



Indiana
Department
of
Health

INDIANA STATE TRAUMA CARE COMMITTEE

May 20, 2022

Email questions to: indianatrauma@isdh.in.gov

OUR MISSION:

To promote, protect, and improve the health and safety of all Hoosiers.

OUR VISION:

Every Hoosier reaches optimal health regardless of where they live, learn, work, or play.



Housekeeping

- There will be breaks in the agenda.
- There will be opportunity for Q & A during the meeting.

This meeting has been public noticed.

Introduction and approval of meeting minutes

Lindsay Weaver, M.D., FACEP
Chief Medical Officer

PI Subcommittee Updates

Peter Hammer, MD, FACS

Trauma Medical Director, IU Methodist



2022 PI Goals

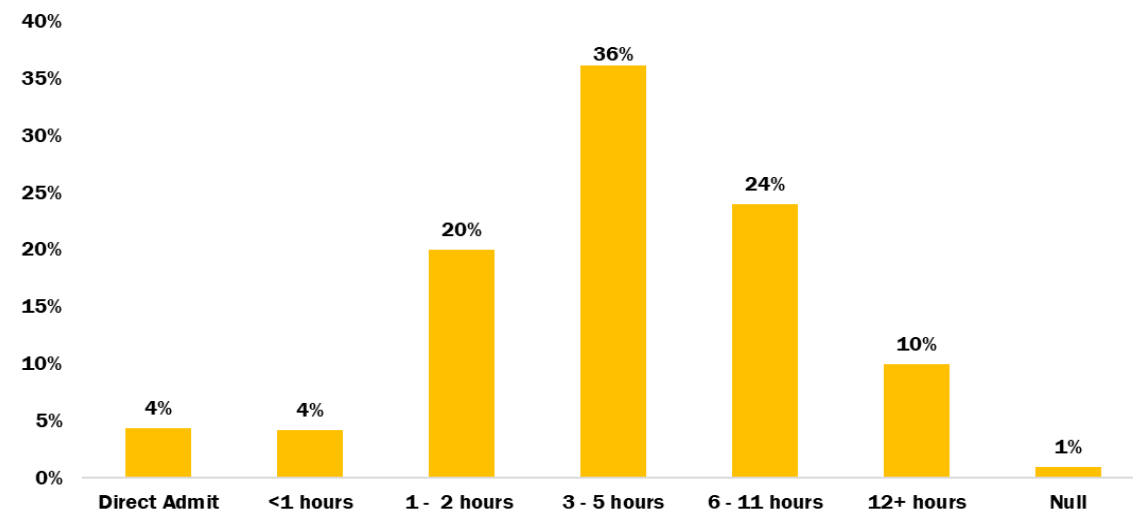
- Decrease ED LOS for critical patients at non-trauma centers
- Increase trauma registry quiz participation
- Collect hospital level variables
- Continued EMS run sheet collection
- Work with District leadership for PI process development

Q4 2021

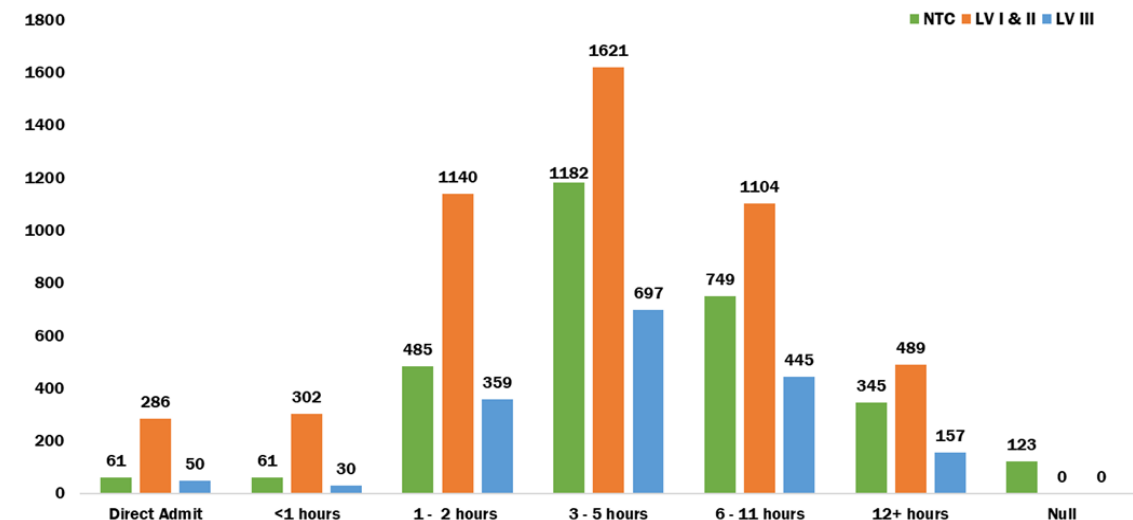
- 109 Hospitals reported
 - 9686 cases
 - LV I & II = 4566
 - LV III = 1669
 - NTC = 3451
- 112 review cases
- No ED admit/discharge date/time
 - We will send these cases to hospitals for additional review
- Q1 2022 will be due on **June 30th**



ED Length of Stay - Physical Exits (All Patients)

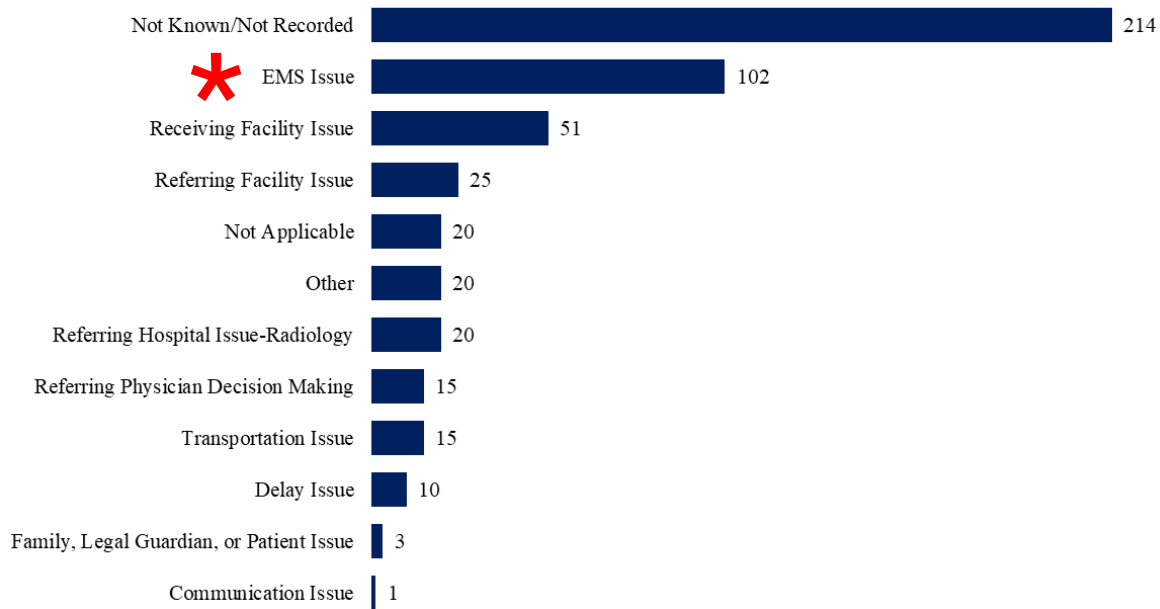


ED Length of Stay by Trauma Levels (Physical Exit)

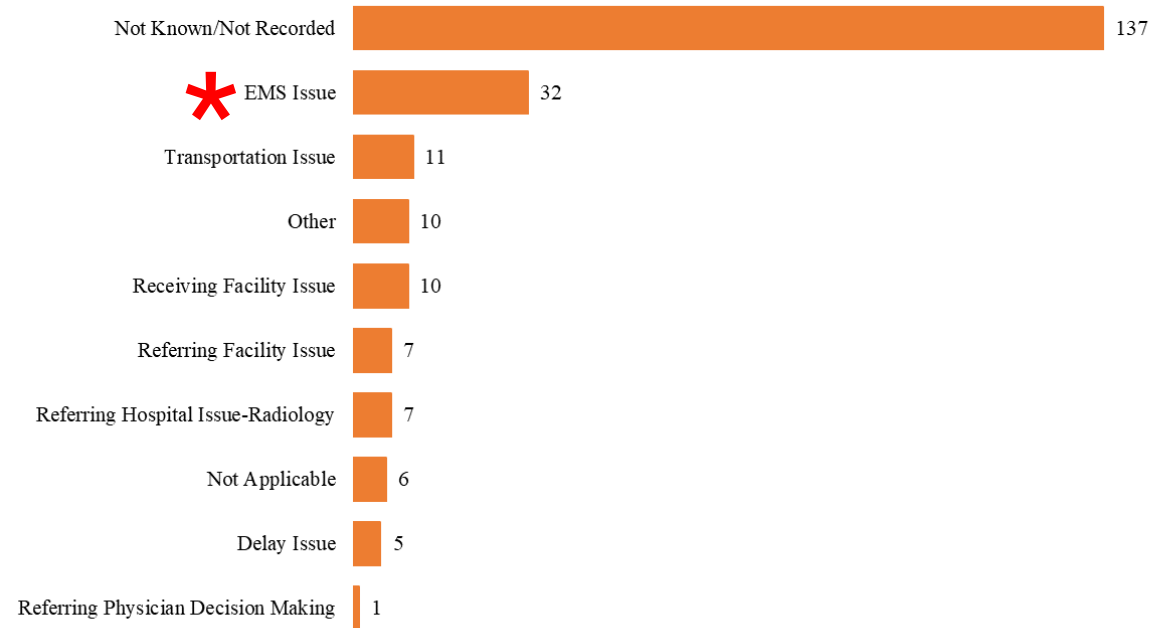


Transfer Delay (NTC only)

Transfer Delay Reasons (all patients)



Transfer Delay Reasons (critical patients only)



- **NTC = 3110**
 - Transfer Delay
 - Yes = 496
 - Critical = 226
- **EMS Issue**
 - **EMR note from sending facility with more detail**

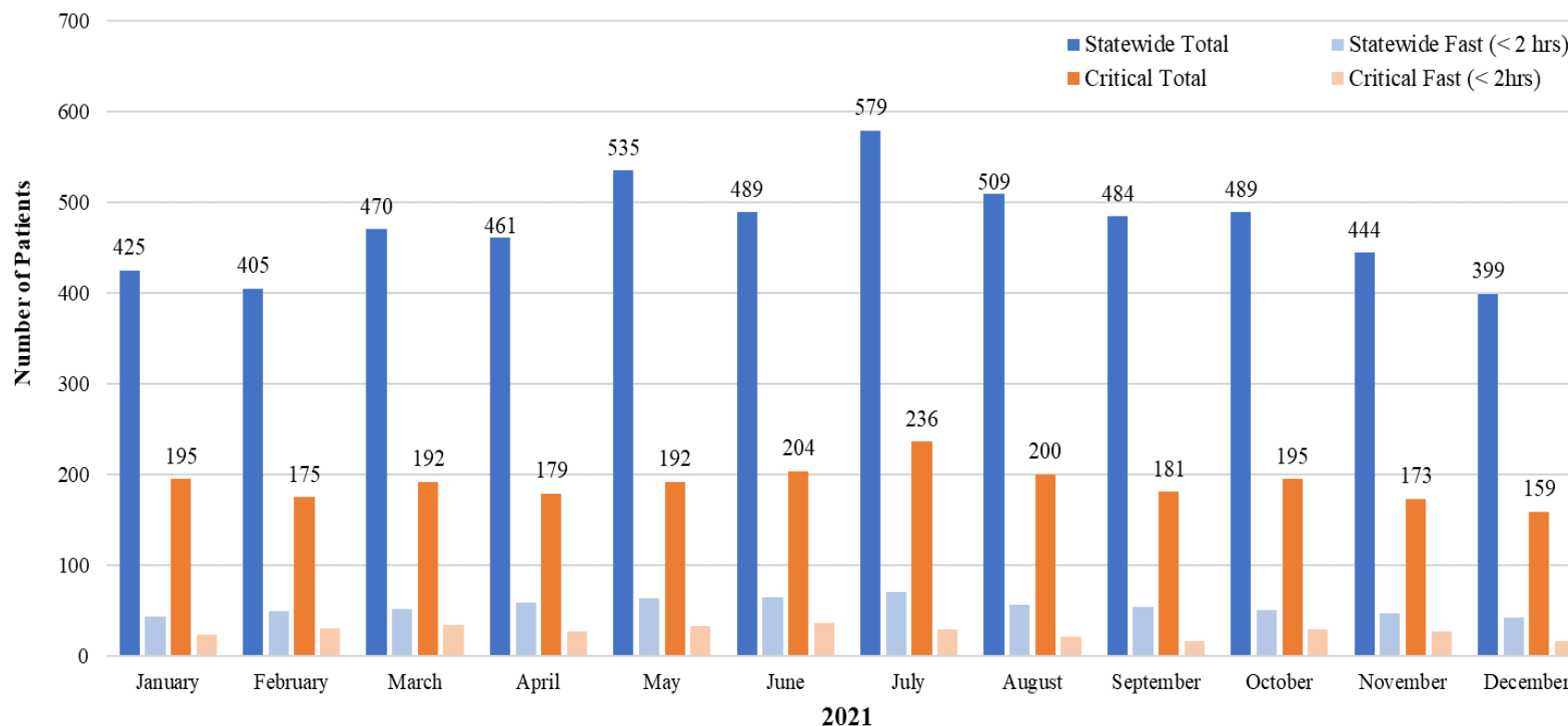
List of hospital not reporting for Q4 2021

