



Indiana State Trauma Care Committee

June 15, 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



Updates

Katie Hokanson, *Director of Trauma and Injury Prevention*



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

Welcome baby Hess!



Email questions to: indianatrauma@isdh.in.gov

Division staffing updates

- DeAngela Hall
 - Records Consultant
- Morgan Sprecher
 - INVDRS Epidemiologist
- Paravdeep “Pravy” Nijjar
 - Registry Coordinator → Injury Prevention Program Coordinator

Division staffing updates

- No longer with the division
 - Tanya Barrett
 - Event Program Coordinator
- No longer with ISDH
 - Preston Harness
 - Injury Prevention Program Coordinator
 - Brittany Armstrong
 - Records Consultant



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

National Association of State EMS Officials

Annual Meeting - Trauma Managers Council

- Trauma Quality Improvement Program (TQIP).
- Stop the Bleed.
- American College of Surgeons (ACS) Committee on Trauma (COT) trauma system minimum standards.
- American Trauma Society (ATS) trauma survivor network.
- Systems of care.
- Misc.



Indiana State
Department of Health

7

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>



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

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



**Indiana State
Department of Health**

Inter-Personal Violence (IPV) Prevention in Health Care Settings

- Many cases of IPV come in contact with health care facilities.
 - Health care facilities are KEY for IPV violence identification and prevention.
- Create a repository of evidence-based prevention and screening programs and tools designed for health care settings.



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

Repository Categories

- Child physical abuse
- Adult sexual assault
- Child sexual abuse
- Domestic violence
- Bullying
- Homicide
- Traumatic stress
- Elder abuse



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

Repository

- ISDH Home
- Trauma System/Injury Prevention**
- Site Index
- Injury Prevention +
- Indiana's Trauma System +
- Trauma Registry +
- Pre-Hospital/EMS +
- Trauma Centers
- Trauma and Injury Prevention Division Staff
- Trauma and Injury Prevention Definitions
- Calendar of Events
- EMS Medical Directors' Conference
- Trauma Times

[TRAUMA SYSTEM/INJURY PREVENTION PROGRAM HOME](#) » [INJURY PREVENTION](#) » [INTERPERSONAL VIOLENCE PROGRAM REPOSITORY](#)

INTERPERSONAL VIOLENCE PROGRAM REPOSITORY

Interpersonal Violence Evidence Based Program Repository for Health Care Facilities

[Open and Search the Repository](#)

Many cases of interpersonal violence, due to the nature of the traumatic injuries, go through emergency departments and other health care settings. It is therefore important to understand what evidence based programs are available in health care settings to prevent and identify cases of interpersonal violence. The interpersonal violence (IPV) evidence based program repository was developed in order to provide a quick reference tool for health care facilities on evidence based prevention and screening programs and tools that are available locally and nationally. A major aspect of the repository is the listing of evidence based programs with available evaluations in order to provide information for health care facilities on the effectiveness of the programs and how the programs were evaluated. The evaluation information can assist health care sites in determining what programs best fit for their health care facility.

The repository is broken up into eight IPV categories including: child physical abuse, adult sexual assault, child sexual abuse, domestic violence, bullying, homicide, traumatic stress, and elder abuse. The second and third columns of the spreadsheet lists all of the programs related to each of the IPV categories and the affiliated group(s). Each of the programs listed in the repository, if available, has a link to the associated group website which provides information and background about the IPV program. The remaining columns in the repository provide information on whether an evaluation is available and depending on whether the program is a prevention program or a screening tool the associated evaluation or measures are provided in the associated columns 'Prevention Program Evaluation' or 'Identification Screening Tool Measures.' The identification screening tool usually do have a formal evaluation, but are used frequently in health care settings. The measures provided are from individual studies. Each of the listed evaluations or measures provides a link for the evaluation site of the listed ranking. This allows health care facilities the flexibility to see how IPV programs were evaluated and what studies were used for the evaluation, providing further opportunities in depth in determining what program would be most effective.

Online Services

[Indiana Death Registration System \(IDRS\)](#)

[Indiana Immunization Registry](#)

Repository



MENU



Interpersonal Violence Evidence Based Program Repository for Health Care Facilities

Gov. Eric J. Holcomb

Injury Categories

- Child Physical Abuse
- Adult Sexual Abuse
- Child Sexual Abuse
- Domestic Violence

Populations

- Infants
- Children
- Adolescents
- Adults

Search

Use the prevention scales button to search for in-depth information on prevention program evaluation scales.

Prevention Scales

47 programs available. Search programs by selecting one or more items from categories and populations.

Category	Program	Group	Evaluation	Prevention Program Evaluation	Screening Tool Measures	Population
Child Physical Abuse	Resilience Questionnaire	American Academy of Pediatrics:	N			Infants Children Adolescents Adults
Homicide Domestic Violence Child Physical Abuse	Danger Assessment	Danger Assessment	Y		<ul style="list-style-type: none"> • K.C. Basile, M.F. Hertz, S.E. Back, 2007: Internal consistency: 0.66 -0.86. Test/retest reliability: 0.89 -0.94. Construct validity convergent with the Conflict Tactics Scale (CTS), $r = 0.49 - 0.55$ and ISA, $r = 0.44 - 0.75$. 	Adults Children
Child Physical Abuse	Fussy Baby Network	Erikson Institute	Y	<ul style="list-style-type: none"> • Clearinghouse for Military Family Readiness-Placement on the continuum of evidence: Unclear \emptyset 		Infants Adults
Bullying Child Physical Abuse Domestic Violence Child Sexual Abuse Homicide	Positive Action	Positive Action, Inc.	Y	<ul style="list-style-type: none"> • Crime Solutions Evidence Rating: Effective (multiple studies) 		Adolescents Children
Child Physical Abuse	Child Abuse Consultation Service	Riley Children's Health	N			Children

Repository

 MENU



 Interpersonal Violence Evidence Based Program Repository for Health Care Facilities

Gov. Eric J. Holcomb

Injury Categories

- Child Physical Abuse
- Adult Sexual Abuse
- Child Sexual Abuse
- Domestic Violence

Populations

- Infants
- Children
- Adolescents
- Adults

Search

Prevention Scales

Use the prevention scales button to search for in-depth information on prevention program evaluation scales.

88 programs available. Search programs by selecting one or more items from categories and populations.

Category	Program	Group	Evaluation	Prevention Program Evaluation	Screening Tool Measures	Population
Child Physical Abuse Child Sexual Abuse	DOCS INCLASE (Indiana Child Abuse Screening and Education)	Riley Children's Health	N			Children
Child Physical Abuse Bullying	Triple P System	Parenting and Family Support Center	Y	<ul style="list-style-type: none"> • Blueprints Rating System: Promising • Coalition for Evidence-Based Policy: Promising Program • Model Program 		Infants Children Adults
Child Physical Abuse Bullying	Parent-Child Interaction Therapy (PCIT)	PCIT International	Y	<ul style="list-style-type: none"> • Crime Solutions Evidence Rating: Effective (multiple studies) 		Children Adults
Child Physical Abuse	Alternatives for Families: Cognitive Behavioral Therapy	AF-CBT	Y	<ul style="list-style-type: none"> • Crime Solutions Evidence Rating: Promising (1 study) 		Children Adults
Child Physical Abuse	Multisystemic Therapy for Child Abuse and Neglect (MST-CAN)	MST-CAN	Y	<ul style="list-style-type: none"> • Crime Solutions Evidence Rating: Promising (1 study) 		Children Adolescents Adults
Child Physical Abuse	Family Foundations	Family Foundations	Y	<ul style="list-style-type: none"> • Crime Solutions Evidence Rating: Promising (multi study) • Clearinghouse for Military Family Readiness-Placement on the continuum of evidence: Promising 		Infants Adults

Small Changes, Big Differences

[Find out about Triple P](#)[The system at work](#)[Getting started](#)[Local contacts](#)

TRIPLE P TAKES THE GUESSWORK OUT OF PARENTING

The Triple P – Positive Parenting Program is one of the most effective evidence-based parenting programs in the world, backed up by more than 35 years of ongoing research. Triple P gives parents simple and practical strategies to help them build strong, healthy relationships, confidently manage their children's behavior and prevent problems developing. Triple P is currently used in more than 25 countries and has been shown to work across cultures, socio-economic groups and in many different kinds of family structures.

This website is for practitioners, agencies, jurisdictions and governments. If you are a parent, please go to [Triple P's parent website](#).

[FIND OUT ABOUT TRIPLE P ▶](#)[THE TRIPLE P SYSTEM AT WORK ▶](#)[GET STARTED WITH TRIPLE P ▶](#)

ARE YOU A PARENT?
OOPS, YOU'RE ON THE WRONG SITE!
[CLICK HERE](#)



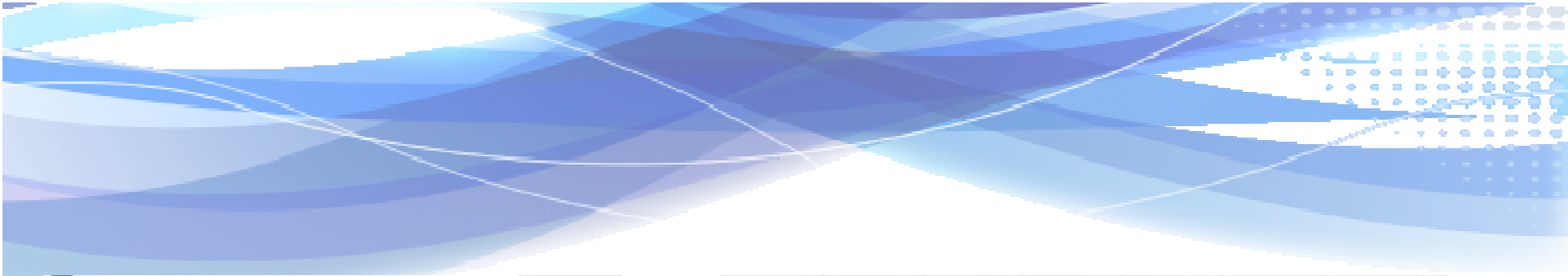
WANT TO KNOW HOW **TRIPLE P ONLINE** CAN WORK WITH **YOUR FAMILIES?**

[Watch the Webinar with Dr Karen Turner](#)

SEE WHAT OTHERS SAY



- ▶ GIVES PARENTS HOPE
- ▶ TEEN TERROR NO



Injury Categories
 Child Physical Abuse
 Adult Sexual Abuse
 Child Sexual Abuse
 Domestic Violence

Populations
 Infants
 Children
 Adolescents
 Adults

Search

Use the prevention scales button to search for in-depth information on prevention program evaluation scales.



88 programs available. Search programs by selecting one or more items from categories and populations.

Category	Program	Group	Evaluation	Prevention Program Evaluation	Screening Tool Measures	Population
Child Physical Abuse	Family Functional Assessment (FFA) Field Guide	Indiana Department of Child Services	N			Children Adolescents Adults
Child Physical Abuse	Minding the Baby (MTB)	Yale Child Study Center, Yale School of Nursing, Fair Haven Community Health Center, and Cornell Scott Hill Health Center.	Y	• Clearinghouse for Military Family Readiness-Placement on the continuum of evidence: Promising		Infants Children Adolescents Adults
Child Physical Abuse	The Period of Purple Crying	The Period of Purple Crying	Y	• California Evidence-Based Clearinghouse for Child Welfare Scientific Rating: 3		Infants Adults
Child Physical Abuse	All Babies Cry	Children's Trust	Y	• Clearinghouse for Military Family Readiness-Placement on the continuum of evidence: Unclear+		Infants Adults
Child Physical Abuse	Fussy Baby Network	Erikson Institute	Y	• Clearinghouse for Military Family Readiness-Placement on the continuum of evidence: Unclear		Infants Adults
Child Physical Abuse	Safe Babies New York Program	Safe Babies New York	Y	• California Evidence-Based Clearinghouse for Child Welfare Scientific Rating: 3 • Clearinghouse for Military Family Readiness-Placement on the continuum of evidence: Promising		Infants Adults
Child Physical Abuse	Safe to Sleep	NIH	N			Infants Adults
Child Physical Abuse	Parents Plus Children's Program (PPCP)	ParentsPlus	Y	• Clearinghouse for Military Family Readiness-Placement on the continuum of evidence: Promising		Children Adults

Use the links below to jump to a specific scale section.

[California Evidence-Based Clearinghouse for Child Welfare Scientific Rating](#)

[Blueprints Rating System](#)

[Crime Solutions](#)

[Coalition for Evidence-Based Policy](#)

[Substance Abuse and Mental Health Services Administration's \(SAMHSA's\) National Registry of Evidence-based Programs and Practices](#)

[Injury Center University of Michigan](#)

[Agency for Healthcare Research and Quality Levels of Evidence](#)

[Clearinghouse for Military Family Readiness Evaluation Placement](#)

California Evidence-Based Clearinghouse for Child Welfare Scientific Rating:

1. Well-Supported by Research Evidence

1. Multiple Site Replication and Follow-up:

- At least two rigorous randomized controlled trials (RCTs) in different usual care or practice settings have found the practice to be superior to an appropriate comparison practice.
- In at least one of these RCTs, the practice has shown to have a sustained effect at least one year beyond the end of treatment, when compared to a control group.
- The RCTs have been reported in published, peer-reviewed literature.

2. Outcome measures must be reliable and valid, and administered consistently and accurately across all subjects.

3. If multiple outcome studies have been published, the overall weight of the evidence supports the benefit of the practice.

4. There is no case data suggesting a risk of harm that: a) was probably caused by the treatment and b) the harm was severe

IPV information

- The Interpersonal Violence Prevention Repository will provide a quick reference for health care facilities on evidence based prevention and screening programs and tools .
- The IPV program repository can be accessed from the link below
- <https://secure.in.gov/isdh/27783.htm>

Suicides

A total of X suicides occurred in XX County in 2016. The data below is based off those deaths.

Indiana Suicide Rate:

15.2

per 100,000 population

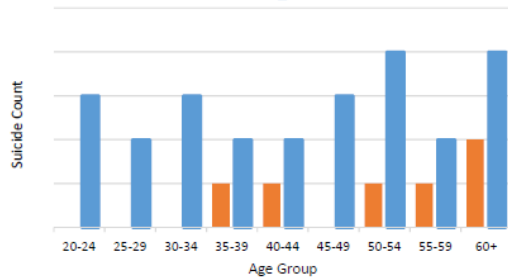
XX County Suicide Rate:

11.2

per 100,000 population

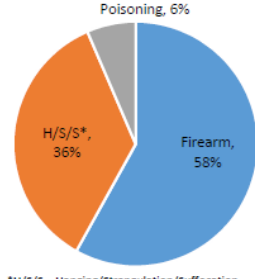
Suicide by Age and Sex

Female Male



Suicide Cause of Death

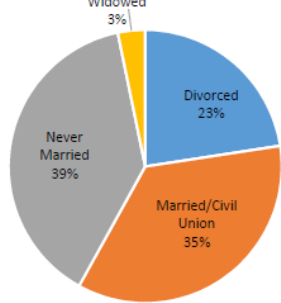
(Cause, count, percentage of suicides)



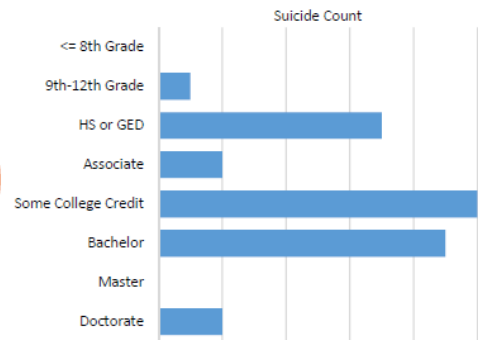
*H/S/S = Hanging/Strangulation/Suffocation

Marital Status

(Status, count, percentage of suicides)



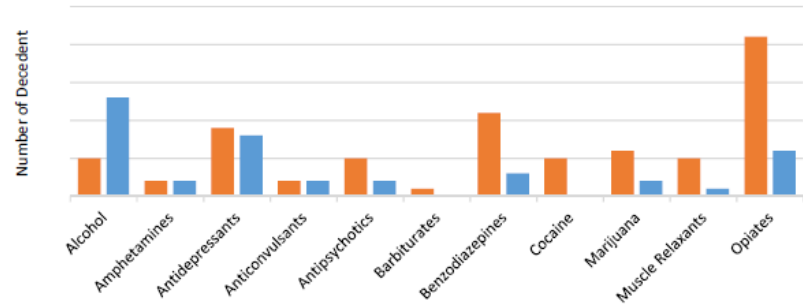
Education Level of Suicide Decedents



Substances Present in Suicide and Unintentional Drug Overdose Decedents

Substances Present by Manner of Death

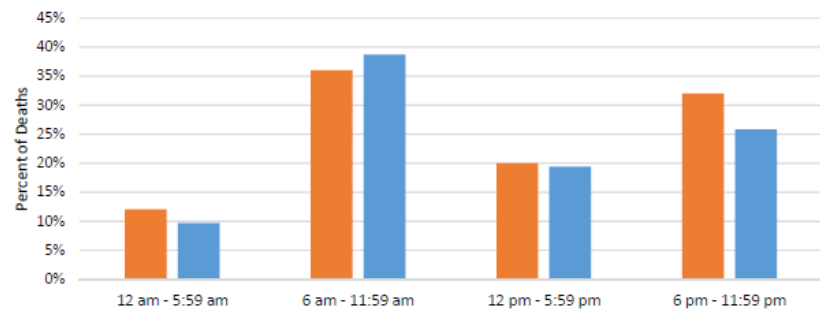
Overdoses Suicides

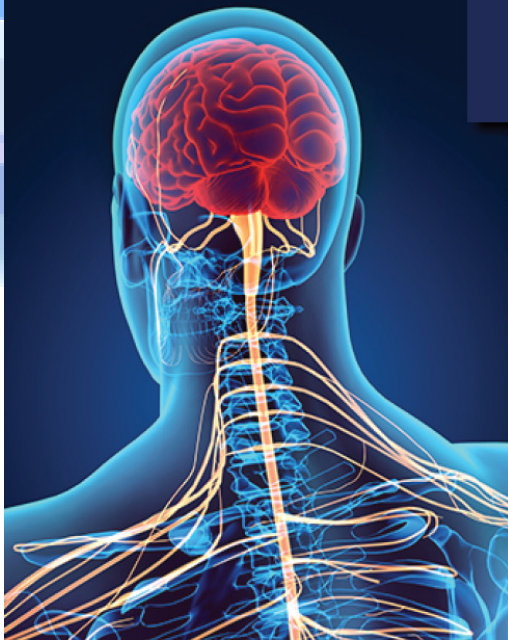


Time of Injury in Suicide and Unintentional Drug Overdose Decedents

Time of Injury by Manner of Death

Overdoses Suicides





2018
Indiana Traumatic Spinal Cord and Brain Injury Research Conference

A program making an impact

Wednesday, April 18, 2018

IU Health Neuroscience Center
 355 W. 16th Street
 Conference Center Auditorium, Floor 1
 Indianapolis, IN 46202
 8 a.m. - 1:30 p.m.

Get notified when registration opens! Send your contact information to indianatrauma@isdh.in.gov.



Registration is open on the website
 Date: March 8-9, 2018
 Location: Indiana State Department of Health

www.amtrauma.org
 @ATStrauma
 info@AMTrauma.org
 800-556-7890

**COMPREHENSIVE
 EDUCATION FOR THE
 TRAUMA REGISTRY EXPERT**
 AMERICAN TRAUMA SOCIETY - TRAUMA REGISTRY COURSE

trauma registry course

The American Trauma Society's Trauma Registry Course has been recognized by the American College of Surgeons in the Resources for Optimal Care of the Injury Patient since 1999 as an avenue for comprehensive trauma registry training.



