

KENTUCKY BOARD OF EMERGENCY MEDICAL SERVICES
(Amendment)

202 KAR 7:550. Required equipment and vehicle standards.

RELATES TO: KRS 13B, 311A.030, 311A.180, 311A.190, 29 C.F.R. 1910.135

STATUTORY AUTHORITY: KRS 311A.020, 311A.025, 311A.030, 311A.190

NECESSITY, FUNCTION, AND CONFORMITY: KRS 311A.020 requires the Board of Emergency Medical Services to exercise all administrative functions in the regulation of the emergency medical services system and the licensing of ambulance services and medical first response agencies, except those regulated by the Board of Medical Licensure ~~[Emergency Medical Services]~~ or the Cabinet for Health and Family Services. KRS 311A.030 requires the board to promulgate administrative regulations for the licensing, inspection, and regulation of ambulance providers and medical first response agencies. This administrative regulation establishes the required equipment to operate an ambulance service.

Section 1. Ground Ambulance Specifications.

(1) Ground ambulances utilized by Class I, II, III, and IV agencies shall:

(a) Have the name of the provider permanently affixed by paint, decal, or wrap on both sides of the exterior surface of the vehicle.

1. The name shall be the incorporated name or the name under which the provider does business and as it appears on the provider's license.

2. This requirement shall not preclude a provider from adding additional names from another entity on the vehicle due to a joint venture, if the name as licensed by the board is larger, and visible and legible by the public.

3. A vehicle operated by an agency shall not be marked with the words "advanced life support", "paramedic," or similar words that convey essentially the same meaning on the vehicle's exterior surface visible to the public unless the:

a. Vehicle is always staffed at an Advanced Life Support level; or

b. Agency was licensed by the board prior to January 1, 2018.

(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.

(c) Be designed to provide for the medical care or transportation of patients.

(d) Stow all equipment weighing three (3) pounds or more in an enclosure, bracket, mount, or other appropriate securing device.

(e) Have tires that meet the manufacturer's standards for the gross vehicle weight of the vehicle.

1. A tire shall not display exposed tire cord or have tread depth less than 2/32 on back tires and 4/32 on front tires if measured in any two (2) adjacent grooves at three (3) locations spaced equally around the tire.

2. Retread tires shall not be used on ground vehicles.

3. Internal patches may be utilized for tire repairs if necessary.

4. More than two (2) patches shall not be used on any one (1) defective tire.

5. Plugs shall not be used for the repair of defective ambulance tires.

(2) All Class I, II, III, and IV ground ambulances shall meet or exceed the minimum physical characteristics established in paragraphs (a) through (d)(e) of this subsection.

~~[(a)] [A ground ambulance licensed in Kentucky shall be affixed with an official Kentucky Board of Emergency Medical Services decal that states, at a minimum, the month and year of inspection.]~~

- (a) ~~((b))~~ An ambulance manufactured prior to January 1, 2019 shall meet or exceed the standards established in the U.S. General Services Administration Federal Specification for the Star-of-Life Ambulance (GSA KKK-A-1822) in effect on the original date of manufacture.
- (b) ~~((c))~~ The agency shall require, for a unit in which the chassis of an ambulance is later replaced, the conversion company to supply a letter to verify that no modification exists that was contained in GSA KKK-A-1822 on the original date of module manufacture.
- (c) ~~((d))~~ A new production ground ambulance that is ordered after January 1, 2019 shall comply fully with the ambulance design criteria contained in the Commission on Accreditation of Ambulance Services Ground Vehicle Standard for Ambulances (GVS), 7/2022~~[7/2016]~~. A decal or letter of verification from the manufacturer certifying that the vehicle meets the GVS standard, if ordered after January 1, 2019, shall be made available upon inspection.
- (d) ~~((e))~~ The agency shall require for any GVS certified vehicle, in which the chassis of an ambulance is later replaced, the conversion company shall supply a letter to verify that no modification exists that was contained in the GVS standard on the original date of module manufacture.
- (3) In addition to the GSA KKK-A-1822 or the GVS standards, additional requirements shall be met as established in paragraphs (a) through (d) of this subsection.
- (a) 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.
- (b) 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.
- (c) There shall be no more patients, personnel, and other persons than can be safely secured by means of permanently installed safety belts in the vehicle while the vehicle is in motion.
- (d) The patient care area lighting shall be fully functional.
- (4) A preventive maintenance program shall be maintained for each vehicle and its equipment to keep them in optimum working order to protect the health and safety of the patient and ambulance personnel.
- (5) Documentation shall be maintained by the agency to support evidence of periodic inspections as recommended by the manufacturer, including calibrations required for maintenance and operation of the vehicle and its equipment.
- (6) Each vehicle and its equipment shall be checked after each use to ensure that it is in a clean and sanitary condition, unless precluded by emergency conditions.
- (7)
- (a) Except as established in paragraph (b) of this subsection, 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) pillow-case, 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.