Adams Memorial Hospital
Ascension St Vincent Mercy Hospital
Ascension St. Vincent - Kokomo
Ascension St. Vincent- Noblesville (Neighborhood Hospital)*
Ascension St. Vincent Randolph
Ascension St. Vincent Salem Hospital
Decatur County Memorial Hospital
Franciscan Health Crawfordsville
Goshen Health
Greene County General Hospital
Harrison County Hospital
Kings Daughters Health
Pulaski Memorial Hospital
Scott County Memorial Hospital
St Mary Medical Center (Hobart)
Union Hospital Terre Haute
Woodlawn Hospital

* no qualifying cases to report

ED Length of Stay – NTC only

Fewer than half of patients are transferred from the ED (PE) < 2 hours



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*Critical patient is defined as having a GCS ≤ 12 , OR Shock Index > 0.9 OR ISS > 15 at the initial hospital.

** Critical patient criteria for GCS will be update to ≤ 14 starting Q1 2022



GCS Update

Indiana Trauma System - Registry Definition Update

What

Updating the definition of critical transfer patients to a Glasgow Coma Score (GCS) < 14

Old Definition – Glasgow Coma Score (GCS) < 13

New Definition - Glasgow Coma Score (GCS) < 14

Why

- The change from a GCS < 13 to a GCS < 14 was made to include patients with a GCS = 13 as "critical" due to the high-risk of mortality and to align with the CDC and Indiana Field Triage and Transfer Guidelines.
- The goal with this change is to ensure that patients are transferred to designated trauma centers within 120 minutes.

When

Effective 1st Quarter 2022 reporting period

How/Where

The definition change will impact the following reports:

- **Statewide report** - the transfer patient section (linking initial to final hospital) will be updated to reflect the definition change.

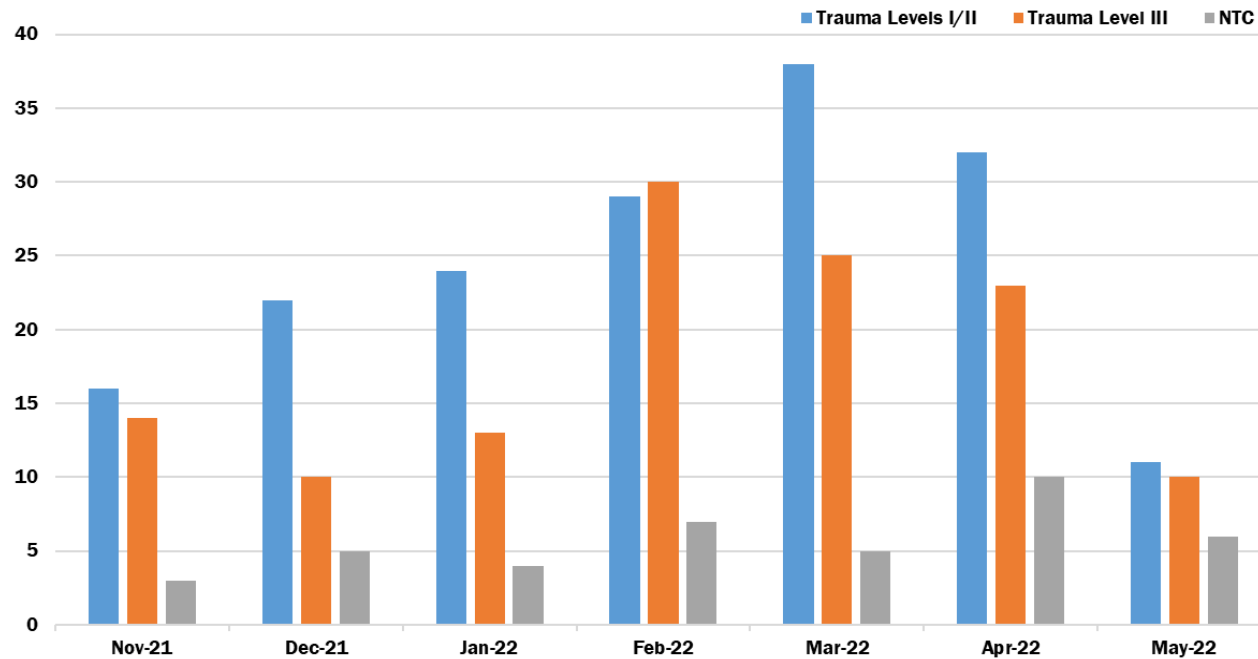


ACS Field Triage

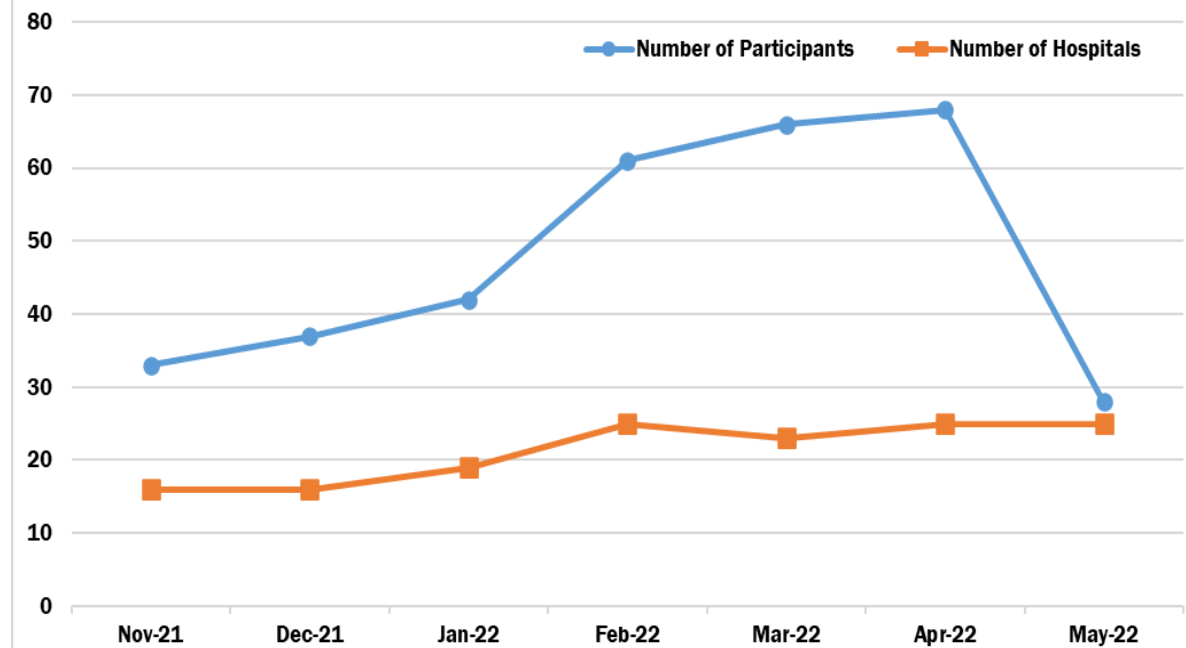
- New Red Criteria – “Unable to follow commands (GCS Motor < 6)”
 - vs GCS < 14

Trauma Registry Quiz Participation

Number of Participants by Hospital Level



Hospital and Individual Participation





2022 Microsoft Teams Meeting Dates

- ☐ July 12
- ☐ September 13
- ☐ November 15

ACS Updates

Scott Thomas, MD, FACS

Trauma Medical Director, Beacon Health



VRC VERIFICATION
REVIEW
CONSULTATION
for excellence in trauma centers

A QUALITY PROGRAM
of the AMERICAN COLLEGE
OF SURGEONS

Resources for Optimal Care of the Injured Patient

2022 Standards | Released March 2022

facs.org/vrc

ACS AMERICAN COLLEGE
OF SURGEONS

- Implementation – September 2023

National Guideline for the Field Triage of Injured Patients

RED CRITERIA High Risk for Serious Injury

Injury Patterns	Mental Status & Vital Signs
<ul style="list-style-type: none"> Penetrating injuries to head, neck, torso, and proximal extremities Skull deformity, suspected skull fracture Suspected spinal injury with new motor or sensory loss Chest wall instability, deformity, or suspected flail chest Suspected pelvic fracture Suspected fracture of two or more proximal long bones Crushed, degloved, mangled, or pulseless extremity Amputation proximal to wrist or ankle Active bleeding requiring a tourniquet or wound packing with continuous pressure 	<p>All Patients</p> <ul style="list-style-type: none"> Unable to follow commands (motor GCS < 6) RR < 10 or > 29 breaths/min Respiratory distress or need for respiratory support Room-air pulse oximetry < 90% <p>Age 0-9 years</p> <ul style="list-style-type: none"> SBP < 70mm Hg + (2 x age years) <p>Age 10-64 years</p> <ul style="list-style-type: none"> SBP < 90 mmHg or HR > SBP <p>Age ≥ 65 years</p> <ul style="list-style-type: none"> SBP < 110 mmHg or HR > SBP

Patients meeting any one of the above RED criteria should be transported to the highest-level trauma center available within the geographic constraints of the regional trauma system

YELLOW CRITERIA Moderate Risk for Serious Injury

Mechanism of Injury	EMS Judgment
<ul style="list-style-type: none"> High-Risk Auto Crash <ul style="list-style-type: none"> Partial or complete ejection Significant intrusion (including roof) <ul style="list-style-type: none"> >12 inches occupant site OR >18 inches any site OR Need for extrication for entrapped patient Death in passenger compartment Child (Age 0-9) unrestrained or in unsecured child safety seat Vehicle telemetry data consistent with severe injury Rider separated from transport vehicle with significant impact (eg, motorcycle, ATV, horse, etc.) Pedestrian/bicycle rider thrown, run over, or with significant impact Fall from height > 10 feet (all ages) 	<p>Consider risk factors, including:</p> <ul style="list-style-type: none"> Low-level falls in young children (age ≤ 5 years) or older adults (age ≥ 65 years) with significant head impact Anticoagulant use Suspicion of child abuse Special, high-resource healthcare needs Pregnancy > 20 weeks Burns in conjunction with trauma Children should be triaged preferentially to pediatric capable centers <p>If concerned, take to a trauma center</p>

Patients meeting any one of the YELLOW CRITERIA WHO DO NOT MEET RED CRITERIA should be preferentially transported to a trauma center, as available within the geographic constraints of the regional trauma system (need not be the highest-level trauma center)