5th annual
**EMS
 Medical Directors'
 Conference**

Friday, April 27, 2018

Get

Ritz Charles
 12156 N. Meridian Street
 Carmel, IN 46032

8am - 5pm



Email questions to: indianatrauma@isdh.in.gov



Indiana State
Department of Health

Harm Reduction:

One small step for man, one giant leap for mankind

Tuesday, June 19
10-11 a.m. (EDT)



Email questions to: indianatrauma@isdh.in.gov

Indiana Black & Minority Health Fair

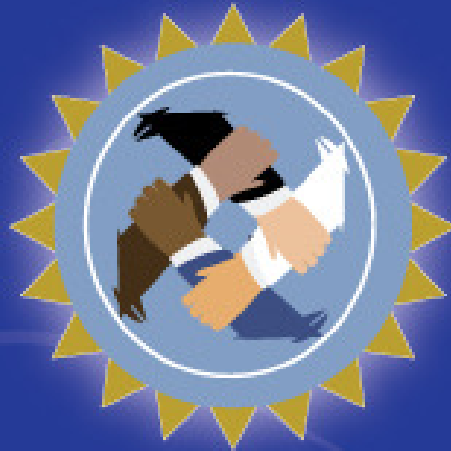


- July 19-22
 - Thursday, 7/19
 - Senior day
- Older adult falls prevention
- Child passenger safety



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov



Public Safety + Public Health Opioid Conference

Community Solutions: United to Combat the Opioid Epidemic

SAVE THE DATE

Tuesday, August 14

502 East Event Centre
Carmel, Indiana

Target audience: Law enforcement, healthcare professionals, local health department professionals, community outreach coordinators, educators, judicial system representatives and coroners

Want to get notified when registration opens?
Interested in becoming an exhibitor or sponsor?

Contact us at LHDinfo@isdh.in.gov.



Email questions to: indianatrauma@isdh.in.gov

Midwest Injury Prevention Alliance (MIPA) Summit

- Save the Date!
 - November 29 & 30



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

Screening, Brief Intervention and Referral to Treatment (SBIRT) provider training

- **Screening** quickly assesses the severity of substance use & identifies the appropriate level of treatment.
- **Brief intervention** focuses on increasing insight & awareness regarding substance use AND motivation toward behavioral change.
- **Referral** to treatment provides those identified as needing more extensive treatment with access to specialty care.

@INDTrauma



Indiana State
Department of Health

SBIRT provider training (continued)

- Session 1: Intro to Motivational Interviewing (MI):
 - ~~Mon. June 4th - Elkhart General Hospital.~~
 - ~~Fri. June 8th - Riverview Health (Noblesville).~~
 - ~~Fri. June 29th - IU Health Bloomington.~~
- Session 2 and 3: Advanced MI and SBIRT (2-day session, one topic per day):
 - Wed. Aug. 29th and Thurs Aug. 30th - IU Health Bloomington.
 - Wed. Aug. 15th and Thur. Aug. 16th - Elkhart General Hospital.
 - Thu. Aug. 9th and Fri. August 10th - Riverview Health (Noblesville).

@INDTrauma

SBIRT provider training (continued)

- To register- <https://sbirt-2018.eventbrite.com>
- Email questions to: indianatrauma@isdh.in.gov
- Coding for SBIRT reimbursement:
[https://www.samhsa.gov/sbirt/coding-reimbursement.](https://www.samhsa.gov/sbirt/coding-reimbursement)

@INDTrauma

Division grant activities

- Administration for Community Living (ACL) – Traumatic Brain Injury (TBI).
- ACL – Evidence-Based Falls Prevention Program.
- Comprehensive Opioid Abuse Site-based Program (COAP)
 - Category 6: Public Safety, Behavioral Health & Public Health Information-Sharing Partnerships.

Division grant activities

- National Violent Death Reporting System (NVDRS).
- Prescription Drug Overdose: Prevention for States (PFS)
 - Base.
 - Supplement.
 - Expansion.
- Enhanced State Surveillance of Opioid-Related Morbidity & Mortality (ESOOS)
 - Base.
 - Supplement.
- First Responder Comprehensive Addiction & Recovery Act (FR CARA).
- Preventive Health & Health Services Block Grant (PHHS BG).

Trauma network design

- Purdue University (Dr. Nan Kong) & Wright State University (Dr. Priti Parikh).
- Developing a web-based strategic planning tool for trauma network.
 - Data analytics.
 - Optimization.
 - GIS capabilities.
- Demo of tool coming soon!

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*

Email questions to: indianatrauma@isdh.in.gov

“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
Memorial Hospital & Health Care Center	Jasper	III	Adult	08/24/2016	October 2017	05/16-05/17, 2017	05/15-05/16, 2018
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

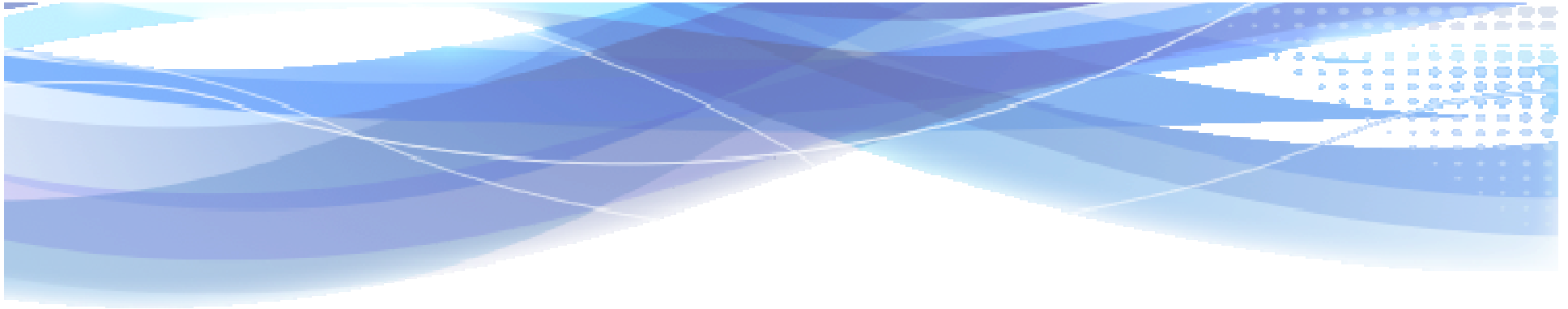
**Date the Indiana State Trauma Care Committee (ISTCC) reviewed/reviews the 1 year review documents. This date is based on the first ISTCC meeting after the 1 year date.

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



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov



Regional Updates

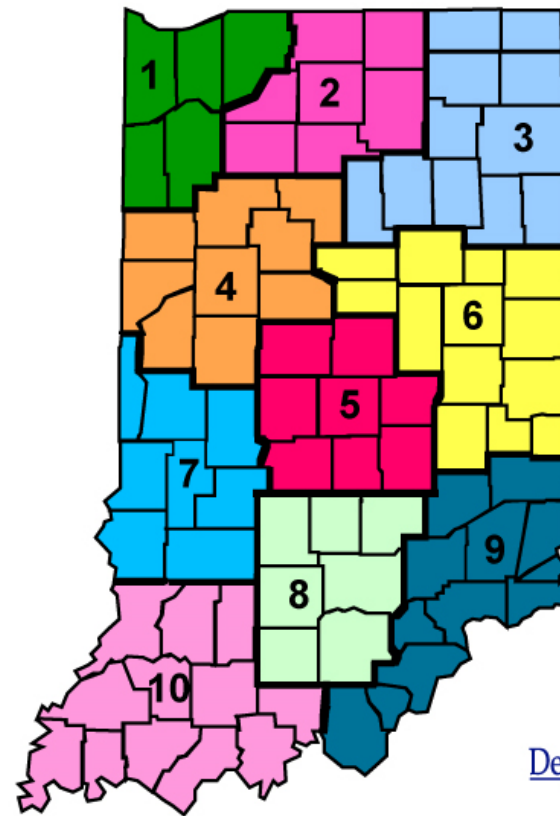


Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

Regional updates

- District 1
- District 2
- District 4
- District 5
- District 6
- District 7
- District 10
- District 3



Email questions to: indianatrauma@isdh.in.gov



District 3: Double transfer case study

Lisa Hollister, *Trauma Program Manager*
Parkview Regional Medical Center



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

Trauma Transfers: A Retrospective Analysis of Multiple Transfers



LISA HOLLISTER, MSN, RN
ANNETTE CHARD, RN, CEN
DEBORAH MCMAHAN, MD
JANA SANDERS, MEN
SHIVANI PARIKSHAK, BS
MARY LANGEMEIER



INDIANA UNIVERSITY
SCHOOL OF MEDICINE



ACS Requirements for Trauma Centers



- **Level I (ex: Eskenazi, Riley, Methodist)**
 - Capable of providing total care for every aspect of injury
 - Associated with a school of medicine
 - Facilitates research
 - 24 hour in-house coverage by general surgeons
 - Prompt availability of care in specialties
 - Receives patients from all levels of care
- **Level II (ex: Memorial Hospital, Lutheran, Parkview Regional)**
 - Same as a level I trauma center EXCEPT:
 - ✦ Not associated with a school of medicine
 - ✦ Does not have a general surgery residency training program
 - ✦ Does not do research
- **Level III (ex: IU Health Arnett & Ball Memorial)**
 - 24 hour immediate coverage by emergency medicine physicians
 - Prompt availability of coverage by general surgeons and anesthesiologists
 - Transfer agreements for patients requiring more comprehensive care at a Level I or II trauma center

Level 1 Trauma:

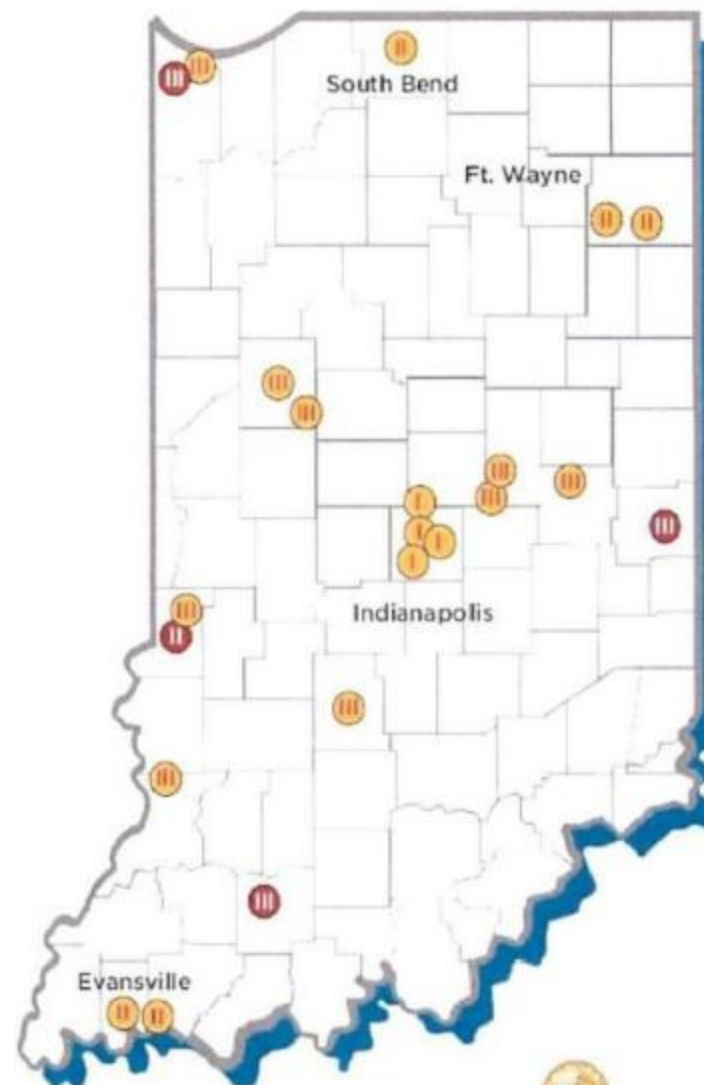
- Indiana University Health Methodist Hospital, Indianapolis
- Riley Hospital for Children at Indiana University Health, Indianapolis
- Eskenazi Health, Indianapolis
- St. Vincent Hospital, Indianapolis

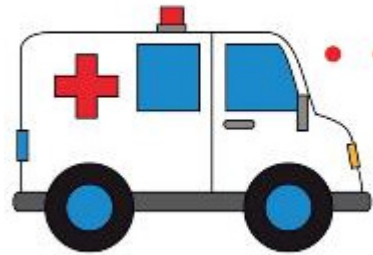
Level 2 Trauma:

- Deaconess Hospital, Evansville
- St. Vincent Hospital, Evansville
- Lutheran Hospital of Indiana, Fort Wayne
- Parkview Regional Medical Center, Fort Wayne
- Memorial Hospital of South Bend
- Terre Haute Regional Hospital

Level 3 Trauma:

- IU Health Arnett, Lafayette
- IU Health Ball Memorial Hospital, Muncie
- Franciscan Health Lafayette East
- St. Vincent Anderson Regional
- Community Hospital, Anderson
- Good Samaritan, Vincennes
- Methodist Northlake, Gary
- Union Hospital, Terre Haute
- IU Health Bloomington
- Franciscan Health Crown Point
- Reid Health
- Memorial Hospital and Health Care Center, Jasper - in the process

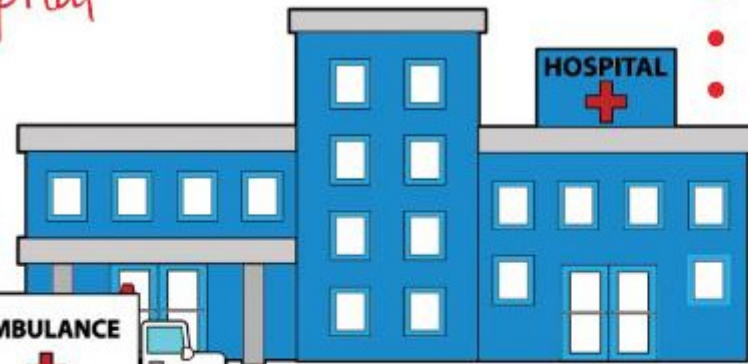




TRANSFER #1

Local Hospital

TRANSFER #2



Trauma II Center:
Lutheran/Parkview



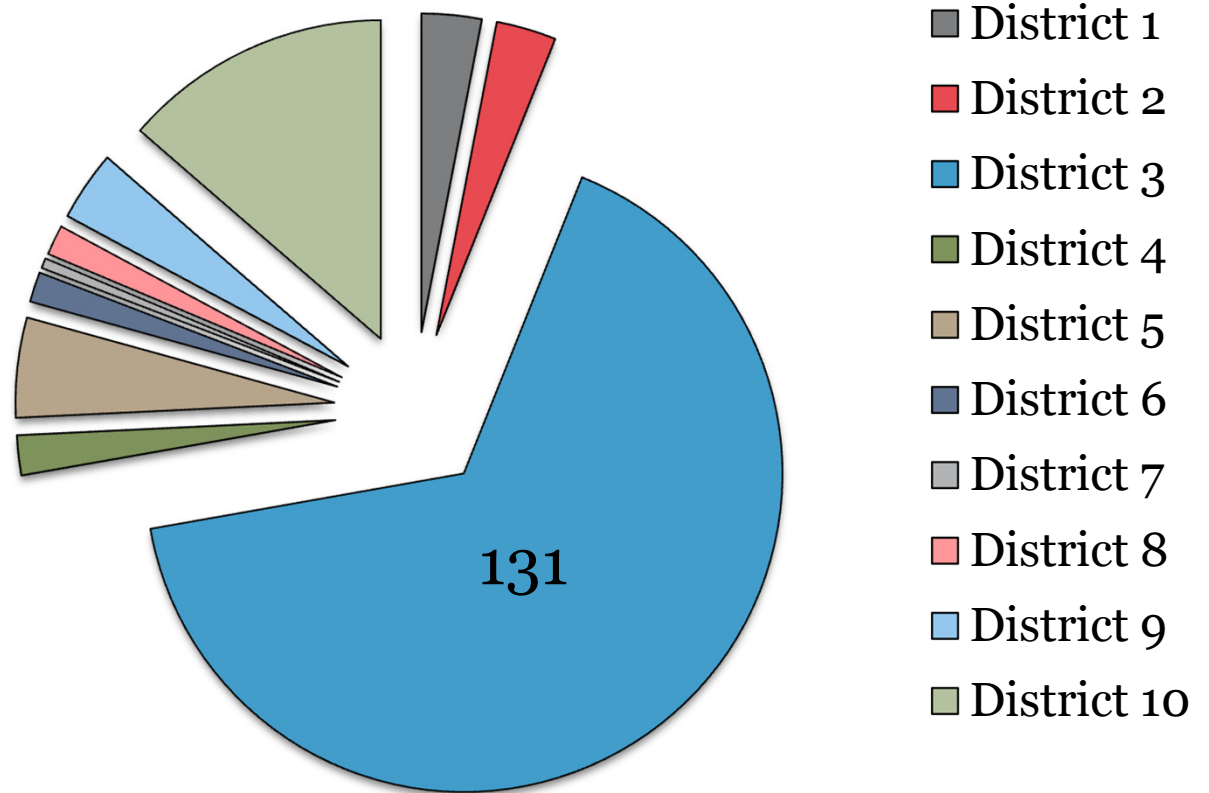
Acute Care Facility

DOUBLE
TRANSFER



District 3 (comprised of Adams, Allen, DeKalb, Huntington, LaGrange, Miami, Noble, Steuben, Wabash, Wells and Whitley counties) accounted for 66.2% of Indiana's double transfers between 2014-2016.

Double Transfers in Indiana



n = 198

Study Goals



- Determine whether or not District 3 has an issue with inappropriate double transfers
- Understand the reasons provided when a transfer is deemed inappropriate
- Explore improvements in processes to decrease the number of transfers for a trauma patient
- Learn why patients transferred from a trauma center
- Discover where patients transferred to

Why do we care?



- ISDH Quarter 1 Report, 2016
 - Time for ONE transfer = 702 minutes or 11.7 hours
- Parkview Study, 2014
 - Mean cost per patient = \$15,135
- Ultimately affects quality of care

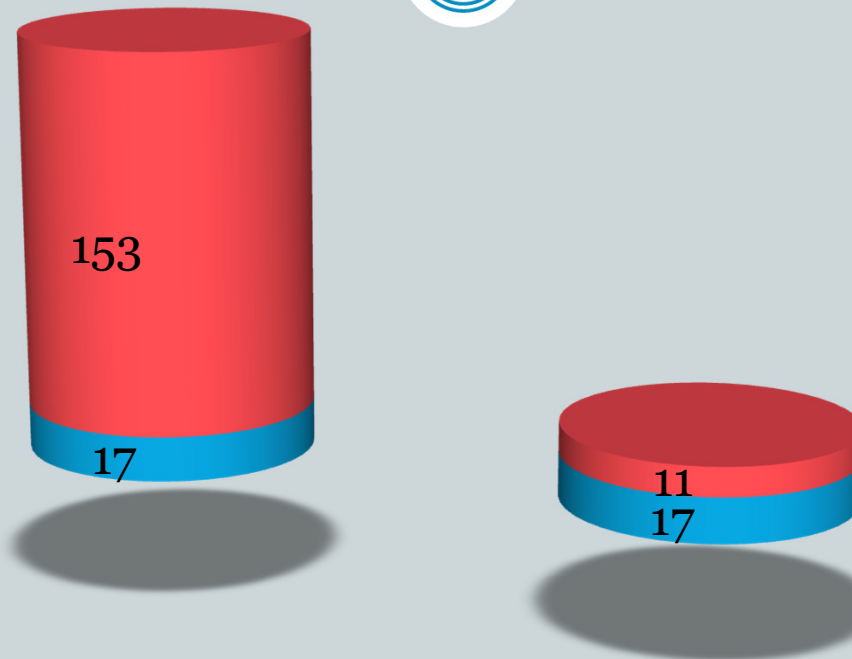


Methods



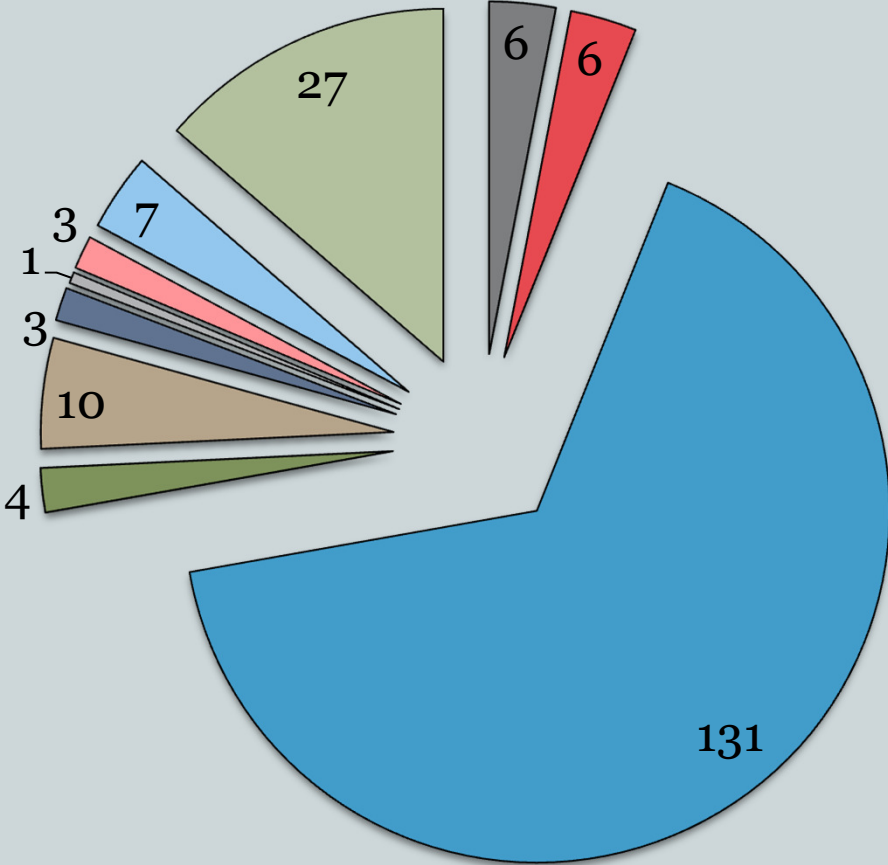
- Retrospective chart review of trauma transfers occurring in Allen County for the years 2014-2016
 - Parkview – 17 charts
 - Lutheran – 153 charts
 - Demographic data, injury type, injury location, Injury Severity Score (ISS), trauma activation level, number of transfers, reason for the second transfer, time at first hospital, time to transfer, and whether the transfer was deemed appropriate
- Data analysis
 - Inter-hospital transfers vs. intra-hospital transfers
- First study for double transfers at patient level

