



+ 2017 ANNUAL REPORT +

REPORT

Content

Message from the Executive Director	1
Mission Statement	2
Fast Facts	3
Board Members	4 - 6
Notable Board Actions	7 - 8
Committees of the Board	9 - 13
KBEMS Staff	14
Agency Accomplishments	15 - 18
Mission Lifeline	19
2017 Solar Eclipse	20
EMS EMAC Task Force 15	21
Ambulance Block Grant	22
NIOSH Pilot Study	23
EMS Vehicles	24
Kentucky Agencies	25
Training & Educational Institutions	26
Educators	27
Kentucky Providers	28
2017 Incidents	29 - 33
Incident Destinations	34
Ground Transports	35
Air Medical Transports	36
Naloxone Administrations	37
Highway Safety	38
Cardiac Arrest Incidents	39
Community Paramedicine Pilot	40
Attrition Survey	41
Current Projects of the Board	42 - 43

Message from the Executive Director



Twenty four hours a day, seven days a week Emergency Medical Service Responders in our Commonwealth are delivering exceptional pre-hospital emergency medical care. What we do in Emergency Medical Services is important. EMS is a necessary service that is vital for our community and the nation. EMTs and Paramedics are the healthcare safety net for all of us. We're there for everyone when they need us, on their terms, doing what's best for them. We come to them, meet them as they are, and give them the best that we have to offer. EMS workers are usually the first to arrive on the scene of a car accident, a crime scene, a disaster, or a fire. They never know what they will face when they arrive, and often their own lives are in danger when they do. They kneel down to render life-saving aid along busy highways, outside burning buildings, and on crime-infested streets. While they are usually the first on the scene, they are often the last to seek recognition. EMS workers do their jobs because they want to save lives, pure and simple.

The Kentucky Board of Emergency Medical Services strives to maintain and improve a unified comprehensive and effective EMS system within the borders of Kentucky ensuring that the EMS system is recognized as a leader and a role model that other EMS systems attempt to equal. We do this by promoting excellence through regulations, promoting healthy communities and encouraging community support, providing value-added information for emergency preparedness, public health, EMS research and strategic governance, and developing and managing information, standards and guidelines for EMS providers.

With our new KSTARS (Kentucky State Ambulance Reporting System) in place, we will have the resources to provide very detailed reports on activity involving Emergency Medical Services in Kentucky. This will also allow us to be more involved in research to improve health and safety across the Commonwealth.

As Executive Director, I can humbly say that our staff proudly accepts the challenge to move EMS forward in the Commonwealth of Kentucky. I am confident that through hard work and dedication, we will continue to strengthen what is in place and reach new heights in the years ahead.

Michael Poynter, Executive Director
Kentucky Board of Emergency Medical Services



Mission Statement

KBEMS mission is to ensure availability of high quality emergency medical services for the Commonwealth of Kentucky through collaboration with EMS providers and agencies by:



KBEMS accomplishes this mission through:

- Credentialing of all EMS Responders in the State.
- Annual Inspections of all EMS Agencies and initial and annual inspections of ambulances licensed in Kentucky.
- Administration of ambulance grant funding.
- Processing of all initial EMS courses conducted by Kentucky EMS Training & Educational Institutions (TEIs).
- Certification and licensure audits.
- Approves EMS TEIs as National Registry Educational Programs.
- Investigation of complaints on any EMS Responder or Agency.
- Due process for EMS responders and agencies under pending legal action.
- Administration of discipline of EMS Responders and Agencies.
- Approval of EMS medical directors and protocols.
- Participation in disaster preparedness and mass casualty planning.
- Oversight and management of the EMS for Children (EMSC) Program.



Vision

Through transparent practices, KBEMS will ensure and promote high quality emergency medical care across the Commonwealth of Kentucky.

Values

Integrity
 High Quality Care
 Quality of Education
 Competent Staff
 Being Proactive, Not Reactive
 Accountability of Board, Agencies, and Individuals
 Highly Motivated and Progressive Board

Fast Facts

Emergency Medical Services is a vital component of healthcare, on any given day, in almost every community in our nation, EMS responds to calls for help, 24/7. According to the 2011 National EMS Assessment, EMS responds to 37 million calls per year in the United States with annual expenditures of approximately \$5,000,000,000!

EMS Provider Levels

Emergency Medical Responder

EMRs have the knowledge and skills necessary to provide immediate lifesaving interventions while awaiting additional EMS resources to arrive. EMRs also provide assistance to higher-level personnel at the scene of emergencies.

Initial Training Hours = 50

Recertification Hours = 17

Emergency Medical Technician

EMTs have the basic knowledge and skills necessary to stabilize and safely transport patients ranging from non-emergency and routine medical transports to life threatening emergencies.

Initial Training Hours = 150

Recertification Hours = 24

Advanced Emergency Medical Technician

AEMTs perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is an important link for administering ALS care from the scene to the emergency health care system.

Initial Training Hours = 400

Recertification Hours = 48

Paramedic

A Paramedic is an allied health professional whose primary focus is to provide advanced emergency medical care for critical and emergent patients. This individual possesses the complex knowledge and skills necessary to provide patient care and transportation.

Initial Training Hours = 2,000

Recertification Hours = 60

Kentucky Facts

4,436,974

Total Population
2016 US Census Bureau

\$24,063

Per Capita Income
2011 - 2015 US Census Bureau

40,408

Square Miles
2016 US Census Bureau

84%

High School Graduation Rate
2011 - 2015 US Census Bureau

Board Members



David E. Bentley, M.D.

Representing: Physician licensed in Kentucky serving as medical director of an Advanced Life Support Ambulance Service.



Andrew C. Bernard, M.D.

Representing: Trauma Surgeon licensed in Kentucky.



Joe Bradshaw

Representing: Licensed Air Ambulance Service Administrator or Paramedic for a licensed Air Ambulance Service headquartered in Kentucky.



Carlos Coyle

Representing: Paramedic who works for a government agency but is not serving in an educational, management, or supervisory capacity.



Nancye C. Davis

Representing: Emergency Medical Services Educator from a Kentucky College that provides an EMS Educational Program.



Phil Dietz

Representing: Fire Service Based, licensed Class I Ground Ambulance Service Administrator who is a certified Emergency Medical Technician or licensed Paramedic.

Board Members



Jim Duke, Board Chairman

Representing: Advanced Life Support, government-operated Ambulance Service Administrator who is a certified Emergency Medical Technician or a Licensed Paramedic.



Timothy Dukes

Representing: Hospital Administrators.



Todd Early

Representing: Private licensed Class I Ground Ambulance Service Administrator who is a certified Emergency Medical Technician or a licensed Paramedic who is a resident of Kentucky.



Joseph Iocono, M.D.

Representing: Physician licensed in Kentucky who routinely is involved in the emergency care of ill and injured children.



Jamey Locke

Representing: Citizen having no involvement in the delivery of medical or emergency services.



Walter Lubbers, M.D.

Representing: Physician Licensed in Kentucky having a primary practice in the delivery of emergency medical care.

Board Members



James Nickell

Representing: County Judge/Executive from a county that operates, whether directly or through contract services, a licensed Class I Ground Ambulance Service.



Joseph Prewitt, Vice-Chairman

Representing: Volunteer-staffed, licensed Class I Ground Ambulance Service Administrator who is a certified Emergency Medical Technician or licensed Paramedic.



Aaron Stamper

Representing: Basic Life Support, Licensed Class I government-operated Ground Ambulance Service administrator who is a certified Emergency Medical Technician or a Licensed Paramedic.



Lloyd Leslie Stapleton

Representing: Mayor of a city that operates, either directly or through contract services, a licensed Class I Ground Ambulance Service.



Michael Sutt

Representing: Emergency Medical Technician - Basic, who works for a government agency but is not serving in a educational, management, or supervisory capacity.



Jimmy Vancleve

Representing: First Responder who is not serving in an educational, management, or supervisory capacity.

Notable Board Actions

- Angela Evans and William “Bill” George brought on as legal council through contract with McBrayer, McGinnis, Leslie, and Kirkland.
- Ratified the credentialing of twenty (20) new EMS Medical Directors reviewed by the KBEMS Director of Field Operations.
- Ratified fifty-two (52) Initial or modifications of EMS Protocols by Ground and Air Ambulance agencies licensed in Kentucky and reviewed by the KBEMS State Medical Advisor.
- Approved “Mobile Integrated Healthcare/ Community Paramedicine” Pilot Program applications for:
 1. Montgomery County Fire/EMS- Mt. Sterling
 2. Lexington Fire Department/EMS- Lexington
 3. Murray-Calloway County EMS- Murray
- Approved “Mobile Integrated Healthcare/ Community Paramedicine” Pilot Program Extensions of one (1) calendar year for:
 1. The Medical Center EMS- Bowling Green
 2. Oldham County EMS- LaGrange
 3. Louisville-Metro EMS- Louisville
 4. Yellow Ambulance (Louisville)
- Updated the National Background Check vendor from “Verified Credentials” to “Castle Branch.”
- Moved to modify the data submission timelines currently in place from the 15th of the month following the month in which the incident occurred, to seventy-two (72) hours following the incident. This data submission timeline is in reference to submission of data to the Kentucky State Ambulance Reporting System (KSTARS).
- Moved to require the following NEMSIS Version 3 data elements as of April 13, 2017:
 - eOther.03- Personal Protective Equipment Used
 - eOther.04- EMS Professional (Crew Member) ID
 - eOther.05- Suspected Work Related Exposure, Injury, or Death
 - eOther.06- The Type of Work-Related Injury, Death or Suspected Exposure
- Accepted the following CPR training courses as submitted and reviewed for Kentucky EMS Professionals:
 - Pacific Medical Training
 - EMS Safety Services, Inc.
 - Ellis & Associates, Inc.
- Accepted the following programs as a “Board-Approved” EMS Instructor Course:
 - Eastern Kentucky University- EMC 440 EMS Instruction Course
(3 College Credit Hours)
- Approved 2017-2018 KBEMS Annual Budget as submitted.

Notable Board Actions

- Approved a statewide, five (5) year waiver for Activated Charcoal pending the elimination of Activated Charcoal through pending Administrative Regulations, effective June 15, 2017.
- Approved Cardiac & Stroke Care Subcommittee Prehospital Stroke Protocol to include the Emergent Large Vessel Occlusion (ELVO) assessment tool and destination guidance.
- Approved the formation of a KBEMS State EMS Protocol Work Group to continuously review and update the KBEMS State EMS Protocol. This group will meet at least semi-annually. The Work Group will be appointed by the KBEMS Chairperson and shall be comprised of working Kentucky licensed Paramedics. The Chair of the EMS Protocol Work Group shall be the KBEMS State Medical Advisor.
- Honored the 2017 American Heart Association- Mission Lifeline EMS Award Recipients:
 - Mercy Regional EMS, Paducah
 - Madison County EMS, Richmond
 - The Medical Center EMS, Bowling Green
 - Woodford County EMS, Versailles
 - Boyle County EMS, Danville
 - Lexington Fire & EMS, Lexington
 - Independence Fire District, Independence
 - Estill County EMS, Irvine
 - Air Methods Kentucky
 - Meade County EMS, Brandenburg
 - Owensboro Health-Muhlenberg EMS, Powderly
 - Bullitt County EMS, Shepherdsville
 - Shelby County EMS, Shelbyville
 - Jessamine County EMS, Nicholasville
 - Powell County Ambulance Service, Stanton
 - Louisville-Metro EMS, Louisville
 - Garrard County EMS, Lancaster
 - Erlanger Fire/EMS, Erlanger
 - Georgetown-Scott County EMS, Georgetown
- Mr. James C. Duke elected KBEMS Board Chair for 2018.
- Mr. Joseph Prewitt elected KBEMS Vice-Chair for 2018.
- Approved for promulgation 202 KAR 7:501- Ambulance Agency Licensure, 202 KAR 7:545- License Classifications, 202 KAR 7:550- Required Equipment and Vehicle Standards, 202 KAR 7:555- Ground Agencies, and 202 KAR 7:560- Ground Vehicle Staff to replace current ground ambulance regulations in place under 202 KAR 7:501 (eff. 2003)- To Legislative Research Commission- February, 2018.
- Approved for promulgation 202 KAR 7:565- Clinical Pilot Programs- To Legislative Research Commission- February, 2018.

Committees of the Board

The Kentucky Board of Emergency Medical Services has multiple committees and subcommittees that meet throughout the year to focus on specific topics and initiatives.

