



# 2017 Annual Report

TRISTATE TRAUMA REGISTRY





# 2017 Annual Report

## TRISTATE TRAUMA REGISTRY



The **2017 Annual Report** of the Tristate Trauma Registry contains data from local trauma centers and hospitals that treat trauma-related injuries in our community. The report is reflective of aggregate trauma data and covers 10,317 records of patients treated across the region\*.

The year's data shows a consistency in demographics and patient population. Falls among the older adult population continue to be the leading cause of the traumatic injury and death. This year we also see a continued decline in patients with no insurance.

In 2017, the Tristate Trauma Coalition celebrated 10 years of the regional trauma registry. For 10 years, the region has continuously supported work to improve patient outcomes through data collection and analysis.

Additionally, the Tristate Trauma Coalition was an active participant in the development of a statewide regional organization group. The Ohio Regional Trauma Organizations Coalition was created with the purpose of Ohio regions and statewide organizations to have a forum to work together to improve the care of the injured patient by sharing best practices, reporting initiatives and developing projects centered around performance improvement and education.

The Tristate Trauma Coalition strives to continuously support the improvement of care to trauma patients region-wide and to make an impact in the community through education and awareness.



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\* This report does not include data from Adams County Regional Medical Center and Northern Kentucky Hospitals.



# The Tristate Trauma Coalition

## ANNUAL REPORT



**The Tristate Trauma Coalition (TSTC)** is a group of multidisciplinary agencies and organizations which collaborate to serve the community by improving patient outcomes and providing a forum for independent health care facilities and systems, emergency medical services, and community partners to work together to improve the care of the injured patient. TSTC provides a forum for sharing best practices, collecting and analyzing trauma data, and determining the educational needs of regional nurses and physicians who treat injured patients. Its goal is to promote and enhance the care of the injured patient within the tristate through the collection and analysis of quality data from all hospitals in the region; providing quality professional trauma education; and convening stakeholders to collaborate on trauma-related issues and trends

### Community Served Estimated Population in the Area

The Tristate region consists of eight counties in southwest Ohio, two in southeast Indiana, and four in northern Kentucky. Population in this area is approximately 2.246 million based on 2015 census data. Hamilton County is the most populated of the counties served, and is home to the two Level One Trauma Centers: UC Health – University of Cincinnati Medical Center and Cincinnati Children’s Hospital Medical Center. Level 3 trauma centers in the region are: Atrium Medical Center, Bethesda North Hospital and UC Health – West Chester Hospital.

University of Cincinnati  
Medical Center



Atrium Medical Center  
Premier Health Partners



West Chester  
Hospital





# The Tristate Trauma Coalition

## SERVICES



### The three primary functions of the Tristate Trauma Coalition and its workgroups are:

The Tristate Trauma Registry: Maintains the regional database containing demographic, injury, clinical, and outcome data as provided by member hospitals; identifies and optimizes the resources needed to accomplish function goals, e.g. data quality, validation; provides continuing education for trauma data collectors.

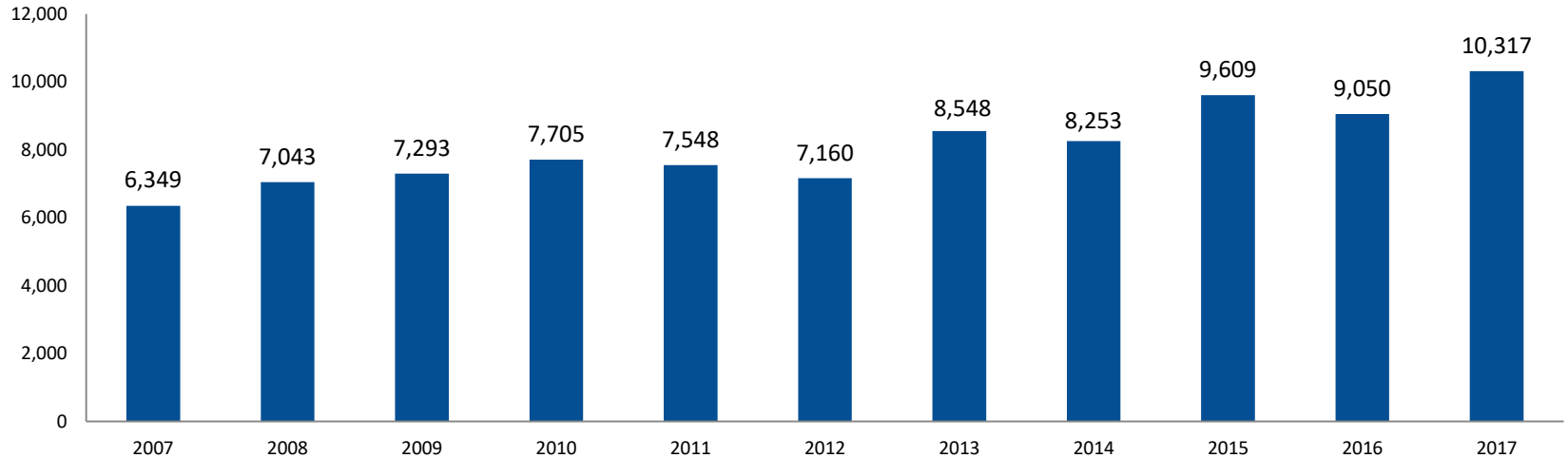
Performance Improvement Program (PIP): Provides interested parties with relevant summary reports, metrics, and other deliverables to be used to improve awareness, education, prevention, and all aspects of the continuum of care from pre-hospital to inpatient to rehabilitation, with eventual reintegration to home with the best functional and productive outcomes. Reviews aggregate data, scorecard/dashboard, and benchmarking standards.

