

Trauma Care
Commission
2025 Annual Report





Acknowledgement

The Indiana Department of Health (IDOH) acknowledges the continued efforts of all the individuals involved in working to understand, prevent, and treat traumatic injury.

Special thanks are extended to the members of the Indiana Trauma Care Commission, hospitals, EMS agencies, medical directors, program managers, and registrars. Their commitment to continuously improving care, preventing injury, and collecting quality data makes it possible to advance Indiana's trauma system.

IDOH remains focused on supporting Indiana's trauma system to ensure that Hoosiers have access to timely, high-quality trauma care aimed at improving outcomes and quality of life.



Contents

Executive Summary	4
Background	6
Indiana Trauma Overview	<u>9</u>
Comprehensive Engagement	<u>11</u>
Accountability	
Trauma Care Access	<u>13</u>
Emergency Medical Services	<u>14</u>
Data & Performance Improvement	
Prevention, Education, and Outreach	18



Executive Summary

Injury is a prevalent public health problem, causing great loss of life and productivity in Indiana. In 2023, unintentional injury was the third leading cause of death for all Hoosiers and the leading cause of death for Hoosiers ages 1 to 44. It affects all populations, whether urban or rural, young or old. Organized systems of care that integrate military and civilian trauma care have been shown to save lives after injury. Integration is essential to combat the injury epidemic across the entire spectrum, from injury prevention and pre-hospital care to acute hospital treatment and rehabilitation. Indiana is privileged to have an engaged stakeholder group of expert providers across all phases of injury care that have been driving statewide trauma system development to help overcome barriers, improve efficiency and advance system performance to a higher level.

The Trauma Care Commission 2025 Annual Report illustrates progress made toward Indiana's <u>Trauma System Plan</u> (TSP) strategies and priorities. The following are key highlights:

- The TCC implemented updated comprehensive hospital data quality reports for Trauma Regional Advisory Councils (TRACs) and enhanced trauma registry validation rules to provide timely feedback to hospitals including launching a dashboard to improve Indiana hospitals' ability to access, explore and monitor trauma data over time
- The TCC instituted a formula-based model to fund TRACs including governance and reporting requirements. Each TRAC received TCC approval of a regional plan with subsequent funding to support ongoing system development including:
 - Registry enhancements/improvements
 - Professional education and training
 - Regional system engagement non-trauma center support
- The TCC developed and funded a comprehensive list of training and education opportunities to expand trauma knowledge and professional development across the continuum of care.
 Additionally, the TCC is developing trauma registry training to improve trauma and nontrauma center data quality and submission:
 - More than 1,600 statewide healthcare professionals received training and education
 - More than 160 rural healthcare professionals received high-fidelity simulation training
- The TCC drafted a statewide performance improvement (PI) plan aimed at targeting key performance indicators to improve overall delivery of trauma care and outcomes
- The TCC maintained a grant process to support system development projects. Thirteen <u>trauma system development projects</u> are in process and seek to make improvements in the following areas:

¹ Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS). Accessed at https://wisqars.cdc.gov/ on Sep 17, 2025.



- · Trauma system development
- Quality improvement
- Trauma center and non-trauma center engagement
- Injury prevention
 - More than 6,500 prevention services offered including:
 - Screening/assessment
 - Preparedness and response supplies
 - Safety modifications
- The TCC continues to explore the first statewide Training Affiliation Agreement (TAA) with military partners to improve and support readiness of both medical soldiers and civilian counterparts

The TCC continues to play an important role in providing oversight of the TSP implementation and guidance for future trauma system improvements in patient care as it builds a comprehensive and coordinated trauma system. From improving communication and coordination by exploring the implementation of a medical operations coordination center (MOCC) to enhancing registry visibility and data sharing to inform performance improvement, there is still much opportunity to elevate Indiana's trauma system.



Background

The 2025 TCC annual report is provided pursuant to SEA 4-2023 and IC 16-31-2.5 which established a 13-member commission. The TCC continues to serve as an advisory body to IDOH on all issues involving Indiana's trauma system, which collectively responds to more than 40,000 reported trauma incidents, annually. Indiana's trauma system aims to assure that resources and infrastructure are in place to ensure the continuum of care for trauma patients has timely, structured cooperation and communication across all providers, hospitals and EMS agencies.

