



»»»  
M O V I N G  
**E M S**  
F O R W A R D  
ANNUAL REPORT 2019 »»»



## KENTUCKY EMS OATH

As a member of Kentucky's Emergency Medical Services community, I pledge that I will strive to:

Alleviate suffering, promote health, and do no harm;

Maintain professional competence and demonstrate concern for the competence of my peers;

Refuse to participate in illegal or unethical activity, and expose the same when engaged in by others;

Advocate for my patients, my colleagues, and my profession; and

Continuously improve my knowledge, skill, and abilities so that I can serve the public exceptionally.



### WANT THE HEADS UP ON ALL THINGS EMS? DOWNLOAD OUR HEADS UP KY EMS MOBILE APP NOW!

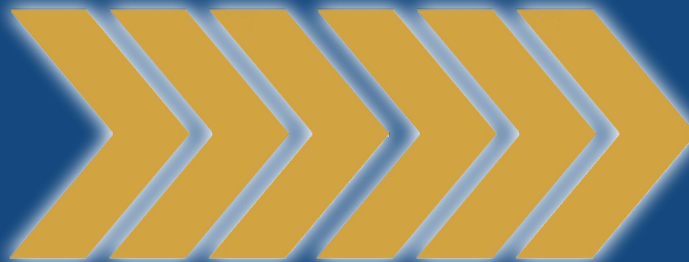
The ability to inform Kentucky's emergency medical service community of information and upcoming events is critical. Welcome Heads Up KY EMS, a custom scripted software application used to quickly and easily generate messages for providers, medical directors, service directors, and TEI administrators, regarding meeting updates, events, and incidents where time is crucial! Heads Up KY EMS is free and easy to use for both Android and Apple iOS devices. Download Heads Up KY EMS today on the Apple App Store or Google Play Store!





# IN THIS REPORT

1	WELCOME FROM OUR EXECUTIVE DIRECTOR	24	TRAINING & EDUCATIONAL INSTITUTIONS
2	OUR MISSION, VISION & VALUES	25	KENTUCKY EDUCATORS
3	EMS FAST FACTS	26	KENTUCKY PROVIDERS
4	MEET OUR TEAM	27-31	KENTUCKY INCIDENTS
5-6	MEET OUR BOARD	32	INCIDENT DESTINATIONS
7	BOARD ACCOMPLISHMENTS LEGAL ACCOMPLISHMENTS CURRENT BOARD PROJECTS	33	GROUND VS AIR MED TRANSPORTS
8-12	MEET OUR COMMITTEES	34	NALOXONE ADMINISTRATIONS
13-18	OUR ACCOMPLISHMENTS	35	HIGHWAY SAFETY INCIDENTS
19	MISSION: LIFELINE	36	CARDIAC ARREST INCIDENTS
20	AMBULANCE BLOCK GRANT	37	TOP IMPRESSIONS, PROCEDURES & MEDICATIONS
21	EMS LINKS 2019	38	COMMUNITY PARAMEDICINE
22	EMS VEHICLES	39	STATEWIDE EMPLOYEE ATTRITION
23	KENTUCKY AGENCIES		



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Every single day Kentucky Emergency Medical Responders, Emergency Medical Technicians, Advanced–Emergency Medical Technicians and Paramedics serve the people of the Commonwealth with pride. They deliver exceptional prehospital emergency medical care 24 hours a day, 365 days a year. While EMS professionals and projects in Kentucky continue to receive national recognition, we continually strive to improve service delivery and elevate our standards of excellence.

The Kentucky Board of Emergency Medical Services strives to establish a unified, comprehensive and effective EMS system within the Commonwealth of Kentucky, ensuring that the EMS systems across our state will be recognized as leaders in the prehospital care arena.

We will satisfy this goal by promoting excellence through regulation, encouraging healthy communities, enhancing community support for EMS, and collaborating with public health and emergency management coordination efforts.

**The Kentucky Board of EMS will advocate for continued EMS integration into the healthcare community, focusing our efforts on EMS research and strategic governance, and developing and managing an organized repository of information, standards and guidelines for EMS providers.**

I can proudly say that our staff accepts the challenge to support progressive development of EMS in the Commonwealth of Kentucky, and we believe that through collaborative efforts with each EMS agency and provider in Kentucky, that we will enhance the health and safety of our citizens.

Respectfully,

Mike Poynter, EMT-P, CP-C, FACPE  
Executive Director  
Kentucky Board of Emergency Medical Services





# OUR MISSION, VISION & VALUES



The Kentucky Board of Emergency Medical Services' mission is to ensure availability of high quality emergency medical services for the Commonwealth of Kentucky through collaboration with EMS providers and agencies by:



## HOW DO WE ACCOMPLISH OUR MISSION?

- » 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 EMS-related courses conducted by Kentucky EMS Training & Educational Institutions (TEIs).
- » Approves EMS TEIs as National Registry Educational programs.
- » Certification and licensure audits.
- » Investigation of complaints against 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.

## OUR VISION

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

## OUR VALUES

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

# EMS FAST FACTS

## FACT CHECK! DID YOU KNOW?

- » EMS is a vital component of healthcare, on any given day, in almost every community in our nation, responding 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 billion!

24 HOURS A  
DAY, 7 DAYS A  
WEEK



Photo credit: FreePix

## KENTUCKY FACTS

**4,436,974**

Total Population  
2016 US Census Bureau

**\$24,063**

Per Capita Income  
2011-15 US Census Bureau

**40,408**

Square Miles  
2016 US Census Bureau

**84%**

High School Graduation Rate  
2011-15 US Census Bureau

## EMS PROVIDER LEVELS

### EMERGENCY MEDICAL RESPONDER

INITIAL TRAINING HOURS = 50 | RECERTIFICATION HOURS = 17

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

### EMERGENCY MEDICAL TECHNICIAN

INITIAL TRAINING HOURS = 150 | RECERTIFICATION HOURS = 24

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

### ADVANCED EMERGENCY MEDICAL TECHNICIAN

INITIAL TRAINING HOURS = 400 | RECERTIFICATION HOURS = 48

Performs interventions with basic and advanced equipment typically found on an ambulance, and is an important link for administering ALS care from the scene to the emergency health care system.

### PARAMEDIC

INITIAL TRAINING HOURS = 2,000 | RECERTIFICATION HOURS = 60

An allied health professional whose primary focus is to provide advanced emergency medical care for critical and emergent patients, and who possesses the complex knowledge and skills necessary to provide patient care and transportation.

# MEET OUR TEAM



**Robert Andrew**  
Director of Education  
& Training



**Drew Chandler**  
Data Administrator



**Ray Chesney**  
Inspector/Liaison



**Paula Coyle**  
Inspector/Liaison



**Calynn Fields**  
Resource Management  
Specialist



**Brooke French**  
Certification Specialist



**Greg Hiles**  
Marketing Manager



**Sam Lowe**  
Investigator



**Dr. Julia Martin**  
State Medical Advisor



**Chuck O'Neal**  
Deputy Executive  
Director



**Paul Phillips**  
Director of Field  
Operations



**Michael Poynter**  
Executive Director



**Monica Robertson**  
Data Analyst



**Courtney Robinson**  
Certification Specialist



**Morgan Scaggs**  
EMS-C Project  
Director



**Eddie Slone**  
Inspector/Liaison



**Janet Sweeney**  
Financial Analyst



**Carolyn Threlkeld**  
Administrative Assistant



# MEET OUR BOARD



**Phil Dietz, Chair**

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



**Ashley Powell, Vice-Chair**

Representing: Basic Life Support, License Class I government-operated Ground Ambulance Service Administrator



**Adrienne Bryant**

Representing: Emergency Medical Technician Basic



**Jessica Fette**

Representing: Mayors



**Tracey Franklin**

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



**William Haugh**

Representing: Hospital Administrators



**Jim Lee**

Representing: Citizens at Large



**Walter Lubbers, M.D.**

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



**Kevin Neal, Judge Executive**

Representing: County Judge/ Executives Operating Licensed Class I Ground Ambulance Services



**Timothy Price, M.D.**

Representing: Physicians serving as a Medical Director of an advanced Life Support Ambulance Service



# MEET OUR BOARD



**Allison Rains, M.D.**

Representing: Physicians who are routinely involved in the emergency care of ill or injured children



**Michael Reynolds**

Representing: Advanced life support government-operated ambulance service administrators



**Chad Scott**

Representing: Private Licensed Class I Ambulance Service Administrators who is a Certified Emergency Medical Technician or Licensed Paramedic



**Robbie Smither**

Representing: First Responders



**David Webb**

Representing: Licensed Air Ambulance Service administrators or paramedics for a licensed air ambulance

## DID YOU KNOW?

- » Our Board is a volunteer board, with only expenses being covered.
- » Terms last 3 Years
- » In order to become a Board Member, you must apply through the Kentucky Governor's Boards and Commissions Office. They accept applications through their website. Check with the Boards and Commissions Office to confirm deadlines and the application process. Board Members are appointed annually every September.

# BOARD ACCOMPLISHMENTS

## LEGAL ACCOMPLISHMENTS

- » Phil Deitz was elected Chair of the Board for 2019-2020.
- » Ashley Powell was elected Vice-Chair of the Board for 2019-2020.
- » The State Medical Advisor reviewed and approved sixty (60) medical protocol submissions
- » The Director of Field Operations processed fifty-six (56) agency Medical Director approvals.
- » Promulgated an amendment to Administrative Regulation 202 KAR 7:520 Allocation of block grant funding assistance for emergency medical services.
- » Created Administrative Regulation 202 KAR 7:575- Fee schedules of licensed ambulance providers.
- » Promulgated an amendment to Administrative Regulation 202 KAR 7:560-Ground vehicle staff.
- » Approved KBEMS Budget for 2019-2020.
- » Distributed Ambulance Block grants to 104 agencies totaling \$1,040,000.00.
- » Promulgated an amendment to Administrative Regulation 202 KAR 7:020- Board Organization.
- » Approved 2019-2020 Board/Committee/ Subcommittee Schedule.
- » The KBEMS Executive Director requested an audit of the organization. Audit findings were presented to the board.
- » Presented recognition to Dr. Jeff Thurman as first physician in Kentucky to be board certified in Emergency Medical Services from a Kentucky-based EMS Residency program.

- » Received and filled 116 Open Records during the calendar year.
- » Conducted investigations of 60 complaints lodged against individuals, agencies, and TEIs.
- » Issued 54 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 6,409 criminal background checks for applicants for certification/licensure renewal.
- » Scheduled and provided staff facilitation and resources for Board, Standing Committee, Subcommittee, Task Force and Preliminary Inquiry Board meetings.
- » Submitted Coordinated requests for Advisory Opinions.
- » Submitted the following administrative regulations for approval to the Legislative Research Commission:
  - 202 KAR 7:020- Board Organization
  - 202 KAR 7:520- Block Grant Funding
  - 202 KAR 7:560- Ground Vehicle Staff
  - 202 KAR 7:575- Fee schedules of licensed ambulance providers



## CURRENT BOARD PROJECTS MOVING #KYEMSFORWARD

- » Development of online continuing education training for EMS professionals.
- » Development of EMS Physician Medical Director training and credentialing program.
- » Implementation of the statewide C.A.R.E.S. program to enhance cardiac arrest survival.
- » Development of online sexual violence awareness training platform.
- » Continued development of EMS recruitment and retention strategies.

# MEET OUR COMMITTEES



The Kentucky Board of Emergency Medical Services has multiple committees and subcommittees, made up of both members on non-members of the board, that meet throughout the year to focus on specific topics and initiatives.

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.

Subcommittees serve in an advisory role to their respective standing committee and the Board by providing guidance in terms of strategic planning, policy development and organization.

Meeting dates and minutes are available at: [kyems.com](http://kyems.com).

## COMMITTEES OF THE BOARD

**EXECUTIVE COMMITTEE**

**EDUCATION COMMITTEE**

**EMS-C COMMITTEE**

**DATA COLLECTION COMMITTEE**

**MEDICAL OVERSIGHT COMMITTEE**

## SUBCOMMITTEES OF THE BOARD

**CARDIAC & STROKE CARE**

**MOBILE INTEGRATED HEALTHCARE &**

**COMMUNITY PARAMEDICINE**

# MEET OUR COMMITTEES

## EXECUTIVE COMMITTEE

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



(a) 202 KAR 7:020 - Board Organization: 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.