These committees and subcommittees are comprised of both members and non-members of the Board. The subcommittees are charged with the strategic planning, policy development, organization, and in an advisory role to their respective standing committee and the Board.

Members shall have a term that expires September 30 of each calendar year. Reappointments for subsequent terms may be made by the Board Chair anytime after September 1 and before September 30.

Meeting dates and meeting minutes can be located on KYEMS.com.



Committees of the Board

Executive Committee

Education Committee

EMSC Committee

Data Collection Committee

Medical Oversight Committee

Subcommittees of the Board

Cardiac and Stroke Care

Disaster Preparedness and Mass Casualty
Incidents

Mobile Integrated Healthcare and Community
Paramedicine



Committees of the Board

Executive Committee

The executive committee shall address legislative issues and proposals and review administrative regulations for submission to the board including:

(b) Recommending to the board promulgation of administrative regulations, amendment of administrative regulations, or repeal of administrative regulations relating to:

1. All levels of personnel licensed or certified by the board and ambulance services licensed or certified by the board;
2. Rules and operating procedures for the board and each of its standing committees and task forces;
3. EMS Grant Program; and
4. EMS for Children Program;

(b) Serving as a resource for board staff:

1. In reviewing applications regarding requests for funding under programs administered by or overseen by the board;
2. With the development of funding programs or applications, including state and federal grants pertaining to EMS and monitoring and reviewing the grants once received by the Board;
3. With creating and recommending to the board a biennial budget for the board prior to submission to appropriate state agencies;
4. With identifying, developing and recommending to the board sources of funding for its programs; and
5. In developing reimbursement programs and providing consult for emergency medical service providers.

(c) Making recommendations to the board regarding fees to be charged by the board.



Members

Joe Bradshaw, Chair

Joe Prewitt, Vice Chair

Phil Dietz

Mike Sutt

Carlos Coyle

Ex Officio

Michael Poynter,
Executive Director

Chuck O'Neal,
Deputy Executive Director



Committees of the Board

Education Committee

The Education Committee shall consist of seven (7) voting members representative of EMS Educators in the state of Kentucky. At least one (1) voting member of the Education Committee shall also be a member of the Kentucky Board of Emergency Medical Services. The Committee shall meet at least six (6) times annually. The purpose and charge of the Education Committee shall be to:

- (a) Assist the board in developing a strategic plan for EMS education in the state of Kentucky;
- (b) Act as a resource for EMS educators and EMS-TEIs in the Commonwealth; and
- (c) Assume the lead role in formulating, drafting, and sending to the board for approval and subsequent promulgation of all administrative regulations that set the standards and requirements for EMS education in Kentucky.



Members

Jimmy Vancleve, Chair	Terri Bailey
Debbie Berry	Lee Brown
Nancye Davis	Phillip Ferguson
Jamie Goodpaster	

Ex Officio

Robert Andrew, Director of Education & Training

Medical Oversight Committee

The medical oversight committee shall address issues pertaining to quality assurance, medical control, scope of practice, medical standards of curricula or other related issues as may be assigned by the board.

Members

Eric Bentley, MD, Chair	Ben Wofford
Irvin Smith, MD, Vice Chair	Aaron Stamper
Todd Early	Walter Lubbers, MD
Michael Reynolds	

Ex Officio

Dr. Julia Martin, State Medical Advisor	Chuck O'Neal, Deputy Executive Director
--	--



Committees of the Board

EMSC Committee

The Emergency Medical Services for Children Program may include but not be limited to the establishment of the following:

- (a) Guidelines for necessary out-of-hospital medical service equipment;
- (b) Guidelines and protocols for out-of-hospital pediatric emergency medical services;
- (c) Assistance in the development and provision of professional education programs for emergency medical services personnel for the provision of emergency care of infants and children;
- (d) Coordination and cooperation between the Emergency Medical Services for Children Program and other public and private organizations interested or involved in emergency care for children;
- (e) Assistance with the purchase of equipment for the provision of medical services for children only; and
- (f) The scope of activities carried out by and the provision of staff for the Emergency Medical Services for Children Program shall be commensurate with the availability of funds.



Members

Mary Fallat, Chair, EMSC Principle Investigator	Sandra Herr, Vice-Chair	Morgan Scaggs, EMSC Program Director
Scottie Day	Susan Pollack	Margaret Gupton
Erika Janes	Melanie Tyner-Wilson	Scottie Day
Carol Wright		

Ex Officio

Bari Lee Mattingly	Mark McDonald	Marsh Frontz	David Foley
--------------------	---------------	--------------	-------------

Committees of the Board

Data Collection Committee

The Data Collection Committee shall consist of seven (7) members appointed by the board chair in the manner established in 202 KAR 7:020.

(a) Any office of the board staff member specifically employed through or designated by the Kentucky Community and Technical College System (KCTCS) for the purpose of EMS data collection and analysis shall serve as the staff liaison for the Data Collection Committee.

(b) The Data Collection Committee shall be responsible for the following:

1. The development of a statewide plan for data collection and compliance;
2. Identification of information initiatives for EMS in Kentucky;
3. Identification and research of funding sources tied to EMS data collection;
4. Assistance to licensed services with questions or other needs associated with this administrative regulation, KRS Chapter 311A, and other issues associated with the board’s statutory authority to require data collection and submission; and
5. Matters identified by board members, the chair, or the executive director that involve data collection, data submission, or information use.

(c) The Data Collection Committee shall schedule on an annual basis at least six (6) regular meetings.



Members

John Hultgren, Chair	Joe Prewitt	Sara Robeson
Mike Rogers	Mike Singleton	Linda Basham
Michael Schwendau		

Ex Officio

Drew Chandler, Data Administrator	Monica Robertson, Data Coordinator
-----------------------------------	------------------------------------

KBEMS Staff



Robert Andrew
Director of Education & Training



Drew Chandler
Data Administrator



Ray Chesney
Inspector/Liaison



Courtney Collins
Certification Specialist



Paula Coyle
Inspector/Liaison



Calynn Fields
Resource Management Specialist



Brooke French
Certification Specialist



Sam Lowe
Investigator



Dr. Julia Martin
State Medical Advisor



Tina McBride
Senior Administrative Assistant



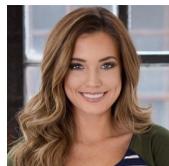
Chuck O'Neal
Deputy Executive Director



Paul Phillips
Director of Field Operations



Michael Poynter
Executive Director



Monica Robertson
Data Coordinator



Morgan Scaggs
EMSC Project Director



Janet Sweeney
Financial Analyst



Corissa Walters
Inspector/Liaison

76% of KBEMS employees are currently or were previously certified/licensed EMS providers.

Agency Accomplishments

Field Operations Accomplishments

- Continued use of the online agency policy review to expedite agency inspections.
- Director of Field Operations, Paul Phillips, participated in CAAS GVS Remount Forum in Charlotte, NC.
- Participated in the 2017 Solar Eclipse pre-planning, monitoring and KY State EOC Mobilization.
- Purchased two fleet vehicles.
- Published the 2016 Kentucky EMS Attrition Survey.
- Participated with KBEMS Task Force for creating Ground Ambulance Regulations.
- Created KEMSIS Applications to simplify the process when applying for staff, equipment & medical director waivers.
- Director of Field Operations, Paul Phillips, participated with National Association of State EMS Officials Safe Transport of Children, and Agency and Vehicle Licensure Committee.

KBEMS Field Staff inspected over 220 agencies, and over 1,200 agency vehicles.

The KBEMS Field Staff traveled the equivalent of 2 trips around the earth to perform agency and vehicle inspections in 2017!

Top 10 Agency Deficiencies

1. Activated Charcoal	6. KKK-1822 Specification
2. Radio Equipment	7. Operating Condition
3. Irrigation Fluids	8. AED (Non-ALS)
4. Gown/Coveralls	9. Expiration Dates
5. Humidifier	10. Heating/AC System

Education & Training Accomplishments

- 202 KAR 7:20, 7:301, 7:330, 7:401, and 7:601 revisions completed and submitted for approval.
- Facilitated meetings with the certification and licensure team for the revision of all EMS provider applications.
- Created certification and licensure process manual.
- Implemented remote site visits using FaceTime for the inspection of EMS-TEI's.
- Distributed quarterly educator newsletter, Education Matters, to subscriber base of over 800 EMS providers and educators.
- Completed the five (5) year National Registry EMS provider on-line transition course for over 1,500 Kentucky EMS providers.
- Initiated digital conversion of all certification and licensure files into the Kentucky Emergency Medical Services Information System (KEMSIS).



Agency Accomplishments

EMSC Accomplishments

- Provided and supported pediatric education for EMS providers throughout the state.
- Represented KBEMS and EMS on multiple state and national boards and committees focused on pediatric issues.
- Morgan Scaggs serves as Chair-Elect of the Pediatric Emergency Care Council of the National Association of State EMS Officials.
- Distributed pediatric transport devices, length-based resuscitation tapes, and Safe Infant packets to EMS agencies.
- Publication of the KIDSTUFF quarterly newsletter.
- Developed a recognition program for EMS Agencies and hospitals to acknowledge excellence in pediatric preparedness that will be implemented in 2018.



The New Kentucky EMSC Performance Measures

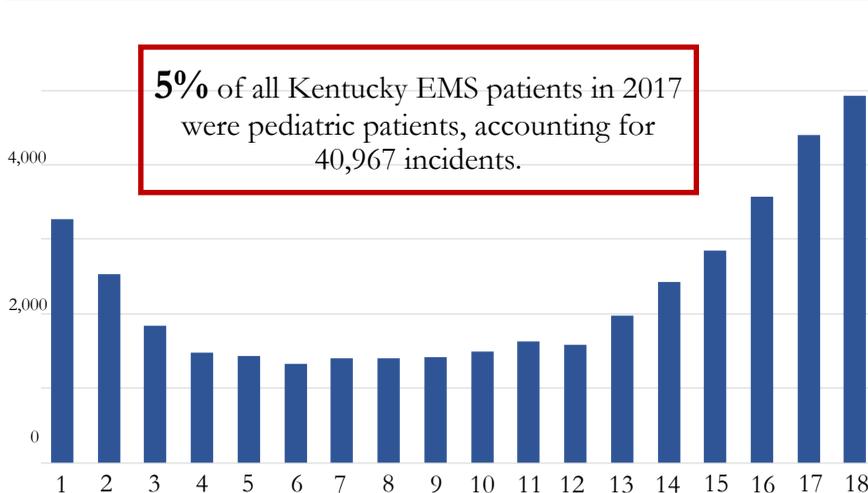
By 2026, 90 percent of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.

1. EMSC 02 - Pediatric Emergency Care Coordinator
 - (a) Numerator: 35
 - (b) Denominator: 165
 - (c) Percentage: 21.2%

By 2026, 90 percent of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.

2. EMSC 03 - Use of Pediatric-Specific Equipment
 - (a) Numerator: 36
 - (b) Denominator: 165
 - (c) Percentage: 21.8%

2017 Pediatric Incidents Reported to KSTARS (Birth - 18 Years of Age)



5% of all Kentucky EMS patients in 2017 were pediatric patients, accounting for 40,967 incidents.

Age	Patients	Incidents	Total
1	3,272	10	1,496
2	2,538	11	1,622
3	1,833	12	1,583
4	1,477	13	1,971
5	1,434	14	2,428
6	1,320	15	2,851
7	1,405	16	3,575
8	1,405	17	4,405
9	1,424	18	4,928

Top 3 Types of Service Requested for Pediatric Incidents:

911 Response (Scene) =
29,214 Incidents

Interfacility Transport =
6,919 Incidents

Medical Transport =
4,533 Incidents

Agency Accomplishments

Data Accomplishments

- Awarded a grant from the Kentucky Transportation Cabinet (KTC) for \$75,000 to continue work on the Kentucky State Ambulance Reporting System (KSTARS) data program.
- Awarded a grant from the Kentucky Department for Public Health (KDPH) for \$49,000.00 to sustain the Patient Tracking module.
- Awarded a grant from the National Institute for Occupational Safety and Health (NIOSH) for \$11,033.52 to participate in a pilot project on use of state NEMSIS data for EMS industry occupational safety surveillance.
- Analyzed time from call completion to incident received in KSTARS; found greater than 50% of services reported within 96 hours.
- Completed KSTARS integration with the Kentucky Health Information Exchange (KHIE).
- Collected NEMSIS Version 3 data from all but one licensed service.
- Implemented ReadyOp notification system for Eclipse and EMAC deployments.
- Improved radio communication capabilities for support of ESF-8 activities.
- Migrated website and support portal to new platforms with mobile device optimization.
- Negotiated data sharing agreements with seven external organizations.
- Participated with Kentucky Highway Safety Traffic Records Advisory Council and strategic records assessment.
- Participated with National Association of State EMS Officials Data Manager Council.
- Participated with FEMA Regional Emergency Communication Coordinating Workgroup.
- Participated with White House Office of National Drug Control Policy (ONDCP) Heroin Availability Reduction Plan (HARP).
- Provided “Path to Statewide Data Collection“ lecture at ImageTrend Connect Conference.
- Recommended participation in Cardiac Arrest Registry program.
- Recommended changes to 202 KAR 7:540 Data Regulation to improve data completeness and timeliness.

