



Acute Care Systems

MEHC

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Acute Care Systems: Mississippi's Functional Framework for Optimizing the Care of Time Sensitive Conditions – An Update

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Acute Care Systems: MS Functional Framework

The system of care approach to public health provides a functional framework for making use of resources to optimize the care of patients

- To address conditions significantly impacting mortality and morbidity
 - Improve on the care of those experiencing time sensitive conditions
 - Optimize the care of the sickest of the sick
 - Generally, to promote best practices in the care of patients
- Core Framework/Elements:
 - Hospitals designated based on resources for the care of particular types of patients
 - EMS destination guidelines for the transport of patients to the appropriate hospital
 - Criteria for activation and utilization of hospital resources once the patient arrives
 - Data collection and overall system performance evaluation and improvement
- Background
 - American Heart Association
 - Various approaches to the use of systems of care throughout the US
 - Based our COVID-19 SOC on this model in 2020
 - National efforts underway to mitigate impact of emerging infectious disease using SOC

Acute Care Systems: MS Functional Framework

- **Mississippi Milestones**

- TRAUMA SYSTEM: 1998

- Mandatory: 2008

- STEMI SYSTEM: 2011

- STROKE SYSTEM: 2013

- COVID-19: 2020

- Current Interest in Developing

- Burn Surge Plan
- PEDS READY SYSTEM
- SEPSIS PROTOCOL SYSTEM



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- **SYSTEMS OF CARE DESIGN**
 - **SBOH Approved**
 - System of Care Plan
 - www.msdh.ms.gov
 - System of Care Rules and Regulations
 - www.msdh.ms.gov
 - **EMS Destination Guidelines/Protocols**
 - **Activation Criteria**
 - **Designation Survey/Review Process**
 - **Statewide Performance Improvement Process**
 - Supported by hospital/local performance improvement committees

Acute Care Systems: MS Functional Framework

- **TRAUMA SYSTEM-Mandatory Participation**
 - Transitioned from a regional system model to a more centralized model: 2020
 - Intent was to improve on the efficacy of the system and use a higher proportion of funds for trauma services (lower administration costs)
 - Significant success with this resulting in savings of \$400K+ annually
 - MS Trauma Care System Foundation
 - Mr. John Gardner jgardner@mhanet.org
 - EMS Enhanced Reimbursement Program implemented recently for increased reimbursement for EMS providers for all patients they transport – match money paid from the trauma fund
 - Upper Payer Limit for EMS in progress; hopes DOM will approve this FY
 - Remodeled performance improvement process for trauma
 - Statewide Trauma System Performance Improvement Committee
 - Subcommittees – District Level
 - North
 - Central
 - South
 - STEMI and Stroke Systems looking to also implement district level PI processes
 - Data analytics are done by districts, which are congruent with the public health districts

