



Indiana State Trauma Care Committee

August 17, 2018



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov



Introductions & approval of meeting minutes



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov



Traumatic Brain Injury

Dr. Lance Trexler, *Executive Director*
Rehabilitation Hospital of Indiana



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov



Indiana State
Department of Health

Trauma and Injury Prevention

Indiana TBI State Partnership
Program Mentor State Funding Opportunity
Grant No. 90TBSG0034-01-00
June 1, 2018 - May 31, 2021

Improving Health
Outcomes following
Traumatic Brain Injury
through Building a
TBI-informed System of
Services and Supports
and Resource
Facilitation



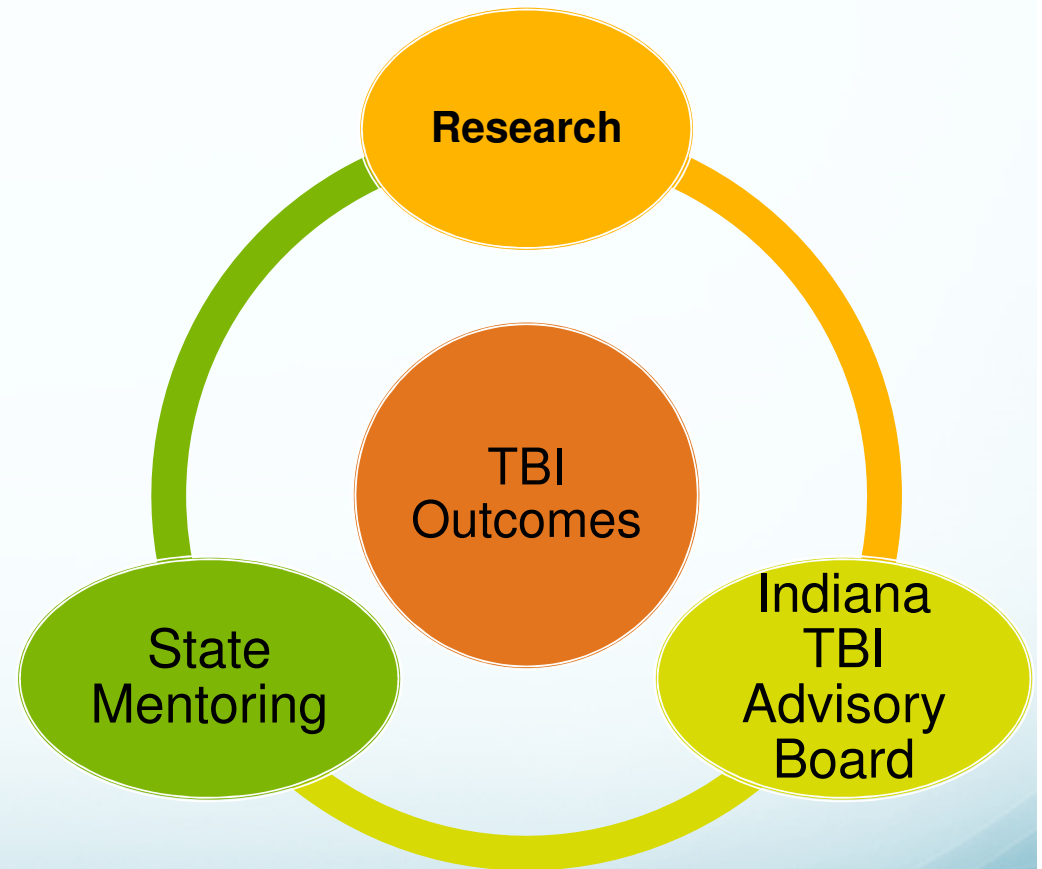
 Rehabilitation
Hospital of Indiana
RESOURCE FACILITATION DEPARTMENT

ACL Grant 2018 - 2021

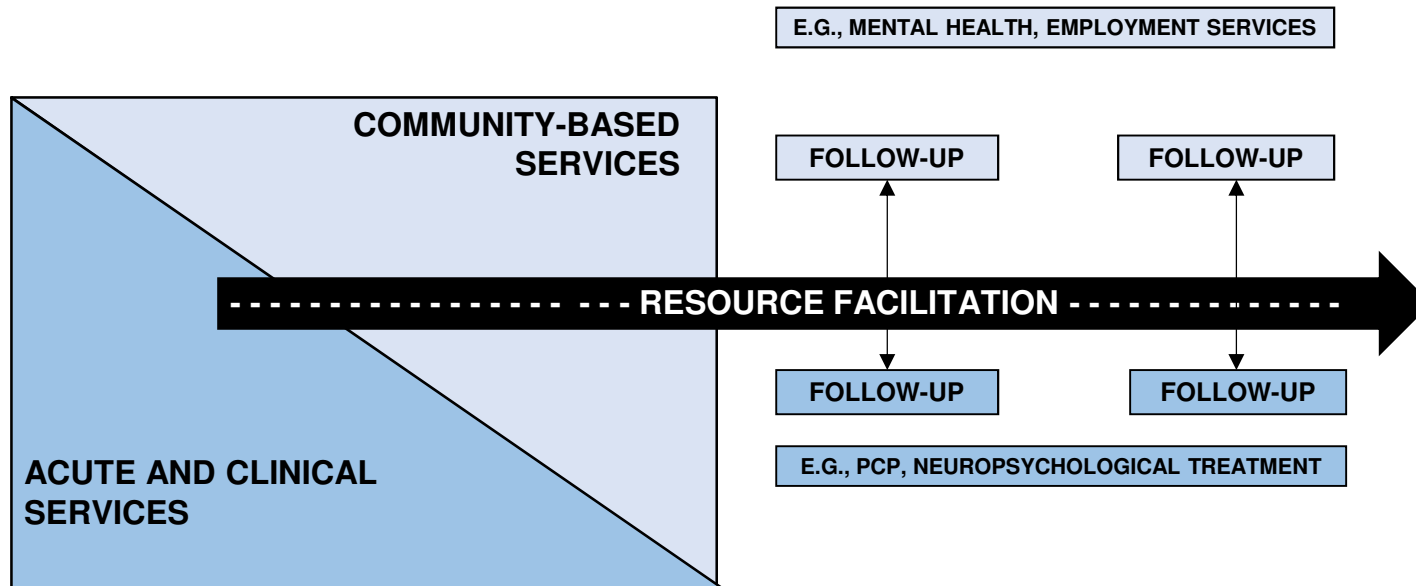
- ISDH Lead Agency
- Goal: improve health care outcomes following TBI
 - Prevent substance abuse, especially opioid misuse
 - Prevent institutionalization, including incarceration and out-of-state residential placement
- Strategies:
 - Research on the Efficacy of Resource Facilitation for Health Outcomes
 - Indiana TBI Advisory Board
 - Mentoring other States

ACL Grant: Project Leadership and Organization

- Dana Fink, ACL: Federal Project Officer
- Katie Hokanson, ISDH: Project Director
- Lance E. Trexler, PhD, RHI: Principal Investigator
 - Devan Parrott, PhD, RHI: Research
 - Laura Trexler, OTR, RHI: Resource Facilitation, Indiana TBI Advisory Board, and Mentoring



Resource Facilitation: Acute to Chronic Care Continuum



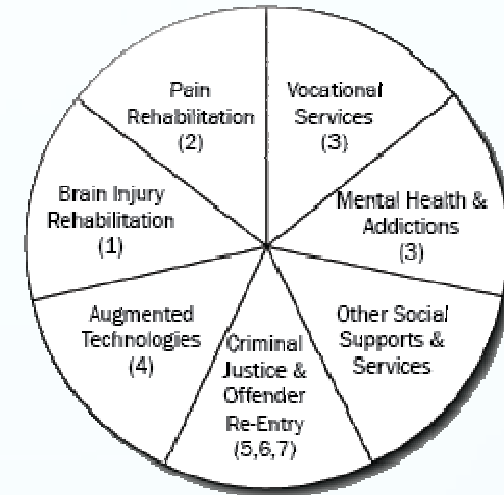
RF Model

Methodist
Trauma Center

St. Vincent's
Trauma Center

TBI Collaborative Care Team

TBI Integrated Care Pathway

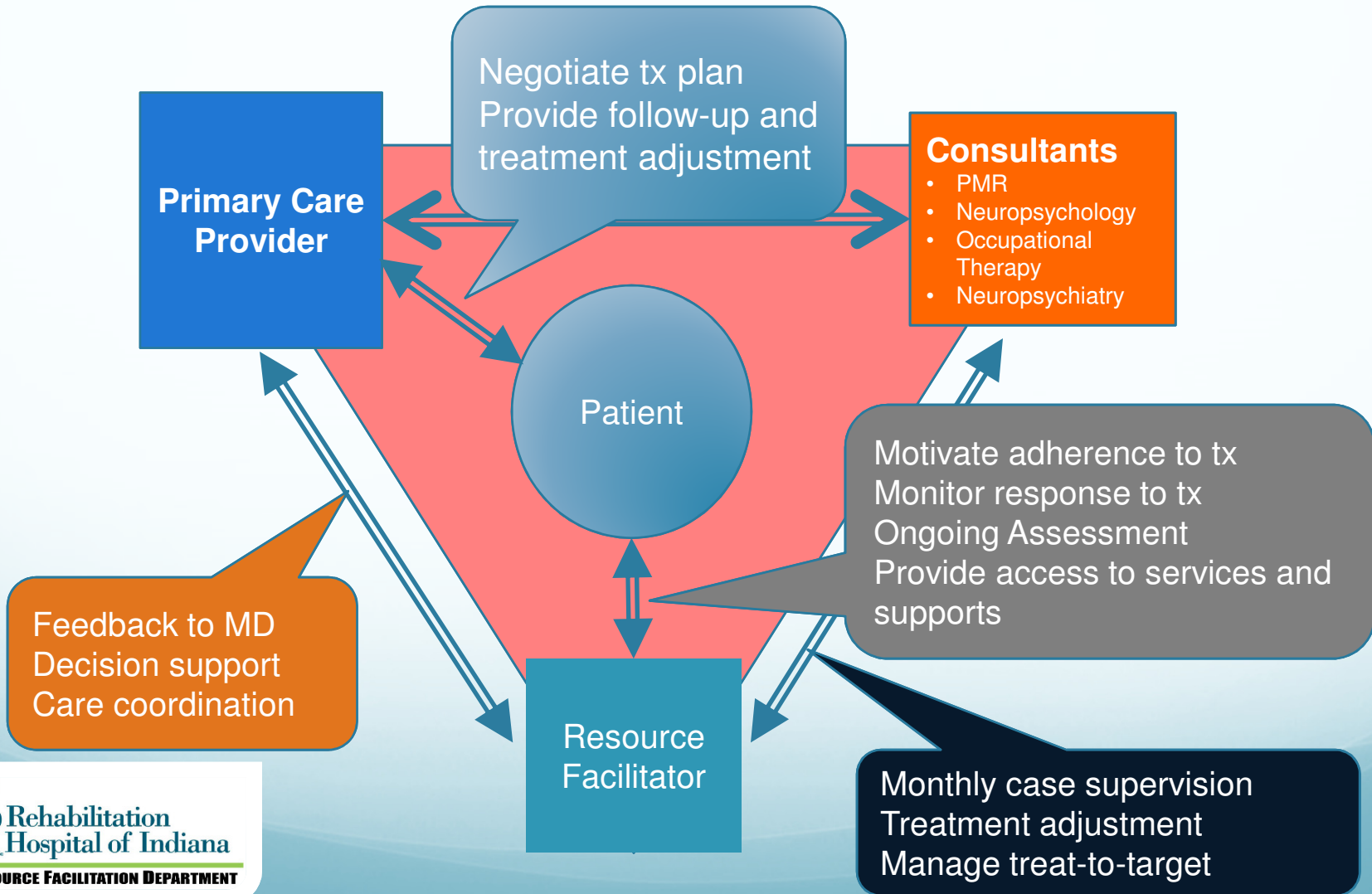


1. Rehabilitation Hospital of Indiana
2. Eskenazi Health
3. Micktown Mental Health
4. Easterseals Crossroads
5. Offender Re-entry Program
6. Prosecutors Office
7. Marion County Problem Solving Courts

BEAM = **B**asic **E**veryday **A**ctivity **M**onitoring: *Cloud-based interface for monitoring individualized health care metrics for surveillance of risk factors and RF outcome measures*

Collaborative Care + RF for TBI Health Outcomes

Trexler, Hammond, Parrott, Trexler, and Ibarra; Indiana ACL grant (2018 – 2021)



ACL Grant Team

- Katie Hokanson, MHA, Director, Trauma and Injury Prevention, ISDH
 - Jeremy Funk, MS, Trauma and Injury Epidemiologist
- Devan Parrott, PhD, Director, RHI Research, Training and Outcomes Center
 - Data Analyst
 - Research Associate
- Laura Trexler, OTR, ACL Grant Resource Facilitation Program Manager
 - 2 Resource Facilitators

ACL Grant Consultants

- Flora Hammond, MD, FACRM, Chair, Department of PMR, IU School of Medicine and RHI.
- Summer Ibarra, PhD, Clinical Director, RHI Departments of Rehabilitation Neuropsychology and Resource Facilitation
- Jess Fann, MD, MPH, Professor, Department of Psychiatry and Behavioral Sciences, University of Washington
- Stephen Sutter, President, CreateAbility Concepts, Indianapolis



ACL Grant: Research

- Hypotheses:
 - Primary: Subjects who receive RF will demonstrate better health outcomes
 - Health-related quality of life
 - Level of disability
 - Secondary:
 - Subjects who receive RF will demonstrate less opioid misuse
 - Subjects who receive RF will have lower incidence of incarceration
- Methods:
 - RCT with blinded outcome assessors at end of treatment and at 3-month follow-up
 - Prospectively recruit 150 TBI from the trauma center
 - Randomize 100 to RF and 50 to follow-up as usual
 - 12 months of RF and 3 month follow-up

ACL Grant: Indiana TBI Advisory Board

- Goals for the Board
 - Indiana TBI State Plan
 - TBI Needs and Resources Survey
 - Input on ACL Grant and Sustainability
- Task Forces:
 - Consumer Task Force
 - Criminal Justice Task Force

ACL Grant 2018 - 2021: Mentoring

- Annual National Webinar on Resource Facilitation
- Workgroups:
 - Using Data to Connect People to Services
 - Transition and Employment

Traumatic Brain Injury and Opioid Addiction:

**An Unrecognized Risk, Consequence,
and Barrier to Effective Treatment**

Lance E. Trexler, PhD, FACRM
Rehabilitation Hospital of Indiana
Indiana University School of Medicine

Indiana Prevalence of Traumatic Brain Injury

- 2,472 Annual hospitalizations for just Traumatic Brain Injury
- 66,410 Hoosiers living with Disability associated Traumatic Brain Injuries
- CDC has determined that moderate to severe brain injury is a lifelong condition

Economic Impact of Resource Facilitation: Workforce Re-entry Following Traumatic Brain Injury, Srikant Devaraj, PhD, Michael Hicks, PhD, Brandon Patterson Graduate Research Assistant, Center for Business and Economic Research, Miller College of Business, Ball State University, February 21, 2017.

