The Indiana Trauma Registry (ITR) monthly report is a dashboard style report for the Indiana Criminal Justice Institute (ICJI) and any other party concerned about trauma in Indiana. This report highlights the three data quality measures for the ICJI grant: completeness, timeliness, and uniformity. The report focuses on data within the ITR, specifically motor vehicle collisions (MVC).

### Completeness

The Hospital Discharge database, also maintained by the ISDH, contains all records of patients cared for in Indiana hospitals. We compared patient records from the ITR with the Hospital Discharge database to know how complete ITR’s data is.

![Graph showing completeness over time](image)

### Timeliness

![Graph showing timeliness over time](image)

### Uniformity

Actions to improve uniformity of data in the Indiana Trauma Registry:

- Conducted baseline inter-rater reliability study in 2012
- Will schedule follow-up inter-rater reliability study in 2013
  - Sent survey to Registrars asking for the best format to conduct follow-up inter-rater reliability study
  - One case per month once a quarter appears to be the best format
  - Working with American Trauma Society to provide cases for study
- 2012 saw an increase in the number of certified specialists in trauma registry (CSTR) across the state from 2 to 5.
- With formal training in data abstraction, uniformity should increase
Indiana Trauma Registry

Cause of Injury (COI)

COI - Motor Vehicle Collision (MVC)

COI - MVC
Indiana Trauma Registry

3348 Incidents

9 Trauma Centers
28 (Non-Trauma) Hospitals
37 Total Hospitals Reporting

Race

- White: 84%
- Black: 10%
- Asian: 1%
- Native American: 0%
- Other Race: 0%
- Unknown: 3%

Age

- Pediatric (<18): 11%
- Adult: 12%
- Elderly (>65): 77%

Gender

- Male: 64%
- Female: 35%

Drug & Alcohol Use

- Drug - Illegal Use: 12%
- Drug - Rx Use: 9%
- Alcohol - Trace Amount: 6%
- Alcohol - Beyond Legal Limit: 12%
- Total Alcohol or Drug involved MVC: 33%

Injury Severity Score

- ISS 1-8: 4%
- ISS 9-14: 15%
- ISS 15-24: 29%
- ISS 25-44: 29%
- ISS 45-74: 15%
- ISS 75: 4%

Protective Devices

- Airbag: 23%
- Seatbelt Use: 30%
- Child Restraint: 2%
- Helmet: 7%
- Protective Clothing/Gear: 1%
- Any Safety Equipment: 51%

Injury Severity Score (ISS) is a measure of how bad the injury is. Scores over 15 are considered major trauma. A score of 75 is considered not survivable.
Indiana Trauma Registry

Motor Vehicle Collision

2012 - YTD

- Motorcycle
  - White: 89%
  - Black: 1%
  - Asian: 1%
  - Native American: 1%
  - Other Race: 1%
  - Unknown: 1%

- Automobile
  - White: 84%
  - Black: 2%
  - Asian: 9%
  - Native American: 1%
  - Other Race: 1%
  - Unknown: 1%

- Bicyclist
  - White: 14%
  - Black: 1%
  - Asian: 3%
  - Native American: 0%
  - Other Race: 0%
  - Unknown: 1%

- Pedestrian
  - White: 21%
  - Black: 4%
  - Asian: 1%
  - Native American: 1%
  - Other Race: 0%
  - Unknown: 71%

2013 - YTD*

* Does not constitute a representative view of 2013 trauma.
Indiana Trauma Registry

Motor Vehicle Collision

2012 - YTD

- Motorcycle: 90% (9% Pediatric, 4% Adult, 6% Elderly)
- Automobile: 77% (11% Pediatric, 12% Adult, 40% Elderly)
- Pedestrian: 64% (4% Pediatric, 33% Adult, 6% Elderly)

2013 - YTD*

- Motorcycle: 60% (0% Pediatric, 60% Adult, 0% Elderly)
- Automobile: 40% (40% Pediatric, 60% Adult, 0% Elderly)
- Pedestrian: 70% (8% Pediatric, 22% Adult, 7% Elderly)

* Does not constitute a representative view of 2013 trauma.