### MEMBERS

**ASHLEY POWELL, CHAIR**  
**JOE PREWITT, VICE-CHAIR**  
**CARLOS COYLE**  
**JIM DUKE**  
**TRACEY FRANKLIN**  
**WILLIAM HAUGH**  
**DAVID WEBB**

### EX OFFICIO

**MICHAEL POYNTER**  
**KBEMS EXECUTIVE DIRECTOR**  
  
**CHUCK O'NEAL**  
**KBEMS DEPUTY EXECUTIVE DIRECTOR**



# MEET OUR COMMITTEES

## 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

**DEBBIE BERRY, CHAIR**  
**MICHAEL REYNOLDS,**  
**VICE-CHAIR**

**CHUCK CREMEANS**  
**DAVID FIFER**  
**TRACEY FRANKLIN**  
**TIM MAY**

### EX OFFICIO

**ROBERT ANDREW**  
**KBEMS 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

**DR. WALT LUBBERS, CHAIR**    **BRANDON REMELY**  
**JOHN HOLDER, VICE-CHAIR**    **ROBBIE SMITHER**  
**JEREMY JEFFREY**    **DR. JEFF THURMAN**  
**STEVE LISTERMAN**

### EX OFFICIO

**DR. JULIA MARTIN**  
**KBEMS STATE MEDICAL ADVISOR**  
**CHUCK O'NEAL**  
**KBEMS DEPUTY EXECUTIVE DIRECTOR**

# MEET OUR COMMITTEES

## 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, M.D., CHAIR**

**MORGAN SCAGGS, EMT-P, VICE-CHAIR**

**MARGARET GUPTON, EMT-P**

**ERIKA JANES, RN**

**LANDON JONES, M.D.**

**MARK MCDONALD, M.D.**

**SUSAN POLLACK, M.D.**

**MELANIE TYNER-WILSON**

**CAROL WRIGHT, RN**

### EX OFFICIO

**SCOTTIE DAY**

**DAVID FOLEY**

**SANDRA HERR**

**BARI LEE MATTINGLY**



## DATA 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

<b>MIKE ROGERS, CHAIR</b>	<b>JOE PREWITT</b>
<b>BRIAN BAKER,</b>	<b>DR. TIM PRICE</b>
<b>VICE-CHAIR</b>	<b>SARAH ROBESON</b>
<b>TRISH COOPER</b>	<b>JASON SIWULA</b>

### EX OFFICIO

**DREW CHANDLER**  
**KBEMS DATA ADMINISTRATOR**

**MONICA ROBERTSON**  
**KBEMS DATA ANALYST**



# OUR ACCOMPLISHMENTS

## FIELD OPERATIONS

- » Began enforcement of new KBEMS Ground Ambulance Regulations: 202 KAR 7:501; 202 KAR 7:545; 202 KAR 7:550; 202 KAR 7:555; and 202 KAR 7:560.
- » Created and rolled out new license renewal and inspection process that combined the two processes and streamlined processing.
- » Updated all KBEMS inspection checklists to reflect new KBEMS Ground Ambulance Regulations.
- » Updated KBEMS Agency License & Vehicle Inspection Manual to version 2.1.
- » All KBEMS Field Staff completed National Certified Investigator Training Basic Program from the Council on Licensure, Enforcement & Regulation.
- » Director of Field Operations attended the National Association of EMS Officials Annual Meeting in Salt Lake City, UT and continued participation with the NASEMSO Agency & Vehicle Licensure committee.

Inspection Requirement	Regulation/ Statute Violated	Number of Violations
(b) Be maintained in good operating condition and in full repair without obvious apparent problems relating to tires, exhaust, body integrity, warning devices, or mechanical reliability, which would be recognized by the average lay person who is not an automotive mechanic.	202 KAR 7:550 Section 1(1)(b)	2
Stow all equipment weighing three (3) pounds or more in an enclosure, bracket, mount, or other appropriate securing device.	202 KAR 7:550 Section 1(1)(d)	5
The air-conditioning system shall minimally deliver a temperature of sixty-five (65) degrees Fahrenheit or less from the vent or vents in the driver and patient compartments in warm weather conditions as determined by a standard automotive testing thermometer.	202 KAR 7:550 Section 1(3)(a)	1
The heating system shall minimally deliver a temperature of eighty-five (85) degrees Fahrenheit or more from the vent or vents in the driver and patient compartments in cool weather conditions as determined by a standard automotive testing thermometer.	202 KAR 7:550 Section 1(3)(b)	1
The patient care area lighting shall be fully functional.	202 KAR 7:550 Section 1(3)(d)	2
All linen used for patient care including sheets, blankets, pillowcases, pillows, towels, and washcloths shall be stowed in a separate cabinet and secured from body fluids. (b) One (1) pillow, one (1) pillowcase, one (1) fitted sheet, two (2) flat sheets, one (1) towel, and two (2) blankets may be utilized on the stretcher that is in-service and shall not require stowing.	202 KAR 7:550 Section 1(7) (a, b)	1
Each ambulance equipped with a mobile two-way radio with a control point in driver's and patient compartment. Radios must have capability, under normal conditions, of operating on agency, dispatch center, mutual aid and hospital frequencies	202 KAR 7:550	14
Capability to communicate on all VHF Ky State Mutual Aid Frequencies, per the Ky Field Operations Guide	202 KAR 7:550	9
Two (2) sources of suction apparatus, one (1) of which shall be mechanically operated	202 KAR 7:550 Sec 2(2)(a)1	1
Blind-Insertion Airway Device (BIAD) (adult and pediatric)	202 KAR 7:550 Sec 2(2)(a)8	1
An AED with a minimum of two (2) complete sets of pads suitable for adult and pediatric populations for all non-ALS vehicles	202 KAR 7:550 Sec 2(2)(d)11	4
Pulse oximeter with pediatric and adult probes	202 KAR 7:550 Sec 2(2)(d)12	3
A length-based resuscitation tape or a reference material that provides appropriate guidance for pediatric drug dosing and equipment sizing based on length or weight	202 KAR 7:550 Sec 2(2)(d)13	3

[CONTINUED ON PAGE 14]



# OUR ACCOMPLISHMENTS

## FIELD OPERATIONS

Inspection Requirement	Regulation/ Statute Violated	Number of Violations
OB Supplies	202 KAR 7:550 Sec 2(2)(d)	1
A pediatric transport device with a minimum weight range of ten (10) to forty (40) pounds	202 KAR 7:550 Sec 2(2)(i)	8
A stair chair for the movement of patients in a seated position.	202 KAR 7:550 Sec 2(2)(j)	3
A disposable bed pan	202 KAR 7:550 Sec 2(5)(c)	1
0-4, straight Miller	202 KAR 7:550 Sec 3(2)(a)2a	1
2-4, curved Macintosh	202 KAR 7:550 Sec 3(2)(a)2b	1
Long-large bore needles or angiocatheters (at least 3.25 inches in length for needle chest decompression in large patients)	202 KAR 7:550 Sec 3(2)(c)4	4
A minimum of ten (10) triage tags consistent with START System of Triage	202 KAR 7:550 Sec 2(2)(d)4	2
Minimum Staffing Requirements (Class III)	202 KAR 7:560 Sec 1(6)	1
Personnel Files	202 KAR 7:555 Section 2(1)(c)	11
Each agency shall maintain a policy or affiliation agreement with the primary call-taking center that provides dispatch services for all or part of the service area of the ground agency.	202 KAR 7:555 Section 3(10)	1
A licensed agency shall have a written plan to assure all requests for service shall be promptly answered	202 KAR 7:555 Section 3(5)	1
A written plan for the quality assessment of patient care and provider quality improvement	202 KAR 7:555 Section 2(1)(j)	1
A plan and records for the provision of continuing education for staff and volunteers	202 KAR 7:555 Section 2(1)(f)	1
A policy for the provision of a pre-employment and annual health assessment of employees of the agency	202 KAR 7:555 Section 2(1)(d)	2
Providing unauthorized level of service	202 KAR 7:560 Sec 1	1
A standby or backup power source other than the one (1) contained in the isolette (Class III, Neonatal Subclassification)	202 KAR 7:550 Sec 6(b)	1
A written orientation program for all personnel	202 KAR 7:555 Section 2(1)(l)	1
A written plan for providers to consult with online adult and pediatric medical direction.	202 KAR 7:555 Section 2(1)(e)	1
Epinephrine on ambulance	KRS 311A.195	1

## EMSC

### 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.

By the end of 2019, 53% of 911-responding ground EMS services had designated a Pediatric Emergency Care Coordinator (PECC).

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

In 2017, 21% of KY agencies met this metric and reassessment will be completed in 2021.

A recent study "found that the availability of a PECC in an agency is associated with increased frequency of pediatric psychomotor skills evaluations.

\*Hilary A. Hewes, Michael Ely, Rachel Richards, Manish I. Shah, Stephanie Busch, Diane Pilkey, Katherine Dixon Hert & Lenora M. Olson (2018): Ready for Children: Assessing Pediatric Care Coordination and Psychomotor Skills Evaluation in the Prehospital Setting, Prehospital Emergency Care, DOI:

- » 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 served as Chair 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.
- » Hosted the 3rd annual meeting of the Kentucky Pediatric Emergency Care Coalition, a collaborative effort focused on improving pediatric emergency care in the emergency department.
- » Recognized two additional hospital emergency departments as Pediatric Ready, bringing the total number of recognized facilities to five.

Recognized 13 EMS Agencies for commitment to improving Pediatric Emergency Care:

Buechel Fire Protection District  
Burlington Fire Protection District  
Georgetown Scott County EMS  
Hebron Fire Protection District (2nd yr)  
Kings Daughters Medical Transport  
Madison County EMS (2nd yr)  
The Medical Center EMS (2nd yr)  
Mercy Regional EMS  
Murray Calloway County Hospital Ambulance Service  
Oldham County EMS  
Pikeville Fire and EMS  
Somerset Pulaski County EMS  
Whitley County EMS

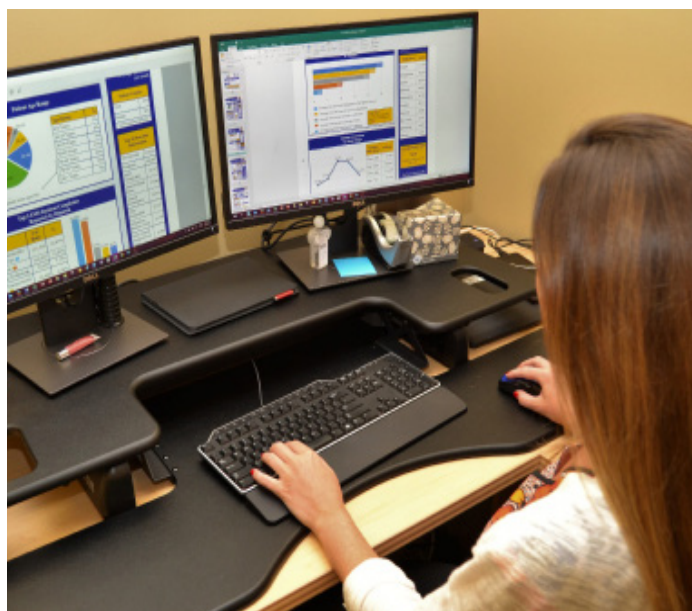


# OUR ACCOMPLISHMENTS

## DATA

- » Awarded a grant from the Kentucky Transportation Cabinet's Office of Highway Safety for \$93,440.00 to continue work on the Kentucky State Ambulance Reporting System (KSTARS) data program.
- » Initiated conversion of PDF forms and checklists to web pages for streamlined edits and mobile user experience improvement
- » Provided Using Your Agency's Data for Publications lecture at the ImageTrend Connect User Conference and Training in St. Paul, MN.
- » Recommended revisions to the 202 KAR 7:540 Data Collection Regulation.
- » Collected supplemental data for the Mobile Integrated Healthcare / Community Paramedicine Pilots for program evaluation.
- » Developed and released a real-time lookup of provider credentials and companion certifications on an updated provider card.
- » Executed a data sharing agreement for use of Biospatial analytic tools.
- » Participated with the Kentucky Highway Safety Traffic Records Advisory Council.
- » Data Administrator Drew Chandler was elected Secretary of the National Association of State

- EMS Officials' Data Manager Council.
- » Participated with the FEMA Regional Emergency Communication Coordinating Workgroup.
- » Testified in US Department of Transportation's Occupant Protection Assessment for Kentucky.
- » Collaborated with Kentucky Office of Rural Health to apply for a grant to participate in the Cardiac Arrest Registry to Enhance Survival (CARES).
- » Performed daily administration and maintenance activities to ensure operational readiness of all systems.



