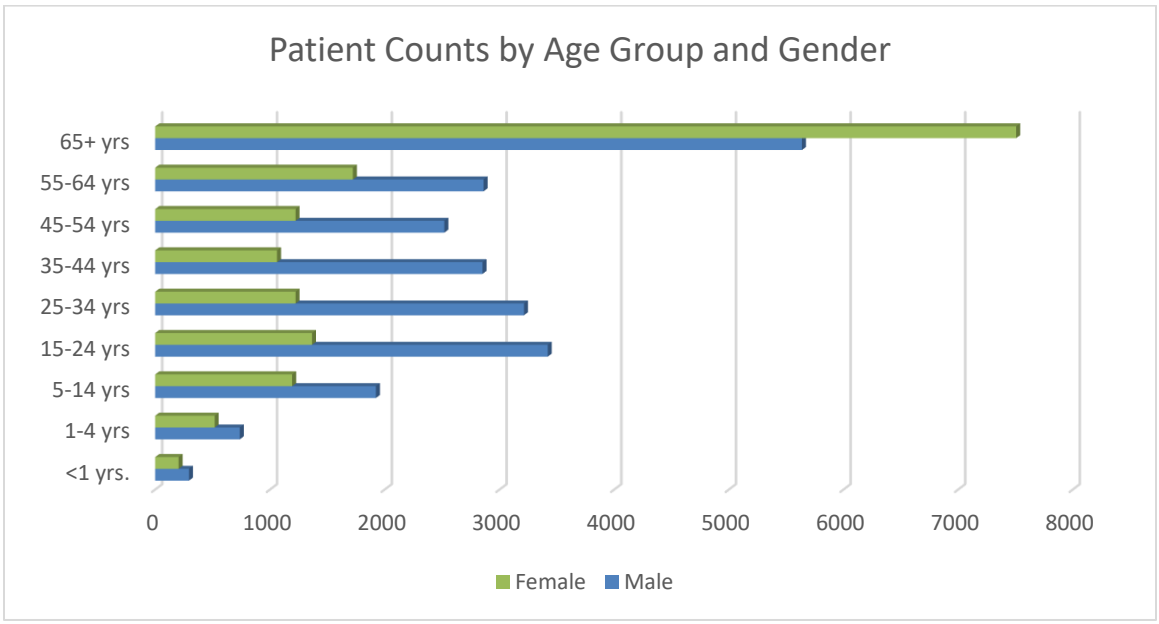
The graph above reflects the top 10 admission services utilized when being admitted for a traumatic injury.

Figure 3a:



59% of all patients treated at a Tennessee trauma center or CRPC were male. This 2022 data reflects a one-point percentage change in the injury gender distribution from 2021.

