

System Report

July 2020 – September 2020

Mississippi Trauma Care System

Designated Trauma Care Providers Working Together to Prevent and Treat Trauma

Prepared for:

Mississippi State Board of Health

December 7, 2020

Introduction

According to the Centers for Disease Control and Prevention, unintentional traumatic injury is the leading cause of death in the United States for persons between the ages of 1 and 44 (WISQARS, 2018). Mississippi is no exception to this statistic. Moreover, in 2018 there were 33,654 motor vehicle crash fatalities in the United States. 597 of these fatalities occurred as a result of injuries sustained on Mississippi roads (FARS, 2020). Motor vehicle crashes are the leading cause of death among the teenage population in the United States (CDC, Teen Driver, 2019). Mississippi ranks 5th in the nation in terms of the number of teens killed in motor vehicle crashes ("Mississippi Fatalities and Injuries for Youth and Adult Highway Crashes," 2017). These statistics are widely circulated and well known, but they reflect the extent to which trauma is a public health concern, not only in the United States, generally, but in Mississippi, specifically.

To improve outcomes for trauma patients, the Mississippi Trauma Care System established the following primary goal: to deliver the *right* patient to the *right* hospital the *first* time. Research shows this approach to trauma care saves lives.

Mississippi's Trauma System dates to 1991, when the Mississippi Legislature charged the Mississippi State Department of Health (MSDH) with responsibility for oversight of trauma system development. The Legislature passed House Bill 966 in 1998, officially establishing Mississippi's Trauma System. The Trauma System of Care Plan and Trauma System Rules and Regulations provide the operational authority and framework for the Trauma System.

MSDH is the lead agency in Trauma System development and execuction and partners with system stakeholders thoughout the state. Historically, MSDH opted to contract with trauma regions for administering regional trauma system activities; however, following the advice of the Mississippi Trauma Advisory Committee (MTAC), MSDH reviewed the efficacy of the regional system and found opportunities for reducing administrative and educational costs and improving on the scope and quality of trauma-related educational offerings. In an effort to save on costs and improve on quality MSDH contracted with the Mississippi Trauma Care System Foundation, Inc., a foundation of the Mississippi Hospital Association, for services formerly provided by trauma care regions, beginning on April 16, 2020.

As suggested by the Mississippi Trauma Care Task Force, this report on the Mississippi Trauma Care System will be submitted quarterly to the Mississippi State Board of Health.



Trauma - Quarterly Activities

- Mississippi Trauma Advisory Committee meetings via ZOOM
- Bureau of Acute Care Systems weekly collaboration meetings with the Mississippi Trauma Care Foundation
- Status calls and collaboration with Trauma Registry vendor (Digital Innovations/ESO)

Trauma Center Survey/ Education Visits:

- State Health Officer Memo (April 6, 2020)
 - Designation of all currently designated trauma centers extended for one year due to COVID-19
- Designation surveys and in-person education visits postponed due to COVID-19

Current List of Designated Trauma Centers

- Three (3) Level I Trauma Centers
 - University of Mississippi Medical Center, Jackson
 - Regional One Medical Center, Memphis
 - University of South Alabama, Mobile
- One (1) Stand-Alone Tertiary Pediatric Trauma Center
 - o Le Bonheur Children's Hospital, Memphis
- Three (3) Level II Trauma Centers
 - Forrest General Hospital, Hattiesburg
 - Memorial Hospital of Gulfport, Gulfport
 - North Mississippi Medical Center, Tupelo
- Sixteen (16) Level III Trauma Centers
 - Anderson Regional Medical Center, Meridian
 - Baptist Memorial Hospital DeSoto, Southaven
 - Baptist Memorial Hospital Golden Triangle, Columbus
 - o Baptist Memorial Hospital North Mississippi, Oxford
 - Delta Regional Medical Center, Greenville
 - Garden Park Medical Center, Gulfport
 - Magnolia Regional Health Center, Corinth
 - Merit Health Biloxi, Biloxi
 - Merit Health Central, Jackson
 - o Merit Health River Oaks, Flowood
 - Merit Health Wesley, Hattiesburg
 - Ocean Springs Hospital, Ocean Springs
 - OCH Regional Medical Center, Starkville
 - Rush Foundation Hospital, Meridian
 - Singing River Hospital, Pascagoula
 - South Central Regional Medical Center, Laurel
- Sixty-Two (62) Level IV Trauma Centers
- Two (2) Burn Centers:
 - Firefighters Burn Center at RegionalOne Health
 - o J.M. Still at Merit Health Central