### KSTARS AND KEMSIS HIGHLIGHTS

**894,155**

Incident reports received in KSTARS

**2,153**

Customer support cases fielded

**115**

Requested software enhancements for  
KEMSIS and KSTARS

**57**

Open Records requests processed for  
KEMSIS data

**49**

Open Records requests processed for  
KSTARS data



# OUR ACCOMPLISHMENTS

## EDUCATION & TRAINING



- » Finalized and submitted revisions to 202 KAR 7:201, 7:301, 7:330, 7:401, and 7:601 to remove antiquated and adverse language from regulations to improve retention and speed up issuance of initial certification and licensure.
- » Completed testing and implemented final production of revised EMS provider applications to lessen the time and paperwork burden on EMS providers applying for certification and/or licensure and to reduce time of issuing certification and/or licensure to same day if application is complete.
- » Completed over 20,000 digital conversions of certification and licensure files into the Kentucky Emergency Medical Services Information System (KEMSIS).
- » Continued support of the online module for "Telephone-Cardiopulmonary Resuscitation (T-CPR)" course for telecommunicators, which fulfills the requirements described in Senate Bill 142 (2018). This course is for telecommunicators (dispatchers) that need to comply with training requirements mandated by KRS 15.550, KRS 15.585 and KRS 15.530 to 15.590. To date 782 telecommunicators and emergency managers have completed the training.
- » Created and implemented the online module for First Responder Opioid Awareness and Exposure Training in cooperation with the Kentucky Department for Public Health. The First Responder Opioid Awareness and Exposure Training provides unified, scientific, evidence-

- based recommendations to first responders so they can protect themselves when the presence of opioids is suspected during their daily activities. To date over 2,000 emergency service providers have completed the training.
- » Created and implemented the online module for Alpha-gal, an emerging allergic syndrome spreading across the southern U.S. The Alpha-gal training course will provide an overview of Alpha-gal syndrome (AGS), including causes, signs and symptoms, emergency treatment, diagnosis and management, and prevention to increase awareness of the syndrome in Kentucky. In the three months since its release 82 emergency service providers have completed the training.
- » In cooperation with The Kentucky Association of Sexual Assault Programs created and implemented the Sexual Violence Awareness Train the Trainer Course. The purpose of the Sexual Violence Awareness Train the Trainer Course is to establish trainers across the state to provide Sexual Violence Awareness Training for EMS responders in their service regions. This course is required for KBEMS certified educators to teach the new Sexual Violence Awareness Course required by KRS 311.A120, (3) Effective June 27, 2019. Over 100 emergency medical educators across the state completed the course.

[CONTINUED ON PAGE 18]

# OUR ACCOMPLISHMENTS

## EDUCATION & TRAINING

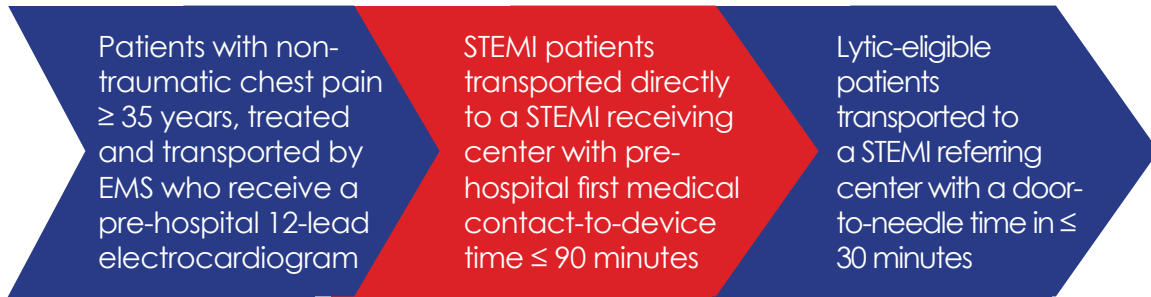
- » In cooperation with The Kentucky Office for Rural Health KBEMS offered the EMS Leaders in Kentucky Summit (EMS LINKS) in Frankfort, Kentucky in which 128 EMS leaders attended to learn about current trends and best practices of leadership and management in EMS.
- » The KBEMS Director of Education, Robert Andrew successfully completed and became certified as a National Certified Investigator & Inspector through the Council on Licensure, Enforcement and Regulation.
- » Participated with the National Association of State EMS Officials Personnel Licensure Council and Education Committee.
- » Participated with the FBI-InfraGard National Awards Committee for the selection of recipients for the InfraGard National Congress Awards Ceremony.
- » Participated with the Kentucky State Ebola Assessment Team to determine minimum compliance and readiness as an identified Ebola Assessment Hospital.
- » Participated with the Kentucky Medical Orders for Scope of Treatment Coalition.
- » Automated the EMS-TEI renewal process to lessen the time and paperwork burden on EMS-TEI's. Quality measures through random audits are in place to measure compliance.
- » Conducted 105 EMS provider continuing education audits.
- » Conducted 18 Emergency Medical Services – Training and Educational Institution audits.
- » Conducted 19 Emergency Medical Services – Training and Educational Institution inspections for initial certification and upgrades.
- » Issued 163 (2018 numbers) initial EMS certification course approval numbers. This includes Emergency Medical Responder, Emergency Medical Technician, Advanced Emergency Medical Technician, and Paramedic Courses.
- » Issued 16 continuing education course approvals for Kentucky EMS/Healthcare symposiums.
- » Issued 7 plans of corrections to Emergency Medical Services – Training and Educational Institutions for regulatory violations.
- » Issued 7,707 (2018 numbers) EMS provider certifications and/or licenses.
- » Issued 98 (2018 numbers) EMS-TEI licenses.
- » Added a QR code to the back of EMS provider certification/licensure cards for easy access and reliable online lookup for certification/licensure verification.
- » Provide daily regulatory and operational guidance to KBEMS certified educators, Emergency Medical Services – Training and Educational Institutions, and other stakeholders regarding EMS certification, licensure, and education.
- » Education Committee created education curriculum for the Kentucky Community Paramedicine Program and continued oversight of the Accreditation Work Group created to identify best practices and develop resources that will promote retention and success for future and existing Paramedic Training and Educational Institutions.



# 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 STEMIs, 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:



## 2018 AHA MISSION: LIFELINE RECIPIENTS

Air Methods Kentucky (joint achievement award- Meade Co. EMS) - Silver Plus

Alexandria Fire District - Bronze Plus

Anchorage Middletown Fire and EMS - Silver Plus

Boyle Co. EMS - Gold

Buechel Fire EMS - Silver Plus

City of Erlanger Fire/EMS - Silver Plus

Georgetown-Scott Co. EMS - Silver Plus

Hardin Co. EMS - Silver

Independence Fire District - Gold Plus

Jessamine Co. EMS - Gold Plus

Lexington Fire and EMS - Silver Plus

Louisville Metro EMS - Gold

Lyon Co. EMS - Bronze Plus

Madison Co. EMS - Gold Plus

Mayfield-Graves Co. Ambulance - Bronze

Medical Center EMS - Gold Plus

Mercy Regional EMS - Bronze Plus

Montgomery Co. Fire & EMS - Silver Plus

Murray Calloway Co. EMS - Silver Plus

Oldham Co. EMS - Silver Plus

Shelby Co. EMS - Gold Plus

Somerset-Pulaski Co. EMS - Bronze Plus



American Heart Association.  
Mission:Lifeline®



# 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 Money Awarded	
2016	\$1,035,870
2017	\$980,000
2018	\$1,060,000
2019	\$1,080,000

## MOST 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

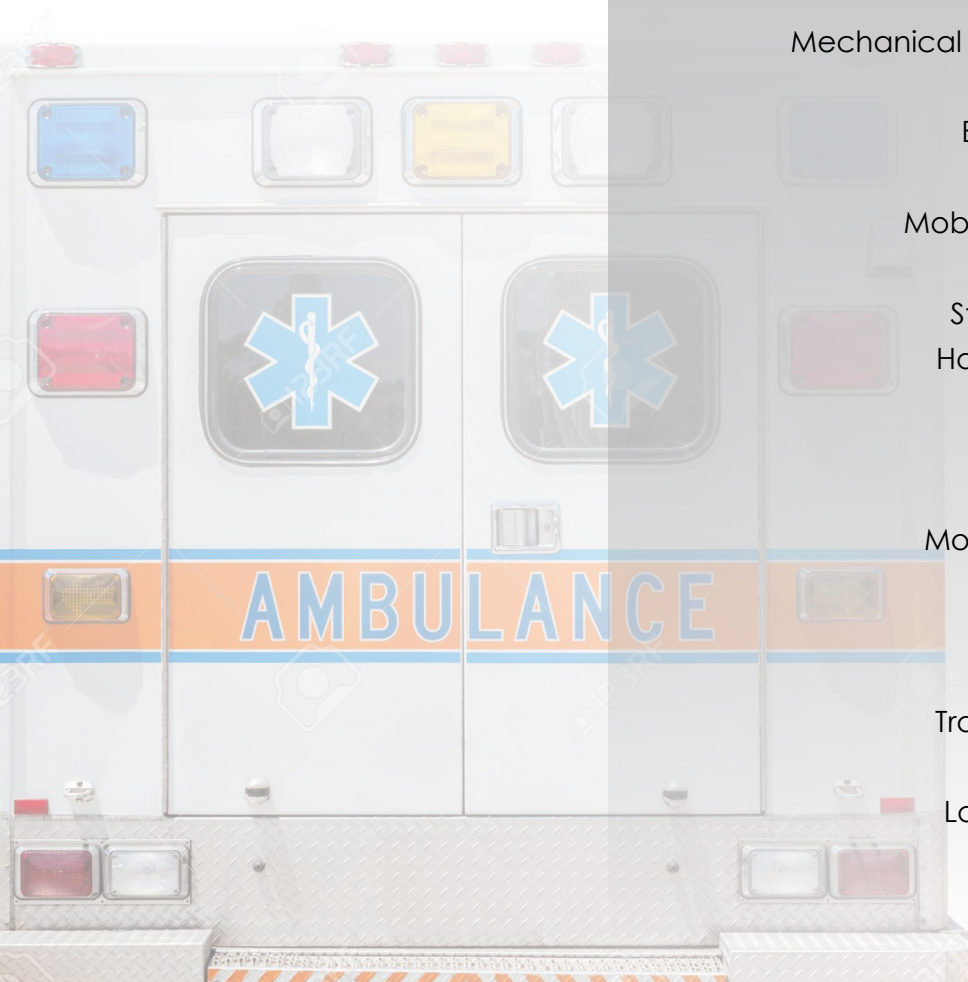
Backboard

Monitor / Defibrillator

Traction Splint

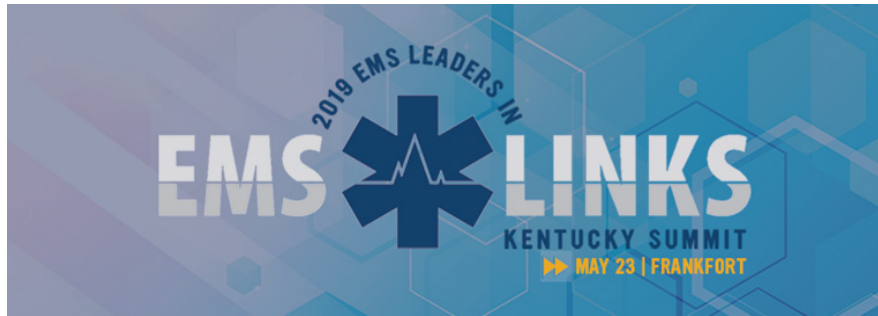
Transport Ventilator

Laptop Computer





# EMS LINKS 2019



KBEMS partnered with the Kentucky Office of Rural Health to host the 2019 EMS LINKS (Leaders in Kentucky Summit) event on May 23 as part of National EMS Week. The event was held in Frankfort at the Buffalo Trace Distillery Clubhouse and was attended by more than 200 EMS professionals who go beyond the call and always remain #EMSstrong. Not only did this opportunity allow all in attendance to reflect on the current state of EMS and where it's headed in the future, but it also gave participants a chance to network and recognize one another for all the sacrifices made in this line of work, a duty that all in attendance feel called to, to carry out.