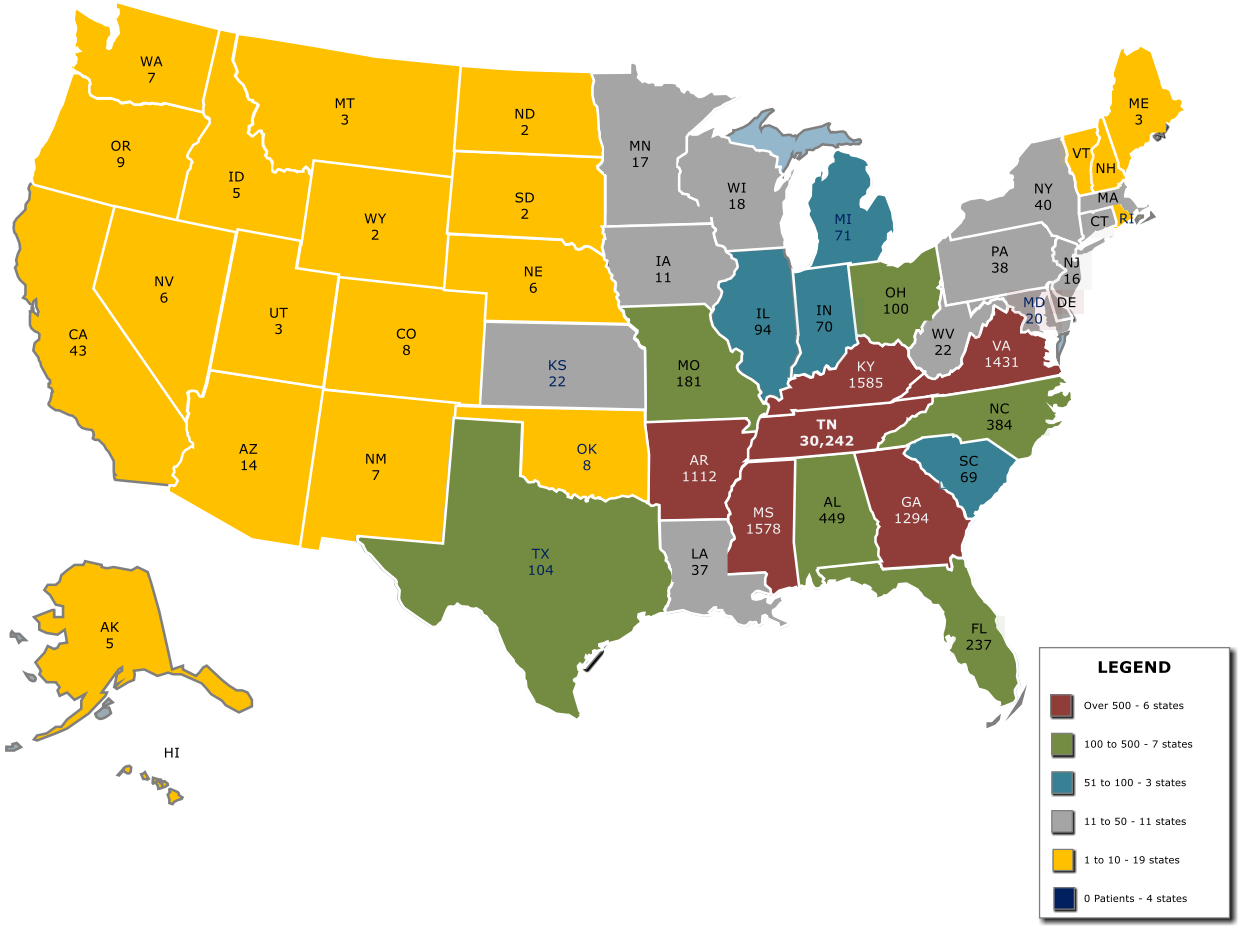
Figure 3b



The information above is reflective of traumatic injury patient counts by age and gender for 2022.

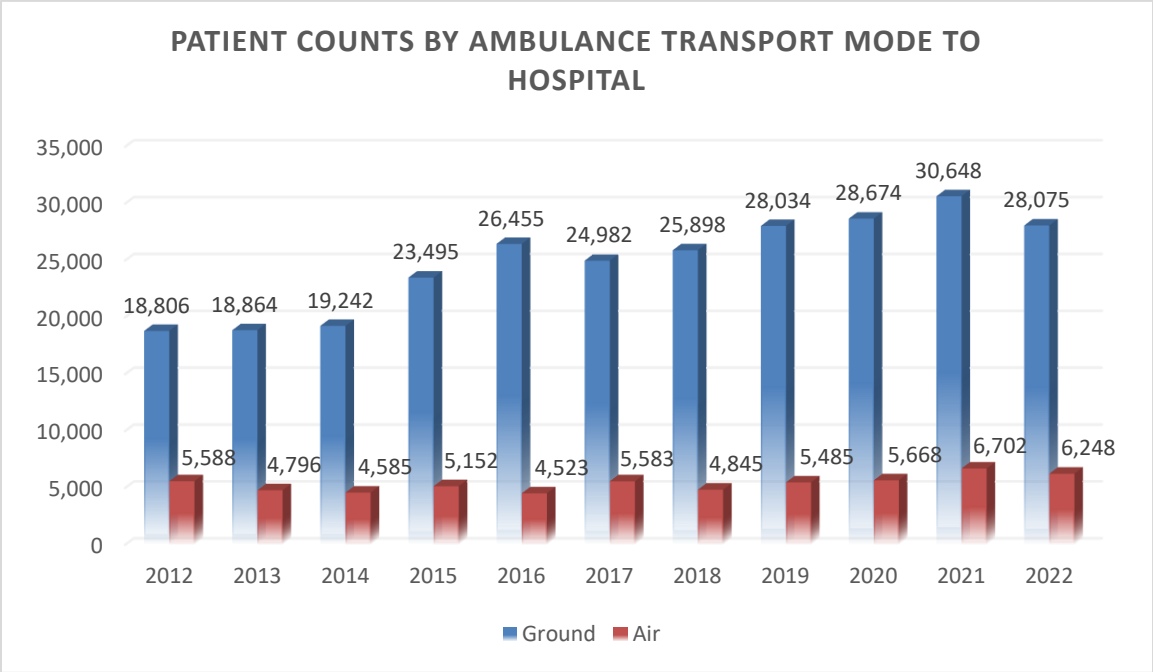
Figure 4:

Trauma Patients Treated in Tennessee Trauma Centers and CRPC's by State of Residence in 2022



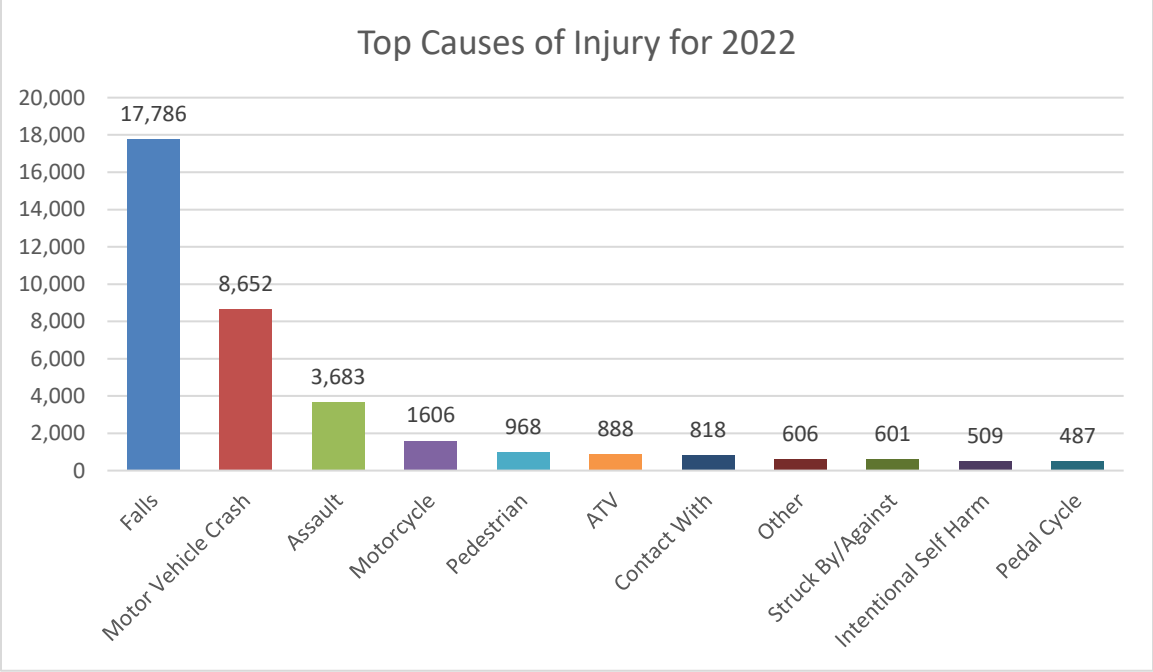
77% of all trauma cases treated in Tennessee trauma centers or CRPC's were Tennesseans (30,242); 23% of all cases (9,167) were residents of other states.

Figure 5a:



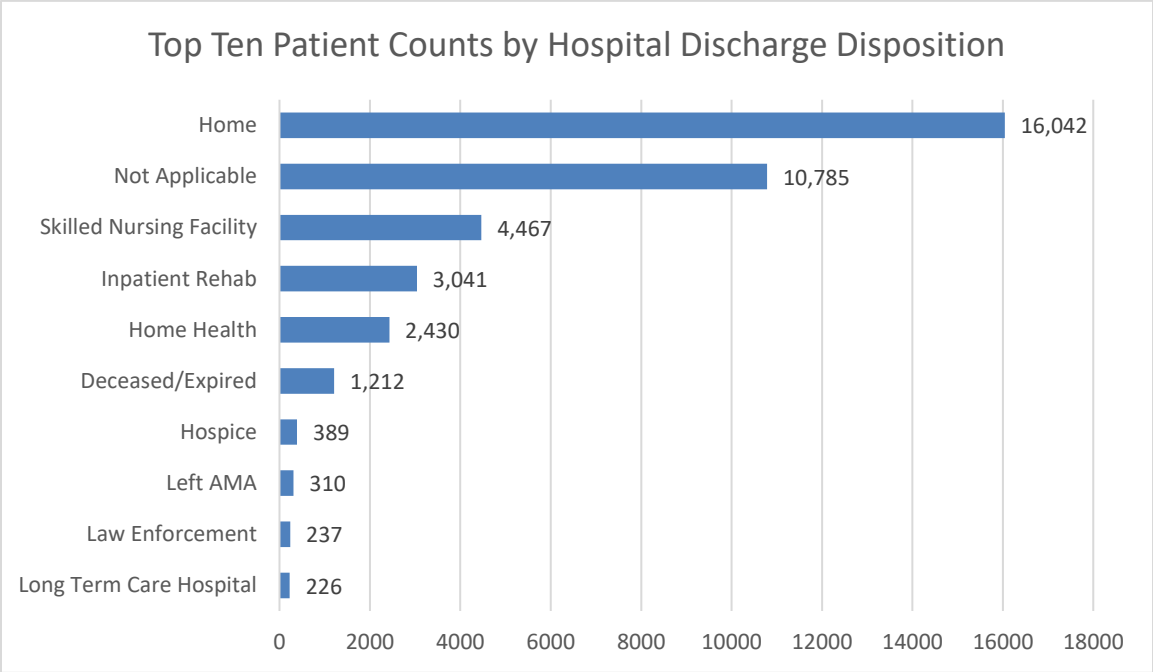
Patient transports by ground and air travel to a trauma center or CRPC have shown a decrease for calendar year 2022.