- Consolidate criteria into 2 categories
 - High risk for serious injury
 - Moderate risk for serious injury
- Structure/format re-imagined
 - Align better with information flow to EMS
 - Align better with how FTG's were being used



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2021 Revision Process

- Systemic review of current FTG literature
 - Clearly defined thresholds for addition/deletion of criteria
- EMS input integral to revision process
 - Expanded expert panel
- NHTSA funding/support



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EMS Feedback



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- FTG are widely used by EMS in the U.S.
 - Prior versions seen to be overly complex
- Stepwise approach felt to be useful
 - But mechanism/injury is evaluated first and drives most decisions

“I see the wreck before I see the patient”

“I see the patient before I know the BP”

Nat'l – Field Triage Guidelines

National Guideline for the Field Triage of Injured Patients

RED CRITERIA

High Risk for Serious Injury

Injury Patterns

- Penetrating injuries to head, neck, torso, and proximal extremities
- Skull deformity, suspected skull fracture
- Suspected spinal injury with new motor or sensory loss
- Chest wall instability, deformity, or suspected flail chest
- Suspected pelvic fracture
- Suspected fracture of two or more proximal long bones
- Crushed, degloved, mangled, or pulseless extremity
- Amputation proximal to wrist or ankle
- Active bleeding requiring a tourniquet or wound packing with continuous pressure

Mental Status & Vital Signs

All Patients

- Unable to follow commands (motor GCS < 6)
- RR < 10 or > 29 breaths/min
- Respiratory distress or need for respiratory support
- Room-air pulse oximetry < 90%

Age 0-9 years

- SBP < 70mm Hg + (2 x age years)

Age 10-64 years

- SBP < 90 mmHg or
- HR > SBP

Age ≥ 65 years

- SBP < 110 mmHg or
- HR > SBP

Patients meeting any one of the above RED criteria should be transported to the highest-level trauma center available within the geographic constraints of the regional trauma system

Field Triage Guidelines

YELLOW CRITERIA

Moderate Risk for Serious Injury

Mechanism of Injury

- High-Risk Auto Crash
 - Partial or complete ejection
 - Significant intrusion (including roof)
 - >12 inches occupant site OR
 - >18 inches any site OR
 - Need for extrication for entrapped patient
 - Death in passenger compartment
- Child (Age 0-9) unrestrained or in unsecured child safety seat
 - Vehicle telemetry data consistent with severe injury
- Rider separated from transport vehicle with significant impact (eg, motorcycle, ATV, horse, etc.)
- Pedestrian/bicycle rider thrown, run over, or with significant impact
- Fall from height > 10 feet (all ages)

EMS Judgment


Consider risk factors, including:

- Low-level falls in young children (age \leq 5 years) or older adults (age \geq 65 years) with significant head impact
- Anticoagulant use
- Suspicion of child abuse
- Special, high-resource healthcare needs
- Pregnancy > 20 weeks
- Burns in conjunction with trauma
- Children should be triaged preferentially to pediatric capable centers

If concerned, take to a trauma center

Patients meeting any one of the YELLOW CRITERIA WHO DO NOT MEET RED CRITERIA should be preferentially transported to a trauma center, as available within the geographic constraints of the regional trauma system (need not be the highest-level trauma center)

2021 FTG's



YELLOW CRITERIA <i>Moderate Risk for Serious Injury</i>	
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- EMS judgement section now includes factors that the expert panel felt were important to consider, but which lacked a robust and consistent evidence base

National Guideline for the Field Triage of Injured Patients

RED CRITERIA High Risk for Serious Injury

Injury Patterns	Mental Status & Vital Signs
<ul style="list-style-type: none"> Penetrating injuries to head, neck, torso, and proximal extremities Skull deformity, suspected skull fracture Suspected spinal injury with new motor or sensory loss Chest wall instability, deformity, or suspected flail chest Suspected pelvic fracture Suspected fracture of two or more proximal long bones Crushed, degloved, mangled, or pulseless extremity Amputation proximal to wrist or ankle Active bleeding requiring a tourniquet or wound packing with continuous pressure 	<p>All Patients</p> <ul style="list-style-type: none"> Unable to follow commands (motor GCS < 6) RR < 10 or > 29 breaths/min Respiratory distress or need for respiratory support Room-air pulse oximetry < 90% <p>Age 0-9 years</p> <ul style="list-style-type: none"> SBP < 70mm Hg + (2 x age years) <p>Age 10-64 years</p> <ul style="list-style-type: none"> SBP < 90 mmHg or HR > SBP <p>Age ≥ 65 years</p> <ul style="list-style-type: none"> SBP < 110 mmHg or HR > SBP

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Patients meeting any one of the YELLOW CRITERIA WHO DO NOT MEET RED CRITERIA should be preferentially transported to a trauma center, as available within the geographic constraints of the regional trauma system (need not be the highest-level trauma center)

- Each risk category is aligned with recommendations for selection of a destination hospital
- Organized by risk of serious injury
 - Transport recommendations aligned with level of risk

Transport recommendations

- Goal
 - “Right Patient, Right Place, Right Time”
 - Patients meeting “ high risk” risk criteria should be triggered to the highest level trauma center within the region – whenever possible
- No “ one size fits all”
 - Account for regional differences
- Guidelines designed to help EMS identify patient who should go to a trauma center
- NOT meant to dictate how trauma teams are activated at the trauma center

Trauma System Consultation



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John Armstrong MD FACS

IDHS/EMS Updates

Kraig Kinney

State Director and Counsel of EMS

Emergency Medical Services



- The Indiana Emergency Medical Services is created in statute in IC 16-31-2-1.
- The EMS Commission is the body that develops EMS policy and authorizes certification of EMS personnel and organizations.
- EMS Commission members are appointed to four (4) year terms (no term limits on renewal appointments) by the Governor in specific categories.

Emergency Medical Services – EMS Section



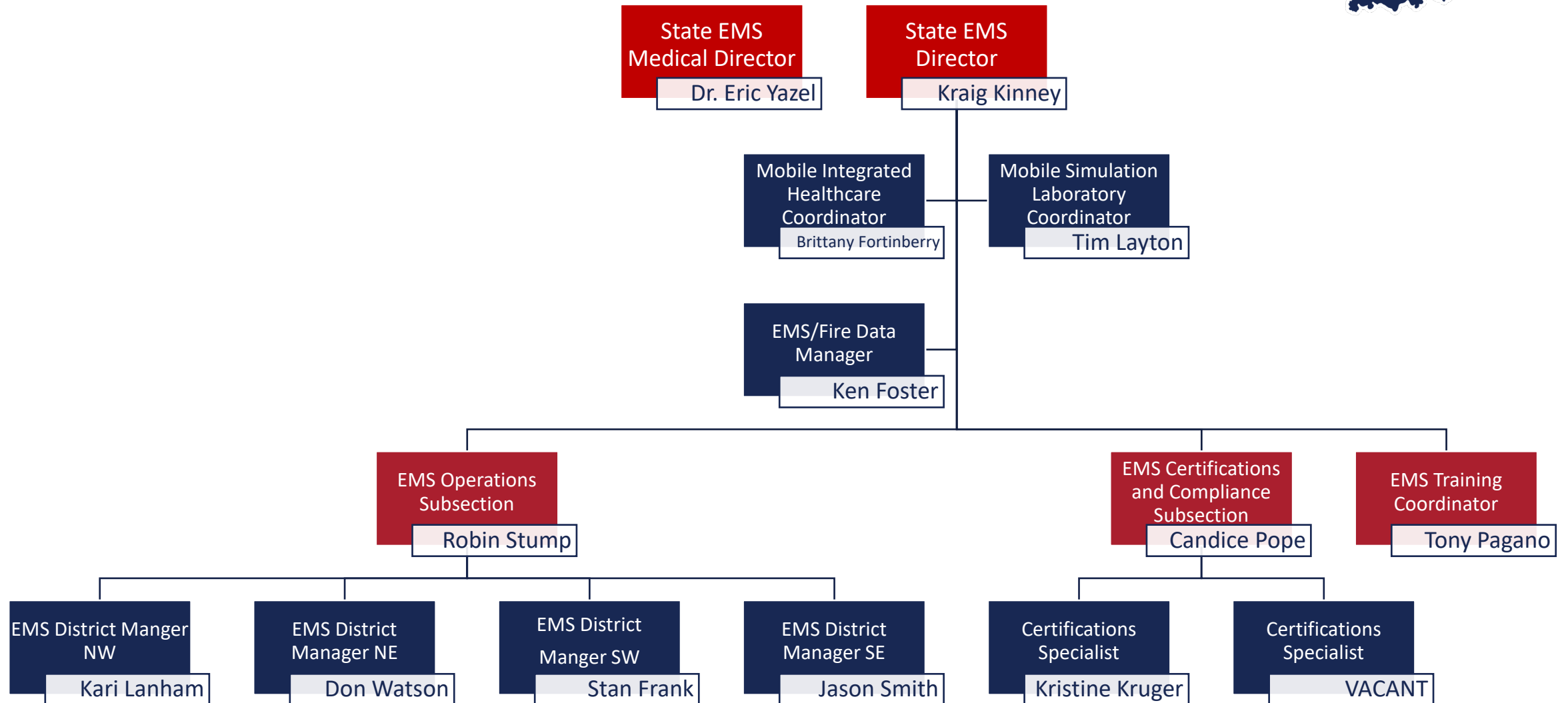
- While the EMS Commission sets the policy and provides oversight functions, the Indiana Department of Homeland Security is the administrative agency that handles EMS operations and implements EMS Commission directives.



EMS is a section of the Division of Fire and Building Safety that falls under direction of the State Fire Marshal.



EMS Section Organization Chart

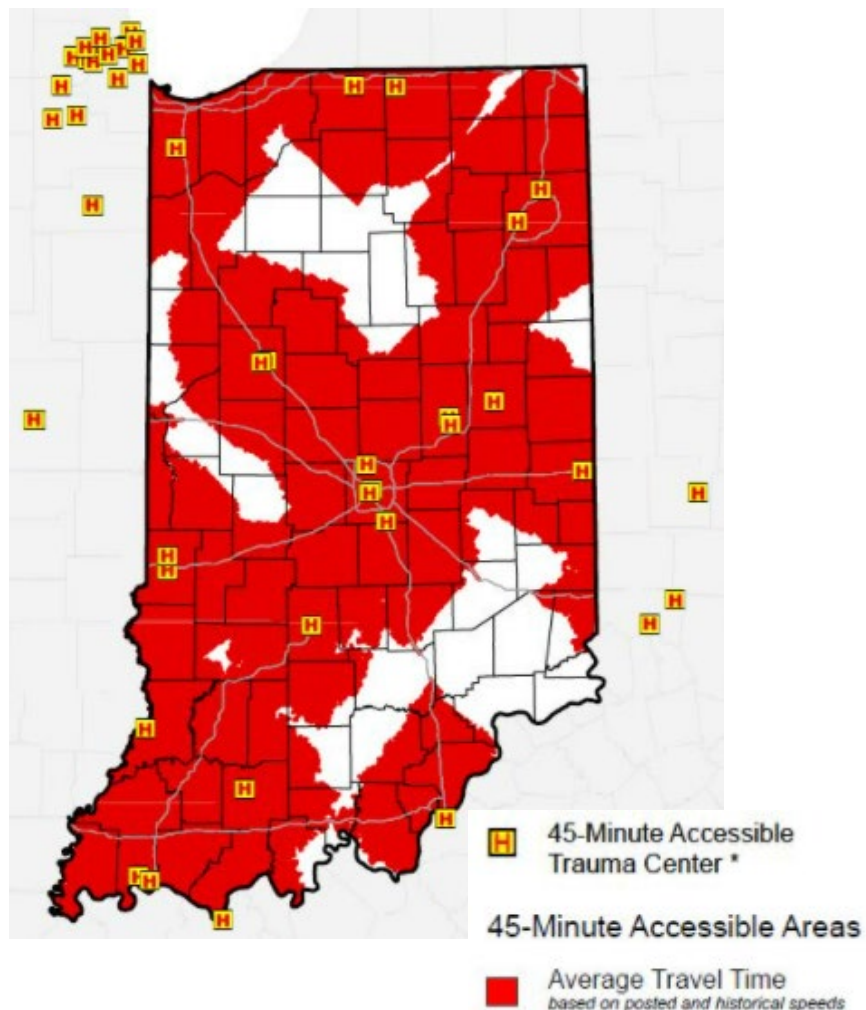




New State EMS
Medical
Director— Dr.
Eric Yazel



Significant improvements over the last decade but gaps remain



- **Injury: leading cause of death for Hoosiers <age 45**
- 92% of Hoosiers have access to a trauma center within a 45-minute drive
- Not enough EMS providers, especially in rural areas and not enough trauma centers
- Responsibility shared by two agencies: IDHS/EMS and IDOH Division of Trauma & Injury Prevention