Double Transfers: District 3, 2014-2016



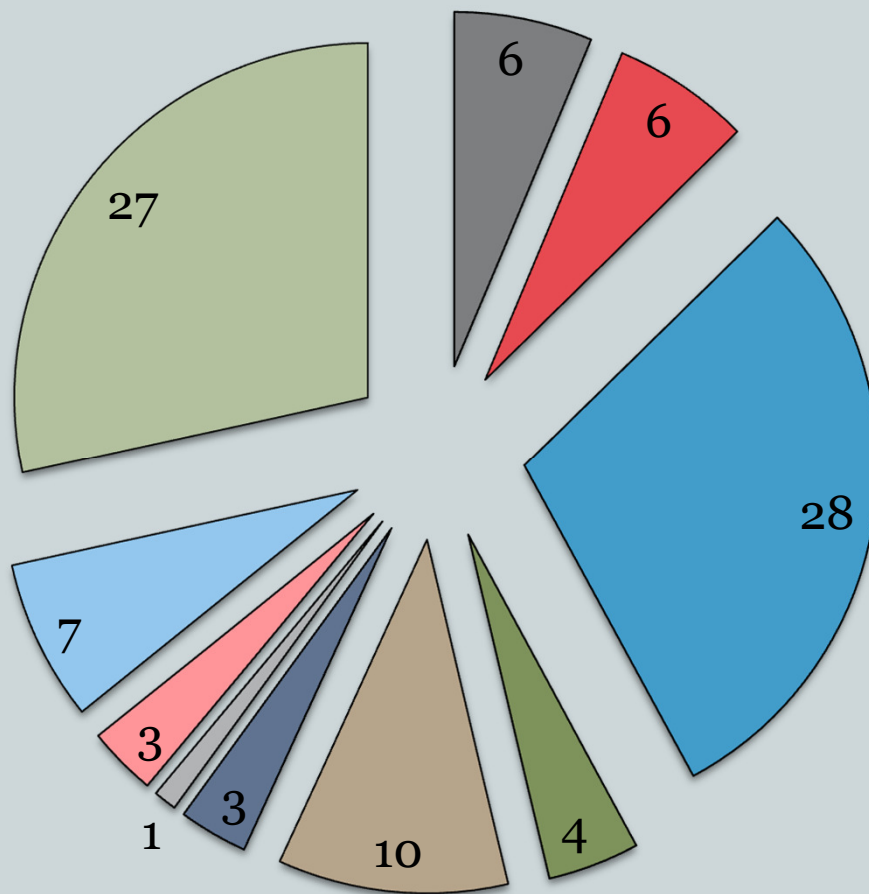
	With The Orthopedic Hospital (n = 170)	Without The Orthopedic Hospital (n = 28)
■ Lutheran	153	11
■ Parkview	17	17

Double Transfers in Indiana, 2014-2016: Before Eliminating The Orthopedic Hospital (TOH)



- District 1
- District 2
- District 3
- District 4
- District 5
- District 6
- District 7
- District 8
- District 9
- District 10

Double Transfers in Indiana, 2014-2016: After Eliminating The Orthopedic Hospital (TOH)



■ District 1

■ District 2

■ District 3

■ District 4

■ District 5

■ District 6

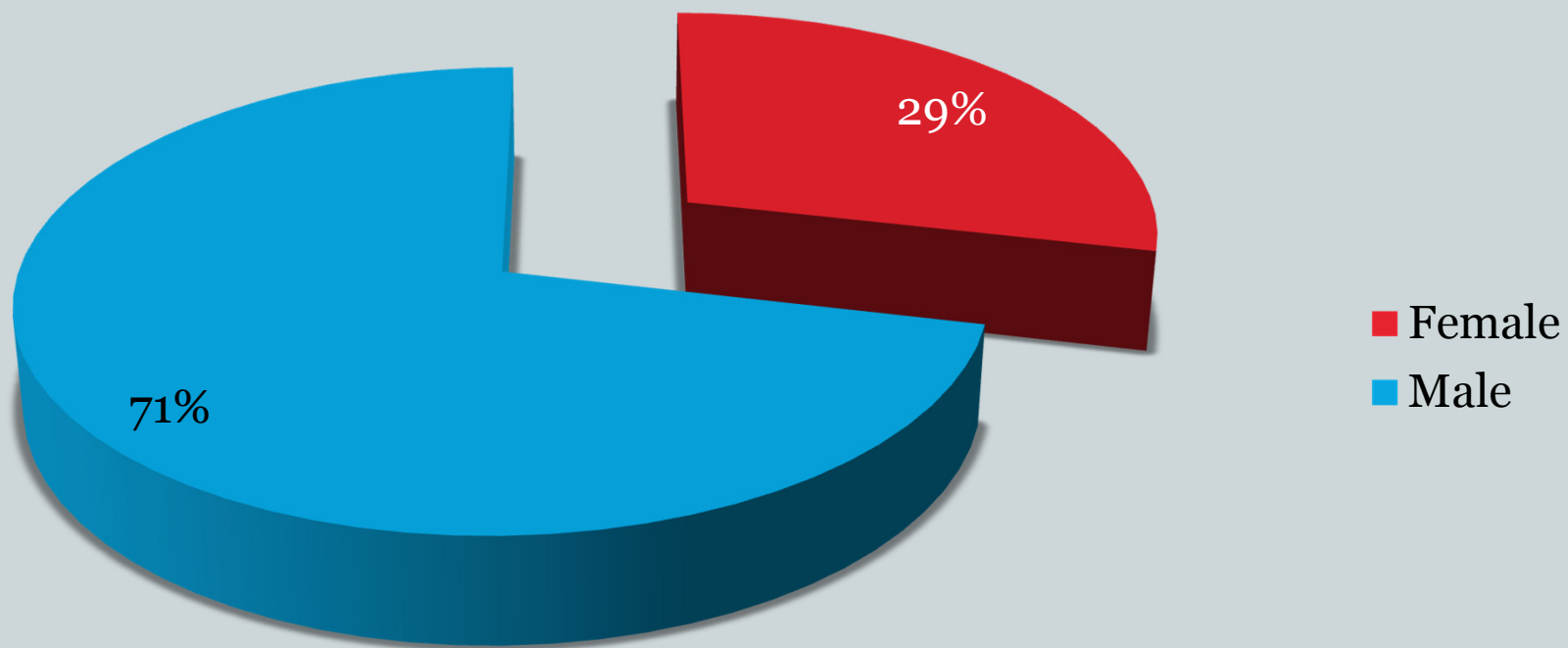
■ District 7

■ District 8

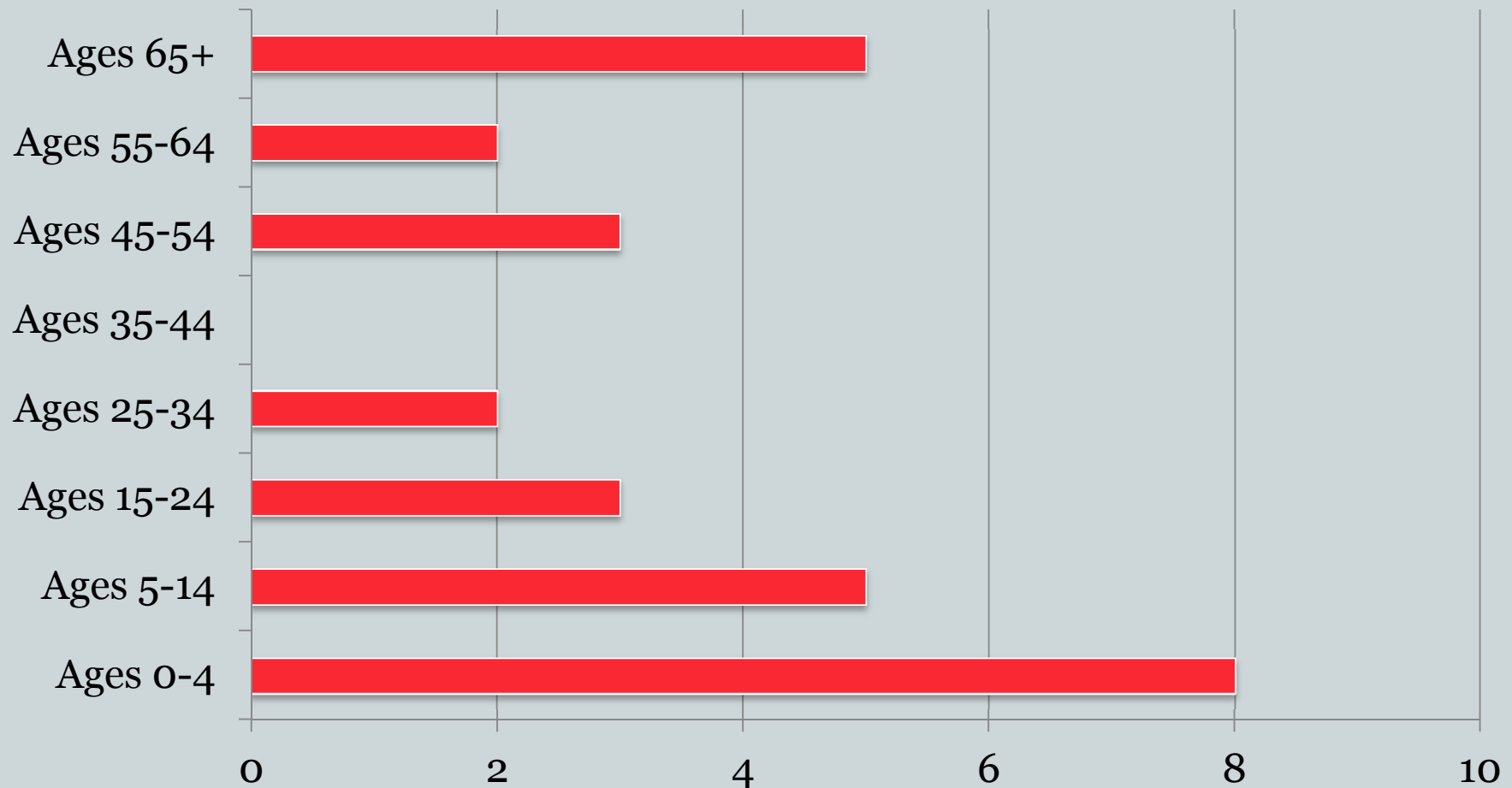
■ District 9

■ District 10

Patient Demographics: Sex



Patient Demographics: Age



TYPES OF

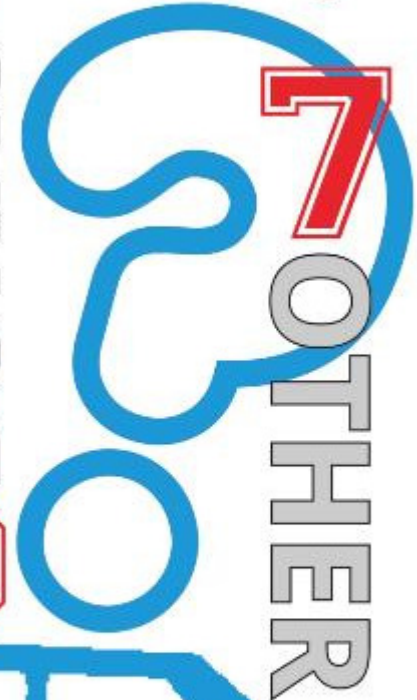
INJURY



11 FALLS



3 BURNS



7 OTHER



7 MOTOR VEHICLE



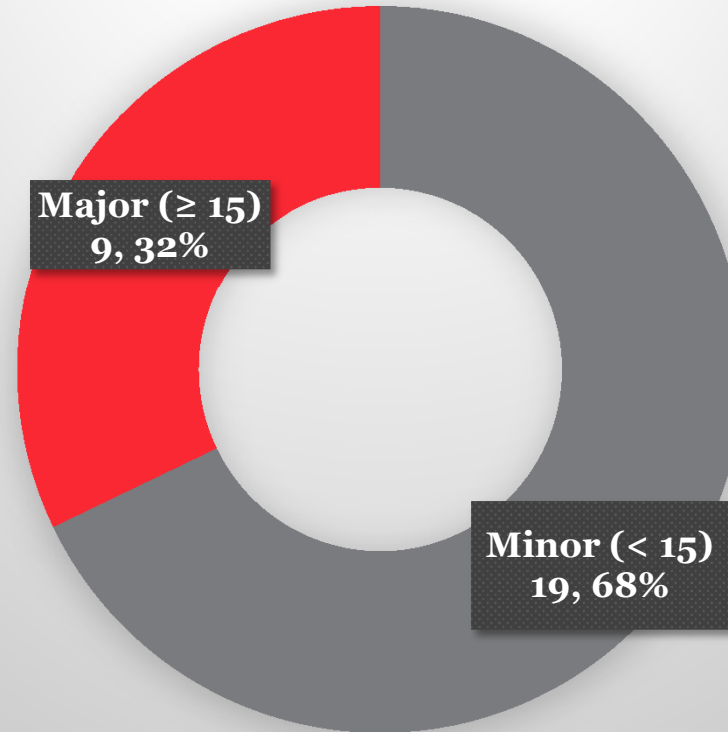
The Injury Severity Score (ISS) is a scoring system used to assess trauma severity

ISS range: 1 to 75

ISS correlate with mortality, morbidity, and hospital stay after the trauma incident