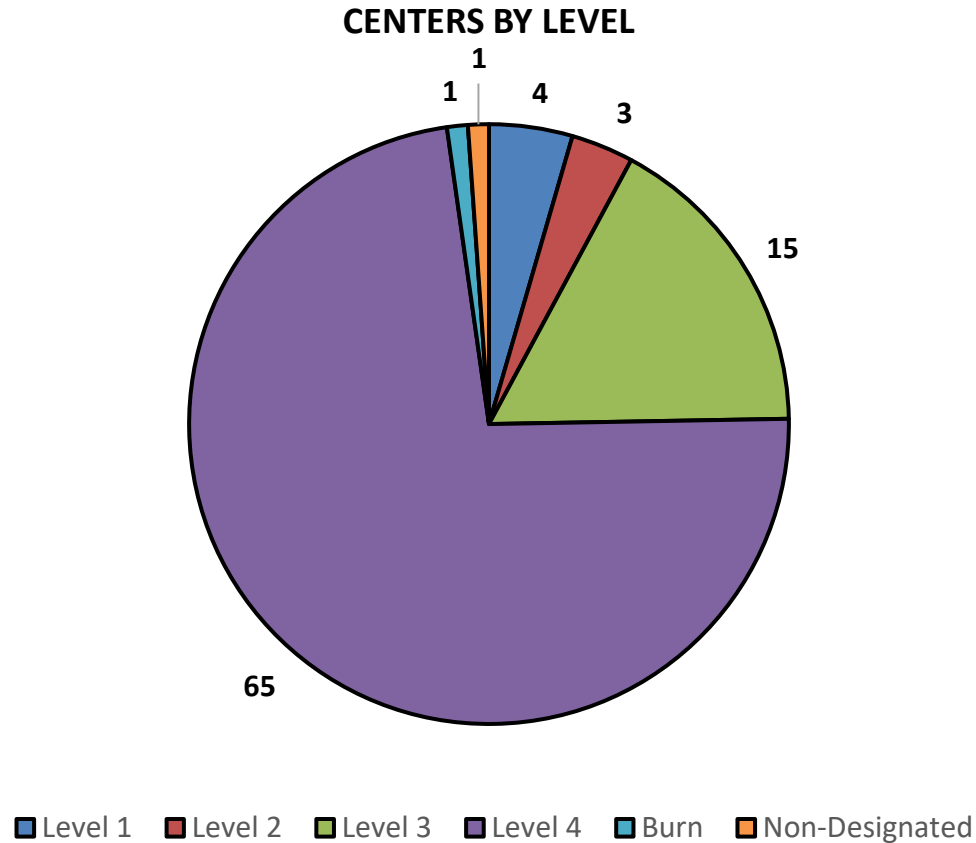
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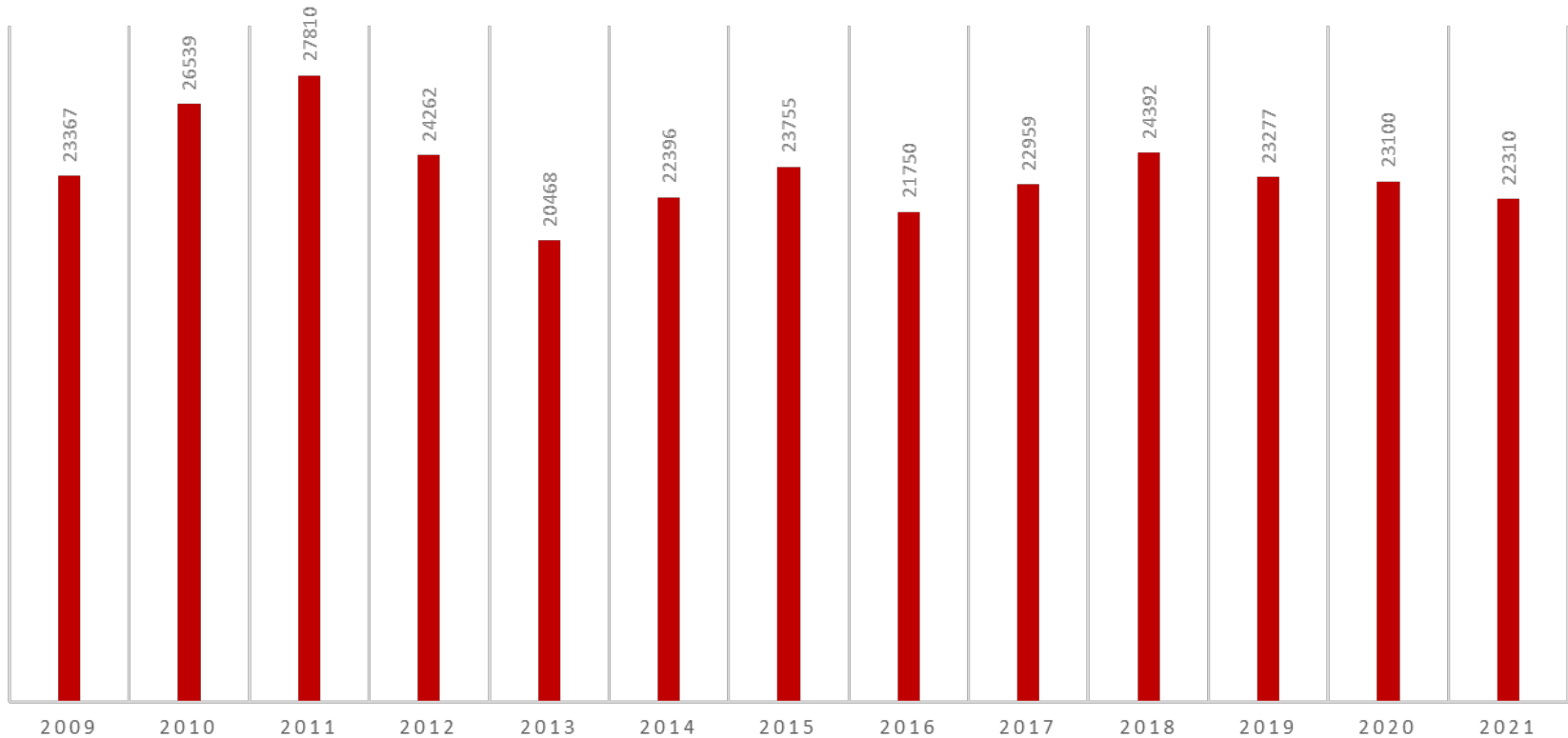
- **TRAUMA SYSTEM DESIGNATIONS: TOTAL 88**
 - List on the MSDH Website