Awarded the 2017 ImageTrend Hooley Award for Data Innovation.



LAKEVILLE, MINN. [July 20, 2017] - ImageTrend, Inc. announced the winners of the 2017 Hooley™ Awards. Innovation Award: To recognize those who are serving in a new or innovative way to meet the needs of their organization, including developing programs or solutions to benefit providers, administrators, or the community.

Winner: Michael Poynter – Kentucky Board of Emergency Medical Services (KBEMS)

Agency Accomplishments

Legal Accomplishments

- Conducted investigations of forty-eight (48) complaints lodged against individuals, agencies, and TEI's.
- Received and filled One-Hundred and thirty (130) Open Records Requests during the calendar year.
- Issued ninety-nine (99) Agency Data Statements of Violation for late EMS data submission consistent with 202 KAR 7:540.
- Provided daily operational guidance to individuals, agencies, and others in regard to EMS statutory and regulatory interpretation.
- Provided numerous lectures at Regional, State, and National Conferences.
- Reviewed six-thousand-seventy one (6,071) criminal background checks for applicants for certification/licensure renewal.
- Scheduled and provided staff facilitation and resources for sixty-seven (67) Board, Standing Committee, Subcommittee, Task Force, and Preliminary Inquiry Board Meetings.
- Development through Task Force participation 202 KAR 7:501- Ambulance Agency Licensure, 202 KAR 7:545- License Classifications, 202 KAR 7:550- Required Equipment and Vehicle Standards, 202 KAR 7:555- Ground Agencies, 202 KAR 7:560- Ground Vehicle Staff, 202 KAR 7:565- Clinical Pilot Programs- To Legislative Research Commission- February, 2018.
- In 2017, 93 Medical Protocols were submitted for review.



The below agencies (35) were granted medical protocol amendments in 2017.

ADAIR CO. AMBULANCE SERVICE
AIR CARE & MOBILE CARE
AMERICAN MEDICAL RESPONSE
CAMPBELLSVILLE-TAYLOR COUNTY EMS
CARROLL CO. EMERGENCY MEDICAL SERVICES
CITY OF PAINTSVILLE FIRE-RESCUE- EMS
DAVIESS COUNTY FIRE & RESCUE
FORT MITCHELL LIFE SQUAD
GALLATIN CO. EMS
INDEPENDENCE FIRE DISTRICT AMBULANCE SERVICE
JEFFERSON FIRE PROTECTION DISTRICT
KENTUCKY STATE REFORMATORY EMS
LOGAN ALUMINUM AMBULANCE SERVICE
LOGAN COUNTY EMS
LYON CO. AMBULANCE SERVICE
MCLEAN CO. FISCAL COURT AMBULANCE SERVICE
MERCER CO. EMS, INC.
MERCY AMBULANCE SERVICE INC.
NORTHERN PENDLETON FIRE DISTRICT
OLDHAM COUNTY EMS
PATIENT TRANSPORT SERVICES, INC.
PENDLETON COUNTY AMBULANCE TAXING DISTRICT
PINER-FISKBURG FIRE PROTECTION DISTRICT
PORTSMOUTH EMERGENCY AMBULANCE SERVICE, INC.
RYLAND HEIGHTS & COMMUNITY VFD, INC.
TODD CO. AMBULANCE SERVICE
TRANS STAR AMBULANCE SERVICE
TURFWAY PARK, LLC
UC HEALTH AIR CARE & MOBILE CARE
UNIVERSITY AIR CARE
WAYNESBURG AREA RESCUE SQUAD EMS
WOODFORD COUNTY AMBULANCE SERVICE
YELLOW AMBULANCE

Mission: Lifeline

The American Heart Association recognizes the critical life-saving role prehospital emergency services provide to the overall success of a STEMI system of care. The availability of 12-lead ECGs and well trained EMS providers allow for rapid identification of STEMI, early activation of hospital emergency and cardiac teams and transportation to a STEMI Receiving or Referral center for immediate care.

The EMS agencies recognized here have achieved 75% or higher on the following criteria that are applicable to their systems:

- Patients with non-traumatic chest pain ≥ 35 years, treated and transported by EMS who receive a pre-hospital 12-lead electrocardiogram
- STEMI patients transported directly to a STEMI receiving center with pre-hospital first medical contact-to-device time ≤ 90 minutes
- Lytic-eligible patients transported to a STEMI referring center with a door-to-needle time in ≤ 30 minutes



The Kentucky Board of Emergency Medical Services is proud to recognize the American Heart Association's Mission: Lifeline 2017 award winners!

Gold Plus

Jessamine County EMS
Madison County EMS
Mercy Regional EMS
Shelby County EMS

Gold

Boyle County EMS
Bullitt County EMS
Louisville Metro EMS
Medical Center EMS
Woodford County EMS

Silver Plus

Independence Fire District

Bronze Plus

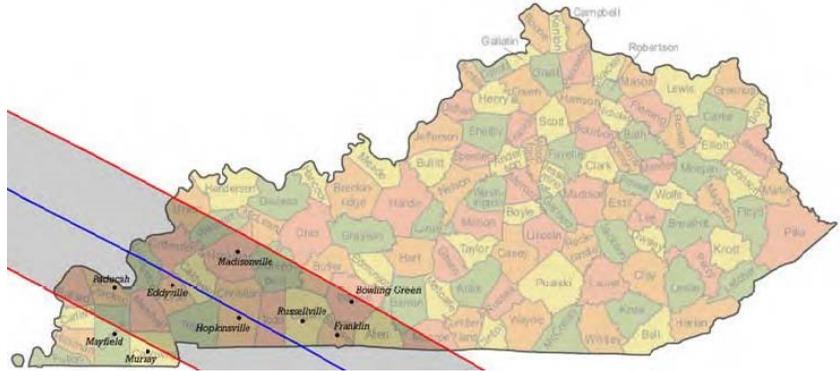
Estill County EMS

Bronze

Air Methods Kentucky
Air Methods Kentucky, Meade Co. EMS
Erlanger Fire/EMS
Garrard County EMS
Georgetown-Scott County EMS
Lexington Fire and EMS
Owensboro Health Muhlenberg EMS
Powell County Ambulance Service

2017 Solar Eclipse

On August 21st, 2017, a solar eclipse was observed across North America and a total eclipse was observed in 14 states. The point of greatest eclipse, where the axis of the moon's shadow passes closest to the center of the earth, was located 20 km northwest of Hopkinsville, Kentucky, and 21 eclipse-related events drew an estimated 116,500 visitors to the area.



21 Kentucky Counties with eclipse totality:

Ballard, McCracken, Marshall, Trigg, Graves, Calloway, Lyon, Livingston, Crittenden, Caldwell, Christian, Todd, Union, Webster, Hopkins, Muhlenberg, Logan, Simpson, Allen, Warren, & Butler.

9 Kentucky Cities with eclipse totality:

Mayfield, Murray, Paducah, Eddyville, Hopkinsville, Russellville, Madisonville, Franklin, & Bowling Green.

In preparation for the eclipse, the Kentucky Department for Public Health (KDPH) collaborated with local and regional epidemiologists, the Kentucky Board of Emergency Medical Services (KBEMS), area hospitals, the Kentucky health information exchange (KHIE), and informatics staff at the Tennessee and Illinois state health departments to implement surveillance for anticipated events of public health importance during this period.

In addition to syndromic surveillance, the KDPH monitored run data from 14 EMS services, which were entered as summary text reports to a web-based portal at least every 8 hours from August 19–21 by counties in the path of totality. The Kentucky Board of Emergency Medical Services (KBEMS) compared daily run volumes to the same time period during 2016 to determine whether additional resources were needed to provide care and transport in the area.

Patient volume did not exceed capacity for any local EMS service, and historical comparisons showed run volumes to be similar to or less than the previous year. Seven patients were documented as receiving EMS transport to a hospital for event-related issues, and 4 were assisted on-site for heat-related illness. Only 4 of 26 first aid stations reported. A total of 36 patients sought care: 13 for injuries, 10 for pain or headache, 4 for heat-related illness, and 9 for other conditions. Some EMS services did not enumerate patients seen or association of runs with an eclipse-related event.



EMS EMAC Task Force 15

Kentucky Emergency Management in association with the Kentucky Board of Emergency Medical Services and the Kentucky Department for Public Health deployed Kentucky EMS EMAC Task Force 15 to the state of Florida on September 12, 2017 in response to EMAC requests for EMS assistance for those jurisdictions affected by Hurricane IRMA.



The team of thirty (30) was staged initially in Tallahassee, Florida and subsequently deployed to support EMS operations in LeCanto, Florida and worked collaboratively with “Nature Coast EMS” in Citrus County, Florida. Citrus County is on the Gulf Coast of Florida and has a population of 141,000. Task Force 15 EMS teams responded to 111 calls in support of Nature Coast EMS.

Ambulances, personnel, communications equipment, and ATV equipment were deployed from the Kentucky Board of Emergency Medical Services, the Kentucky Fire Commission, Boyd County EMS-Ashland, Independence Fire & EMS- Independence, Livingston County EMS- Smithland, Lyon County EMS- Eddyville, Shelby County EMS-Shelbyville, & Somerset/Pulaski County EMS- Somerset.

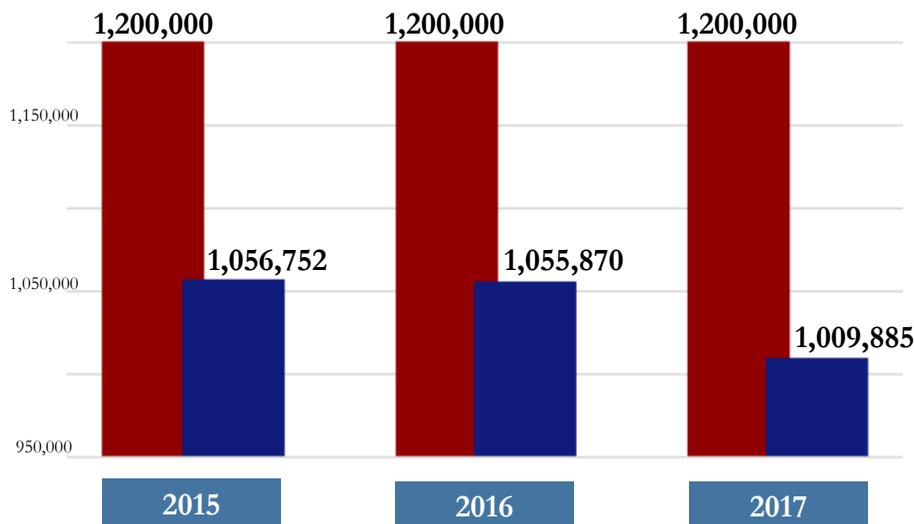
The following personnel were selected and responded to Hurricane IRMA as members of Kentucky EMS Task Force 15:

Mike Poynter, Paramedic, Kentucky Board of EMS	Shaun Powell, Paramedic- Shelby County EMS
Chuck O'Neal, Paramedic, Kentucky Board of EMS	Samantha Kimbler, Paramedic- Shelby County EMS
Rickie Driskill, Paramedic, Livingston County EMS	Timothy Stigers, Paramedic- Shelby County EMS
Michael Wiggins, Paramedic, Lyon County EMS	Alan Robinson, Paramedic- Shelby County EMS
Brian Claybern, EMT, Independence FD/EMS	Ron Sowder, Paramedic- Shelby County EMS
Jared Powers, EMT, Independence FD/EMS	Brent Turvey, Paramedic- Boyd County EMS
Daniel Caudill, EMT, Boyd County EMS	Matthew Holley, Paramedic- Boyd County EMS
William Crockett, EMT, Somerset-Pulaski County EMS	Charles "Mike" Doolin, Paramedic- Boyd County EMS
Gregory Hampton, EMT, Lyon County EMS	Brandon Wood, Paramedic- Somerset-Pulaski County EMS
David Koon, EMT, Livingston County EMS	Michael "Mike" Short, Paramedic- Somerset-Pulaski County EMS
Dustin Winstead, EMT, Lyon County EMS	Michael "Mike" Dick, Paramedic- Livingston County EMS
Jessica Harper, EMT, Livingston County EMS	Heath Ryan, Paramedic- Lyon County EMS
Bonnie Stevenson, EMT, Somerset-Pulaski County EMS	Paul Thomasson, Paramedic- Livingston County EMS
Ken Harney, Paramedic, Independence FD/EMS	John Weatherbee, EMT-Communications- Kentucky Fire Commission
Bridget Moore, Paramedic, Independence FD/EMS	Bill Birkle, EMT- Communications- Kentucky Fire Commission

Ambulance Block Grant

KRS 311A.155 Authorizes the Kentucky Board of Emergency Medical Services to maintain a block grant fund program for the purpose of assisting units of local government in the provision of emergency medical services. This administrative regulation establishes standards and criteria governing the allocation of emergency medical services funding assistance to eligible applicants. An annual grant allocation in the amount of \$10,000.00 is distributed to each applicant county that is in compliance.