Trauma Education: The Tristate Trauma Coalition offers trauma-specific education to physicians and nurses. These courses include, but are not limited to: Advanced Trauma Life Support (ATLS); Trauma Nursing Core Course (TNCC); Emergency Nursing Pediatric Course (ENPC).

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## TRISTATE TRAUMA REGISTRY

### Patient Volume by Calendar Year January 1, 2007- December 31, 2017



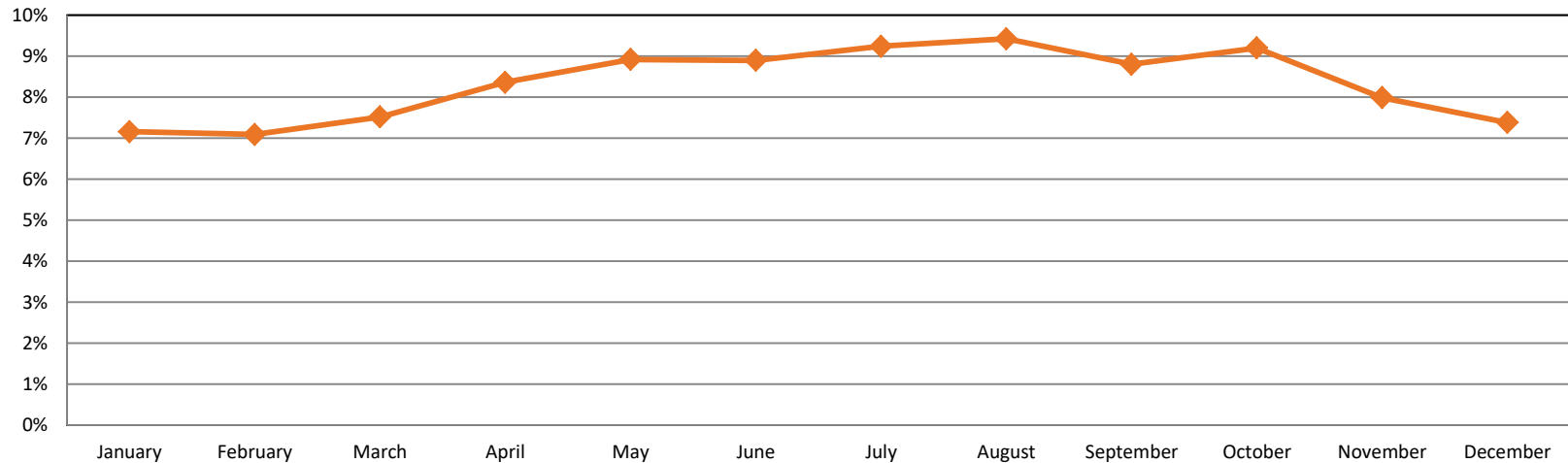
Variations in the number of record each year are effected by continued education on capturing the correct patient population and facility participation.



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## TRISTATE TRAUMA REGISTRY

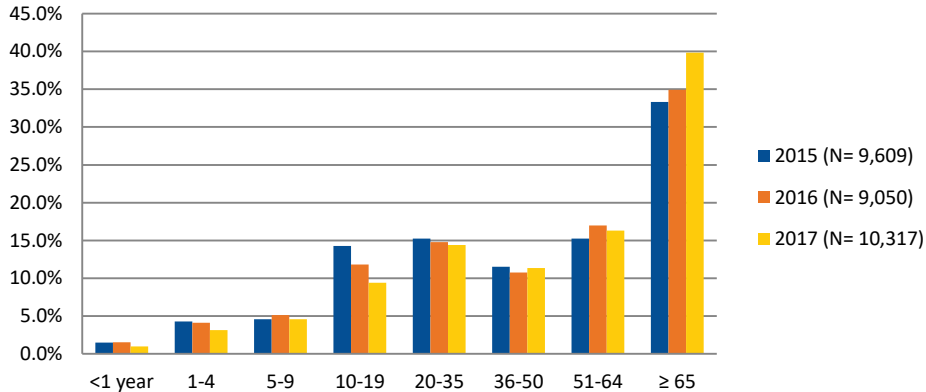
Average Patient Volume by Month  
2015- 2017