2012 - 2013 (YTD)

Motorcycle

- 90% (9% Pediatric, 4% Adult, 6% Elderly)

Automobile

- 75% (14% Pediatric, 12% Adult, 75% Elderly)

Bicyclist

- 64% (4% Pediatric, 33% Adult, 6% Elderly)

Pedestrian

- 70% (8% Pediatric, 22% Adult, 7% Elderly)
Indiana Trauma Registry

Drug & Alcohol Use

Motor Vehicle Collision

2012 - YTD

- Alcohol Involved: 67%
- Drugs Involved: 12%
- Both Drugs and Alcohol Involved: 15%
- No Drugs or Alcohol Involved: 6%

2013 - YTD*

- Alcohol Involved: 87%
- Drugs Involved: 7%
- Both Drugs and Alcohol Involved: 7%
- No Drugs or Alcohol Involved: 0%

* Does not constitute a representative view of 2013 trauma.

2012 - 2013 (YTD)

Motorcycle

- Alcohol Involved: 64%
- Drugs Involved: 15%
- Both Drugs and Alcohol Involved: 7%
- No Drugs or Alcohol Involved: 7%

Automobile

- Alcohol Involved: 68%
- Drugs Involved: 13%
- Both Drugs and Alcohol Involved: 14%
- No Drugs or Alcohol Involved: 4%

Bicyclist

- Alcohol Involved: 82%
- Drugs Involved: 6%
- Both Drugs and Alcohol Involved: 2%
- No Drugs or Alcohol Involved: 10%

Pedestrian

- Alcohol Involved: 60%
- Drugs Involved: 14%
- Both Drugs and Alcohol Involved: 6%
- No Drugs or Alcohol Involved: 11%
Indiana Trauma Registry

Injury Severity Score

Motor Vehicle Collision

2012 - YTD

Motorcycle

2012 - 2013 (YTD)

Motorcycle

Automobile

2013 - YTD*

Bicyclist

Pedestrian

* Does not constitute a representative view of 2013 trauma.
Indiana Trauma Registry

Motor Vehicle Collision

**2012 - YTD**

- Airbag: 48%
- Seatbelt Use: 21%
- Child Restraint: 6%
- Helmet: 6%
- Protective Clothing or Gear: 0%
- No Safety Equipment: 1%

**2013 - YTD***

- Airbag: 53%
- Seatbelt Use: 33%
- Child Restraint: 13%
- Helmet: 0%
- Protective Clothing or Gear: 0%
- No Safety Equipment: 0%

* Does not constitute a representative view of 2013 trauma.

**2012 - 2013 (YTD)**

**Motorcycle**

- Airbag: 73%
- Seatbelt Use: 26%
- Child Restraint: 0%
- Helmet: 1%
- Protective Clothing or Gear: 0%
- No Safety Equipment: 0%

**Automobile**

- Airbag: 34%
- Seatbelt Use: 32%
- Child Restraint: 32%
- Helmet: 0%
- Protective Clothing or Gear: 0%
- No Safety Equipment: 0%

**Bicyclist**

- Airbag: 86%
- Seatbelt Use: 14%
- Child Restraint: 0%
- Helmet: 0%
- Protective Clothing or Gear: 0%
- No Safety Equipment: 0%

**Pedestrian**

- Airbag: 99%
- Seatbelt Use: 0%
- Child Restraint: 0%
- Helmet: 0%
- Protective Clothing or Gear: 0%
- No Safety Equipment: 0%
3348 incidents from Mar. 1, 2012 to Feb. 28, 2013
By Public Health Preparedness Districts

Indiana Average

District 1  n=85

District 2  n=185

District 3  n=430

District 4  n=165

District 5  n=729

District 6  n=198

Percentage of MVC incidents where the patients tested positive for drugs or alcohol
Percentage of MVC incidents where the patients tested positive for drugs or alcohol