Narcotics Prescription During Inpatient TBI Rehabilitation

- TBIMS Acute TBI Rehabilitation (10 sites; n = 2,103)
- 72% sample received narcotics:
 - » Highest frequency of medications studied
- 1st 2 days: 55%
- Last 2 days: 45%
- % in sample received
 - » Scheduled: 26%
 - » PRN: 63%
- Used equally across FIM groups

received in sample 2103;
% received among the other agents

oxycodone (864; 37%)
acetaminophen (APAP) + hydrocodone (688; 30%)
morphine (205; 9%)
fentanyl (145; 6%)
tramadol (142; 6%)
hydromorphone (85; 4%)
propoxyphene N + APAP (84; 4%)
codeine (48; 2%)
methadone (44; 2%)
APAP + codeine (14; <1%)
meperidine (4; <1%)
buprenorphine (4; <1%)
propoxyphene N (4; <1%)

Opioids and TBI: Discharge Data from RHI

- One year of discharges from October 22, 2016 to October 22, 2017
- Diagnosis of TBI
- Sample size = 232
- 149 (64%) on an opioid
- 47 (31%) on multiple opioids



DEATHS DUE TO ACCIDENTAL POISONINGS

- N = 14,398 with TBI - 1,519 died (11%) - 4.4% (67) AP deaths
- **AP death 11x more likely than general population**
- Associated factors after controlling for age:
 - non-minority
 - previously married
 - EtOH/drug problem use (PTI & LKF)
 - > EtOH use
 - Better function
 - living alone
 - private residence
 - arrests in past year

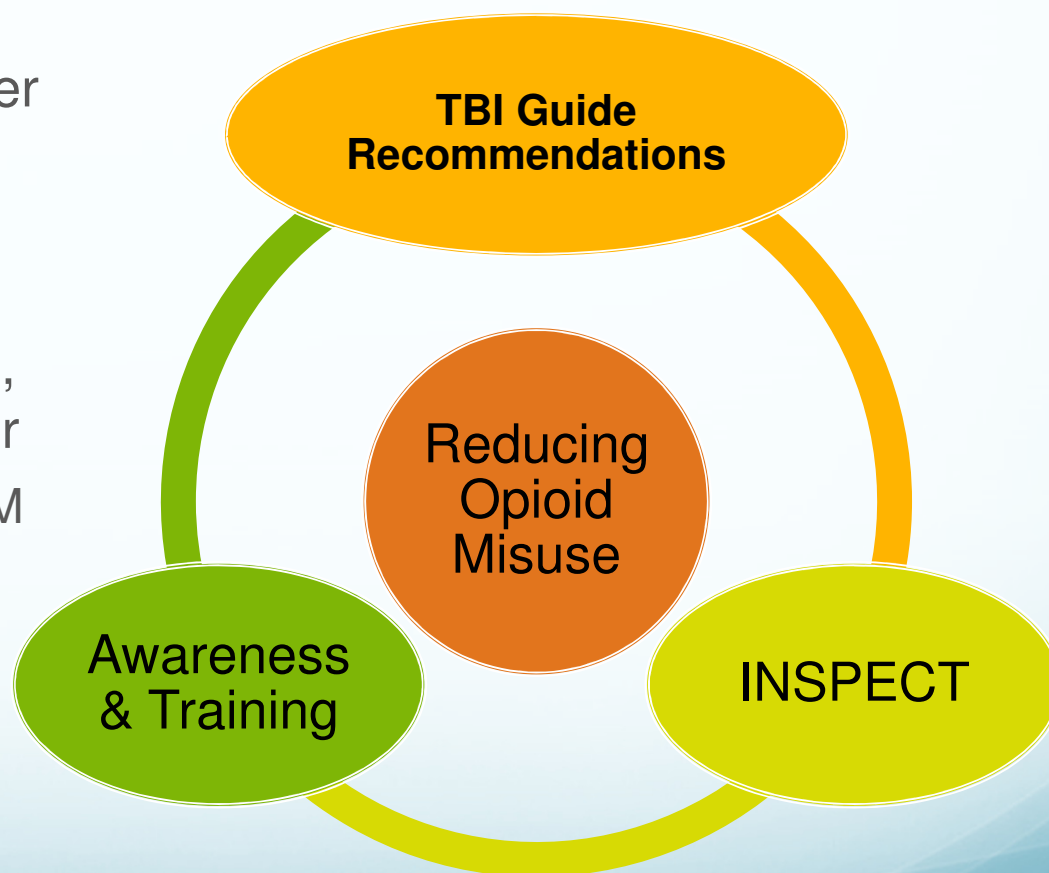
n	Accidental poisoning by:
14	Unspecified drug
13	Opiates and related narcotics*
11	Analgesics antipyretics and antirheumatics*
6	Methadone*
7	Psychostimulants
6	Alcohol +
2	Other specified analgesics and antipyretics*
2	Local anesthetics
1	Aromatic analgesics, not elsewhere classified*
1	Other specified sedatives and hypnotics
1	Agents affecting blood constituents
1	Agents acting on muscles & respiratory system
1	Other specified drugs
1	Other specified gases and vapors

Traumatic Brain Injury is a Significant and Unrecognized Risk Factor for Opioid Misuse

- People with TBI have a high rate of premorbid substance abuse
- TBI often results in headache or orthopedic injuries for which they are prescribed opioids (70%)
- TBI frequently results in impairment of:
 - Memory – people forget that they have taken their pain medication, and therefore take it again.
 - impaired judgement, self-regulation, and impulsivity which may lead to overuse of pain medication
- Prescribers unaware they are prescribing to someone with a TBI and the implications

CDC-ISDH Project Leadership

- Rachel Kossover-Smith, CDC: Federal Project Officer
- Katie Hokanson, ISDH: Project Director
- Lance E. Trexler, PhD, RHI, IUSM: Principal Investigator
 - Flora Hammond, MD; IUSM and RHI
 - John Corrigan, PhD; Ohio State University
 - Shashank Davè, MD; IUSM and RHI



CDC Rapid Response Project: Reducing Opioid Misuse and Overdose in People with TBI

- **Project 1:** Development of TBI-Opioid Practice Recommendations
 - Overview of TBI as a risk factor for opioid misuse
 - How to screen for TBI
 - Recommendations for managing opioids
 - Where to find brain injury services and supports
- **Project 2:** Insert TBI screening into INSPECT:
 - Promote awareness of how has TBI
 - Prospective surveillance
 - Analysis of prescribing trends
 - Ongoing training and education



CDC Rapid Response Project: Reducing Opioid Misuse and Overdose in People with TBI

Project 3: Training and Education to Disseminate TBI-Opioid Practice Guidelines

- One day (live, recorded or both) conference for
 - Prescribers, health care professionals, especially TBI
 - Mental health and SUD providers
 - Criminal justice
 - Local Coordinating Councils
- One hour overview webinar
- Publication of Recommendations in peer-reviewed journal
- Awareness of the increased risk for opioid misuse following TBI
- Training providers on:
 - Screening and identification of TBI,
 - How to upload the results of the OSU-TBI-ID into INSPECT,
 - How to check for the history of TBI as a risk factor in INSPECT,
 - Detailed review of the TBI-OPR, and
 - Where to find brain injury resources and supports.

CDC Rapid Response Project: Reducing Opioid Misuse and Overdose in People with TBI

- **Project 4:** TBI and Opioid Products
 - Factsheets
 - Social media
 - Emails
- **Project 5:** Opioid Surveillance through INSPECT
 - OSU-TBI-ID utilization
 - Prevalence of TBI in INSPECT and where
 - Impact of training on prescribing
 - Pilot data for future funding



Questions or Comments?

Funding for this presentation was made possible (in part) by the Administration for Community Living. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.



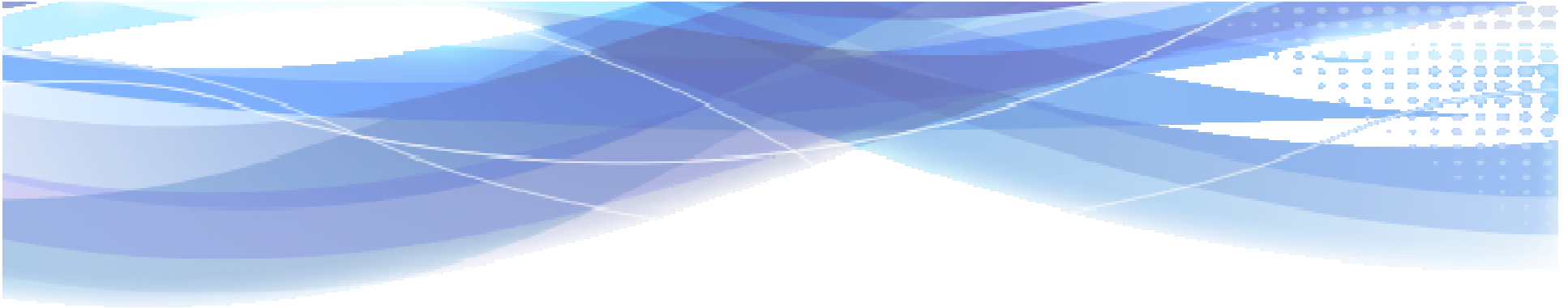
Updates

Katie Hokanson, *Director of Trauma and Injury Prevention*



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Department of Health

Email questions to: indianatrauma@isdh.in.gov



- Congratulations Memorial Hospital & Health Care Center, Jasper!
 - Level III Adult Verification.

Division staffing updates

- Madeline Tatum
 - Records Consultant
- No longer with the division
 - Dawn Smith
 - Public Health Associate



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28

Email questions to: indianatrauma@isdh.in.gov

Stroke center list

- IC 16-31-2-9.5
 - Compile & maintain a list of Indiana hospitals that are stroke certified.
 - <https://www.in.gov/isdh/27849.htm>



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Hospital Name	Location	Level of Stroke Certification	Name of Certifying Entity	Transfer Agreement With:
Baptist Health Floyd	New Albany	Primary Stroke Center	Healthcare Facilities Accreditation Program	Baptist Health Louisville
Bluffton Regional Medical Center Lutheran Health Network	Bluffton	Primary Stroke Center	The Joint Commission	
Community Hospital Anderson	Anderson	Advanced Primary Stroke Center	The Joint Commission	St. Vincent Hospital and Health Care Center, IU Health Methodist



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Firework injury reporting

- No longer required!
 - Starting July 1, IC 35-4-7-7 has eliminated the requirement of fireworks injuries reporting.

Email questions to: indianatrauma@isdh.in.gov



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Who is still reporting?

1. Deaconess-Gateway ED
2. Community-Gary
3. Jay Co Hospital
4. St. Joseph-Mishawaka
5. St. Vincent Anderson
6. IU Health - Riley Hospital for Children
7. Dukes Memorial (2)
8. RediMed, Fort Wayne
9. Adson Health Network
Email questions to IndianaTulma@isdh.in.gov
10. FPN Express Care
11. IU Health Riley Physicians-Bedford
12. Lutheran Health-St. Joe
13. IU Urgent Care-Lafayette
14. Clark Memorial Hospital
15. Eye Center of So IN
16. St. Catherine East Chicago
17. LaPorte Hospital
18. Franciscan Express Care
19. St. Vincent Urgent Care
20. Lutheran ER Fort Wayne
21. Community Hospital South
22. Community Hospital North
23. IU Health Arnett Hospital



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Who is still reporting?

24. Franciscan Health
25. Parkview-Whitley
26. Eskenazi Pediatric Outpatient
27. IU Health - Ball Memorial
28. St. Vincent-Warrick
29. Hancock Immediate Care
30. MedCheck-Greenwood
31. Immediate Care
32. Elkhart Urgent Care
Email questions to: indianatrauma@isdh.in.gov
33. St. Vincent Noblesville
34. Hendricks Regional Health
36. Franciscan Express Care
37. Porter Regional Hospital
38. Schneck Medical Center
39. Baptist Health-Floyd
40. Franciscan-Hammond
41. Major Health Partners
42. Franciscan Health - Crown Point



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Indiana State Department of Health

It's a team effort: Creating a county's overdose rapid response plan

**Tuesday, August 21
10-11 a.m. (EDT)**

The Indiana State Department of Health is hosting a live webcast on the Overdose Response Pilot Project, a program that assesses local health department (LHDs) and county stakeholder capabilities and response readiness for a drug overdose event. An overview of the project will be provided, as well as successes, challenges, takeaways, and information about the new open grant cycle. This webcast will be specifically tailored to LHDs in Indiana.