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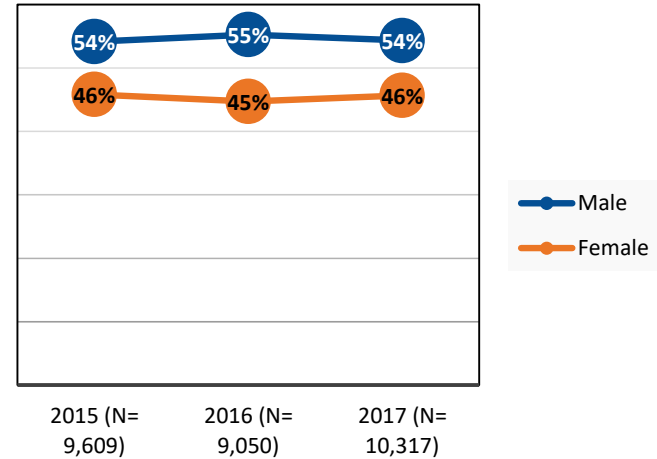
## TRISTATE TRAUMA REGISTRY

### Percent of Patients by Age



Injuries among patients greater than 65 years of age continue to rise throughout the tristate. This is attributed to the higher population in this age range.

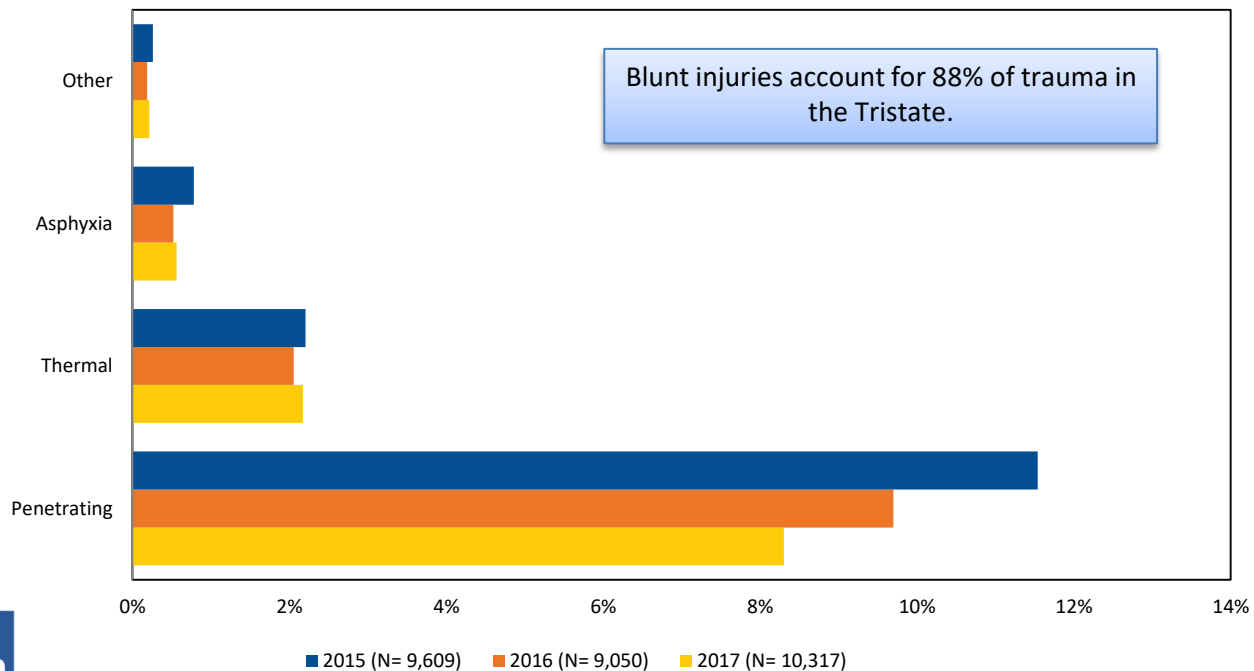
### Percent of Patients by Sex



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## TRISTATE TRAUMA REGISTRY

### Injury Type

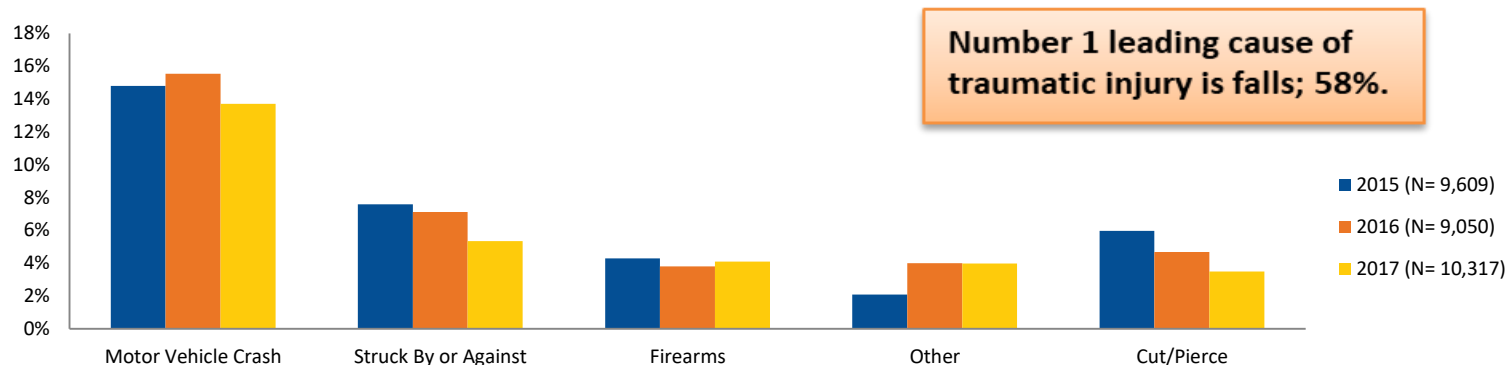




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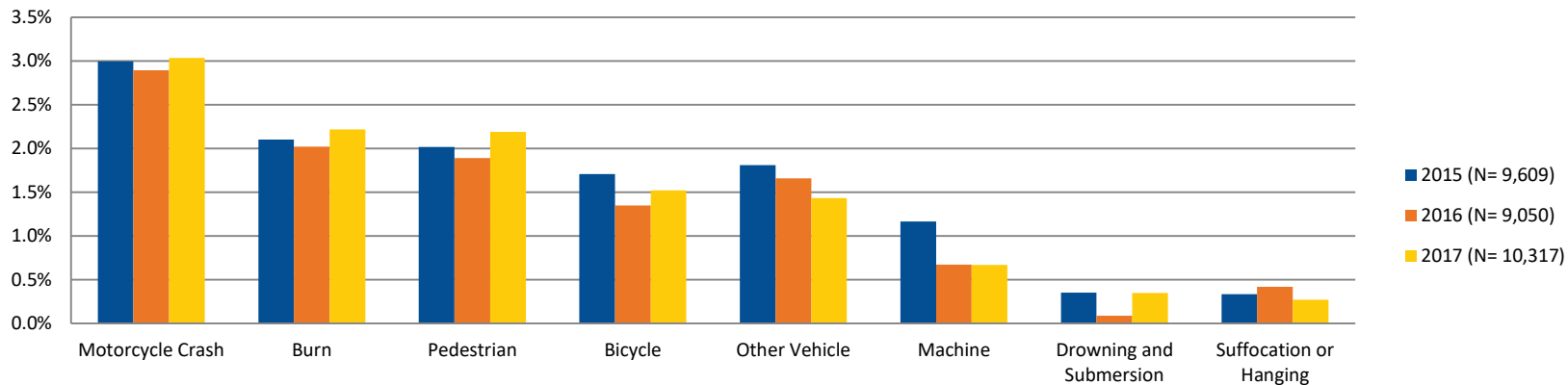