Mississippi Trauma Advisory Committee (MTAC):

- MTAC, September 8, 2020 Special Called Meeting
 - Approved proposed changes to Trauma System Rules and Regulations for Implementing EMS Enhanced Reimbursement Program
- MTAC, October 8, 2020 Regular Quarterly Meeting
 - BACS Update
 - Status of 1st FY21 Trauma Care Trust Fund Distribution
 - Status of Final Trauma Care Region Audits
 - Aggregate System Data Shared with Committee
 - Report on Increased Emergency Department Length of Stay for trauma patients due to COVID-19 (see chart below)
- Trauma Registry Subcommittee, July 22, 2020
 - Election of Ms. Stephanie Langston to serve as chair of the subcommittee
 - BACS Update
 - Provided information on transition to a more centralized trauma system and the Mississippi Trauma Care System Foundation (MTCSF)
 - Provided information on the latest Trauma Registry update(s) for the Web and Windows platforms, respectively
 - Web update automatically included in the web interface update, no need for users to take steps to update anything
 - Windows users must download from DI/ESO
 - Provided information an update on the status of the EMS-Trauma Registries Bridge
 - Anticipated completion this quarter
 - Foundation

- Provided update on staffing
 - Foundations to make use of North, Central and South districts
 - To provide information sharing through district meetings and provide training
- Trauma Functionality Subcommittee, July 23, 2020
 - Discussion with general agreement for updates to the Performance Improvement and Patient Safety Plan
 - Suggstions to be implemented and sent to the Chair and State Performance Improvement Committee chair for futher review
 - Discussion of EMS-Trauma Data Bridge

Clinical Effectiveness Committee (CEC)/ Trauma Medical Directors:

- September 9, 2020
 - Discussion of the challenges currently faced transferring patients due to COVID-19
 - Increased Emergency Department Length of Stays
 - Prospect of utilizing telemedicine
 - Discussion of the proposed TQIP Collaborative

- Discussion of further development of advocacy efforts
- Discussed recent changes from a regionalized system to a centralized system
- Discussion of streamlining Level IV Trauma Center requirements
- Discussion of upcoming statewide trauma conference

Trauma Performance Improvement (PI) Program:

- No meeting due to COVID 19
- MSDH presently reviewing the efficacy of using virtual teleconference environment for Performance Improvement meetings

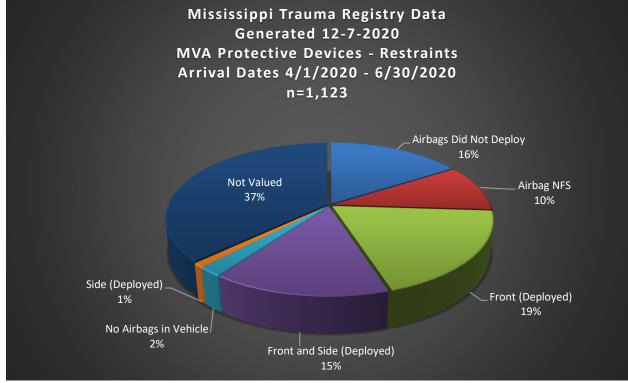
Trauma Data: (April – June 2020)