Section 2. Class I, II, and IV Basic Life Support Ambulance Equipment and Supplies.

- (1) Each BLS agency shall maintain evidence in the form of a letter that adult and pediatric medical protocols have been reviewed and approved by the board pursuant to

KRS 311A.180. A hard copy or electronic equivalent of approved protocols shall be accessible to each provider throughout each call.

(2) Each Class I, II, and IV BLS agency shall carry and maintain, in full operational order, the following minimum basic life support equipment and supplies:

(a) Suction, ventilation, and blood pressure equipment, which shall include:

1. Two (2) sources of suction apparatus, one (1) of which shall be mechanically operated;
2. Rigid catheters;
3. Flexible catheters in adult, pediatric, and infant sizes;
4. Bulb syringe for infant and neonate suction;
5. Disposable adult and pediatric bag-valve-mask with a pediatric pop-off valve with oxygen reservoir, oxygen tubing, and adult, pediatric, infant, and neonate masks;
6. Nasopharyngeal airways (16F-34F; adult and child sizes) with water-soluble lubricant;
7. Oropharyngeal airways (sizes 0-5; adult, child, and infant sizes);
8. Blind-Insertion Airway Device (BIAD) (adult and pediatric); and
9. Manual pediatric and adult regular and large sphygmomanometer cuffs with stethoscope.

(b) Oxygen equipment, including:

1. A fixed oxygen system for each ambulance;
2. Two (2) portable, adequately filled, secured oxygen tanks that are minimally size D;
3. Pressure gauge and flow rate regulator for fixed and portable units with a range of zero to fifteen (15) liters per minute; and
4. Transparent non-rebreather oxygen masks and nasal cannulas for adults and pediatrics.

(c) Bandages, bandaging supplies and tape, including:

- ~~1. Commercially packaged or sterile burn sheets;~~
1. ~~2.~~ Triangular bandages;
 2. ~~3.~~ Dressings of the following types:
 - a. Sterile dressings, including gauze sponges of suitable size; and
 - b. Abdominal dressings;
 3. ~~4.~~ Gauze rolls, various sizes;
 4. ~~5.~~ Occlusive dressing, or equivalent;
 5. ~~6.~~ Adhesive tape of various sizes (include one (1) inch and two (2) inch);
 6. ~~7.~~ A minimum of four (4) arterial ~~Arterial~~ tourniquets; and
 7. ~~8.~~ Shears for bandages.

(d) Miscellaneous supplies, including:

1. Hand held flashlight capable of providing adequate lighting to assess a scene or a patient away from the vehicle;
2. Penlight;
3. A copy or electronic equivalent of the most recent version of the ~~[2016]~~ U.S. Department of Transportation, Emergency Response Guidebook;
4. A minimum of ten (10) triage tags consistent with a commercial system of triage ~~[START System of Triage]~~;
5. Obstetrical supplies that shall include at a minimum:
 - a. Sterile scalpels or scissors;
 - b. Sterile gloves;
 - c. Bulb suction;
 - d. Two (2) umbilical clamps; and
 - e. Thermal absorbent blanket and head cover, aluminum foil roll, or appropriate heat-reflective material, e.g., enough to cover newborn infant;

6. Sterile irrigation fluids;
7. Glucometer or blood glucose measuring device with reagent strips and lancets for obtaining a blood glucose sample;
8. Oral glucose;
9. Cold packs;
10. Heat packs;
11. An AED with a minimum of two (2) complete sets of pads suitable for adult and pediatric populations for all non-ALS vehicles;
12. Pulse oximeter with pediatric and adult probes;
13. A ~~length-based resuscitation tape or a~~ reference material or guide that provides appropriate guidance for pediatric drug dosing and equipment sizing based on age, length or weight;

- a. The reference material or guide shall be assigned to the ambulance; and
- b. The reference material or guide may be in an electronic or physical format.