Minor trauma: ISS of less than 15

Major trauma: ISS of 15 or greater

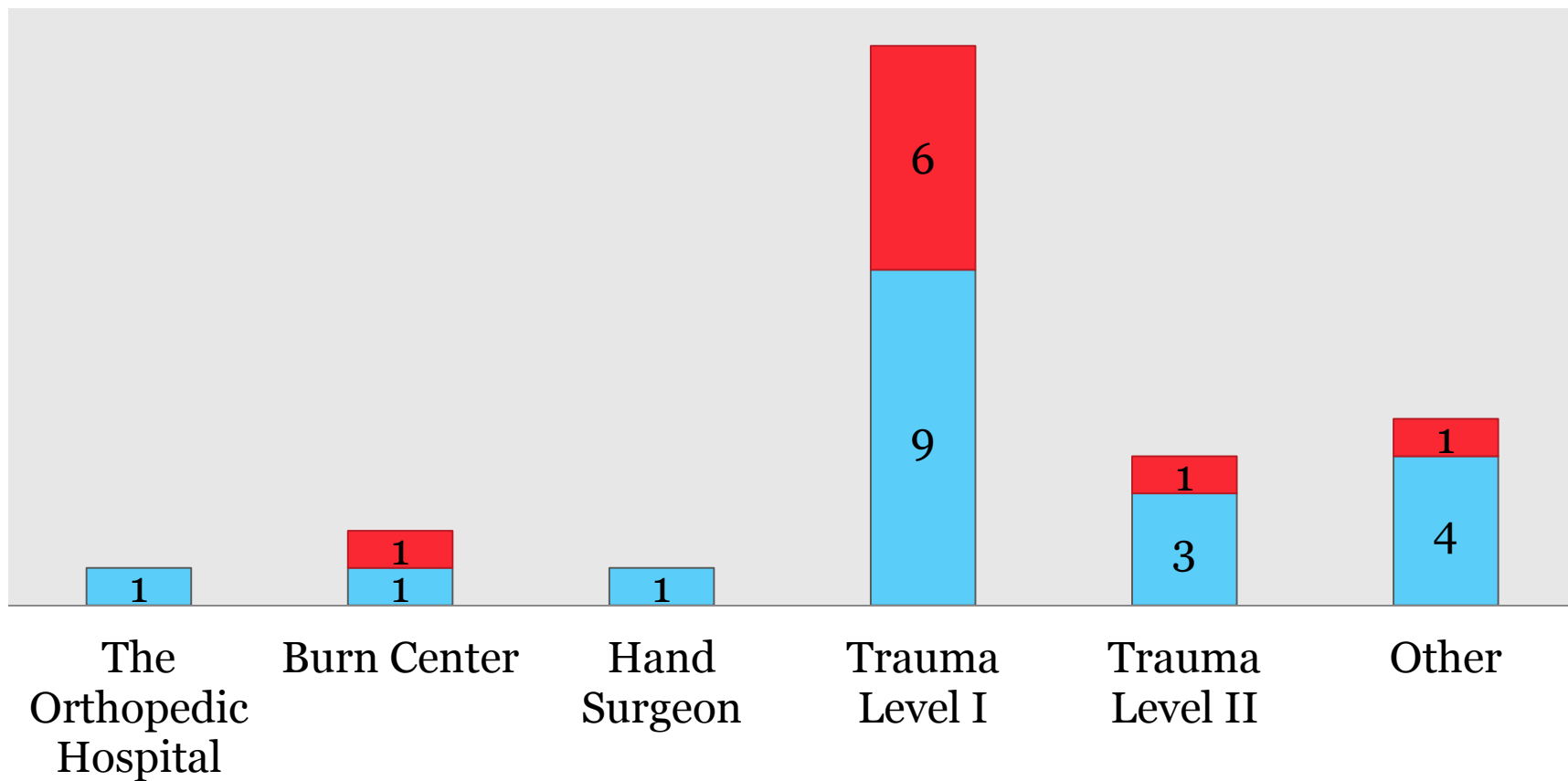


Injury Severity Score (ISS) for Double Transfers

Type of Facility Transferred To



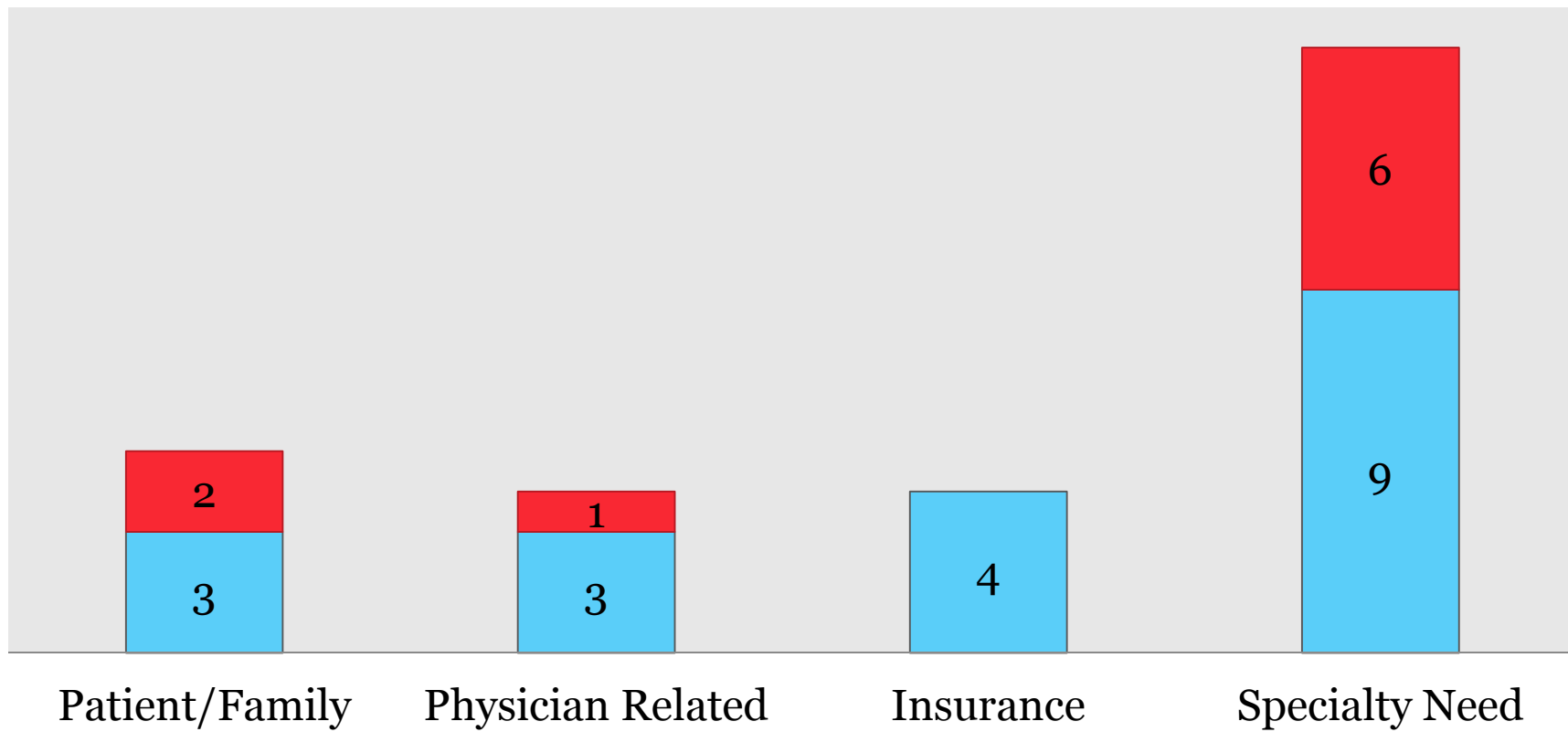
■ ISS < 15 ■ ISS ≥ 15



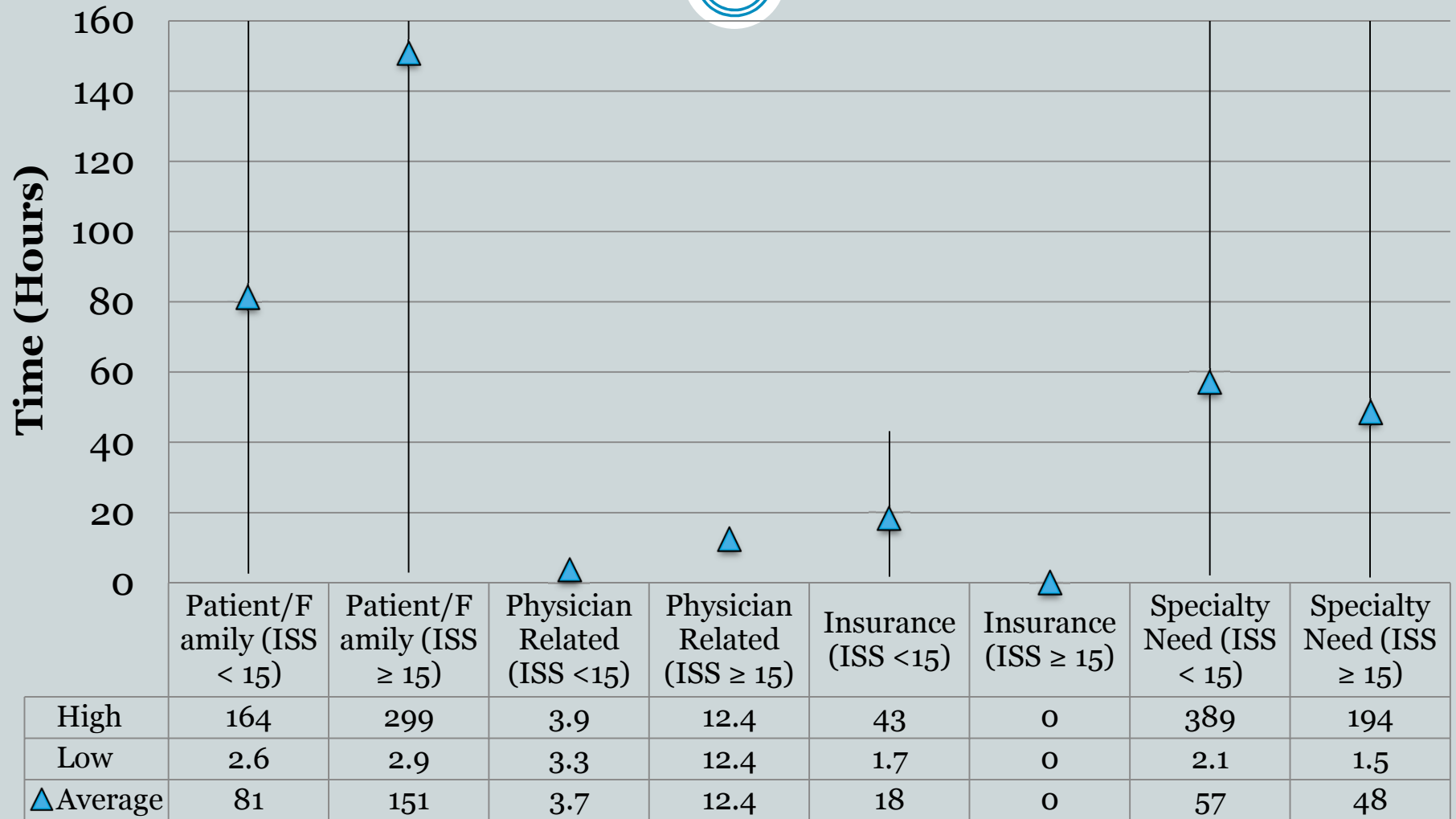
Reason for Second Transfer



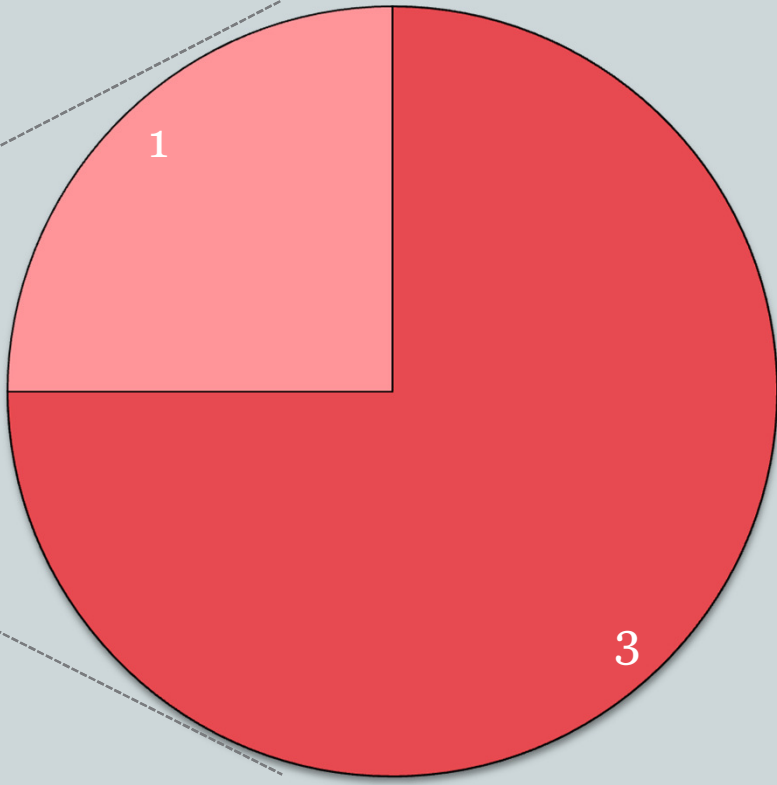
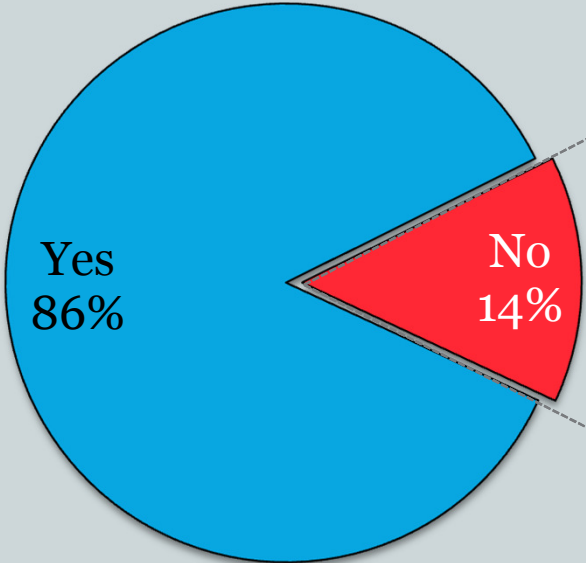
■ ISS < 15 ■ ISS ≥ 15



Time to Transfer based on Reason for Transfer

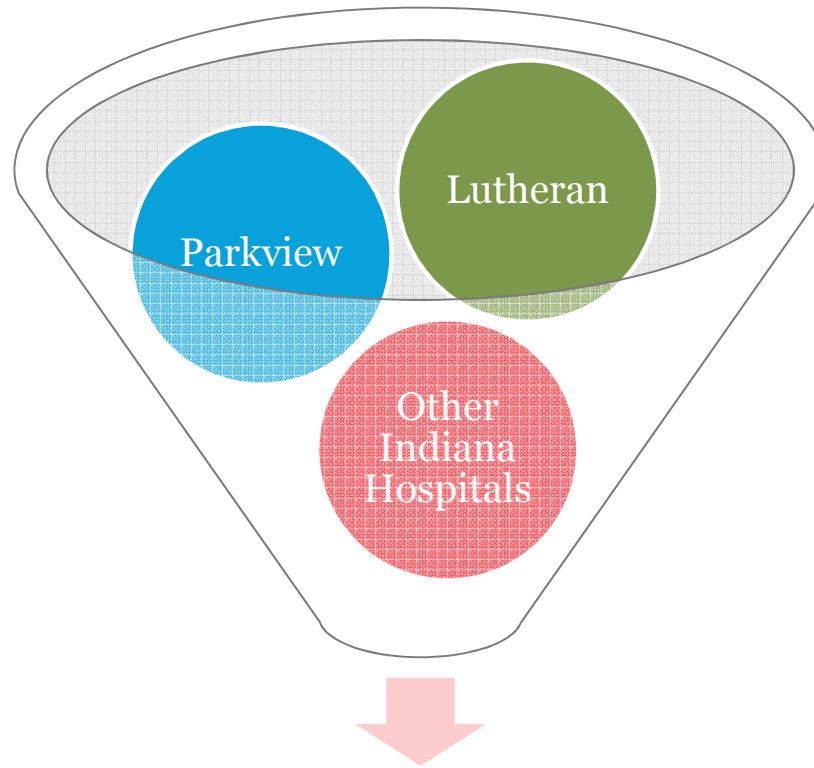


Reasons for Inappropriate Transfers



■ Physician related ■ Insurance

How do we fix this?



Indiana Trauma Registry

Conclusions & Recommendations



- Less than 1% of trauma patients admitted to Lutheran and Parkview hospitals are transferred out
- District 3 does not have an issue with inappropriate transfers
- Indiana Trauma Registry should not include intra-hospital transfers
- Statewide training on entering data into the Indiana Trauma Registry
- Data validation project implementation to conserve data integrity
- Other districts should look at their double transfers on a patient level as well

Questions?





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 MD

Indiana State Trauma Care Committee Update

Michael A. Kaufmann, MD, FACEP, FAEMS

EMS Medical Director

Indiana Department of Homeland Security



HOUSE ENROLLED ACT No. 1336

AN ACT to amend the Indiana Code concerning public safety.

Be it enacted by the General Assembly of the State of Indiana:

SECTION 1. IC 10-19-7-5 IS ADDED TO THE INDIANA CODE AS A NEW SECTION TO READ AS FOLLOWS [EFFECTIVE JULY 1, 2014]: Sec. 5. (a) For purposes of this section, "EMS" means emergency medical services.

(b) For purposes of this section, "state EMS medical director" refers to the state emergency medical services medical director appointed under subsection (c).

(c) The executive director shall appoint an individual to serve as the state emergency medical services medical director. The individual must have the following qualifications:

(1) Thorough knowledge of state EMS laws and

State EMS Medical Director

- Position created in 2014
- HEA 1336
- Second Regular Session 118th General Assembly (2014)
- Office first held by Michael Olinger, MD
- Special thanks to MO for paving the way for this position!



Duties and Responsibilities

The state EMS medical director shall oversee all pre-hospital aspects of the statewide EMS system, including the following:

1. Medical components for systems of care that interface or integrate with the statewide EMS system, including the following:
 - a. **Statewide planning for trauma, burn, cardiac, and stroke care**
 - b. Domestic preparedness
 - c. EMS for children.
2. For all levels of emergency responders establishment of the following:
 - a. **Statewide model guidelines and best practices for all patient care activities to ensure delivery of medical care consistent with professionally recognized standards.**
 - b. **A statewide EMS continuous quality improvement program.**
 - c. A statewide EMS advocacy program.
3. In cooperation with appropriate state and local agencies, training and certification of all EMS providers.

EMS Commission

- The EMS Commission is comprised of 13 individuals appointed by the Governor. Title 16, Chapter 31 of the Indiana Code specifies the following categories be represented:
 - a volunteer fire department that provides ambulance service;
 - a full-time municipal fire or police department that provides ambulance service;
 - a nonprofit provider of emergency ambulance service organized on a volunteer basis other than a volunteer fire department;
 - a provider of private ambulance services; a state-certified paramedic;
 - a certified emergency medical technician;
 - a registered nurse who works in an emergency department;
 - a licensed physician who has primary interest, training, and experience in emergency medical services;
 - a chief executive officer of a hospital that provides emergency ambulance service;
 - and a member who is not affiliated with the provision of emergency medical services and who is tasked with representing the public at large.
- Air medical services representative – Thomas Ladaro, MD
- Member at Large – John Ryan, Esq. Hall Render



EMS Certifications/Licensure

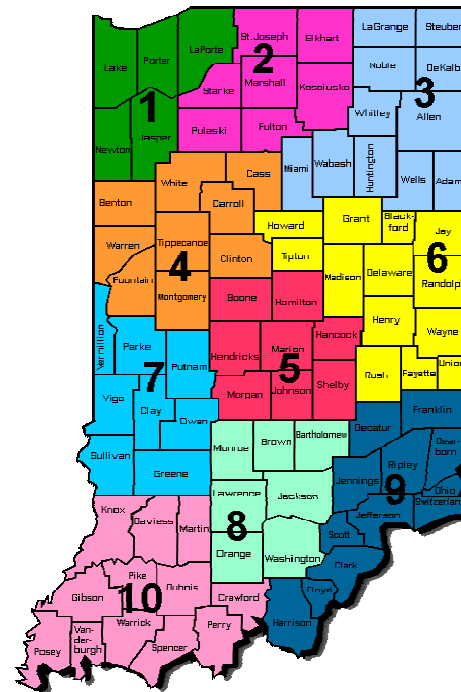
- Training Institutions 117
- Supervising Hospitals 91
- Providers 833
- Vehicles 2,600
- Personnel
- EMR 4,975

- 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

340 Provider Agencies required to report into ImageTrend

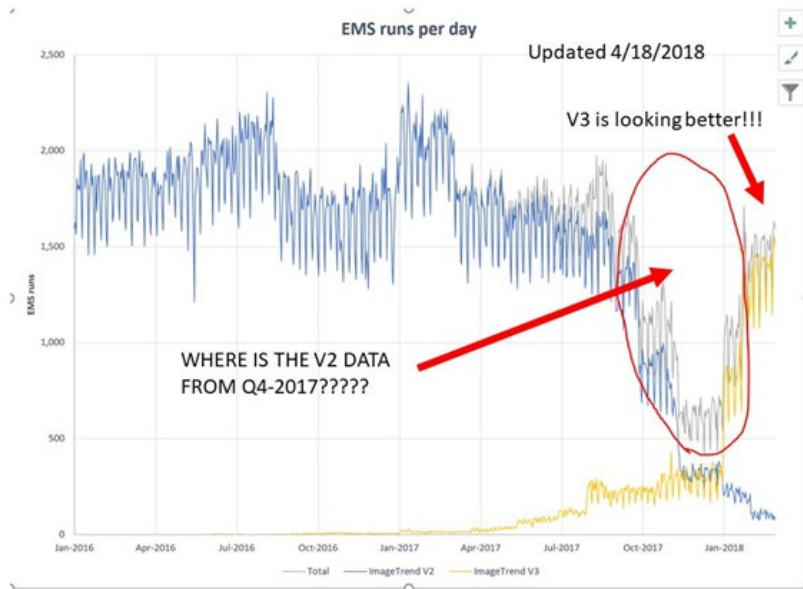




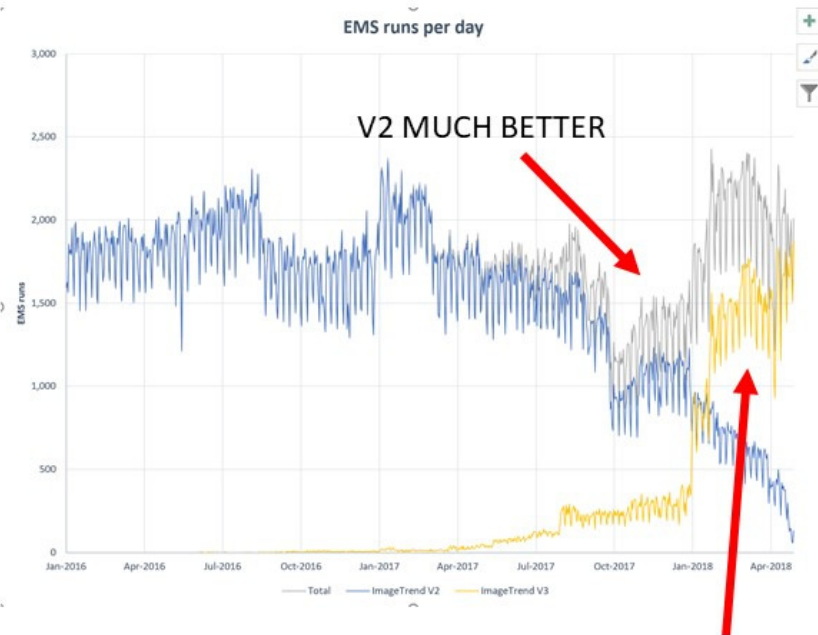
EMS Registry

- 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

4/18/2018



5/16/2018



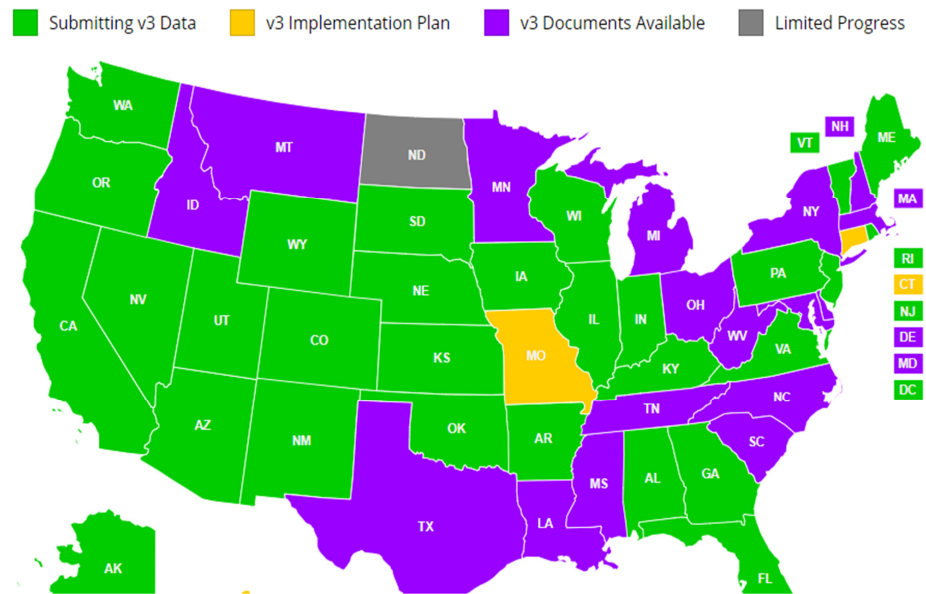
V3 MUCH IMPROVED!!!!