We were pleased to have a variety of speakers join us to discuss a variety of topics, like:

- » Joseph "Jay" Fitch, PhD; Dancing with Elephants
- » Todd Stout; Building the Right Team - Recruitment & Retention
- » Rob Farmer, BSM, FACPE; The Portrait of a Leader
- » Craig Caudill; The Art of SurTHRIVAL
- » Tim Farmer; Overcoming Obstacles through Hard Work & a Positive Attitude
- » Chris Cebollero; To Lead You Have to Serve: The Art of Servant Leadership



And we could not have done this without the support of our other event partners:

- » Premier Partners: KAPA, Stryker, and Zoll
- » Supporting & Strategic Partners: Air Methods, First Watch, Public Consulting Group, and 911 Billing Services and Consulting, Inc.



# EMS VEHICLES



## 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.



## 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.



## 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. The difference between the two ambulances lies in what types of chassis are used. A Type 3 ambulance is mounted on the cut-a-way chassis of a van, whereas Type I ambulances utilize a truck chassis.



## ROTOR WING

Rotary-wing refers to the rotating "wings" (or blades) 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.



## FIXED WING

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.

**1,142**  
Licensed Ambulances  
**131**  
Vehicles Added

Licensed Vehicles	
Type I	327
Type II	195
Type III	458
Air Rotor Wing	63
Air Fixed Wing	3

\*96 Vehicles with no 'Vehicle Type'

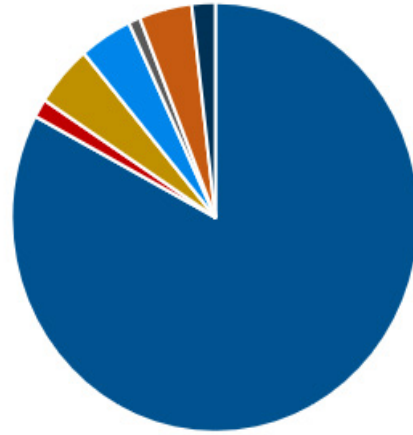


# KENTUCKY AGENCIES

## Kentucky Licensed Agencies

### KY Licensed Agencies

Classification	#	%
Class I	178	83%
Class II	3	1%
Class III	10	5%
Class IV	9	4%
Class VI	2	1%
Class VII	9	4%
Class VIII	4	2%
<b>Total</b>	<b>215</b>	<b>100%</b>



■ Class 1 ■ Class 2 ■ Class 3 ■ Class 4 ■ Class 5 ■ Class 6 ■ Class 7

### Permit Level

ALS Only	19	ALS & BLS	173
BLS Only	20	ALS - Rotor, ALS/BLS - Fixed	3

### Agency Organization Type

Community, Non-Profit	45	Hospital	22
Fire Department	53	Private, Non-Hospital	57
Governmental/ Non-Fire	38		

**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.

**CLASS VIII** Class VIII services provide BLS or ALS pre-hospital care above the first-aid level at special events, sports events, concerts, or large social gatherings.



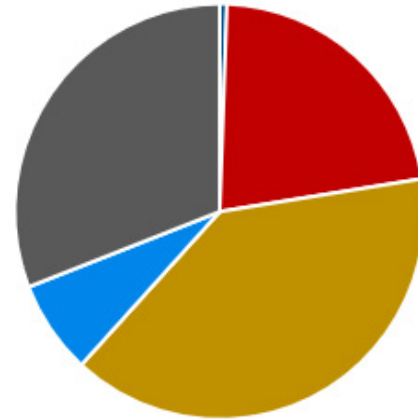
# TRAINING & EDUCATIONAL INSTITUTIONS

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).

## Kentucky Licensed Training & Educational Institutions

### Training & Educational Institution Types

Classification	#	%
EMS-TEI 1	1	<1%
EMS-TEI 2	39	22%
EMS-TEI 3	70	39%
EMS-TEI 4	13	7%
EMS-TEI CE	55	31%
<b>Total</b>	<b>178</b>	<b>100%</b>



■ EMS-TEI 1 ■ EMS-TEI 2 ■ EMS-TEI 3 ■ EMS-TEI 4 ■ EMS-TEI CE

## 164 Courses Issued for 2019

9  
EMR Courses

132  
EMT Courses

17  
AEMT Courses

12  
Paramedic Courses

### 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

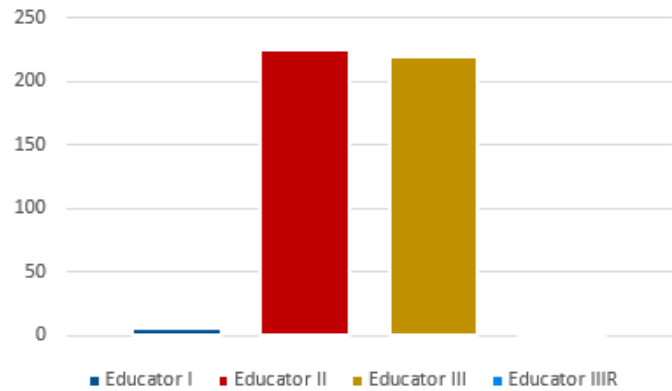
Certified to teach Continuing Education only.



# KENTUCKY EDUCATORS

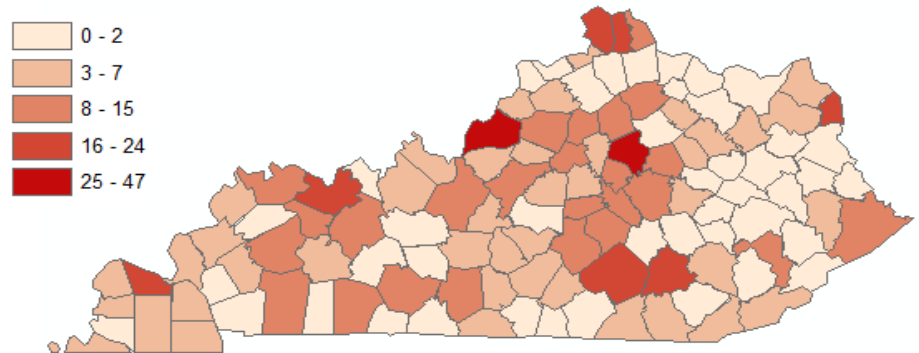
## Kentucky Licensed Educators

Educator Levels		
Level	#	%
Educator I	6	1%
Educator II	225	50%
Educator III	220	49%
Educator IIIIR	2	<1%
<b>Total</b>	<b>453</b>	<b>100%</b>



## KY Educator County of Residence

Top 5 Educator County of Residence
Jefferson
Fayette
McCracken
Pulaski
Boone



## Educator Licenses Issued in 2019

	Educator I	Educator II	Educator III	Educator IIIIR
Initial	2	60	27	0
Renewal	5	173	197	2
Reciprocity	0	0	4	0
Reinstatement	0	0	1	0

### LEVEL

### TEACHING ABILITY

#### Educator I

EMR Initial or Continuing Education Courses

#### Educator II

EMR or EMT Initial or Continuing Education Courses

#### Educator III

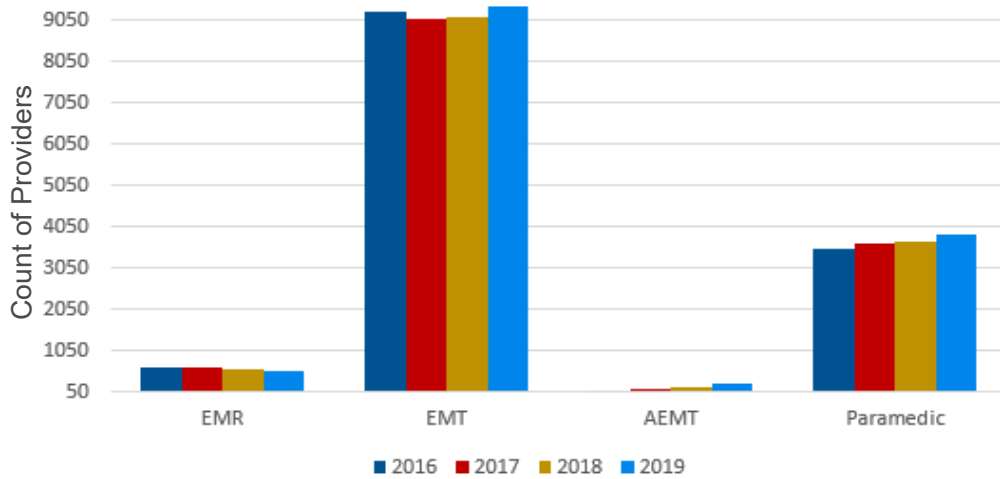
EMR or EMT Initial or Continuing Education Courses;  
AEMT or Paramedic Initial or Continuing Education Courses

#### Educator IIIIR

AEMT or Paramedic Initial or Continuing Education Courses

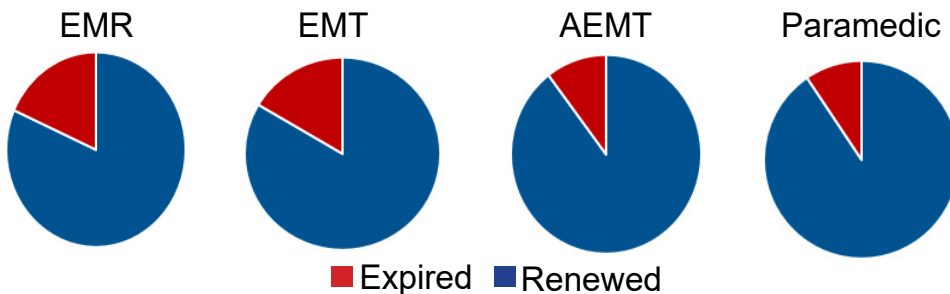
# KENTUCKY PROVIDERS

## Kentucky Certified / Licensed Providers



	2016	2017	2018	2019
EMR	639	632	599	569
EMT	9,257	9,081	9,136	9,370
AEMT	61	102	155	251
Paramedic	3,495	3,632	3,702	3,857
<b>Total</b>	<b>13,452</b>	<b>13,447</b>	<b>13,592</b>	<b>14,047</b>

## 2019 Provider Recertification



	Renewed	Expired	Attrition
EMR	240	54	18.37%
EMT	3,580	707	16.49%
AEMT	78	9	10.34%
Paramedic	1,506	157	9.44%
<b>Total</b>	<b>5,404</b>	<b>927</b>	<b>14.64%</b>