(e) Splints, including:

1. Lower extremity mechanical traction splint in adult and pediatric sizes; and
2. Upper and lower extremity rigid splint devices for adult and pediatric patients;

(f) Immobilization devices, including:

~~[1.] [Short extrication and immobilization device;]~~

1. [2.] One (1) adult [Adult] and one (1) pediatric impervious long spine board[boards], scoop stretcher, or other full body device that provides spinal protection[immobilization devices] with a minimum of three (3) appropriate restraint cross-straps;

2. [3.] Cervical collars in the following sizes:

a.

- (i) Cervical collars for pediatric patients ages two (2) years or older; and
- (ii) Cervical collars for adults in small, medium, large, and other available sizes; or

b. Pediatric and adult adjustable cervical collars; and

3. [4.] Towel rolls or other commercially available cervical immobilization devices for adults and pediatrics;

(g) Two (2) currently certified five (5) pound size or larger, secured, ABC multipurpose fire extinguishers, approved by Underwriters Laboratory, Coast Guard, or Factory Mutual. One (1) shall be accessible to the driver and the other to the attendant or attendants in the patient compartment in the ambulance;

(h) Multi-position stretcher with wheels and a minimum of three (3) cross-straps in addition to one (1) set of shoulder straps for securing the patient to the stretcher and a fixed mechanism to secure the stretcher while in transit;

(i) Until January 1, 2025, a [A] pediatric transport device with a minimum weight range of ten (10) to forty (40) pounds;[and]

(j) On and after January 1, 2025, a pediatric transport device with a minimum weight range of five (5) to ninety-nine (99) pounds; and

~~(k) [(i)]~~ A stair chair for the movement of patients in a seated position.

(3) Personal protective equipment shall be available to each staff member responding on the vehicle, including:

- (a) One (1) clean scrub gown (or substitute, such as disposable coveralls);
- (b) Simple disposable face mask;
- (c) Clear protective goggles or safety glasses;
- (d) Disposable gloves;
- (e) One (1) particulate filter mask rated at N95 or better without an exhaust port for patient use;

- (f) One (1) particulate filter mask rated at N95 or better with or without an exhaust port for protection of crew members; and
- (g) A means of cleansing the hands, such disposable ~~towelettes~~~~[towelettes]~~ or other solutions.
- (4) Cleaning materials shall be available including:
 - (a) Hospital grade disinfectants;
 - (b) Trash bags for disposal of nonbiohazard waste materials;
 - (c) Biohazard bags for the disposal of biohazard waste; and
 - (d) Puncture resistant containers for disposal of sharp objects that are secured to the vehicle.
- (5) Patient comfort items shall be available including:
 - (a) Two (2) clean blankets, sheets, pillows, and pillowcases;
 - (b) A disposable urinal;
 - (c) A disposable bed pan; and
 - (d) An emesis container or similar substitute.
- (6) All items with an expiration date shall not be expired.

Section 3. Class I ALS, Class III ACC, Class III PSC, and Class IV Advanced Life Support Ambulance Equipment and Supplies.