Agencies Not Reporting Data

Prompt Medical Transportation, Inc
Heartland Ambulance Service
Superior Air-Ground Ambulance Service of Indiana Inc
Elite Medical Transportation LLC - Methodist
IU Health Bloomington Emergency Medical Transport Service
Priority One EMS
Prompt Ambulance Central, Inc
Lakeshore EMS
ITS EMS DBA - Action Ambulance
Statewide Transfer Ambulance & Rescue, Inc
Care Ambulance Service LLC (Terre Haute)
United Emergency Medical Services
United Mobile Care / DBA Unified Mobile Care, Inc
Deploy Service Default Settings
D & S Ambulance
Able Ambulance Inc

NEMESIS

- Green for the first time!
- Submitting V3 Data



Indiana EMS Quality Improvement Program

- Started 6/2018
- EMS Registry
- EMS Compass Indicators
 - **Hypoglycemia**
 - **Med Error**
 - **Peds Respiraoty**
 - **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.

Trauma Indicator Example



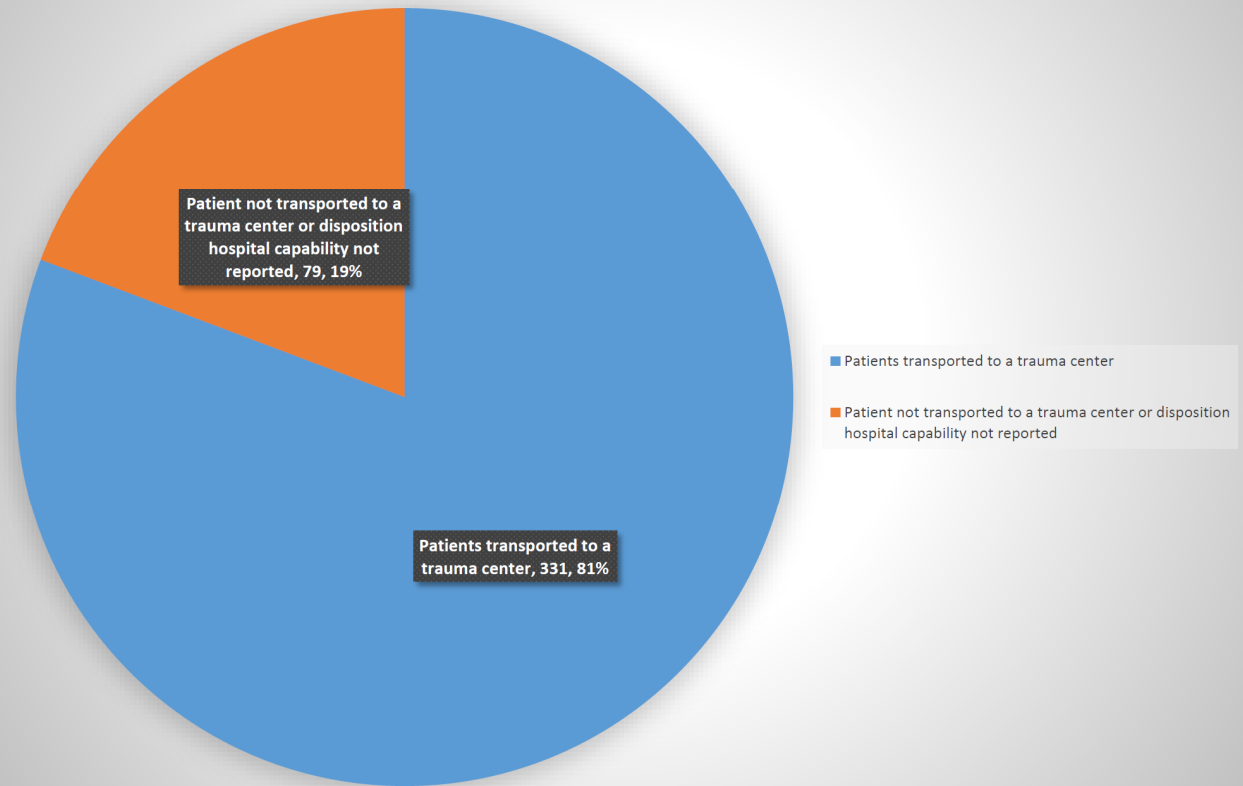
EMS Compass Performance Measures approved for testing Sept. 20, 2016 - Version 10.3

11/3/16

Trauma										
EMS Compass® ID	Version	Topic/Clinical Area	EMS Compass Bundle	Measure Title	Description	Measure Type	Rationale	Numerator	Denominator	Complete Pseudocode
Trauma-04	1	Clinical	Trauma	Trauma patients transported to trauma center	Trauma patients transported to trauma center	Process	Evidence is strong that Step 1 and Step 2 and Step 3 trauma patients should go to a trauma center	Patients transported to a trauma center	Patients meeting CDC Step 1 or 2 or 3 criteria originating from a 911 request	<pre> eDeposition.23 IN (9909021 Trauma Center Level 1 9909023 Trauma Center Level 2 9909025 Trauma Center Level 3 9909027 Trauma Center Level 4 9909029 Trauma Center Level 5) [!injury.02] IS NOT M.I.L.L.) OR [!injury.03] IN (2903001 - Amputation proximal to wrist or ankle; 2903003 - Crushed, degloved, mangled, or pulseless extremity; 2903005 - Chest wall instability or deformity (e.g., flail chest); 2903007 - Glasgow Coma Score <= 13; 2903009 - Open or depressed skull fracture; 2903011 - Paralysis; 2903013 - Pelvic fractures; 2903015 - All penetrating injuries to head, neck, torso, and extremities proximal to elbow or knee; 2903017 - Respiratory Rate <10 or >29 breaths per minute (<20 in infants aged <1 year) or need for ventilatory support; 2903019 - Systolic Blood Pressure <90 mmHg; 2903021 - Two or more proximal long-bone fractures)) OR [!injury.04] IN (2904001 - Auto v. Pedestrian/Bicyclist Thrown, Run Over, or > 20 MPH Impact; 2904003 - Fall Adults: > 20 ft. (one story is equal to 10 ft.); 2904005 - Fall Children: > 10 ft. or 2-3 times the height of the child; 2904007 - Crash Death in Same Passenger Compartment; 2904009 - Crash Ejection (partial or complete) from automobile; 2904011 - Crash Intrusion, including roof: > 12 in. occupant side; > 18 in. any side; 2904013 - Crash Vehicle Telemetry Data (AADN) Consistent with High Risk of Injury; 2904015 - Motorcycle Crash > 20 MPH) WHERE eResponse.05 = Type of Service Requested + 2205001 - 911 Response (Scene) </pre>

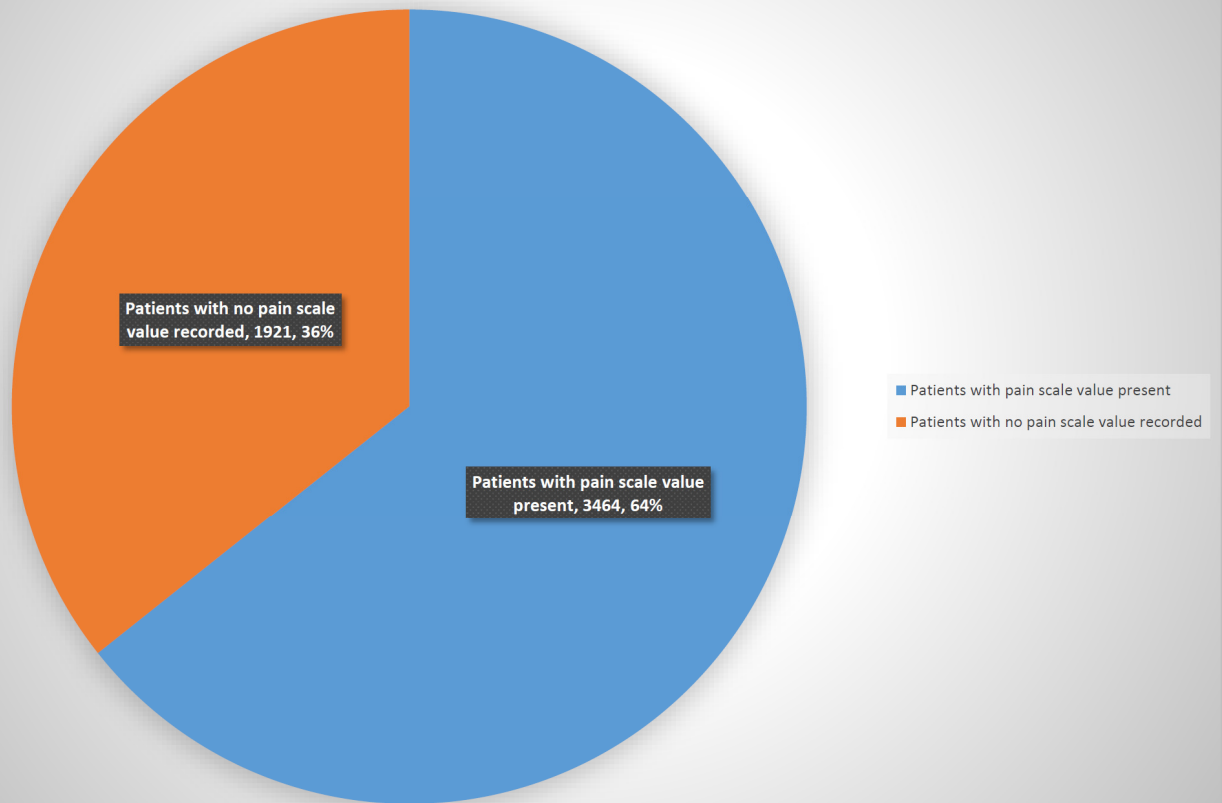
Trauma Center Destination

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



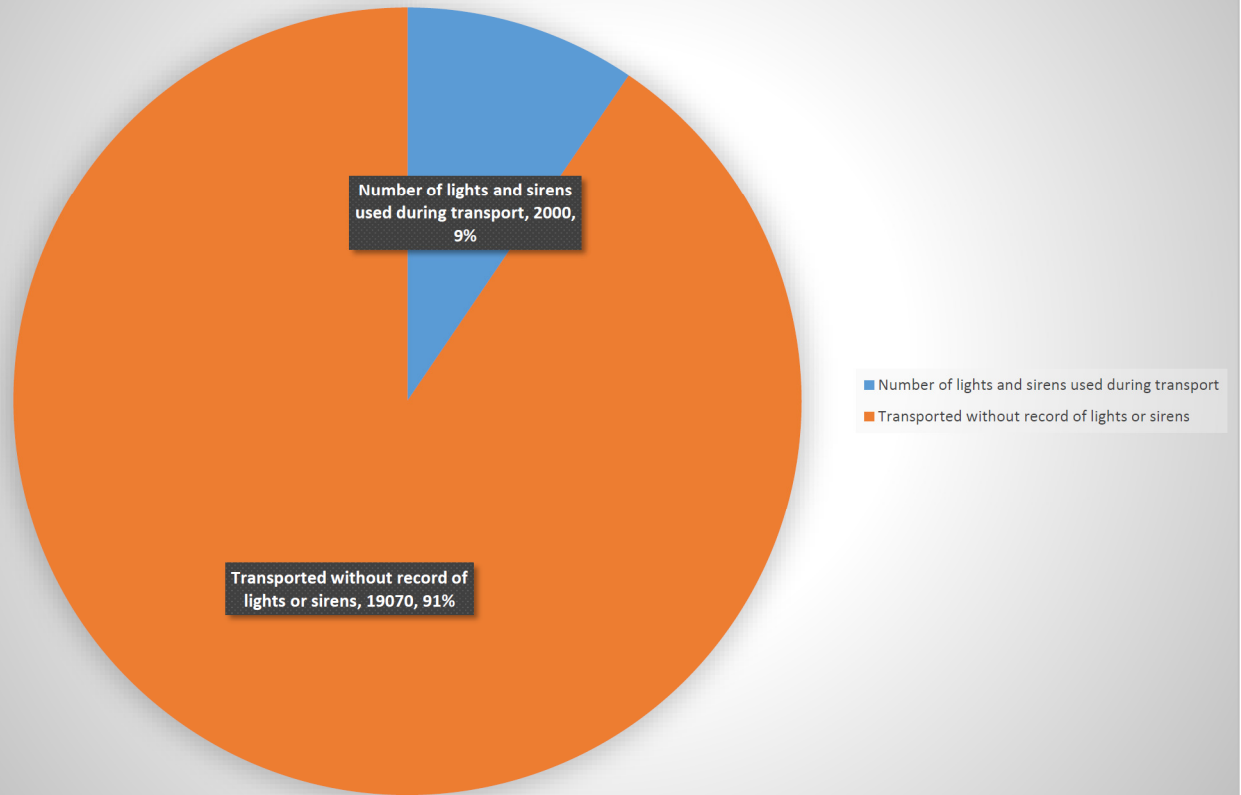
Pain Assessment

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



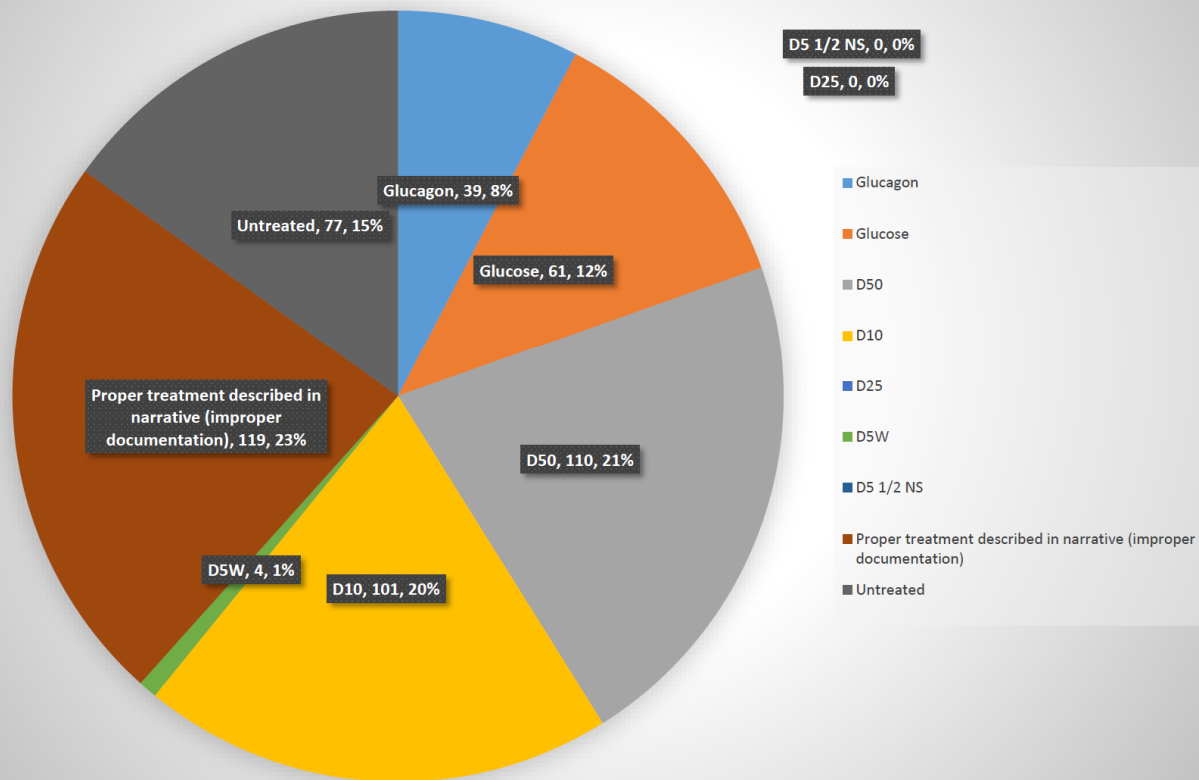
Safety

Lights and Sirens Transport Rate for Patient Transports Originating from a 911 Request - April 2018 (21070 Reports)



Hypoglycemia

Patients Identified as being Hypoglycemic with a blood sugar of <60 mg/dl originating from a 911 request - April 2018 (486 Reports)



Rules & 836-IAC Limitations

- On January 14, 2013, Governor Pence signed Executive Order 13-03 which places a “Regulatory Moratorium” on executive branch agencies’ ability to promulgate administrative rules. By “freezing” the creation of new rules, the Office of Management and Budget (OMB) will be able to review and identify existing regulations that inhibit Hoosiers’ freedom to engage in individual, family, and business pursuits.

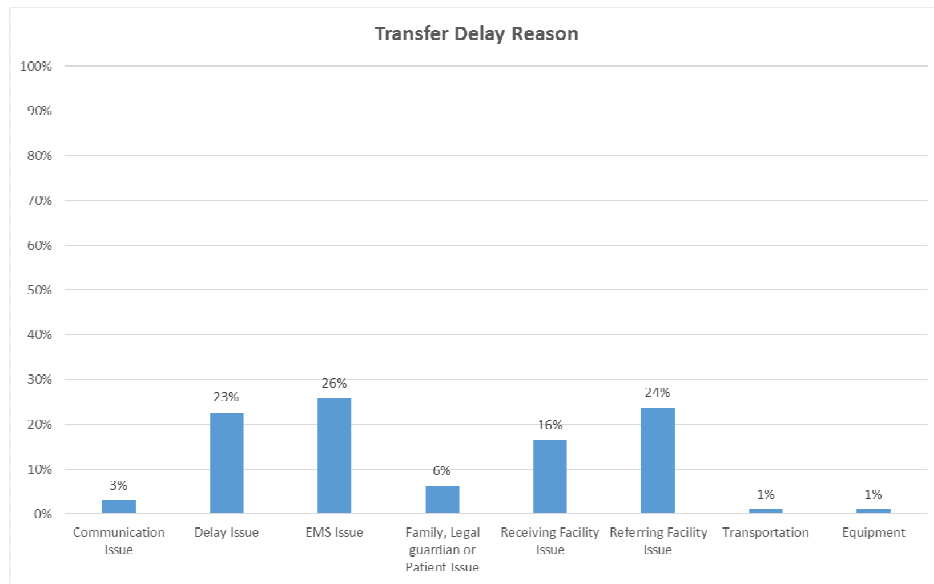


Rule Making Update

- **836 IAC 1-1-5 Reports and records**
- Authority: IC 16-31-2-7; IC 16-31-
 - Adopted the NEMESIS V3 data elements
 - Passed a proposal submitted by IDHS/EMS to require run sheets to be submitted within 24 hours of run completion.
- More rule changes to follow including 836 in it's entirety.
 - Likely done in quarterly blocks
 - Completion date expected to be 2020



Transfer Delay Pilot



- March 13, 2018
- EMS Issue Cited as #1 cause of transfer delays
- Further identified as a shortage of ground transport

PI Subcommittee

Better Define the Problem

- **EMS Issue**

- Air transport ETA > Ground transport ETA
- Air transport not available due to weather
- Out of county
- Shortage of ground transport availability

- **Added to the list**

- NO ALS available
- ALS Transportation delayed
- No hospital staff available to accompany BLS EMS personnel