## TRISTATE TRAUMA REGISTRY

### Top 6 Mechanisms of Injury





### Other Mechanisms of Injury



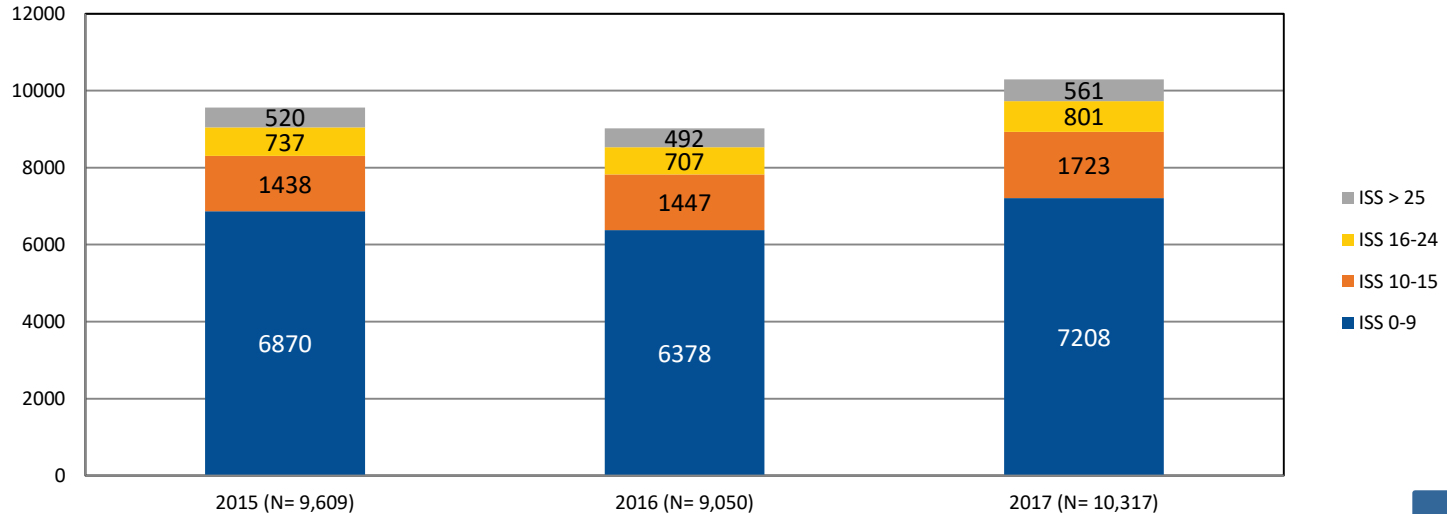
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## TRISTATE TRAUMA REGISTRY



An Injury Severity Score (ISS) is used to determine the severity of patients' injuries & estimate their outcomes. Scores in the 0-9 range indicate minor & moderate injuries, 10-15 indicates serious injuries, 16-24 indicates severe, & over 25 indicates critical injury. The data demonstrates the vast majority of patients are treatable & able to recover from their injuries. Validation of diagnoses continue throughout the region establishing a more accurate level of the patient's severity.

