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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 pre-hospital 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
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:

⇒ Ensuring quality, competent EMS care through effective oversight, communication, and education;
⇒ Advancing professionalism of EMS providers and agencies;
⇒ Promoting the health and safety of patients, EMS professionals, and agencies; and
⇒ Providing leadership for EMS.

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 EMS related courses conducted by Kentucky EMS Training & Educational Institutions (TEIs).
❖ Certification and licensure audits.
❖ Approval for students to test at the National Registry Level.
❖ 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.

KBEMS also hosts and participates in numerous EMS meetings and conferences statewide and is an active member of the National Association of State EMS Officials (NASEMSO) and National EMS Management Association (NEMSMA).

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
❖ Accountability of board, agencies, and individuals.
❖ Being proactive, not reactive
❖ Highly motivated and progressive board
❖ Advancement of EMS profession
❖ Citizen and provider safety
❖ Ethical standards in dealing with issues.
KY & EMS Fast Facts

KY FAST FACTS:

Square Miles: 40,409mi²
Population: 4,425,092
Population Density:110 people per square mile
High School Graduation Rate: 83%
Per Capita Income: $23,741
Median Household Income: $43,342
Prevalence of Obesity (Adults): 33%
Prevalence of Overweight (Adults): 67%
Prevalence of Smoking (Adults): 26%
Drug Arrests (per 100,000 population): rate 1,322
(Retrieved from Kentuckyhealthfacts.org)

4 EMS Provider Levels

Emergency Medical Responder (EMR)-
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 and during transport.

Advanced Emergency Medical Technician (AEMT)-
AEMTs perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

Emergency Medical Technician (EMT)-
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.

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.

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<table>
<thead>
<tr>
<th>Provider</th>
<th>Initial Training Hours</th>
<th>Recertification Hours (Every 2 Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMR</td>
<td>50</td>
<td>17</td>
</tr>
<tr>
<td>EMT</td>
<td>150</td>
<td>24</td>
</tr>
<tr>
<td>AEMT</td>
<td>400</td>
<td>48</td>
</tr>
<tr>
<td>Paramedic</td>
<td>2,000</td>
<td>60</td>
</tr>
</tbody>
</table>
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
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
In 2016, The Kentucky Board of Emergency Medical Services took the following action:

- Welcomed the following newly appointed members of the Board:
  Lloyd Leslie Stapleton, Mayor of Prestonsburg
  Aaron Stamper, Executive Director, Jessamine Co. EMS

- Accepted the following Pediatric Abusive Head Trauma Courses to meet the PAHT requirements for EMS providers:
  1. Kentucky Board of Nursing (KBN) PAHT Courses
  2. Kentucky Department of Criminal Justice Training PAHT Course
  3. CHI Health at Home PAHT Course

- Endorsed a KBEMS Community Paramedicine “Description of the Profession”

- Awarded $1,009,885.17 in Ambulance Block Grant Funding to licensed ambulance services in the Commonwealth.

- Board Approval to require valid facility ID’s on all KSTARS (NEMSIS) Incident Reports.

- Approved “Mobile Integrated Healthcare/Community Paramedicine” Pilot Program applications for:
  1. Louisville Metro EMS, Louisville
  2. Oldham County EMS, LaGrange
  3. The Medical Center EMS, Bowling Green
  4. Yellow Ambulance, Louisville
  5. Mayfield-Graves County EMS

- Ratified Minimum Data Point Reporting for Mobile Integrated Health/Community Paramedicine Pilot Programs.

- Ratified the Fiscal Year 2017 KBEMS Budget

- Line of Duty Death benefits for EMS Providers legislation was enacted. (The John Mackey Bill)

- The Board promulgated Administrative Regulations related to Line of Duty Death benefits for EMS providers, which were submitted to the General Assembly for passage.

- Provided a Recommendation that all Certified/Licensed EMS Personnel receive training in Traffic Incident Management Systems (TIMS) by 12/31/2017.

- Board Recommendation for Ambulance Services to collect NEMSIS Element ePatient.19- Patient Email Address.
Members shall have a term that expires September 30 of each calendar year. Reappointments for subsequent terms may be made by the chairperson of the board anytime after September 1 and before September 30.