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Labor of Love Summit 2018

Healthy Babies Start with Healthy Moms

Race to 2024

Wednesday, November 14, 2018

JW Marriott | 10 S. West Street, Indianapolis, IN 46204

#INlaboroflove

Email questions to: indianatrauma@isdh.in.gov

Midwest Injury Prevention Alliance (MIPA) Summit

- Save the Date!
 - November 29 & 30



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Email questions to: indianatrauma@isdh.in.gov

MIPA Summit (continued)

Time	Session			Location
8:00 a.m. – 9:00 a.m.				
9:00 a.m. – 9:15 a.m.				
9:15 a.m. – 10:15 a.m.				
10:15 a.m. – 10:30 a.m.				
10:30 a.m. – 12:00 p.m.	<p><i>Talking to Diverse Communities/Technology Track</i></p> <p>Location:</p>	<p><i>Suicide Track</i></p> <p>Location: <i>General Session</i></p>	<p><i>Prescription Drug Overdose</i></p> <p>Location:</p>	
12:00 p.m. – 1:30 p.m.	Lunch & Networking Break			
1:30 p.m. – 3:00 p.m.	<p><i>Preparing for a Career in Injury Prevention</i></p> <p>Location:</p>	<p><i>Occupational Injury</i></p> <p>Location:</p>	<p><i>Older Adult Falls</i></p> <p>Location: <i>General Session</i></p>	
3:00 p.m. – 3:15 p.m.				
3:15 p.m. – 4:30 p.m.				
4:30 p.m. – 5:30 p.m.				

MIPA Summit (continued)

Time	Session		Location
8:00 a.m. – 9:00 a.m.			
9:00 a.m. – 9:15 a.m.			
9:15 a.m. – 10:15 a.m.			
10:15 a.m. – 10:30 a.m.			
10:30 a.m. – 12:00 p.m.	<p data-bbox="646 915 863 938"><i>Distracted Driving Track</i></p> <p data-bbox="709 1068 793 1091"><i>Location:</i></p>	<p data-bbox="1226 915 1381 938"><i>Child Injury Track</i></p> <p data-bbox="1192 1068 1415 1091"><i>Location: General Session</i></p>	<p data-bbox="1633 915 1814 938"><i>Violence Prevention</i></p> <p data-bbox="1682 1068 1766 1091"><i>Location:</i></p>
12:00 p.m. – 2:00 p.m.	<p data-bbox="617 1146 1016 1169"><i>LUNCH & CLOSING KEYNOTE PRESENTATION:</i></p>		

IPAC & INVDRS

- Remaining 2018 meeting date:
 - September 21
 - Discussing Stop the Bleed at IPAC

Email questions to: indianatrauma@isdh.in.gov



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Division grant activities

- Administration for Community Living (ACL) – Traumatic Brain Injury (TBI).
 - Awarded & funded!
 - Partnering with the Rehabilitation Hospital of Indiana.
- ACL – Evidence-Based Falls Prevention Program.
 - Not funded.
- Comprehensive Opioid Abuse Site-based Program (COAP)
 - Category 6: Public Safety, Behavioral Health & Public Health Information-Sharing Partnerships.

Email questions to: indianatrauma@isdh.in.gov



Indiana State
Department of Health

Division grant activities

- Opioid Crisis response grant
 - Assisted Preparedness division.
- HRSA – Rural Communities Opioid Response Program
 - Partnered with Fayette County.
 - Worked with ISDH HIV/STD/hepC division.
 - Submitted application end of July.
- HRSA – Partnership for Disaster Health Response
 - Dr. Box provided letter of support from ISTCC/ISDH.
- BJA STOP School Violence Prevention and Mental Health Grant
 - Submitted application mid-July.

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INSPECT Integration with EMRs



INSPECT Integration Initiative - Integration Request Form

INSPECT STATEWIDE INTEGRATION ANNOUNCEMENT

Effective August 24, 2017 Indiana will begin steps to implement a statewide, comprehensive platform for healthcare professionals to review patients' controlled-substance prescription history more quickly and efficiently. This platform supports Indiana's Prescription Drug Monitoring Program (INSPECT) and transfers data into electronic health records (EHR) and pharmacy management systems. Statewide integration of the INSPECT platform is a key component of Indiana's ongoing efforts to address the opioid crisis.

Integration Process:

1. Follow the instructions and complete ALL of the following (*only authorized*

decision makers at the healthcare entity should fill out these forms):

- ✓ Integration Request Form (located on the right of this page)
- ✓ End User License Agreement (will be emailed to you within 24 hours)
- ✓ PMP Gateway Licensee Questionnaire (will open in a new window)

Primary Point of Contact

* indicates required field

First Name*

Last Name*

Primary Point of Contact Email Address*

Job Title

Phone Number*

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Resources for Optimal Care of the Injured Patient

stakeholder comment

- Comment portal: <https://www.facs.org/quality-programs/trauma/vrc/stakeholder-comment>
- Monthly ACS webinars on this topic. Changes are presented.
 - Contact COTVRC@facs.org to be added to the listserv.
- Link to the previous webinars
 - Educational webinars and tutorials → monthly trauma center Q&A Webinars.
 - <https://www.facs.org/quality-programs/trauma/vrc/resources>

Email questions to: indianatrauma@isdh.in.gov

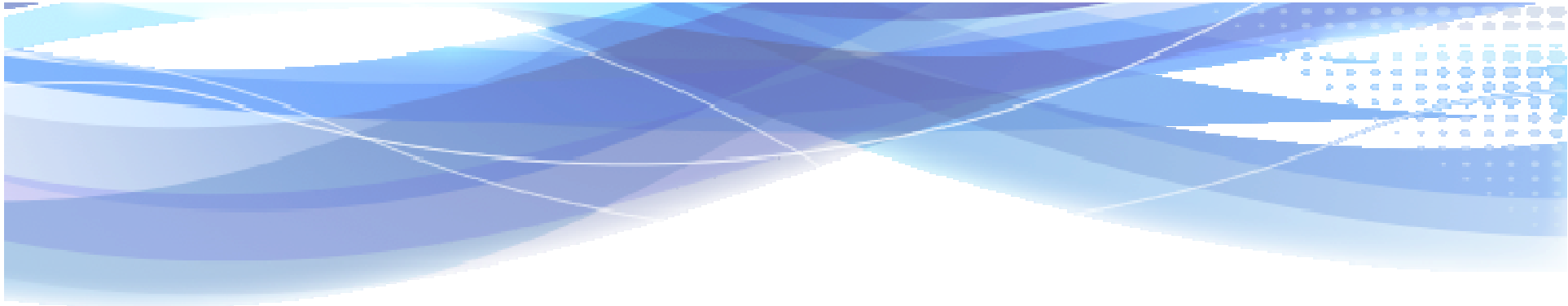
ACS Clinical & Technical Revisions - Trauma Registry

- 2019 – first year ACS will make BOTH clinical and technical transitions.
- Trauma Vendor Alliance
 - Creating a set of state-specific data collection “channels”.
 - Currently gathering all expected state-specific clinical revisions for 2019.

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“In the Process” of ACS Verification Trauma Centers

Facility Name	City	Level	Adult / Pediatric	“In the Process” Date*	1 Year Review Date**	ACS Consultation Visit Date	ACS Verification Visit Date
Elkhart General Hospital	Elkhart	III	Adult	03/15/2018	April 2019	N/A	May 2019

*Date the EMS Commission granted the facility “In the process” status

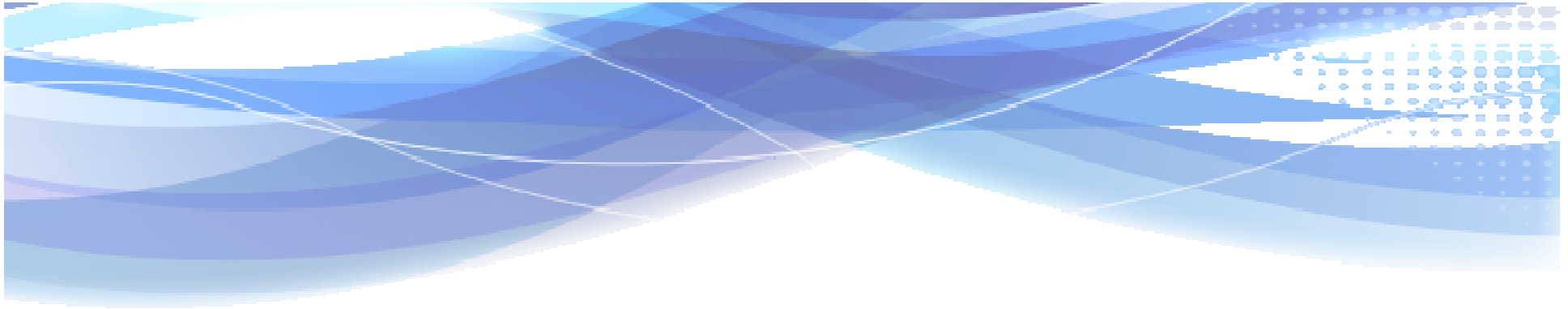
**Date the Indiana State Trauma Care Committee (ISTCC) reviewed/reviews the 1 year review documents. This date is based on the first ISTCC meeting after the 1 year date.

Facility is past the two year mark for their “In the Process” status.



**Indiana State
Department of Health**

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Regional Updates

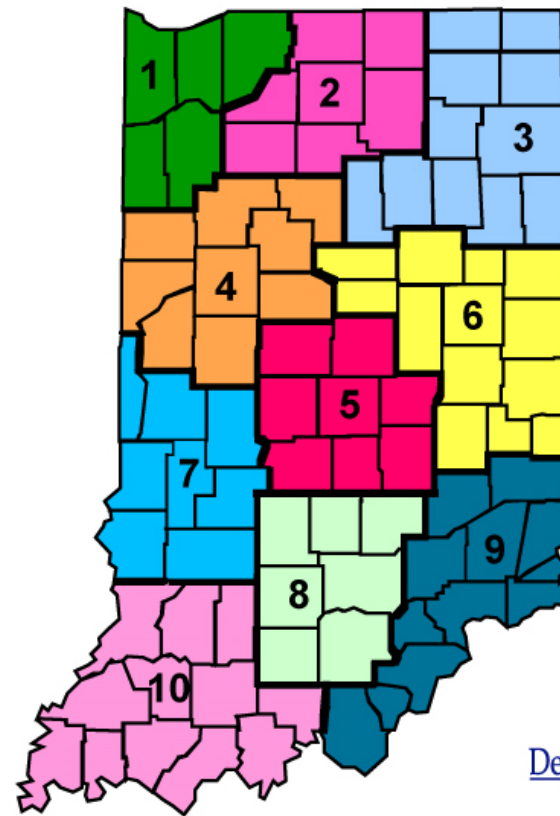


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Regional updates

- District 2
- District 3
- District 4
- District 6
- District 7
- District 8
- District 10



Email questions to: indianatrauma@isdh.in.gov



EMS Medical Director Updates

Dr. Michael Kaufmann, *EMS Medical Director*
Indiana Department of Homeland Security



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

State of the State: EMS/IDHS

Indiana State Trauma Care Committee Update
August 2018

Michael A. Kaufmann, MD, FACEP, FAEMS

EMS Medical Director
Indiana Department of Homeland Security





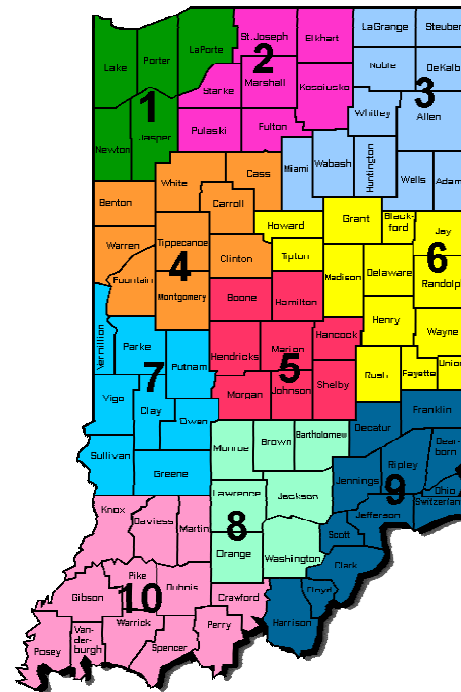
EMS Certifications/Licensure

- Training Institutions 117
- Supervising Hospitals 91
- Providers 833
- Vehicles 2,600
- Personnel
- EMR 4,975
- EMT 14,133
- Advanced EMT 578
- EMT- Paramedic 4,408
- Primary Instructor 566

EMS System Metrics

- Total Ambulances in state 2,022
 - D1 – 363
 - D2 - 145
 - D3 - 111
 - D4 - 120
 - D5 - 492
 - D6 - 301
 - D7 - 84
 - D8 - 49
 - D9 - 245
 - D10 - 112
- Total ALS non-transport vehicles 584
- Total Rotocraft statewide 52

