System Report
October - December 2018

Mississippi Trauma Care System

Designated Trauma Care Providers
Working Together to Prevent and Treat Trauma

Prepared for:

Mississippi State Board of Health

January 12, 2019
Introduction

The goal of the Mississippi Trauma System of Care is to deliver the right patient to the right hospital the first time. Research shows that this approach decreases mortality. Trauma remains the leading cause of death for Mississippians age 1 to 44, and Mississippi ranks 3rd in the nation for unintentional injury deaths.

Mississippi began development of a statewide trauma system in 1991. The Mississippi Legislature charged the Mississippi State Department of Health with the responsibility for oversight of trauma system development. The Mississippi Legislature passed House Bill 966 in 1998, establishing the Trauma System. Since that time the state has adopted a trauma care plan, established seven designated trauma regions, designated qualifying hospitals as trauma centers, maintained a trauma registry, and disbursed funding to trauma regions, trauma centers, physicians and EMS providers. This year the Trauma System celebrates its 20th year.

The Mississippi Legislature passed House Bill 1405 during the 2008 Regular Session to revitalize and more fully fund the Mississippi Trauma Care System. Mississippi moved from a voluntary system with indigent reimbursement to a mandatory system with block grant funding based on funding; the first trauma system of its type in the United States. During the 2016 Regular Session the Legislature passed Senate Bill 2362, also known as the Budget Transparency and Simplification Act. Senate Bill 2362 swept collections from fines previously directed to an account to fund the Trauma System into the state General Fund. With SB 2362 about 35% of the Trauma System disbursement originates from the MSDH State General Funding allocation.

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

- Registry Sub-committee Statewide Meeting
  - Discussion of web-registry implementation
  - Collaboration to obtain dataset excluded from registry for Clinical Effectiveness Committee (Level I – III only)
  - Discussion of registry inclusion criteria
- Trauma User Group Training
  - Two days of training provided on web-based registry
- Burn Performance Improvement Meeting
  - Discussion and updates to Burn Dashboard
  - Discussion of how to identify burn deaths on scene
  - Request of regions to submit core indicators on burn patients
- Burn Sub-committee Statewide Meeting
  - Discussion of Burn Registry and data fields required
  - Reviewed Trauma System of Care plan – updates to Board of Health
  - Discussion of Burn Destination guidelines
  - Discussion of required resources for pediatric burn patients
- Trauma Functionality, Rules & Regulations Statewide Meeting
  - Discussion regarding TNCC requirements for Level I – IV Trauma Centers
  - Discussion regarding EMS wait times in hospitals – EMS has group reviewing data
  - Dates for registry training exclusion as requested; identified other means of training available, (region, state, hospital)
  - Trauma Funding Task Group (MTAC Task Group) – no meeting October - December
- Collaboration with registry vendor to implement updates to Trauma Registry
- Trauma System Nurse collaboration with Mississippi Department of Transportation to work on Strategic Highway Safety Plan
- Trauma Nursing Core Course (TNCC) for four providers
- Participation with Emergency Preparedness responding to Hurricanes Florence and Michael

Trauma Center Survey/ Education Visits:

- One (1) on-site visit to assist with trauma registry submission
- One (1) on-site education visit with Trauma Program Manager
- Two (2) Designation visits to Level III Center
- One (1) Education visit to Level III Center
- One (1) Education visit to Burn Center

Trauma Center Designations:

The following Level IV Trauma Centers were designated during this period:

- S. E. Lackey Memorial Hospital
- Merit Health River Region
- MS Baptist Medical Center – Jackson
Currently, the system is comprised of:

- **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**
  - 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

- **Seventeen (17) Level III Trauma Centers**
  - Anderson Regional Medical Center, Meridian
  - Baptist Memorial Hospital – DeSoto, Southaven
  - Baptist Memorial Hospital – Golden Triangle, Columbus
  - 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
  - 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
  - Southwest Mississippi Regional Medical Center, McComb

- **Sixty-One (61) Level IV Trauma Centers**

- **One (1) Burn Center:** J.M. Still at Merit Health Central

**Mississippi Trauma Advisory Committee (MTAC):**

- MTAC meeting 9-26-2018
  - BACS update to include update on Trauma System of Care Rules and Regulations Chapter 2
  - Update on trauma center designations
  - Update on trauma registry implementation
  - Update on trauma region administrative payments
  - Update on TCTF distribution payments
  - Discussed prospect of updating the trauma SOC plan to provide for burn destination guideline
Clinical Effectiveness Committee (CEC)/ Trauma Medical Directors:

- Clinical Effectiveness Committee met September 12, 2018
- Points of discussion:
  - Activation Criteria
    - Review of registry data regarding changes to activation criteria
    - Bravo criteria
  - EMS Destination Guidelines

Trauma Performance Improvement (PI) Program:

- Performance Improvement Committee met October 9, 2018
- Points of discussion:
  - Discussion of diversion status regarding Coastal Region
  - Discussion of exclusions / inclusion criteria for registry entry – committee requested Level I – III Centers send data for Clinical Effectiveness to review
  - Transfers of pediatric patients
  - Alpha activations at Level IV centers
  - Orthopedic response times
  - PI Scorecard for centers
  - Approval statewide Performance Improvement/Patient Safety (PIPS) Plan to begin using indicators with January 1, 2019 encounters
  - Mortality related to trauma patients
    - Specifically unexpected survivors and unexpected deaths
## Trauma Data: (July 2018, August 2018, September 2018)

The report includes Trauma Data from the Mississippi Trauma Registry DI Report Writer Statistics Report. The report was generated on 01/15/2019 and covers arrival dates from 07/01/2018 to 09/30/2018 with trauma records only. The query used was `LEVEL_I_III_HOSPS` and the data was gathered by hospital facility.

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<th>ISS 10-15</th>
<th>ISS 16-24</th>
<th>ISS&gt;24</th>
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<tr>
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<td>3550</td>
<td>443</td>
<td>234</td>
<td>117</td>
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### MVA Injuries
Mississippi Trauma Registry Data
Generated 01/16/2019
MVA - Protective Devices - Restraints
July - September
N=1933

- Airbags Did Not Deploy 13%
- Airbag-NFS 9%
- Front (Deployed) 13%
- Front and Side (Deployed) 6%
- No Airbags in Vehicle 0%
- Side (Deployed) 1%
- No Airbags in Vehicle 0%
- NA/ Unknown 58%

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

Age and Gender

Mississippi Trauma Registry Data
Generated 01/15/2019
Incidents by Age and Gender
Arrival Dates July - September 2018
N=5506

- Male Pts
- Female Pts
**MVA Deaths**

Mississippi Trauma Registry Data
Generated 1/16/2019
MVA Deaths - Protective Devices - Restraints
July - September 2018
N= 49

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<th>Incidents</th>
<th>No Restraints in Vehicle</th>
<th>Unrestrained</th>
<th>Seatbelt - Lap/Shoulder</th>
<th>NA / Unknown</th>
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<td>17</td>
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<td>25</td>
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**ATV Injuries (Protective Devices) Pediatric**

Mississippi Trauma Registry Data
Generated 01/16/2019
ATV Injuries - Pediatrics (Age 15 and under) - Protective Devices/Equipment
July - September 2018
N= 94

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<th>Unknown</th>
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</table>
**ATV Injuries (Protective Devices)**

**Adult**

![Mississippi Trauma Registry Data
Generated 1/16/2019
ATV Injuries - Adults (Age GT 15) - Protective Devices/Equipment
July - September 2018
N= 191](image)

![Mississippi Trauma Registry Data
Generated 01/16/2019
Primary Payor Sources
July - September 2018
Total N = 5506](image)

**Financial Data:**
## Trauma Care Trust Fund:

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<tr>
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<th>October</th>
<th>November</th>
<th>December</th>
<th>Total</th>
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<tbody>
<tr>
<td>Auto Privilege &amp; Tag Fees</td>
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<td>$ 871,751.09</td>
<td>$ 955,159.04</td>
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<td>Interest Income</td>
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