EXECUTIVE COMMITTEE

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

(a) 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
Jamey Locke
Mike Sutt
Carlos Coyle

Ex Officio:
Michael Poynter, Executive Director
Chuck O’Neal, Deputy Executive Director
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

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 Manager
Susan Pollack
Margaret Gupton
Erika Janes
Melanie Tyner-Wilson
Scottie Day
Carol Wright

Ex Officio:
Bari Lee Mattingly
Mark McDonald
Marsh Frontz
David Foley
The Data Management 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 Management Committee.

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

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

Ex Officio:
Drew Chandler, Data Administrator
Monica Robertson, Data Coordinator

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. Eric Bentley – Chair
Lee Turpin
Todd Early
Dr. Walter Lubbers
Dr. Irvin Smith – Vice-Chair
Ben Wofford

Ex Officio:
Dr. Julia Martin, State Medical Advisor
Chuck O’Neal, Deputy Executive Director
Seconds count when a patient suffers a ST-Segment Elevation Myocardial Infarction (STEMI) heart attack. The agencies recognized here have implemented the American Heart Association’s systems of care guidelines in treating these time-sensitive patients.

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
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  
Project Manager– EMS for Children

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**

- Implemented Online KBEMS KEMSIS Inspection Module.
- Director of Field Operations, Paul Phillips, participated with National Association of State EMS Officials Safe Transport of Children, and Agency and Vehicle Licensure Committee.
- Assisted with coordination of Region 15 Healthcare Coalition MASH Showcase at the Lexington Airport
- Purchased two fleet vehicles to replace high-mileage field staff vehicles.
- Director’s Forum at KEMA Conference.
- Inspected over 220 agencies, and over 1200 vehicles.
- Created and distributed the results of the 2016 EMS Workforce Survey.

**EDUCATION & TRAINING**

- Ms. Courtney Collins joined KBEMS as a Certification Specialist for the board.
- Implemented a quarterly newsletter (Education Matters).
- Adopted the National Registry of Emergency Medical Technician’s (NREMT) Early Hours Program.
- Adopted the NREMT National Continued Competency Program (NCCP).
- Initiated a statewide project with Kentucky Homeland Security and The National Center for Biomedical Research and Training (NCBRT) to establish trainers in EMS Agencies/Training and Educational Institutions across the state to provide Site Protection through Observational Techniques (SPOT) training for EMS and other emergency responders in their service regions.
- Initiated a statewide project to improve EMS responders safety on roadway incidents by collaborating with the Kentucky Division of Federal Highways.
- Disaster Preparedness and Mass Casualty Incident Subcommittee (DPMCI) completed and released the KBEMS Mass Casualty Incident Triage Methodology and Mass Casualty Incident Management Courses (Modules I & II) to EMS services and EMS-TEIs.
- Created and implemented electronic inspection process for EMS-TEIs.

**EMSC**

- KYEMSC provided and supported pediatric education for EMS providers throughout the state.
- KYEMSC represented KBEMS and EMS on multiple state and national boards and committees focused on pediatric issues.
- Morgan Scaggs elected to the Chair-Elect position of the Pediatric Emergency Care Council of the National Association of State EMS Officials.
- KYEMSC distributed pediatric transport devices, length-based resuscitation tapes, and Safe Infant packets to EMS agencies.
Agency Accomplishments

- Created the Data Coordinator position; hired Monica Robertson as the Data Coordinator.
- Decommissioned NEMSIS 2 dataset on January 1, 2016 and implemented mandatory NEMSIS 3 reporting for all licensed agencies in the Commonwealth of Kentucky.
- Collected NEMSIS V3 data from 98% of EMS organizations.
- Created a data submission tool for key data elements as required for Mobile Integrated Health/Community Paramedicine Pilot Programs.
- Awarded a grant from the Kentucky Transportation Cabinet for $93,000 to continue work on the Kentucky State Ambulance Reporting System (KSTARS) data program.
- Implemented a support portal with FAQ knowledgebase and ticketing system.
- Implemented a new website design as well as alternative URL’s to the KBEMS website. KBEMS can now be found at kbems.kctcs.edu, kyems.com, and kentuckyems.com.
- Provided ‘Best Practices’ lecture at ImageTrend Connect Conference.
- 6,779 knowledgebase articles viewed.
- Approximately 10,000 inbound and outbound office calls.

