Change of Administration

- **Governor**
  - Mike Pence
- **State Health Commissioner**
  - Dr. William C. VanNess
- **Chief of Staff**
  - Jim Huston
- **Assistant Commissioner, Health & Human Services Commission**
  - Art Logsdon
State Department of Health’s Division of Trauma and Injury Prevention Staff

- Art Logsdon
  - Assistant Commissioner, Health and Human Services Commission
- Brian Carnes
  - Director, Trauma and Injury Prevention Division
- Katie Gatz
  - Manager, Trauma Registry
- Derek Zollinger
  - Data Analyst, Trauma Registry
- TBD
  - Injury Epidemiologist
  - EMS Data Manager
New Position: EMS Registry Candidate

- Recognizes the need for data and performance improvement
- Background as: Paramedic, EMT, nurse or other capable individual with some clinical background
- Values basic database management principles
- Understanding of NEMSIS national dataset
- Very organized with attention to detail
- Ability to help EMS providers and leadership recognize the need for quality data collection
Mission

Division of Trauma and Injury Prevention Mission:

To develop, implement and provide oversight of a statewide comprehensive trauma care system that prevents injuries, saves lives, and improves the care and outcomes of trauma victims.
Trauma Education Tour

Why are we here today?

- Continue listening to Hoosiers who deal with trauma everyday—that’s you
- Statutory obligation to develop, implement and oversee a statewide trauma system
- Encourage EMS providers to share their data
  - Take advantage of our FREE software
Trauma Education Tour - Goals

• Continue to:
  ○ Learn more about data and your needs re: data collection and analysis
  ○ Learn how state and local providers can work together to better respond to trauma
  ○ Learn how a trauma system could better help trauma response and patient care on a day-to-day basis
Education sessions will be held in all 10 Public Health Preparedness Districts in April and May.
Why Now?

- Need to evaluate the **entire** trauma system
- Funding to purchase the EMS registry
- Trauma Registry Rule
- Trauma Center Designation
Injury – or trauma, as we often refer to it – is the No. 1 killer of Hoosiers under the age of 45.

More than 32,000 Hoosiers are hospitalized every year from injuries, and more than 3,000 died from injuries in 2010 (the most recent year for which data is available).

About 11 people per day died from injuries during the years 2007-2010.
Trauma Facts

- For every trauma death in the United States ...
  - Approximately 10 people are hospitalized and transferred to specialized medical care.
  - 178 people are treated and released from hospital emergency departments.

- Problems posed by injury are most acute in our rural areas:
  - 60% of all trauma deaths occur in areas of the United States where only 25% of the population lives.
Indiana’s special injury challenge is that we rank first in the nation for interstate highway miles per land area.

And even though the death rate has decreased in the last 10 years, motor vehicle fatalities remain the No. 1 killer of Hoosiers ages 5-24.
Trauma Lessons Learned

- When trauma patients are transported, by ground or air, to trauma centers:
  - The preventable death rate DROPS by 15-30%
  - There are significant reductions of chronic disabilities and overall community care costs.
Indiana’s Journey

Trauma System Evolution:

- **2004** - Trauma System Advisory Task Force formed
- **2006** - IC 16-19-3-28 (Public Law 155) named the State Health Department the lead agency for statewide trauma system
- **2008** - American College of Surgeons conducted an evaluation of Indiana’s trauma system
Indiana’s Journey

- **2009** - American College of Surgeons provided a set of recommendations for further development of Indiana’s trauma system
- **2010** - Gov. Mitch Daniels created by executive order the Indiana State Trauma Care Committee
- **2011** - ISDH created the Trauma and Injury Prevention Division
- **2012** – EMS Commission adopted the Triage and Transport Rule
- **2013** – Preliminary ISDH adoption of the Trauma Registry Rule
Where is Indiana?

- Indiana does not have an integrated statewide trauma system—one of only 6 states without one.
- Indiana has **components** of a system:
  - Emergency medical services (EMS) providers
  - Trauma centers (nine)
  - A trauma registry
  - Rehabilitation facilities
Trauma Care System Components

- **Data collection**
  - EMS
  - Hospital
  - Rehabilitation

- **Consistent, expert initial injury evaluation**
  - Determines who should be immediately referred to a trauma center.