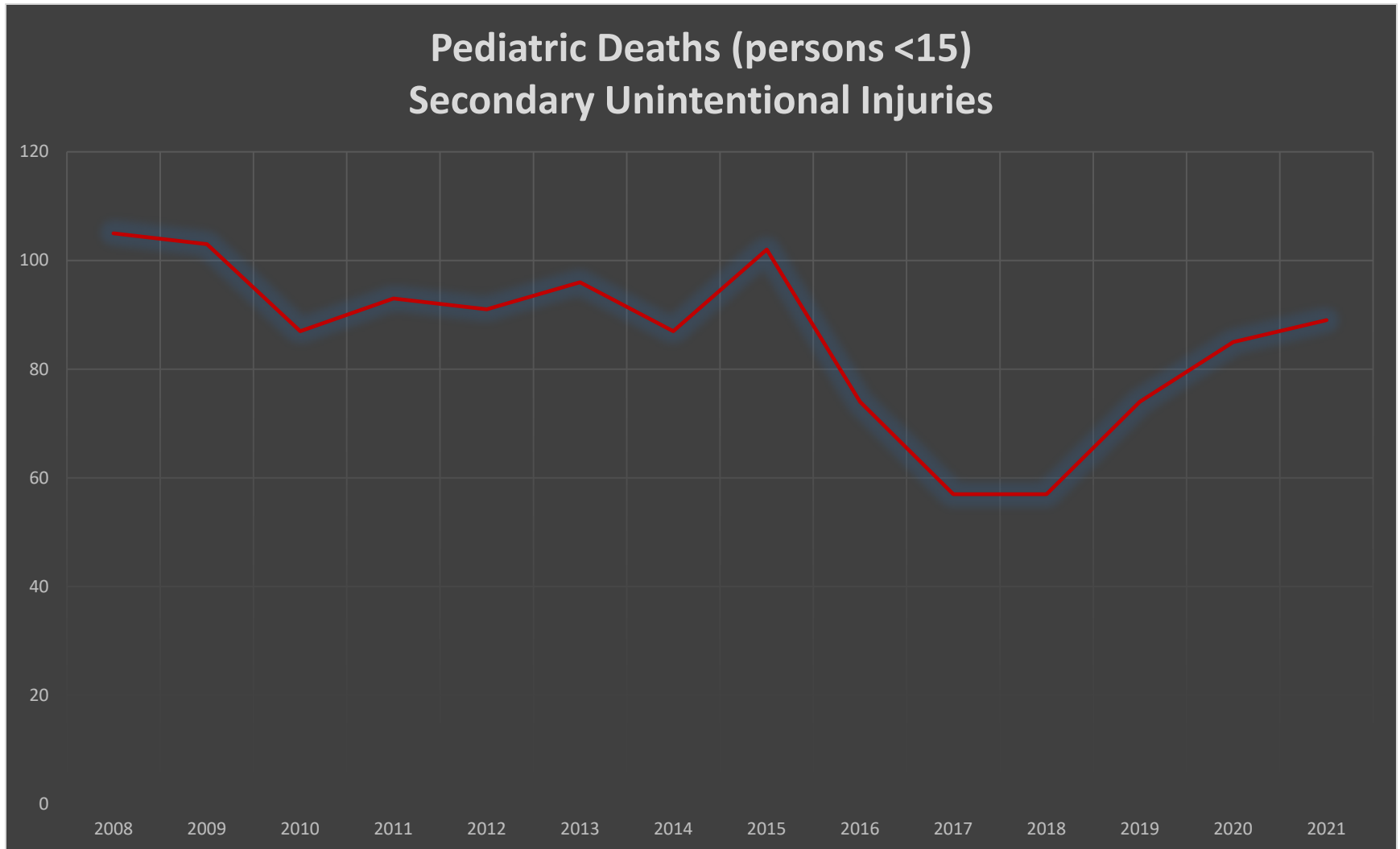
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Trauma System Encounters by Calendar Year

TRAUMA SYSTEM ENCOUNTERS BY CALENDAR YEAR, 2009 - 2021



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MSTAHRS (Mississippi Statistically Automated Health Resource System). (n.d.). Retrieved February 27, 2023, from <https://mstahrs.msdh.ms.gov/index.html>

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- **STEMI FACTS:**

- **MS highest CVD mortality in US**
- **ST-elevation myocardial infarction (STEMI) is a significant public health concern in MS and carries a high risk of death and disability**
- **MSDH BOH approved rules for a formal designation process, and we have to date designated 19 STEMI Receiving Centers**
 - **List on the MSDH Website**



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- **STROKE FACTS:**
 - Ranks 4th US death from immediate and long-term effects of stroke
 - 5th leading cause of death and disability in MS
- **STROKE SYSTEM**
 - MSDH has begun designation of stroke centers

Acute Care Systems: MS Functional Framework

- **Conclusion**
 - **Functional framework for the sickest of the sick**
 - **Importance and role of EMS**
 - **Data and association between system of care and improved outcomes**
 - **Systems of care = change in public health/healthcare culture with a focus on**
 - **Timely care for time sensitive conditions and sickest of the sick**
 - **Bureau of Acute Care Systems supports the mission of the Mississippi State Department of Health to protect and advance the health, well-being and safety of all Mississippians.**