Trauma Care Commission

Trauma Care Commission Membership	Appointee
State Health Commissioner (chairperson)	Dr. Lindsay Weaver
Director, Department of Homeland Security	Jonathan Whitham (proxy)
Secretary, Family and Social Services	Ty Sullivan (proxy)
Administration	
Representative, American College of Surgeons	Dr. Erik Streib (Eskenazi Health)
Committee on Trauma	
Representative, Indiana Hospital Association	Andy VanZee
Representative, Emergency Medical Services	Dr. Elizabeth Weinstein
for Children Program	
Representative, Level I trauma center surgeon	Dr. Lewis Jacobson
	(Ascension St. Vincent - Indianapolis)
Representative, Indiana Chapter of the	Dr. Emily Fitz
American College of Emergency Physicians	(IU Health - Tipton)
Registered nurse, employed as a trauma	Dr. Lisa Hollister
program manager	(Parkview Health)
Representative, Level I pediatric trauma center	Dr. Matthew Landman
surgeon	(IU Health - Riley)
Representative, rural non-trauma center	Dr. David Welsh
	(Margaret Mary Health)
Representative, Level II or Level III trauma	Dr. Scott Thomas
center surgeon	(Beacon Health - Memorial Hospital)
Representative, Level II or Level III trauma	Dr. Jay Woodland
center surgeon	(Deaconess)

TCC meeting dates during 2025 are shown in the table below.

2025 TCC Meeting Dates
February 2025
May 2025
August 2025
November 2025



Trauma Care Commission Subcommittees and Regions

Trauma System Planning

Chairs:

Dr. Eric Streib, Andy VanZee

Priorities:

- Maintenance of Trauma Regional Advisory Councils
- Trauma center designation and access to care
- Needs based assessments
- State to state collaboration
- State Trauma Plan
- Funding

Trauma Education and Outreach

Chairs:

Dr. Matthew Landman, Dr. Jay Woodland

Priorities:

- Provide education and outreach to key trauma and injury prevention stakeholders including regional training opportunities
- Coordinate with IDOH to utilize data for injury prevention programming
- Conduct public awareness campaigns (where applicable)

Trauma Registry

Chairs:

Dr. Lisa Hollister, Summer Blakemore, Missy Smith

Priorities:

- Review and maintain data elements of the Indiana trauma registry
- Oversee registry outreach and training for data optimization
- Assure data is valid, accurate and reliable: Quality data

Trauma Performance Improvement (PI)

Chairs:

Dr. Scott Thomas, Dr. Eric Yazel

Priorities:

- Identify quality measures
- Disseminate best practices
- Provide hospital and systemwide reports of quality measures
- Develop a statewide PI plan

Disaster Preparedness and Military Integration (DP/MI)

Chairs:

Dr. David Welsh, Dr. Mark Liao

Priorities:

- Assess capabilities to partner and coordinate with military and disaster preparedness stakeholders statewide
- Plan and implement opportunities associated with preparedness and disaster planning including coordination of response with TRACs

Indiana Trauma System Regions





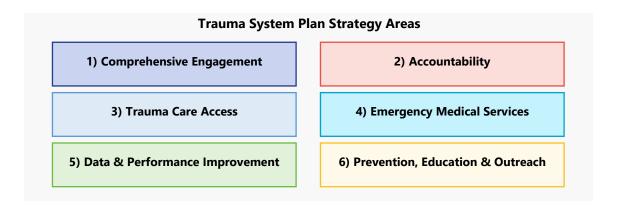
Trauma Center Access

Indiana's trauma system maintained 21 verified adult trauma centers (including three Level I centers; five Level II centers; 13 Level III centers) and five verified pediatric trauma centers (including two Level I centers; three Level II centers).



Trauma System Plan

The TSP is organized by strategy, priority, and detailed objectives that include all components of trauma care. It encompasses six strategy areas (shown below) that organize priorities and respective objectives. Under each strategy are the related priorities, which define the TSP's key activities, and detailed objectives are listed under many priorities which serve as more actionable items for implementation.



The TSP is a living document that will continue to be evaluated and modified by the TCC as public health and trauma evolves in Indiana and new federal and state resources are realized.