### Injury Severity Score

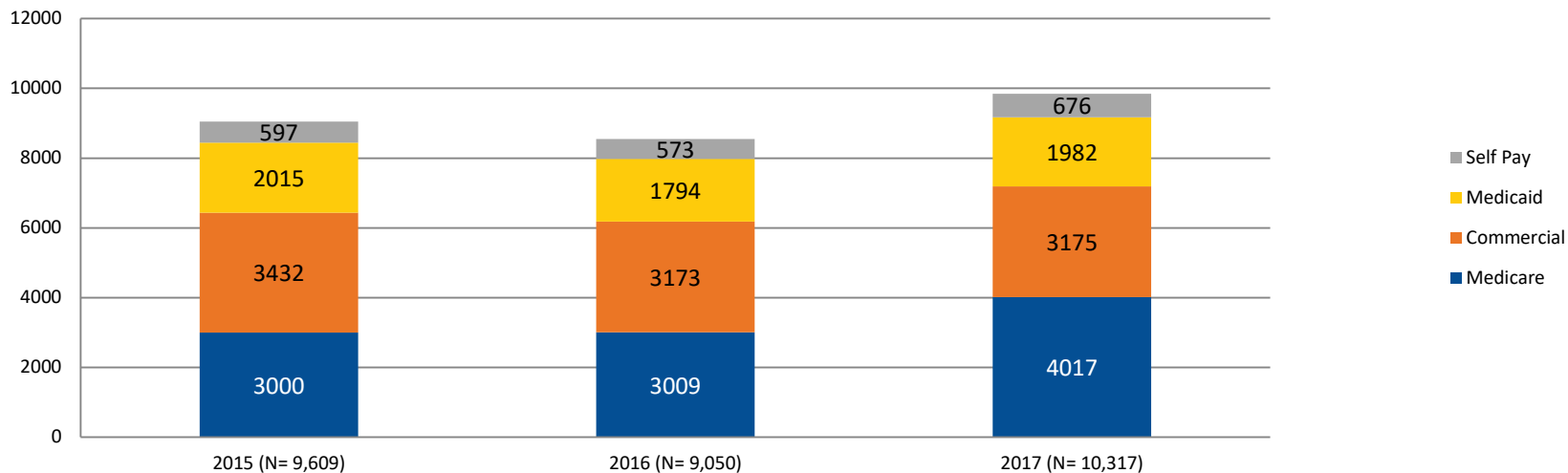


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## TRISTATE TRAUMA REGISTRY



### Top 4 Types of Payment Source

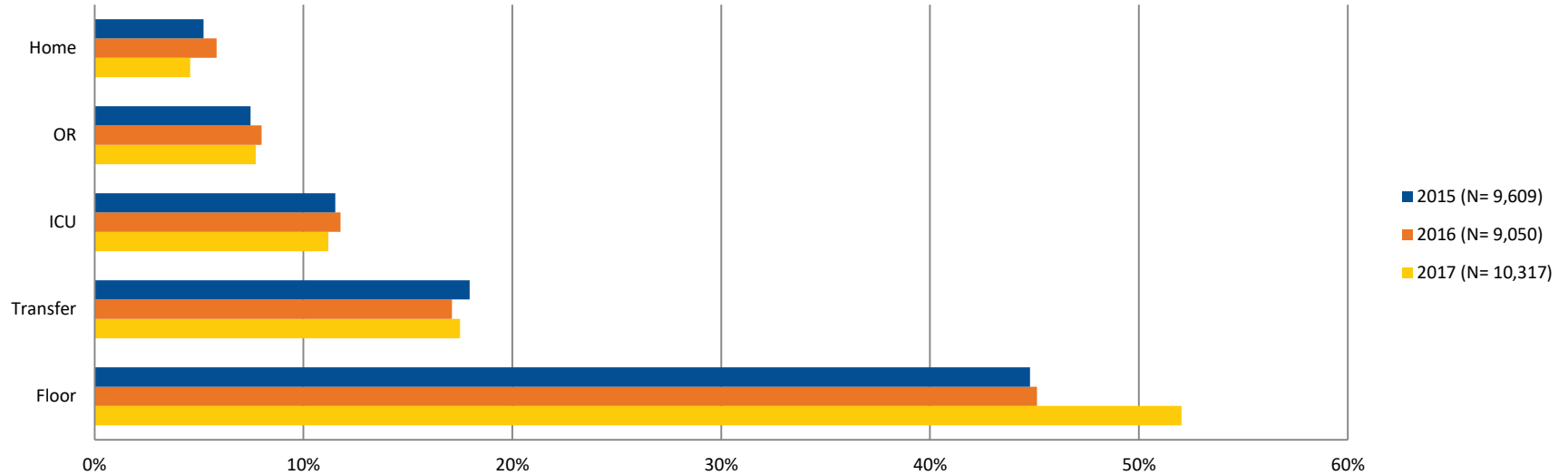