333 Provider Agencies required to report into ImageTrend





EMS Registry

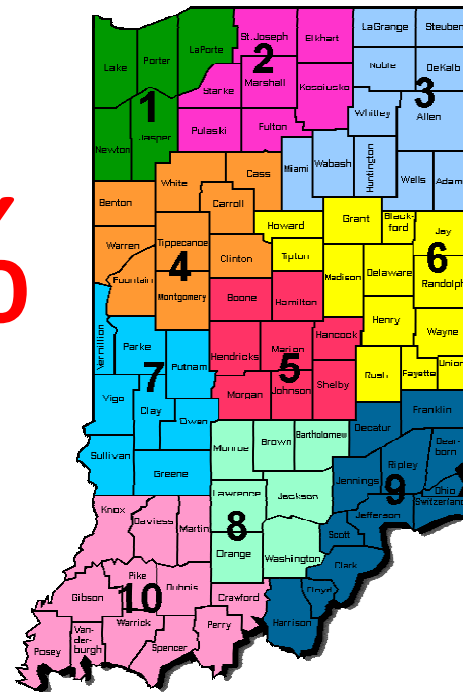
- Historical scarcity of prehospital patient care data to support effective decision-making.
- NEMESIS was designed to provide a uniform national EMS dataset, with standard terms, definitions and values, along with a national EMS database containing aggregated data from all states for certain data elements.
- You see a patient and enter data into your ePCR.
- ePCR uploads to ImageTrend (State EMS Registry)
- State EMS Registry uploads to NEMESIS

EMS System Metrics

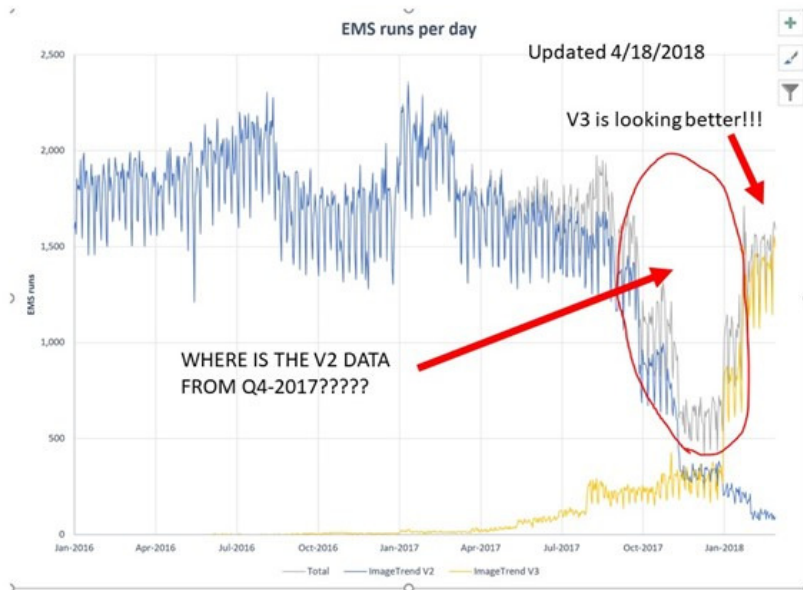
333 Provider Agencies required to report into ImageTrend

- Providers NOT reporting by district.
 - D1 – 7/23 NOT reporting
 - D2 – 4/35 NOT reporting
 - D3 – 5/26 NOT reporting
 - D4 – All reporting (23/23)
 - D5 – 14/67 NOT reporting
 - D6 – 10/58 NOT reporting
 - D7 – 2/14 NOT reporting
 - D8 - 3/8 NOT reporting
 - D9 – 9/35 NOT reporting
 - D10 – 2/17 NOT reporting
- Total ALS non-transport vehicles 584
- Total Rotocraft statewide 52

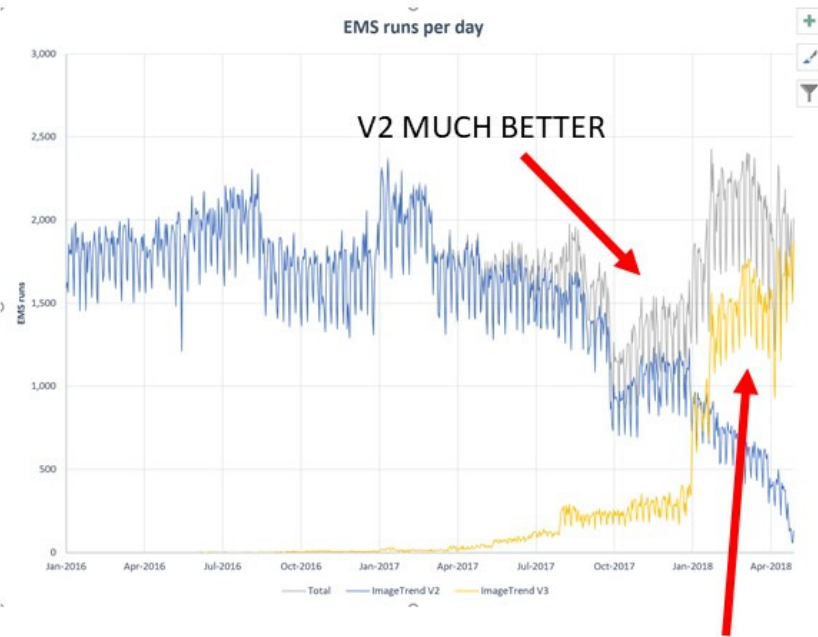
84%



4/18/2018



5/16/2018



V3 MUCH IMPROVED!!!!

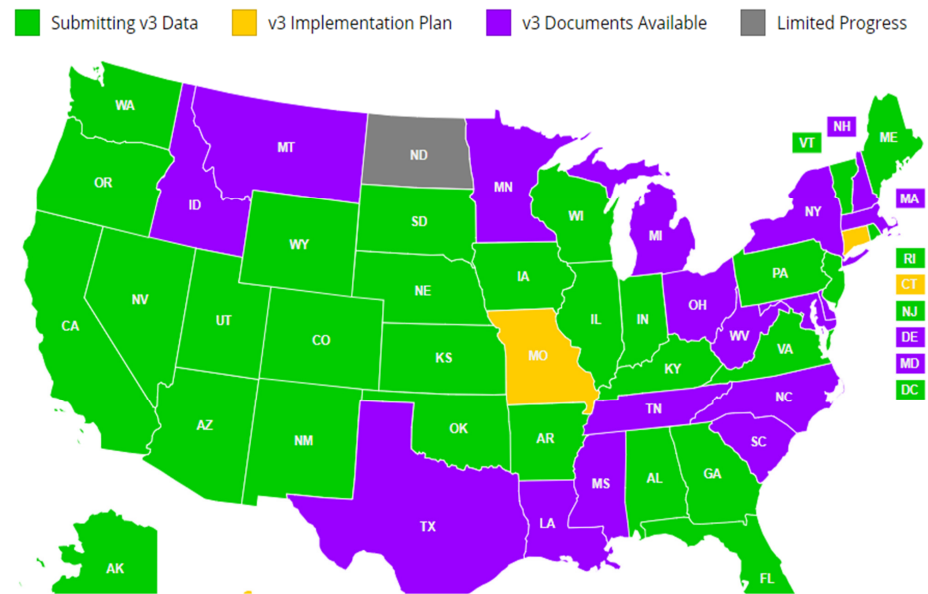
Agencies Not Reporting Data

- District 1
 - Blue Angels EMS LLC
 - Cedar Lake VFD
 - Jasper County Sheriff's Office
 - Kurtz Ambulance Service Inc
 - Lake County Special Trauma and Rescue
 - Superior Air Ambulance, Inc
 - Superior Air-Ground Ambulance Service of Indiana Inc
-
- District 2
 - Bristol FD
 - Liberty Township VFD
 - Starke County Ambulance Service
 - Warren Township VFD

NEMESIS

- Green for the first time!
- Submitting V3 Data

46%



Indiana EMS Quality Improvement Program

- Started 6/2018
- EMS Registry
- EMS Compass Indicators
 - **Hypoglycemia**
 - **Med Error**
 - **Peds Respiratory**
 - **Seizure**
 - **Stroke**
 - **Trauma**
 - **Pain**
 - **Safety**

EMS Compass

EMS COMPASS
Improving Systems of Care Through Meaningful Measures

[About EMS Compass](#) | [About Performance Measures](#) | [EMS Compass Measures](#) | [Webinars](#) | [Contact](#)



Using Data to Make a Difference

The EMS Compass initiative is not simply about designing performance measures for the present. EMS Compass will create a process for the continual design, testing and evaluation of performance measures—and guidance for how local systems can use those measures to improve—so EMS can continue to provide the highest quality care to patients and communities in the future.

State of
Indiana EMS
CQI Report

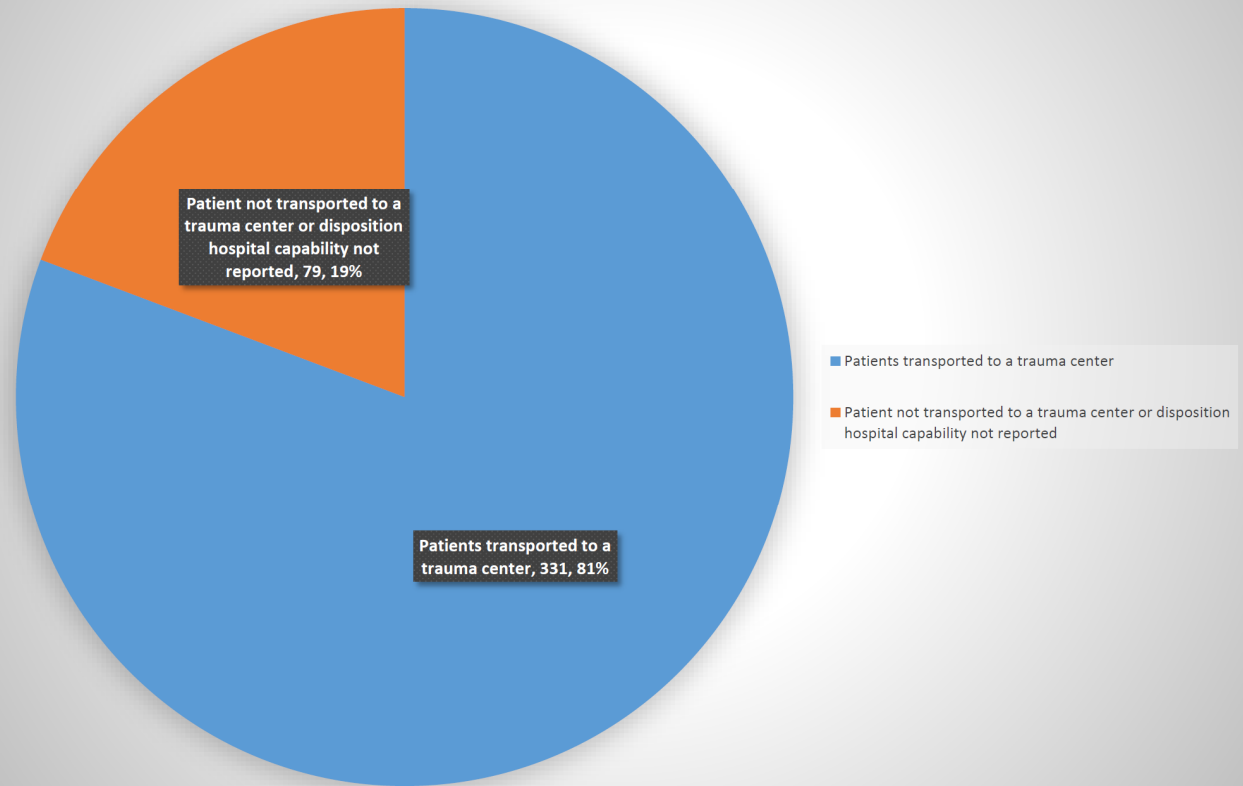
State of Indiana
EMS System Quality Improvement Report
July 2018



Michael A. Kaufmann, MD, FACEP, FAEMS
State EMS Medical Director
Dimitri Georgakopoulos