Indiana Trauma Overview

Trauma Cases, 2024

A trauma case is defined as an acute care encounter for a patient with a traumatic injury who died or was admitted as an inpatient, observed, transferred between hospitals or discharged to hospice. Over 43,000 total trauma cases were reported to the Indiana Trauma Registry in 2024.²

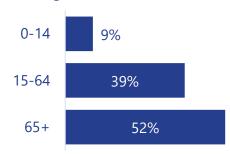
Total Reported Trauma Cases, 2024

43,360

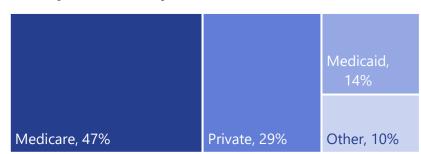
Trauma Case Age and Payment Source

Adults aged 65 and older accounted for over half (52%) of reported trauma cases in 2024, while teens and adults ages 15 to 64 made up 39% of cases and children ages 0 to 14 accounted for 9%. Medicare was the primary method of payment for nearly half of trauma encounters (47%), while private or commercial insurance (29%) and Medicaid (14%) were the next most common payment sources.

Patient Age



Primary Method of Payment



Causes of Injury and Death among Trauma Cases

Understanding leading causes of trauma is critical to inform prevention efforts. In 2024, falls were the leading cause of injury among all trauma encounters, accounting for nearly two-thirds of all encounters. However, mortality rates were highest for firearm, motorcyclist, and pedestrian/pedal cyclist injuries.³

Leading Causes of Injury

(Percent of All Trauma Encounters)

1	Fall (64%)
2	Motor vehicle (occupant/other) (11%)
3	Struck by/against (5%)
4	Firearm (3%)
5	Pedestrian/pedal cyclist (3%)

Leading Mortality Rates

(Mortality Rate by Cause of Injury, All Encounters)

1	Firearm (17.1%)
2	Motorcyclist (5.2%)
3	Pedestrian/pedal cyclist (4.7%)
4	Motor vehicle (occupant/other) (3.3%)
5	Fall (1.9%)

³ Mortality rates represent the number of deaths divided by total encounters for a given cause of injury, as reported to the Indiana Trauma Registry. Deaths that occurred outside of a hospital are not reported to the registry and are not included. To ensure mortality rankings are based on stable estimates, only classified mechanisms of injury with at least 100 encounters were ranked.



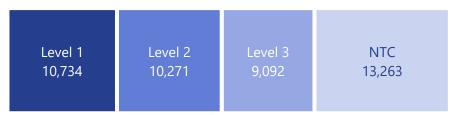
9

² Data are from the Indiana Trauma Registry for calendar year 2024, as of 9/24/2025. Unless otherwise noted, data reflect reported healthcare encounters due to traumatic injury at Indiana acute care facilities, not unique patients.

Level of Trauma Care

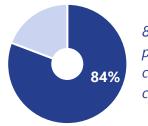
All facilities in Indiana play a role in trauma care. While nearly seven in 10 trauma encounters occurred at designated trauma centers (Level 1, 2, or 3), non-trauma centers (NTCs) also provided care in over 13,000 trauma encounters.

Trauma Encounters by Facility Designation, 2024



Level of Care for Severely Injured Patients

Research has shown that severely injured patients have better outcomes when treated at a tertiary (level 1 or 2) trauma center. Among severely injured patients receiving definitive trauma care in Indiana in 2024, 84% received definitive care at a level 1 or 2 center.⁴



84% of severely injured patients received definitive care at a tertiary care center in 2024.



Emergency Medical Services (EMS)

Emergency medical services (EMS) play a critical role in emergency response and transport of trauma patients, providing over 23,000 transports for initial acute care and over 8,800 interfacility transfers for trauma patients in 2024.⁵

Trauma Outcomes

In 2024, 21% of trauma encounters resulted in patient transfer to another acute care hospital for further care.

After excluding encounters resulting in interfacility transfer, the most common outcome was discharge to home, with about half of patients (51%) discharged to home without services, and



21% of trauma encounters resulted in an interfacility transfer for further care.

another 5% discharged to home with home health services. About one in four patients were discharged to a skilled nursing facility (25%), and another 11% were discharged to an inpatient rehabilitation facility. Just over three percent of patients died, and 1.7% were discharged to hospice. Under 2% were discharged to an intermediate or long-term care facility or another institution.⁶

Trauma Patient Outcomes (Final Treating Facility)



Home without services (51%) Home with home health (5%)



Skilled nursing facility (25%) Inpatient rehabilitation (11%)



Died (3.2%) Hospice (1.7%)



Long-term/intermediate care or other facility (1.9%)

⁶ Less than 1% of patients left against medical advice (AMA) (0.9%) or had unknown disposition (0.6%) (data not shown).