- **Consistent transportation protocols**
  - National expert guidelines determine when and how a patient is transported to a trauma center vs. a hospital emergency department.
Trauma Care System Components

- National verification of trauma centers
  - Assures each trauma center is staffed and equipped appropriately.
- Performance improvement systems
  - Dynamic data registries to assess system improvement and outcomes.
- Education and policy development for injury prevention
Trauma Registry Rule

- Rule that requires these providers to report data to the trauma registry:
  - EMS providers
  - All hospitals with EDs
  - Rehabilitation hospitals
Indiana Trauma Registry Reports

- Reporting hospitals as of March 2013:
  - 9 trauma centers
  - 31 non-trauma centers
  - 79,000 records

Statewide
July 1, 2012 to Sept. 30, 2012
4,951 Incidents

<table>
<thead>
<tr>
<th>Patient Age Groupings</th>
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<tbody>
<tr>
<td>Pediatric &lt;12Y</td>
</tr>
<tr>
<td>Adult</td>
</tr>
<tr>
<td>Unknown/Not Reported</td>
</tr>
</tbody>
</table>

July 1, 2012 to September 30, 2012
321 Incidents at Dummy Indiana Hospital
W Score: 1.234    Rank (by W score): 10/25

<table>
<thead>
<tr>
<th>ED Disposition</th>
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<tbody>
<tr>
<td>( &lt;1 )</td>
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<tr>
<td>( 1-2 )</td>
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<td>( 3-5 )</td>
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<tr>
<td>( 6-11 )</td>
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<td>( 12+ )</td>
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<table>
<thead>
<tr>
<th>Hospital Disposition</th>
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<tbody>
<tr>
<td>( &lt;1 )</td>
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<td>( 12+ )</td>
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<table>
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<tr>
<th>Hospital Length of Stay (Days)</th>
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<tbody>
<tr>
<td>( &lt;0.3 )</td>
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<tr>
<td>( 0.3-6.7 )</td>
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<tr>
<td>( 6.8-16.4 )</td>
</tr>
<tr>
<td>( 16.5-22.0 )</td>
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<tr>
<td>( 22.1+ )</td>
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</tbody>
</table>

* <0.5% CDE: Pedestrian (Other), Natural/Environmental, Overdose
Give Us Back Our Data!

- Performance improvement

- Reports will encompass all aspects of pre-hospital
  - Comparison data: EMS provider and all others (aggregate)

- Link pre-hospital and hospital data re: patient outcomes

- Inventory management—meds, supplies, equipment

- Budgeting
  - Mileage
  - Overtime
  - Vehicle maintenance
ISDH EMS Registry

- Indiana EMS database (NEMSIS v2.2.1 compliant)
- Pilot Project – THANK YOU!
  - AMR
  - Beech Grove FD
  - City of Lawrence FD
  - Decatur Township FD
  - DeKalb EMS
  - Delaware County / Muncie EMS
  - Fishers FD
  - Grant County EMS
  - Greenfield FD
  - Greenwood FD
  - Harrison County Hospital
  - Indianapolis EMS
  - King’s Daughters’ Hospital
  - Parkview Noble Hospital
  - Seals Ambulance Service
  - South Bend FD
  - Sugar Creek Township FD
  - Sullivan County Ambulance Service
  - Sullivan FD
  - Three Rivers Ambulance Service
  - Trans-Care, Inc.
  - Town of Plainfield / Plainfield FD
  - Washington Township / Avon FD
Recruit EMS providers already collecting data electronically
  - We want your data
  - We will take as much as you are willing to share
  - We can take Fire House (Legacy) or NEMSIS data

Training Tour—June and July
  - Recruit providers looking to move from paper to electronic
  - Explain the benefits of data collection
  - Provide free software to providers who want to upgrade to a NEMSIS compliant system
Importance of Pre-hospital Data

- **Focus on data-driven decision making**
  - National push for quality improvement in healthcare
  - Tied to funding CDC, HRSA, NHTSA, etc.
  - Lower future healthcare costs
  - Preventable injuries

- **Identify unmet needs & priorities**
  - Pockets of healthcare disparities
  - Trends due to age, race, gender, etc.

- **Determine which treatments are effective**
  - Local medical directors know their population
  - Effective treatments or adjustments to training
  - Stocking medication or equipment based on known runs
ISDH EMS Registry Reports

Pre-Hospital Data Collected by Indiana State Department of Health
15 agencies committed to providing ePCR data to ISDH pilot program
7774 Incidences from Dec. 9, 2011 to Mar. 1, 2013

Number of Runs by Hour

Response Request

Response Time in Minutes
(From Dispatch to Scene)

Scene Time in Minutes
(From Scene Arrival to Scene Departure)
Training Tour Details

- Training will be conducted by ISDH & ImageTrend
- Training on:
  - Setting up your service in the registry
  - Directly inputting EMS runs
  - Running reports
  - Electronically submitting data
- Goal 1: Train providers on the ISDH EMS database
- Goal 2: Show what data can do for you
- Goal 3: Provide a free system to providers to upgrade to NEMSIS
## Training Tour Details (continued)