Grant Fund Allocation



Grant Money Awarded

2015	88%
2016	88%
2017	84%

■ Fund ■ Awarded

Frequently Purchased Items

Ambulance, Chassis/Remount, Lease Payment	Power Stretcher
Video Laryngoscope	Training Equipment & Manikins
Mechanical Chest Compression Device	EZ IO Drills/bags
Mobile / Portable Radio	Stryker Stair Chair
Hazmat Equipment	Backboard
Monitor / Defibrillator	Traction Splint
Transport Ventilator	Laptop Computer

NIOSH Pilot Study

Kentucky was one of two states awarded a contract by the National Institute for Occupational Safety and Health (NIOSH) for a pilot study researching the viability of National EMS Information System (NEMSIS) data for surveillance of EMS personnel injuries and exposures. The contract came with a first year (2017) budget of \$11,033.52 with two additional year options. The contract provided for data accessibility from the Kentucky State Ambulance Reporting System (KSTARS) to NIOSH researchers for a specific time period as well as steps for providing education on the project topic with the state’s EMS community.

NIOSH Requested NEMSIS Data Elements:

<p><u>eOther.03</u> Personal Protective Equipment Used</p>	<p>The personal protective equipment which was used by EMS personnel during an EMS patient contact: Eye protection, Helmet, Level A Suit, Level B Suit, Level C Suit, Level D Suit (Turn out gear), Gloves, Mask-N95, PAPR, Reflective Vest, Other.</p>
<p><u>eOther.04</u> EMS Professional (Crew Member) ID</p>	<p>The ID number of the EMS Crew Member associated with eOther.03, eOther.05, & eOther.06.</p>
<p><u>eOther.05</u> Suspected EMS Work Related Exposure, Injury, or Death</p>	<p>Indication of an EMS work related exposure, injury, or death associated with this EMS event.</p>
<p><u>eOther.06</u> Type of Work-Related Injury, Death, or Suspected Exposure</p>	<p>The type of EMS crew member work-related injury, death, or suspected exposure related to the EMS response: Death, Exposure, Injury, None, Other.</p>

The below table reflects EMS personnel injury and exposure data reported to KSTARS as of 12/01/2017.

Year	# Incidents	% Using eOther.03	% Using eOther.04	% Using eOther.05	% Using eOther.06
2015	49,771	5%	83%	3%	.5%
2016	706,221	22%	98%	37%	7%
2017	725,738	14%	97%	66%	11%

↑ The Board voted to require the collection of eOther.03, eOther.04, eOther.05, and eOther.06. ↑

For more information visit: <https://youtu.be/K5m2F6-q4ow>

EMS Vehicles



<http://www.hortonambulance.com/>

Type I

A Type I is a Cab Chassis with modular body. The major feature of a Type I ambulance is that it is based on a truck style body with a separate driver compartment. Most heavy duty ambulances are of this type.



<http://www.aev.com>

Type II

Type II ambulances are a long wheelbase van type with an Integral cab design. Many long-distance transport services use Type II ambulances because of their increased fuel efficiency. In general they do not make for practical emergency services because of their cramped spaces.



<http://www.aev.com>

Type III

A Type III ambulance, much like a Type I ambulance, has a separate square patient compartment that is mounted onto an existing chassis. As a result, a lot of people wonder what exactly the difference is between the two types of ambulances. The difference lies in what types of chassis are used. A Type 3 ambulance is mounted on the cut-a-way chassis of a van. By contrast, Type I ambulances utilize a truck chassis.



<http://www.aero-news.net>

Rotor Wing

The name rotary-wing refers to the rotating “wings” (or blades) that are used by helicopters. Helicopter ambulances are used in a variety of situations, primarily dealing with emergency response. Hospitals utilize them to carry specially-trained air EMS teams out to a location where a patient has been injured, and then to escort the patient safely and quickly back to the hospital.



<http://www.airambulancexperts.net>

Fixed Wing

The term “fixed-wing” refers to wings that do not move, or are “fixed” in a specific location on the aircraft. Longer-distance air ambulances possess high-tech medical equipment to accommodate a patient and a medical crew. Fixed-Wing ambulances are a necessity for quickly and comfortably transporting patients across countries, oceans, and continents.

KBEMS Licensed Vehicles

1,235 Licensed Ambulances

100 Vehicles with no 'Vehicle Type' listed →

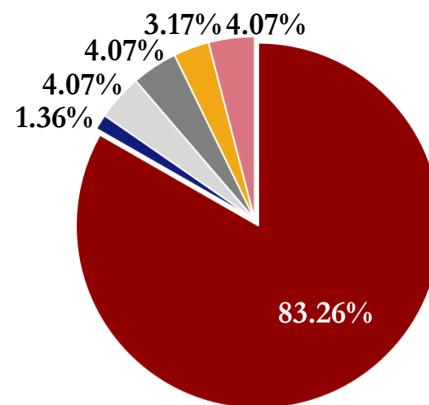
125 Ambulances added in 2017

Type I	283	24.93%
Type II	212	18.68%
Type III	565	49.78%
Air Rotor Wing	71	6.26%
Air Fixed Wing	4	.35%

Kentucky Agencies

KY Licensed Agencies

Agency Classification		
Class I	183	83.26%
Class II	3	1.36%
Class III	9	4.07%
Class IV	9	4.07%
Class VI	7	3.17%
Class VII	9	4.07%
Total	220	100.00%



26 Basic Life Support (BLS) Agencies
195 Advanced Life Support (ALS) Agencies

Agency Organization Type

Community, Non-Profit	48	Hospital	21
Fire Department	51	Private, Non-Hospital	63
Governmental / Non-Fire	37		

Agency Classification

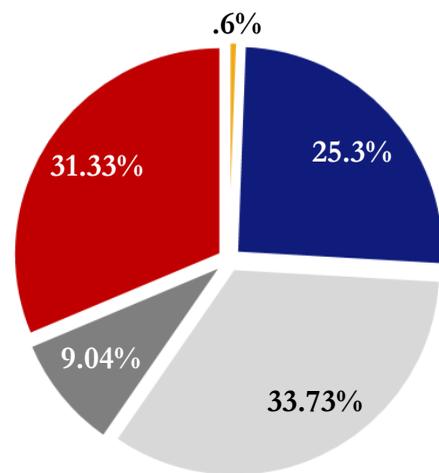
Class I	Class I ground ambulance services shall operate at the ALS or BLS level to provide emergency and nonemergency transportation.
Class II	Class II ground ambulance services shall operate at the BLS level only to provide nonemergency transportation.
Class III	Class III ground ambulance services shall operate at the ALS level only to provide critical care, emergency or nonemergency transportation between health care facilities.
Class IV	Class IV ground ambulance services shall operate at the ALS or BLS level to provide emergency and nonemergency transportation for restricted locations such as industrial sites and other sites that do not provide services outside a designated site.
Class VI	Class VI services provide ALS medical first response without patient transport.
Class VII	Class VII rotor wing air ambulance services may provide ALS emergency or nonemergency transportation. Fixed wing class VII services may provide ALS or BLS emergency or nonemergency transportation.

Training & Educational Institutions

KY Licensed TEIs

A TEI is an organization that is certified by KBEMS to teach present and future EMS providers. TEIs are certified by KBEMS to teach continuing education courses, or courses to certify/license individuals at the levels certified or licensed by KBEMS (Emergency Medical Responder, Emergency Medical Technician, Advanced Emergency Medical Technician, and Paramedic).

TEI Type	#	%
EMS-TEI 1	1	.6%
EMS-TEI 2	42	25.3%
EMS-TEI 3	56	33.73%
EMS-TEI 4	15	9.04%
EMS-TEI CE	52	31.33%
Total	166	100%



178 Courses Issued in 2017

EMR Courses:
11

EMT Courses:
146

AEMT Courses:
6

Paramedic Courses:
15

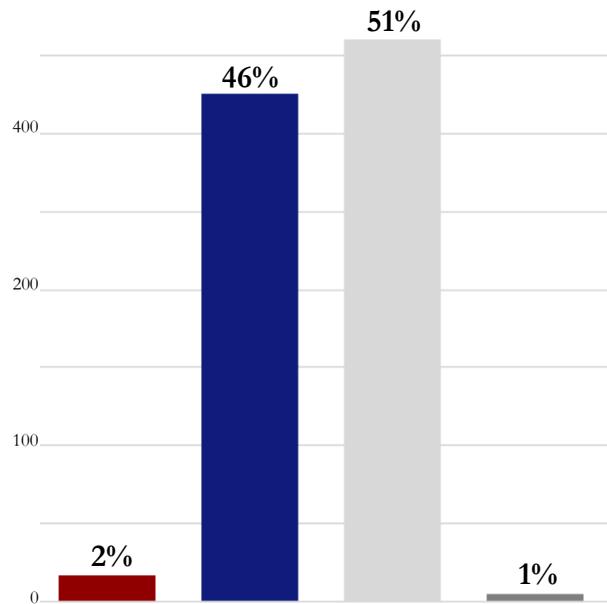
TEI Description

EMS-TEI 1	Certified to teach EMR.
EMS-TEI 2	Certified to teach EMR and EMT.
EMS-TEI 3	Certified to teach EMR, EMT, and AEMT.
EMS-TEI 4	Certified to teach EMR, EMT, AEMT, and Paramedic.
EMS-TEI CE	Certified to teach Continuing Education only.

Educators

KY Licensed Educators

Educator Level	Count of Educators
Educator I	17
Educator II	325
Educator III	360
Educator IIIIR	5
Total	707

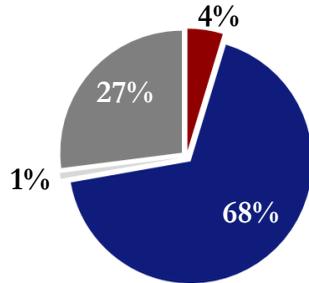


An applicant to become a Kentucky certified EMS educator shall be certified or licensed as an Emergency Medical Responder (EMR), Emergency Medical Technician (EMT), Advanced Emergency Medical Technician (AEMT), or Paramedic. Registered Nurses (RN)s and Physicians (MD or DO) not holding an EMS License or Certification may obtain a Restricted EMS Educator (Level IIIIR) Only.