Model Guidelines

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

National Association of
State EMS Officials



EMS-C

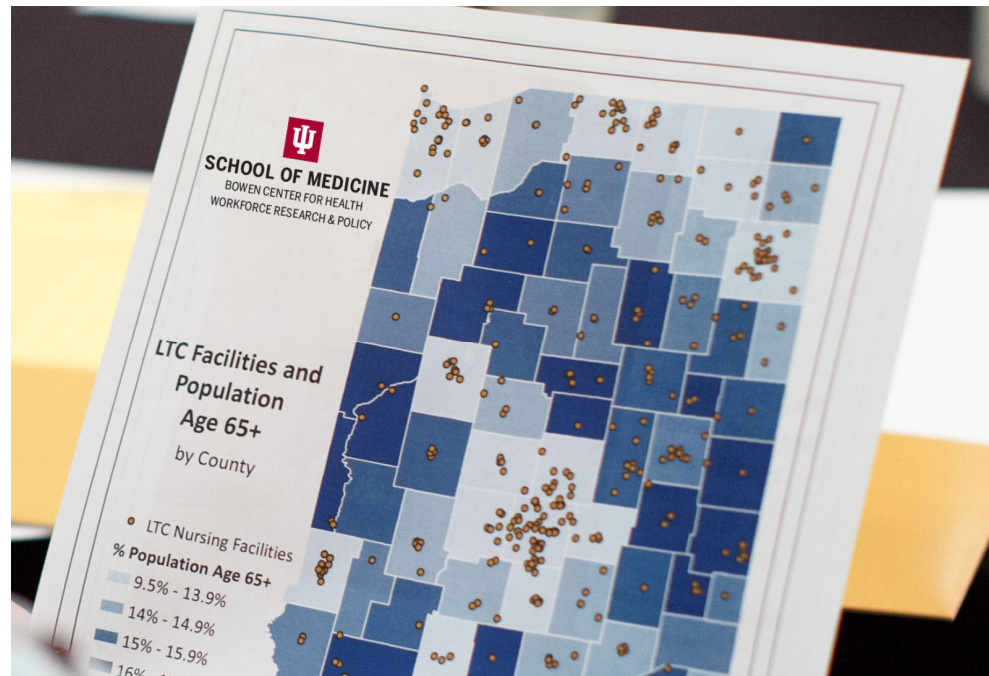


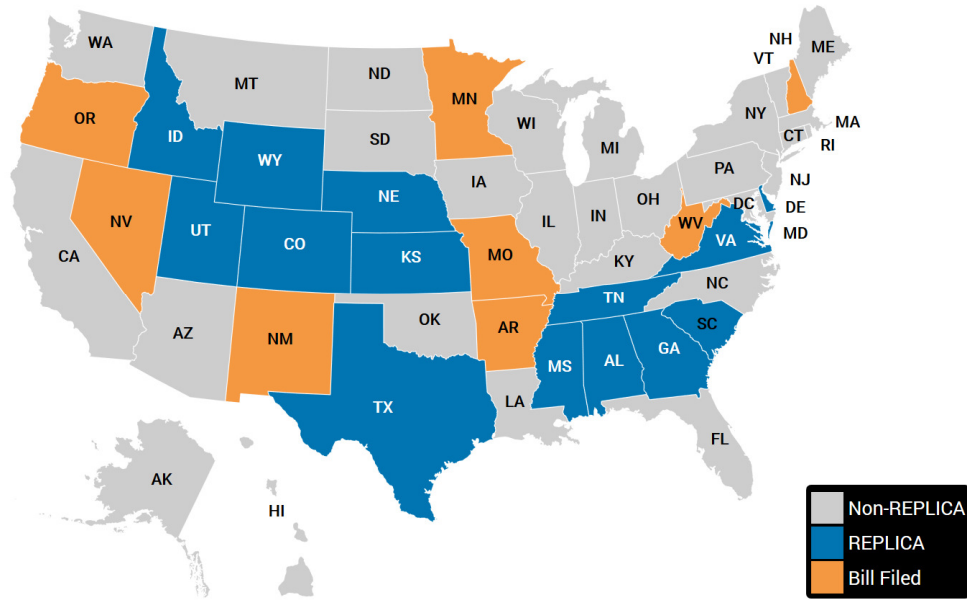
- Emergency Medical Services for Children
 - Elizabeth Weinstein, MD
 - Margo Knefelkamp

- 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





- The Recognition of EMS Personnel Licensure Interstate Compact (REPLICA) is the nation's first and only multi-state compact for the Emergency Medical Services profession.
- REPLICA provides qualified EMS professionals licensed in a "Home State" a legal "Privilege To Practice" in "Remote States".
- Home States are simply a state where an EMT or Paramedic is licensed;
- Remote States are other states that have adopted the REPLICA legislation

REPLICA

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.

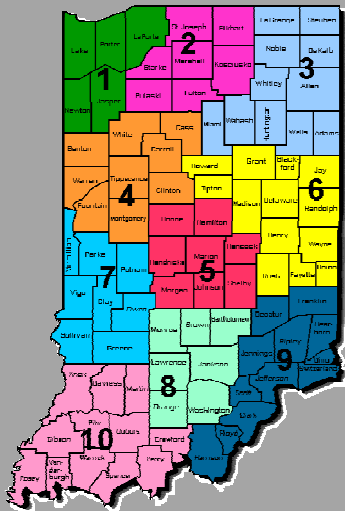
Stop the Bleed is a national campaign with two main goals:

- 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,

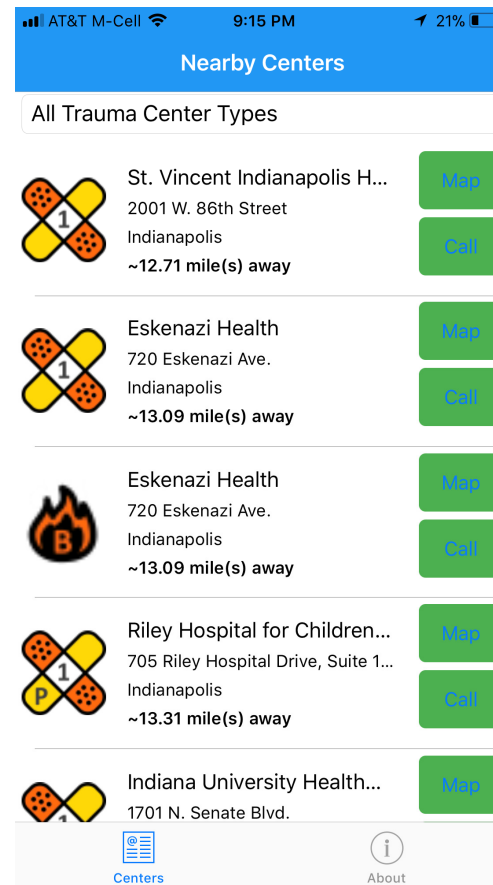
The Indiana Department of Homeland Security and the Indiana State Department of Health are cooperatively distributing this letter to affirm our support and emphasize our shared desire to see the current collaboration toward the building of district Healthcare Coalitions (HCC) continue. We believe it 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.

EMS Field Guide (App Version 1.0)

Demo



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

Healthcare Coalitions, EMResources, Blood Supply & CTASC Updates

Lee Christenson, *Director, Division of Emergency
Preparedness*

ISDH



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

Emergency Preparedness Update

Lee Christenson, Director
Division of Emergency Preparedness



Indiana State
Department of Health

District Healthcare Coalitions

- ▶ Effective July 1, 2018, only coalitions whose governing body includes at least one representative from local public health, one from local emergency management, one from EMS, and two from acute care hospitals, are eligible for federal Healthcare Preparedness Program (HPP) funding.
- ▶ Other suggested members include mental health, long term care, rural health, ambulatory surgical centers, and others
- ▶ As of June 15, 2018, nine of ten district coalitions have approved bylaws meeting the requirements. Bylaws for the last district are in final review.



Budget Period 1 Supplemental HCC Grant Deliverables (7/1/18 – 6/30/19)

- ▶ Update District HCC Preparedness Plan
- ▶ Develop District HCC Response Plan
- ▶ Complete District Risk Assessment
- ▶ Conduct healthcare surge test
- ▶ Complete required National Incident Management Training
- ▶ Conduct communications drills
- ▶ Conduct Training and Exercise Planning Workshop
- ▶ Develop volunteer registry on ISDH SERV-IN
- ▶ Provide list of additional HCC membership
- ▶ Develop District Chempack Plan
- ▶ Conduct Radiological Preparedness Assessment
- ▶ Conduct required coalition meetings



IDHS – ISDH Regional Seminars

- ▶ Three joint, regional meetings (North, Central, South) with local partners to promote collaboration, share priorities and objectives, and assess local needs and concerns
- ▶ Joint presentations from IDHS and ISDH staff covering planning and operations, training, and state–local coordination and grants
- ▶ Panel discussion:
 - State Health Commissioner, Dr. Kristina Box
 - IDHS Executive Director, Bryan Langley
 - State EMS Medical Director, Dr. Michael Kaufmann
 - ISDH Emergency Preparedness Director, Lee Christenson



North Region – Districts 1,2,3,4

- Lake
- Porter
- La Porte
- Newton
- Jasper
- St. Joseph
- Elkhart
- Starke
- Marshall
- Kosciusko
- Pulaski
- Fulton
- Lagrange
- Steuben
- Noble
- DeKalb
- Whitley
- Allen
- Miami
- Wabash
- Huntington
- Wells
- Adams
- Benton
- White
- Cass
- Carroll
- Warren
- Tippecanoe
- Clinton
- Fountain
- Montgomery



Central Region – Districts 5, 6, 7

- Boone
- Hamilton
- Hendricks
- Marion
- Hancock
- Morgan
- Johnson
- Shelby
- Howard
- Grant
- Blackford
- Jay
- Tipton
- Madison
- Delaware
- Randolph
- Henry
- Wayne
- Rush
- Fayette
- Vermillion
- Parke
- Putnam
- Vigo
- Clay
- Owen
- Sullivan
- Greene
- Union



South Region – Districts 8, 9, 10

- Monroe
- Brown
- Bartholomew
- Lawrence
- Jackson
- Orange
- Washington
- Decatur
- Franklin
- Jennings
- Ripley
- Dearborn
- Scott
- Jefferson
- Ohio
- Switzerland
- Clark
- Floyd
- Harrison
- Knox
- Daviess
- Martin
- Gibson
- Pike
- Dubois
- Vanderburgh
- Warrick
- Spencer
- Perry
- Crawford



Regional Meeting Dates

South Region

Districts 8–10

June 27, 2018

Lutheran Church

504 N. Walnut St.

Seymour, IN

10:00 AM–12:30 PM

North Region

Districts 1 – 4

July 17, 2018

Christo's

830 Lincoln Hwy East

Plymouth, IN

10:00 AM–12:30 PM

Central Region

Districts 5–7

July 25th, 2018

Location TBD



Indiana State
Department of Health

Emergency Communication and Resource Coordination Systems Implementation

EMResources and Electronic ICS (eICS)



Indiana State
Department of Health

EMResource

Status Reporting

- ✓ Internal, External, Wait/Offload, Operations Status

Bed Availability

- ✓ Unit, Floor, Pavilion, Campus, Enterprise/System

Automated Operations Alerting

- ✓ Threshold, Status, & Workflow Triggered Alerts

Situational Awareness

- ✓ Enterprise-Wide Visibility and Insights



eICS

Plan & Operationalize

- ✓ Daily Ops, Minor Incidents, Disasters

Automate Notifications

- ✓ Internal, External, Teams & Business Units

Document Events

- ✓ Healthcare Errors, Disruptions, Disasters

Improve Processes

- ✓ Project Management, Risk Assessment, Remediation

Manage Surveys & Accreditation

- ✓ Survey 'event management' & documentation
- ✓ CMS Regulations, Joint Commission Accreditation



Subcommittee Update

Performance Improvement Subcommittee

Ramzi Nimry, *Statewide Trauma System Development &
Training Manager*

ISDH



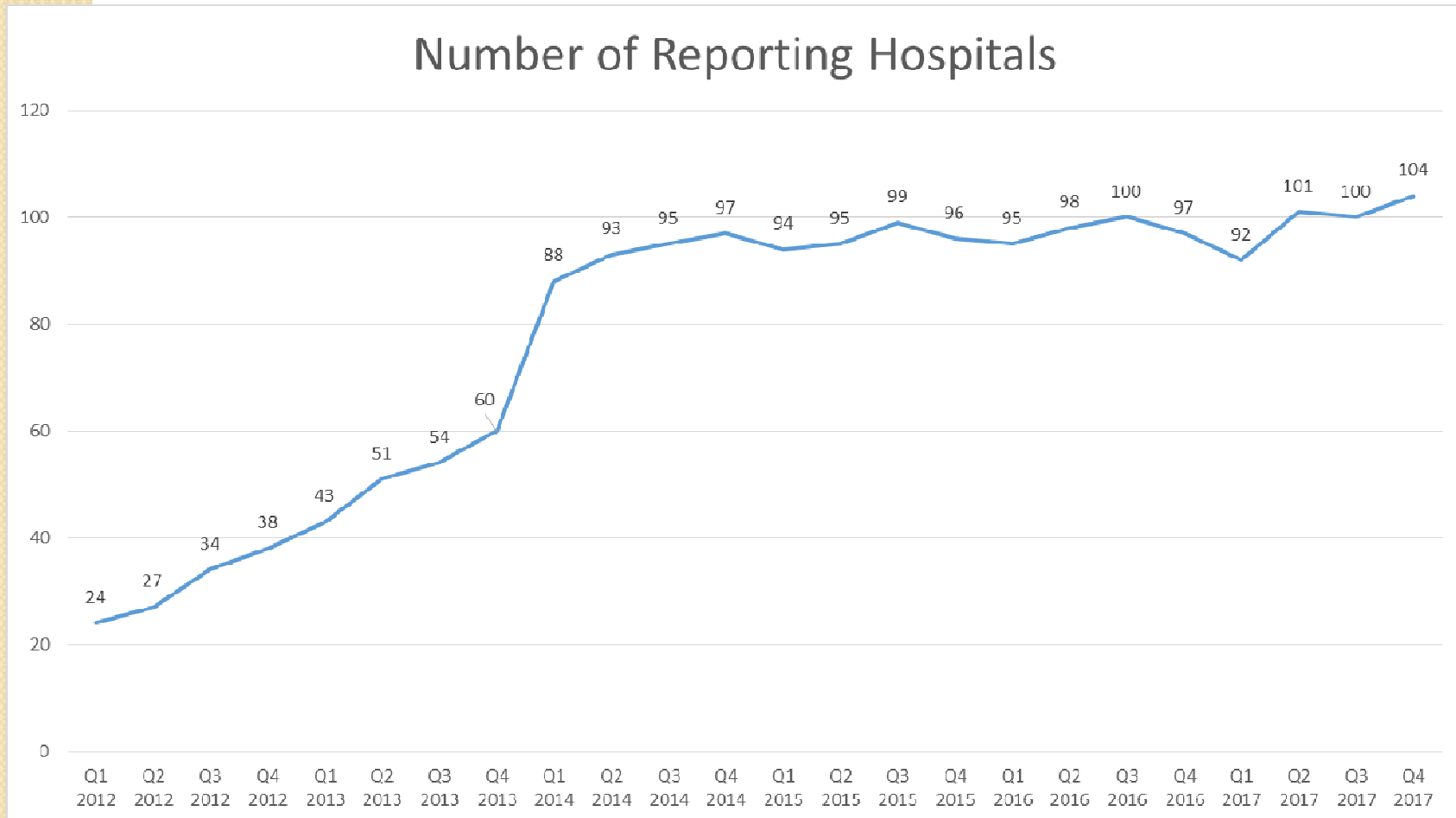
Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

Meeting Attendees

Amanda Rardon-D4	Kelli Vannatter-D6	Dr. Michael Kaufmann- IDHS	
Amelia Shouse-D7	Kelly Blanton-D5	Michele Jolly-D10	
Andy VanZee-IHA	Kelly Mills-D7	Michelle Moore-D6	
Angela Cox-Booe-D5	Kristi Croddy-D5	Michelle Ritchey-D7	
Annette Chard-D3	Latasha Taylor-D1	Missy Hockaday-D5	
Bekah Dillon-D6	Lesley Lopossa-D8	Olivia Roloff-D7	
Brittanie Fell-D7	Lindsey Hill-	Dr. Peter Jenkins-IUH, D5	
Carrie Malone-D7	Lindsey Williams-D8	Regina Nuseibeh-D4	
Christy Claborn-D5	Lisa Hollister-D3	Rexene Slayton-D8	
Chuck Stein-D5	Lynne Bunch-D6	Sarah Hoepfner-D3	
Dawn Daniels-D5	Maria Thurston-D5	Shayla Karlowsky-D1	
Dusten Roe-D2	Marie Stewart-D10	Dr. Stephanie Savage (Chair)-IUH, D5	
Emily Grooms-D2	Mark Rohlfing-D6	Tammy Robinson-D7	
Jennifer Homan-D1	Mary Schober-D5	Tracy Spitzer-D5	
Jennifer Mullen-D1	Dr. Matt Vassy-D10	Wendy St. John-D5	
Jill Castor-D5	Melissa Smith-D5		
Jodi Hackworth-D5	Merry Addison-D7		
ISDH STAFF			
Camry Hess	Katie Hokanson	Pravy Nijjar	Ramzi Nimry

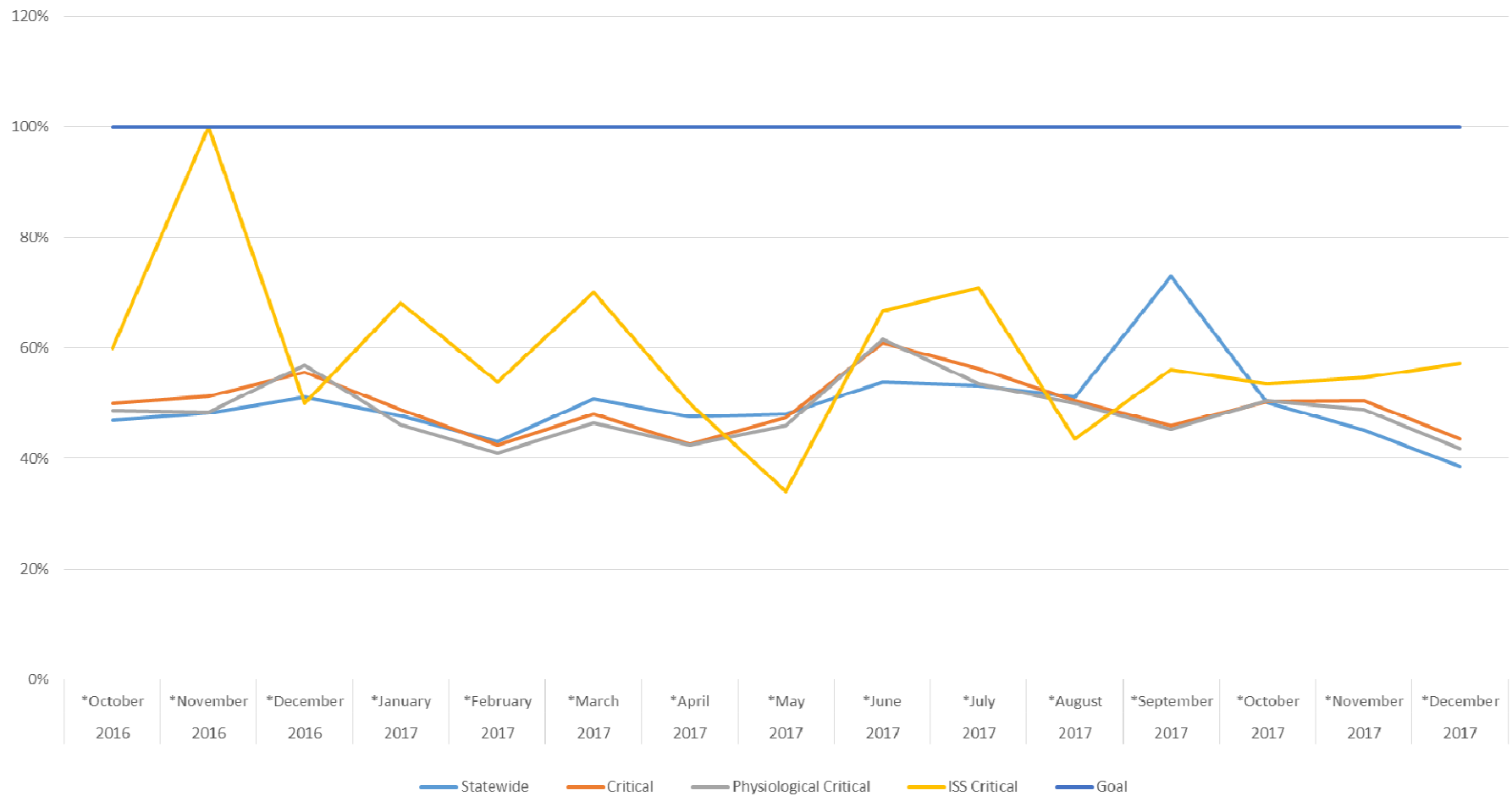
ISDH Performance Improvement Subcommittee May 2018 update



104 hospitals submitted for Q4 2017, the most ever!