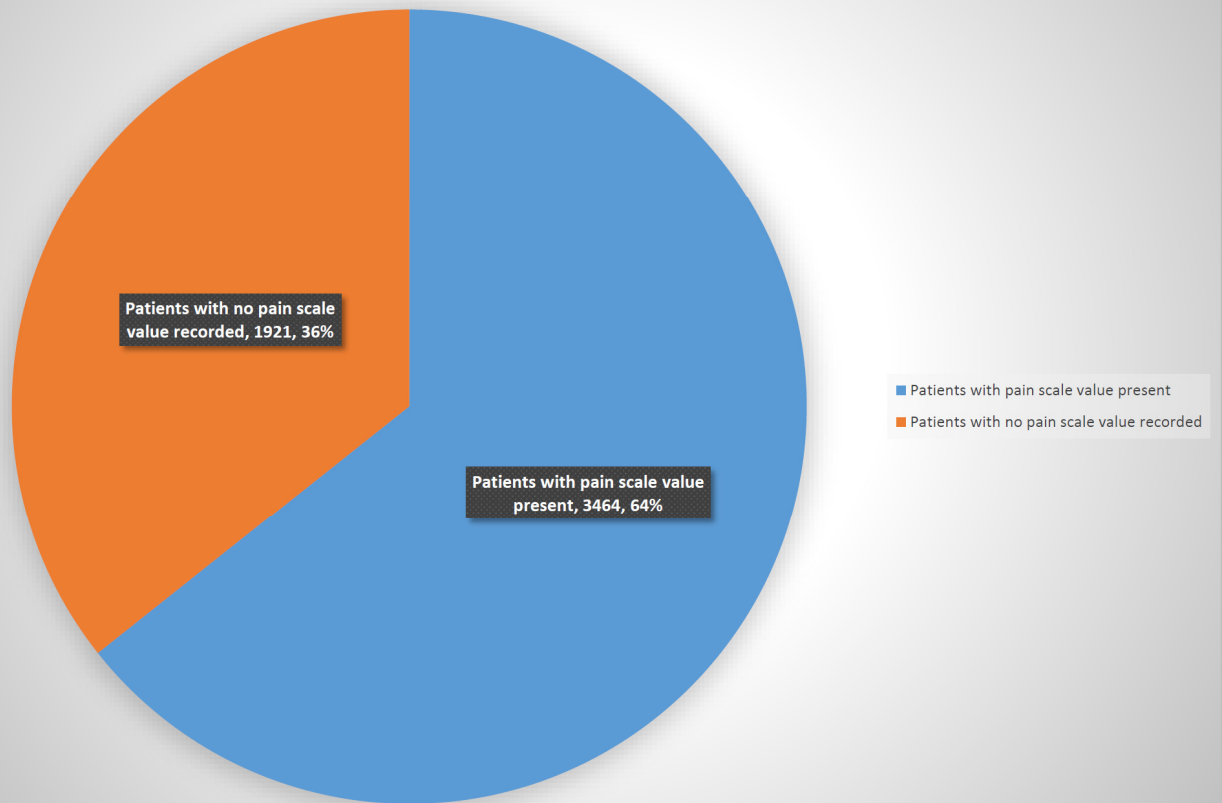
Trauma Center Destination

Patients Meeting CDC Step 1 or 2 or 3 Criteria Originating from a 911 Request Transported to a Trauma Center - April 2018 (411 Reports)

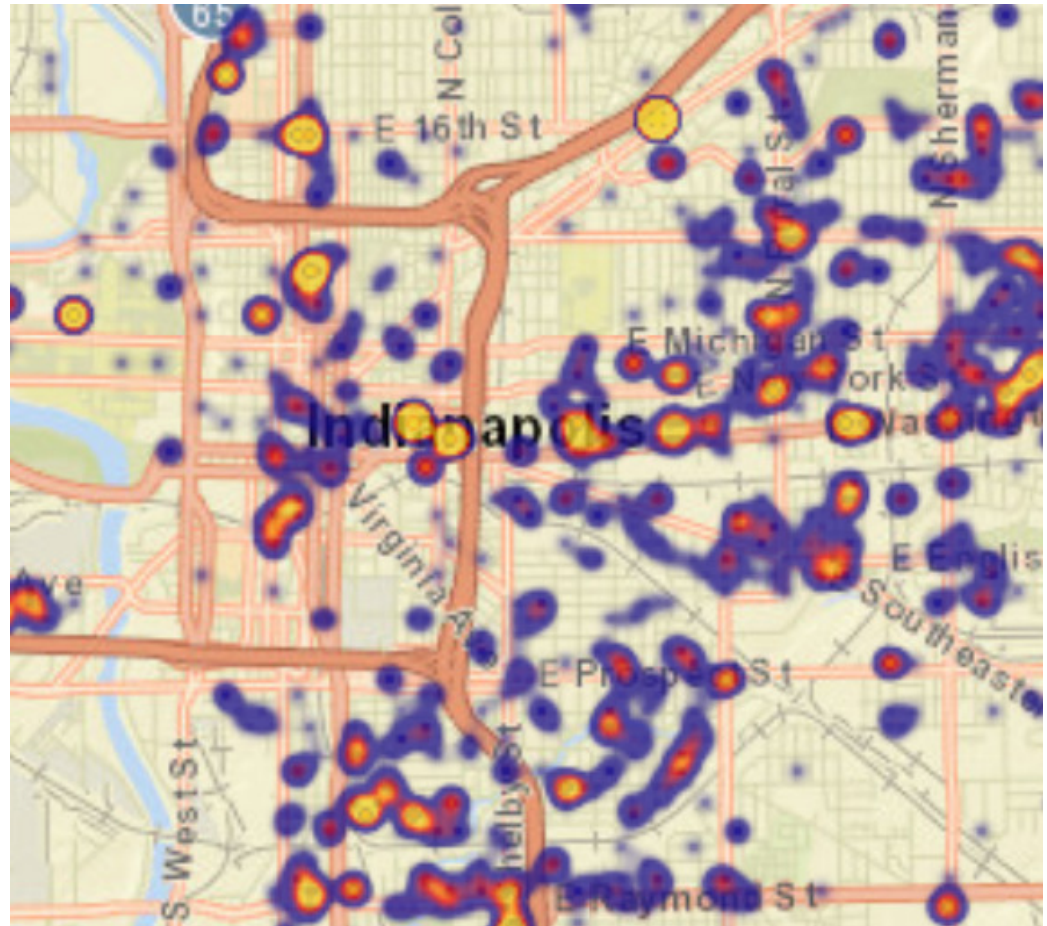


Pain Assessment

Pain Assessment of Injured Patients Originating from a 911 Request - April 2018

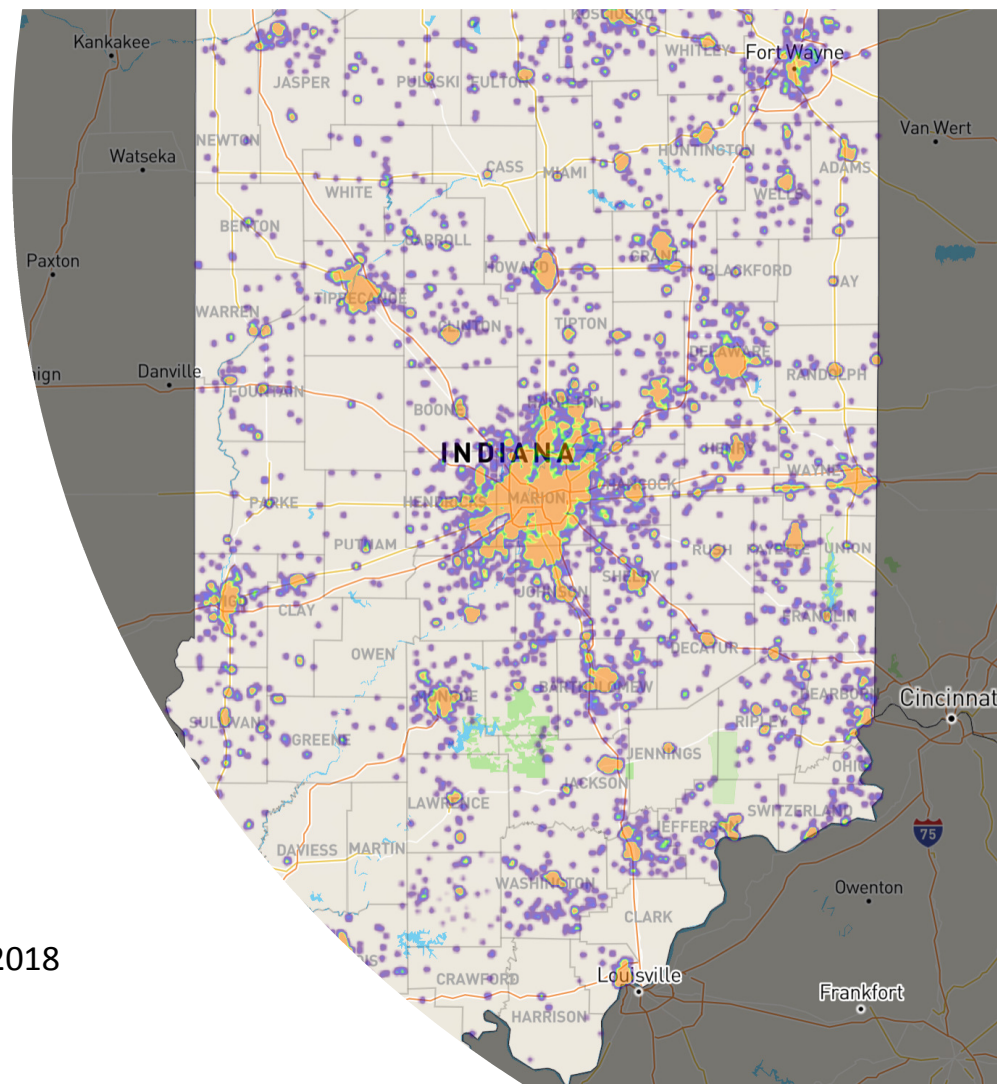


Naloxone Heat Mapping Project



Naloxone Heat Mapping

- Data pages shared with four pilot cities:
 - Indianapolis
 - Richmond
 - Muncie
 - Columbus
 - Evansville
- Currently in active use phase
 - Feedback
 - User review delivered
 - Awaiting Feedback
- Making preparations for public launch slated for 8/2018





Naloxone Sustainability

Working with FSSA and the IHA to secure funding for EMS provider agencies who administer naloxone to Medicaid members.

Pilots in Ripley and Montgomery Counties

Designed to secure a sustainable supply of naloxone.

Rule Making Update

- **836 IAC 1-1-5 Reports and records**
- Authority: IC 16-31-2-7; IC 16-31



- Adopted the NEMSIS V3 data elements.
- May 2018 - Passed a proposal submitted by IDHS/EMS to require run sheets to be submitted within 24 hours of run completion.
- Has gone to Indiana Office of Management and Budget
- Tentative Approval

- Now going to the Governor's Office and Budget Director for consideration
- EMS Commission now ready to enforce reporting with \$500 fines per occurrence.

Rule Making Update

- Stroke Draft Rule
 - Passed May 2018 Commission meeting
 - **Rule 2.2. Certification of Ambulance Service Providers - Stroke Field Triage and Transport Destination Protocol**
 - Submitted to OMB for consideration and fiscal impact review



PENDING

Model Guidelines

- **Developed by NASEMSO in November 2017**
- **Evidence Based**
- **EMS Compass Quality Indicators**
- **NEMSIS Database Referenced**
- **Complete Protocol Manual**

- **Available for use**
- **Suspected Overdose**
- **Stroke**
- **IFT Stroke**
- **Anaphylaxis/Allergic Reaction**
- **Chest Pain**

National Association of
State EMS Officials



EMS-C

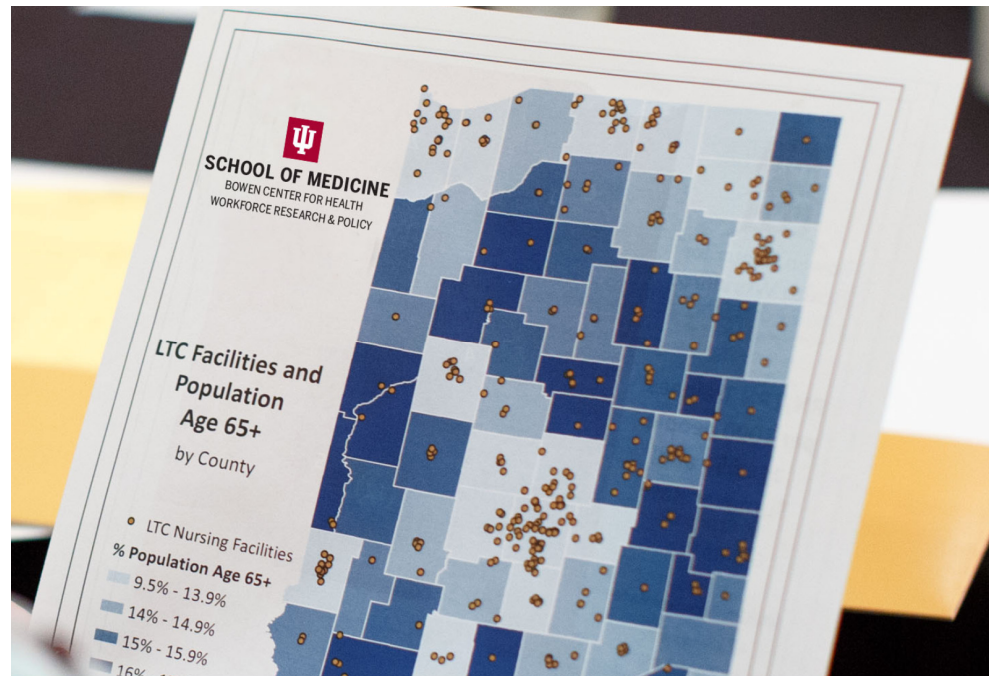


- Emergency Medical Services for Children
 - Elizabeth Weinstein, MD
 - Margo Knefelkamp

- EMS Division of IDHS will be asking each EMS provider organization to identify a pediatric representative to focus on pediatric care within each organization.
- This position will be identified on the EMS provider organization paperwork.
- Future ask will be to have a designated pediatric emergency specialist on the EMS Commission

Workforce Development

- Working to identify barriers restricting EMTs and Paramedics from entering the workforce in Indiana.
- Looking at licensing and certification process to remove obstacles.
- Looking for ways to align Indiana with other organizations such as NREMT to simply the continuing education and certification/licensure process.
- REPLICA



EMT Administration of Epinephrine

Anaphylaxis & Epinephrine Administration for the EMT



Indiana Department of Homeland Security
EMS Division

Topic	Sub-Topic	EMR	EMT	AEMT	NRP
Medical	Medication Delivery	-	-	-	1
	Immune Disease	1	1	1	-

Brokered Medicaid



- NOT A IDHS/EMS Initiative – This is FSSA
- FSSA has contracted with Southeast Trans (SET) as the State’s Medicaid broker for transportation
- This applies to Non-Emergent Medical Transport (NEMT)
 - This is traditional Medicaid
 - Fee-for-service Medicaid
 - DOES NOT apply to managed care
- Significantly impacting EMS and Hospitals
- Roll-out deadline extended to July 1 / September
- Printed documentation is currently being deve
- Town Hall style meetings currently being delive
- FAQ available for more information
- <https://www.in.gov/fssa/ompp/5481.htm>



HEMS Guidelines

- A patient has a significant need of equipment or medical personnel for critical care (to prevent or manage ongoing deterioration that is an imminent threat to life, limb or organ) available from air medical transport and which cannot be provided via ground transport
- A patient has significant potential to require a time-critical intervention and an air medical transport will deliver the patient to an appropriate facility faster than ground transport
- A patient is located in a geographically isolated area that would make ground transport impossible or greatly delayed
- Local EMS resources are exceeded or are unavailable to transport to the closest appropriate facility without compromising response to the primary service area. This also includes disaster and mass causality incidents.