10

⁴ Severely injured is defined as injury severity score of ≥16. Data include only final treating facility encounters.

⁵ Data reflect only initial transports and interfacility transfers to Indiana facilities. Data on Indiana EMS transports to out-of-state receiving facilities are unavailable in the Indiana Trauma Registry.

Strategy 1: Comprehensive Engagement Overview

Comprehensive Engagement

Aim: Engage additional stakeholders and formalize membership to create an inclusive, statewide trauma system.

Strategy 1: Priority Areas and Key Accomplishments, Fiscal Year 2025

Priority Area		Key Accomplishments
✓	Restructure, expand and formalize TRACs	 Expanded TRAC infrastructure to include a leadership Advisory Committee with voting rights Implemented bylaws formalizing official positions including terms
<u></u>	Formalize and expand TCC subcommittees and their membership	 Formalized TCC subcommittee meetings with standardized documentation, operations, and dedicated platforms for information sharing and stakeholder activity Continued recruitment and opportunities for representation from all disciplines of trauma care continuum including EMS
	Formally engage the state, regional trauma leadership, and physiatrists to promote engagement from the rehabilitation workforce	 Emphasized rehabilitation stakeholders as eligible for training and education support Engaged rehabilitation stakeholders through recruitment and membership in TRACs
	Develop a strategy to engage and maintain stakeholder participation within TCC subcommittees and TRACs	 Established meeting cadence and opportunities for ongoing recruitment as TRACs were developed Engage stakeholder participation by offering group sharing opportunities, including education, and regional case study review 100% of trauma centers actively participate in TRACs (26/26) >60% of non-trauma centers actively participate in TRACs (61/99) Continuous membership audit to ensure care continuum representation with emphasis on EMS, non-trauma center, and Health Care Coalition stakeholders



Strategy 2: Accountability Overview

Accountability

Aim: Implement operational guidelines, agreements, and legislation, where appropriate, that holds stakeholders accountable for the creation and maintenance of a successful statewide trauma system.

Strategy 2: Priority Areas and Key Accomplishments, Fiscal Year 2025

Priority Area		Key Accomplishments
	Develop and codify operational guidelines, roles and responsibilities for TRACs	 Developed and implemented operating guidelines for each TRAC including participation and meeting requirements for TRAC members and officers Established a data-driven funding structure to support regional needs within each TRAC: Population per region Square miles per region Number of trauma cases per region Revised ACS verification and state designation "In the Process" application and one year review forms
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Explore developing and implementing regional trauma system plans to improve quality and coordination of statewide care Southern Trauma Regional Advisory Council Strategic Plan FY26 The discrete is intended to be used on a parketic during the first facility and following the council Strategic Plan FY26 The discrete is intended to be used on a parketic during the first facility are of boding placed to the solution Trauma Regional Advisory Council Strategic Plan FY26 The discrete discrete intended to be used the parketic and appear are: The 2 Judge placement will be developed on the parketic and appear are: The 2 Judge placement will be developed on the parketic and parke	 TRACs developed strategic plans with focus on the following areas (implementation FY2026): Registry enhancements/improvements Professional education and training Regional system engagement – non-trauma center support
	Develop and implement a trauma system performance improvement plan	 Developed draft of statewide performance improvement (PI) plan outlining recommendations aimed at targeting key performance indicators to guide priorities and monitor statewide and regional performance over time Identify quality measures Disseminate best practices Provide hospital and systemwide reports



Strategy 3: Trauma Care Access Overview

Trauma Care Access

Aim: Expand regional trauma care access, integrate rehabilitative care and develop disaster plans focused on public health needs.

Strategy 3: Priority Areas and Key Accomplishments, Fiscal Year 2025

Priority Area		Key Accomplishments
	Engage regional TRAC members and hospitals to expand trauma system access in each region	 Elevating trauma center from a Level III to Level II in the Northwest region, anticipated 2027 (Project: Franciscan Health Crown Point Level II Verification) Elevating trauma center from a Level II to Level I in the Northeast region, anticipated 2026 (Project: Parkview Hospital Level I Verification) Recruitment and outreach to non-trauma centers to assess trauma center verification interest and fill gaps in access to care Schneck Medical Center Baptist Health Floyd Columbus Regional Hancock Regional
*	Review and maintain a statewide disaster preparedness plan, focused on public health needs, in coordination with existing plans	 Trauma stakeholders engaged in the development of the Indiana Hospital Preparedness Program (HPP) FY 2024-2028 Strategic Plan required by HHS Administration for Strategic Preparedness and Response (ASPR) Exploring Medical Surge Response Exercise (MSRE) with ten Health Care Coalitions (HCCs) Initial planning to update statewide Mass Casualty Incident (MCI) and Mass Fatality plans in coordination with State Emergency Operations Center (EOC) Subcommittee members participated in two live joint training exercises with Air National Guard and Army Reserve focused on: Search & extraction Medical treatment tents Decontamination



Strategy 4: Emergency Medical Services Overview

Emergency Medical Services

Aim: Streamline patient care, improve EMS registry data and conduct assessments to create an inclusive, efficient EMS system.