- Conducted investigations on seventy-three (73) complaints lodged against individuals, agencies, and TEIs.
- Received and filled one hundred one (101) Open Records Requests during the calendar year.
- Facilitated and provided scheduling and resources for sixty-nine (69) Board, Standing Committee, Subcommittee, and Preliminary Inquiry Board meetings.
- Assisted the American Heart Association (AHA) in the passage of legislation requiring high-school seniors to learn CPR.
## 2016 Provider Recertification

### 2016 Initial Certifications / Licenses

<table>
<thead>
<tr>
<th>Provider Level</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paramedic</td>
<td>153</td>
<td>15.9%</td>
</tr>
<tr>
<td>Advanced EMT</td>
<td>32</td>
<td>3.3%</td>
</tr>
<tr>
<td>EMT</td>
<td>722</td>
<td>75.4%</td>
</tr>
<tr>
<td>EMR</td>
<td>51</td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>959</strong></td>
<td>100%</td>
</tr>
</tbody>
</table>

### 2016 Reciprocity Certifications / Licenses

<table>
<thead>
<tr>
<th>Provider Level</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paramedic</td>
<td>160</td>
<td>50.63%</td>
</tr>
<tr>
<td>Advanced EMT</td>
<td>2</td>
<td>.63%</td>
</tr>
<tr>
<td>EMT</td>
<td>153</td>
<td>48.42%</td>
</tr>
<tr>
<td>EMR</td>
<td>1</td>
<td>.32%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>316</strong></td>
<td>100%</td>
</tr>
</tbody>
</table>

## Provider Snapshot

**TOTAL EMS PROVIDERS** in 2016: **13,452**

**Providers in KY** as of 12/31/2016:

- Paramedic: 3,495 (15.9%)
- Advanced EMT: 61 (3.3%)
- EMT: 9,257 (75.4%)
- EMR: 639 (5.4%)
- **Total**: 9,257 (100%)

**2016 Reciprocity Certifications / Licenses**

- Paramedic: 160 (50.63%)
- Advanced EMT: 2 (.63%)
- EMT: 153 (48.42%)
- EMR: 1 (.32%)
- **Total**: 316 (100%)

**Average Provider**

- **Age**: 41 Years old
- **Race**: 94% White / Caucasian
- **Gender**: 75% Male
## Agency Type

<table>
<thead>
<tr>
<th>Agency Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>Class I ground ambulance services shall operate at the ALS or BLS level to provide emergency and nonemergency transportation.</td>
</tr>
<tr>
<td>Class II</td>
<td>Class II ground ambulance services shall operate at the BLS level only to provide nonemergency transportation.</td>
</tr>
<tr>
<td>Class III</td>
<td>Class III ground ambulance services shall operate at the ALS level only to provide critical care, emergency or nonemergency transportation between health care facilities.</td>
</tr>
<tr>
<td>Class IV</td>
<td>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.</td>
</tr>
<tr>
<td>Class VI</td>
<td>Class VI services provide ALS medical first response without patient transport.</td>
</tr>
<tr>
<td>Class VII</td>
<td>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.</td>
</tr>
</tbody>
</table>

### Licensed Agencies

<table>
<thead>
<tr>
<th>Agency Class</th>
<th># of Agencies</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>184</td>
<td>83.6%</td>
</tr>
<tr>
<td>Class II</td>
<td>2</td>
<td>.9%</td>
</tr>
<tr>
<td>Class III</td>
<td>9</td>
<td>4.1%</td>
</tr>
<tr>
<td>Class IV</td>
<td>9</td>
<td>4.1%</td>
</tr>
<tr>
<td>Class VI</td>
<td>6</td>
<td>2.7%</td>
</tr>
<tr>
<td>Class VII</td>
<td>10</td>
<td>4.6%</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>100%</td>
</tr>
</tbody>
</table>

17 Basic Life Support (BLS) Agencies
167 Advanced Life Support (ALS) Agencies
A TEI is an organization that is certified by KBEMS to teach future and present 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).

