


# Kentucky's Trauma Care System

**Brian G. Harbrecht, MD**  
 Chair, KY Trauma Advisory Committee  
 Chief of Trauma Service, Department of Surgery  
 University of Louisville


**Julia F. Costich, J.D., Ph.D**  
 Vice Chair, KY Trauma Advisory Committee  
 Kentucky Injury Prevention and Research Center  
 College of Public Health  
 Univ. of Kentucky


**Richard Bartlett, BS, MEd**  
 Emergency Preparedness & Trauma Coordinator  
 Kentucky Hospital Association




*The primary goal of a trauma system is to decrease morbidity and mortality from injury by getting injured patients to the closest appropriate hospital with the right resources and care they need.*

- Movement to develop a KY state trauma system originally led by
  - Dr. Paul Kearney, trauma surgeon at the University of Kentucky
  - Dr. Mary Fallat, a pediatric trauma surgeon from Kosair Children's Hospital
    - Dr. Fallat was also the Medical Director for the Kentucky EMS for Children program
- There were a few facilities who had self-verified through the American College of Surgeons
  - Four levels of verification: Level-I (typically a teaching hospital); Level-II to Level-IV.
  - Some maintained it; and some dropped it – usually over the staffing mix needed to sustain verification
  - Taylor Regional Hospital is one of the longest continuously verified Level-III in US
- There was agreement from all involved to create a “voluntary” state system.
- In 2007 KHA, working with KY Public Health Commissioner William Hacker, agreed that they would sponsor enabling legislation in the 2008 General Assembly; but KHA would have to take the lead.
  - I had a background running the Louisville EMS system for over 20 years and became the de facto state Trauma Coordinator.







Kentucky Hospital Association  
Representing Kentucky Health Care Organizations




Kentucky State Trauma System  
Right Patient • Right Care • Right Time

- The law was passed without any state funding, but with provisions for a non-lapsing trauma account should money become available in the future.
  - There were some initial grants from the Foundation for a Healthy Kentucky to help get the program organized, and to underwrite some educational programs.
  - There was a gift from a physician ED staffing group, MESA, that seeded the establishment of the Kentucky Trauma Registry.
  - The law created the Kentucky Trauma Advisory Committee, which is appointed by the Secretary of the Cabinet for Health and Family Services; but there are no funds to support meetings so the group meets regularly using electronic video teleconferencing.
- WHEN THE LAW WENT IN TO EFFECT in 2008, we had two ACS COT Verified Level-I Trauma Centers (UK Chandler Medical Center and UofL Hospital); and one ACS COT Level-III verified Trauma Center (Taylor Regional Hospital).
  - The system developed criteria for in-state verification of Level-IV trauma centers
  - The first Level-IV was Marcum and Wallace Hospital in September, 2010
  - Using a gift from The Good Samaritan Foundation, five workshops were conducted across the state to promote the trauma system and encourage facilities to consider becoming trauma centers. Now have thirteen at Level-IV.





Kentucky Hospital Association  
Representing Kentucky Health Care Organizations



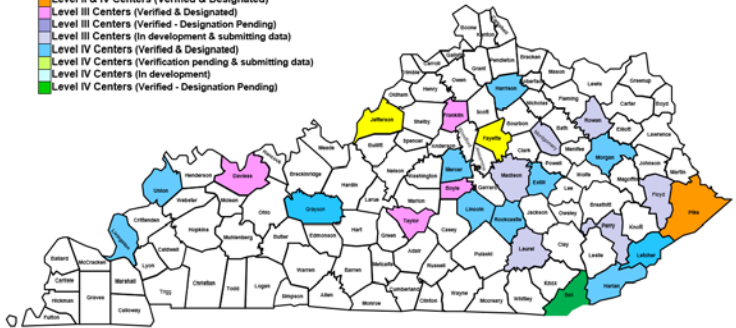
Kentucky State Trauma System  
Right Patient • Right Care • Right Time

- Despite the lack of funds - due to support from the Kentucky Hospital Association, the tireless voluntary efforts of the Trauma Advisory Committee, a dedicated trauma system family, the generosity of friends, foundations and grants – we now have a Kentucky Trauma Care System with 22 verified trauma centers.
  - There are several regional facilities in central KY working toward future Level-III designations
  - There are at least 3-4 other hospitals across the state working on potential Level-IV designations.
  - Pikeville Medical Center is developing additional pediatric capability that may become another pediatric trauma center in the future.

### Hospitals in the Kentucky Trauma System

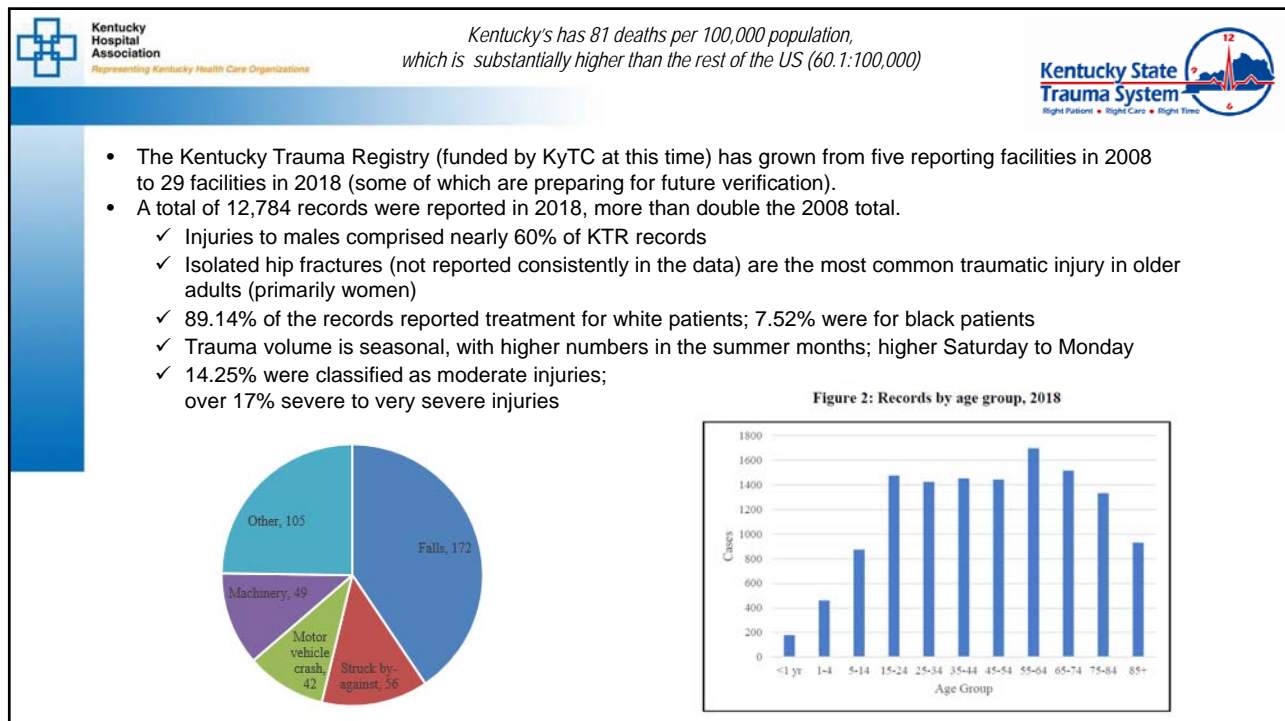
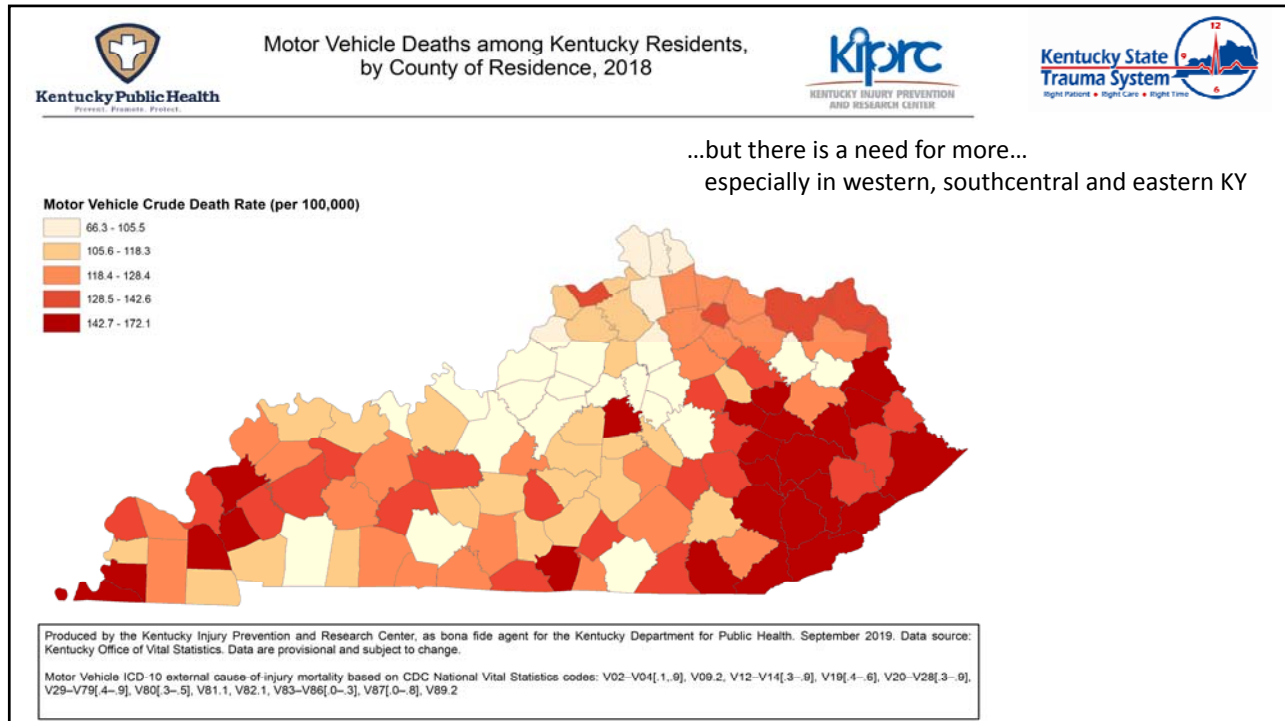
(May 28, 2019)


- Level I Centers (Verified & Designated)
- Level II Centers (Verified & Designated)
- Level III & IV Centers (Verified & Designated)
- Level III Centers (Verified & Designated)
- Level III Centers (Verified - Designation Pending)
- Level III Centers (In development & submitting data)
- Level IV Centers (Verified & Designated)
- Level IV Centers (Verification pending & submitting data)
- Level IV Centers (In development)
- Level IV Centers (Verified - Designation Pending)




**Verified Trauma Centers**

Level I - Pediatric – Norton Children’s Hospital, Louisville	Level III - Owensboro Health Regional Hospital	Level IV - Marcum & Wallace Hospital, Irvine
Level I - UK Chandler Hospital Lexington	Level III - Taylor Regional Medical Center, Campbellsville	Level IV - Methodist Hospital Union, Morganfield
Level I - Pediatric – Kentucky Children’s Hospital, Lexington	Level IV - Ephraim McDowell Fort Logan Hospital, Stanford	Level IV - Middleboro ARH (Final designation pending)
Level I - University of Louisville Hospital, Louisville	Level IV - Ephraim McDowell Haggan, Harrodsburg	Level IV - Morgan Co. ARH, West Liberty
Level II - Pikeville Medical Center	Level IV - Harlan ARH Hospital, Harlan	Level IV - Rockcastle Reg. Hospital, Mt. Vernon
Level III - Ephraim McDowell Regional Medical Center, Danville	Level IV - Harrison Memorial, Cynthiana	Level IV - Twin Lakes Reg. Med. Center
Level III - Frankfort Regional Medical Center	Level IV - Livingston Hospital, Salem	Level IV - Tug Valley ARH Regional Med. Center
		Level IV - Whitesburg ARH Hospital





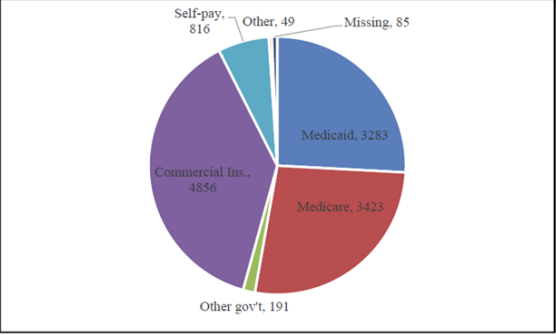
Kentucky Hospital Association  
Representing Kentucky Health Care Organizations




Kentucky State Trauma System  
Right Patient • Right Care • Right Time

- 75.4% of the patients admitted were sent to the operating room
  - 13.7% were transferred to another hospital
  - Deaths were recorded for only 1.2% of ED trauma patients
- *Trauma Systems have clearly shown that they can save lives and decrease morbidity from injury.*
- The long range goals of the Kentucky Trauma System are to decrease the death rate from injury, decrease morbidity and disability, and to decrease the overall healthcare burden injury has on the people of the Commonwealth.
- Who is paying the bills?
  - 38.24% covered by commercial insurance
  - 26.95% from Medicare
  - 25.8% from Medicaid
  - “Self-Pay” & “uninsured” in 2018 – 6.4%
    - This was in the 40% range before Medicaid coverage became available to new categories and income levels

**Primary source of payment, 2018**




Source	Count
Commercial Ins.	4856
Medicare	3423
Medicaid	3283
Self-pay	816
Other	49
Missing	85
Other gov't	191




Kentucky Hospital Association  
Representing Kentucky Health Care Organizations


## What are the system's needs?



Kentucky State Trauma System  
Right Patient • Right Care • Right Time

- The short-term goal is to secure a stable, on-going source of funding to support the operation and growth of the Kentucky Trauma Care System
  - Consider sources like Georgia's Super-Speeder program
  - Enhanced Distracted Driving legislation
  - Options used in other states: Add-on for motor vehicle registrations
- **What would the money be used for?**
  - Trauma Program Manager (1 FTE)
  - Trauma Educator/Coordinator (1 FTE)
  - Trauma Registry Support (software costs and support for data management/analysis) – UK KIPRC
  - Basic program operating funds (KyTAC meeting expenses, office space, phones, computer services, etc.)
  - Educational program support examples
    - Rural Trauma Team Development courses
    - Trauma physician and nursing courses
    - Pediatric Life Support courses
    - Burn management courses
    - Injury prevention programs
    - Stop the Bleed programs and materials
      - To include in-school kits and training
    - Trauma Registrar courses
  - Support for the annual Trauma and Emergency Medicine Symposium

 Kentucky  
Hospital  
Association  
Representing Kentucky Health Care Organizations

 Kentucky State  
Trauma System  
Right Patient • Right Care • Right Time

**Brian G. Harbrecht, MD**  
Chair, KY Trauma Advisory Committee  
[briang.harbrecht@louisville.edu](mailto:briang.harbrecht@louisville.edu)

Julia F. Costich, J.D., Ph.D  
Vice Chair, KY Trauma Advisory Committee  
[julia.costich@uky.edu](mailto:julia.costich@uky.edu)

**Richard Bartlett, BS, MEd**  
Emergency Preparedness & Trauma Coordinator  
Kentucky Hospital Association  
[trauma@kyha.com](mailto:trauma@kyha.com)