Transfers – Time to Orders Written

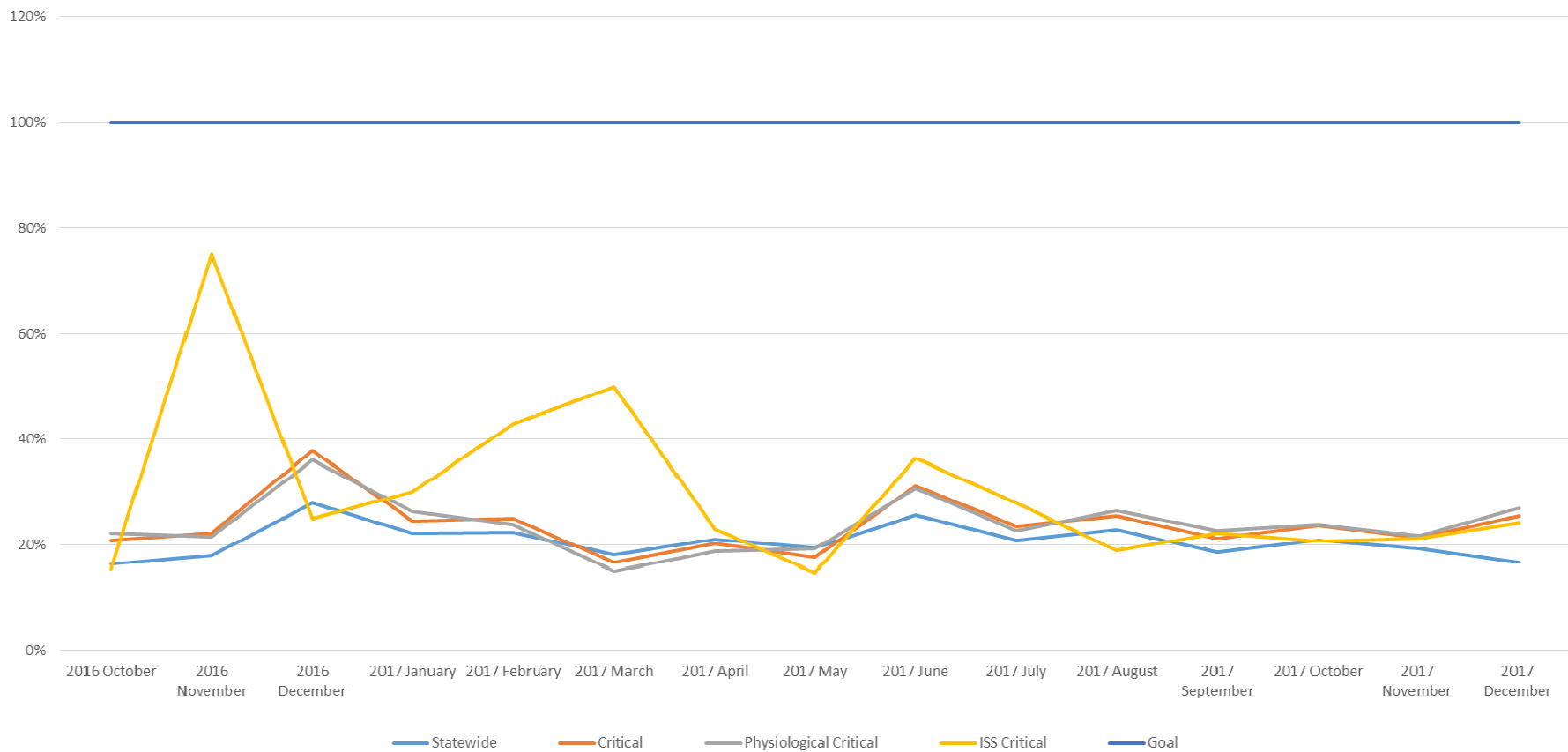
Percent of Patients Transferred from ED at non-verified Trauma Center Hospitals in <2 Hours



*ED LOS was calculated using ED/Acute Care Discharge (Orders Written) for July 2016 and later.

Transfers – Time to ED departure (Physical Exit)

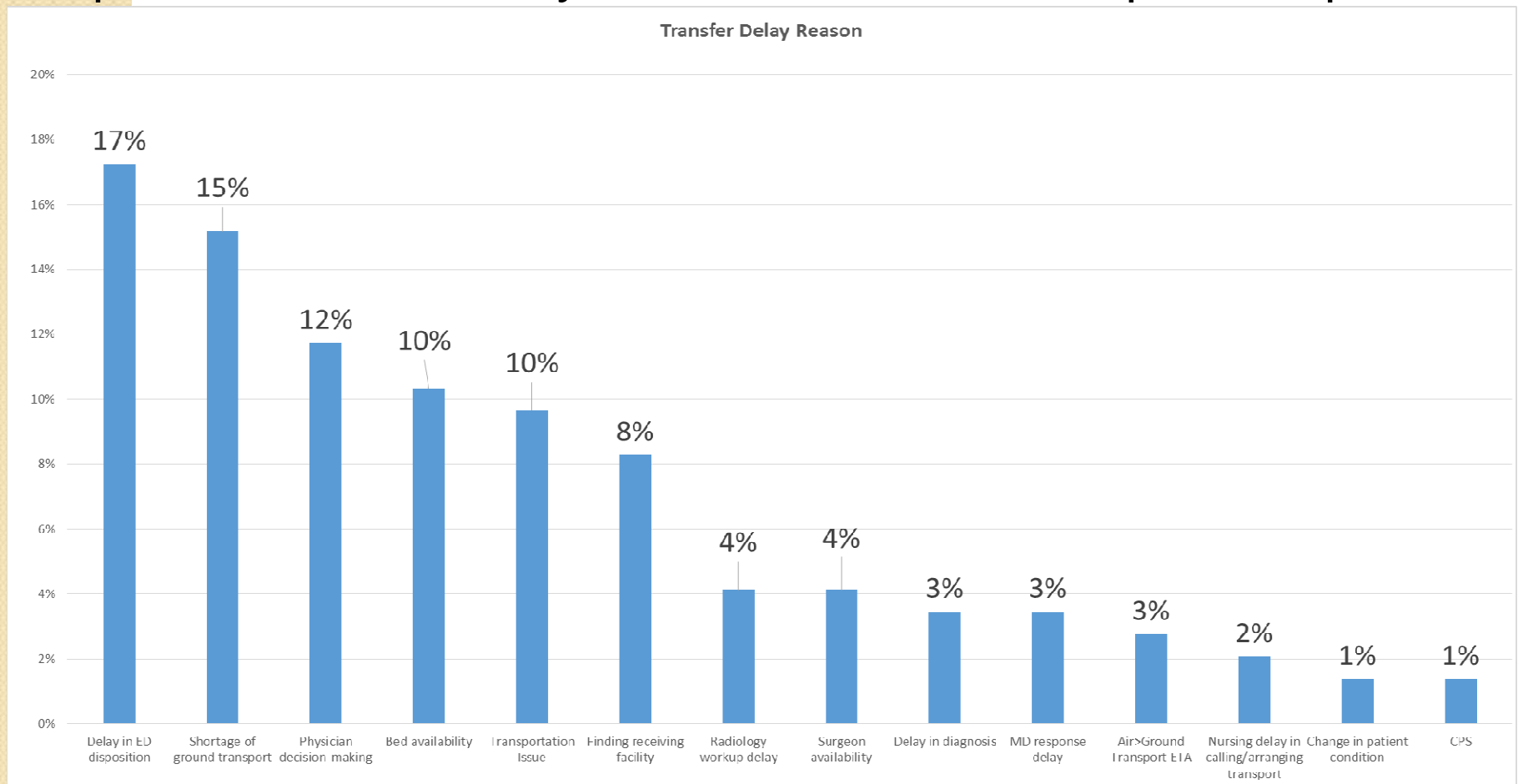
Percent of Patients Transferred from ED at non-verified Trauma Center Hospitals in <2 Hours



*ED LOS was calculated using ED/Acute Care Discharge (Physical Exit) for July 2016 and later.

Transfer Delay Pilot Project Update

- 19 hospitals participating in the pilot
- ISDH working with ImageTrend on a mock up
- Specific transfer delay reasons based on the pilot hospitals



Changes to the Statewide Report

Quarterly

Pages 1-4, 7 (matched incidents), 10, 15 (bottom section), 16-18, 21, 29

Annually

Pages 5, 6, 7 (CAH list), 8-9, 11-14, 15 (top section), 19-20, 22-28, 30-55

Ongoing Initiatives

Registry Quiz participation

80% in most recent sampling


Pravy will start sharing response rate/district

Not receiving EMS run sheets?

Contact Murray Lawry, mlawry@isdh.in.gov

Non-transfer of severely injured patients

Dr. Jenkins project



American College of Surgeons - Committee on Trauma Update

Dr. Scott Thomas, *Trauma Medical Director*
Memorial Hospital of South Bend



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov



100+years

AMERICAN COLLEGE OF SURGEONS

*Inspiring Quality:
Highest Standards, Better Outcomes*



**THE
COMMITTEE
ON TRAUMA**

AMERICAN COLLEGE OF SURGEONS COMMITTEE ON TRAUMA

Scott Thomas, MD, FACS
COT Chair



Mission



Develop and implement systems for trauma care in local , regional, national, and international arenas. These will be supported by programs that promote education, professional development, and standards of care and assessment of outcomes.

Verified Trauma Centers

Center Level	Count
Adult level 1	125
Adult level 2	180
Adult level 3	100
Pediatric level 1	55
Pediatric level 2	6
Adult level 1 or 2, Pediatric level 2	44
TOTAL	510

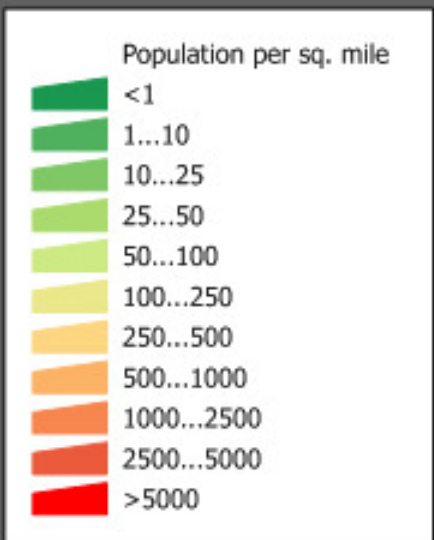
CAFÉ Project

- Partnership with University of Arkansas and ACS
 - NIH funded
- Comparative Assessment for Environments of Trauma Care
 - **Good structure → good processes → good outcomes**
 - Developed web service to let centers compare organizational structure of trauma centers and systems to allow for optimization
 - Standardizing terminology
- Currently taking feedback and will soon release tool
 - <http://cafe-trauma.com>

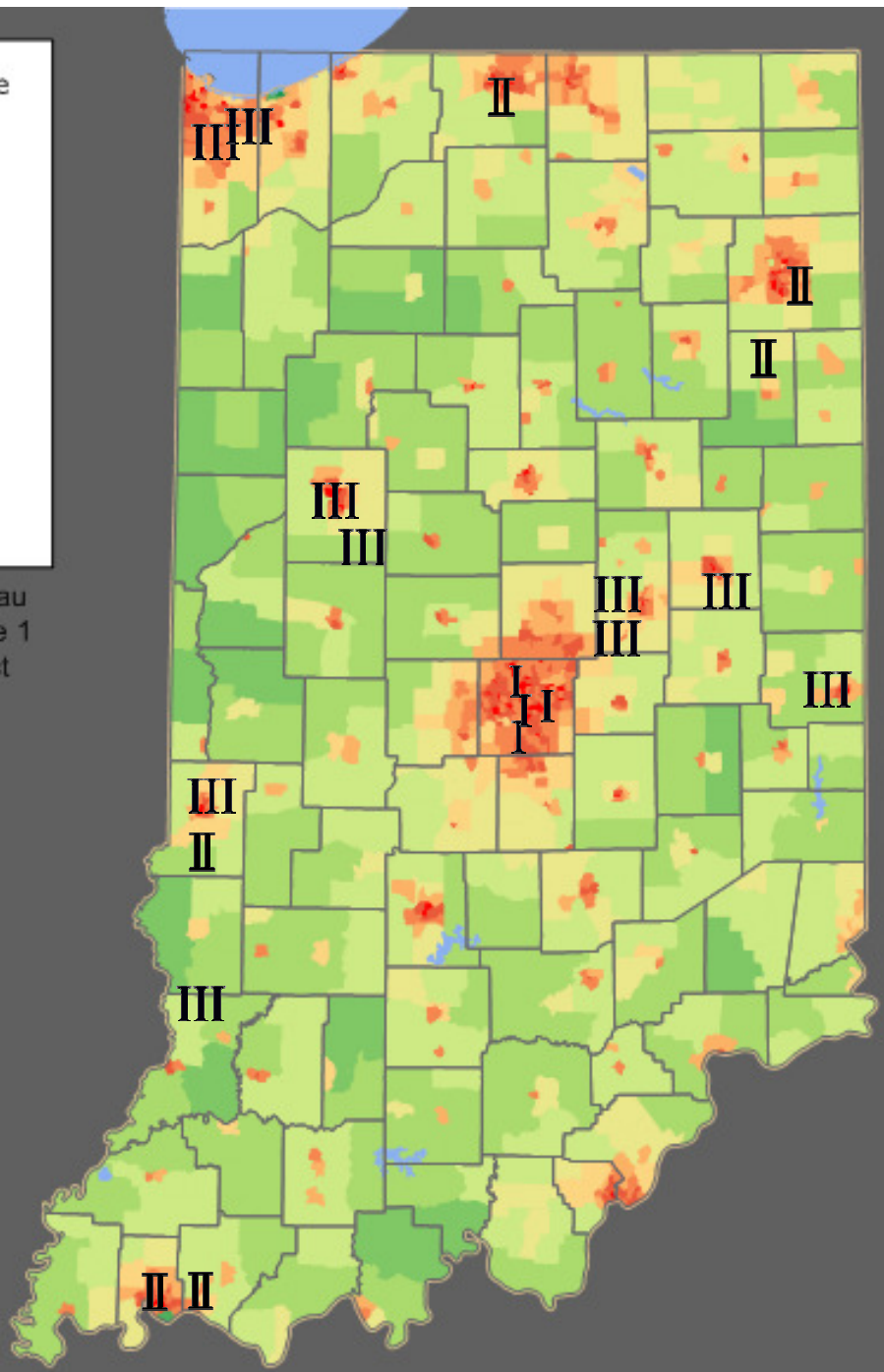
Needs Based Assessment (version 2)



- NBATS to assess need for trauma centers in geographic areas without creating excess
- It is not desirable or even possible to generate a single ideal solution regarding the number of trauma centers
- Version 2 proposed modifications
 - ▣ Population size to also include injury severity (assist in determining resources needed as well as number of centers)
 - ▣ Median transport times (assist in determining distribution of centers)



Source: U.S. Census Bureau
 Census 2010 Summary File 1
 population by census tract



Trauma System Criteria

1. Address full spectrum (pre-hospital thru rehab)
2. Establish lead agency for policy enforcement
3. Establish trauma advisory committee
4. Regularly update trauma system plan
5. Establish process/criteria for center designation
6. Infrastructure for data collection, storage, analysis
7. Collect and analyze injury surveillance data
8. Performance improvement process for evaluation
9. Trauma information management system
10. Integrate with military facilities, disaster, and mass casualty networks

Zero Preventable Deaths



- Integrate military and civilian trauma systems
 - ▣ Assist military physicians in maintaining trauma skills
 - ▣ Collect and share common data
 - ▣ Share best practices
 - ▣ Strengthen trauma research
- Government funded
 - ▣ Military physicians at level 1 and 2 trauma centers

Injury Prevention



- Firearm Injury Prevention
 - ▣ Safe storage initiatives
 - ▣ Hospital-based violence intervention programs
 - ▣ Physician guidance to counsel patients on safe firearm ownership
 - ▣ Partnership with mental health community



- Public is **willing** to provide bleeding control care
 - >80% surveyed willing to be trained
 - >60% surveyed concerned with causing harm
 - Need more classes, grants available
- International training
 - >850 people trained in Holland
- Active shooter training



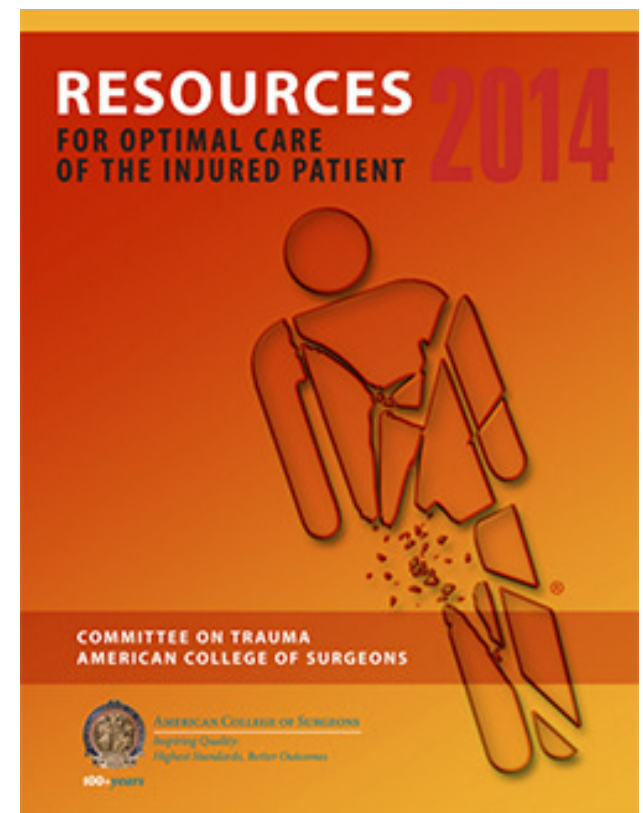
ATLS



- 10th Edition
 - ▣ Attend ACS update training
 - ▣ Participate in region/state/site training
 - ▣ Teach pilot course
 - ▣ Complete online update

Orange Book Revision

- Currently reviewing and updating 2014 standards
 - ▣ Taking suggestions on chapters but need to provide evidence based information when possible
 - ▣ <https://www.facs.org/quality-programs/trauma/vrc/stakeholder-comment>





Quarter 3 Trauma Registry Data Report

Ramzi Nimry, *Statewide Trauma System
Development & Training Manager*

ISDH



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov

Hospitals not reporting to the Indiana Trauma Registry - Quarter 3 2017

- Community Hospital Munster
- Decatur County Memorial Hospital
- Fayette Regional Health
- Franciscan Health – Dyer
- Franciscan Health – Hammond
- Franciscan Health – Indianapolis
- Franciscan Health – Munster
- Goshen Hospital
- Harrison County Hospital
- Hendricks Regional Health Brownsburg
- IU Health Jay (formerly Jay County Hospital)
- Major Hospital
- Pulaski Memorial Hospital
- Riverview Health
- St. Catherine Regional – Charlestown
- St. Mary Medical Center – Hobart
- St Vincent – Randolph
- Sullivan County Community
- Woodlawn Hospital

Hospitals reporting to the Indiana Trauma Registry - Quarter 3 2017

- St Joseph Hospital
(Fort Wayne)
- St Vincent Clay

Hospitals reporting to the Indiana Trauma Registry - Quarter 3 2017

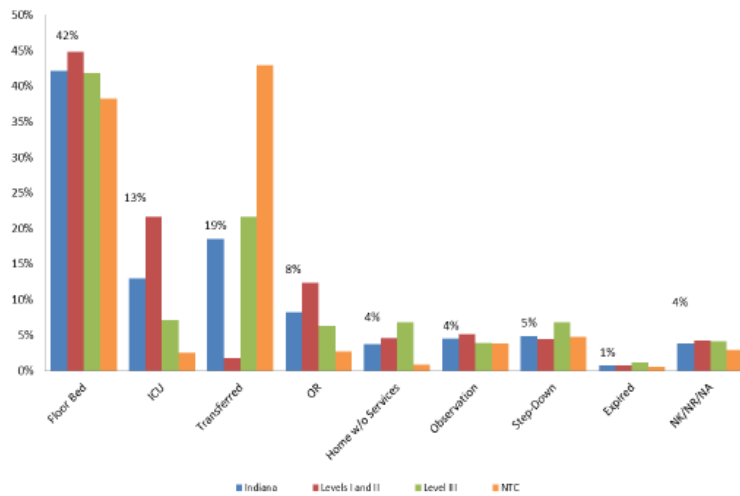
- 9,996 incidents
- July 1, 2017 – September 30, 2017
- 100 total hospitals reporting
 - 10 Level I and II Trauma Centers
 - 12 Level III Trauma Centers
 - 78 Non-Trauma Hospitals