Figure 5b:



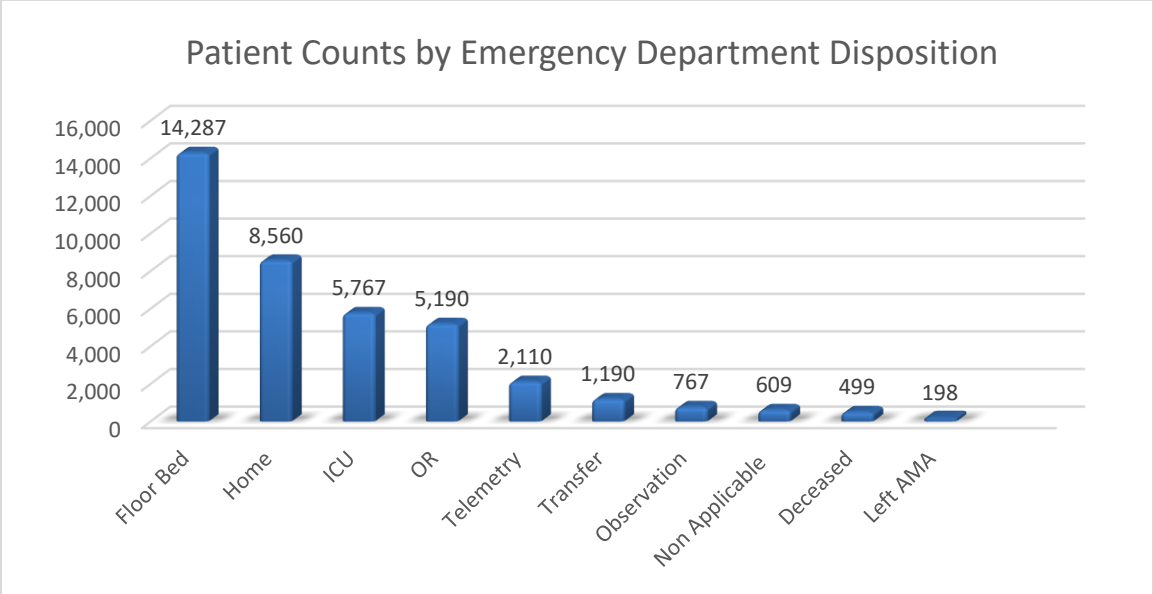
The graph above reflects the top 11 causes of injury for seeking care at a trauma center or CRPC in 2022.

Figure 6a:



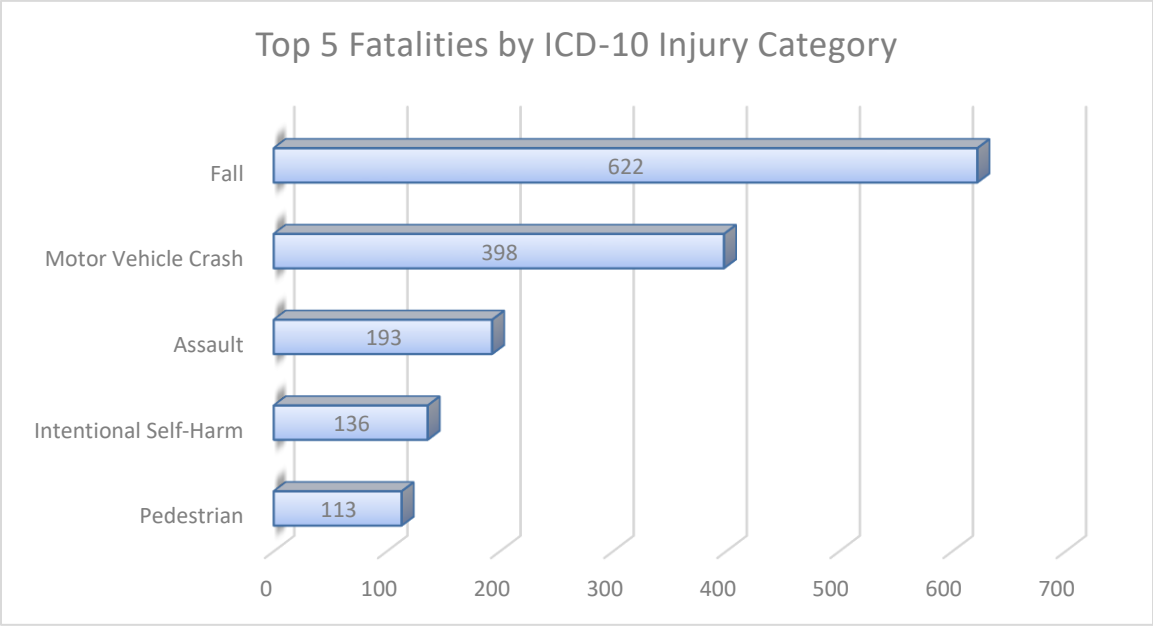
56% of patients admitted to a trauma facility in 2022 were discharged back to their home after hospital admission. 16% were admitted into a skilled nursing facility upon hospital discharge and approximately 4% of patients had an outcome of death.

Figure 6b:



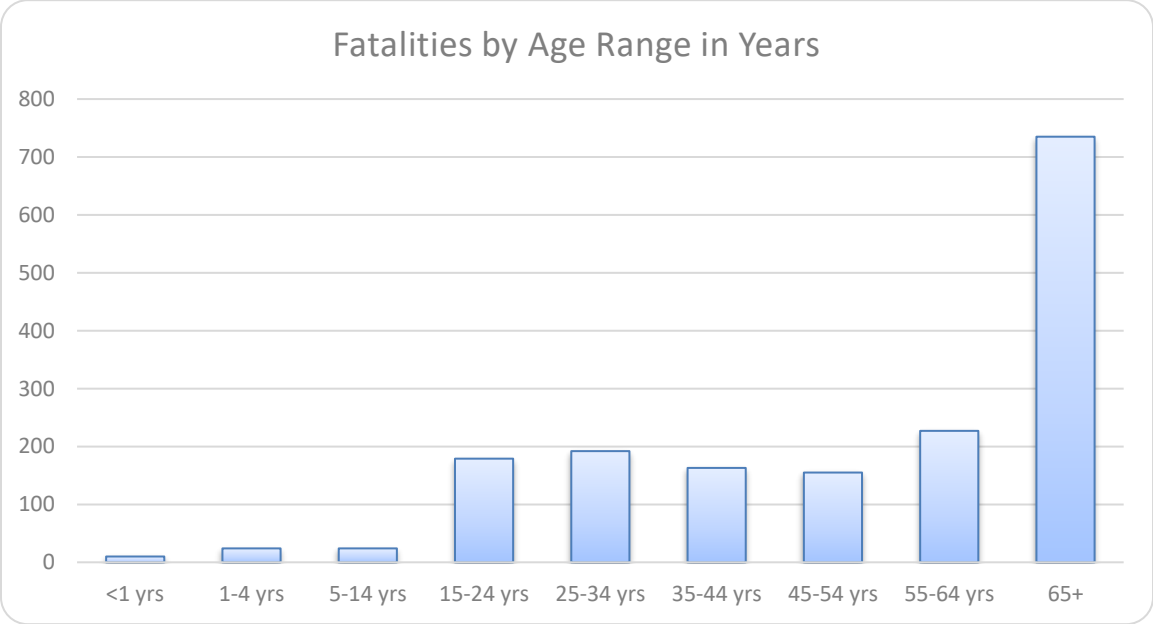
Most patient were admitted to a floor bed based on their Emergency Department discharge disposition in 2022.

Figure 7a:



Fatalities from falls, motor vehicle crashes, assaults, intentional self-harm, and pedestrian are the top 5 mechanisms for injury that lead to death in 2022 trauma registry submissions.

Figure 7b:



The chart above is reflective of 2022 trauma registry fatalities separated into their respective age groups.