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## TRISTATE TRAUMA REGISTRY



### Top 6 Emergency Department Dispositions

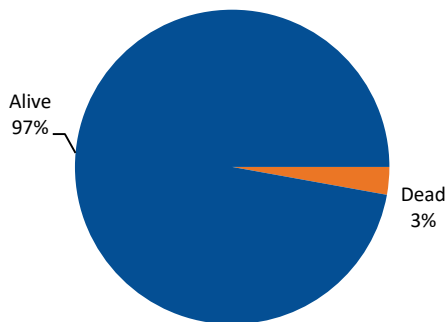


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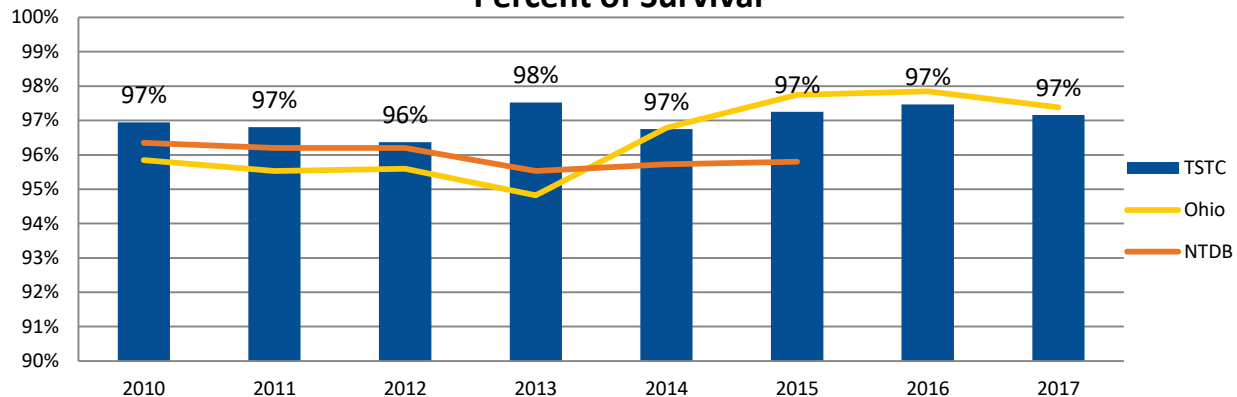
## TRISTATE TRAUMA REGISTRY