- (1) Each ALS agency shall maintain evidence in the form of a letter that adult and pediatric medical protocols have been reviewed and approved by the board pursuant to KRS 311A.180. A hard copy or electronic equivalent of approved protocols shall be accessible to each provider throughout each call.
- (2) In addition to the BLS equipment required in Section 2 of this administrative regulation, each Class I ALS, Class III ACC, Class III PSC, and Class IV ALS vehicle shall maintain, in fully operational order, supplies and equipment required by the agency's protocols, including a minimum of:
 - (a) Endotracheal intubation equipment consisting of:
 - 1. Laryngoscope handle with extra batteries, bulbs, or blades if applicable;
 - 2. At least four (4) laryngoscope ~~[Laryngoscope]~~ blades to allow intubation of patients in accordance with agency protocols, including a minimum of:~~[in the following sizes:]~~
 - a. 0-4, straight Miller; ~~or~~~~[and]~~
 - b. 2-4, curved Macintosh;
 - 3. Endotracheal tubes in the following sizes:
 - a. 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, and 5.5 cuffed or uncuffed; ~~or~~
 - b. If intubation is not included in the agency's protocols for pediatric patients, supraglottic airways in all available sizes per the manufacturer of the specific device chosen; and
 - c. ~~[b.]~~ 6.0, 6.5, 7.0, 7.5 and 8.0 cuffed;
 - 4. Stylettes in adult and pediatric sizes;
 - 5. 10-mL syringes;
 - 6. Magill forceps in adult and pediatric sizes;
 - 7. Water-soluble lubricant for lubrication of endotracheal and nasotracheal tubes;
 - 8. End-Tidal CO₂ detection capability (adult and pediatric);
 - 9. One-half (1/2) inch wide twill tape or equivalent for securing endotracheal tubes;
 - 10. Equipment necessary to perform emergency percutaneous cricothyrotomy;~~[and]~~
 - 11. Disposable nebulizer; and
 - 12. Continuous waveform capnography;
 - (b) A portable, battery-operated monitor defibrillator that:
 - 1. Has a tape write-out or recorder, hands-free defibrillator pads, electrocardiogram monitoring leads, and electrodes for adults and pediatrics;

2. Is capable of delivering direct current energy over a variable range, which is suitable for pediatric and adult usage;
3. Has synchronized counter-shock capability for cardioversion;
4. Has a transcutaneous cardiac pacemaker, including adult and pediatric pads and cables; and
5. Has 12-Lead ECG capability if the vehicle is staffed to provide ALS services;
- (c) Vascular Access supplies consisting of:
 1. Isotonic crystalloid solutions;
 2. Antiseptic solution (alcohol wipes and providone-iodine wipes);
 3. Intravenous catheters, 14G-24G;
 4. Long-large bore needles or angiocatheters (at least 3.25 inches in length for needle chest decompression in large patients);
 5. Intraosseous needles or intraosseous devices appropriate for children and adults; and
 6. Latex-free tourniquet;
- (d) Needles of various sizes, including suitable sizes for intramuscular injections;
- (e) Intravenous macrodrip and microdrip administrations sets; and
- (f) Intravenous arm boards, adult and pediatric, or appropriate substitute.
- (3) An ALS agency shall stock and maintain drugs and medications as required by the master drug list contained in protocols established in accordance with this section.
- (4) Controlled drugs shall be stored in a locked storage box in a locked compartment on the vehicle that is immediately accessible to personnel.
- (5) This administrative regulation shall not prevent an agency from maintaining other supplies or equipment that are required to carry out its protocols as approved by the board in accordance with KRS 311A.180.
- (6) All items with expiration dates shall not be expired.

Section 4. Class III Adult Critical Care (ACC) Transport Equipment.

- (1) Each Class III ACC agency shall maintain evidence in the form of a letter that medical protocols have been reviewed and approved by the board in accordance with KRS 311A.180. A hard copy or electronic equivalent of approved protocols shall be accessible to each provider throughout each call.
- (2) In addition to the BLS equipment required in Section 2 of this administrative regulation and the ALS equipment required in Section 3 of this administrative regulation, Class III Adult Critical Care agencies shall carry on each vehicle and maintain in fully operational order all supplies and equipment required by the agency's protocols, including at a minimum:
 - (a) A portable transport ventilator, the capabilities of which shall include:
 1. Controlling rate;
 2. Volume;
 3. FiO₂ up to 100 percent;
 4. I:E ratio;
 5. PEEP;
 6. Volume control;
 7. Pressure control;
 8. SIMV mode;
 9. NPPV mode; and
 10. Low- and high-pressure warning alarms;
 - (b) Two (2) portable transport ventilator circuits appropriately sized for the patient being transported;
 - (c) Continuous Positive Airway Pressure (CPAP) ventilation portable equipment;
 - (d) Electronic waveform capnography, intubated patient, capable of waveform display;

- (e) Difficult airway equipment in the form of a bougie gum elastic ET introducer;
- (f) Sterile cricothyrotomy set, surgical or needle;
- (g) Invasive pressure monitoring capability electronic waveform available on two (2) channels;
- (h) An infusion pump or pumps capable of infusing three (3) separate medications simultaneously;
- (i) Six (6) IV infusion pump tubing sets;
- (j) Two (2) blood infusion sets; and
- (k) A device to monitor core body temperature through rectal or esophageal probe.