## 2019 Issued Certifications/Licenses

### Initial

EMR	15
EMT	791
AEMT	81
Paramedic	122
<b>Total</b>	<b>1,009</b>

### Reinstatement

EMR	0
EMT	38
AEMT	1
Paramedic	24
<b>Total</b>	<b>63</b>

### Reciprocity

EMR	0
EMT	150
AEMT	20
Paramedic	128
<b>Total</b>	<b>298</b>

### Temporary

EMR	0
EMT	8
AEMT	0
Paramedic	2
<b>Total</b>	<b>10</b>

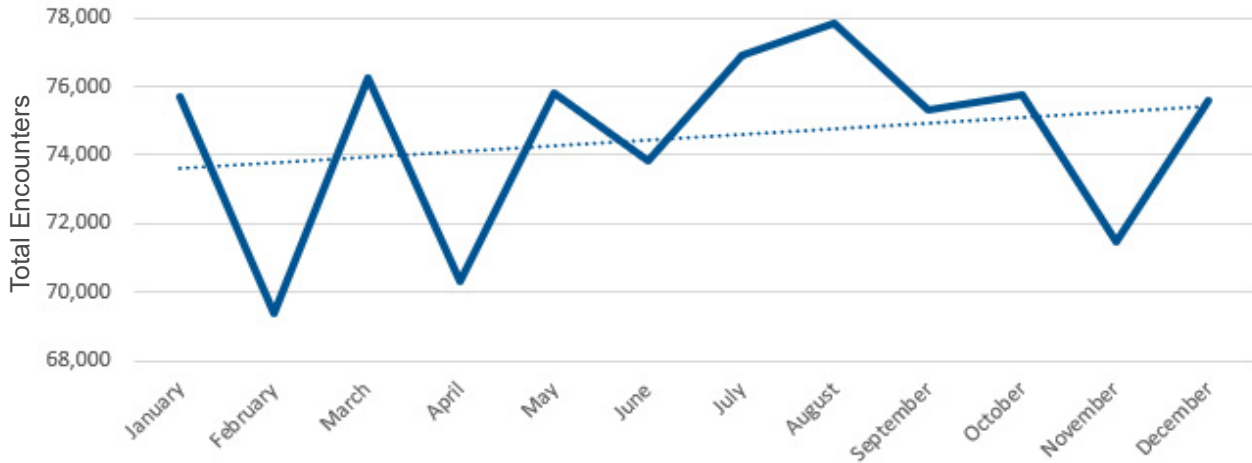


# KENTUCKY INCIDENTS

**894,155**

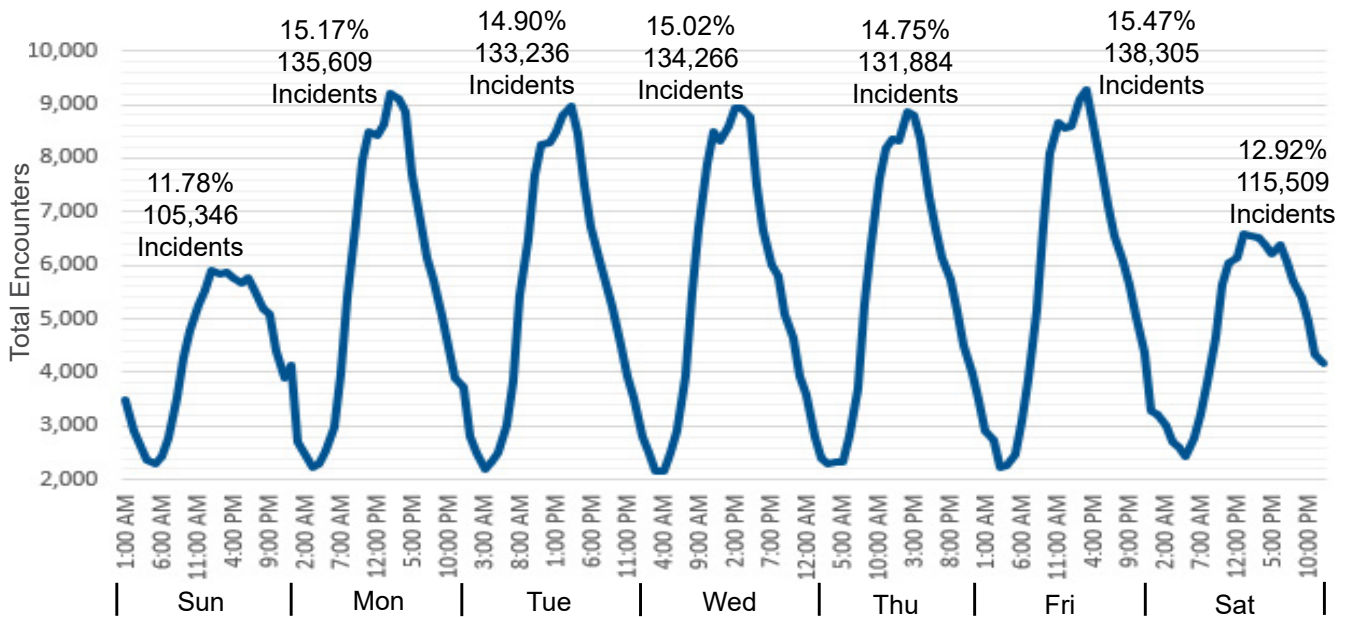
EMS Incidents Reported to KSTARS within 2019

## Monthly Incidents Reported to KSTARS



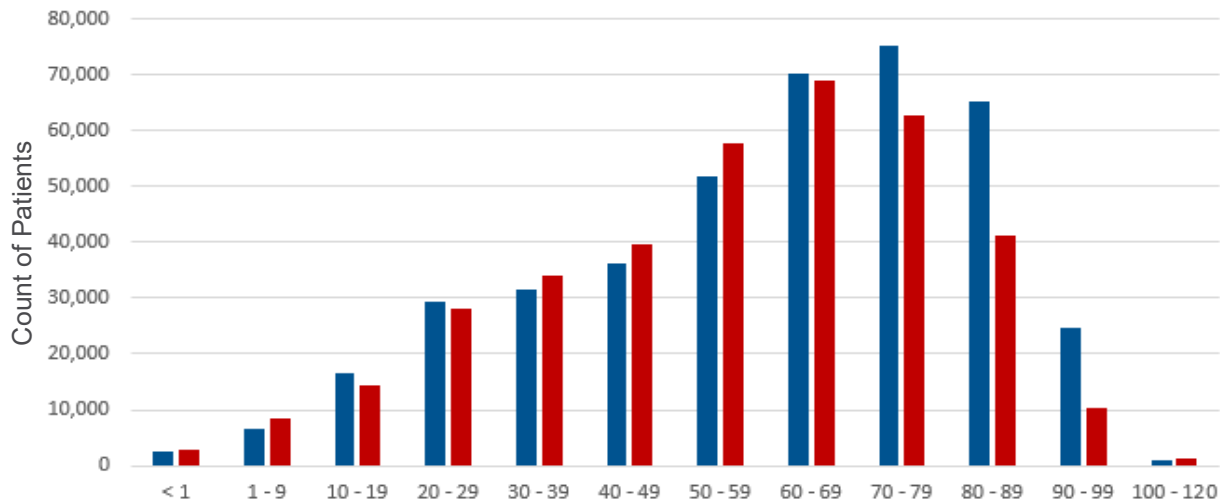
January	75,720	May	75,822	September	75,296
February	69,373	June	73,853	October	75,754
March	76,232	July	76,899	November	71,456
April	70,337	August	77,844	December	75,569

## Incident Peak Times by Day of Week



# KENTUCKY INCIDENTS

## Patient Age Range by Gender



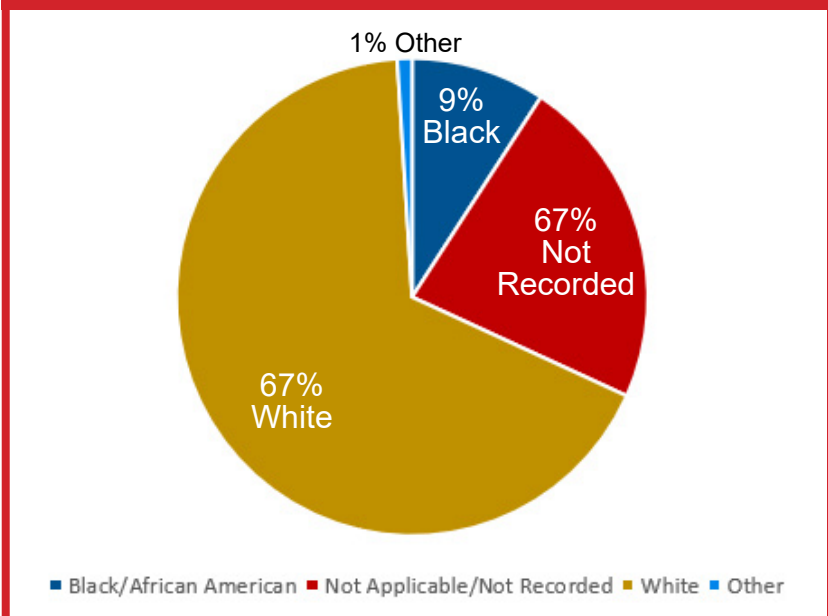
Age Range	Female	Male	Age Range	Female	Male
<1 Years of Age	2,498	2,956	50 - 59 Years of Age	51,709	57,588
1 - 9 Years of Age	6,614	8,364	60 - 69 Years of Age	70,268	69,118
10 - 19 Years of Age	16,614	14,218	70 - 79 Years of Age	75,283	62,803
20 - 29 Years of Age	29,291	28,003	80 - 89 Years of Age	65,101	41,197
30 - 39 Years of Age	31,430	34,159	90 - 99 Years of Age	24,682	10,424
40 - 49 Years of Age	36,082	39,699	100 - 120 Years of Age	1,076	1,303

\*113,675 Incidents missing either age and/or gender data.

## Top 10 Patient Residence by County

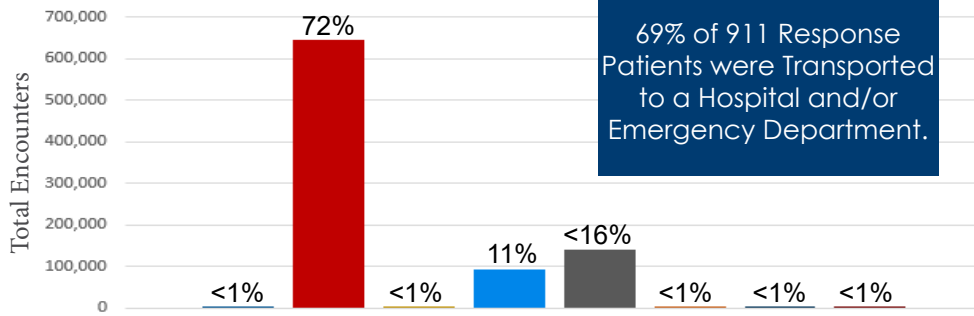
County	#
1. Jefferson	137,051
2. Fayette	43,626
3. Kenton	21,641
4. Clark	18,208
5. Warren	17,297
6. Floyd	15,250
7. Madison	14,974
8. Hardin	14,379
9. Daviess	13,799
10. Boone	13,199

## Patient Race



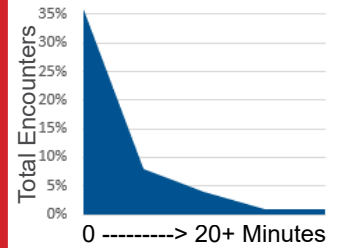
# KENTUCKY INCIDENTS

## Type of Service Requested



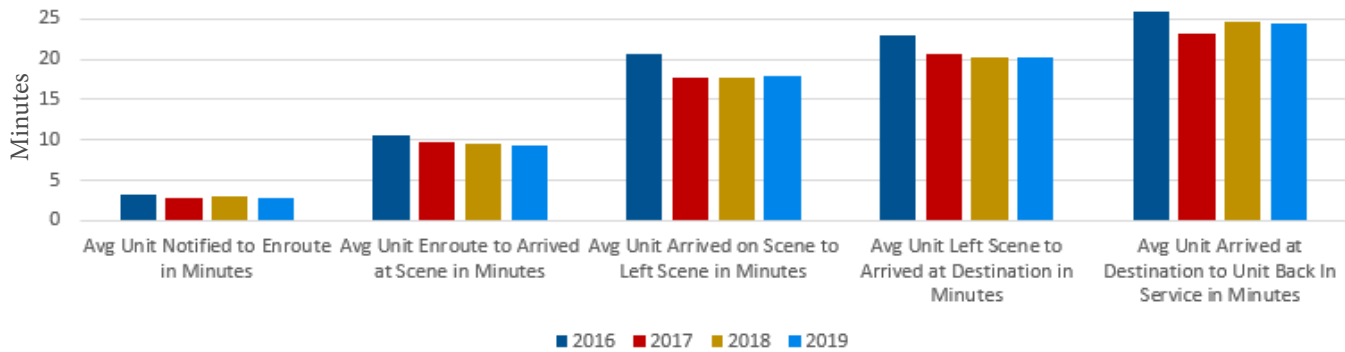
911 Response	645,285	Standby	4,313
Medical Transport	141,180	Not Recorded	21
Interfacility Transport	94,481	Mutual Aid	4,050
Public Assistance/Other	4,266	Intercept	574

## Mileage to Scene



0 to < 5	36%
5 to < 10	8%
10 to < 15	4%
15 to < 20	1%
> 20	1%
Not Recorded	50%

## Average Run Times in Minutes



Average Service Response Times	2016	2017	2018	2019
Unit Notified to Enroute	3 Minutes	3 Minutes	3 Minutes	3 Minutes
Unit Enroute to Arrived at Scene	11 Minutes	10 Minutes	10 Minutes	9 Minutes
Unit Arrived on Scene to Left Scene	21 Minutes	18 Minutes	18 Minutes	18 Minutes
Unit Left Scene to Arrived at Destination	23 Minutes	21 Minutes	20 Minutes	20 Minutes
Unit Arrived at Destination to Unit Back in Service	26 Minutes	23 Minutes	25 Minutes	25 Minutes
Average Unit Notified by Dispatch to Unit Back in Service	1.23 Hours	1.14 Minutes	1.15 Minutes	1.15 Minutes