### 2017 Discharge Status



### Percent of Survival

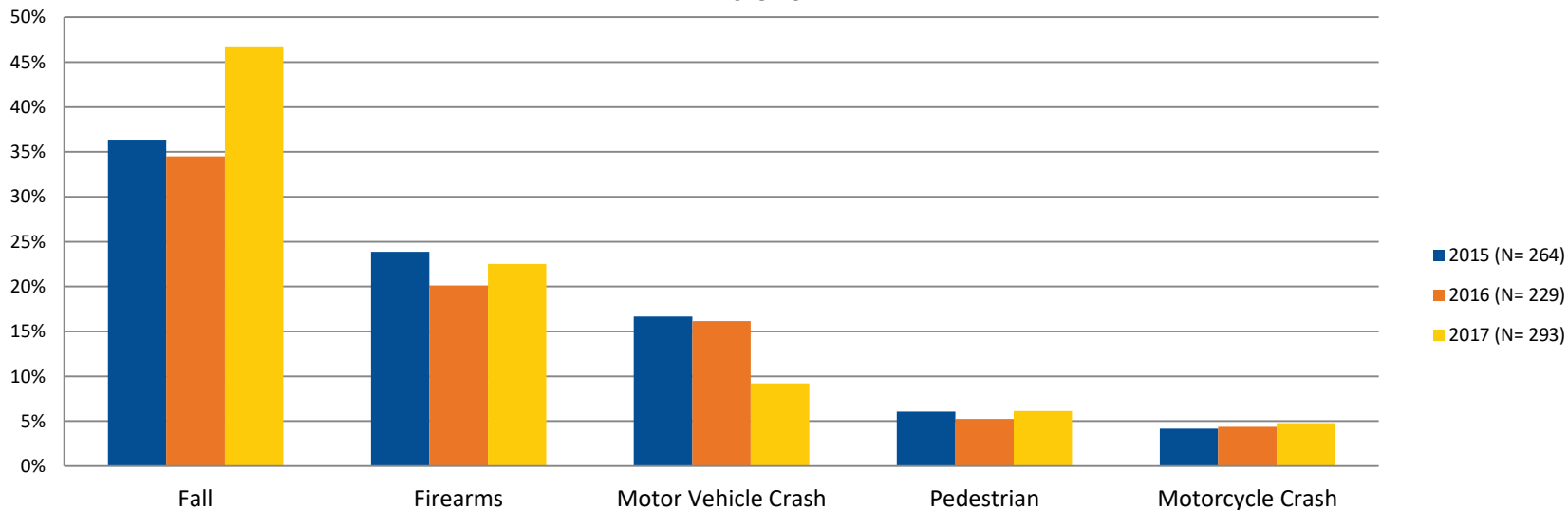


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## TRISTATE TRAUMA REGISTRY



### Tristate Trauma Registry Top 5 Mechanism of Injury Resulting in Death 2015-2017

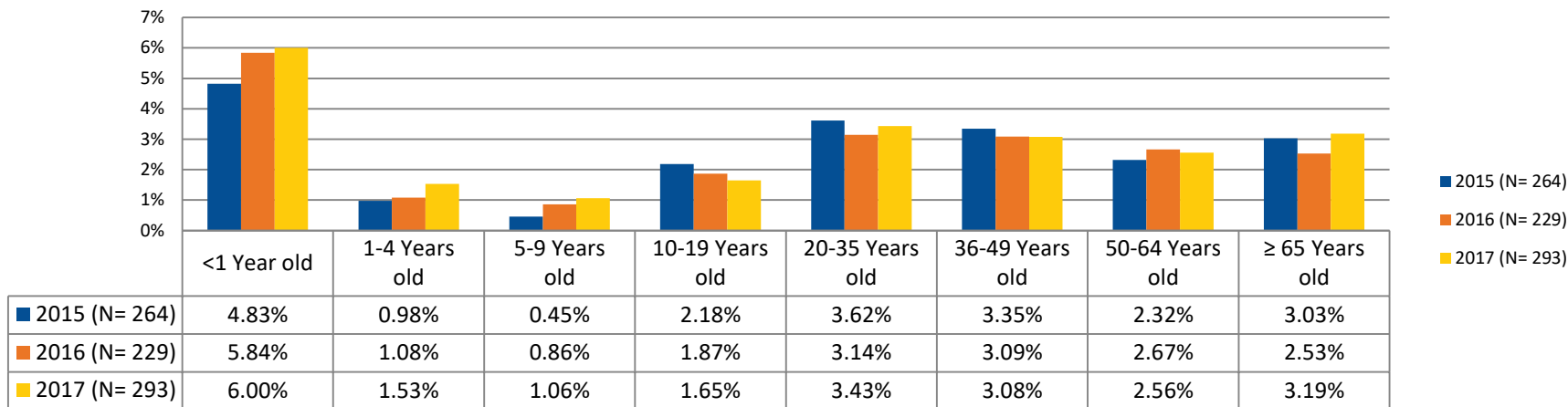


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## TRISTATE TRAUMA REGISTRY



### Case Fatality Rate by Age 2015 - 2017



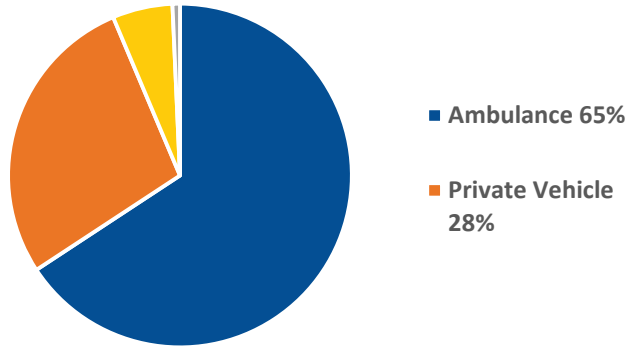


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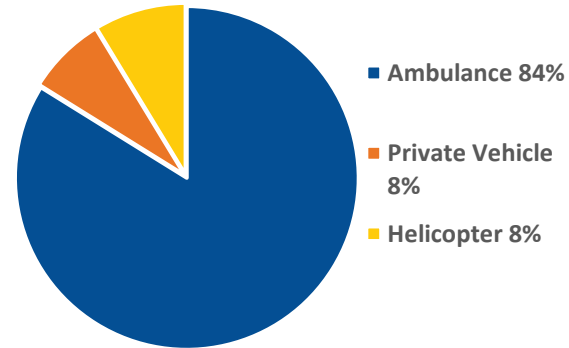
## TRISTATE TRAUMA REGISTRY