Section 5. Class III Pediatric Specialty Care (IIIPSC) Transport Equipment.

- (1) Each Class III Pediatric Specialty Care agency shall maintain evidence in the form of a letter that all medical protocols have been reviewed and approved by the board in accordance with KRS 311A.180. A hard copy or electronic equivalent of approved protocols shall be accessible to each provider throughout each call.
- (2) In addition to the BLS equipment required in Section 2 of this administrative regulation, the ALS equipment required in Section 3 of this administrative regulation, and the Critical Care equipment listed in Section 4 of this administrative regulation, each Class III Pediatric Specialty Care agency shall carry on each vehicle and maintain in fully operational order supplies and equipment required by the agency's protocols, including:
 - (a) Two (2) 250 ml bags of normal saline or lactated ringers;
 - (b) Twelve (12) syringes assorted from 1cc to 2cc;
 - (c) Four (4) three-way stopcocks;
 - (d) A needle cricothyrotomy kit for children from the ages of twenty-nine (29) days until twenty-one (21) years of age; and
 - (e) A blind-insertion airway device (BIAD) in appropriate sizes for children from the ages of twenty-nine (29) days until twenty-one (21) years of age.

Section 6. Class III Neonatal Specialty Care (III NSC) Transport Equipment.

- (1) Each Class III Neonatal Specialty Care agency shall maintain evidence in the form of a letter that all medical protocols have been reviewed and approved by the board in accordance with KRS 311A.180. A hard copy or electronic equivalent of approved protocols shall be accessible to each provider throughout each call.
- (2) In addition to compliance with Section 1 of this administrative regulation, each Class III Neonatal Specialty Care agency shall carry on each vehicle and maintain in fully operational order all supplies and equipment required by the agency's protocols, including:
 - (a) Direct two-way communications with the designated neonatologist, attending physician, or receiving NICU;
 - (b) A standby or backup power source other than the one (1) contained in the isolette;
 - (c) A source of electrical power sufficient to operate the isolette and ancillary electrically powered equipment;
 - (d) A transport incubator with portable power supply, portable oxygen tanks, or liquid oxygen, and a source of compressed air, including appropriate valves, meters, and fittings. The transport incubator shall be secured in the vehicle using a manufacturer-approved vehicle-mounting device;
 - (e) One (1) portable heart rate monitor with visual or audible display and alarm system per patient;
 - (f) One (1) portable blood pressure monitor with an assortment of cuff sizes suitable for infants;
 - (g) Three (3) battery powered mechanical IV pumps capable of delivering as low as 1cc increments for IV fluids;

- (h) A battery or self-powered oxygen sensor and transcutaneous oxygen monitor or oxygen saturation monitor;
- (i) Oxygen delivery devices and tubing capable of administering high concentrations of oxygen;
- (j) A temperature-monitoring device;
- (k) A portable ventilator appropriate for neonatal patients;
- (l) An anesthesia or self-inflating bag with an oxygen reservoir of less than 750 ml, a manometer pressure gauge, and premature newborn and infant size clear masks;
- (m) A laryngoscope handle;
- (n) Laryngoscope Blades in Miller sizes 00, 0, 1, 2, 3;
- (o) Two (2) bulbs;
- (p) Two (2) batteries;
- (q) Endotracheal tubes in various sizes;
- (r) Two (2) stylets;
- (s) Two (2) meconium aspirators;
- (t) Oral airways in various sizes;
- (u) Suction equipment with low suction capabilities of less than eighty (80) mmHg;
- (v) Two (2) suction catheters in sizes 5.0, 6, 6.5, 8, and 10 each;
- (w) Syringes sizes 1 cc through 60 cc in various sizes;
- (x) Two (2) medication access devices;
- (y) 23-27 gauge vascular access devices in various sizes;
- (z) Sterile gloves in various sizes and sufficient quantity for all crewmembers;
- (aa) Medications as required by the master drug list contained in protocols established in accordance with this section;
- (bb) IV extension tubing in sufficient length to administer IV fluids or medications;
- (cc) IV securing devices in various sizes;
- (dd) Two (2) IV filters;
- (ee) Two (2) umbilical catheters, sizes 3.5 and 5;
- (ff) Ten (10) antiseptic solution wipes;
- (gg) One (1) blood glucose-monitoring device;
- (hh) Five (5) lancets for obtaining a blood glucose sample;
- (ii) One (1) neonatal stethoscope;
- (jj) One (1) flashlight;
- (kk) Gauze pads;
- (ll) One (1) No. 5 and one (1) No. 8 French feeding tube;
- (mm) One (1) high intensity light capable of transillumination;
- (nn) A biomedical waste plastic bag or impervious container;
- (oo) Puncture resistant containers for disposal of sharp objects that shall be secured to the vehicle;
- (pp) Gloves made of nitrile or other suitable materials in sufficient quantity for all crewmembers;
- (qq) Respiratory face masks in sufficient quantity for all crew members;
- (rr) Special procedure trays or instruments capable of performing umbilical catheterization, venous cutdown, and thoracostomy in accordance with established protocol;
- (ss) One (1) bulb syringe;
- (tt) One (1) cord clamp;
- (uu) One (1) age appropriate chest tube evacuation device; and
- (vv) Needle aspiration device or chest tubes in appropriate sizes for a neonate patient.