Level	Teaching Ability
Educator I	EMR Initial or Continuing Education Courses
Educator II	EMR Initial or Continuing Education Courses EMT Initial or Continuing Education Courses
Educator III	EMR Initial or Continuing Education Courses EMT Initial or Continuing Education Courses AEMT or Paramedic Initial or Continuing Education Courses
Educator IIIIR	AEMT or Paramedic Initial or Continuing Education Courses

Kentucky Providers

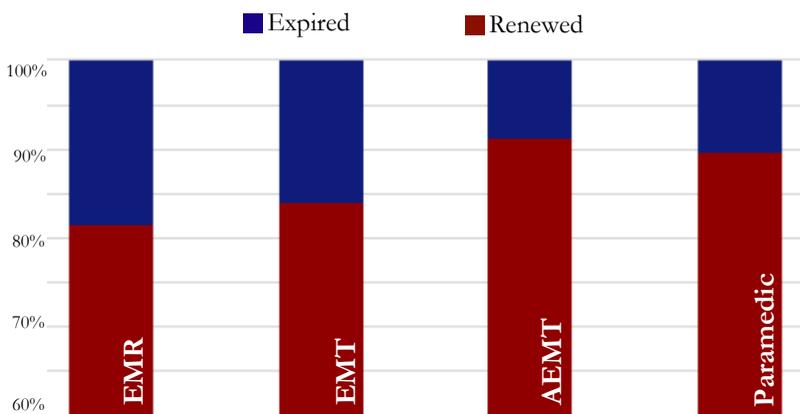
2017 Kentucky Certified / Licensed Providers



Provider Levels

Provider Level	Count	Percentage
EMR	632	4%
EMT	9,081	68%
AEMT	102	1%
Paramedic	3,632	27%
Total	13,447	100%

2017 Provider Recertification



Level	Renewed	Expired	Attrition
EMR	258	59	18.61%
EMT	3,474	668	16.13%
AEMT	31	3	8.82%
Paramedic	1,411	165	10.47%
Total	5,174	895	13.51%

2017 Issued Certifications / Licenses

Initial

Provider Level	Count
EMR	55
EMT	955
AEMT	56
Paramedic	387
Total	1,453

Reinstatement

Provider Level	Count
EMR	3
EMT	42
Paramedic	12
Total	57

Reciprocity

Provider Level	Count
EMR	1
EMT	162
AEMT	23
Paramedic	165
Total	351

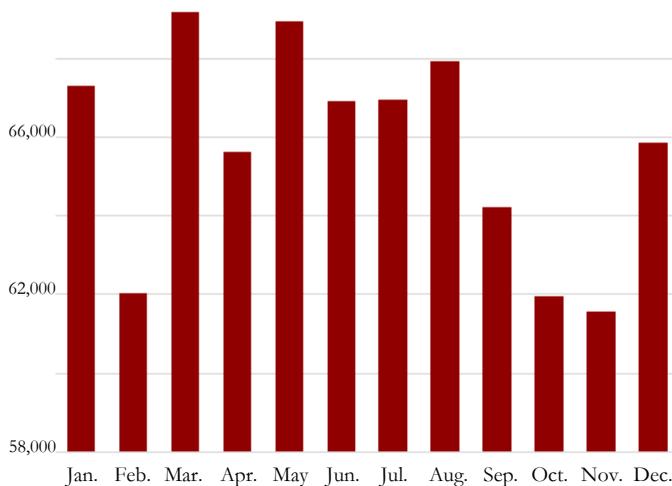
Temporary

Provider Level	Count
EMT	17
Paramedic	11
Total	28

2017 Incidents

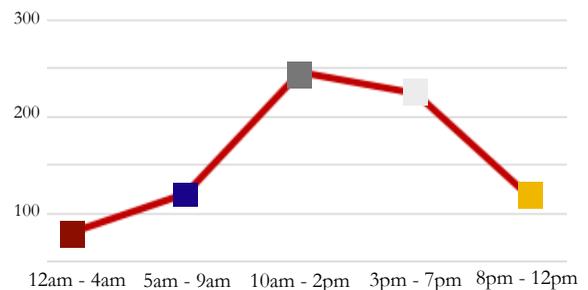
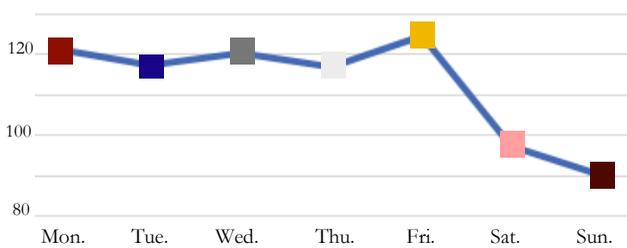
788,917 Total Incidents Reported to KSTARS

Monthly Incident Count



Incident Month			
January	67,330	July	66,990
February	62,033	August	67,945
March	69,216	September	64,214
April	65,623	October	61,953
May	68,968	November	61,550
June	66,924	December	65,867

Incident Peak Times



Incidents by Week Day

Monday	121,346	Friday	124,734
Tuesday	117,502	Saturday	97,512
Wednesday	120,282	Sunday	90,227
Thursday	117,028		

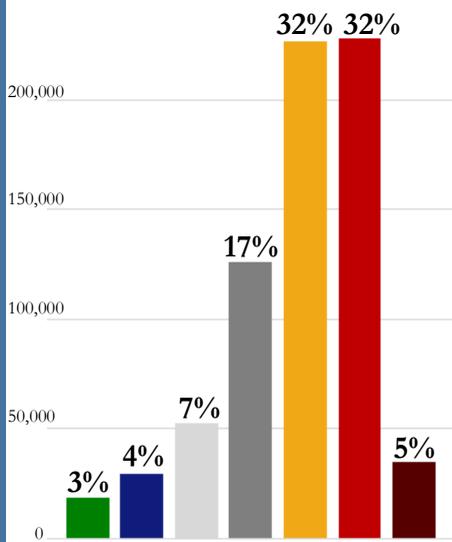
Incident Hour Range

12am - 4am	80,997	3pm - 7pm	224,903
5am - 9am	119,497	8pm - 12pm	117,294
10am - 2pm	245,996		

*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2017. Louisville-Jefferson County Metro did not submit Incident data for CY2017.

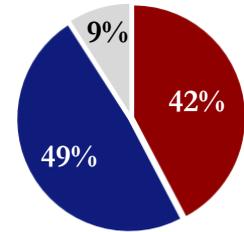
2017 Incidents

Patient Age



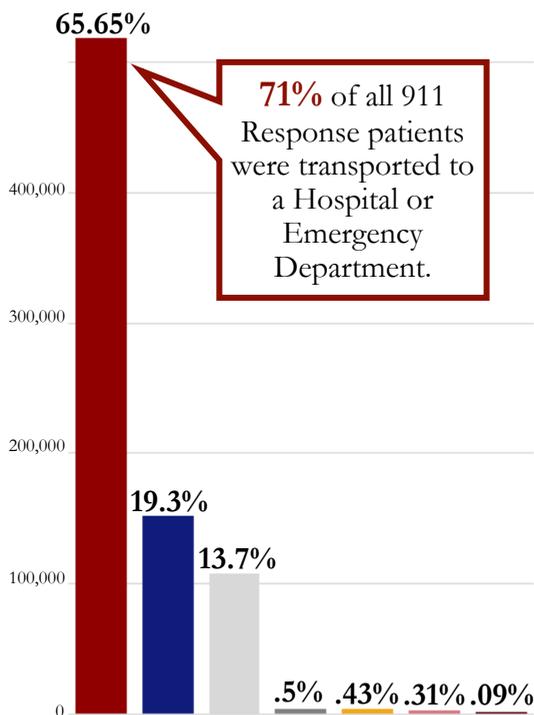
Age Range	Incidents	%
0 - 9 Years	18,702	2.61%
10 - 19 Years	29,743	4.15%
20 - 29 Years	52,449	7.32%
30 - 49 Years	125,652	17.55%
50 - 69 Years	226,681	31.66%
70 - 89 Years	227,679	31.8%
90+ Years	35,188	4.91%

Patient Gender



Gender	Incidents
Male	333,564
Female	383,497
Not Recorded	70,628

Type of Service Requested

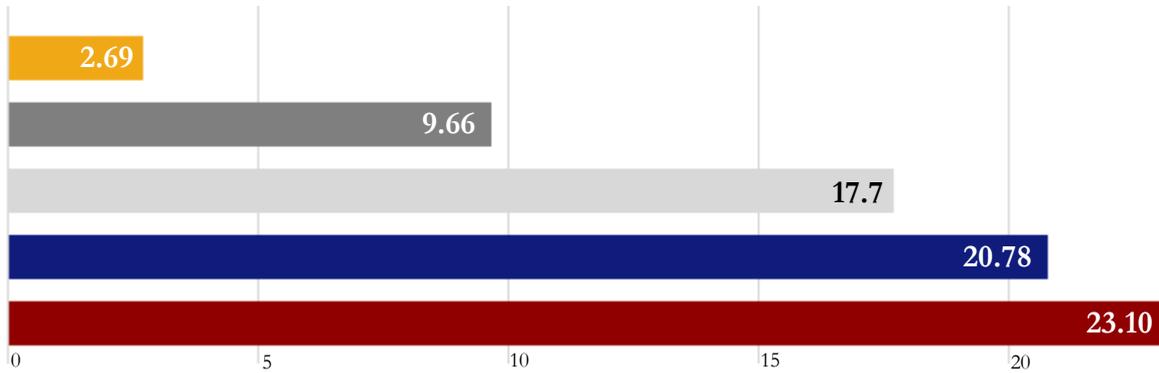


Service Requested	Incidents	%
911 Response (Scene)	517,843	65.65%
Medical Transport	152,252	19.3%
Interfacility Transport	108,166	13.7%
Standby	3,979	.5%
Public Assistance/Other Not Listed	3,423	.43%
Mutual Aid	2,459	.31%
Intercept	681	.09%

*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2017. Louisville-Jefferson County Metro did not submit Incident data for CY2017.

2017 Incidents

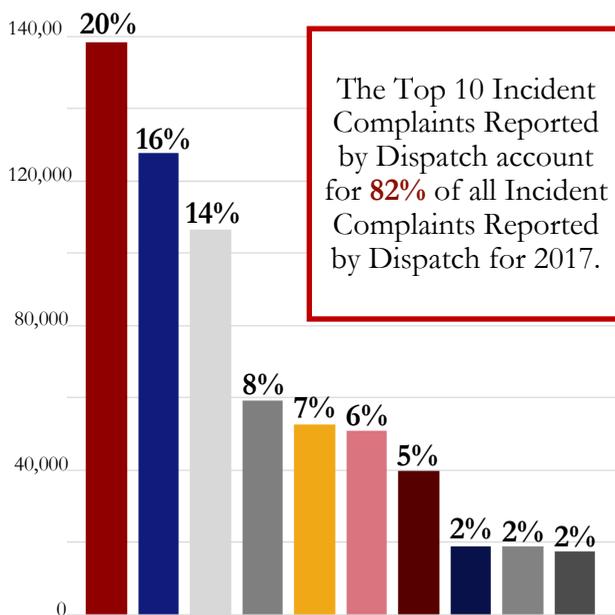
Average Run Times In Minutes



■ Average Unit Notified to Enroute in Minutes	2.69
■ Average Unit Enroute to Arrived at Scene	9.66
■ Average Unit Arrived on Scene to Left Scene	17.7
■ Average Unit Left Scene to Arrived at Destination	20.78
■ Average Unit Arrived at Destination to Unit Back in Service	23.10

1.13 Hours
Average Unit Notified by Dispatch to Unit Back in Service.

Top 10 Incident Complaints Reported by Dispatch



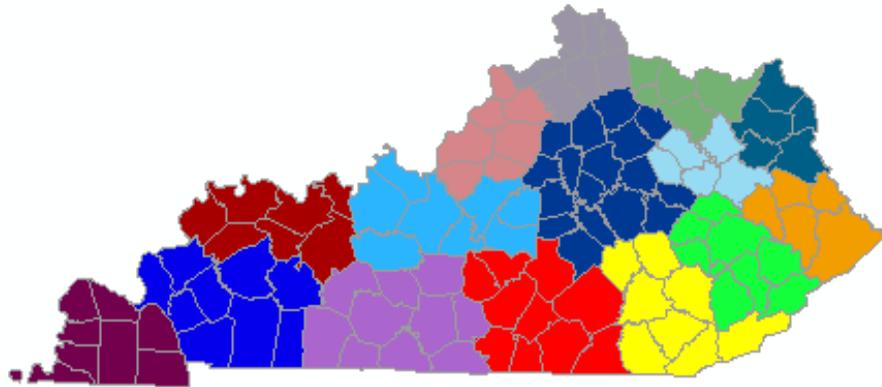
The Top 10 Incident Complaints Reported by Dispatch account for **82%** of all Incident Complaints Reported by Dispatch for 2017.

Service Requested	Incidents
■ Transfer/Interfacility/Palliative Care	158,394
■ Sick Person	127,824
■ No Other Appropriate Choice	106,454
■ Breathing Problem	59,062
■ Falls	52,514
■ Traffic/Transportation Incident	50,812
■ Chest Pain (Non-Traumatic)	39,882
■ Unknown Problem/Person Down	18,826
■ Abdominal Pain/Problems	18,751
■ Unconscious/Fainting/Near-Fainting	17,579

*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2017. Louisville-Jefferson County Metro did not submit Incident data for CY2017.