Strategy 4: Priority Areas and Key Accomplishments, Fiscal Year 2025

Priority Area		Key Accomplishments
*	Elevate EMS as an essential service to decrease triage and transport times and improve the quality of care statewide	 Montgomery County "Hero's in Arms" pilot program recognized as a statewide model for whole blood on first responder EMS vehicles, inspiring several other Indiana programs (Project: Crawfordsville Fire Dept – Rural Delivery/Whole Blood): Five transfusions in the field, four of which achieved positive outcomes with marked improvement of their Shock Index Supported local hospital with limited supply of whole blood for resuscitation of a patient in hypovolemic shock Hosted five community blood drives securing 100+ blood products District 10 pilot opportunity to improve patient outcomes targeting hypothermia reduction in trauma patients (Project: Deaconess Health System – D10 EMS Partnership for Quality Improvement): 15 EMS transport agencies received blanket warmers to support care delivery
	Explore methods to streamline patient triage and trauma care within Indiana and across state lines	 EMS Hospital Summit – engaged stakeholders to explore challenges of interfacility transfers, particularly acute and trauma patients, and developed recommendations to address challenge areas Protocol standardization - diversion Interoperability, data sharing enhancements Interfacility transfer coordination Workforce, scope of practice, burnout Regional Medical Operations Coordination Center IDHS utilized the RAPID pilot program to explore regionalized interfacility transfer support, focusing on critical access facilities in the north, central and southeast regions of the state where need appeared strongest. While utilization equated to less than one transport a day, survey and data analysis indicated facilities have a reliable primary plan for transfers. However, if a barrier occurs in that pathway, there is no safety net – the pilot program provides a foundation for further initiatives



Strategy 4: Emergency Medical Services Overview

 In partnership with DHS-EMS, began developing recommendations and plans to establish a statewide RMOCC (Regional Medical Operations Coordination Center) for resource monitoring, patient transport, transfers, load balancing and data oversight



Complete the on-going EMS workforce assessment and evaluate the findings to determine an action plan for Indiana

 DHS-EMS improved recruitment and certification improvements. EMS certifications increased from 24,500 clinicians to over 26,000 clinicians through 2025

"This initiative was about giving first responders the tools they need to provide the best possible care, from the scene to the hospital. Preventing hypothermia is critical, especially in trauma care, where it can lead to the 'triad of death' – hypothermia, coaqulopathy and acidosis."

-Melissa Hughes, Deaconess EMS Coordinator





Strategy 5: Data & Performance Improvement Overview

Data & Performance Improvement

Aim: Improve data quality and enhance data interoperability to identify opportunities for performance improvement (PI) within the trauma system.

Strategy 5: Priority Areas and Key Accomplishments, Fiscal Year 2025

Priority Area		Key Accomplishments
	Develop a comprehensive approach to data quality	 Developed data quality reports and enhanced trauma registry validation rules to provide timely, comprehensive feedback to hospitals Established key data quality indicators and tracking mechanisms to monitor data quality issues and trends
	Evaluate trauma registry data to establish outcomes and identify gaps	 Developed comprehensive reports for statewide and regional trauma stakeholders on trauma incidence, care and outcomes Launched a dashboard to improve hospitals' ability to access, explore and monitor trauma data over time
	Engage stakeholders in data quality processes and development of performance improvement indicators	 Engaged the trauma registry subcommittee and hospital stakeholders in developing and modifying updated data quality processes, data reports, and dashboards Developed and shared statewide and regional report findings with TCC, TRAC, and trauma stakeholders Regional Quality Improvement pilot project between six community hospitals and a Level I facility targeting improved trauma registry data quality and sharing best practices for trauma system development processes (Project: IU Health - Coordination of Care): Level 1 pediatric facility instituted an autoaccept policy for participating community hospitals Two participating community hospitals implementing a radiographic protocol for geriatric falls Registrar mentorship with other facilities



Strategy 5: Data & Performance Improvement Overview



Offer trauma registry education training programs for healthcare personnel

- Developing a free trauma registry training course, anticipated December 2025 (Project: Indiana Trauma Network – Trauma Registry Engagement):
 - 37 students completed registry education/training (e.g., ICD-10 or AIS-15)



Strategy 6: Prevention, Education, and Outreach Overview

Prevention, Education, and Outreach

Aim: Increase education for trauma system personnel, engage additional stakeholders, and report and implement targeted injury prevention programs.