Section 7. Class VI and Class VIII BLS Agency Equipment.

(1) Each Class VI and VIII BLS agency shall maintain evidence in the form of a letter that all medical protocols have been reviewed and approved by the board in accordance with KRS 311A.180. A hard copy or electronic equivalent of approved protocols shall be accessible to each provider throughout each call.

(2) Each Class VI and VIII BLS agency shall be exempt from the ground ambulance requirements established in Sections 1 through 6 of this administrative regulation.

(3) Each Class VI and VIII BLS agency shall provide ready access to and maintain in fully operational order all supplies and equipment required by the agency's protocols.

(4)

(a) Each Class VIII BLS agency shall have ready access to and maintain in operational order, two (2) complete sets of equipment required by the agency's protocols and this administrative regulation.

(b) Each Class VI BLS agencies shall be required to maintain one (1) complete set of equipment.

(5) Each basic life support non-transport vehicle shall wrap, properly store, and handle all single-service implements to be inserted into the patient's nose or mouth.

(6) Each Class VI and VIII BLS agency shall properly store and keep multiuse items clean and sterile if indicated.

(7) Each Class VI and VIII BLS agency shall carry the following assembled and readily accessible equipment:

(a) Respiratory and resuscitation equipment, including:

1. Portable suction apparatus, capable of a minimum vacuum of 300 millimeters mercury, equipped with two (2) each of the following:

- a. Wide-bore tubing;
- b. Rigid catheters;
- c. Soft pharyngeal suction tips in child size; and
- d. Soft pharyngeal suction tips in adult size;

2. One (1) hand-operated bag-mask ventilation unit equipped with clear facemasks and oxygen reservoirs with oxygen tubing in each of the following sizes:

- a. Adult;
- b. Child;
- c. Infant; and
- d. Neonatal mask only;

3. Two (2) oropharyngeal airways in each of the following sizes:

- a. Adult;
- b. Child; and
- c. Infant;

~~[4.] [One (1) pocket mask with a one (1) way valve;]~~

4. ~~[5.]~~ Blind-Insertion Airway Devices (BIAD) in adult and pediatric sizes; and

5. ~~[6.]~~ Portable oxygen equipment of at least 300 liters capacity and D size cylinder with a regulator capable of delivering 25LPM;

(b) Oxygen delivery devices, including:

1. Two (2) non-rebreathing oxygen masks in both adult and pediatric sizes;
2. Two (2) nasal cannula in both adult and pediatric sizes;
3. Two (2) nasopharyngeal airways with water-soluble lubricant in each of the following sizes:
 - a. Adult;
 - b. Child; and
 - c. Infant;

(c) Wound care supplies, including:

1. Two (2) airtight dressings for open chest wounds;
2. Assorted bandaging supplies for the care of soft tissue injuries; and