2017 Incidents

Total Call Volume by Region



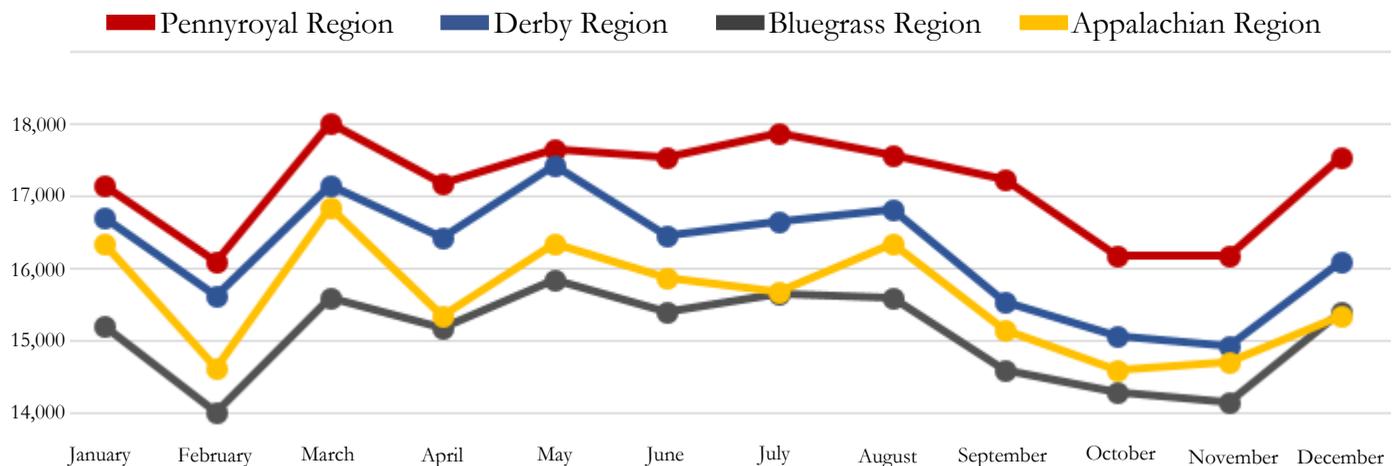
Pennyroyal Region	
District 1	34,278
District 2	33,795
District 3	37,788
District 4	54,485
District 14	41,891
Total	202,237

Derby Region	
District 5	41,891
District 6	86,647
District 7	68,631
Total	197,169

Bluegrass Region	
District 8	8,861
District 15	161,169
Total	170,030

Appalachian Region	
District 9	11,568
District 10	37,632
District 11	39,068
District 12	27,293
District 13	54,010
Total	169,571

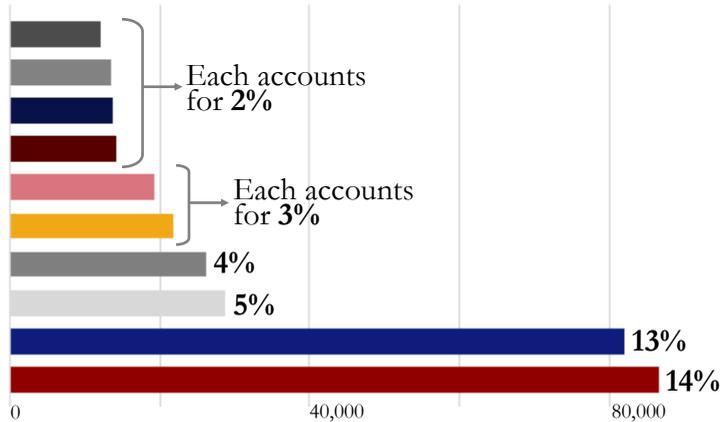
Monthly Call Volume by Region



*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2017. Louisville-Jefferson County Metro did not submit Incident data for CY2017.

2017 Incidents

Top 10 Patient Primary Symptoms



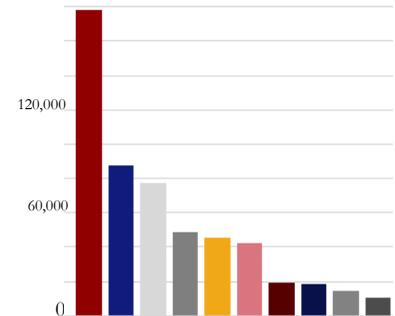
Other general symptoms and signs	87,789
Weakness	81,975
Encounter for general examination without complaint, suspected or reported diagnosis	28,618
Pain, unspecified	26,218
Pain, chest	21,783
Altered mental status	19,349
Encounter, adult, no findings or complaints	14,078
Pain, back	13,774
Acute respiratory distress syndrome	13,366
Shortness of breath	12,174

Top 15 Medications Administered

Oxygen	144,025	18.28%
Nitroglycerin	22,306	2.83%
Aspirin	19,051	2.42%
Sodium Chloride	18,706	2.37%
Albuterol	17,304	2.2%
Ondansetron	14,822	1.88%
Naloxone	12,745	1.62%
Fentanyl	12,555	1.59%
Epinephrine	7,056	.9%
Ipratropium	6,066	.77%
Methylprednisolone	4,454	.57%
Morphine	3,697	.47%
Normal Saline	3,052	.39%
Midazolam	2,640	.34%
Ketamine	2,625	.33%

Top 10 Procedures Performed by EMS

Extremity Vein Catheterization	178,624	Patient Assessment	42,692
12 Lead ECG Obtained	87,552	Spinal Immobilization	19,141
3 Lead ECG Obtained	77,692	Glucose Measurement	18,272
Evaluation Procedure	48,387	Intravenous Insertion	14,543
Moving a Patient to a Stretcher	45,720	Cardiac Monitoring	10,528



*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2017. Louisville-Jefferson County Metro did not submit Incident data for CY2017.

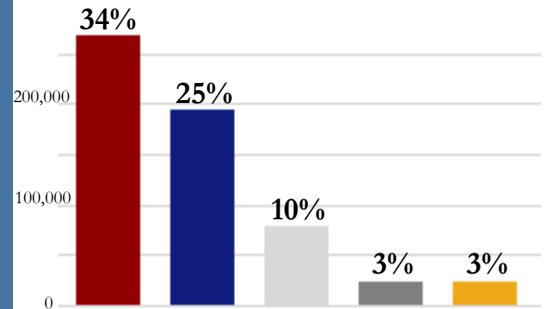
Incident Destinations

Top 10 Facility Destinations

University of Kentucky Hospital	Lexington	8,631
Lake Cumberland Regional Hospital	Somerset	6,152
Kings Daughters Medical Center	Ashland	6,070
Hazard ARH Regional Medical Center	Hazard	4,843
St. Elizabeth Edgewood	Edgewood	4,563
Baptist Health Madisonville	Madisonville	4,050
Baptist Health Richmond	Richmond	3,915
Jewish Hospital & St. Mary's Healthcare	Louisville	3,829
St. Elizabeth Covington	Covington	3,678
Methodist Hospital	Henderson	3,438
The Medical Center at Bowling Green	Bowling Green	2,940
Baptist Health Lexington	Lexington	2,930
Saint Joseph Hospital	Lexington	2,910
Norton HSP/Norton Children HSP/ Norton Healthcare Pavilion	Louisville	2,902
Baptist Health Corbin	Corbin	2,872

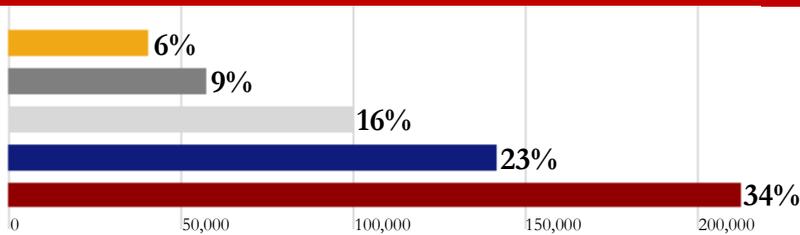
The top destinations are based off of the most widely used & correct Facility ID Codes reported to KSTARS for 2017 incidents.

Top 5 Destination Types



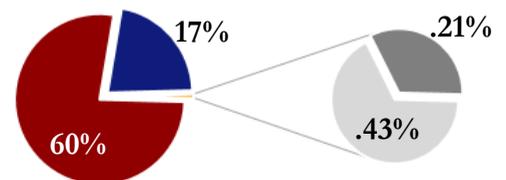
Hospital-Emergency Department	269,537
Hospital-Non Emergency Department Bed	194,958
Nursing Home/Assisted Living Facility	80,404
Medical Office/Clinic	24,325
Home	23,767

Top 5 Reasons for Choosing a Destination



Closest facility	212,280
Patient's choice	141,820
Patient's physician's choice	100,422
Protocol	57,484
Other	40,810

Transport Mode from Scene



Non-Emergent	474,792
Emergent (Immediate Response)	134,751
Emergent Downgraded to Non-Emergent	3,408
Non-Emergent Upgraded to Emergent	1,668

174,268 incidents with transport mode from scene not recorded, not applicable, or blank.

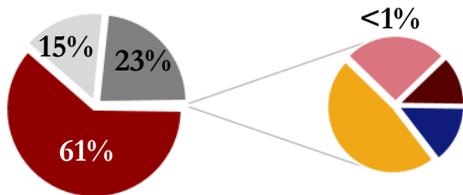
*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2017. Louisville-Jefferson County Metro did not submit Incident data for CY2017.

Ground Transports

549,684
Ground Transports

Ground Transports	549,115
Not Applicable, Not Recorded, or Blank	228,916

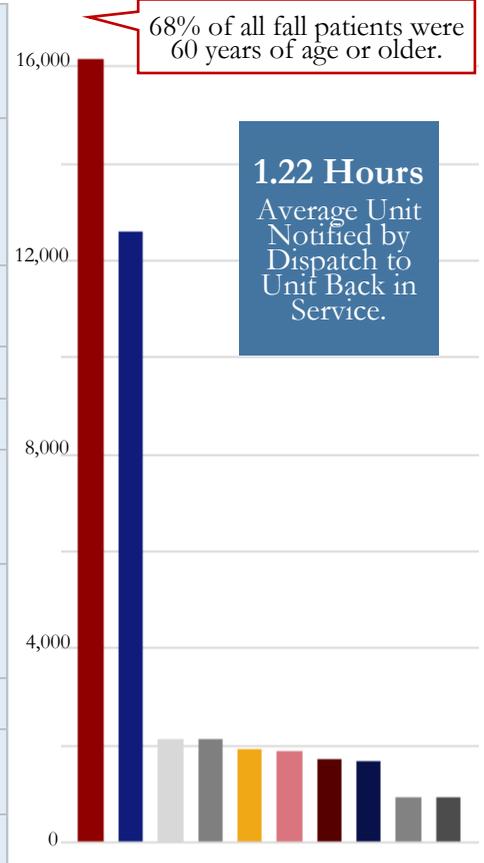
Type of Service Requested



Interfacility Transport	83,834
911 Response (Scene)	336,122
Medical Transport	127,140
Intercept	369
Public Assistance	662
Mutual Aid	1,230
Standby	319

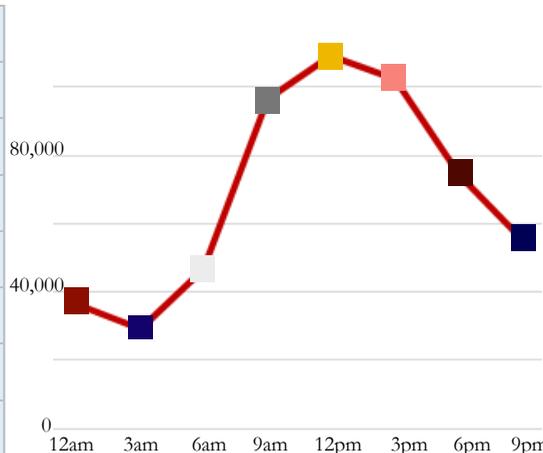
Top 10 Causes of Injury

Fall on same level from slipping, tripping and stumbling	16,152
Car occupant (driver) (passenger) injured in unspecified traffic accident	12,612
Other specified effects of external causes	2,110
Fall from bed	2,109
Fall from chair	1,930
Other slipping, tripping and stumbling and falls	1,888
Fall (on) (from) unspecified stairs and steps	1,712
Assault by bodily force	1,662
Other fall from one level to another	930
Unspecified fall	919



Ground Ambulance Peak Times By Hour Range

12am - 2am	36,446
3am - 5am	29,104
6am - 8am	46,404
9am - 11am	96,707
12pm - 2pm	109,306
3pm - 5pm	102,148
6pm - 8pm	74,413
9pm - 11pm	55,156



Transport Mode from Scene

Emergent (Immediate Response)	22%
Emergent Downgraded to Non-Emergent	<1%
Non-Emergent	77%
Non-Emergent Upgraded to Emergent	<1%

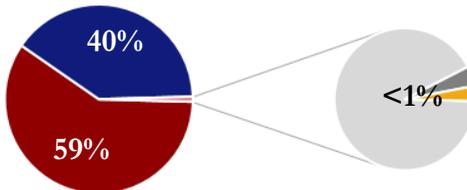
*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2017. Louisville-Jefferson County Metro did not submit Incident data for CY2017.