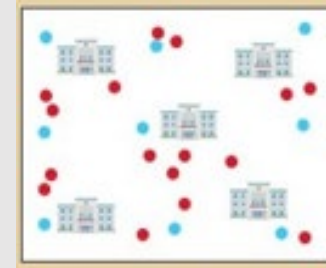
Number of IN Trauma Centers by Level and Location

Level	Number	Location
I	4 + 1 Prov.	Marion County
II	5	Evansville, Fort Wayne, South Bend
III	13 + 1 Prov	Anderson, Bloomington, Crown Point, Elkhart, Indianapolis, Jasper, Lafayette. Muncie, Richmond, Terre Haute, Vincennes

Close the Urban/Rural EMS Gap

- Emergencies happen every day in Indiana and how EMS responds can be the difference between life and death
- Preparedness begins by being ready for those emergencies 24/7/365
- All Hoosiers should be guaranteed an ALS ambulance regardless of where they live
- Unfortunately, people are dying because access to EMS service is unequally distributed across rural and urban areas
- Having reliable and sustainable sources of funding for EMS readiness and emergency preparedness will help EMS provider agencies who deliver EMT and paramedic services to become and stay operational

Urban/Suburban County, IN Pop. 338,000



Time to definitive care = minutes

16 ambulances available 24/7
45 ALS capable apparatus
Ave Response Time = 3 minutes
Ave Transport Time = 5 minutes
Destinations facilities in county: 2 Level 1 Trauma, 2 Pediatric Trauma, 1 Burn Center

Rural County, IN Pop. 15,498



Time to definitive care = hours

2 ambulances available 24/7
8 BLS non-transport apparatus
Ave Response Time = 17 minutes
Ave Transport Time = 30 minutes
No destination facilities in county
Air transport available outside county
Transport time to trauma center = 5 hours roundtrip

Ambulance



Other ALS First Responder



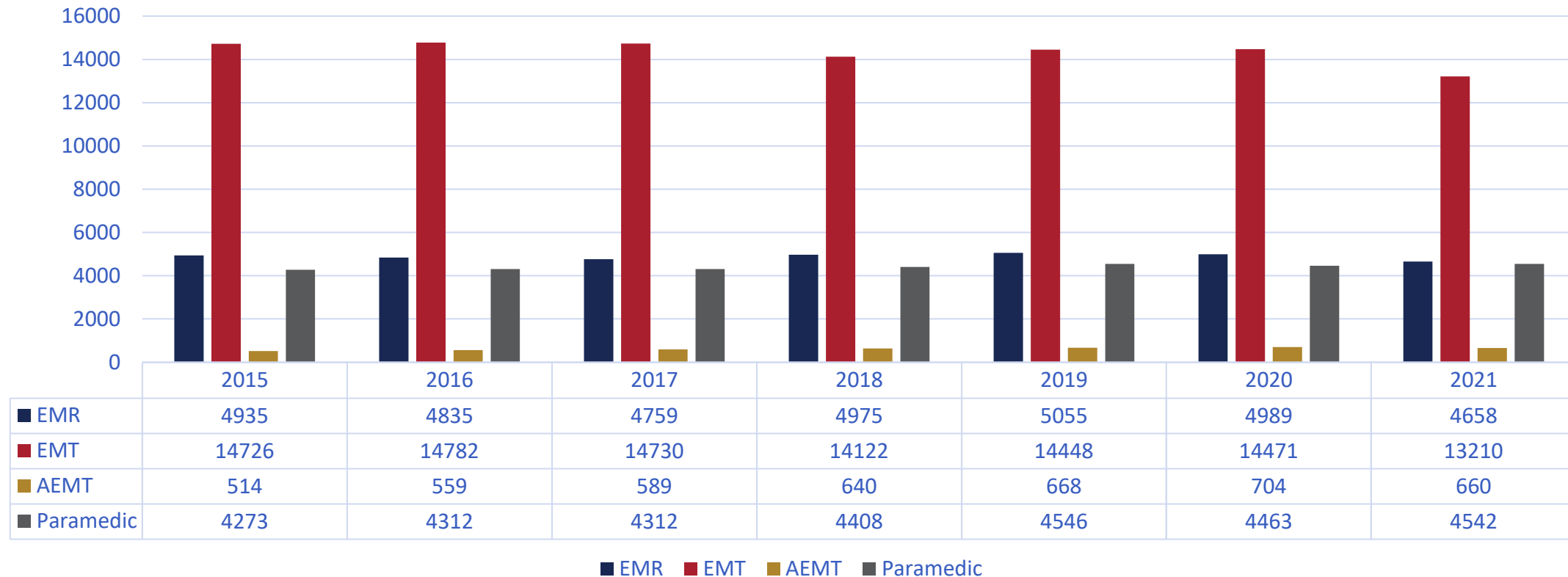
Destination Facility



State of Indiana EMS Personnel



EMS Personnel Certifications by Group 2005-2021

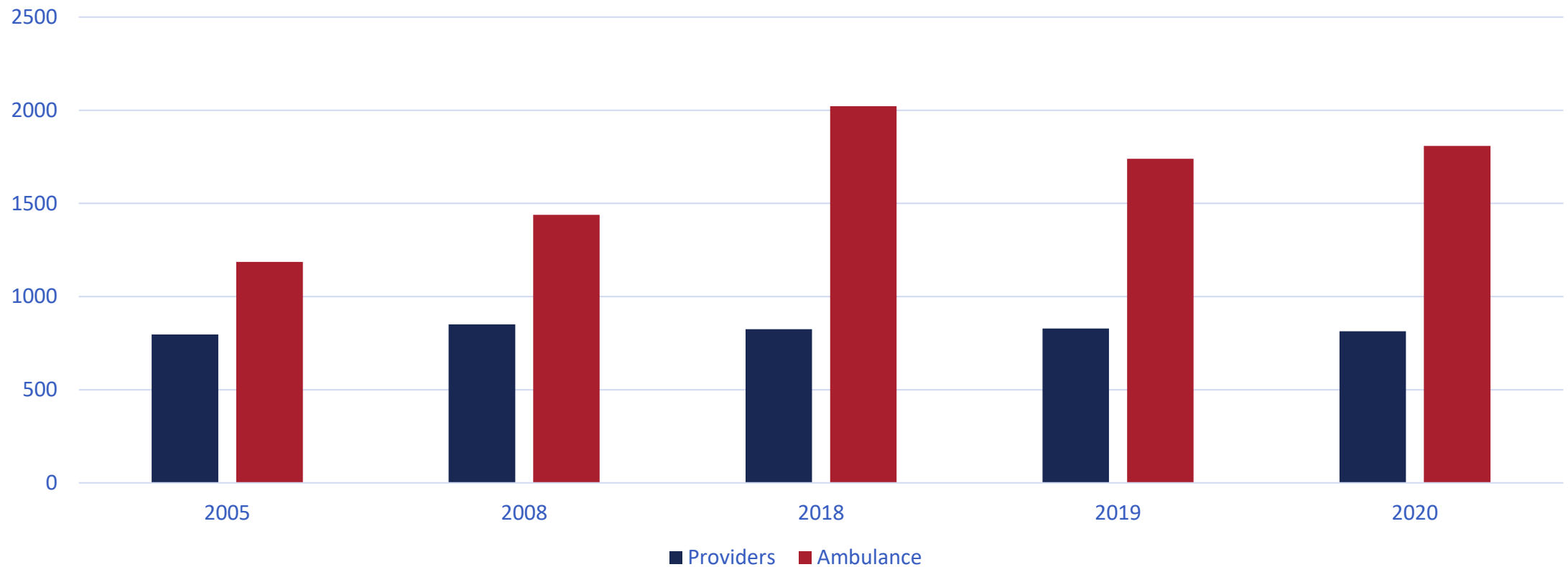


Source: Indiana Department of Homeland Security ACADIS Certifications Database Records

Status of Indiana Ambulances



EMS Provider Organizations and Ambulances



Source: Indiana Department of Homeland Security ACADIS Certifications Database Records

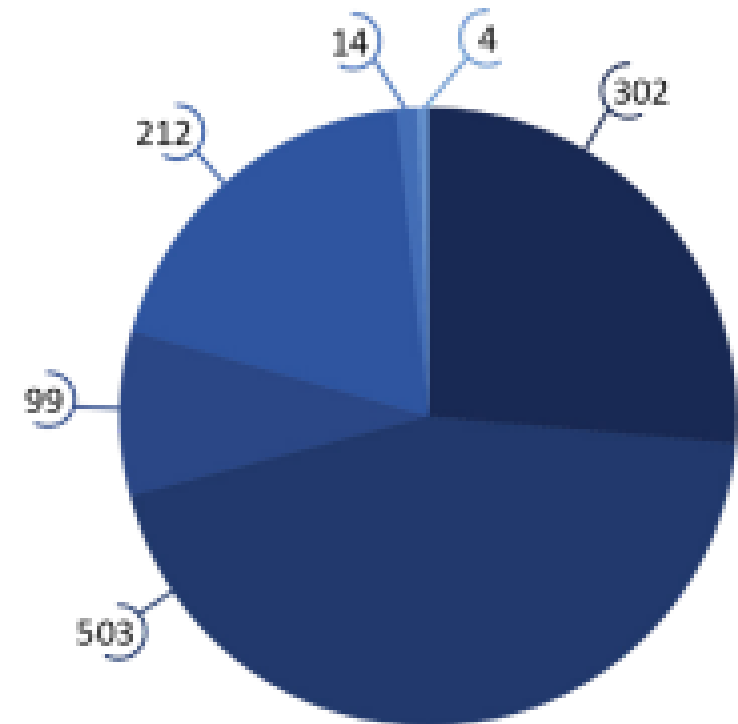


Provider organizations for 2021

Organization Certification Statistics (as of Dec. 31, 2021)

Total provider organizations: 831

- Transporting ambulance service providers
- BLS non-transport providers
- BLS transport providers
- Paramedic provider organizations
- Rotorcraft organizations

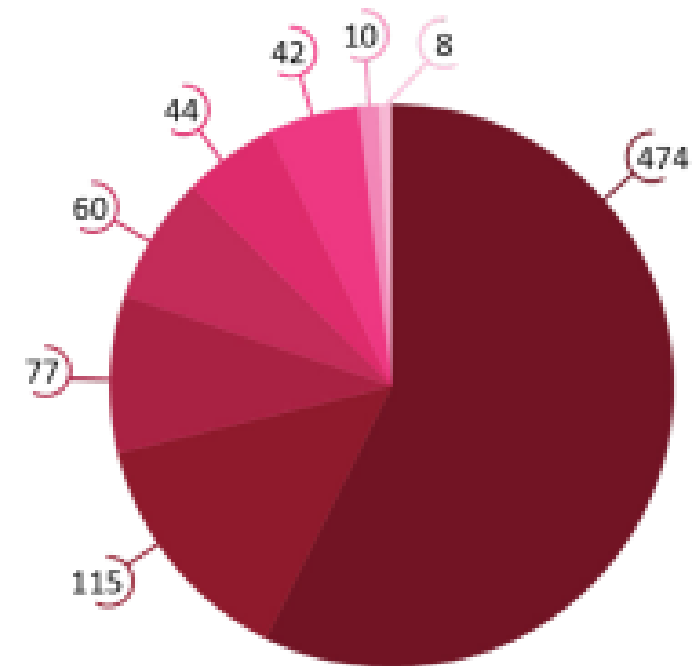




Provider organizations by organization structure for 2021

Providers organization by type: 831

- Volunteer Fire
- Paid Fire
- Governmental
- Private
- Hospital based
- Volunteer Ambulance
- Industrial
- Other