<table>
<thead>
<tr>
<th>June 17 – 21</th>
<th>July 22 - 26</th>
</tr>
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<tbody>
<tr>
<td>6/17 – Terre Haute</td>
<td>7/22 – Muncie</td>
</tr>
<tr>
<td>6/18 – Evansville</td>
<td>7/23 – Fort Wayne</td>
</tr>
<tr>
<td>6/19 – Scottsburg</td>
<td>7/24 – South Bend</td>
</tr>
<tr>
<td>6/20 – Columbus</td>
<td>7/25 – Crown Point</td>
</tr>
<tr>
<td>6/21 - Indianapolis</td>
<td>7/26 – Lafayette</td>
</tr>
</tbody>
</table>
Training Tour Details

- All sessions are 3 hours (local time):
  - 9am-12pm
  - 1:30pm-4:30pm

- Sign Up
  - At the ISDH booth
  - Online at: https://indianatrauma.org
    - Under the training tour link
<table>
<thead>
<tr>
<th>Timeline Event</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Discussion of an EMS Registry</td>
<td>Summer 2012</td>
</tr>
<tr>
<td>Meeting with EMS Commission Chairman &amp; Vice-Chairman</td>
<td>December 2012</td>
</tr>
<tr>
<td>Installed EMS database</td>
<td>January 2013</td>
</tr>
<tr>
<td>Pilot project begins</td>
<td>February 2013</td>
</tr>
<tr>
<td>Recruit electronic providers</td>
<td>March 2013</td>
</tr>
</tbody>
</table>
Indiana Trauma Centers (Level I & II)

9 trauma centers
1 South Bend
2 Fort Wayne
4 Indianapolis
2 Evansville

(By comparison, Ohio has 45 trauma centers)
Trauma Center Access in Indiana

Indiana Trauma Center Access: Areas Within a 45-Minute Drive

<table>
<thead>
<tr>
<th>45-Minute Accessible Trauma Center</th>
<th>45-Minute Accessible Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traveling at Posted Speed</td>
<td>Traveling at Posted Speed</td>
</tr>
<tr>
<td>High Traffic Simulation:</td>
<td>High Traffic Simulation:</td>
</tr>
<tr>
<td>Traveling &lt; 10 mph posted speed</td>
<td>Traveling &lt; 10 mph posted speed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>45-Minute Coverage (at posted speed)</th>
<th>State Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>% of state</td>
</tr>
<tr>
<td>---</td>
<td>-------------</td>
</tr>
<tr>
<td>Land Area</td>
<td>8,838 sq mi</td>
</tr>
<tr>
<td>Population</td>
<td>3,785,460 people</td>
</tr>
<tr>
<td>Interstates</td>
<td>1,129 miles</td>
</tr>
</tbody>
</table>

Travel times are calculated with 2010 Indiana street network reference data published by Esri. Portions of travel times for out-of-state roadways are estimated using Google Maps. Travel times do not take into account current traffic volume or restrictions. Populations are calculated from the 2010 U.S. Census Block summary geography. The method used to determine the population within 45 minutes should be considered a conservative estimate. Interstate mileage is an estimate and does not include the new I-69.

Indiana State Department of Health
Triage & Transport Rule

- Requires most seriously injured patients to be taken to trauma centers.

- Also—permits hospitals to be considered “trauma centers” if the hospital is either:
  - Verified by the American College of Surgeons (ACS)
  - Designated a “trauma center” by a neighboring state’s trauma center designation system (if comparable to ACS’ system)
  - Or, “in the process of ACS verification”

- Hospitals that are truly “in the process” may apply to be considered a trauma center for purposes of this rule.
In the process trauma centers

- EMS Commission knows EMS—not so much trauma center standards
  - Partnering with the Indiana State Trauma Care Committee (ISTCC)
  - ISTCC/State Health Commissioner will review the hospital’s application
  - Recommend to the Commission whether the hospital should be considered a “trauma center” for this Rule’s purposes.

- Providing additional Trauma Centers to which EMS providers may appropriately transport Step 1 and Step 2 patients.

- Available on the IDHS website.
Furthermore . . .

- Other aspects of “in the process” trauma centers:
  - Hospitals must provide sufficient documentation for the ISDH and IDHS to conclude that the hospital complies with a series of requirements.
  - The provisional trauma center status shall not exceed 2 years from the date the provisional status begins.
  - If the hospital is not able to become verified as a trauma center within that 2-year period:
    - Provisional status is revoked
    - Hospital can’t re-apply for at least 3 years.
  - Effect—more trauma centers to which EMS may take seriously injured patients.
In the Future

- Designation Rule
  - Verified by American College of Surgeons
  - Designated by State Department of Health
  - Designated—asking Indiana trauma centers to “do a little extra”
  - 2013 and 2014
Trauma & Injury Prevention timeline

- April & May: Educational Tour
- May: Trauma Care Committee
- June: EMS Commission
- June & July: Training Tour
- August: Trauma Care Committee
- October: Optimal Course offered by ISDH
EMS Database –
Training Tour Registration

Remember to Sign Up!
At the ISDH booth
or
Online at: indianatrauma.org
Under the training tour link
Conclusion

Thank you!

Questions?