Appendix III:
2022 Trauma Fund Distribution

FUNDS DISTRIBUTED TO TRAUMA CENTERS AND NON-TRAUMA CENTERS FROM TENNESSEE TRAUMA FUND - 2022 - 1st QUARTER DISTRIBUTION

Level	Hospital Name	Hospital Specific Pool Payment	Readiness Costs	Total Hospital Distribution Payment
	TOTAL	**$805,366.30**	**$ 862,250.00**	**$1,667,616.30**
Lev 1	Regional One Health	$313,476.03	$97,250.00	$ 410,726.03
Lev 1	Vanderbilt University Medical Center	$185,257.43	$153,250.00	$ 338,507.43
Lev 1	Erlanger Medical Center-Baroness Hospital	$70,742.14	$153,250.00	$ 223,992.14
Lev 1	The University of Tennessee Medical Center	$60,713.70	$102,250.00	$ 162,963.70
Lev 2	TriStar Skyline Medical Center	$62,892.26	$37,750.00	$ 100,642.26
Lev 1	Johnson City Medical Center	$21,124.81	$72,500.00	$93,624.81
CRPC	LeBonheur Children Medical Center	$10,289.82	$64,250.00	$74,539.82
CRPC	East Tennessee Childrens Hospital	$167.60	$51,000.00	$51,167.60
Lev 2	Bristol Regional Medical Center	$10,369.31	$37,750.00	$48,119.31
Lev 3	Holston Valley Medical Center	$10,803.88	$15,500.00	$26,303.88
Lev 3	TriStar Summit Medical Center	$4,400.40	$15,500.00	$19,900.40
Lev 3	TriStar Horizon Medical Center	$3,844.03	$15,500.00	$19,344.03
Lev 3	Sumner Regional Medical Center	$1,457.92	$15,500.00	$16,957.92
Lev 3	TriStar Stonecrest Medical Center	$1,412.63	$15,500.00	$16,912.63
Lev 3	TriStar Hendersonville Medical Center	$893.38	$15,500.00	$16,393.38
	Methodist University Hospital	$16,393.38		$16,393.38
	Baptist Memorial Hospital-Memphis	$7,449.36		$7,449.36
	Erlanger North Hospital	$5,208.85		$5,208.85
	TriStar Southern Hills Medical Center	$3,203.60		$3,203.60
	Jackson-Madison County General Hospital	$3,183.41		$3,183.41
	Ascension Saint Thomas West Hospital	$2,203.73		$2,203.73
	Parkridge Medical Center	$2,118.00		$2,118.00
	Maury Regional Medical Center	$1,397.13		$1,397.13
	Methodist Medical Center of Oak Ridge	$1,197.52		$1,197.52
	Tennova North Knoxville Medical Center	$1,080.94		$1,080.94
	West Tennessee Healthcare Dyersburg Hospital	$856.64		$856.64
	Greeneville Community Hospital East	$842.43		$842.43
	Vanderbilt Wilson County Hospital	$726.39		$726.39
	Cookeville Regional Medical Center	$509.68		$509.68
	Cumberland Medical Center	$408.84		$408.84
	Saint Francis Hospital-Bartlett	$328.93		$328.93
	Williamson Medical Center	$237.42		$237.42
	CHI Memorial Hospital Chattanooga	$174.71		$174.71

FUNDS DISTRIBUTED TO TRAUMA CENTERS AND NON-TRAUMA CENTERS FROM TENNESSEE TRAUMA FUND - 2022 - 2nd QUARTER DISTRIBUTION

Level	Hospital Name	Hospital Specific Pool Payment	Readiness Costs	Total Hospital Distribution Payment
	TOTAL	**$143,747.85**	**$840,000.00**	**$983,747.85**
Lev 1	Vanderbilt University Medical Center	$40,224.94	$153,250.00	$193,474.94
Lev 1	Erlanger Medical Center-Baroness Hospital	$17,078.61	$153,250.00	$170,328.61
Lev 1	Regional One Health	$48,549.21	$97,250.00	$145,799.21
Lev 1	The University of Tennessee Medical Center	$11,142.13	$102,250.00	$113,392.13
Lev 1	Johnson City Medical Center	$3,567.38	$72,500.00	$76,067.38
CRPC	LeBonheur Children Medical Center	$693.12	$64,250.00	$64,943.12
CRPC	East Tennessee Childrens Hospital	$16.47	$51,000.00	$51,016.47
Lev 2	TriStar Skyline Medical Center	$9,286.46	$37,750.00	$47,036.46
Lev 3	Holston Valley Medical Center	$1,688.48	$15,500.00	$17,188.48
Lev 3	TriStar Summit Medical Center	$768.52	$15,500.00	$16,268.52
Lev 3	Bristol Regional Medical Center	$664.70	$15,500.00	$16,164.70
Lev 3	TriStar Horizon Medical Center	$641.18	$15,500.00	$16,141.18
Lev 3	TriStar Stonecrest Medical Center	$400.46	$15,500.00	$15,900.46
Lev 3	TriStar Hendersonville Medical Center	$119.57	$15,500.00	$15,619.57
Lev 3	Sumner Regional Medical Center	$56.67	$15,500.00	$15,556.67
	Methodist University Hospital	$3,580.59		$3,580.59
	Erlanger North Hospital	$1,795.83		$1,795.83
	Baptist Memorial Hospital-Memphis	$1,036.73		$1,036.73
	Jackson-Madison County General Hospital	$561.94		$561.94
	Methodist Medical Center of Oak Ridge	$349.74		$349.74
	CHI Memorial Hospital Chattanooga	$300.35		$300.35
	Williamson Medical Center	$270.48		$270.48
	Maury Regional Medical Center	$202.25		$202.25
	Parkridge Medical Center	$165.48		$165.48
	Saint Francis Hospital-Bartlett	$150.39		$150.39
	Parkwest Medical Center	$112.64		$112.64
	Ascension Saint Thomas West Hospital	$105.05		$105.05
	Blount Memorial Hospital	$100.79		$100.79
	Cookeville Regional Medical Center	$95.17		$95.17
	Tennova North Knoxville Medical Center	$22.50		$22.50

FUNDS DISTRIBUTED TO TRAUMA CENTERS AND NON-TRAUMA CENTERS FROM TENNESSEE TRAUMA FUND - 2022 – 3rd QUARTER DISTRIBUTION

Level	Hospital Name	Hospital Specific Pool Payment	Readiness Costs	Total Hospital Distribution Payment
	TOTAL	**$ 677,387.91**	**$840,000.00**	**$1,517,387.91**
Lev 1	Vanderbilt University Medical Center	$218,731.14	$153,250.00	$371,981.14
Lev 1	Regional One Health	$234,261.36	$97,250.00	$331,511.36

Lev 1	Erlanger Medical Center-Baroness Hospital	$64,500.32	$153,250.00	$217,750.32
Lev 1	The University of Tennessee Medical Center	$44,862.09	$102,250.00	$147,112.09
Lev 1	Johnson City Medical Center	$8,932.87	$72,500.00	$81,432.87
Lev 2	TriStar Skyline Medical Center	$42,666.77	$37,750.00	$80,416.77
CRPC	LeBonheur Children Medical Center	$5,709.28	$64,250.00	$69,959.28
CRPC	East Tennessee Childrens Hospital	$0.00	$51,000.00	$51,000.00
Lev 3	Holston Valley Medical Center	$3,862.74	$15,500.00	$19,362.74
Lev 3	TriStar Summit Medical Center	$2,954.16	$15,500.00	$18,454.16
Lev 3	Bristol Regional Medical Center	$2,759.58	$15,500.00	$18,259.58
Lev 3	TriStar Horizon Medical Center	$1,985.03	$15,500.00	$17,485.03
Lev 3	TriStar Stonecrest Medical Center	$1,222.03	$15,500.00	$16,722.03
Lev 3	Sumner Regional Medical Center	$1,156.99	$15,500.00	$16,656.99
Lev 3	TriStar Hendersonville Medical Center	$538.25	$15,500.00	$16,038.25
	Methodist University Hospital	$11,006.93		$11,006.93
	Baptist Memorial Hospital-Memphis	$10,213.48		$10,213.48
	Ascension Saint Thomas West Hospital	$2,676.02		$2,676.02
	Parkridge Medical Center	$2,251.90		$2,251.90
	St. Thomas Rutherford Hospital	$2,188.93		$2,188.93
	Erlanger North Hospital	$1,748.48		$1,748.48
	Maury Regional Medical Center	$1,565.62		$1,565.62
	CHI Memorial Hospital Chattanooga	$1,550.54		$1,550.54
	Methodist North Hospital	$1,426.54		$1,426.54
	Jackson-Madison County General Hospital	$1,371.17		$1,371.17
	Cookeville Regional Medical Center	$1,325.05		$1,325.05
	Parkwest Medical Center	$1,306.98		$1,306.98
	Methodist Medical Center of Oak Ridge	$1,115.94		$1,115.94
	Williamson Medical Center	$789.30		$789.30
	Tennova North Knoxville Medical Center	$759.82		$759.82
	LeConte Medical Center	$701.41		$701.41
	Blount Memorial Hospital	$685.48		$685.48
	Morristown-Hamblen Healthcare System	$332.67		$332.67
	Saint Francis Hospital-Bartlett	$159.45		$159.45
	Starr Regional Medical Center-Athens	$69.59		$69.59