Air Medical Transports

10,272 Air Medical Transports

Air Medical - Fixed Wing	200
Air Medical - Rotor Craft	10,072

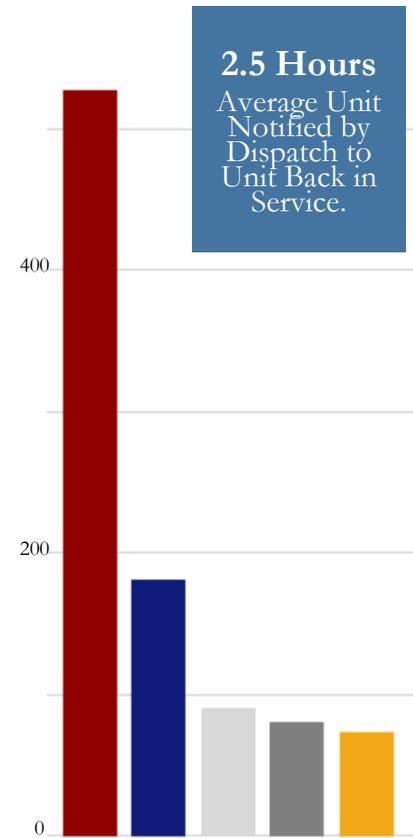
Type of Service Requested



Interfacility Transport	6,082
911 Response (Scene)	4,111
Medical Transport	81
Intercept	4
Public Assistance	3

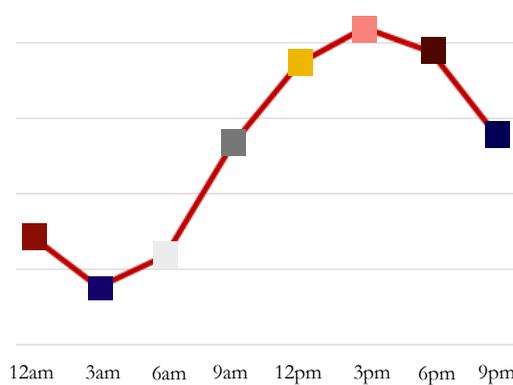
Top 5 Causes of Injury

Car occupant (driver) (passenger) injured in unspecified traffic accident, initial encounter	527
Car occupant (driver) (passenger) injured in other specified transport accidents, initial encounter	181
Driver of other special all-terrain or other off-road motor vehicle injured in nontraffic accident, initial encounter	91
Fall on same level, unspecified, initial	81
Car driver injured in collision with other nonmotor vehicle in traffic accident, initial encounter	74



Air Medical Peak Times By Hour Range

12am - 2am	709
3am - 5am	377
6am - 8am	592
9am - 11am	1,329
12pm - 2pm	1,864
3pm - 5pm	2,104
6pm - 8pm	1,937
9pm - 11pm	1,369



9 Air Ambulance Services

Service State

Kentucky	4
Ohio	1
South Carolina	1
Tennessee	2
West Virginia	1

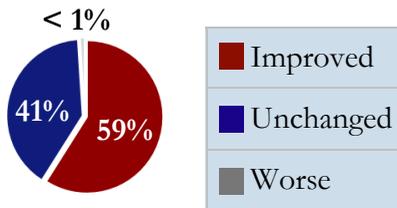
*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2017. Louisville-Jefferson County Metro did not submit Incident data for CY2017.

Naloxone Administrations

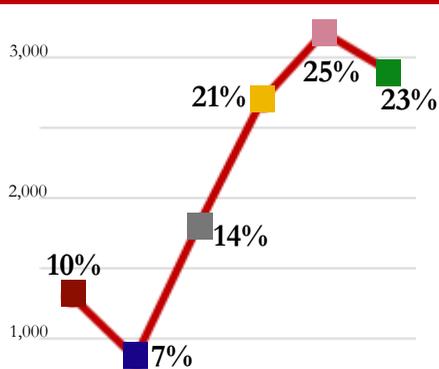
12,724
Naloxone Administrations

2.26
Average Naloxone Dosage

Patient Condition After Receiving Naloxone

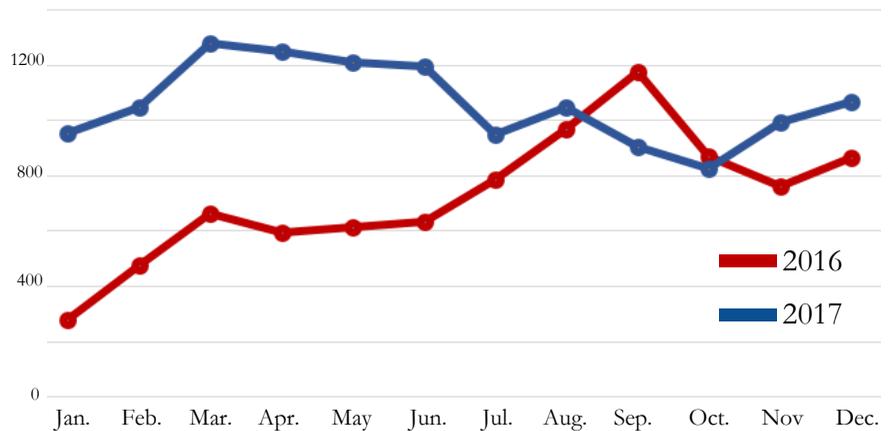


Naloxone Call Times By Hour Range



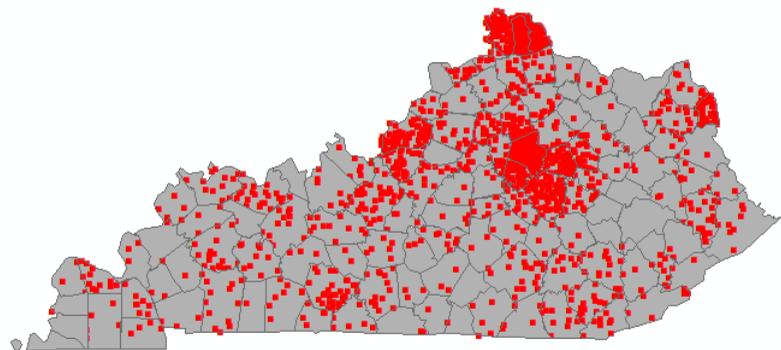
12 am - 3:59 am	1,306
4 am - 7:59 am	853
8 am - 11:59 am	1,791
12 pm - 3:59 pm	2,697
4 pm - 7:59 pm	3,184
8 pm - 11:59 pm	2,910

Naloxone Administration By Month



Kentucky's drug overdose fatality ranking in the US improved from 3rd highest in the nation in 2015 to 6th highest in 2016 according to the Kentucky Injury Prevention & Research Center.

Naloxone Administration By County



Top 10 Scene Incident Counties

Fayette County	2,275	Clark County	433
Kenton County	1,291	Jefferson County	363
Campbell County	758	Boyd County	324
Madison County	525	Jessamine County	298
Boone County	491	Hardin County	236

*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2017. Louisville-Jefferson County Metro did not submit Incident data for CY2017.

Highway Safety

Traffic/Transportation Incidents

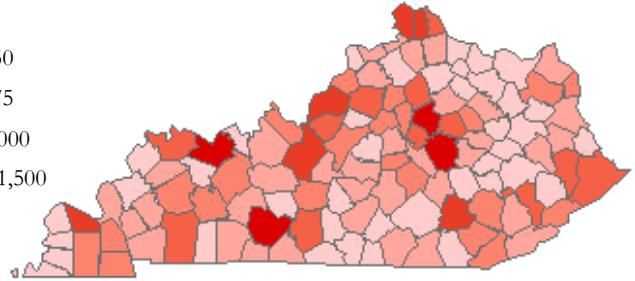
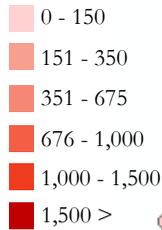
50,731

Traffic/Transportation Incidents Reported by Dispatch.

64,062

of Incidents with Highway/Roadway/Street as the Scene Location

Incident Location Type	Incidents
Exit ramp or entrance ramp of street or highway	86
Highway rest stop	8
Interstate highway	408
Street, highway and other paved roadways	48,743
Street and highway	14,740
Unspecified street and highway	77



Top 10 Counties with Traffic/Transportation Incidents

Fayette	3,759	Boone	1,370
Daviess	1,943	Hardin	1,308
Warren	1,816	Kenton	1,135
Madison	1,624	Laurel	1,131
McCracken	1,457	Jefferson	1,092

1,146
Mass Casualty Traffic Incidents

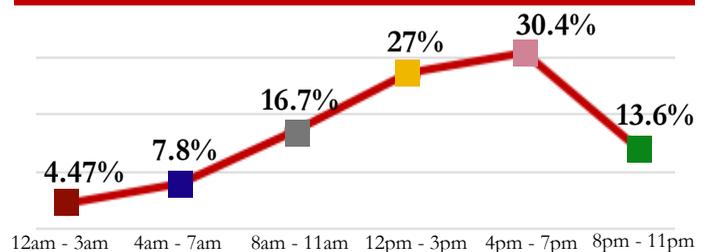
336
Traffic Incidents Requiring Air Transport

6,293
Traffic Incidents with No Airbag Deployed or No Airbag Present

1,623
Traffic Incidents with Positive Alcohol/Drug Use Indicators

13,318
Traffic Incidents where Seatbelt Use was Indicated

Traffic/Transportation Incident Hour Range



Hour Range	Incidents
12am - 3am	2,270
4am - 7am	3,945
8am - 11am	8,483
12pm - 3pm	13,706
4pm - 7pm	15,435
8pm - 11pm	6,892

*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2017. Louisville-Jefferson County Metro did not submit Incident data for CY2017.

Cardiac Arrest Incidents

Patients with chief complaint of “cardiac arrest/chest pain”, incident complaint of “cardiac arrest/chest pain” reported by dispatch, or cardiac arrest during EMS event account for **10.8%** (85,035 Incidents) of all 2017 Incidents.

Chief Complaint

Cardiac Arrest/Chest Pain	34,791
---------------------------	--------

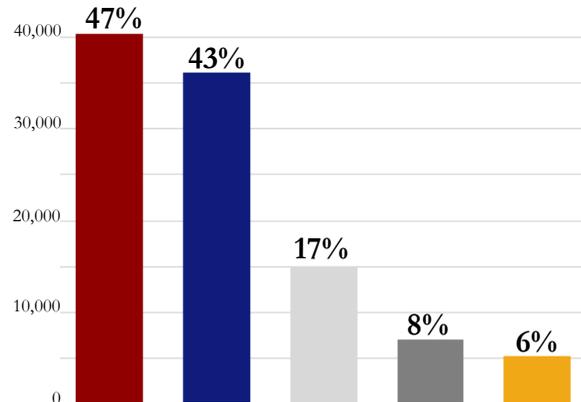
Incident Complaint Reported by Dispatch

Chest Pain (Non-Traumatic)	39,882
Cardiac Arrest/Death	5,247
Cardiac Arrest - Possible DOA	7

Cardiac Arrest During EMS Event

Yes, Prior to EMS Arrival	4,493
Yes, After EMS Arrival	615

Top 5 Procedures Performed



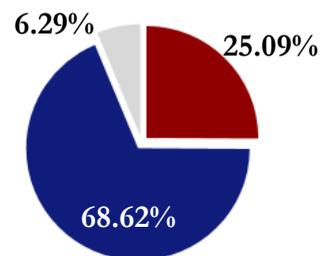
12 Lead ECG Obtained	40,371
Extremity Vein Catheterization	36,222
3 Lead ECG Obtained	14,859
Evaluation Procedure	7,042
Intravenous Insertion	5,142

The data corresponds to the Cardiac Arrest incidents on the left.

Top 5 Medications Administered



Care Provided Prior to EMS Arrival



CPR Provided Prior to EMS Arrival

Return of Spontaneous Circulation	Incidents	%
Yes	566	25.09%
No	1,548	68.62%
N/A or Not Recorded	142	6.29%

Patient Demographics

Patient Gender		Patient Age	
Male	52%	Average Age	58
Female	48%	50 - 79 years of age	60%

*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2017. Louisville-Jefferson County Metro did not submit Incident data for CY2017.