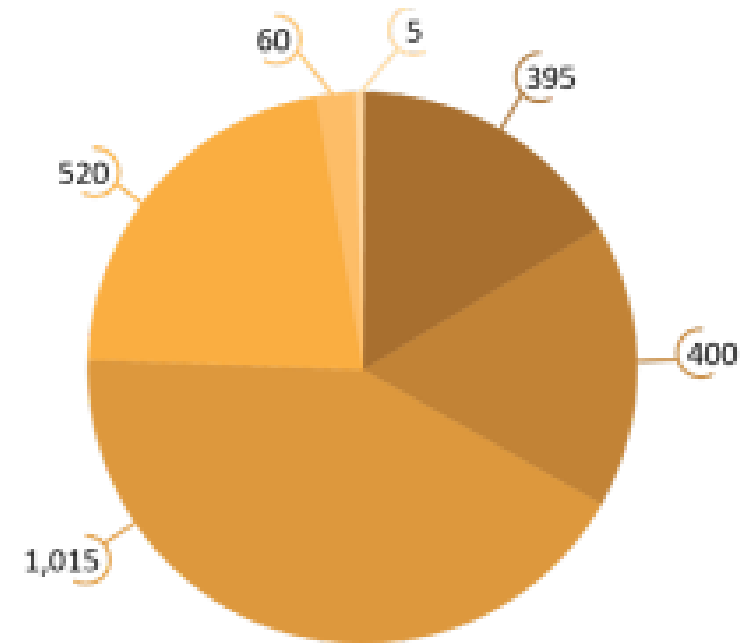




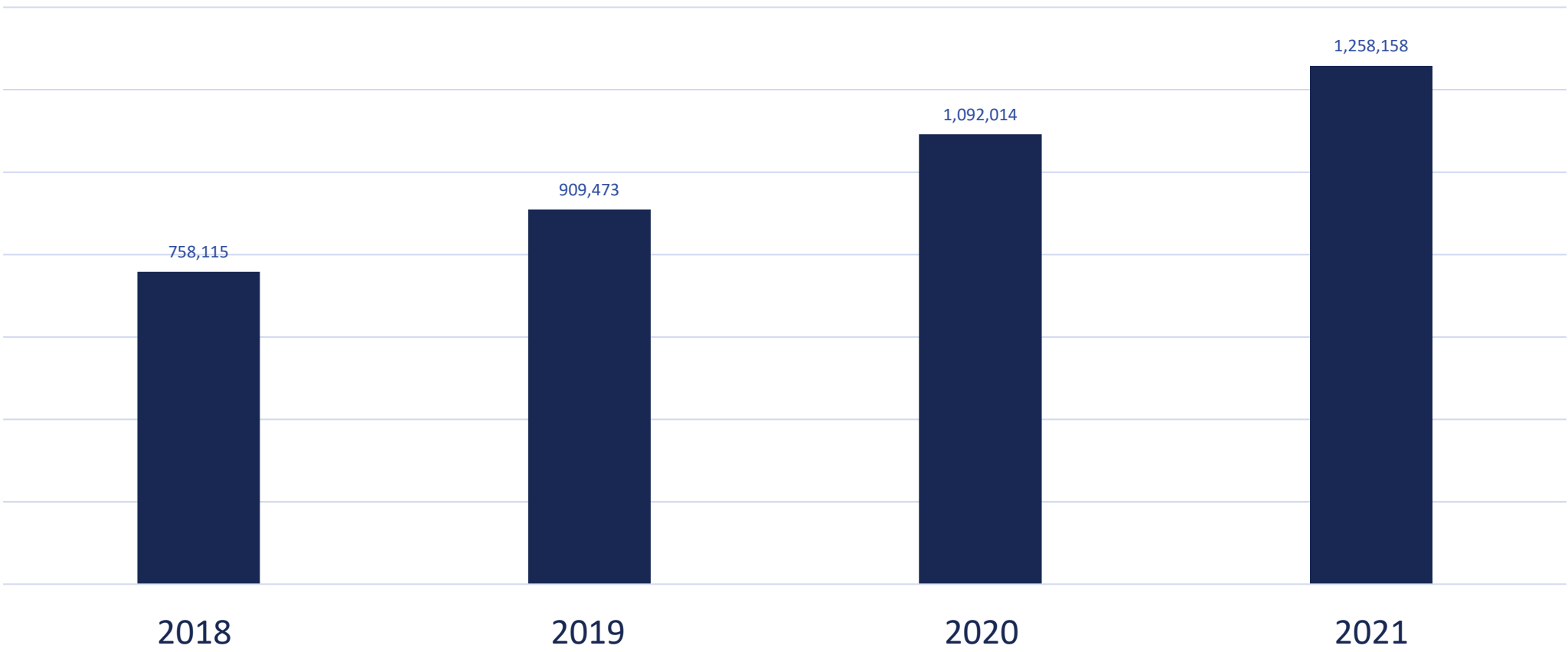
Certified EMS Vehicles by type for 2021

Certified vehicles by type: 2,396

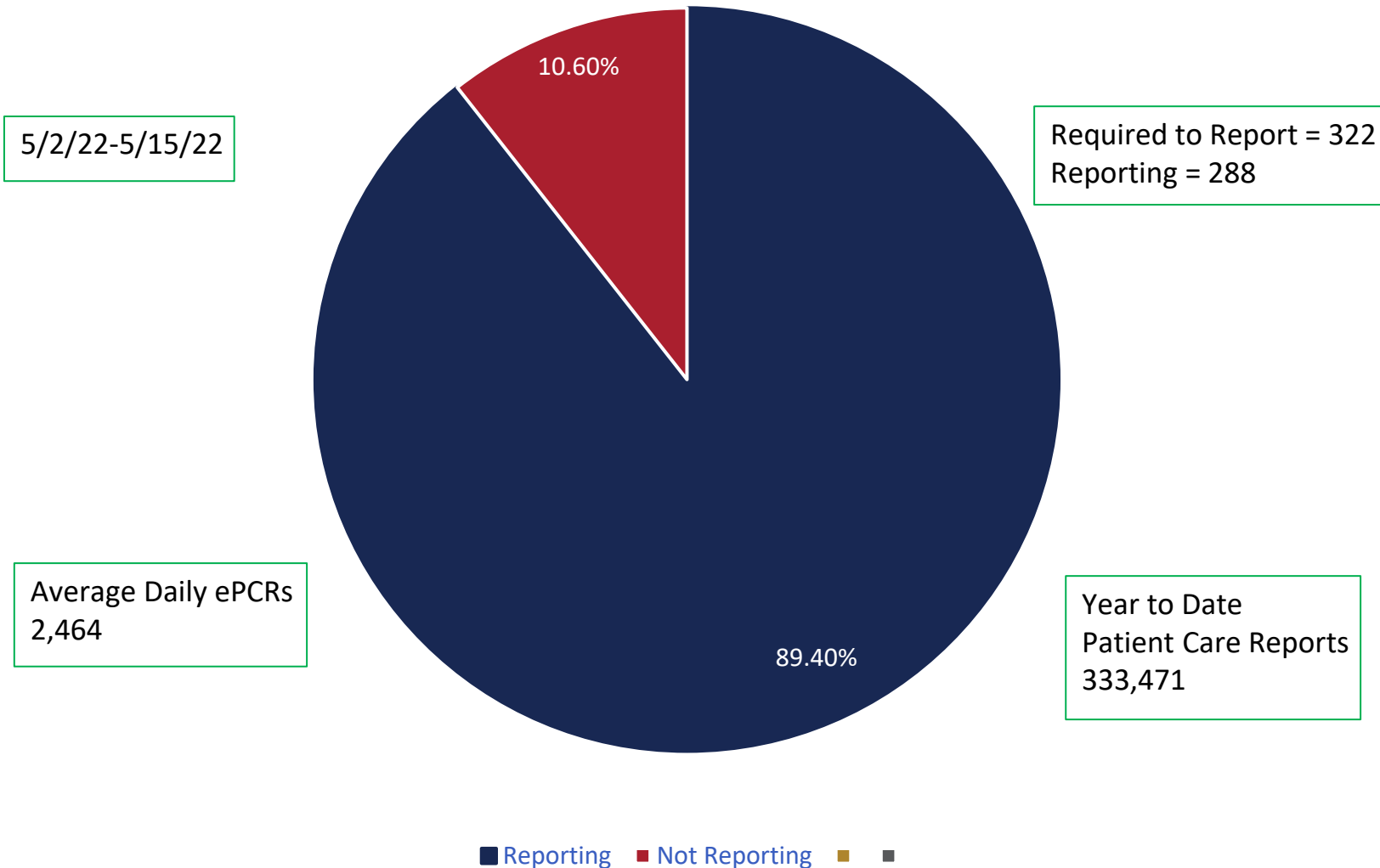
- Type I (Ambulance)
- Type II (Ambulance)
- Type III (Ambulance)
- ALS Non-transport
- Rotorcraft
- Fixed Wing



Annual Indiana EMS Run Volume - YOY



EMS Agency Reporting Percentage: Required to Report



MIH Programs addressing trauma prevention



- IDHS EMS is tracking mobile integrated healthcare (MIH) programs.
- A common area is trauma prevention, specifically falls.
- These 14 approved MIH programs have a component that includes injury prevention.

1. Boone County EMS/Witham Health Services
2. City of Bloomington Fire Department
3. Crawfordsville Fire Department
4. Daviess Community Hospital
5. Good Samaritan Hospital
6. Indiana University Health Ball Hospital
7. Monticello Fire Department
8. New Castle-Henry County EMS
9. Noblesville Fire Department
10. Parkview Health
11. Richmond Fire Department
12. Scott Township Fire and EMS
13. Warsaw-Wayne Fire Territory
14. Zionsville Fire Department.

2022 Legislative Recap for EMS



- **SEA 247 (2022) Report on 911 and Regionalized Trauma Care**
- IDHS, IDOH, Statewide 911 Board, & Integrated Public Safety Commission Recommendations
 - Authority: IC 10-19-2.1-3
- Requirement: Not later than October 1, 2022, the agencies shall develop and submit recommendations to LSA regarding:
 1. Ways that the 911 system can increase interoperability to better facilitate an emergency medical services response for the closest and most appropriate source; and
 2. The effectiveness of regionalized trauma systems and the impact of regionalized trauma systems on patient care
- In doing so, the agencies may consult stakeholder groups such as EMS provider organizations, fire departments, hospitals or other emergency medical facilities, or units of local government.

**** This is on the Agenda for discussion later in the meeting**

2022 Legislative Recap for EMS



- **HEA 1314 (2022) is the IDHS agency bill that was amended to become a Public Safety bill.**
- **Section 11** – Requires IDHS, IDOH, the Integrated Public Safety Commission, and the Statewide 911 Board to make recommendations to the General Assembly regarding: 1) ways the 911 system can increase interoperability for EMS responses, and 2) the effectiveness of regionalized trauma systems and the impact on patient care
 - This provision is in response to discussions that arose during the 2021 Interim Study Committee on Public Health, Behavioral Health, and Human Services - Trauma Care hearing
- **Section 19** – Modernizes the definition of “emergency medical services” to account for care rendered without transportation and care provided during interfacility transfers
 - The current definition does not include two significant aspects of EMS – providing care to a patient when the patient does not need to be transferred to a hospital and providing care to a
 - patient while transferring the patient from one hospital to another hospital if a higher level of care is needed for the patient
- **Section 20** – Amends the definition of “emergency patient” to remove reference to transportation
 - The current definition is outdated as EMS often renders care without transporting the patient

2022 Legislative Recap for EMS



- **Section 26** - Allows the EMS Commission or IDHS to share certain EMS data with another entity for the purpose of improving patient care and outcomes.
- Allows the EMS Commission or IDHS to harness the data EMS providers share with IDHS in order to identify and address trends in patient health outcomes
- **Section 27** – Requires EMS licensed and certified personnel to report a criminal conviction within 90 days of a criminal conviction for a misdemeanor or felony.
- **Section 29** – Update IC 16-31-3-26 to remove old “audit and review” language to more current “quality assurance program”. Removes (a)(1) through (a)(6) but leaves (a) through (d) so rules can be adopted and keeps confidentiality.
 - (a) Each provider organization shall participate in a written quality assurance program. Proceedings under this section are confidential, and any communication related to the quality assurance program is considered a privileged communication.
 - (b) This section does not prevent participation by a provider organization in a peer review committee proceeding under IC 34-30-15.
 - (c) The commission may adopt rules under IC 4-22-2 to implement this section.