HEMS Guidelines

- Organ and/or organ recipient requires air transport to the transplant center in order to maintain viability of time-critical transplant
- For trauma patients, those with two or more of the following criteria have demonstrated an improved outcome with helicopter EMS utilization. This is better known as the Air Medical Prehospital Triage (AMPT) Score.
 - 1.GCS < 14 J Brown, Annals of Surgery 2016
 - 2.RR < 10 or > 29 J Brown, Journal of Trauma Acute Care Surg 2017
 - 3.Unstable Chest
 - 4.Paralysis
 - 5.Hemo/Pneumothorax
 - 6.Multisystem Trauma
 - 7.Physiologic Criteria + Anatomic Criteria (had to have one from each category)

Safety for EMS Providers

- Safety must become a priority!
 - Develops practical ways to implement the recommendations included in National EMS Culture of Safety Strategy.
 - Review the latest information, research, and best practices on EMS patient and practitioner safety.
 - Develop and publish consensus statements on the issues of EMS patient and practitioner safety as guidance to EMS agencies and practitioners.
 - Raises awareness of the importance of EMS patient and practitioner safety within the EMS industry
 - Identify additional steps that the EMS industry can take to improve EMS patient and practitioner safety

SafeAmbulances.org



Ground Ambulance Standards
and EMS Safety Resource



National EMS
SAFETY COUNCIL

Stop The Bleed



SAVE A LIFE

The Indiana Department of Homeland Security is proud to be a supporting partner of the Stop the Bleed Program.

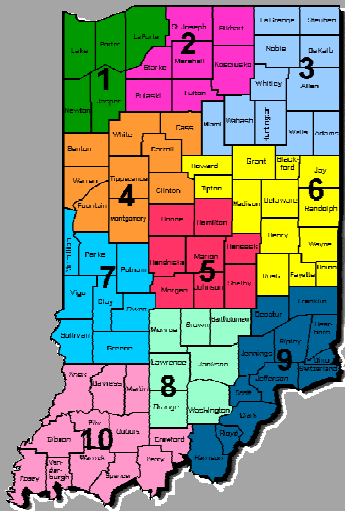
Stop the Bleed is a national campaign with two main goals:

- Inform and empower the general public to become trained on basic trauma care.
- Increase bystander access to bleeding control kits.

Disaster and Mass Casualty Preparedness

- 64% of EMS Providers have never responded to a disaster
- 51% of EMS Managers have never responded to a disaster
- EMS Practitioners are the group of healthcare providers MOST likely to be called to respond to a local disaster.
- 40% of EMS provider agencies are NOT part of a local or regional healthcare coalition.
- 32% of EMS practitioners say they are never required to receive training on triage and treatment for MCIs.
- The biggest obstacle to EMS preparedness, according to NAEMT survey is the cost – 75% cite lack of funding as a barrier.

EMS/EMA Participation



March 19, 2018

Dear Public Safety Partners,

The Indiana Department of Homeland Security and the Indiana State Department of Health are cooperatively distributing this letter to affirm our support and emphasize our shared desire to see the current collaboration toward the building of district Healthcare Coalitions (HCC) continue. We believe it is imperative for emergency management, EMS, public health, and healthcare to all work together to build these coalitions into organizations that will strengthen our state's ability to provide critical health and medical services to the public when disaster strikes.

For many years, hospitals and public health departments across Indiana's 10 preparedness districts have worked to build response capabilities and strengthen their resiliency in the face of emergencies. Similarly, local emergency management and first responder organizations have worked together through district planning councils and task forces to prepare for and respond to disasters.

The many accomplishments of the districts over the years are not measured by the number of plans written, exercises conducted, or equipment purchased, but rather by the collaborative relationships that have been forged, allowing for you to respond to a wide range of disasters both within and outside our state borders.

Promotion

- IDHS/ISDH hosted a series of regional town hall style meetings to further promote EMS participation and overall collaboration with regards to disaster preparedness.
 - July 17th in Plymouth Indiana
 - July 25th in Lawrence Indiana
 - August 16th in Seymour Indiana
- Discuss DPC and HCC structure and function
- Encourage EMS participation in the HCC
 - Member of the Core 4 – Hospitals, Public Health, EMA and EMS
 - CDC Funding is dependent upon EMS participation

EP-HIT-18-001

- ***“Partnership for Disaster Health Response Cooperative Agreement”***
- Grant Purpose:
 - Develop demonstration projects that address health care preparedness challenges
 - Establish best practices for improving disaster readiness across the health care delivery system
 - Show the potential effectiveness and viability of a Regional Disaster Health Response System (RDHRS)
- Award:
 - \$3,000,000 (6M award to two separate entities across the county)
 - Application deadline of 8/15/2018



Description

- ASPR aims to better identify and address gaps in coordinated patient care during disasters through the establishment and maturation of a Regional Disaster Health Response System (RDHRS.)
- The primary objectives of the RDHRS are to:
 - Improve bidirectional communication and situational awareness of the medical needs and issues of the response between healthcare organizations and local, state, regional, and federal partners;
 - Leverage, build, or augment the highly specialized clinical capabilities critical to unusual hazards or catastrophic events; and
 - Augment the horizontal (whole of community) integration of key stakeholders that comprise healthcare coalitions with readily accessible and clinical capabilities that are largely missing from the current configuration of such coalitions.

Know the O –EMS and Public Safety Information Card

IN.gov Know the facts. DATA INDIANA INITIATIVES GET INVOLVED ABOUT

NextLevel Recovery INDIANA

KNOW THE O FACTS STIGMA TRAINING TOOLS & RESOURCES TAKE THE PLEDGE

It all starts with KNOWLEDGE and understanding the facts.

The data shows, the opioid crisis is impacting our state. Many people who struggle with opioid dependency face a wide range of stigmas that are preventing them from seeking treatment. We don't want them to become an opioid overdose statistic.

But most people are not aware of these basic facts.

The facts are simple:

- Opioid use disorder is a disease
- There is treatment
- Recovery is possible

1 **FACT 1**
It's a disease.
[Learn More](#)

2 **FACT 2**
There is treatment.
[Learn More](#)

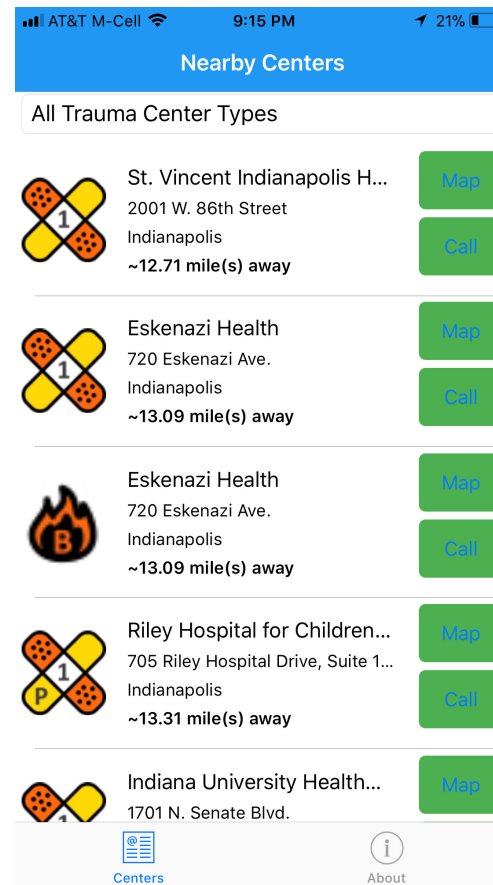
3 **FACT 3**
Recovery is possible.
[Learn More](#)

EMS Field Guide (App Version 1.0)

Beta version ready for distribution.

EMP Grant declined the opportunity to participate.

SHSP Grant application submitted.



Community Paramedicine/MIH

- The time is now to plan and develop the infrastructure for Mobile Integrated Health/Community Paramedicine
 - 836 Rule re-write is under way
 - Alternate reimbursement models are being developed
 - EMS Registry is improving in quantity and quality
 - Local data has proven the benefits of this program
 - Increased medical director involvement
 - Community Health Worker status
- I'll be focusing greater efforts in the coming days on working with ISDH, FSSA, CMS and our state legislators to further develop and advance the status of community paramedicine/mobile integrated health in our state!

H.R. 3378/S. 2121

- **H.R. 3378: Introduced by Rep. Jackie Walorski (R-IN2) in July 2017.** A Ways & Means Committee member, Rep. Walorski was joined by fellow Committee member Rep. Susan DelBene (D-WA1), who signed on as an original cosponsor. Other original cosponsors include Energy & Commerce members Rep. Bill Johnson (R-OH6) and Rep. Raul Ruiz (D-CA36), as well as Rep. Pete Sessions (R-TX32), Chair of the House Rules Committee.
 - Since introduction, H.R. 3378 has enlisted a total of 44 bipartisan cosponsors: <https://www.govtrack.us/congress/bills/115/hr3378/details>
- S.2121: Introduced by Sen. Dean Heller (R-NV) in November 2017. A Senate Finance Committee member, Sen. Heller was joined by fellow Committee member Sen. Michael Bennett (D-CO), who signed on as an original cosponsor. Additional cosponsors include Sen. Catherine Cortez Masto (D-NV), Sen. Tim Scott (R-SC), Sen. Shelley Capito (R-WV), Sen. Todd Young (R-IN), and Sen. Doug Jones (D-AL).
- H.R.3378/S.2121 **provide for long overdue reform and update of the Medicare Air Ambulance Fee Schedule**, which has only seen inflationary updates since introduction in 2002 (and was based on the 1996 Medicare spend on all ambulance reimbursement, ground & air). These bills will:
 - **Mandate cost-reporting for all air ambulance services. Failure to report will result in disqualification from initial temporary short-term increases in air ambulance reimbursement (see additional bullet point). Cost-reporting will inform a rebasing of reimbursement, based upon cost data.**
 - **Mandate quality reporting for all air ambulance services. Failure to report will result in a 10% penalty on air ambulance reimbursement. Quality reporting will inform the creation of a Value-Based Purchasing (VBP) program to incentivize quality improvement in air ambulance services.**
 - Provide short-term temporary increases in the 1st three years, for financial relief for air medical services, which are currently funded at 40% below cost. These increases end after rebasing.

FAA Reauthorization & Airline Deregulation Act Revision

- **FAA Authorization is set to expire Sep. 30, 2018.** The House passed FAA Reauthorization (H.R. 4), which included Sec. 412, which creates an advisory committee to review how to segregate charges for air ambulance services between aviation and non-aviation (i.e., healthcare) aspects. Requires DOT to complete rulemaking based upon the advisory committee's recommendations. Further, Sec. 412(h) revises the Airline Deregulation Act (ADA) to allow expanded state (to include political subdivisions of a state) oversight of anything deemed to be "non-aviation."
- Senate FAA Reauthorization is being reviewed for passage and has no similar provision.
 - However, Sen. McCaskill (D-MO) introduced S. 2812, which is identical to H.R. 4, Sec. 412, and will offer S. 2812 as an amendment to the Senate FAA bill.
- **ADA revision would have a devastating impact on air medical services, creating the potential for expanded state oversight of aspects of air medical services (rates, routes, and services) which currently fall under DOT oversight due to express federal preemption of state oversight of rates, routes, and services of air carriers.**
 - Air medical services are certificated as Part 135 air carriers. Part 135 certification is required for CMS reimbursement.
 - States could expand authority to control air ambulance rates, service areas, aircraft configuration, and ability to conduct interstate transport of patients.
- ADA revision is primarily supported by insurance commissioners and healthcare insurers who want to exempt air medical services from DOT oversight for the purposes of having greater control over air ambulance services pricing.
- This legislation will not reduce balance billing concerns, as health insurers will likely only pay for healthcare services, and pass on the aviation service costs to the consumer.

Thank you!