Source: MS Trauma Registry Report: ISS (Injury Severity Score) Counts Generated 12/7/2020 Arrival Dates 04/1/2020 - 06/30/2020 Query: LEVEL_I_III_HOSPS Population: PIPS_RECORD_INCLUSIO Records Included In Reports Gather: BY_HOSPITAL (By facility)

	ISS	ISS	ISS	ISS	ISS	ISS GT	ISS	
Facility	1-9	10-15	16-24	25-74	75	24	NV	Total Pts
Merit Health Wesley	43	5	1	0	0	0	0	49
Memorial Hospital at Gulfport	144	15	14	11	0	11	0	184
Rush Foundation Hospital	51	14	1	0	0	0	0	66
North MS Medical Center-Tupelo	295	46	34	5	0	5	3	383
Forrest General Hospital	382	79	41	15	0	15	0	517
South Central Regional Medical Center	90	26	17	2	0	2	0	135
Delta Regional Medical Center	71	7	0	0	0	0	0	78
University Medical Center	593	115	56	31	0	31	2	797
Baptist Memorial Hospital North Miss.	169	8	0	0	1	1	0	178
Regional Medical Center - North	61	21	5	5	0	5	0	92
Merit Health Central	10	4	2	0	0	0	0	16
Magnolia Region Health Center	71	8	6	2	0	2	0	87
Baptist Memorial Hospital - Golden Tri	194	10	2	0	0	0	3	209
Oktibbeha County Hospital	68	9	2	2	0	2	0	81
Garden Park Medical Center	84	19	9	7	0	7	0	119
Merit Health River Oaks	45	2	2	0	0	0	0	49
Merit Health Biloxi	89	3	1	0	0	0	0	93
Baptist Memorial Hospital - Desoto	212	16	7	7	0	7	1	243

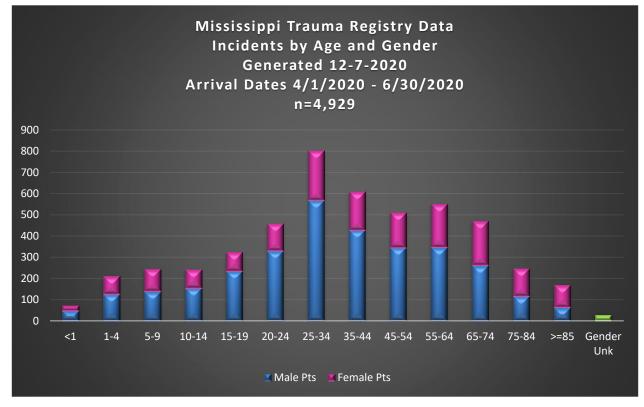
Regional One Health	127	49	31	22	0	22	0	229
LeBonheur Children's Medical Center	101	18	12	6	0	6	0	137
Univ of South Alabama Medical Center	106	17	27	21	2	23	0	173
Total	3006	491	270	136	3	139	9	3915