2022 Legislative Recap for EMS



- **Section 36** – Requires a health plan operator to fairly negotiate rates and terms with an ambulance service provider willing to become a “participating provider” and provides that if negotiations do not result in the ambulance service provider becoming a “participating provider” both entities must keep certain records regarding the negotiations for two years
- **Section 37** – Requires certain life, accident, and health insurance plans that provide reimbursement for different types of EMS care must provide reimbursement on an equal basis regardless if the service involves transporting the patient
- **Section 38** - Requires certain accident and sickness insurance policies or HMOs that provide reimbursement for EMS must also provide reimbursement for certain ambulance services or specialty care transport services
- **Section 39** - Requires certain health maintenance organization plans that provide reimbursement for different types of EMS care must provide reimbursement on an equal basis regardless if the service involves transporting the patient.

ACS Committee on Trauma Revised Field Trauma Triage Guidelines



- The guidelines, in use since the late 1980s, provide evidence-based criteria in making care and transport decisions for patients with traumatic injuries in the prehospital setting.

The screenshot shows a webpage from EMS News. At the top, there is a dark blue header with "EMS News" in white and "ems.gov" in white. Below the header, there is a red horizontal line. The main content area has a white background. The title "ACS Committee on Trauma Releases Revised Field Trauma Triage Guidelines" is in bold black text. Below the title, there is a paragraph of text: "The American College of Surgeons (ACS) has released an update of the Field Trauma Triage Guidelines (FTTG) for use by clinicians nationwide. The guidelines, in use since the late 1980s, provide evidence-based criteria in making care and transport decisions for patients with traumatic injuries in the prehospital setting." At the bottom of the article, there is a blue button with white text that says "Download Updated Guidelines".

EMS News **ems.gov**

Rectangular Snip

ACS Committee on Trauma Releases Revised Field Trauma Triage Guidelines

The American College of Surgeons (ACS) has released an update of the Field Trauma Triage Guidelines (FTTG) for use by clinicians nationwide. The guidelines, in use since the late 1980s, provide evidence-based criteria in making care and transport decisions for patients with traumatic injuries in the prehospital setting.

[Download Updated Guidelines](#)

Rule 2.1. Certification of Ambulance Service Providers - Trauma Field Triage and Transport Destination Protocol

- The ACS Trauma guidelines are adopted into the EMS rules so likely a rule change will be needed to adopt and implement.

EMS District Forums and Leadership



Northwest

Thursday, August 11, 2022, 0800-1700 EST

Monticello Fire Department, 120 W Washington St, Monticello, IN 47960

Northeast

Thursday, September 8, 2022, 0800-1700 EST

Central Christian Church, 500 Macgahan St, Huntington, IN 46750

Central

Thursday, July 14, 2022, 0800-1700 EST

MADE, 1610 Reeves Rd., Plainfield, IN 46168

Southwest

Thursday, October 6, 2022, 0800-1700 EST

Greene County Fairgrounds

Southeast

Thursday, November 10, 2022, 0800-1700 EST

Redeemer Lutheran Church, 504 N Walnut St, Seymour, IN 47274 (back entrance)



Celebrating EMS...



EMS WEEK

Rising to the Challenge

May 15-21, 2022



**QUESTIONS?
COMMENTS?
FEEDBACK?**



iEMSC Updates

Dr. Elizabeth Weinstein, MD, FAAEM, FACEP, FAAP

Director, Indiana Emergency Medical Services for Children

Pediatric Readiness and ACS COT Trauma Designation

Elizabeth Weinstein, MD

Indiana Emergency Medical Services for
Children



ACS COT Orange Book 2023

In all trauma centers, the emergency department must evaluate its pediatric readiness and have a plan to address any deficiencies.

Compliance: Gap analysis with plan to address deficiencies in pediatric readiness

ACS-COT Orange Book



Indiana – Emergency Medical Services for Children

What is "Pediatric Readiness?"

Refers to the infrastructure, administration and coordination of care, personnel, pediatric-specific policies, equipment, and other resources that ensure the center is prepared to provide care to an injured child.

ACS-COT Orange Book



The National Pediatric Readiness Project (NPRP) is a multi-phase quality improvement initiative to ensure that all U.S. emergency departments have the essential guidelines and resources in place to provide effective emergency care to children.

THE PROJECT IS SUPPORTED BY THE AMERICAN COLLEGE OF EMERGENCY PHYSICIANS, THE EMERGENCY NURSES ASSOCIATION, THE AMERICAN ACADEMY OF PEDIATRICS, AND THE FEDERAL EMERGENCY MEDICAL SERVICES (EMS) FOR CHILDREN PROGRAM



Indiana – Emergency Medical Services for Children

Why is readiness important?

Hospitals with high ED readiness scores demonstrate a 4-fold lower rate of mortality for children with critical illness than those with lower readiness scores; thus, improving pediatric readiness improves outcomes for children and their families.





99% OF INDIANA HOSPITALS COMPLETED THE 2021 ASSESSMENT



Assessment Tool



189 Items on the
assessment



82 Items Scored for
"Pediatric Readiness"



Perfect Score = 100



How did my ED participate?

Generally, your ED nurse managers collaborated with your ED leadership to participate in the NPRP assessment.



ED Nurse Managers who completed the NPRP assessment immediately received:

- A pediatric readiness score from 0 – 100
- The avg pediatric readiness score of EDs of similar pediatric volume
- The avg pediatric readiness score of all participating EDs to use as a benchmark
- **An ED Gap Report to target efforts for improvement in pediatric readiness**



Assessment Tool

6 Major Sections

- Coordination (19 pts)
- Staffing (10 pts)
- QI/PI (7 pts)
- Safety (14 pts)
- Policies (17 pts)
- Equipment (33 points)



What now?

- Finding your data
- Interpreting results
- Addressing gaps
- EMSC is here to help!



Get Ready for the Next Assessment

emscimprovement.center/domains/pediatric-readiness-project/get-ready-2020/

Apps

Section IV: About...

EMSC Program M...

NEDARC - Overview

EMSC Webinars - ...

Home - IUEM - IU...

Welcome to iEMSC


iEMS HQ Portal

Constant Contact

All files and folder...

Access Managem...

NHTSA_Reassess...



National

Pediatric Readiness Project

Ensuring Emergency Care for All Children

National Pediatric Readiness Project

About

Assessment

Readiness Toolkit

Results and Findings

Project Partners

Get Ready for the Next Assessment!

Selected Publications

ED Checklist


Steering Committee


Spread the Word


Need to find your previous results?

ED personnel who wish to obtain a copy of their facility's assessment results should contact their local **State Partnership Manager**. To find their contact information, please visit our [EMSC Grants Database](#). Select "State Partnership" from the type dropdown as well as your state and check the "current" radio button. Click "View Grant Details" to see the contact information for your state.

About the EMSC


What is the EMSC Fact Sheet  (PDF)


History of the EMSC  (PDF)

Target Issues Grantees Fact Sheet  (PDF)

White Paper: Quality Improvement in

Upcoming Assessment


ED Checklist  (2021 Update)


2018 Pediatric Readiness Guidelines  (AAP.org)

Selected Publications


Literature In Support of Pediatric Readiness

Resources

Critical Crossroads Toolkit: Mental Health Care in the ED  (PDF)

AAP Children & Disasters  (AAP.org)

AAP Topical Collection: Pediatric



QR Code for this page

Indiana – Emergency Medical Services for Children



Region V For Kids

Great Lakes Pediatric Consortium For Disaster Response

States involved:

Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

Workgroups:

Supply Chain

Surge/Peds Annex

Telehealth

Legal

Metrics

HVA

Pediatric Coordinating Centers/Exercise

Reunification

IT

Trauma

Behavioral Health

Education

EMS

Facility Recognition

Save the Date

Pediatric Care Coordination Center: A Demonstration and Table Top Exercise **June 7, 2022, 10:00 am to 2:15 pm EST**



The Michigan Bureau of EMS, Trauma and Preparedness in partnership with the Region V for Kids Pediatric Center of Excellence invites you to a pediatric medical operations coordination cell (PMOCC) exercise. The PMOCC is a new model for emergency management of pediatric disaster and surge incidents and is based upon the [ASPR TRACIE Medical Operations Coordination Cells Toolkit](#).

The Pediatric Care Coordination Center (PCCC) is Michigan's conceptual version of a PMOCC. Participants will conduct and validate internal standard operating procedures of a PMOCC. Observers are asked to comment on the activation process and evaluate cell operations.

Suggested participants include:

State Department of Health, Preparedness and Public Health Officials
Healthcare Coalition Preparedness Coordinators
Hospital Emergency Managers and Surge Planners
Emergency Preparedness Personnel
State Hospital Association Representatives

The exercise will feature

- 1) Pediatric Medical Education Presentations
- 2) A Functional Demonstration of a PMOCC
- 3) A Table Top Exercise

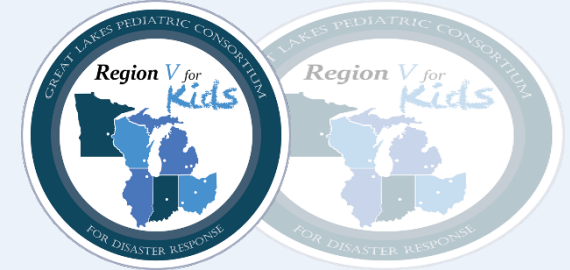
Visit the PCCC webpage [\(PCCC Homepage\)](#) for exercise details

Register for the exercise at [PCCC Exercise Registration](#) [\(Link\)](#)

Deadline for registration is 3 June 2022

Contact the Exercise Planning Team at PMOCCexercise@umich.edu

Exercise Websites (x2)



EIIC
EMSC Innovation and Improvement Center

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Focus Areas: EMSC Program Support, QI Collaboratives, Education, Impact, Audiences

Home / Focus Areas / Disaster Preparedness / ASPR Pediatric Disaster Care Centers of Excellence / Region V for Kids (formerly EGLPCOR) / Exercises

2022 Pediatric Care Coordination Center: A Demonstration and Table Top Exercise

Pediatric Care Coordination Center: A Demonstration Exercise

June 7, 2022 10:00 AM to 2:15 PM EST

This program will be held via Zoom.

The Michigan Bureau of EMS, Trauma and Preparedness in partnership with Region V for Kids is conducting a pediatric medical operations coordination cell (PMOCC) exercise. PMOCC is a new model for emergency management of pediatric disasters and surge incidents and is based on the new ASPR TRACIE Medical Operations Coordination Cells Toolkit. The June demonstration is designed to introduce and demonstrate a PMOCC for pediatric preparedness and response planners of Region V for Kids states including Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. However, others are encouraged to attend, observe, and comment on the activation process and evaluate cell operations. Understanding how PMOCCs could fulfill the role of coordinated response management in times of pediatric disasters and surge incidents, ultimately reducing the overwhelming impact they can have on local and regional resources.