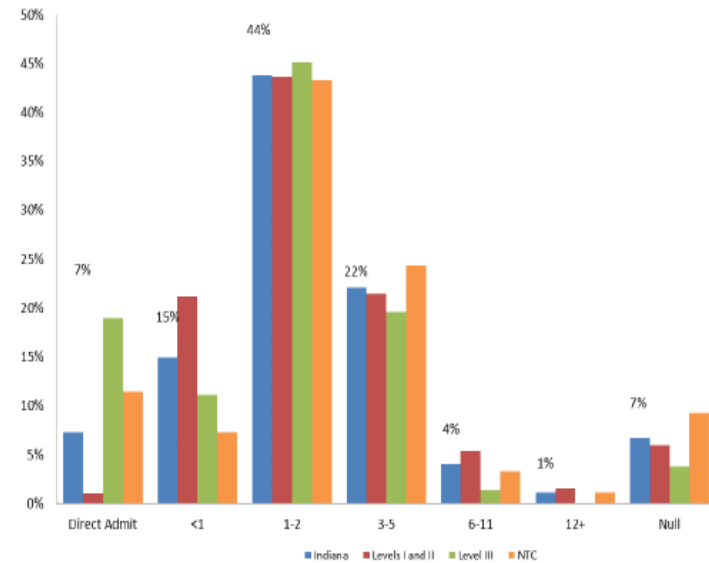
Indiana State
Department of Health

ED Disposition / Length of Stay - Page 2

ED Disposition by Percentage



ED Length of Stay (Hours)



ED LOS > 12 Hours - Page 4

ED LOS > 12 Hours, N=115

Facilities	38 Level I and II 77 Non-trauma Centers	Region	16 North; 65 Central; 20 South; 14 Unknown/Out of State
Average Distance from Scene to Facility	20.5 Miles	ISS	56 (1-8 cat); 39 (9-15 cat); 8 (16-24), 4 (25-44) , 8 (No ISS)
Transport Type	80 Ambulance; 22 Private Vehicle; 1 Police ; 6 Unknown	GCS Motor	5 (1 cat); 2 (5 cat); 92 (6 cat); 16 (unknown)
Cause of Injury	35 Transport; 55 Falls; 5 Inanimate mechanical force; 1 animate mechanical forces, 1 Heat, 18 Not Identified	RTS—Systolic	0 (2-3) ;105 (4) 10 (unknown)
Signs of Life	110 Yes 5 No	RTS—Resp. Scale	0 (0-1) ; 1(2); 102 (3); 3 (4); 9 (unknown)
Age	48.08 Years (1-95 Years)	Resp. Assistance	10 Yes; 91 No; 7 Unknown
Gender	51 Female; 64 Male	ED LOS Hours	115 (12-34)
Interfacility Transfer	21 Yes; 94 No	ED Disposition	48 Floor; 10 Home without services; 3 ICU; 6 Observation; 13 OR; 13 Step Down; 17 Transferred; 0 Unknown

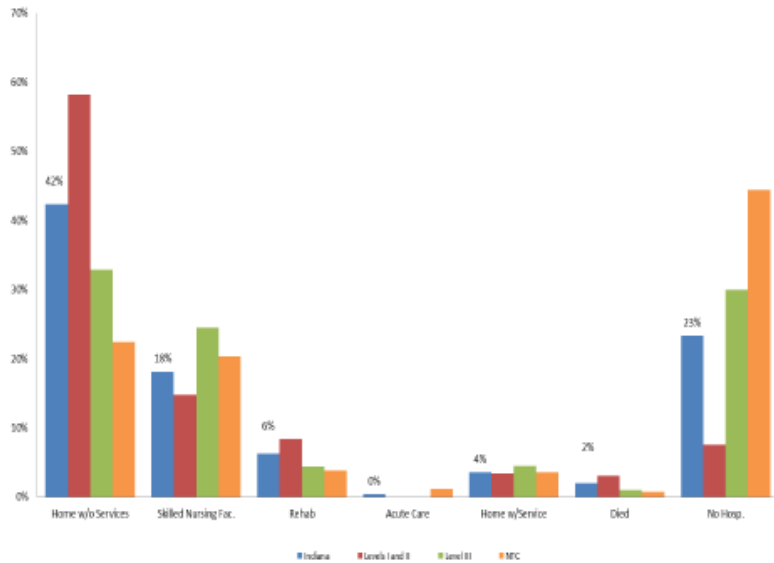
-Region was created from injury zip code. Missing = no injury zip or injury zip from out of state.

-Numbers represent counts per category or mean with minimum and maximum in parentheses.

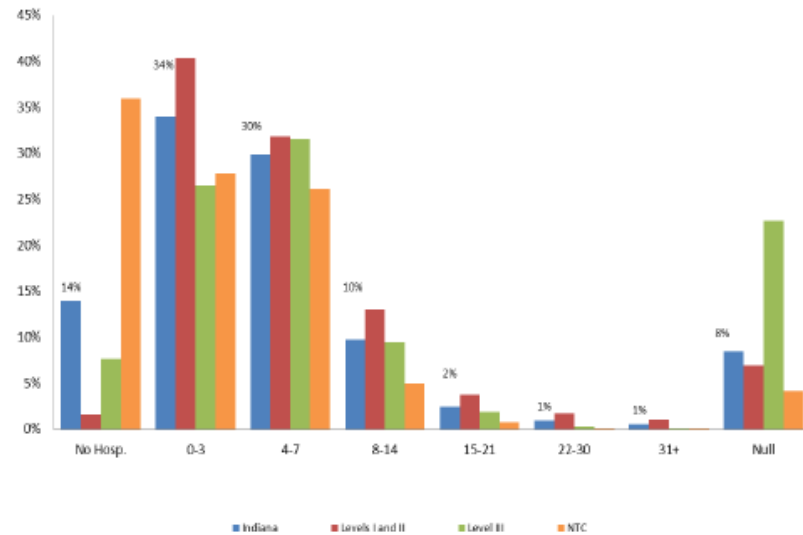
-No signs of life is defined as having none of the following: organized EKG activity, papillary responses, spontaneous respiratory attempts or movement, and unassisted blood pressure. This usually implies the patient was brought to the ED with CPR in progress (2015 Trauma Registry Data Dictionary, page 185).

Hospital Disposition and LOS - Page 6

Hospital Disposition



Hospital Length of Stay (days)



Hospital dispositions with <1% included: Another institution, Null, Psychiatric Hospital, Long-Term Care Hospital and Intermediate Care

Linking - Page 7

Statewide Quarter 3 Data Report July 1, 2017—September 30, 2017 9,996 Incidents

100 Total Hospitals Reporting

Level I and II:	10 facilities	51.0% of data
Level III:	12 facilities	15.8% of data
(Non-Trauma) Hospitals:	77 facilities	33.2% of data

For Quarter 3 2017, of the 9,996 incidents reported to the Indiana Trauma Registry, 2,200 cases that had an ED Disposition of “Transferred to another acute care facility” at the initial facility or that had the Inter-Facility Transfer equal to “Yes” at the Trauma Center. Of those transferred, 920 cases were probabilistically matched. The linked cases make up 9.2% of the Q3 2017 data. All public health preparedness districts are represented. The diagram below illustrates the overlap between the transfers reported from the initial facility and from the final facility that can be matched.



The initial facility in which transfers come from may be considered Critical Access Hospitals (CAHs). All Indiana CAHs are considered Rural, and must meet additional requirements to have a CAH designation, such as having no more than 25 inpatient beds and being located in a rural area. Facilities that are highlighted indicate that these facilities reported data for Quarter 3 2017.

Within this transfer data section, the purple columns represent the transfer cases and the single percentages represent the percent for the transfer cases. For two demographic variables, patient age groupings and gender, the Indiana average is included to provide more insight to this transfer population.

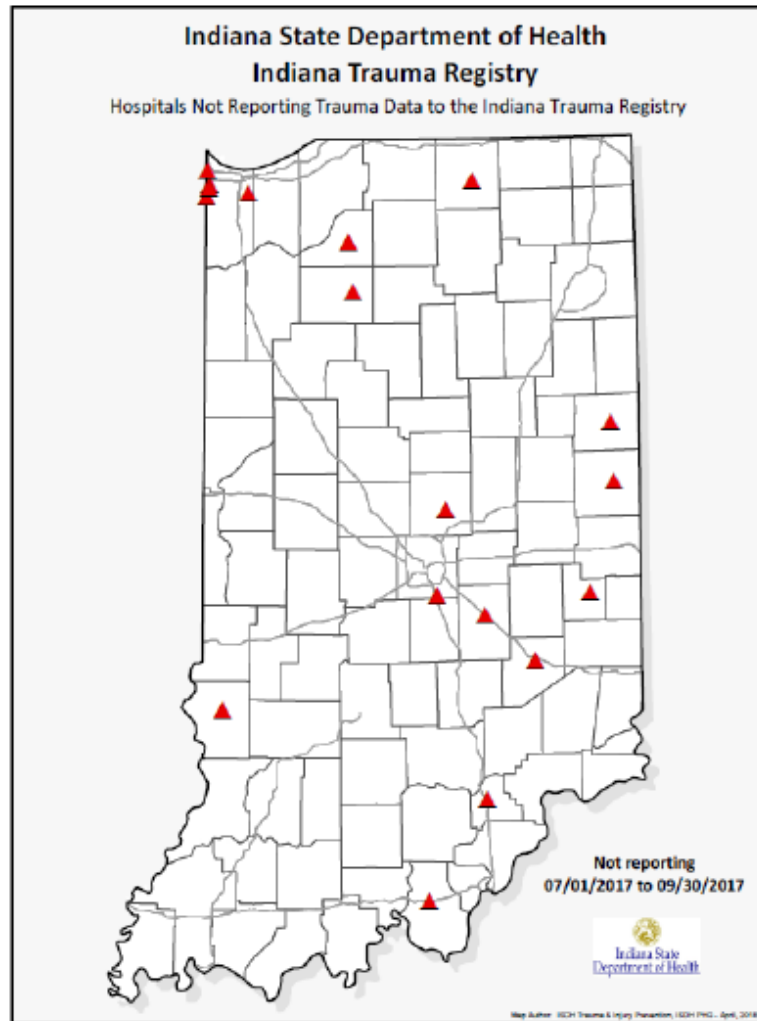
CAH List	
Adams Memorial Hospital	Perry County Memorial Hospital
Cameron Memorial Community Hospital	Pulaski Memorial Hospital
Community Hospital of Bremen	Putnam County Hospital
Decatur County Memorial Hospital	Rush Memorial Hospital
Dukes Memorial Hospital	Scott Memorial Hospital
Gibson General Hospital	St. Vincent – Clay Hospital
Greene County General Hospital	St. Vincent – Dunn Hospital
Harrison County Hospital	St. Vincent – Frankfort Hospital
IU Health – Bedford Hospital	St. Vincent – Jennings Hospital
IU Health – Blackford Hospital	St. Vincent – Mercy Hospital
IU Health – Paoli Hospital	St. Vincent – Randolph Hospital
IU Health – Tipton Hospital	St. Vincent – Salem Hospital
IU Health – White Memorial Hospital	St. Vincent – Warrick Hospital
Jasper County Hospital	St. Vincent – Williamsport Hospital
Jay County Hospital	Sullivan County Community Hospital
Margaret Mary Community Hospital	Union Hospital Clinton
Parkview LaGrange Hospital	Woodlawn Hospital
Parkview Wabash Hospital	
Rural List	
Columbus Regional Hospital	King’s Daughters’ Health
Daviess Community Hospital	Kosciusko Community Hospital
Fayette Regional Health System	Major Hospital
Franciscan Health-Michigan City	Marion General Hospital
Franciscan Health-Crawfordsville	Memorial Hospital (Logansport)
Good Samaritan Hospital	Memorial Hospital & Health Care Center
Henry Community Health	Parkview Noble Hospital
IU Health – La Porte Hospital	Reid Health
IU Health – Starke Hospital	St. Joseph’s Regional Medical Center –
Schneck Medical Center	

Linked Transfer Patient Averages - Page 10

For Linked Transfer Patients:

For Transfer Patients:				
	All Transfer Patients	Critical*	Physiological Critical**	ISS Critical***
Number of Patients	920	289	234	91
EMS Notified to Scene	7.83 minutes	7.88 minutes	7.47 minutes	8.65 minutes
EMS Scene Arrival to Departure	16.19 minutes	15.43 minutes	15.67 minutes	14.8 minutes
EMS Scene Departure to Initial Hospital ED Arrival	17.67 minutes	15.9 minutes	15.11 minutes	16.1 minutes
Initial Hospital ED Arrival to Departure	2 hours 8 minutes	1 hours 49 minutes	1 hours 51 minutes	1 hour 45 minutes
Initial Hospital ED Departure to Final Hospital ED Arrival	2 hours 1.3 minutes	1 hours 48 minutes	1 hours 52 minutes	1 hour 35.5 minutes
TOTAL TIME	4 hours 9.3 minutes	3 hours 38.7 minutes	3 hours 43.5 minutes	3 hours 21.3 minutes

Not Reporting Map - Page 16



Hospital that did not report during Q3 2017:

- Community Hospital Munster
- Decatur County Memorial
- Fayette Regional Health
- Franciscan Health Dyer
- Franciscan Health Hammond
- Franciscan Health Indianapolis
- Franciscan Health Munster
- Goshen Health Hospital
- Harrison County
- Jay County Hospital
- Major Hospital
- Pulaski Memorial
- Riverview Health
- Starke Hospital
- St. Mary Medical Center—Hobart
- St. Vincent Randolph
- Sullivan County Community
- Woodlawn Hospital

Reporting Map - Page 17

Indiana State Department of Health Indiana Trauma Registry

Hospitals Reporting Trauma Data Quarter 3
July 1, 2017 - September 30, 2017

Level I and II Trauma Centers

Deaconess Hospital
Eskenazi Health
IU Health Methodist Hospital
Lutheran Hospital of Indiana
Memorial Hospital of South Bend
Parkview Regional Medical Center
Riley Hospital for Children at IU Health
St Mary's Medical Center of Evansville
St Vincent Indianapolis Hospital & Health Services
Terre Haute Regional Hospital

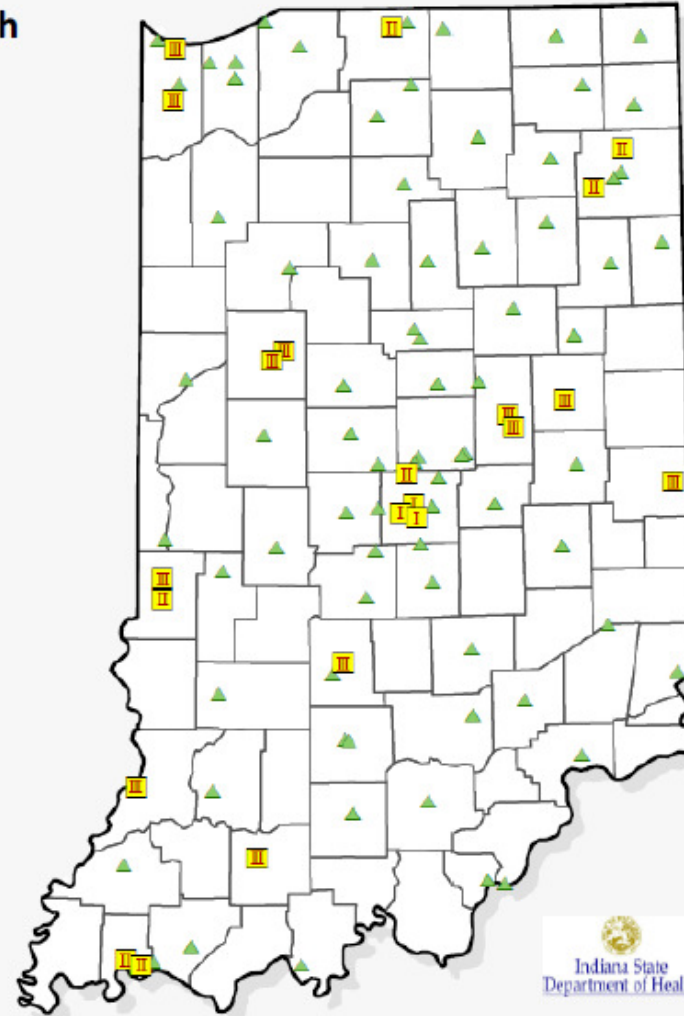
Level III Trauma Centers

Community Hospital of Anderson & Madison Co.
Franciscan St Anthony Health - Crown Point
Franciscan St Elizabeth Health - Lafayette East
Good Samaritan Hospital
IU Health Arnett Hospital
IU Health Ball Memorial Hospital
IU Health Bloomington Hospital
Memorial Hospital and Health Care Center
Methodist Hospitals - Northlake Campus
Reid Hospital & Health Care Services
St Vincent Anderson
Union Hospital Terre Haute

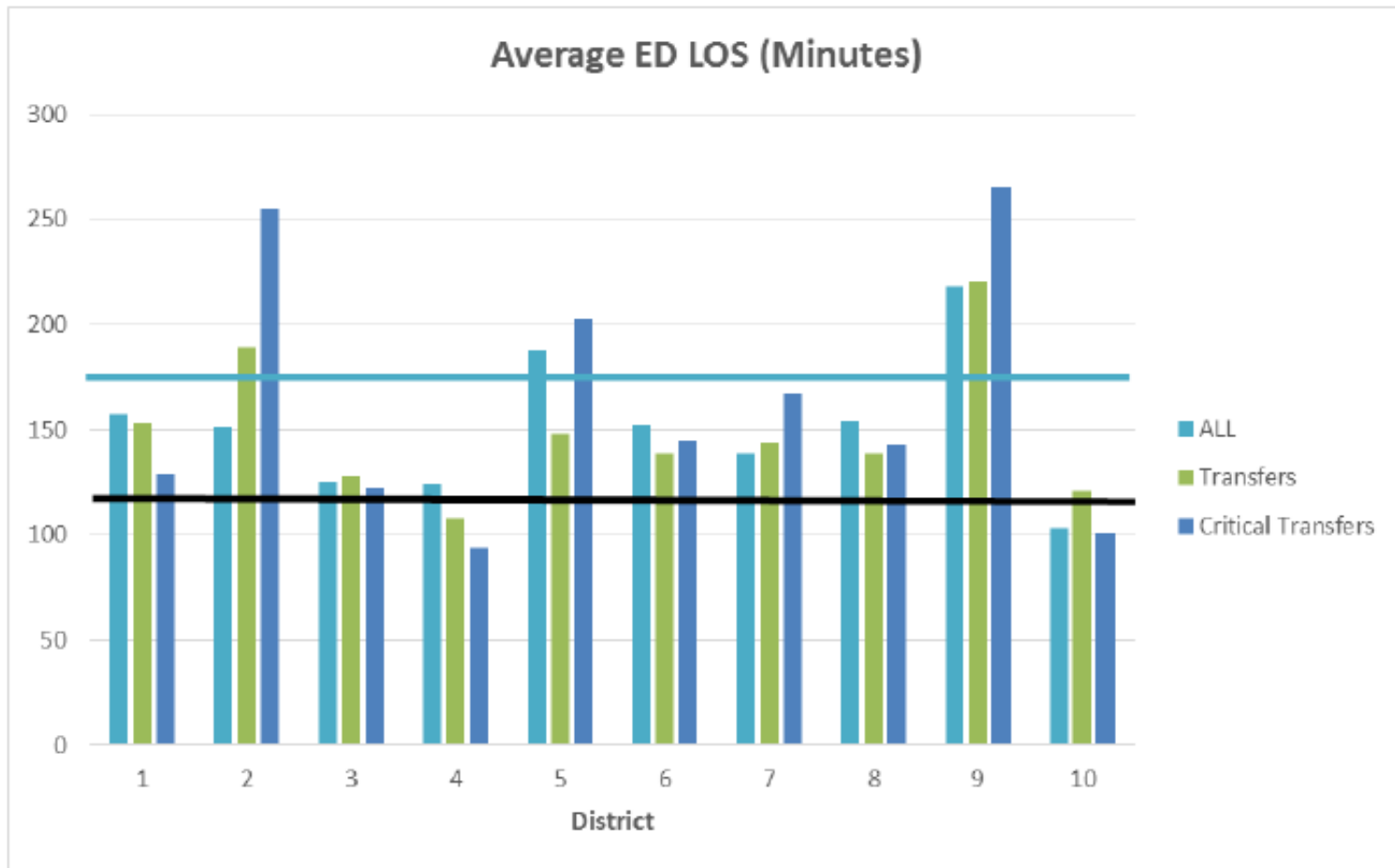
Non-Trauma Hospitals

78 Non-Trauma Hospitals

Hospital categories include Verified and "In the Process"
Trauma Centers as of June 30, 2017.



ED LOS by District- Page 21



*Black line represents the 120 minute performance improvement filter

**Blue line represents the state average



Questions?

2018 ISTCC & ITN Meetings

- Location: Indiana Government Center – South, Conference Room B.
- Webcast still available.
- Time: 10:00 A.M. EST.
- Dates:
 - August 17
 - October 19
 - December 14

Other Business



Indiana State
Department of Health

Email questions to: indianatrauma@isdh.in.gov