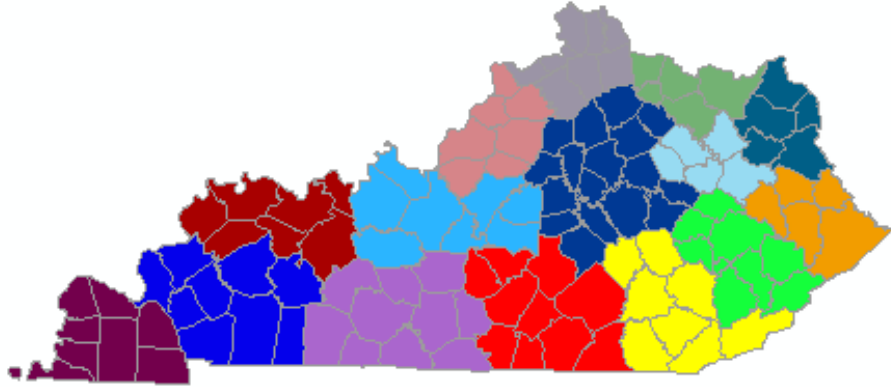
# KENTUCKY INCIDENTS

## Top 10 Complaints Reported by Dispatch & Top Corresponding Provider Impressions

Incident Complaint Reported by Dispatch	Provider Primary Impression	Count of Incidents
1. Transfer/ Interfacility/ Palliative Care (149,717 Incidents)	1. Weakness	24,057
	2. Other Reduced Mobility	18,569
	3. Encounter for Other Specified Aftercare	7,825
2. Sick Person (135,828 Incidents)	1. Weakness	24,104
	2. Pain, Unspecified	8,198
	3. Altered Mental Status	6,833
3. No Other Appropriate Choice (109,767 Incidents)	1. Weakness	28,043
	2. Altered Mental Status	6,752
	3. Encounter for General Examination	6,076
4. Breathing Problem (71,951 Incidents)	1. Respiratory Distress, Acute	21,449
	2. Shortness of Breath	5,958
	3. Weakness	3,506
5. Falls (66,715 Incidents)	1. Injury, Unspecified	12,348
	2. Weakness	7,670
	3. Encounter for General Examination	5,849
6. Traffic/ Transportation Incident (58,642 Incidents)	1. Injury, Unspecified	12,825
	2. Encounter for General Examination	9,383
	3. Back Pain	2,661
7. Chest Pain (Non-Traumatic) (50,488 Incidents)	1. Chest Pain, Unspecified	19,993
	2. Chest Pain, Other [Non-Cardiac]	5,869
	3. Angina (1); or Ischemic Chest Pain (2)	3,023
8. Unknown Problem / Person Down (27,811 Incidents)	1. Altered Mental Status	1,565
	2. Encounter for General Examination	1,389
	3. Obvious Death	1,174
9. Unconscious / Fainting / Near-Fainting (22,746 Incidents)	1. Syncope and Collapse	4,904
	2. Altered Mental Status	2,380
	3. Weakness	1,454
10. Abdominal Pain / Problems (21,825 Incidents)	1. Generalized Abdominal Pain	5,509
	2. Unspecified Abdominal Pain	4,310
	3. Acute Abdomen	2,575

# KENTUCKY INCIDENTS

## Total Call Volume by Region



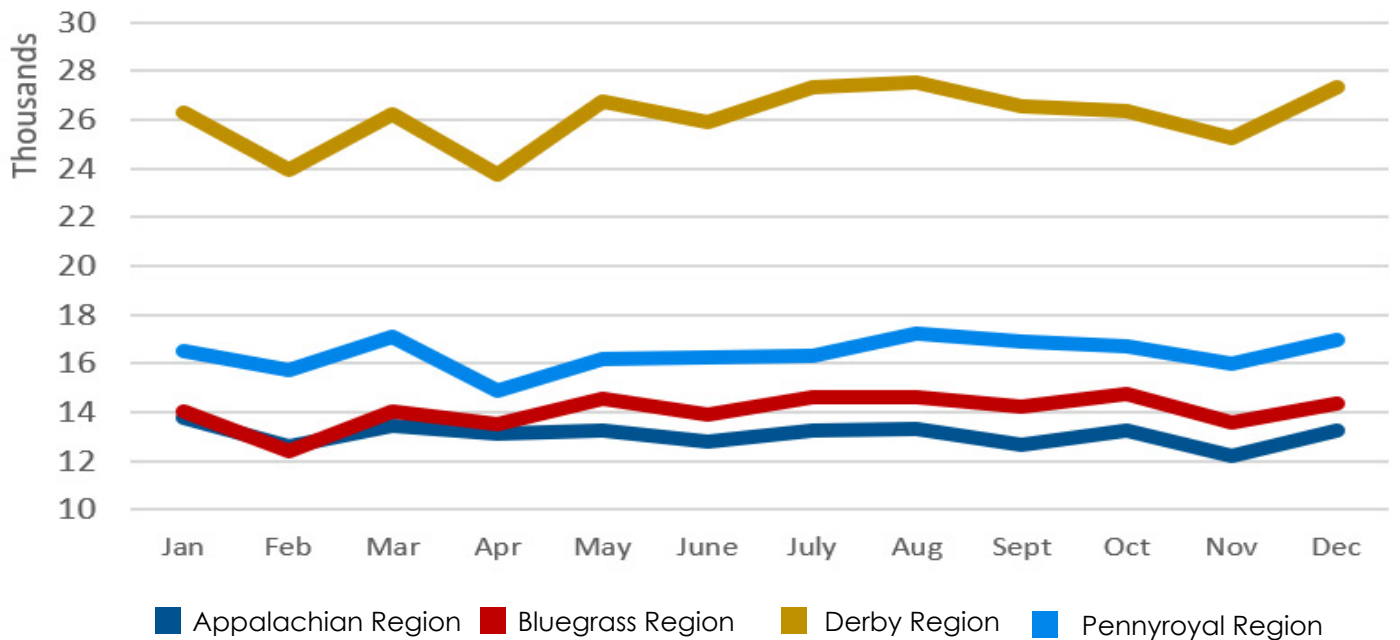
Pennyroyal Region	
District 1	35,212
District 2	32,243
District 3	36,835
District 4	52,247
District 14	40,249
<b>Total</b>	<b>196,786</b>

Derby Region	
District 5	40,905
District 6	202,369
District 7	70,364
<b>Total</b>	<b>313,638</b>

Bluegrass Region	
District 8	9,317
District 15	173,616
<b>Total</b>	<b>182,933</b>

Appalachian Region	
District 9	10,773
District 10	40,507
District 11	39,140
District 12	28,064
District 13	45,945
<b>Total</b>	<b>164,429</b>

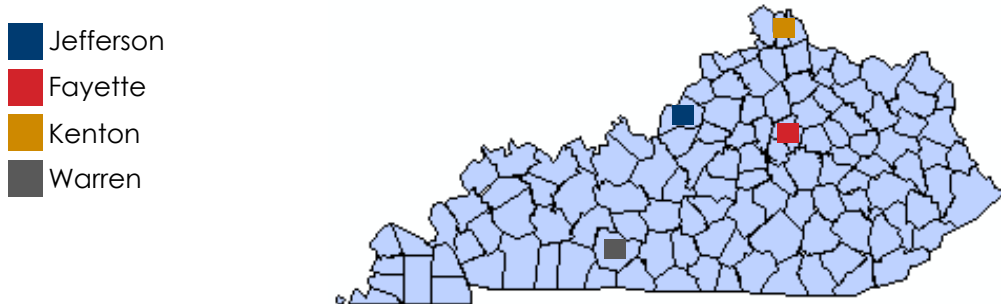
## Monthly Call Volume by Region



# INCIDENT DESTINATIONS

683,489 Patients Transported by EMS

## Top 10 Facility Destinations



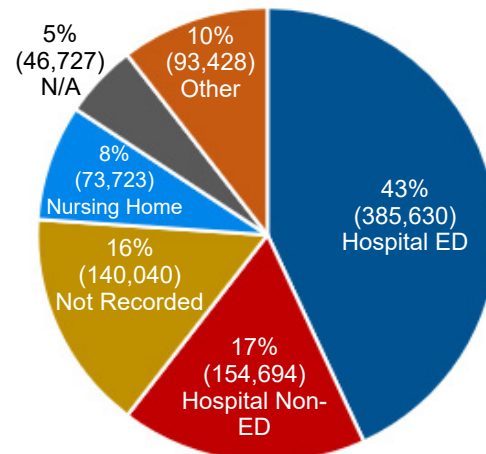
1. University of Louisville Hospital	23,581	6. The Medical Center at Bowling Green	12,724
2. University of KY Hospital	21,766	7. St. Elizabeth Edgewood	12,607
3. Norton HSP/ Norton CHDRN HSP/ Norton Healthcare Pavilion	19,480	8. Jewish Hospital & St. Mary's Healthcare	12,029
4. Baptist Health Louisville	17,653	9. Saints Mary & Elizabeth Hospital	11,408
5. Norton Audubon Hospital	16,140	10. Baptist Health Lexington	10,557

\*Based on Incident Reports Submitted to KSTARS Using a CORRECT Facility ID Code. 791,890 Patients Transports with an INCORRECT or NO Facility ID Code Submitted to KSTARS for CY 2019.

## Transport Mode From Scene

Reason for Choosing Destination	Emergent	Non-Emergent
Closest Facility	44%	13%
Patient's Choice	36%	21%
Patient's Physician's Choice	4%	34%
Protocol	9%	7%
Other	1%	19%
Family Choice	3%	2%
Regional Specialty Center	2%	2%
Insurance Status/ Requirement	<1%	1%
On-Line/On-Scene Medical Direction	<1%	<1%
Law Enforcement Choice	<1%	<1%
Diversion	<1%	<1%
<b>Total Incidents</b>	<b>448,308</b>	<b>190,976</b>

## Destination Type



Other (10%): Blank, 34,290 (37%), Medical Office/Clinic, 23,108 (25%), Home, 20,410 (22%), Other, 9,903 (11%), Other EMS Responder Air, 2,564 (3%), Freestanding ED, 1,615 (2%), Urgent Care, 708 (<1%), Morgue, 451 (<1%), Police, 200 (<1%), Other EMS Responder Ground, 179 (<1%).

# GROUND VS. AIR MED TRANSPORTS

666,929 Ground Transports

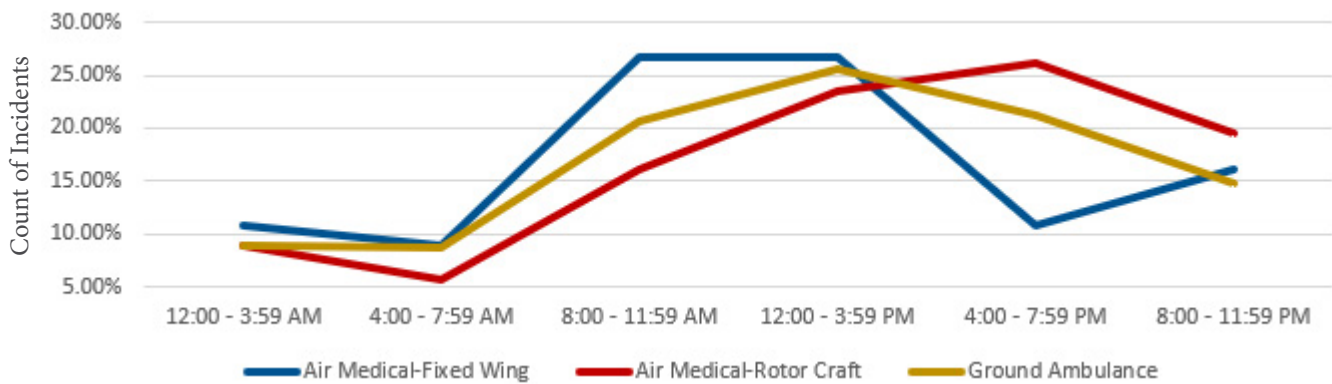
8,694 Air Transports

## Provider Primary Impression

Ground Transports	
Top 5 Primary Impressions	#
Weakness	37%
Altered Mental Status	18%
Not Recorded	16%
Injury, Unspecified	15%
Generalized Abdominal Pain	14%