Who is invited to participate:

- State emergency planners
- Pediatric officials
- EMSC coordinators, and
- Hospital Preparedness Program (HPP) leaders
- Region V for Kids Pediatric Center of Excellence children's hospital preparedness, disaster surge and response representatives
- Stakeholders with interest in regional or multi-state pediatric disaster and surge care coordination

Exercise Materials

Region V for Kids PMOCC Exercise Save the Date

PMOCC Exercise Plan (ExPlan)

Registration for the PMOCC Exercise

Deadline for Registration is June 3, 2022

Exercise Registration Link

For questions or more information - Contact the Exercise Planning Team at PMOCCExercise@umich.edu

Exercises

- 2022 Pediatric Care Coordination Center: A Demonstration and Table Top Exercise
- 2021 Advancing Pediatric Telehealth Capability Virtual Exercise Tracking & Family Reunification Virtual Tabletop Exercise
- 2020 Darkest Winter: Pediatric Disaster and Surge Response Virtual Exercise
- 2022 Refining Pediatric Telehealth Capability: A Demonstration to Leverage the Use of Technology During Disaster Response

Questions?

Exercise Planning Team

AdvancingCapability@umich.edu

Pediatric Care Coordination Center

STATE OF MICHIGAN

Pediatric Care Coordination Center: A Demonstration and Table Top Exercise

June 7, 2022, 10:00 am to 2:15 pm EST

The Michigan Bureau of EMS, Trauma and Preparedness, in partnership with the Region V for Kids Pediatric Center of Excellence, invites you to a pediatric medical operations coordination cell (PMOCC) exercise.

The exercise will feature

- 1) Pediatric Medical Education Presentations
- 2) A Functional Demonstration of a PMOCC
- 3) A Table Top Exercise

Register for the exercise at [PCCC Exercise Registration](#) (Link)

Deadline for registration is 3 June 2022

Contact the Exercise Planning Team at PMOCCExercise@umich.edu

BETP
Bureau of EMS, Trauma & Preparedness

Exercise Materials

Save the Date: Pediatric Care Coordination Center: A Demonstration and Table Top Exercise June 7, 2022, 10:00 am to 2:15 pm EST

Agenda

State of Michigan Pediatric Care Coordination Center: Pediatric Care Coordination Center: a Demonstration and Tabletop Exercise

Please direct participant's questions to PMOCCExercise@umich.edu

CONTACT INDIANA EMSC PROGRAM MANAGER, MARGO KNEFELKAMP,
MARGO.KNEFELKAMP@INDIANAPOLISEMS.ORG

INDIANAEMSC.ORG



Indiana – Emergency Medical Services for Children

Legislative Updates

Blaire Viehweg

Deputy Director, Legislative & External Affairs

SEA 247 – Report on 911 and Regionalized Trauma Systems

- During the 2021 Interim Study Committee on Public Health, Behavioral Health, and Human Services trauma care hearing, many questions arose surrounding trauma and response
- The IGA is looking to improve regionalized trauma response across Indiana through collaboration between all parties
- SEA 247 requires the Department of Homeland Security, Department of Health, Integrated Public Safety Commission and Statewide 911 board to collaborate and make recommendations before October 31, 2022, to the Indiana General Assembly
- Recommendations must address:
 - Improving emergency medical services response through increased interoperability of the 911 system
 - Effectiveness of regionalized trauma systems and the systems' impact on patient care

IDOH Updates

Lindsay Weaver, M.D., FACEP
Chief Medical Officer

9 New Expectations in the ACS Trauma Standards

ACS Expectations

1. Meet new staffing and staff education requirements
2. Create a more structured PIPS plan and demonstrate its effectiveness
3. Create a data quality plan
4. Develop several new protocols and guidelines
5. Secure expertise in several new specialty areas
6. Meet new response time and resource availability standards
7. Academic trauma centers: Meet new (relaxed) education and research requirements
8. Level III centers: If neurotrauma provided, demonstrate appropriate resources
9. Assess readiness to treat pediatric patients



Indiana
Department
of
Health

EMS Transport and Transfer

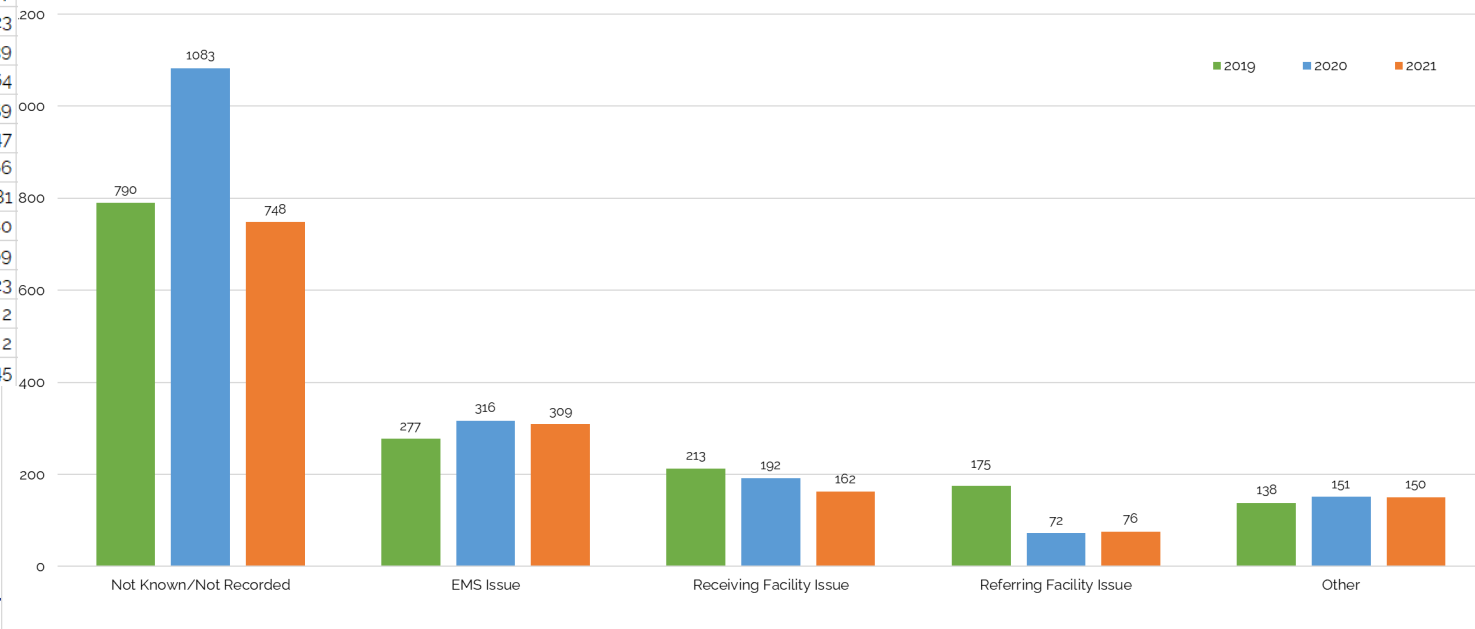
NTC Interviews

- 4 hospitals chosen in coordination with IRHA and IHA to further explore what issues they are having locally with transfer and transport
- ¾ completed
- Review data
- What are they experiencing?
- EMS staffing, training issues?
- 911 vs transport
- Air ambulance use

- After “unknown”, “**EMS Issue**” is the number one reason hospitals listed as the cause for the delay.
- Of those where a reason is given, “EMS Issue” made up 30% (902) of the reasons for delay from 2019 through 2021.

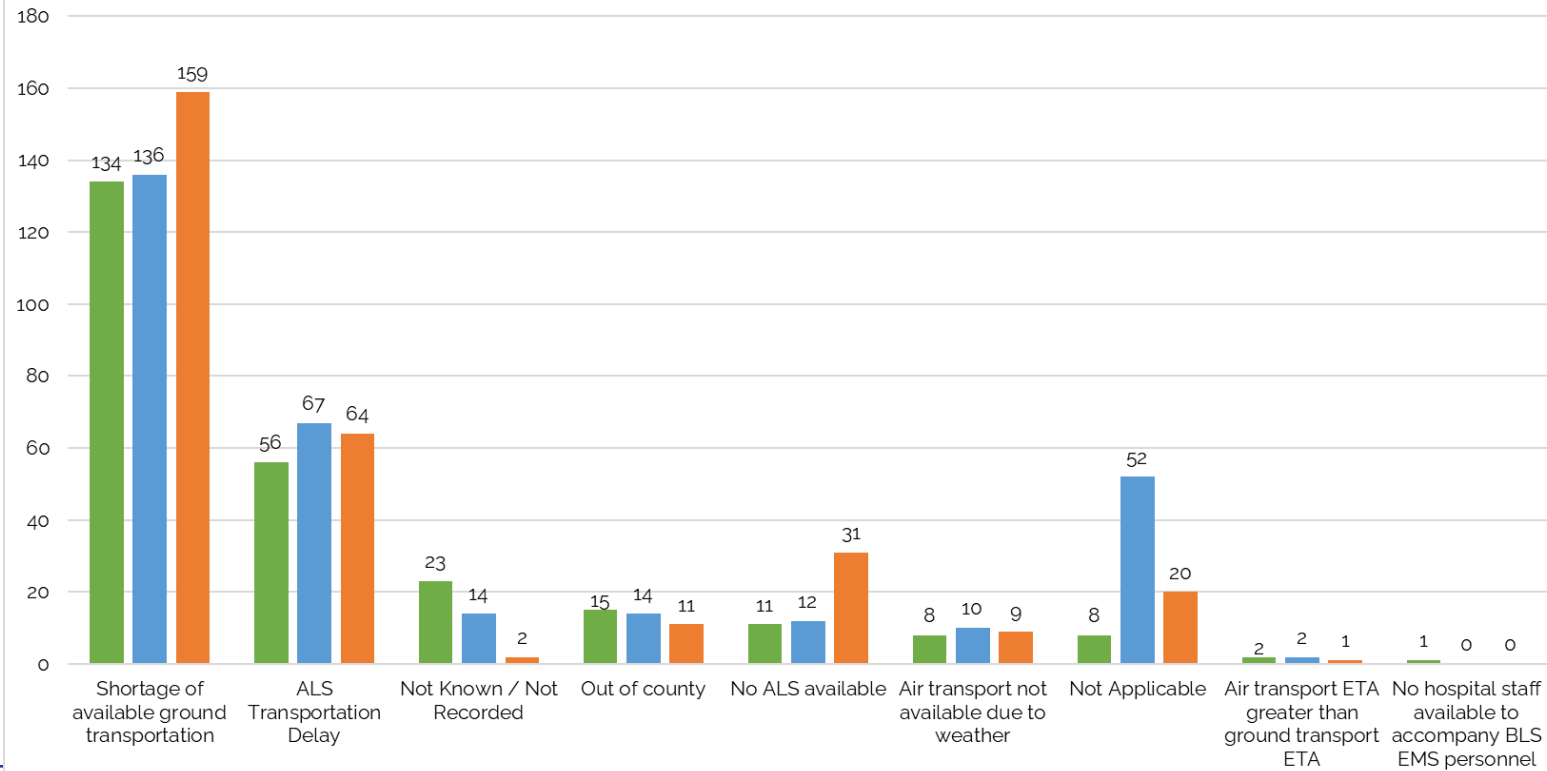
Transfer_Delay_Reason__TR17_44_(Transfer Delay Reason (TR17#44))	YearN			Total
	2019	2020	2021	
Not Known/Not Recorded	790	1083	748	2621
EMS Issue	277	316	309	902
Receiving Facility Issue	213	192	162	567
Referring Facility Issue	175	72	76	323
Other	138	151	150	439
Referring Physician Decision Making	94	93	77	264
Delay Issue	65	55	39	159
Communication Issue	35	12	0	47
Family, Legal Guardian, or Patient Issue	32	24	10	66
Not Applicable	25	31	25	81
Referring Hospital Issue-Radiology	25	22	33	80
Transportation Issue	25	24	20	69
Weather or Nature Factors Issue	9	6	8	23
Equipment Issue	0	1	1	2
Error Issue	0	0	2	2
Total	1903	2082	1660	5645

Top five reasons for transfer delay for level III and NTC



- Of the EMS Issue Transfer delays 50% (429/862) were due to the shortage of available ground transportation. 502 people, whose care was delayed due to lack of available transport.