Motor Vehicle Collisions

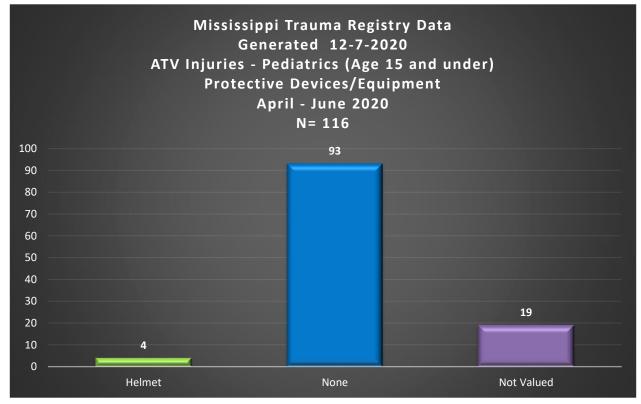


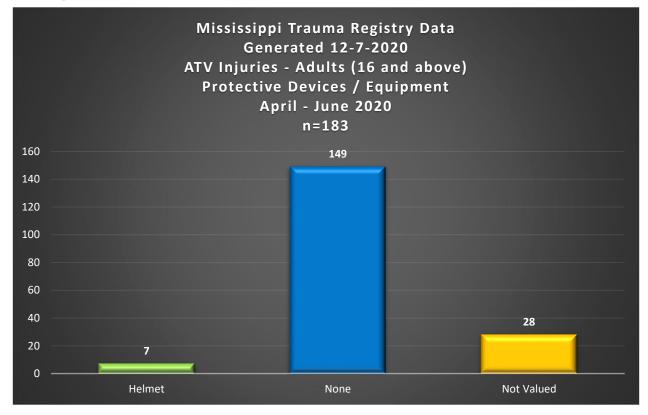
Legislative Bill signed on May 9, 2017 requiring all passengers in vehicle to wear seatbelts.





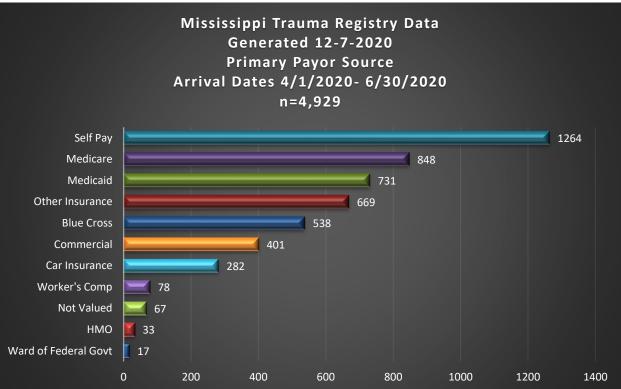
ATV Injuries (Protective Devices) - Pediatric

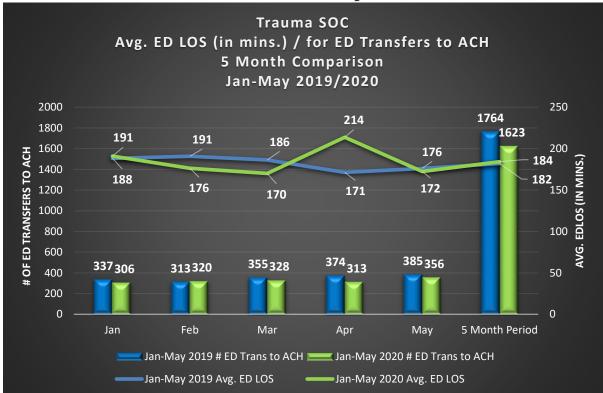




ATV Injuries (Protective Devices) – Adult







ED LOS / Transfers from ED to an Acute Care Hospital

Trauma Care Trust Fund Collections:

	July 2020	August 2020	September 2020	Total(s)
Auto Privilege & Tag Fees	\$ 1,186,106.54	\$ 1,209,361.77	\$ 1,132,046.36	\$ 3,527,514.67
Interest Income		\$ 25,680.14	\$ 14,249.29	\$ 39,929.43
License, Fees and Permits	\$ 240,337.46	\$ 174,634.75	\$ 134,693.40	\$ 549,665.61
QUARTERLY 1	\$ 4,117,109.71			

References

Center for Disease Control (CDC). (2019). Motor Vehicle Safety - Teen Drivers: Get the Facts.

Fatality and Injury Reporting System Tool (FIRST). (2020). National Highway Traffic Safety Administration (NHTSA). Retrieved from https://cdan.dot.gov/query

Mississippi Fatalities and Injuries for Youth and Adult Highway Crashes. (2017).

Mississippi Statistically Automated Health Resource System (MSTAHRS). (2020). Mississippi State Department of Health. Retrieved from http://mstahrs.msdh.ms.gov/

Mississippi Trauma Registry. (2020). [ESO/Digital Innovations, Inc.].

Web-Based Injury Statistics Query and Reporting System (WISQARS). (2020). (Version 2018). National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Retrieved from https://www.cdc.gov/injury/wisqars/index.html