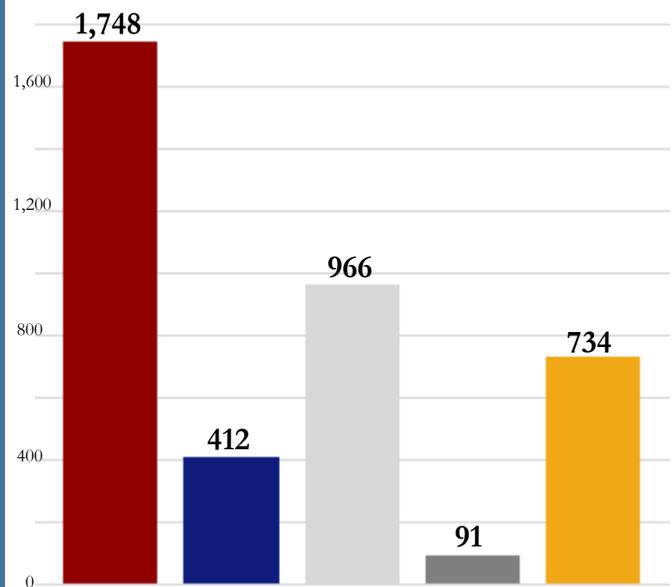
Community Paramedicine Pilot

In Kentucky, the demand for Emergency Medical Services is increasing while reimbursements are decreasing. To upturn this phenomenon the Kentucky Board of Emergency Medical Services implemented Kentucky's first Mobile Integrated Health/ Community Paramedicine Pilot Program on June 1st, 2016. The primary role of the program is to fill unmet needs with untapped resources, reduce 911 utilization/ED visits, and create partnerships within the community. The data below reflects the Year 2, Quarter 1 & 2 findings of the MIH/CP pilot program (06/01/2017 - 11/30/2017).



Top 10 Reasons for Service Provider/MD/Hospital Initiated Referrals			
Breathing Problem	29	Traumatic Injury	3
Diabetic Problem	25	Convulsions/Seizure	3
Heart Problems/AICD	15	Back Pain	3
Sick Person	10	Stroke/CVA	3
No other Appropriate Choice	4	Well Person Check	2

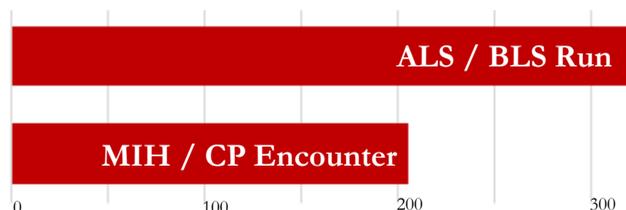
Top 10 Reasons for Service Service Initiated Referrals			
No Other Appropriate Choice	476	Abdominal Pain/problems	51
Traumatic Injury	204	Overdose/Poisoning/Ingestion	40
Falls	151	Medical Alarm	36
Cardiac Arrest/Death	114	Hemorrhage/Laceration	27
Sick Person	75	Psychiatric Problem/Abnormal Behavior/Suicide Attempt	10



Initial Encounters	1,748
Repeat Encounters	412
EMS Transports Prevented	966
Hospital Readmissions Prevented	91
ED Visits Prevented	734

Average Cost

MIH / CP Encounter	\$205.39
ALS / BLS Run	\$321.41



EMS Employee Attrition Survey

This report presents the findings of KBEMS' 2017 Attrition Survey; the primary objective of this study is to determine the trends and other factors that contribute to Kentucky EMS employee attrition. The survey was administered to 885 KY EMS providers who discontinued their EMS License/Certification in 2017.

Participant Demographics

113 Participants
(12.77% Response Rate)

Male	71.68%
Female	28.32%

Provider Level

EMR	3.54%
EMT	76.11%
AEMT	.88%
Paramedic	19.47%

Age Range

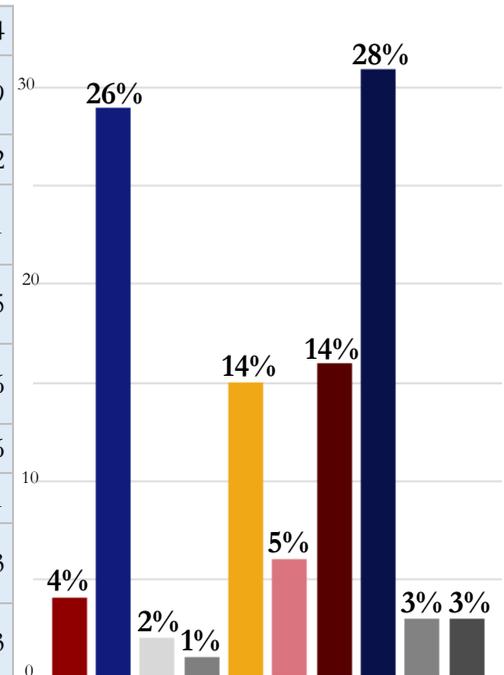
18-24	4.42%
25-34	21.24%
35-44	20.35%
45-54	23.01%
55-64	22.12%
65+	8.85%

Education

High School Diploma	14.16%
Some College	41.59%
Associate's Degree	16.81%
Bachelor's Degree	20.35%
Master's Degree	7.08%
Doctorate	0%

Primary Reasons for Allowing License/Certification to Expire

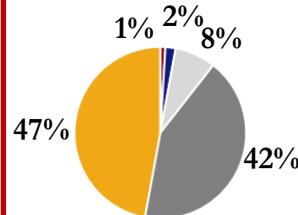
Work injury	4
External factors; not my choice to leave EMS	29
Inflexible work schedule	2
Lack of promotion opportunities	1
Low salary and/or poor benefits package	15
Poor management and/or hostile work environment	6
Relocated	16
Retired	31
Simply did not enjoy working in EMS	3
Unable to find a full-time position	3



Participant Attitudes & Beliefs

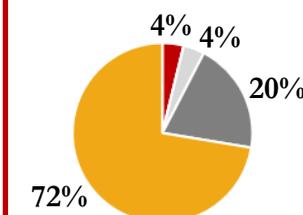
Stress

I believe that working as an EMS provider is Highly Stressful.



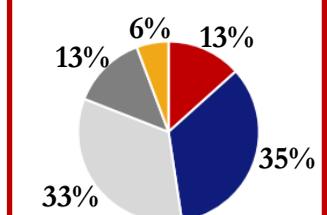
Salary

I believe that EMS providers deserve a higher annual salary.



Advancement

There are plenty of opportunities for advancement in EMS.

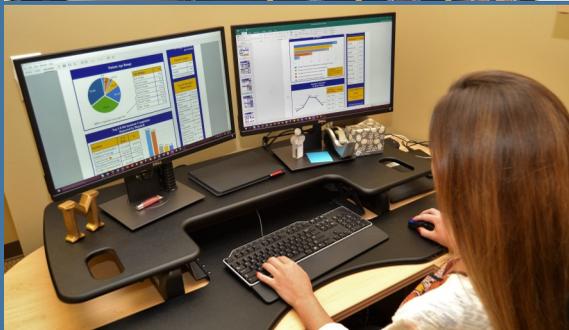


Strongly Disagree Disagree Neutral Agree Strongly Agree

Top 5 Career Fields previous EMS providers are now working:

1. Health & Medicine 37.88% (25)
2. Manufacturing 12.12% (8)
3. Government 9.09% (6)
4. Construction 7.58% (5)
5. Sales 7.58% (5)

Current Projects of the Board

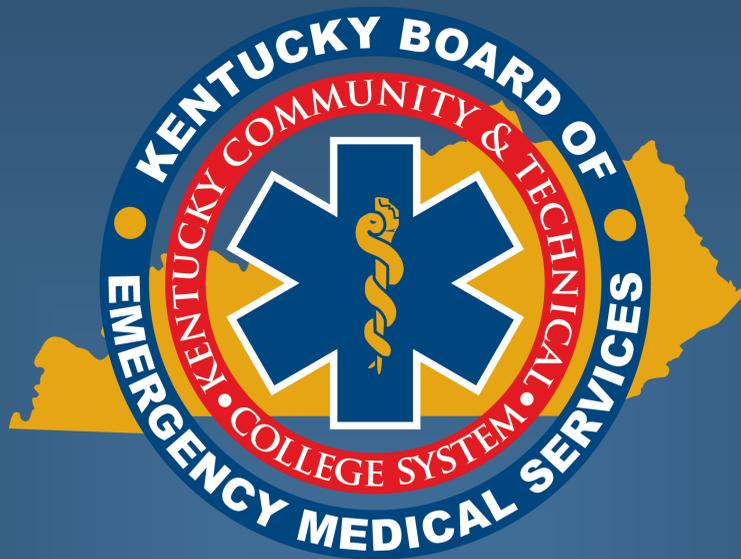


- Continued work and collaboration with the Legislative research commission on 202 KAR 7:501- Ambulance Agency Licensure, 202 KAR 7:545- License Classifications, 202 KAR 7:550- Required Equipment and Vehicle Standards, 202 KAR 7:555- Ground Agencies, and 202 KAR 7:560- Ground Vehicle Staff, 202 KAR 7:565- Clinical Pilot Programs
- Implementation of NEMSIS Version 3.4.0.
- Continued work on the review and appropriate amendment of Kentucky EMS regulations to protect the health and safety of citizens of the Commonwealth through the provision of effective Emergency Medical Services, while eliminating unnecessary and/or burdensome regulatory processes and red-tape.
- Continued revisions and complete update of the KBEMS State EMS Protocol.
- Destination Guidance for Trauma, STEMI, Stroke with or w/o Emergent Large Vessel Occlusion, Sepsis, and Cardiac Arrest.
- Research, development, and publishing of 2017 EMS Workforce Attrition Report.
- Research, development, and publishing of 2017 Mobile Integrated Healthcare/Community Paramedicine Pilot Program Study.
- Continue to collaborate with Community Colleges and Regional Universities to advocate for the development of Accredited Paramedic Program availability throughout the Commonwealth of Kentucky.
- Continued work on the “EMS 2023” Work Group which is tasked with identifying and implementing positive change for challenges that EMS professionals and agencies currently face, to enhance professionalism of the workforce, and to recruit and retain educated, high-quality, career-minded EMS professionals.
- Amendments to 202 KAR 7:520- Block Grant.
- Amendments to 202 KAR 7:540- Data Collection, Management, and Compliance.
- Amendments to 202 KAR 7:801- Medical Directors.
- Representation on the National Infragard Board of Directors.
- Support of the 2018 Bryant Stiles Fire Officers School, 2018 Kentucky State EMS Fire School, 2018 Lake Cumberland Healthcare Symposium, and 2018 Kentucky EMS Conference and Expo.

Current Projects of the Board

- Update of KEMSIS (Licensure) applications to ensure appropriate repository of historic EMS records and streamlining of all EMS service needs and requests.
- Collaboration with ESF 5 and ESF 8 partners in Emergency Management and Public Health to ensure appropriate State EMS representation and support for EMS professionals and agencies in Kentucky and throughout the nation.
- Collaboration with EMS agencies, the FDA, and Kentucky Board of Pharmacy to mitigate the effects of multiple shortages of Emergency Medications and Intravenous fluids.
- Continued Research under contract with NIOSH/CDC on EMS Work-Related Injuries research project.
- Representation on numerous councils of the National Association of State EMS Officials (NASEMSO).
- Collaboration and data sharing with the Kentucky Department of Transportation.
- Collaboration with healthcare and law enforcement partners in research of Opioid abuse in Kentucky and monitoring of Naloxone administration by EMS professionals.
- Scheduling and coordination of the “Kentucky EMS Leadership Academy” during 2018.
- Continued endorsement of Traffic Incident Management System (TIMS) training for all certified and licensed EMS personnel in Kentucky.
- Continued work on a Commonwealth “Cardiac Arrest Registry (CARES)” in collaboration with the American Heart Association, Kentucky Chapter of the American College of Cardiology, and CARES registry (CDC-Emory University).
- Research and Development of collaborative legislation for Community Paramedicine, and adoption of “Board Certification” of specialties in EMS. Some of which may include: Community Paramedic, Tactical Paramedic, Flight Paramedic, Wilderness EMT/Paramedic, Critical Care Transport Paramedic.
- Continued improvement to KEMSIS user experience and site performance.





Kentucky Board of Emergency Medical Services

118 James Court
Lexington, KY 40505
(859) 256-3565

kyems.com • support.kyems.com