Strategy 6: Priority Areas and Key Accomplishments, Fiscal Year 2025

Priority Area		Key Accomplishments
	Engage a variety of stakeholders to develop and evaluate targeted injury prevention programs	 Youth violence prevention program expanded to additional hospital, a community resource center and multiple schools to increase coverage in areas of opportunity (Project: Eskenazi Health – Prescription for Hope): >35 youth enrolled in violence prevention program Trained four violence prevention specialists Firearm safety and suicide prevention program aimed at education and training on safe storage where children are present (Project: IU Riley / IN Chapter, American Academy of Pediatrics – Store-It-Safe): Trained 52 pediatric providers across six counties to educate on safe storage in homes where children are present 2000 depression screenings administered 1850 suicide screenings administered 120 firearm lockboxes distributed Distributed statewide survey to collect and inventory injury prevention programming including establishing partnerships within TRACs
	Increase education and training for personnel across the full continuum of trauma care	 Statewide Professional Education and Training (Project: Indiana Hospital Association – System Development): 100% of trauma centers participated in education/training (26/26) >50% of non-trauma centers participated in education/training (50/99) >1600 students statewide 502 seats for TCAR/PCAR 405 TNCC and 10 TNCC instructors 280 ENPC and 7 ENPC instructors 140 ATLS and 10 recertifications 65 ATCN 165 trained with cadaver lab 32 RTTDC 25 BDLS



Strategy 6: Prevention, Education, and Outreach Overview



- Nine vent trainings
- Rural Professional Education and Training (Project: Rural Health Innovation Collaborative, RHIC):
 - Conducted 11 non-trauma center trainings
 - 165 rural/critical access health care professionals trained with high fidelity simulation
- Falls prevention program and toolkit development intended to educate trauma stakeholders and improve outcomes associated with older adult falls (Project: IU Health - Falls Prevention):
 - Connected with 82 provider facilities distributing >250 Falls Prevention Toolkits across multiple counties
 - Supported safety equipment modifications to 175 at-risk older adults
 - Conducted 14 community-based falls prevention education events with 167 attendees
- Increased capacity of Stepping-On Falls Prevention programming by certifying 16 new statewide facilitators



Leverage injury epidemiology data and conduct surveys among hospital-based clinical staff and key constituents to implement targeted injury prevention efforts

- Published county injury reports for all 92 counties to provide a local snapshot of leading causes of injury, death, hospitalization and ED visits
- Utilized epidemiologic data to guide Health First Indiana injury prevention planning and programming among 84 counties focused on injury and overdose prevention including coordination with hospitals



Create and implement a plan to routinely educate and inform the public of the status of injury prevention activities

- Developed and published multiple <u>data briefs</u> on a variety of injury topics
- Implemented a social media campaign for National Trauma Awareness Month
 - >12,000 impressions
- Developing general injury dashboard to reflect Health First Indiana injury prevention priorities
- Held first annual statewide Trauma and Emergency Medicine Symposium
 - >250 participants
 - >100 completed professional development training



Strategy 6: Prevention, Education, and Outreach Overview





"This was a really good training, period. We plan to add additional education and process about Shock Index for our ED staff."

-Randy Barnett, Clinical Educator, Greene County Hospital





Special thanks to:

Lindsay Weaver, MD, FACEP – Indiana State Health Commissioner

Eldon Whetstone, JD – Assistant Commissioner, Health and Human Services

Robert Davis – Director, Office of Data and Analytics

Brian Busching, MPH – Director, Division of Trauma and Injury Prevention

Lauren Milroy, MPH – Surveillance/Evaluation Director, Division of Trauma and Injury Prevention

Ramzi Nimry – Program Director, Division of Trauma and Injury Prevention

Vince Benchino, MBA, RD – Clinical Director, Division of Trauma and Injury Prevention