Air Transports	
Top 5 Primary Impressions	#
Injury, Unspecified	16%
Stroke	12%
Altered Mental Status	8%
Generalized Abdominal Pain	4%
Angina (1); or Ischemic Chest Pain (2)	3%

## Incident Peak Times



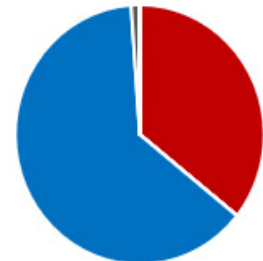
## Type of Service Requested

### Ground Transports



68%	911 Response	36%
<1%	Intercept	<1%
12%	Interfacility Transport	63%
20%	Medical Transport	1%
<1%	Mutual Aid	<1%
<1%	Public Assistance	<1%
<1%	Standby	<1%
<1%	Not Recorded	<1%

### Air Transports



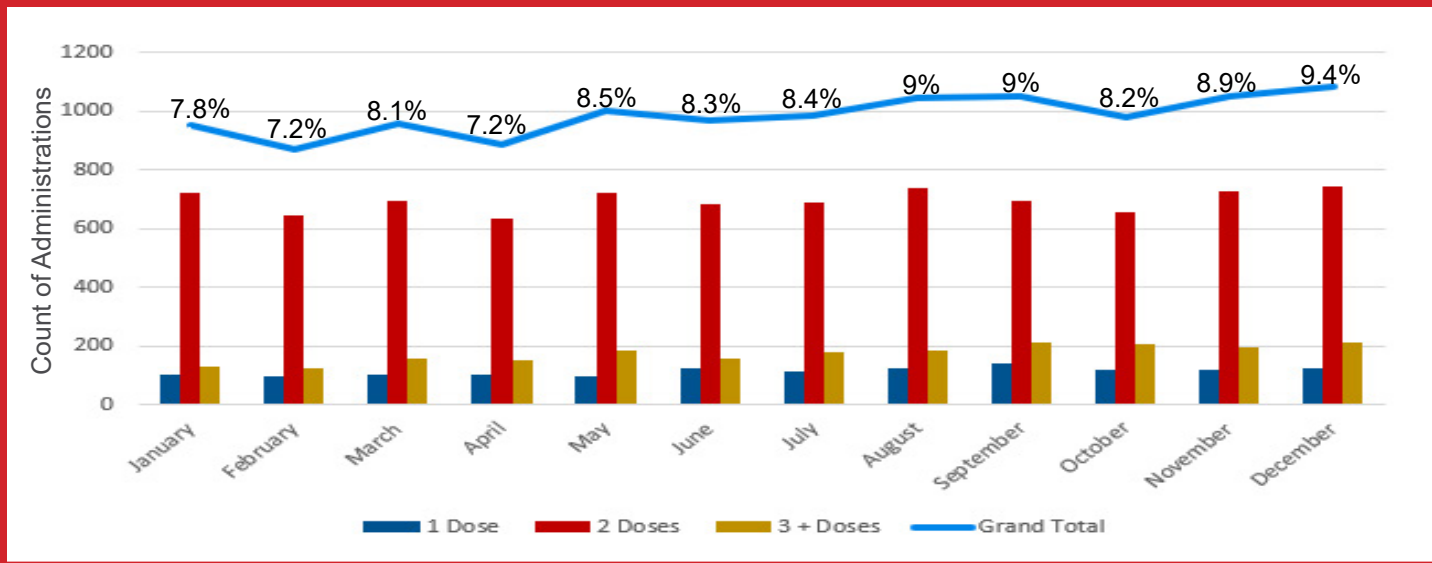
Air Medical - Rotor Wing Transports	8,638	Air Medical - Fixed Wing Transports	56
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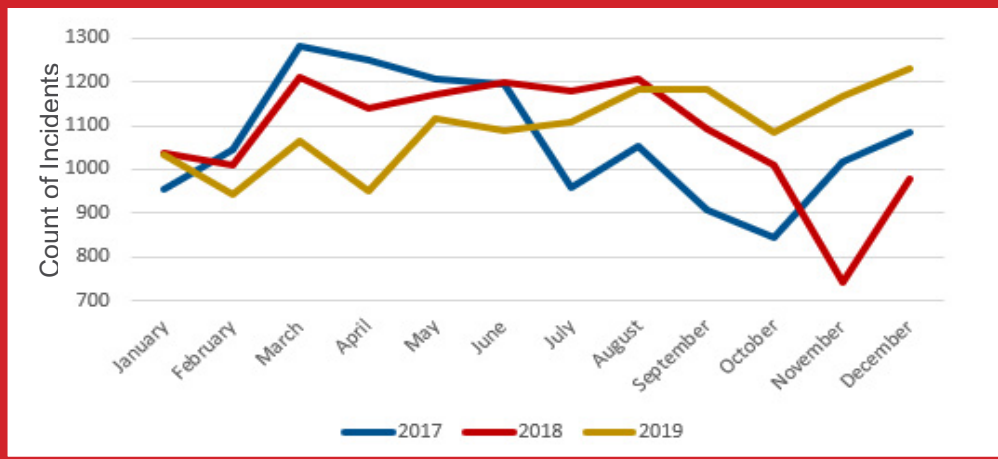
# NALOXONE ADMINISTRATIONS

## 13,144 Naloxone Administrations in CY 2019

### Monthly Naloxone Administrations by Dosage



### Yearly Administrations by Month



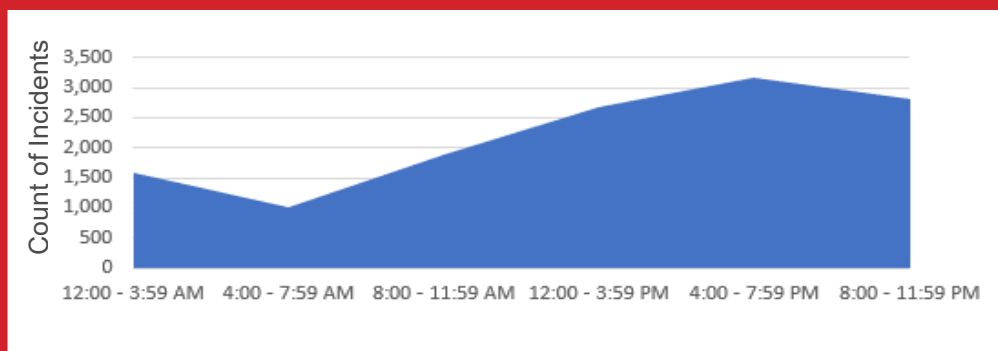
### Patient Condition After Receiving Naloxone

Patient Improved	58%
Patient Unchanged	37%
Patient Worse	<1%
4% of Naloxone Incidents have No Patient Condition Recorded.	

### Top 10 Provider Primary Impressions

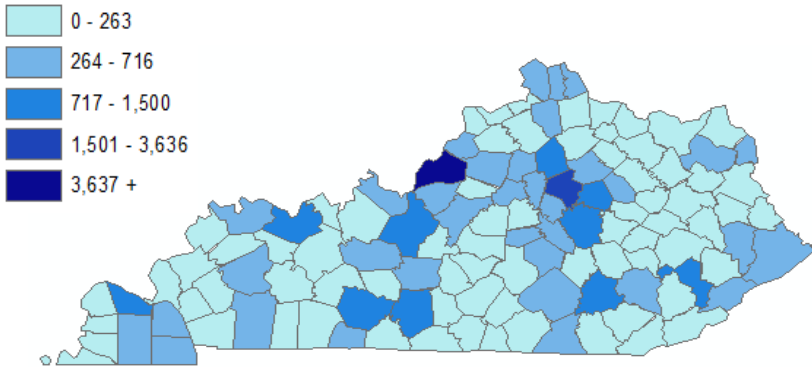
Poisoning by Heroin	25%
Altered Mental Status	15%
Opioid Related Disorders	10%
Cardiac Arrest	9%
Poisoning by Other Opioids	8%
Poisoning by Unspecified Drugs	5%
Poisoning by Other Drugs	5%
Respiratory Distress	2%
Syncope and Collapse	1%
Stroke	1%

### Peak Times



# HIGHWAY SAFETY INCIDENTS

## Traffic / Transportation Incidents



Top 10 Counties  
Where Traffic / Transportation Incidents Occurred

1. Jefferson	11,007	6. McCracken	1,156
2. Fayette	3,636	7. Hardin	1,105
3. Warren	1,500	8. Laurel	1,097
4. Madison	1,417	9. Barren	811
5. Daviess	1,329	10. Scott	785

**58,680**

Traffic/Transportation Incidents Reported by Dispatch.

**1,270**

Mass Casualty Traffic/Transportation Incidents

**13,505**

Traffic Incidents with No Airbag Deployed or No Airbag Present

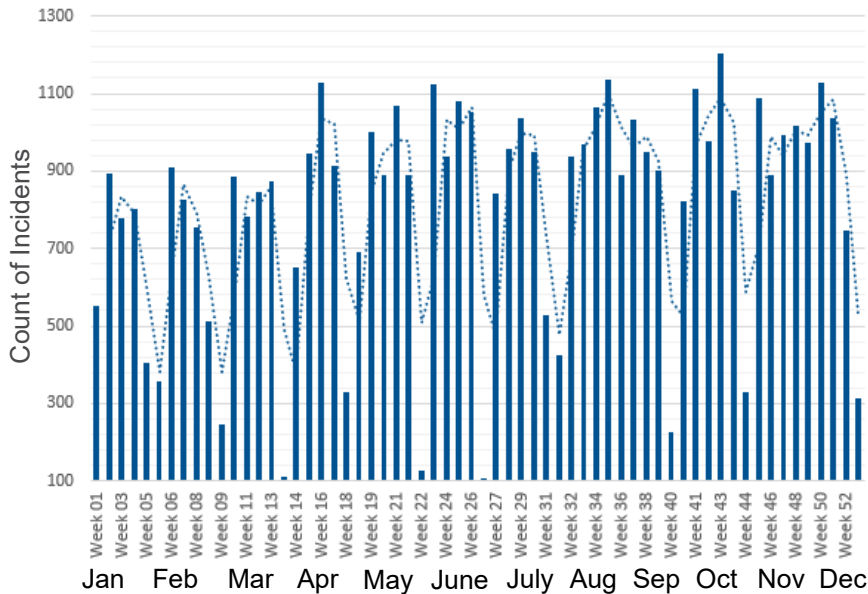
**1,903**

Traffic Incidents with Critical Patient Acuity

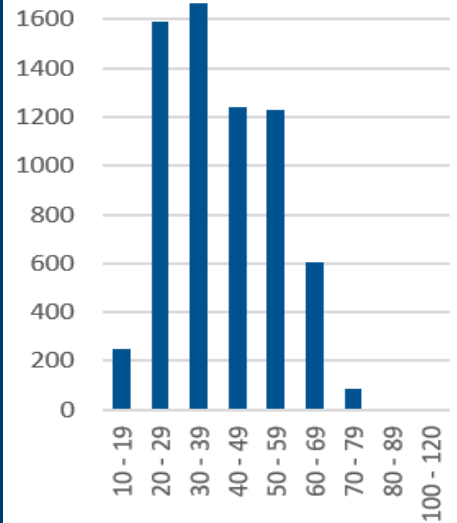
**6,705**

Traffic Incidents with Positive Alcohol / Drug Use Indicators

## Peak Times by Week & Month



## Drug Use Indicators by Patient Age Range



Highway Safety Incidents are defined as incidents where the complaint reported by Dispatch is equal to 'Traffic/Transportation' and Incident Location Type contains any "Highway, Roadway, or Street".

# CARDIAC ARREST INCIDENTS

## Cardiac Arrest Incidents

### Incident Complaint Reported by Dispatch

= "Cardiac Arrest / Chest Pain"	54,765
---------------------------------	--------

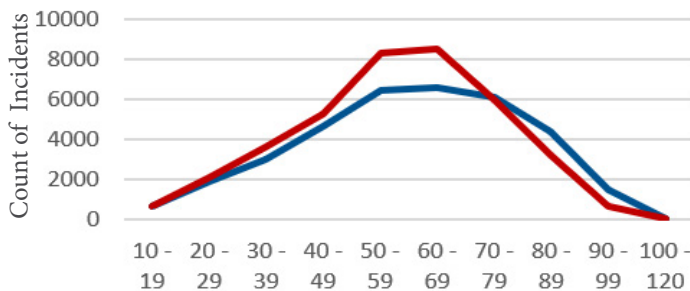
### Provider Primary Impression

Contains Any "Cardiac Arrest, Chest Pain, Cardiac Arrhythmia"	54,483
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### Cardiac Arrest During EMS Event

Contains "Yes"	6,770
Yes, After EMS Arrival	868
Yes, Prior to EMS Arrival	5,902

### Patient Age & Gender

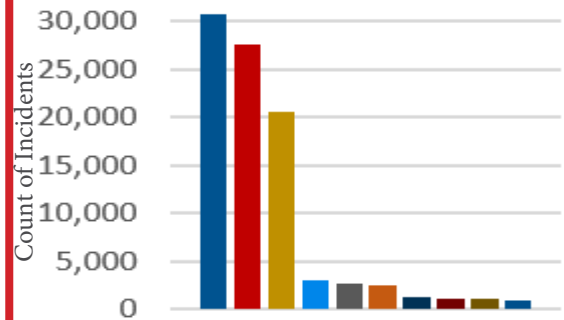


<span style="color: red;">■</span> Male	38,360	<span style="color: blue;">■</span> Female	35,281
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### Patient Age Range

Age Range	Percentage	Age Range	Percentage
<1 Year	<1%	50 - 59 Years	20%
1 - 9 Years	<1%	60 - 69 Years	20%
10 - 19 Years	2%	70 - 79 Years	16%
20 - 29 Years	5%	80 - 89 Years	10%
30 - 39 Years	9%	90 - 99 Years	3%
40 - 49 Years	13%	100 - 120 Years	<1%

### Top 10 Medications Administered to 12 Lead ECG Patients



### Medications Administered

Medication	Count	Percentage
Nitroglycerin	30,695	22%
Aspirin	27,637	20%
Oxygen	20,556	15%
Ondansetron	3,002	2%
Epinephrine	2,702	2%
Sodium Chloride	2,444	2%
Adenosine	1,212	1%
Albuterol	1,133	1%
Morphine	1,024	1%
Fentanyl	914	1%

### CPR Provided Prior to EMS Arrival

#### Return of Spontaneous Circulation

No	64%
Yes	6%
Not Recorded/Not Applicable	30%

Cardiac Arrest incidents are defined as incidents where complaint reported by dispatch is equal to "Cardiac Arrest/Chest Pain" and provider impression contains "Cardiac Arrest/Chest Pain/Cardiac Arrhythmia" or cardiac arrest during EMS event equals yes.

## Top 5 Provider Primary Impressions



## Top 5 Corresponding Provider Secondary Impressions

Not Recorded	Not Recorded	Not Recorded	Not Recorded	Not Recorded
Not Applicable	Weakness	Malaise	Not Applicable	Nausea
Weakness	Malaise	Pain, Unspecified	Altered Mental Status	Not Applicable
Malaise	Pain, Unspecified	Injury of Head	Weakness	Weakness
Other Fatigue	Injury, Unspecified	Not Applicable	Malaise	Malaise

## Top Procedures Administered

Extremity Vein Catheterization	23.69%
Evaluation Procedure	23.01%
12 Lead ECG Obtained	15.41%
3 lead ECG Obtained	9.27%
Moving a Patient to a Stretcher	5.28%
Patient Assessment	4.94%
Spinal Immobilization	2.08%
Glucose Measurement	1.92%
Cardiac Monitoring (Regime/ Therapy)	1.53%
Adult Continuous Physical Assessment	1.21%
Intravenous Insertion	.81%
Monitoring of Preexisting Devices	.67%

## Top Medications Administered

Oxygen	17.32%
Nitroglycerin	2.83%
Aspirin	2.81%
Albuterol	2.17%
Ondansetron	1.89%
Sodium Chloride	1.63%
Naloxone	1.47%
Fentanyl	1.43%
Epinephrine	1.30%
Ipratropium	.79%
Methylprednisolone	.67%
Albuterol / Ipratropium	.63%



# COMMUNITY PARAMEDICINE

The Community Paramedicine Pilot Program's objective is to fill unmet needs to untapped resources, reduce 911 utilization/ED visits, and create partnerships within the community. The data below reflects the year 4, quarters 1 & 2, findings of the MIH/CP Pilot Program (06/01/2019 - 11/30/2019).

30  
Providers Trained

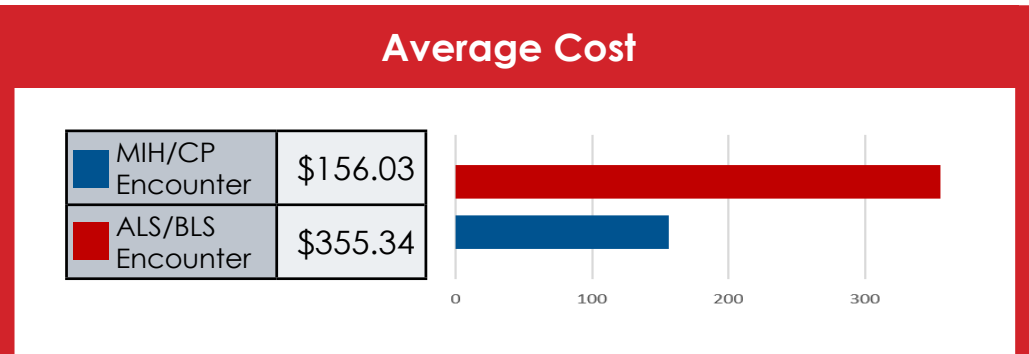
40  
Providers Made Visits

1,344  
Patient Encounters

651  
Initial

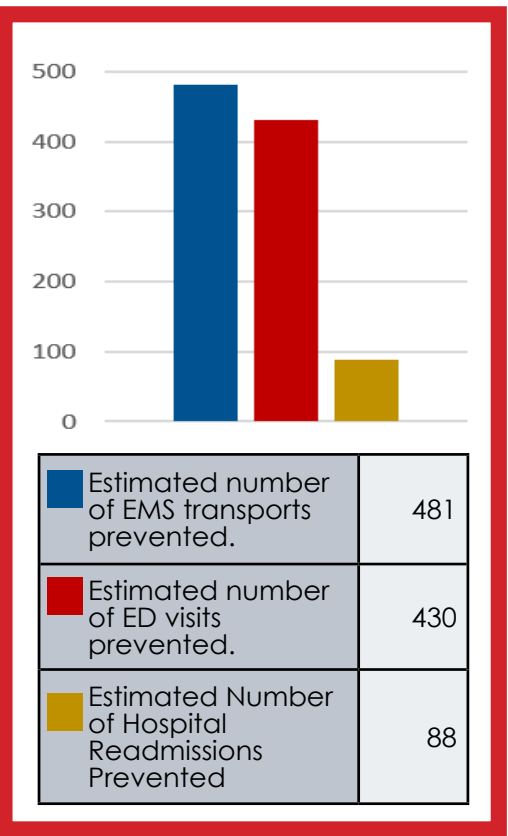
693  
Repeat

Top 15 Reasons for Service	
Abdominal Pain/ Problems	27
Breathing Problem	102
Cardiac Arrest/ Death	86
Chest Pain	9
Diabetic Problem	23
Falls	172
Heart Problems/ AICD	12
Hemorrhage/ Laceration	5
Medical Alarm	55
No Other Appropriate Choice	305
Overdose/ Poisoning/ Ingestion	19
Psychiatric Problem/ Abnormal Behavior	10
Sick Person	123
Traumatic Injury	34
Well Person Problem	13



### Average Cost by Pilot Primary Objective

Pilot Program Primary Objective	MIH/CP Encounter	ALS/BLS Encounter
Re-Admission (Follow-Up) - Primary focus is to continue care for an acute event to prevent unnecessary readmission back to inpatient facilities.	\$165.64	\$317.32
Non-Urgent, Non-Scheduled - Primary focus is to correctly navigate low acuity patients away from urgent resource utilization.	\$200.00	\$350.00
Both Non-Urgent, Non-Scheduled AND Re-Admission (Follow-Up)	\$119.60	\$367.47



455  
911 calls diverted to MIH/CP program.

27  
participants referred to PCP.

197  
participants who have a PCP at time of referral.

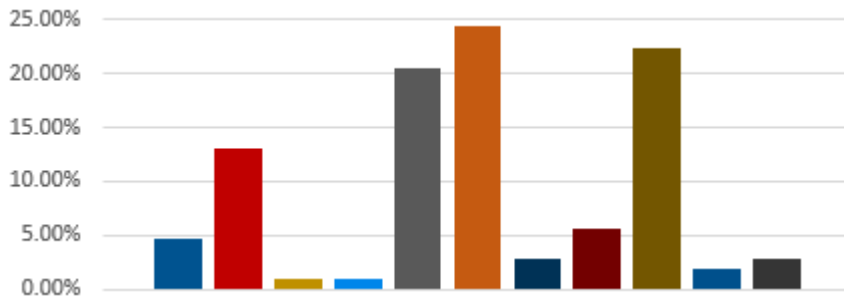
28  
participants referred to subspecialist.

36.5  
Average patient encounter in minutes.

# STATEWIDE EMPLOYEE ATTRITION

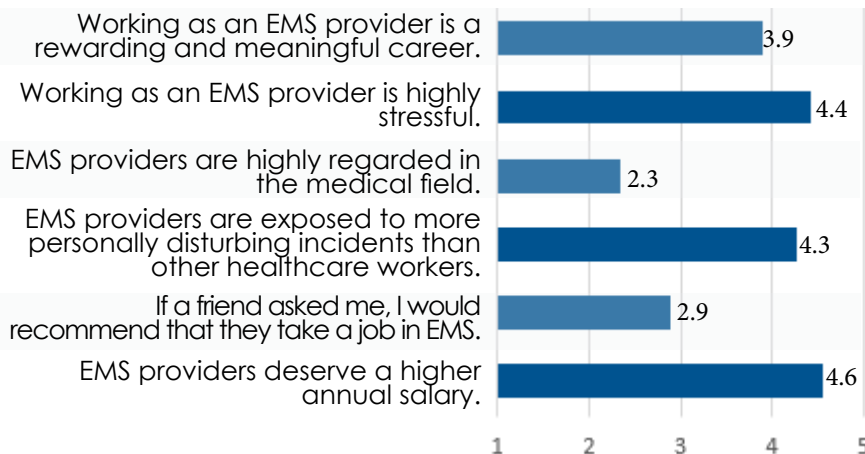
This report presents the findings of the KBEMS' 2018 Attrition Survey. The primary objective of this report is to determine the trends and other factors that contribute to Kentucky EMS employee attrition. The survey was administered to 950 KY EMS providers who discontinued their license / certification in 2018.

## Primary Reason for Allowing License / Certification to Expire



Work Injury	5%	Poor Management and/or Hostile Workplace Environment	2.8%
External Factors	13%	Relocated	5.6%
Inflexible Work Schedule	.93%	Retired	22.43%
Lack of Promotion Opportunities	.93%	Simply Did Not Enjoy Working in EMS	1.87%
Low Salary and/or Poor Benefits Package	20.56%	Unable to Find a Full-time Position	2.8%
No longer working for a KY EMS Service	24.30%		

## Participant Attitudes & Beliefs



5 Point Likert Scale: 1 = STRONGLY DISAGREE 3 = NEUTRAL 5 = STRONGLY AGREE

## Participant Demographics

109 Participants  
(11.47% Response Rate)

### Gender

Female	23%
Male	77%

### Race

White	95%
Hispanic	1%
Other / Declined	4%

### Age Range

18 - 24	5%
25 - 34	17%
35 - 44	26%
45 - 54	21%
55 - 64	23%
65+	8%

### Residence

Kentucky	75%
Out of State	25%

### Education

High School Diploma	15%
Some College	49%
Associate's Degree	20%
Bachelor's Degree	6%
Master's Degree	9%

### Provider Level

EMR	7%
EMT	66%
AEMT	3%
Paramedic	24%

### Certified Educator

Yes	14%
No	86%

## THANK YOU

To our KBEMS Administrative Staff who often work behind-the-scenes;

to all of our Board Members;

to all of our Committee, Subcommittee and Task Force Members;

and to all of you who support EMS,

who continuously give us your feedback and input, and share your stories.

We cannot do this without you.

We are only here because of you.

And we cannot put into words how thankful we are for the sacrifices that you, your family and friends, colleagues and other loved ones make.

Thank you for allowing us to support you and for including us in the EMS family.

You are moving #kyemsforward.

And we can only do this if we're all together.



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**#kyemsforward**