Reasons selected for EMS issue

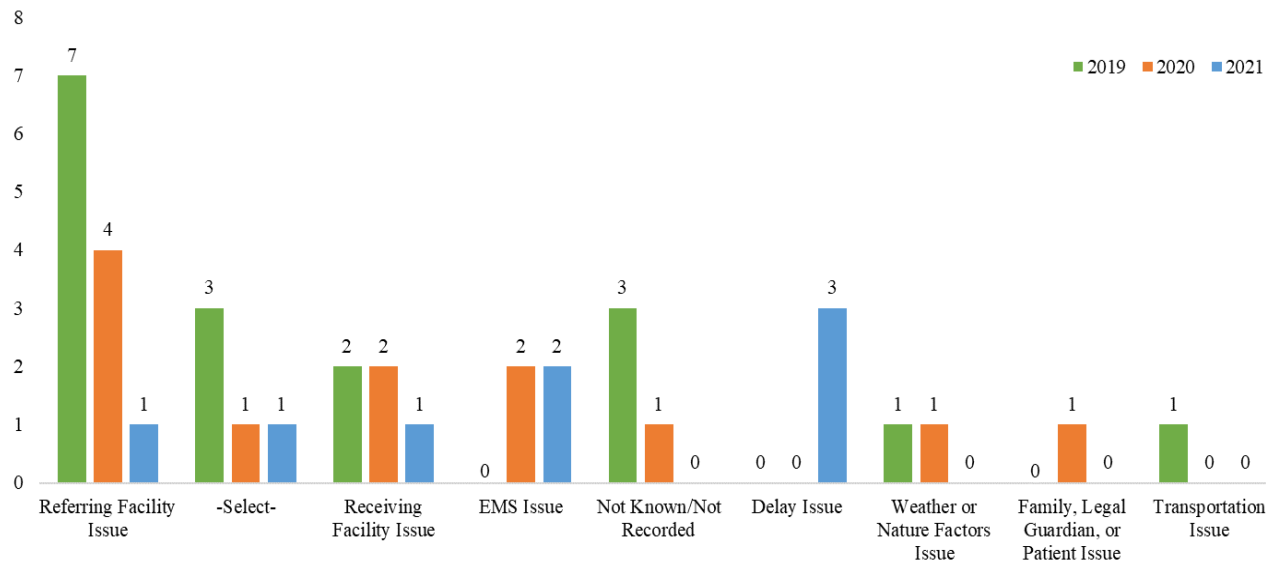


**Indiana
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of
Health**

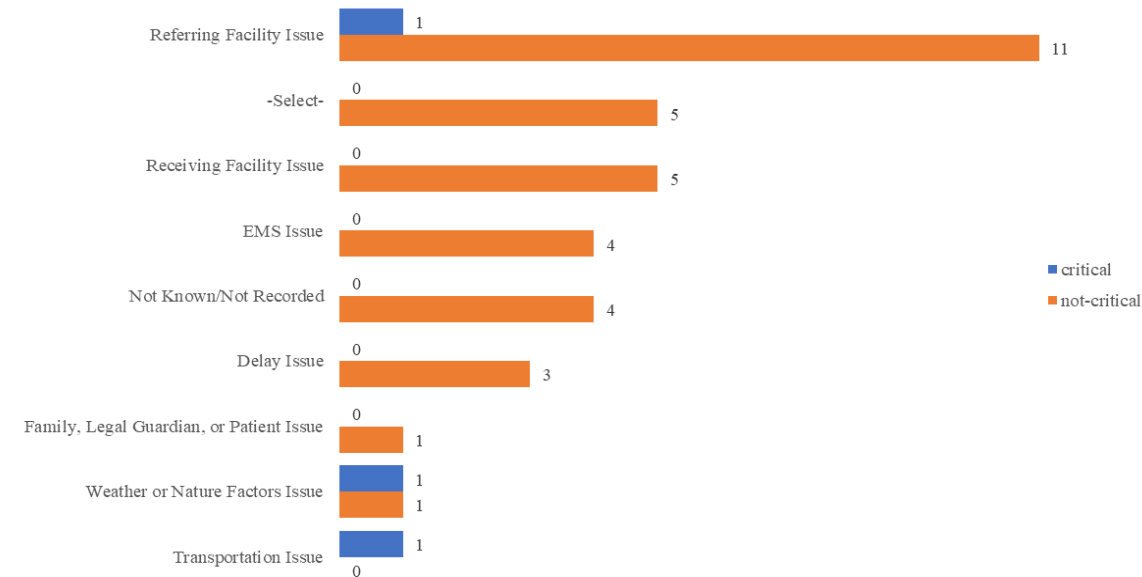
Transfer Delay – A Medical Center

- There are 37 cases recorded as having a transfer delay

Transfer Delay Reasons



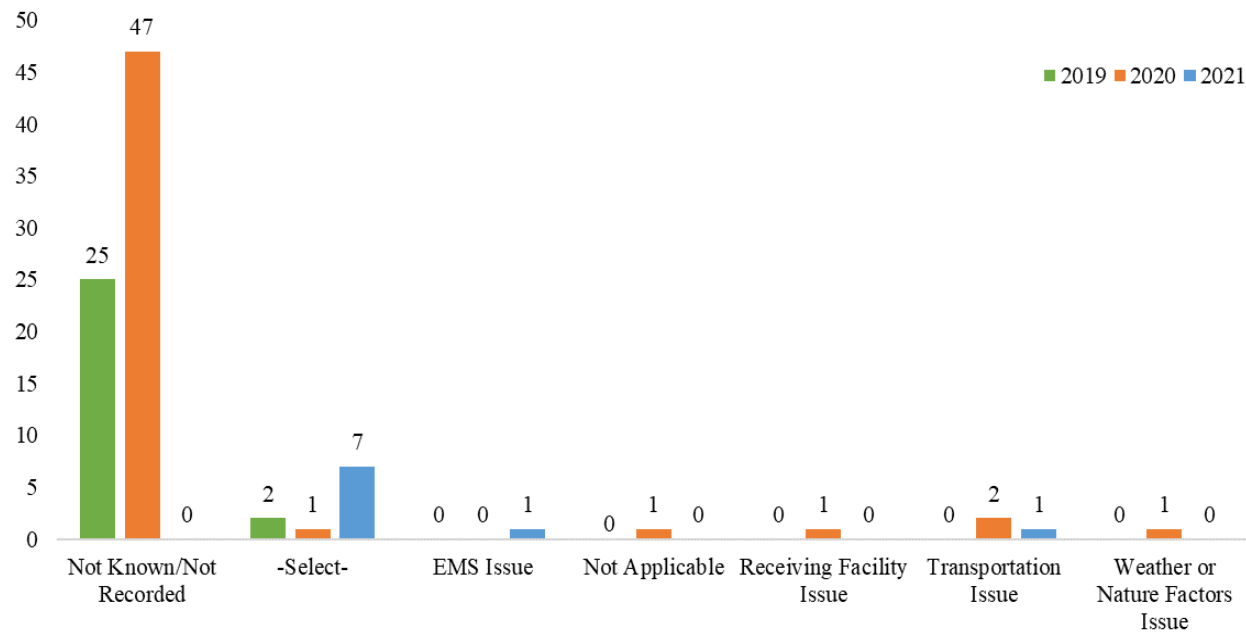
Transfer Delay Reasons - Critical vs Non-critical



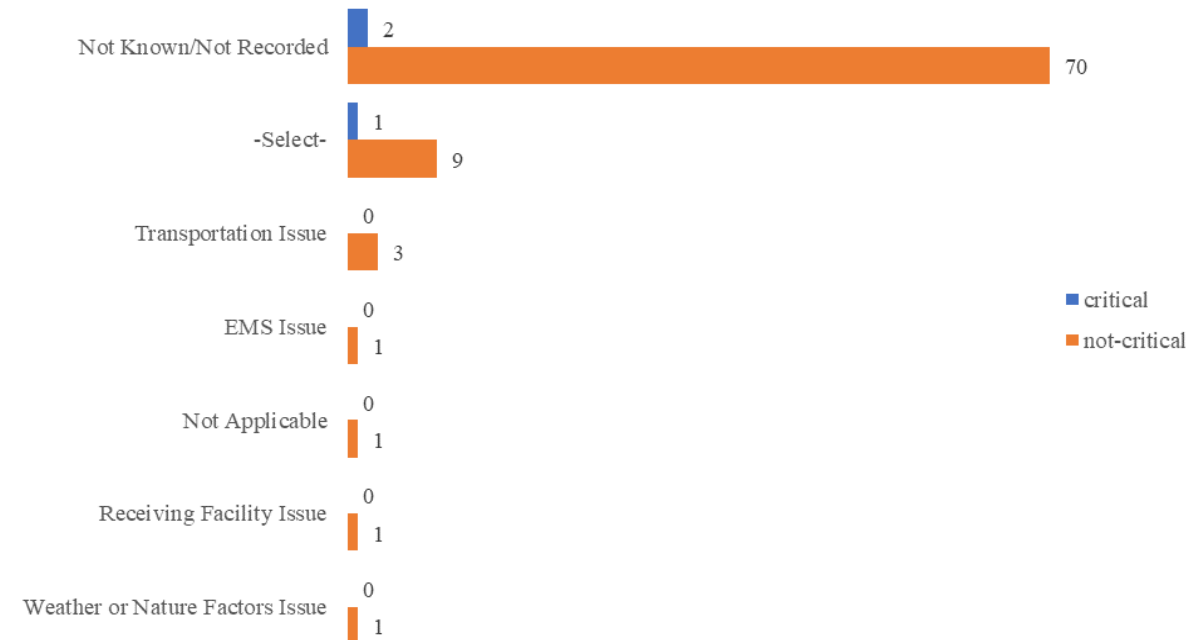
Transfer Delay – B Medical Center

- There are 89 cases recorded as having a transfer delay

Transfer Delay Reasons



Transfer Delay Reasons - Critical vs Non-critical



Findings

- Decreased number of available ambulances
- Must chose 911 availability over transport (gone for 5-6 hours out of county)
- Air ambulances for critical transport but risk of weather issues
- EMS providers move on to different jobs (nurse etc)- become a pipeline position
- Decreased availability of training opportunities
- Data Entry cumbersome and doesn't allow to get to the true root cause of delay

Findings

- Varying levels of coordination in area
 - Hospital A- great coordination with surrounding areas
 - Hospital B- no coordination with surrounding areas, everybody for themselves. Border town and ambulances right over border will not help
 - Hospital C- have mutual aid agreements with surrounding counties but everyone has to watch out for themselves
- Coordination does not occur at the emergency preparedness district level. Occurs with bordering counties and referral areas



Indiana
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Opportunities and Next
Steps?



Indiana
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of
Health

Governor's Public Health Commission Update

Reduce Childhood Injury

Draft Recommendation B

Address childhood injury and violence prevention

Potential action items:

- A. Establish an inter-professional coalition of experts focused on keeping youth from unintentional firearm deaths and suicide.
- B. Fund and leverage DOH to develop policies to address safety issues and increase equitable access to safety equipment shown to significantly decrease child injuries (such as bike helmets, cabinet locks, and stair gates.)

Enhance EMS readiness

Draft Recommendation 4.

Ensure local level EMS readiness through expansion and sustainability of EMS workforce

Possible action items:

- A. Conduct needs assessment of specific EMS gaps in local jurisdictions
- B. Ensure funding and prioritized recruitment to address workforce shortages in EMS
- C. Establish long-term promotional and retention plans for EMS personnel
- D. Explore ongoing training and expansion of community paramedicine programs

Improve the scalability of emergency response efforts beyond the local level

Draft Recommendation 5.

Improve regional coordination efforts to ensure a seamless emergency response

Possible action items:

- A. Evaluate stakeholder engagement process to redefine the IDOH emergency preparedness districts
- B. Evaluate stakeholder engagement process to redefine roles, responsibilities, and authorities of regional partners

Discussion

- GPHC recommendations– Who, what, when, where, why? What are we missing?
- Quality Improvement – What does this look like? How is the data collected? Opportunity for state or regional efforts?
- Regional Trauma Councils – Review available information
- Regional Trauma Coordination- Why is this necessary? How do we approach reorganization? What will be the expectations of coordination?

Other Business

Next ISTCC Meeting:
July 15, 2022 – Hybrid
10:00am to 11:00am (Eastern Time)