FUNDS DISTRIBUTED TO TRAUMA CENTERS AND NON-TRAUMA CENTERS FROM TENNESSEE TRAUMA FUND - 2022 – 4th QUARTER DISTRIBUTION

Level	Hospital Name	Hospital Specific Pool Payment	Readiness Costs	Total Hospital Distribution Payment
	TOTAL	**$719,168.08**	**$840,000.00**	**$1,559,168.08**
Lev 1	Vanderbilt University Medical Center	$208,886.94	$153,250.00	$362,136.94
Lev 1	Regional One Health	$247,542.64	$97,250.00	$344,792.64
Lev 1	Erlanger Medical Center - Baroness	$58,558.25	$153,250.00	$211,808.25
Lev 1	The University of Tennessee Medical Center	$66,873.24	$102,250.00	$169,123.24
Lev 1	Johnson City Medical Center	$21,605.91	$72,500.00	$94,105.91

Lev 2	TriStar Skyline Medical Center	$44,068.94	$37,750.00	$81,818.94
CRPC	LeBonheur Children Medical Center	$4,366.22	$64,250.00	$68,616.22
CRPC	East Tennessee Childrens Hospital	$0.00	$51,000.00	$51,000.00
Lev 3	Holston Valley Medical Center	$4,966.89	$15,500.00	$20,466.89
Lev 3	Bristol Regional Medical Center	$4,332.43	$15,500.00	$19,832.43
Lev 3	TriStar Summit Medical Center	$2,758.06	$15,500.00	$18,258.06
Lev 3	TriStar Horizon Medical Center	$1,371.32	$15,500.00	$16,871.32
Lev 3	TriStar Stonecrest Medical Center	$902.81	$15,500.00	$16,402.81
Lev 3	Sumner Regional Medical Center	$831.61	$15,500.00	$16,331.61
Lev 3	TriStar Hendersonville Medical Center	$231.82	$15,500.00	$15,731.82
	Methodist University Hospital	$15,731.82		$15,731.82
	Baptist Memorial Hospital-Memphis	$11,784.73		$11,784.73
	St. Thomas Rutherford Hospital	$3,157.43		$3,157.43
	Erlanger North Hospital	$2,354.68		$2,354.68
	Saint Thomas West Hospital	$2,062.55		$2,062.55
	Tennova Healthcare Regional Jackson	$1,752.93		$1,752.93
	Saint Francis Hospital	$1,521.69		$1,521.69
	Vanderbilt Wilson County Hospital	$1,196.28		$1,196.28
	Maury Regional Medical Center	$1,010.83		$1,010.83
	Parkridge Medical Center	$945.62		$945.62
	Tennova Healtcare - Clarksville	$945.29		$945.29
	Parkwest Medical Center	$943.00		$943.00
	CHI Memorial Hospital Chattanooga	$860.78		$860.78
	Williamson Medical Center	$776.29		$776.29
	Tennova Healthcare-Jefferson Mem Hosp	$765.43		$765.43
	TriStar Southern Hills Medical Center	$713.57		$713.57
	Henry County Medical Center	$633.61		$633.61
	LeConte Medical Center	$630.11		$630.11
	Greeneville Community Hospital East	$603.56		$603.56
	Blount Memorial Hospital	$565.21		$565.21
	Methodist North Hospital	$553.06		$553.06
	Tennova Healthcare Turkey Creek M C	$455.64		$455.64
	Tennova Healthcare North Knoxville M C	$395.98		$395.98
	Baptist Memorial Hospital-Collierville	$300.37		$300.37
	Saint Francis Hospital-Bartlett	$298.59		$298.59
	Cookeville Regional Medical Center	$251.61		$251.61
	Cumberland Medical Center	$178.96		$178.96
	Morristown-Hamblen Healthcare System	$108.25		$108.25
	Starr Regional Medical Center-Athens	$106.44		$106.44
	Tennova Healthcare-Newport Medical Center	$93.30		$93.30
	Methodist Medical Center of Oak Ridge	$83.63		$83.63
	CHI Memorial Hospital Hixon	$54.90		$54.90
	Tennova Healthcare Dyersburg Regional	$34.89		$34.89

Appendix IV:
Research Publications

1. The Efficacy and Safety of Methylnaltrexone for the Treatment of Postoperative Ileus. Beavers J, Orton L, Atchison L, Medvecz A, Dennis B, Guillamondegui O, Smith MC. Am Surg. 2022 Mar;88(3):409-413. doi: 10.1177/00031348211048825. Epub 2021 Oct 13. PMID: 34645328
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