Kentucky Trauma Registry (KTR)



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State Web Site: http://www.mc.uky.edu/kiprc/programs/trauma-

registry.html

Sources of Information for the Database

In 2012, Kentucky administrative regulations (902 KAR 28:040) established a single statewide Kentucky Trauma Registry (KTR) with the Kentucky Injury Prevention and Research Center (KIPRC) designated as the statewide repository for trauma data. The Kentucky Trauma Registry is currently funded by the National Highway Traffic Safety Administration through the Kentucky Transportation Cabinet to support annual and adhoc reports using registry data and reporting system activation for new trauma facilities. Funding also makes ongoing evaluation possible. Currently, 29 Kentucky hospitals are designated and verified or in a process of designation as trauma centers in Kentucky.

Designated/Verified trauma facilities (20 of 29):

- <u>Level 1 Adult Trauma Centers</u>: University of Kentucky, Chandler Medical Center (Lexington), University of Louisville Hospital (Louisville);
- <u>Level 1 Pediatric Trauma Centers</u>: University of Kentucky, Kentucky Children's Hospital (Lexington), Norton Children's Hospital (Louisville);
- Level 2 Trauma Center: Pikeville Medical Center (Pikeville);
- <u>Level 3 Trauma Centers</u>: Ephraim McDowell Regional Medical Center (Danville), Frankfort Regional Medical Center; Owensboro Medical Center, Taylor Regional Hospital (Campbellsville);
- Level 4 Trauma Centers: Ephraim McDowell Ft. Logan Hospital (Stanford), Harlan ARH, Harrison Memorial (Cynthiana), James B. Haggin Memorial Hospital (Harrodsburg), Livingston County Hospital (Salem), Marcum & Wallace Hospital (Irvine), Methodist Hospital Union County (Morganfield), Morgan County ARH (West Liberty), Rockcastle Regional Hospital (Mt. Vernon), St. Claire Regional Medical Center (Morehead), Tug Valley ARH (So. Williamson).

Facilities in process of designation/verification (9 of 29):

Hazard ARH Hospital, McDowell ARH Hospital, Middlesboro ARH Hospital, Russell County Hospital, St. Claire Medical Center, St. Joseph Berea, St. Joseph Hospital Mt. Sterling, Trigg County Hospital, Whitesburg ARH.

All of these hospitals submit data to the KTR. KIPRC has an important role in synthesizing and analyzing statewide trauma registry data and producing statewide trauma registry reports.

Description of the Data Collected

Trauma registry data includes hospital name, patient gender, date of birth, race, county of injury and residence, zip code, date and time of injury, arrival, and discharge, referring hospital, E-code, Injury Severity Score (ISS), Glasgow Coma Score (GCS), trauma score, Revised Probability of Survival (RPS), Blood Alcohol Level (ETOH), ICD-9 codes, length of stay, number of ICU days, and disposition.

Strengths of the Data

The Kentucky Trauma Registry provides a rich database that includes Kentuckians who incur serious traumatic injury and are cared for in the state's verified facilities. It supports the identification of areas in which the state deviates from national norms regarding traumatic injury incidence, characteristics, and care.

Data Limitations

There are three important limitations that users of KTR data should keep in mind:

- It only includes data from facilities that are either American College of Surgeons (ACOS)-verified, state-verified Level IV centers, or those preparing for initial verification. It is clear that serious trauma is also cared for at many other general acute care facilities across the state that do not elect to pursue ACOS-verified status. The trauma registry, therefore, does not provide as complete an account of traumatic injury in Kentucky as it would if reporting were spread across a larger group of facilities.
- 2. Registry data cannot include patient identifiers under Kentucky law, so repeat visits by the same patient are not identifiable. Thus, the registry data analysis describes cases rather than unique patients.
- 3. Some Kentucky residents who incur traumatic injury near the state's borders are hospitalized in adjacent states, notably Ohio and Tennessee. Our trauma registry does not have access to information about these patients.

Specific Uses of Information

Trauma registry data are used for trauma system planning, informing legislative initiatives, and identification of areas in which additional activity is necessary.

System Evaluation

The data collection is routinely monitored utilizing quality control standards developed by the CDC. Evaluation of quality is determined through quarterly and annual reports of these performance standards.

<u>Data Set Availability</u>

Kentucky Trauma Registry data sets are not generally available. Requests for data summary and reports should be addressed to Julia Costich at KIPRC.

Data Release Policy

Spreadsheet versions of KTR data are available upon request from the KIPRC. Summary KTR data can be made available to appropriate research agencies through submission of a formal request to KIPRC. Each request should identify the requesting organization, purpose of research, proposed methodology to be employed and publication plan. On a case by case basis, KIPRC reviews the request and obtains additional information as needed. KIPRC and the research team agree upon a collaboration plan which will include schedule, methods, analysis, reporting, and publication of the study. Upon review and agreement of the study plan, KIPRC may approve the request for data. Reports using KTR data cannot identify any individual patient or hospital.

Data Publications

Detailed reports, profiling the traumatic injuries treated in Kentucky trauma facilities, are available at:

http://www.mc.uky.edu/kiprc/projects/trauma/index.html

Suggested Data Citation

- Costich JF, Rock PJ. *Kentucky Trauma Registry Report 2015 Annual Report*. Kentucky Injury Prevention and Research Center, Lexington, KY, October 2016.
- Rock PJ, Costich JF. 2014 Kentucky Inpatient Traumatic Injury Data Report, Kentucky Injury Prevention and Research Center, November 2015.

Contributing Author

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