<table>
<thead>
<tr>
<th>TEI Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS-TEI 1</td>
<td>Certified to teach EMR.</td>
</tr>
<tr>
<td>EMS-TEI 2</td>
<td>Certified to teach EMR and EMT.</td>
</tr>
<tr>
<td>EMS-TEI 3</td>
<td>Certified to teach EMR, EMT, and AEMT.</td>
</tr>
<tr>
<td>EMS-TEI 4</td>
<td>Certified to teach EMR, EMT, AEMT, and Paramedic.</td>
</tr>
<tr>
<td>EMS-TEI CE</td>
<td>Certified to teach Continuing Education Only.</td>
</tr>
</tbody>
</table>
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. 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.

Air (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.

Air (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.
In 2016, Field Staff traveled over 53,000 miles to perform Agency and Vehicle Inspections. This is the equivalent of over 2 trips around the Earth!

*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2016. During the NEMSIS V2 to V3 transition several agencies/incidents went unreported.
EMS Incidents

Total Incidents
*704,709
Reported to KSTARS in 2016

Average Incidents
58,725
per month

Patient Age Range

<table>
<thead>
<tr>
<th>Age Range</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9 Years</td>
<td>3%</td>
</tr>
<tr>
<td>10-19 Years</td>
<td>4%</td>
</tr>
<tr>
<td>20-29 Years</td>
<td>7%</td>
</tr>
<tr>
<td>30-49 Years</td>
<td>17%</td>
</tr>
<tr>
<td>50-69 Years</td>
<td>32%</td>
</tr>
<tr>
<td>70-89 Years</td>
<td>32%</td>
</tr>
<tr>
<td>90+ Years</td>
<td>5%</td>
</tr>
</tbody>
</table>

*69% of patients were aged 50+

Patient Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>42%</td>
</tr>
<tr>
<td>Female</td>
<td>48%</td>
</tr>
</tbody>
</table>

(10% not reported to KSTARS)

Top 5 EMS Incident Complaints Reported by Dispatch

<table>
<thead>
<tr>
<th>Incident</th>
<th># of Runs</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer/Interfacility/Palliative Care</td>
<td>111,264</td>
<td>16.07%</td>
</tr>
<tr>
<td>Sick Person</td>
<td>102,835</td>
<td>14.85%</td>
</tr>
<tr>
<td>Breathing Problem</td>
<td>50,863</td>
<td>7.35%</td>
</tr>
<tr>
<td>Traffic/Transportation Incident</td>
<td>45,405</td>
<td>6.56%</td>
</tr>
<tr>
<td>Falls</td>
<td>43,636</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

Total 354,003 51.13%

*The top 5 Incident Complaints Reported by Dispatch accounts for 51.13% of all EMS Incidents.

The figures appearing in this publication are approximations based on data collected within KSTARS for CY2016. During the NEMSIS V2 to V3 transition several agencies/incidents went unreported.
The figures appearing in this publication are approximations based on data collected within KSTARS for CY2016. During the NEMSIS V2 to V3 transition several agencies/incidents went unreported.

### Average Run Times in Minutes

- **Average Unit Arrived at Destination to Unit Back in Service:** 25.75 minutes
- **Average Unit Left Scene to Arrived at Destination:** 22.89 minutes
- **Average Unit Arrived on Scene to Left Scene:** 20.79 minutes
- **Average Unit Enroute to Arrived at Scene:** 10.61 minutes
- **Average Unit Notified to Enroute in Minutes:** 3.21 minutes

*1.38 Hours*

Average Unit Notified by Dispatch to Unit Back in Service.