- Your input and participation in the Indiana EMS System is vitally important.
- Mkaufmann@dhs.in.gov
- 317-514-6985

Indiana Government Center South
302 W. Washington St. Room E238
Indianapolis, Indiana 46204





Safety Shower Toolkit

Jamie Dugan, *TEXT*
Good Samaritan Hospital



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov



Educating Parents to Prevent Infant Mortality



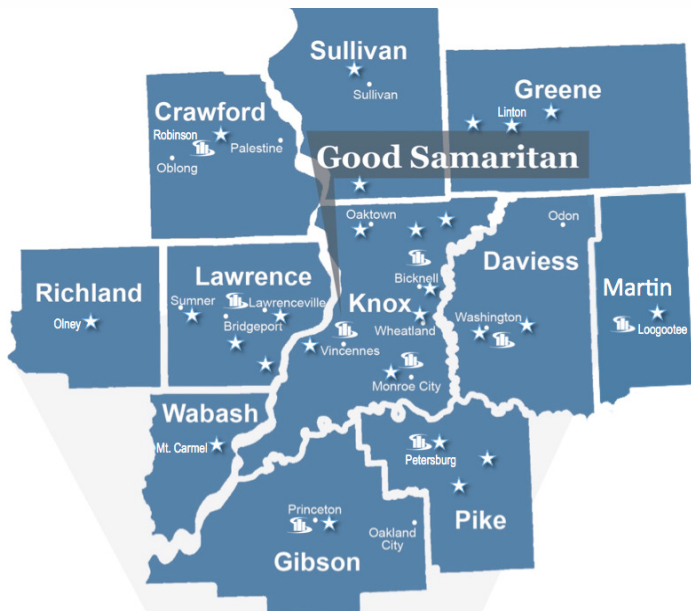


Infant Mortality

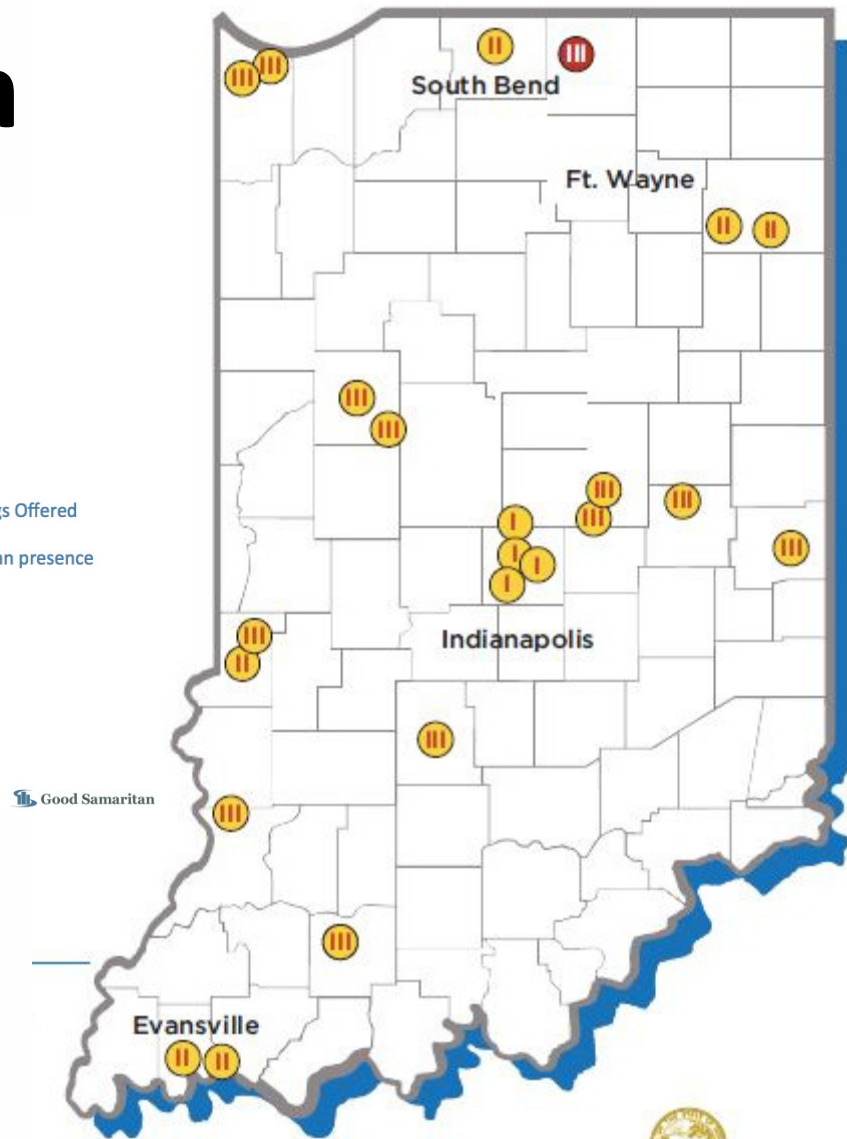
- Indiana ranks as the 42nd worst state in the nation for infant mortality
- In 2013, the Southwest region accounted for the highest infant mortality rate in Indiana



Good Samaritan



- ★ Free Screenings Offered
- Good Samaritan presence



Good Samaritan



Indiana State
Department of Health
Trauma and Injury Prevention



Supporting Partners

Bryson's Time Out Take Ten
CASA (Court Appointed Special Advocates)
Good Samaritan Hospital & Volunteers
Hamilton Center
Healthy Families Program
Indiana Tobacco Quit Line
ISDH Division of Trauma & Injury Prevention
MCH MOMS Helpline
Memorial Hospital and Health Care Center
Mouzin Brothers Farms
Pace Community Action Agency
Safe Kids Vanderburgh/Warrick
Samaritan Center
St. Joseph's Catholic Church
St. Vincent Evansville & Volunteers
Sullivan Civic Center
Sullivan County Community Hospital & Volunteers
Terre Haute Regional Hospital & Volunteers
Toyota Boshoku Illinois
Vincennes City Fire
Vincennes Pet Port
Vincennes Township Fire
Vincennes University



Goal: 167 first birthdays

- May 2017 Vincennes
- August 2017 Evansville
- November 2017 Vincennes
- January 2018 Jasper
- April 2018 Vincennes
- June 2018 Sullivan





St.
Vincent
Evansville
Baby
Safety
Shower
August
2017



Good Samaritan Baby Safety Shower October 2017





Siblings welcome



Infant CPR



Safe Sleep



Fire Safety



Shower Booths

Car Seat Safety
Infant CPR
Safe Sleep
Fire/Carbon Monoxide Safety
Smoking Cessation
Prenatal Care & Delivery
Medical Financial Assistance
Breastfeeding
Bathing Safety
Opioid Epidemic
OK to visit ER
Domestic Violence
Pet Safety
WIC
Early Head Start
Time Out- Shaken Baby Syndrome



Until next year...



Watch them grow



Certified Passenger Safety Technicians (CPST)



Grow Up with Good Samaritan







Everytime a child is saved
from the dark side of life,
everytime one of us
makes the effort to make
a difference in a child's
life, we add light and
healing to our own lives.

-Oprah Winfrey





Risk factors for inter-facility transfer patients

Dr. Peter Jenkins, *Trauma Surgeon*

IU Health – Methodist Hospital



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

OUTCOMES OF SEVERELY INJURED PATIENTS TREATED AT NON-TRAUMA CENTERS:

PROJECT UPDATE

Peter C. Jenkins MD, MSc
K12 Emergency Care Research Scholar
National Heart, Lung, and Blood Institute



SCHOOL OF MEDICINE

INDIANA UNIVERSITY

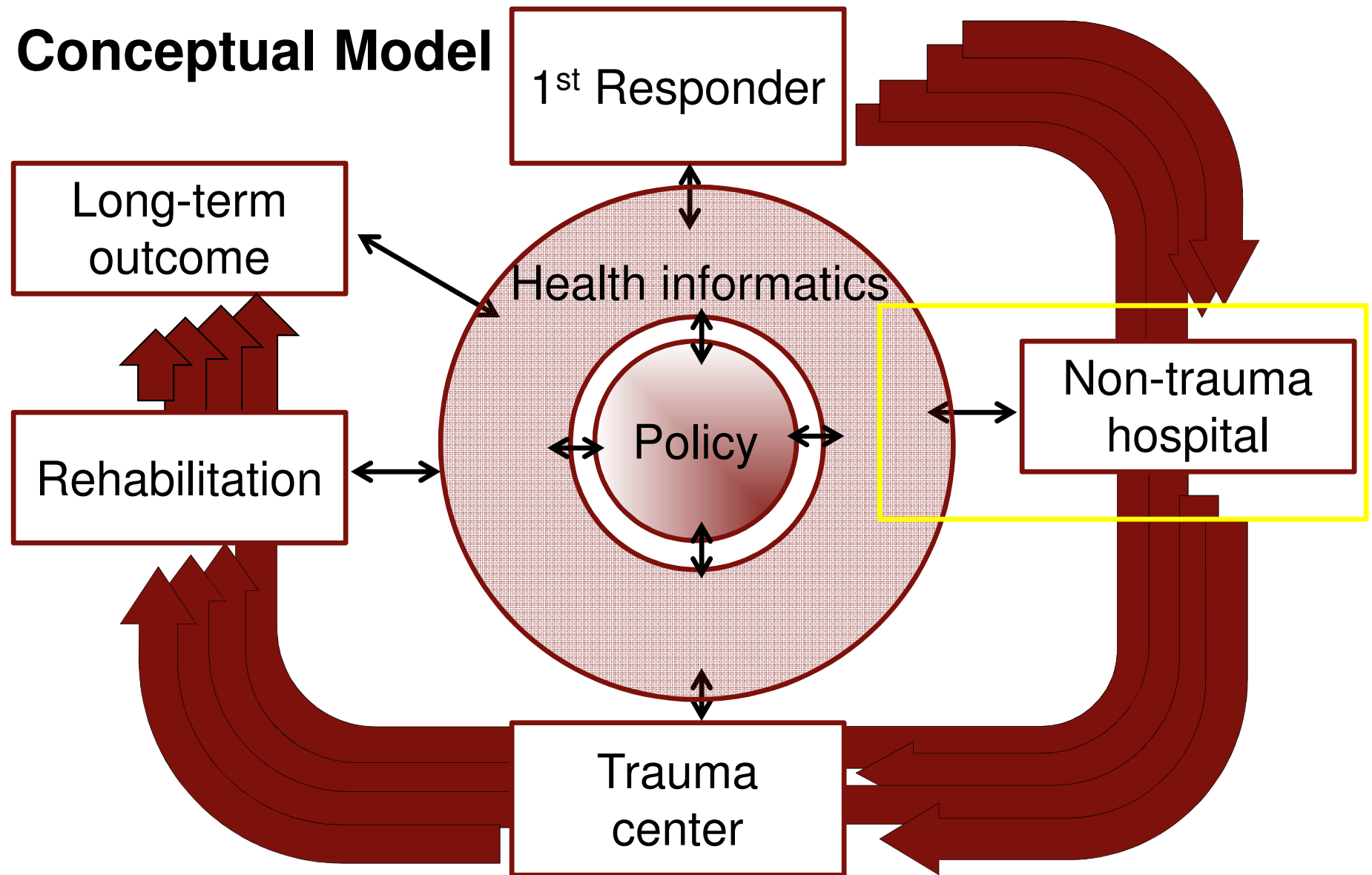
Outline

1. Review project
2. Identify barriers and opportunities associated with current analysis
3. Future directions

Outline

1. **Review project**
2. Identify barriers and opportunities associated with analysis
3. Future directions

Conceptual Model



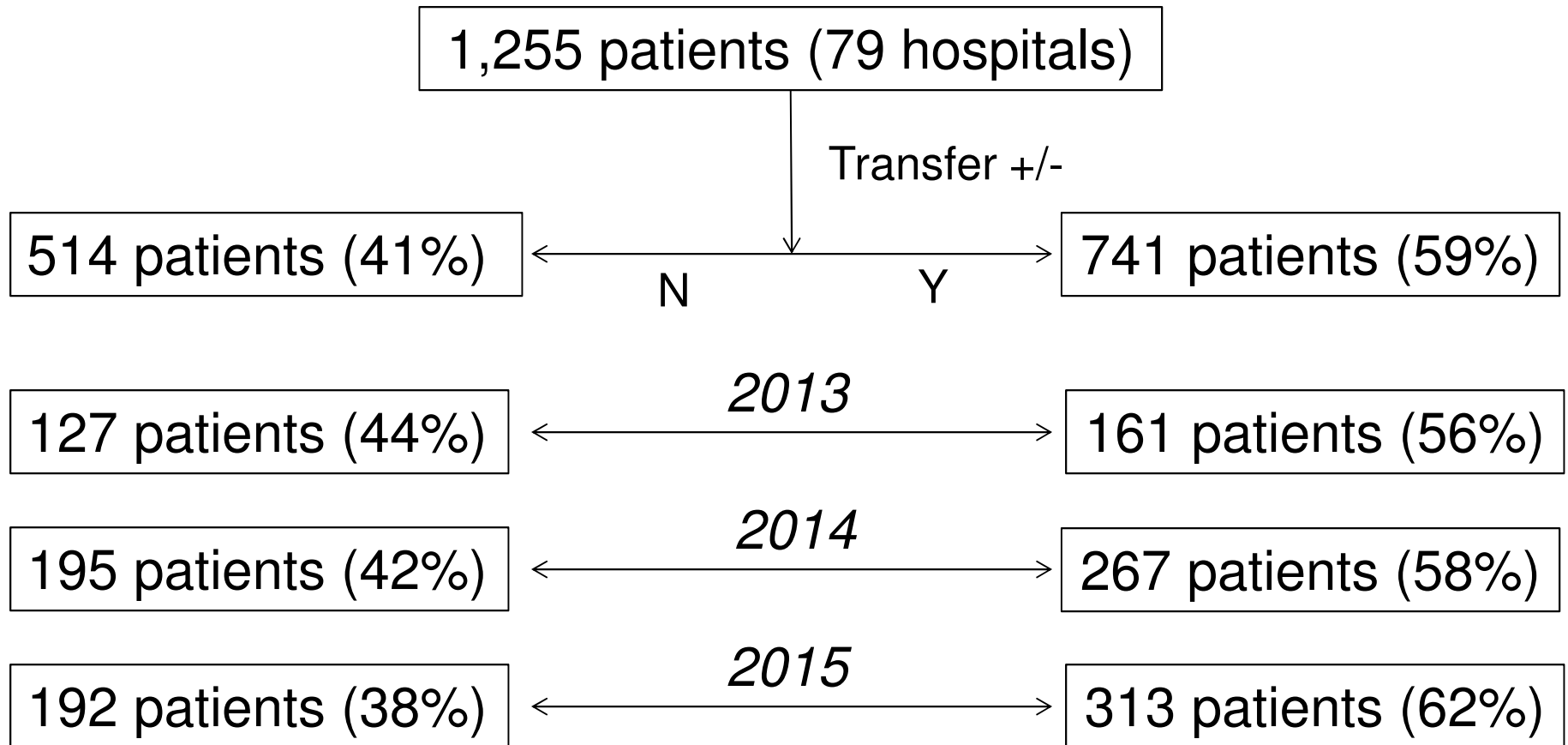
Review Project: Goals

1. Determine transfer patterns of severely injured patients at non-trauma hospitals
2. Identify patient and injury characteristics associated with transfer to trauma centers
3. Examine outcomes of patients who remain at non-trauma centers