### Average From Scene Mode of Arrival



### Average Inter-Facility Mode of Arrival

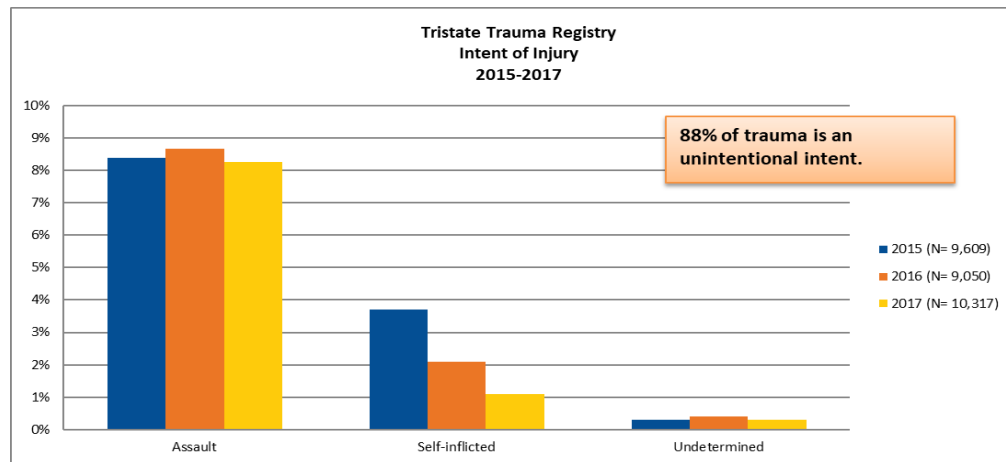
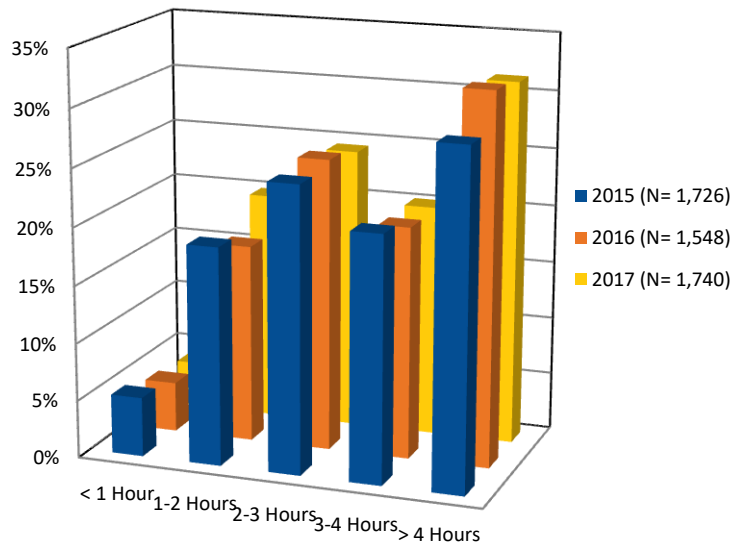


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### Emergency Department Length of Stay of Patients Transferred



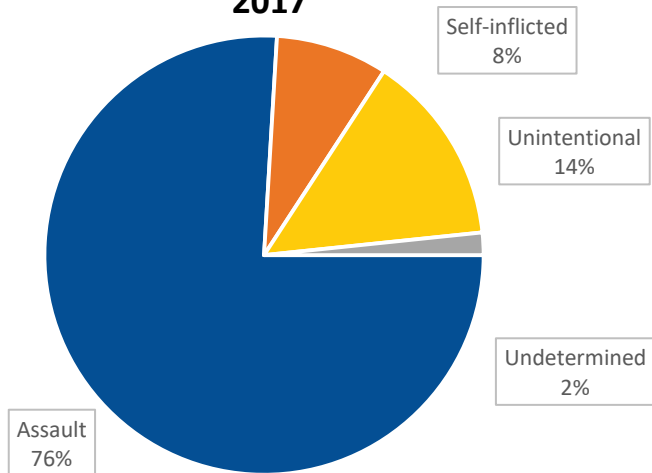
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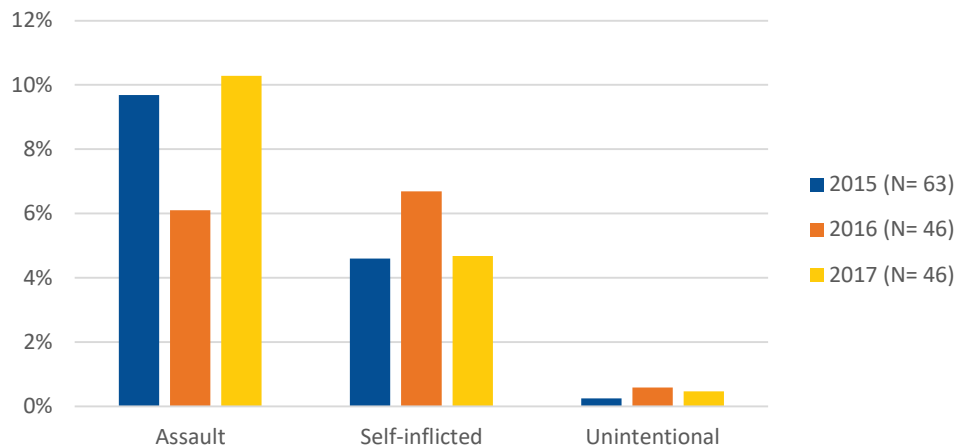
**Firearm Related Injuries by Intent**

**2017**



**Firearm Related Deaths by Intent**

**2015 - 2017**





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For questions regarding the  
**2017 Annual Report,**  
please contact Kelly Harrison

[kharrison@healthcollab.org](mailto:kharrison@healthcollab.org)