### Incident Call Times by Hour Range

<table>
<thead>
<tr>
<th>Incident Hour Range</th>
<th>#of Runs</th>
</tr>
</thead>
<tbody>
<tr>
<td>12am - 4am</td>
<td>73,787</td>
</tr>
<tr>
<td>5am - 9am</td>
<td>104,913</td>
</tr>
<tr>
<td>10am - 2pm</td>
<td>216,108</td>
</tr>
<tr>
<td>3pm - 7pm</td>
<td>196,746</td>
</tr>
<tr>
<td>8pm - 12pm</td>
<td>101,036</td>
</tr>
</tbody>
</table>

### Top 10 Medications Administered by EMS

<table>
<thead>
<tr>
<th>Medication</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen</td>
<td>113,145</td>
</tr>
<tr>
<td>Nitroglycerin</td>
<td>18,504</td>
</tr>
<tr>
<td>Aspirin</td>
<td>15,045</td>
</tr>
<tr>
<td>Albuterol</td>
<td>14,897</td>
</tr>
<tr>
<td>Ondansetron</td>
<td>11,784</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>11,311</td>
</tr>
<tr>
<td>Naloxone</td>
<td>8,569</td>
</tr>
<tr>
<td>Epi 1:1,000</td>
<td>5,517</td>
</tr>
<tr>
<td>Ipratropium</td>
<td>4,827</td>
</tr>
<tr>
<td>Glucose</td>
<td>3,767</td>
</tr>
</tbody>
</table>

### Average Validity Score

76.34

*Validity is scored on a 100 point scale.*

*The figures appearing in this publication are approximations based on data collected within KSTARS for CY2016. During the NEMSIS V2 to V3 transition several agencies/incidents went unreported.*
EMS Incidents

The figures appearing in this publication are approximations based on data collected within KSTARS for CY2016. During the NEMSIS V2 to V3 transition several agencies/incidents went unreported.

Top 5 Patient Destinations

<table>
<thead>
<tr>
<th>Destination</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital-Emergency Department</td>
<td>445,855</td>
</tr>
<tr>
<td>Not Recorded</td>
<td>117,860</td>
</tr>
<tr>
<td>Nursing Home/Assisted Living Facility</td>
<td>109,903</td>
</tr>
<tr>
<td>Hospital-Non-Emergency Department Bed</td>
<td>104,116</td>
</tr>
<tr>
<td>Medical Office/Clinic</td>
<td>33,443</td>
</tr>
</tbody>
</table>

Top 5 Treatments / Procedures Provided by EMS

<table>
<thead>
<tr>
<th>Treatments / Procedures</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremity Vein Catheterization</td>
<td>69,146</td>
</tr>
<tr>
<td>12 Lead ECG Obtained</td>
<td>52,508</td>
</tr>
<tr>
<td>3 Lead ECG Obtained</td>
<td>49,722</td>
</tr>
<tr>
<td>Moving a patient to a stretcher</td>
<td>35,880</td>
</tr>
<tr>
<td>Patient Assessment</td>
<td>31,120</td>
</tr>
</tbody>
</table>

Top 3 Incident Location Types

<table>
<thead>
<tr>
<th>Location</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>163,995</td>
</tr>
<tr>
<td>Non-institutional (private) residence</td>
<td>130,163</td>
</tr>
<tr>
<td>Nursing home</td>
<td>62,746</td>
</tr>
</tbody>
</table>

Miscellaneous Incidents

- Mass Casualty Incidents: 2,781
- Stab/Gunshot Penetrating Trauma Incidents: 1,130
- Patients Deceased at Scene: 5,563

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### Naloxone County Data

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Counties with at least 1 Incident</td>
<td>110</td>
</tr>
<tr>
<td>Average Incidents per County</td>
<td>78.61</td>
</tr>
<tr>
<td>Maximum Incidents per County</td>
<td>858</td>
</tr>
</tbody>
</table>

### Top 5 Counties

<table>
<thead>
<tr>
<th>County</th>
<th>Naloxone Administration Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenton</td>
<td>858</td>
</tr>
<tr>
<td>Fayette</td>
<td>699</td>
</tr>
<tr>
<td>Campbell</td>
<td>598</td>
</tr>
<tr>
<td>Madison</td>
<td>417</td>
</tr>
<tr>
<td>Boone</td>
<td>412</td>
</tr>
</tbody>
</table>

### Naloxone Call Times By Hour Range

<table>
<thead>
<tr>
<th>Hour Range</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>12am - 4am</td>
<td>12.59</td>
</tr>
<tr>
<td>5am - 9am</td>
<td>10.5%</td>
</tr>
<tr>
<td>10am - 2pm</td>
<td>23.65</td>
</tr>
<tr>
<td>3pm - 7pm</td>
<td>30.5%</td>
</tr>
<tr>
<td>8pm - 12pm</td>
<td>22.76</td>
</tr>
</tbody>
</table>

### Patient Condition after Receiving Naloxone

- **Worse**: 1.14%
- **Unchanged**: 41.42%
- **Improved**: 58.44%

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This report presents the findings of KBEMS’ 2016 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 1,523 KY EMS providers who discontinued their License/Certification in 2016.