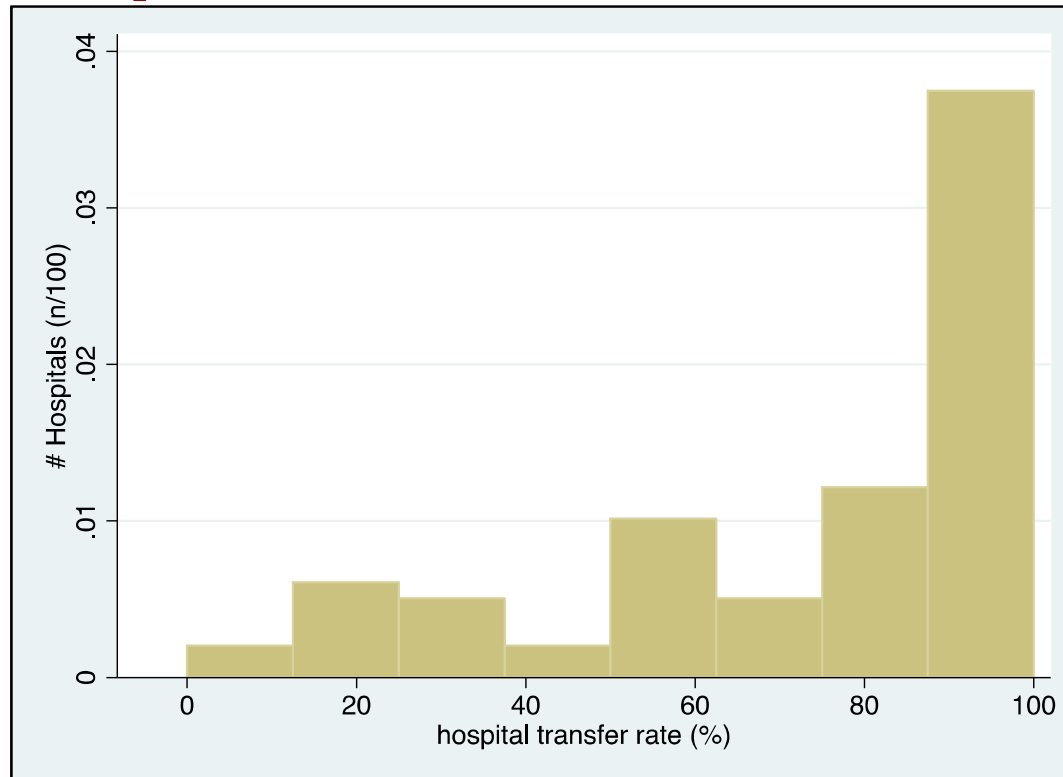
Review Project: Methods

- ISDH data (2013-2015)
- Calculate transfer rate at the population level
- Calculate transfer rate at the hospital level
- Multivariate logistic regression clustered at the hospital level to examine factors associated with:
 - Transfer status
 - Mortality (patients who remain)

Review Project: Results – patient transfer rates



Review Project: Results – hospital transfer rates



Mean hospital transfer rate = 74%
Median hospital transfer rate = 81%

Review Project: Table 1

Characteristics of severely injured patients admitted to non-trauma centers by transfer status (n=1,255)

	Remained at non-trauma center	Transferred to trauma center	P-value
Age, %			<0.00
16-25 y	12.2	20.5	
26-35 y	7.5	13.8	
36-45 y	7.1	10.5	
46-55 y	11.4	16.3	
56-65 y	15.6	13.3	
66-75 y	14.4	10.6	
76-85 y	20.1	11.7	
> 85 y	11.8	3.4	
Missing, n	6	4	
Female, %	37.0	31.1	0.03
Race, %			0.03
White	91.1	92.0	
Black	6.9	4.3	
Other/Unknown	2.0	3.7	
Primary Payer Source, %			<0.00
Medicaid	4.6	7.5	
Medicare	42.2	19.6	
Commercial	27.2	32.7	
Self pay	9.3	15.5	
Other	10.0	17.2	
Not known	4.7	7.6	

Review Project: Table 1 (cont.)

Patient injury severity using ISS 98, mean (SD)	21.7 (8.1)	20.5 (6.5)	<0.00
Mechanism of Injury, %			<0.00
Fall	54.4	28.0	
Motor vehicle collision	21.2	35.0	
Pedestrian struck	3.7	4.6	
Transport	2.6	4.5	
Firearm	2.4	3.7	
Cut/pierce	0.6	1.6	
Other bike	1.6	1.1	
Machine	0.2	1.1	
Fire/Burn	2.0	12.3	
Pedestrian other	0.2	0.3	
Natural	0.6	0.5	
Overexertion	0.7	0.1	
Other	5.1	3.9	
Missing	4.9	3.4	

Chi-square used to calculate p value for categorical variables and t-test used to calculate p value for continuous variables.

Review Project: OR transfer

	Odds Ratio	P-value
Age		
16-25 y	1	
26-35 y	0.96	0.87
36-45 y	0.88	0.66
46-55 y	0.91	0.61
56-65 y	0.66	0.44
66-75 y	0.89	0.66
76-85 y	0.81	0.53
> 85 y	0.40	<0.000
Male	1.18	0.25
Race		
White	1	
Black	0.50	0.03
Other/Unknown	1.13	0.79
Primary Payer Source		
Commercial	1	
Medicaid	1.08	0.76
Medicare	0.47	<0.000
Self pay	1.33	0.27
Other	1.60	0.10
Not known	2.23	0.13

Review Project: OR transfer

	Odds Ratio	P-Value
ISS 98	0.97	0.04
Pulse Rate	0.99	0.67
Mechanism of Injury		
Blunt	1	
Burn	9.37	<0.000
Penetrating	2.03	0.04
Other	0.73	0.42
Blank	0.96	0.86

Review Project: OR mortality (n=514)

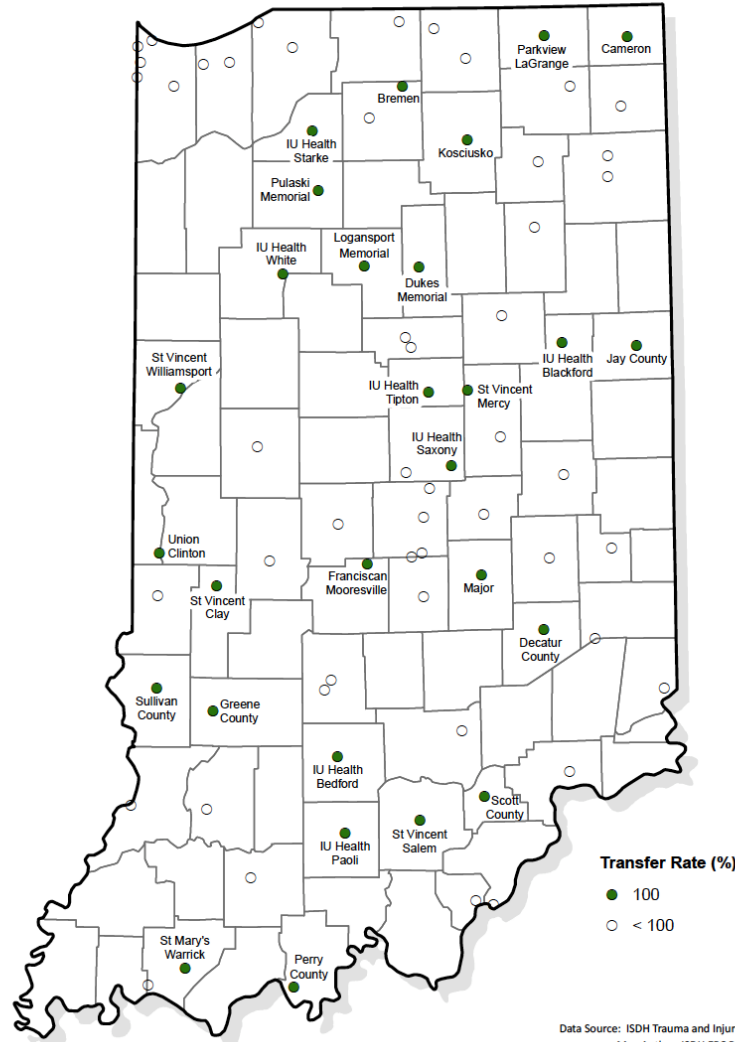
	Odds Ratio	P-value
Age		
16-25 y	1	
26-35 y	1.46	0.54
36-45 y	0.14	0.02
46-55 y	0.97	0.94
56-65 y	0.58	0.12
66-75 y	1.34	0.70
76-85 y	1.29	0.77
> 85 y	4.59	0.06
Male	2.49	0.01
Race		
White	1	
Black	0.31	0.08
Other/Unknown	10.32	0.01
Primary Payer Source		
Commercial	1	
Medicaid	5.34	0.01
Medicare	1.96	0.19
Self pay	1.24	0.77
Other	1.34	0.69
Not known	1.19	0.78

Review Project: OR mortality (n=514)

	Odds Ratio	P-Value
ISS 98	1.15	<0.000
Pulse Rate	0.99	0.67
Mechanism of Injury		
Blunt	1	
Burn	-	
Penetrating	62.85	<0.000
Other	3.93	0.01
Blank	1.46	0.46
Hospital transfer rate, <u>tertile</u>		
T1 (0%-54%)	1	
T2 (55%-80%)	1.9	0.03
T3 (>80%)	9.23	0.01

Transfer Rates for Hospitals

Excludes Trauma Centers



Data Source: ISDH Trauma and Injury Prevention
Map Author: ISDH ERC PHG, 02/2017

Outline

1. Review project
- 2. Identify barriers and opportunities associated with analysis**
3. Future directions

Identify barriers and opportunities associated with analysis

1. Include comorbidities
2. Include hospital variables
3. Evaluate data quality

Identify barriers and opportunities associated with analysis

1. Include comorbidities
 - a. Statistical analysis requires 10-20 patients per variable included in a regression model
 - b. Comorbidity indexes combine multiple comorbidities into a single variable
 - c. Elixhauser and Charleston indexes are most common (ICD-10)

Identify barriers and opportunities associated with analysis

2. Include hospital variables
 - a. Necessary for analysis of hospital-level performance
 - b. TQIP platform includes hospital variable, but not required field
 - c. AHA data (2013-2016) and supplemental survey data

Thanks Ramzi, Elisa, Jill, Missy, and all who participated!!!

Identify barriers and opportunities associated with analysis

3. Evaluate data quality
 - a) Missing days (approx 150 patient admissions) from initial analysis
 - b) VPN access
 - c) Assessed completeness of days represented

Outline

1. Review project
2. Identify barriers and opportunities associated with analysis
- 3. Future directions**

Future directions – short-term

1. “Comparison of Comorbidity Indexes Predicting Trauma Related Mortality”
2. “Outcomes of Severely Injured Patients Treated at Non-trauma Centers”
3. “Influence of Indiana Medicaid Expansion on Trauma Patient Outcomes”
4. “Hospital Variation in Trauma Patient Outcomes at Non-trauma Centers”

Future directions – short-term

1. “Comparison of Comorbidity Indexes Predicting Trauma Related Mortality”
2. “Outcomes of Severely Injured Patients Treated at Non-trauma Centers”
3. “Influence of Indiana Medicaid Expansion on Trauma Patient Outcomes”
4. “Hospital Variation in Trauma Patient Outcomes at Non-trauma Centers”

Future directions – longterm

1. NIH K08 grant proposal (Feb. 2019)
 - I. Demonstrate variation among non-trauma hospitals
 - II. Identify barriers to optimal patient transport at non-trauma hospitals
 - III. ISDH pilot IN-TQIP (feedback & support)
2. Statewide IN-TQIP implementation (2021)

Summary

1. Include trauma comorbidity index when evaluating mortality risk
2. Collect data prospectively using existing hospital fields in trauma registry
3. Present findings to TCC in October



Trauma system planning subcommittee update

Dr. Scott Thomas, *Trauma Medical Director*

Memorial Hospital of South Bend

Dr. Matt Vassy, *Trauma Medical Director*

Deaconess Hospital



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

Trauma System Planning Subcommittee

- Is there a need for ACS to come back for another site visit?
- Division strategic plan



Indiana State
Department of Health

135

Email questions to: indianatrauma@isdh.in.gov

2018 ISTCC & ITN Meetings

- Location: Indiana Government Center – South, Conference Room B.
- Webcast still available.
- Time: 10:00 A.M. EST.
- Dates:
 - October 19
 - December 14

Other Business



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov