



# **System Report**

**Data Period**  
*(April 2017, May 2017, June 2017)*

## **Mississippi Trauma Care System**

*Designated Trauma Care Providers  
Working Together to Prevent and Treat Trauma*

**Prepared for:**

**Mississippi State Board of Health**

**August 21, 2017**

## Introduction

The goal of the Mississippi Trauma Care System 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 third 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. Since that time the state has adopted a trauma care plan, established seven designated trauma regions, designated qualifying hospitals as trauma centers, maintains a trauma registry, and disbursed funding to trauma regions, trauma centers, and physicians and EMS providers.

The Mississippi Legislature passed House Bill 1405 during the 2007 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 participation; the first trauma system of its type in the United States. 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**

- Trauma Registry sub-committee statewide meeting
- Trauma Registry User Group statewide meeting with contact hours given to those in attendance
- ITS Analyst assigned to RFP process for trauma registry vendor
- Burn Performance Improvement meeting
- Burn sub-committee statewide meeting
- Trauma Functionality, Rules & Regulations statewide meeting
- Statewide Trauma System of Care Surgeon Medical Director meeting

## **Trauma Center Survey/ Education Visits:**

Education visit to – Anderson Regional Medical Center, Meridian

## **FY 2015 Trauma Care Trust Fund Financial Audits:**

Financial audits for the following:

- 7 Regions  
*(Delta, North, Central, East Central, Southwest, Southeast, Coast)*
- All Level I Centers  
*(University Medical Center, LeBonheur, Regional One Health, USA)*
- All Level II Centers  
*(NMMC, Forrest General Hospital, Memorial of Gulfport)*
- All Level III Centers  
*(Merit Health Central, Merit Health River Oaks, Merit Health Biloxi, Ocean Springs, Singing River Hospital, Baptist Memorial Hospital-DeSoto, Delta Regional Medical Center, Anderson Regional Hospital, Rush Hospital, BMH Oxford, BMH Golden Triangle, OCH Regional, South Central Regional, Southwest MS Regional Medical Center)*
- One EMS agency in each of the 7 regions
- No material findings reported

## **Trauma Center Designations:**

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

- Baptist Memorial Hospital – Leake
- Simpson General Hospital
- George Regional Hospital
- Hancock Medical Center
- Sharkey Issaquena Community Hospital
- University of MS Medical Center- Grenada
- Pioneer Hospital – Aberdeen
- Jefferson Davis Community Hospital
- Field Memorial Hospital

- Franklin County Memorial Hospital

Currently, the system is comprised of:

- Three (3) Level I Trauma Centers
  - UMMC, 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
- Sixteen (16) Level III Trauma Centers
  - Anderson Regional Medical Center, Meridian
  - Baptist Memorial Hospital – DeSoto, Southaven
  - Baptist Memorial Hospital- GT, Columbus
  - Baptist Memorial Hospital-NM, 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
  - Ocean Springs Hospital, Ocean Springs
  - Oktibbeha County Hospital Regional Medical Center, Starkville
  - Rush Foundation Hospital, Meridian
  - Singing River Hospital, Pascagoula
  - South Central Regional Medical Center, Laurel
  - Southwest MS Regional Medical Center, McComb
- Sixty-two (62) Level IV Trauma Centers; and
- One Burn Center -J.M. Still at Merit Health Central

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

- MTAC met on May 10, 2017
  - Bureau reviewed system finances
  - Update on development of systemwide performance measures
  - Update on Clinical Effectiveness Committee activities
    - MTAC requested that the Committee review the Trauma Center Activation Criteria and Destination Guidelines and provide a recommendation at the August 2017 MTAC meeting
  - Discussed RFP for trauma registry and data points needed to monitor patient care and system growth

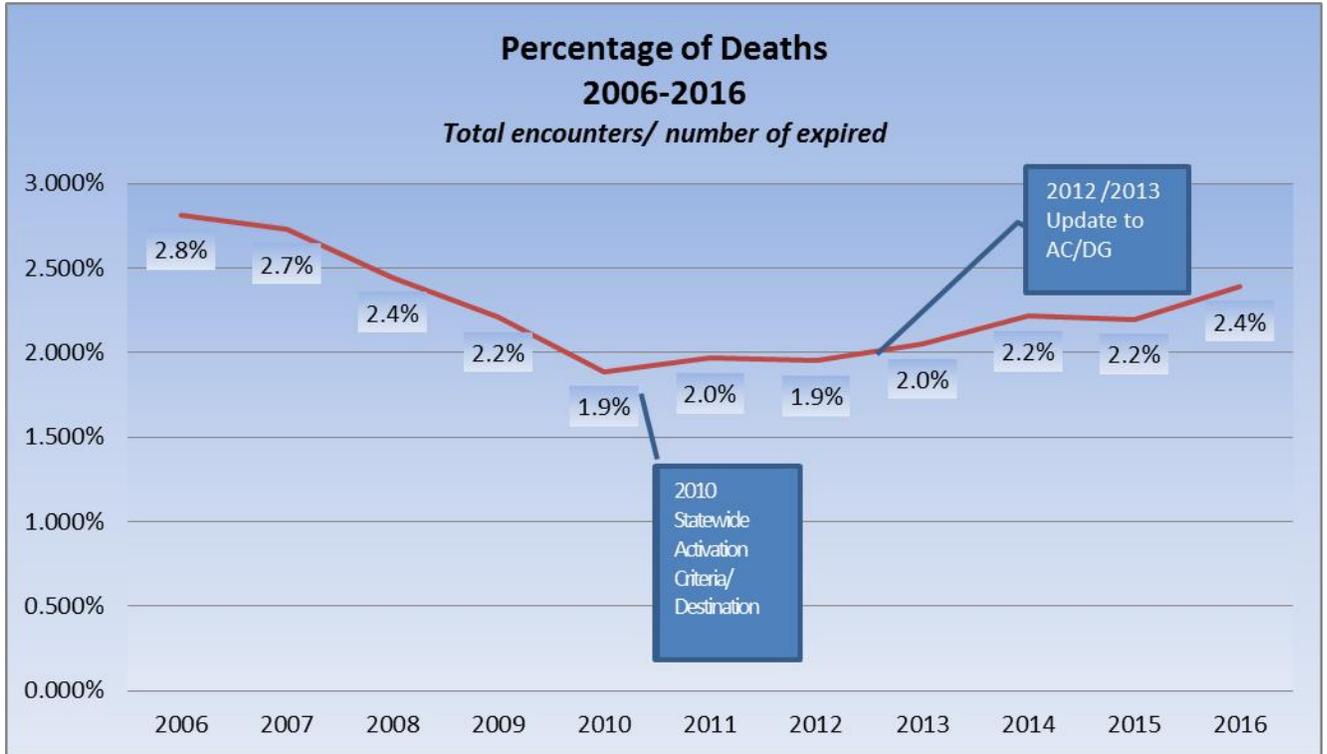
## **Clinical Effectiveness Committee (CEC)/ Trauma Medical Directors:**

- The clinical effectiveness committee held the first meeting. Group established mission and goal of the committee. Items for discussion included the following:
  - Activation criteria and destination guidelines-these are the criteria used to activate the more critical trauma patients. In 2010/2011 our trauma system began using a combined criteria. In collaboration with the EMS Medical Directors we have proposed to separate these criteria. We believe that this will help to decrease the overtriage / overactivation of trauma patients.
  - National topics that include bleeding control. The American College of Surgeons, Committee on Trauma has a national campaign “Stop the Bleed”. The Trauma System of Care began training police officers on tourniquet use in 2016. To date we have trained over 4000 law enforcement officers across the state. This training has proved to be successful with **fifteen (15) lives saved**.
  - Training for surgeons related to trauma; ATLS (Advanced Trauma Life Support); ASSET (Advanced Surgical Skills for Exposure in Trauma Course) and ATOM (Advanced Trauma Operative Management Course) are a few of the course topics that are currently being discussed.
  - Other topics included exploring ideas of a statewide trauma symposium.

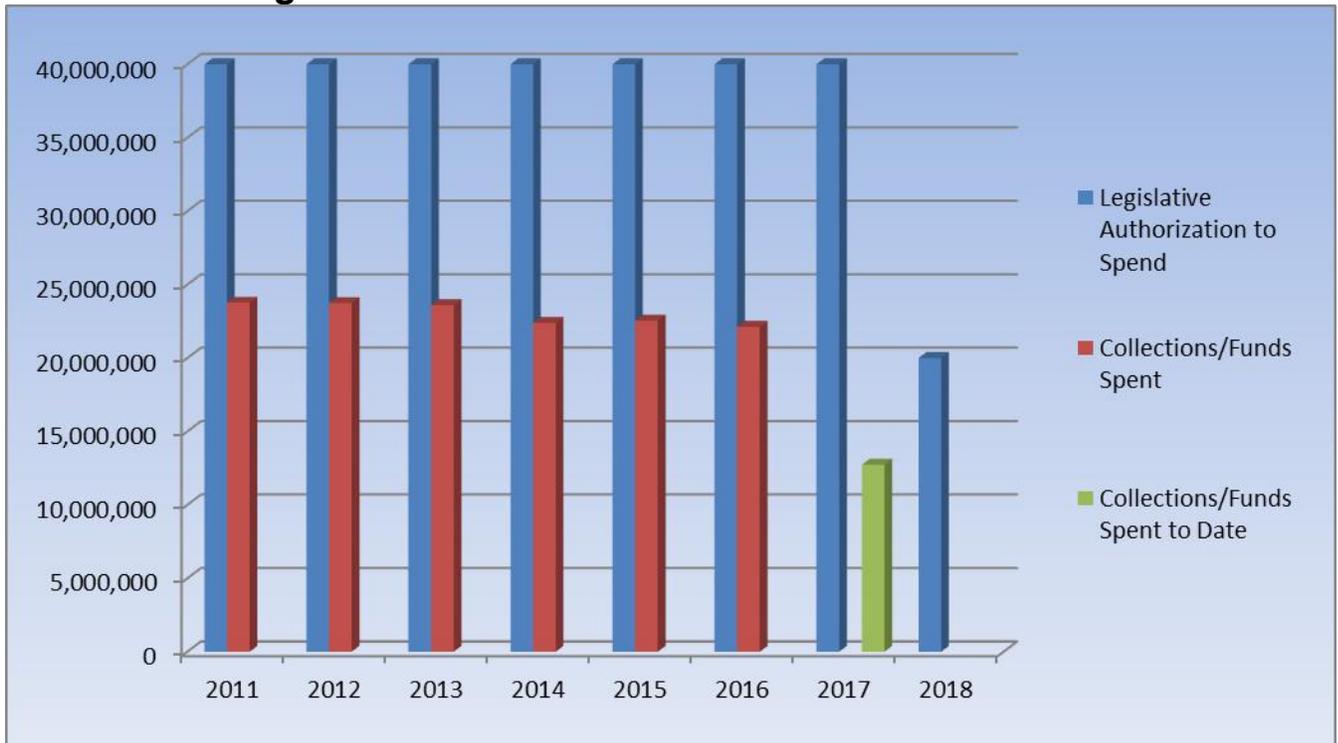
## **Trauma Performance Improvement (PI) Program:**

- The performance improvement committee is meeting on regular basis. A few of the items of discussion are as follows:
  - Discussion of mortality related to trauma patients.
  - Research and publications related to the trauma system of care.

Below is a snapshot of the data the PI committee is analyzing for trends related to trauma deaths.



### Trauma Funding:

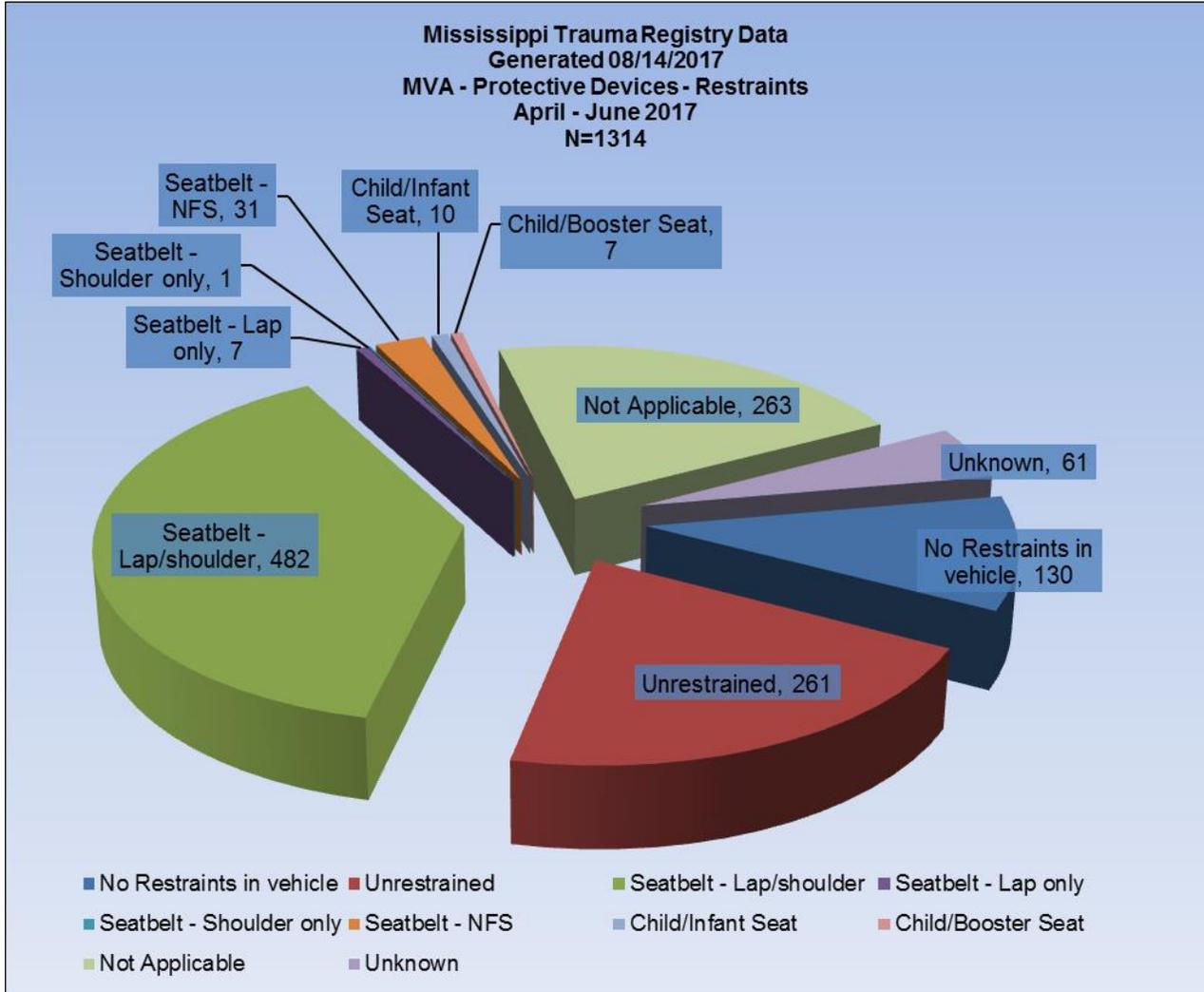


**Trauma Data:*****Injury Severity Score (ISS) Summary for Level I-III Trauma Centers***

Mississippi Trauma Registry Data  
 Injury Severity Score Summary for Level I to Level III Hospitals  
 Generated 08/14/2017  
 Arrival Dates: 04/01/2017- 06/30/2017  
 April- June 2017  
 N = 3160

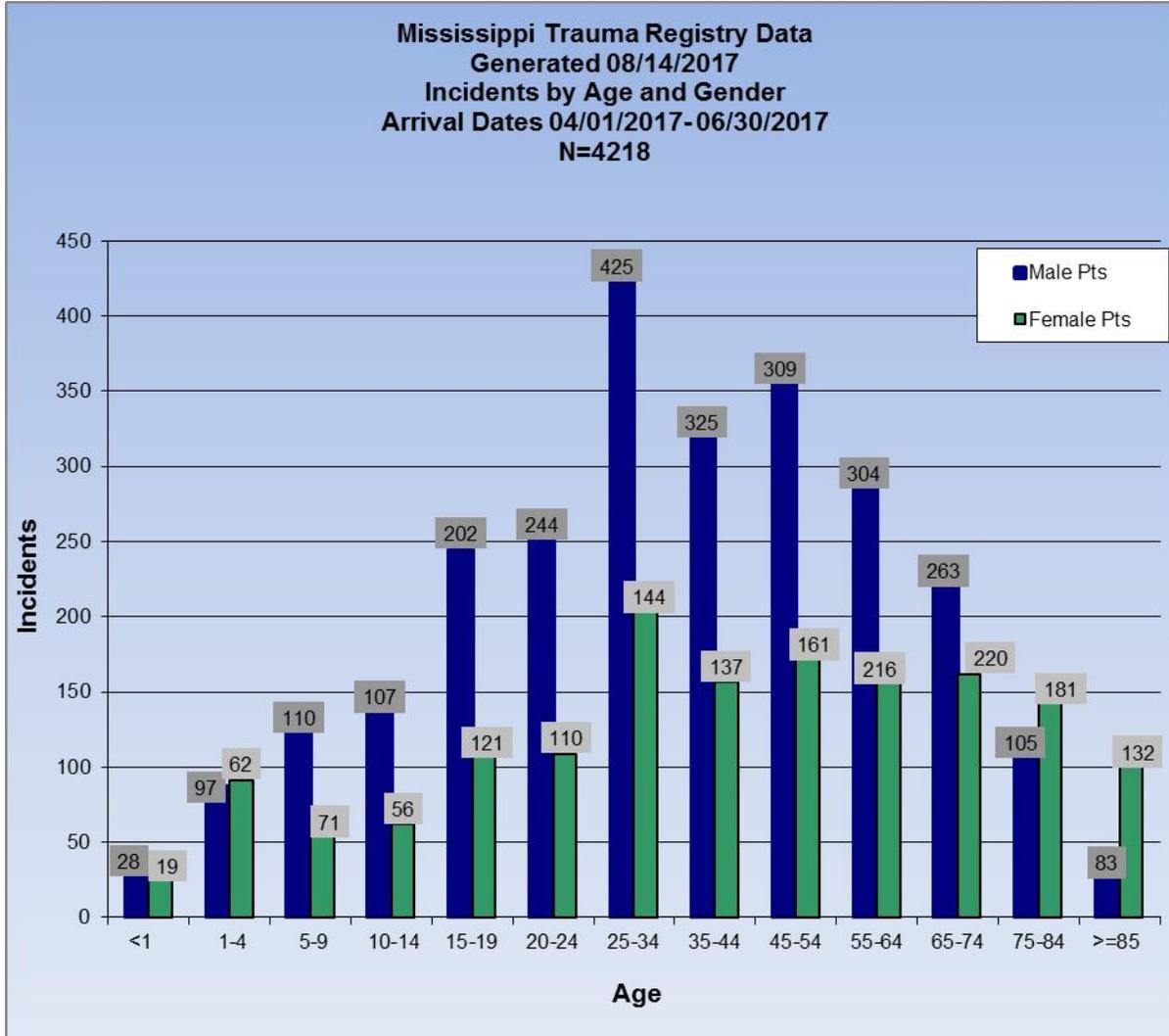
Facility	ISS 1-9	ISS 10-15	ISS 16-24	ISS>24	ISS N/V
Anderson Regional Medical Center-North	105	25	8	2	0
Baptist Memorial Hospital-Desoto	216	25	4	2	0
Baptist Memorial Hospital-GoldenTriangle	115	13	1	2	0
Baptist Memorial Hospital-North Miss.	127	15	3	0	0
Biloxi Regional Medical Center	17	6	1	2	0
Central MS Medical Center	25	1	0	2	0
Delta Regional Medical Center	67	5	3	0	0
Forrest General Hospital	408	58	36	5	0
Garden Park Medical Center	98	13	5	8	0
LeBonheur Children's Medical Center	144	13	2	2	5
Magnolia Hospital	112	17	6	2	0
Memorial Hospital at Gulfport	157	24	7	6	0
North MS Medical Center-Tupelo	283	64	30	20	1
Ocean Springs Hospital	79	8	4	0	1
Oktibbeha County Hospital	21	3	2	0	0
Regional Medical Center at Memphis	89	23	11	4	0
River Oaks Hospital, Inc.	17	1	0	0	0
Rush Foundation Hospital	92	16	6	1	0
Singing River Hospital	93	5	1	0	1
South Central Regional Medical Center	80	19	2	0	0
Southwest Mississippi Regional Medical C	100	21	9	5	0
Univ of South Alabama Medical Center	44	22	12	6	0
University Medical Center	24	3	1	16	0
<b>Total</b>	<b>2513</b>	<b>400</b>	<b>154</b>	<b>85</b>	<b>8</b>

**MVA Injuries**

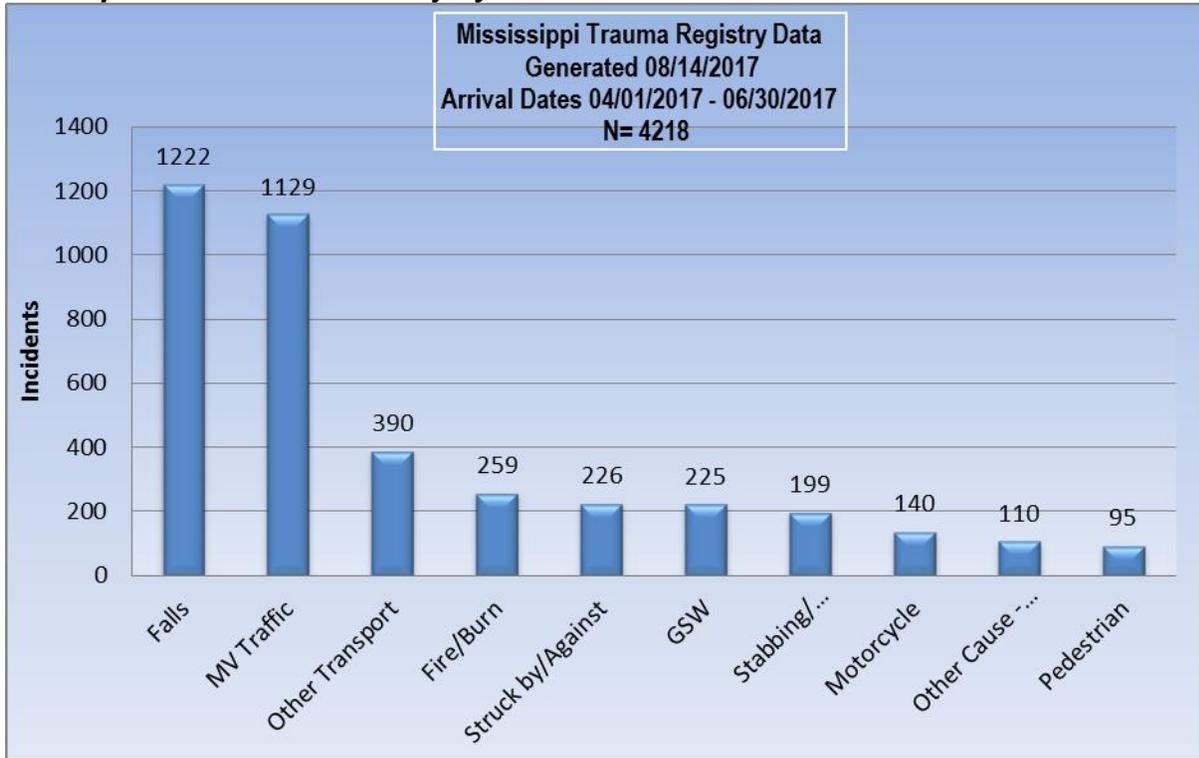


Legislative Bill signed on May 9, 2017 requiring all passengers in vehicle to wear seatbelts.

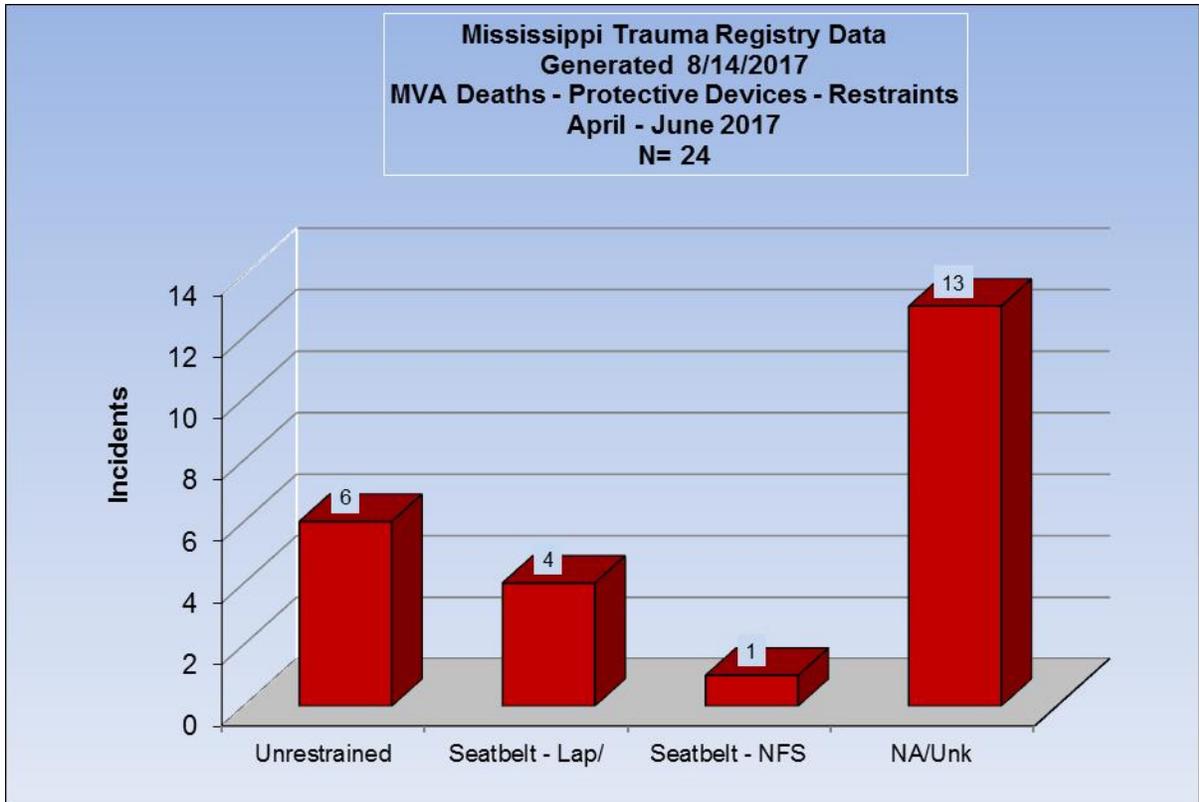
**Age and Gender**



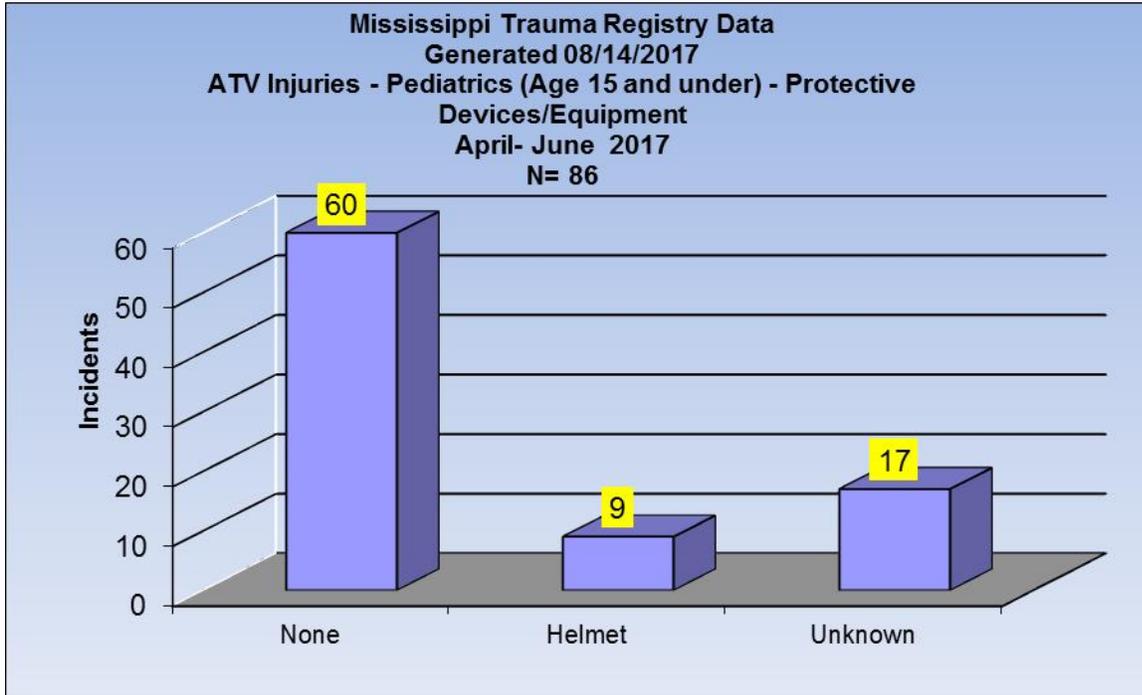
**The top10 mechanisms of injury**



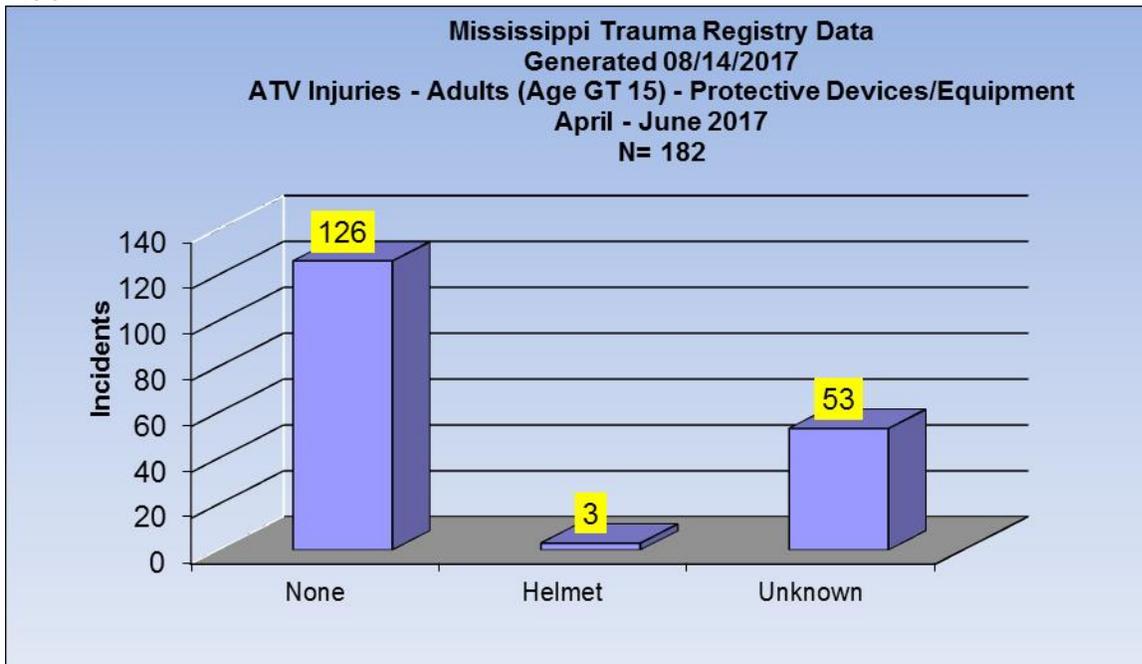
**MVA Deaths**



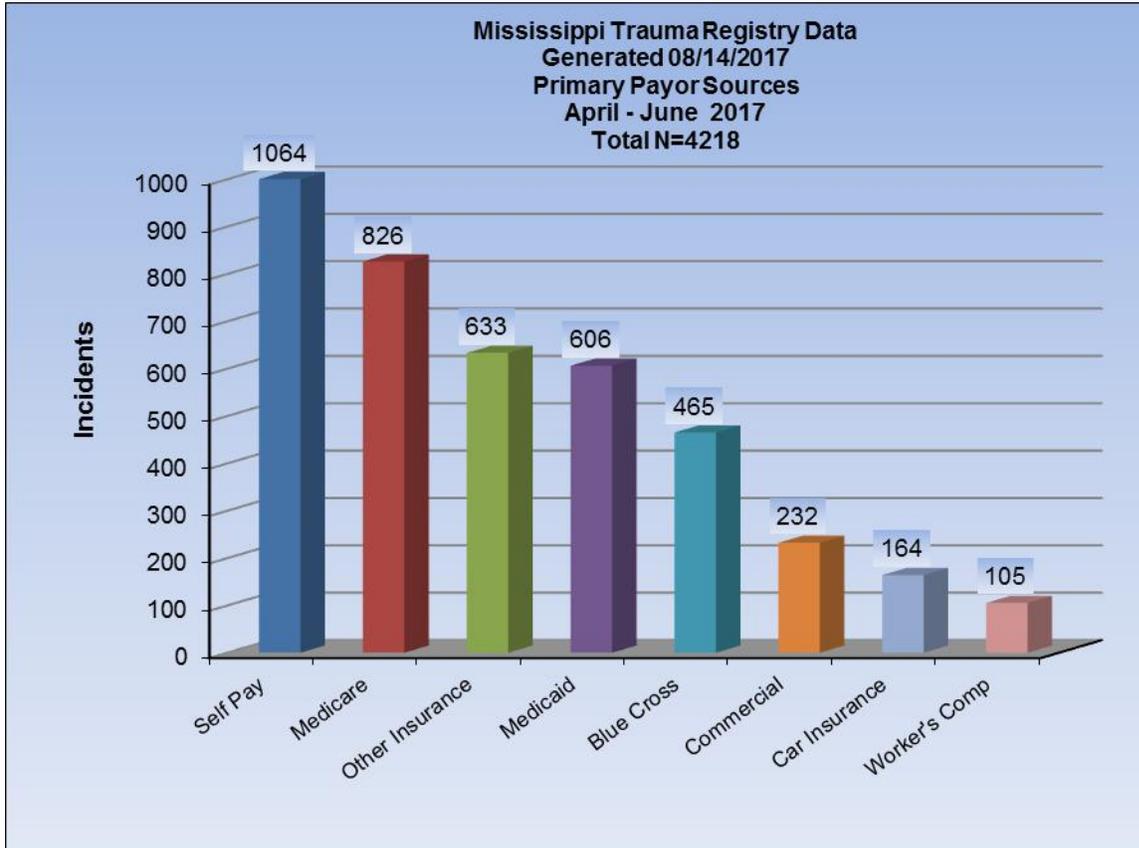
**ATV Injuries (Protective Devices)  
Pediatric**



**ATV Injuries (Protective Devices)  
Adult**



**Financial Data:**



**Trauma Care Trust Fund:**

	<b>April</b>	<b>May</b>	<b>June</b>	<b>Total</b>
Auto Privilege & Tag Fees	476,750	783,725	1,444,554	2,705,029
Interest Income	1,239	3,884	9,031	14,153
License, Fees and Permits	82,755	107,704	116,164	306,624
				<b>3,025,806</b>