### Participant Demographics

- **N = 197** (15.72% Response Rate)
- **Male** 70.56%
- **Female** 29.44%

### Provider Level at time of Expiration

- EMR 4.64%
- EMT 65.98%
- AEMT 1.03%
- Paramedic 28.35%

### Age Range

<table>
<thead>
<tr>
<th>Range</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>5.08%</td>
</tr>
<tr>
<td>25-34</td>
<td>30.46%</td>
</tr>
<tr>
<td>35-44</td>
<td>22.84%</td>
</tr>
<tr>
<td>45-54</td>
<td>16.75%</td>
</tr>
<tr>
<td>55-64</td>
<td>20.81%</td>
</tr>
<tr>
<td>65+</td>
<td>4.06%</td>
</tr>
</tbody>
</table>

### Education

- **High School Diploma** 5.08%
- **Some College** 30.46%
- **Associate’s Degree** 22.84%
- **Bachelor’s Degree** 16.75%
- **Master’s Degree** 20.81%
- **Doctorate** 4.06%

### Participant Attitudes and Perceptions

#### Salary

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I believe that EMS professionals deserve a higher annual salary.</td>
<td>8.74%</td>
<td>55%</td>
<td>3.28%</td>
<td>16.39%</td>
<td>71.04%</td>
</tr>
</tbody>
</table>

#### Career Recommendation

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>If a friend asked me, I would recommend that they take a job in EMS.</td>
<td>8.65%</td>
<td>24.32%</td>
<td>31.35%</td>
<td>20%</td>
<td>15.68%</td>
</tr>
</tbody>
</table>

#### Workplace Stress

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I believe that working as an EMS provider is highly stressful.</td>
<td>2.17%</td>
<td>1.63%</td>
<td>13.59%</td>
<td>32.07%</td>
<td>50.54%</td>
</tr>
</tbody>
</table>

### Top 5 career fields previous EMS providers are now working:

1. Health & Medicine 23.98% (41)
2. Fire 9.94% (17)
3. Self-Employed 9.94% (17)
4. Transportation 8.19% (14)
5. Government 6.43% (11)
Current Projects of the Board

- Continued work with agencies engaged in Mobile Integrated Health/Community Paramedicine Pilot Programs.
- Destination guidance recommendations for EMS Providers concerning Stroke Patients.
- Planning for 2018 EMS Leadership in Kentucky Summit and EMS Day on the Hill collaborative.
- Promulgation of 202 KAR 7:810-EMS Line of Duty Death Regulation.
- Amendments to 202 KAR 7:501-Ground Ambulance and 202 KAR 7:520-Block Grant.
- Amendments to 202 KAR 7:801-Medical Directors.
- Support of the 2017 Kentucky EMS Conference and Expo.
- Representation on the Kentucky Wireless Interoperability Executive Committee.
- Representation on the National InfraGard Board of Directors.
- Representation on numerous councils of the National Association of State EMS Officials (NASEMSO).
- Collaboration and data sharing with the Kentucky Health Information Exchange (KHIE).
- Collaboration and data sharing with the Kentucky Department of Transportation.
- Collaboration with healthcare and law enforcement partners in research of Heroin overdose and Naloxone administration by EMS professionals.
- Scheduling and coordination of Situational Awareness through Observational Techniques (SPOT) Training in collaboration with Louisiana State University.
- Endorsement of Traffic Incident Management System (TIMS) training for all certified and licensed EMS personnel in Kentucky.
- Amendments to 202 KAR 7:601-Training, Education, and Continuing Education.