- 3. Sterile water for irrigation;
- (d) An AED with a minimum of two (2) complete sets of pads for all non-ALS providers and vehicles;
- (e) Patient stabilization equipment, including:
 - 1. Two (2) upper and two (2) lower extremity-splinting devices; and
 - 2. Two (2) cervical collars in each of the following sizes or adjustable equivalents:
 - a. Pediatric;
 - b. Small;
 - c. Medium;
 - d. Large; and
 - e. No-Neck;
- (f) Personal protection and body substance isolation equipment, including at least one (1) of each of the following for each EMS provider:
 - 1. Gown;
 - 2. Face mask and shield;
 - 3. Gloves;
 - 4. Biohazard bag;
 - 5. Puncture resistant container for the disposal of sharp objects; and
 - 6. Antimicrobial hand cleaner; and
- (g) Miscellaneous items, including:
 - 1. Obstetrical supplies, including:
 - a. Sterile scalpels or scissors;
 - b. Sterile gloves;
 - c. Bulb suction; and
 - d. Two (2) umbilical clamps;
 - 2. One (1) blood pressure sphygmomanometer in each of the following cuff sizes:
 - a. Large adult;
 - b. Adult; and
 - c. Pediatric;
 - 3. One (1) stethoscope in each of the following sizes:
 - a. Adult; and
 - b. Pediatric; and
 - 4. A glucometer or blood glucose-measuring device with reagent strips and lancets for obtaining a blood glucose sample.

Section 8. Class VI and VIII ALS Agency Equipment.

- (1) Each Class VI and VIII ALS agency shall maintain evidence in the form of a letter that medical protocols have been reviewed and approved by the board in accordance with KRS 311A.180. A hard copy or electronic equivalent of approved protocols shall be accessible to each provider throughout each call.
- (2) Each Class VI and VIII ALS agency shall be exempt from the ambulance requirements established in Sections 1 through 6 of this administrative regulation.
- (3)
 - (a) Each Class VIII ALS agency shall have ready access to and maintain in operational order, two (2) complete sets of equipment required by the agency's protocols and this administrative regulation.
 - (b) Each Class VI ALS agency shall be required to maintain one (1) complete set of equipment.
- (4) In addition to the BLS equipment required in Section 7 of this administrative regulation, each Class VI and VIII ALS agency shall provide ready access to and maintain in fully operational order, supplies and equipment required by the agency's protocols, including a minimum of:

- (a) Endotracheal intubation equipment consisting of:
 - 1. Laryngoscope handle;
 - 2. Various laryngoscope blades in adult, pediatric, and infant sizes;
 - 3. Extra batteries and bulbs for handles or blades;
 - 4. A minimum of seven (7) different sizes of endotracheal tubes for oral and nasal placement in adult, pediatric, and infant sizes;
 - 5. Equipment necessary to perform emergency cricothyrotomy;
 - 6. An end tidal carbon dioxide detection device;
 - 7. Stylettes in adult and pediatric sizes;
 - 8. Magill forceps in adult and pediatric sizes;
 - 9. One-half (1/2) inch wide twill tape or equivalent for securing endotracheal tubes; and
 - 10. Water-soluble lubricant for lubrication of endotracheal and nasotracheal tubes;
 - (b) A portable monitor defibrillator that:
 - 1. Is capable of displaying a visual display of cardiac electrical activity;
 - 2. Is capable of providing a hard copy of cardiac electrical activity measure;
 - 3. Is capable of delivering direct current energy over a variable range, which is suitable for pediatric and adult usage;
 - 4. Is capable of providing external cardiac pacing;
 - 5. Has adult and pediatric external pads, capable of utilization for immediate monitoring of heart activity and delivery of counter shock in both the adult and pediatric patient;
 - 6. Is capable of being operated from internal rechargeable batteries;
 - 7. Has synchronized counter shock capability for cardioversion; and
 - 8. Has a patient monitoring cable with electrode pads or equivalent for use with the patient monitoring cable;
 - (c) Sterile, disposable needles, in types and sizes sufficient for personnel to administer medications and perform procedures allowed by the agency's patient treatment protocols;
 - (d) Disposable syringes in types and sizes sufficient for personnel to administer medications and perform procedures allowed by the agency's patient treatment protocols;
 - (e) Restriction band appropriate for use with venipuncture procedure;
 - (f) Disposable, individually packaged antiseptic wipes;
 - (g) Intravenous fluids as required by the agency's protocol, with macrodrip and microdrip fluid sets, and accessory items including over the needle catheter devices in sizes fourteen (14) to twenty-four (24) gauge;
 - (h) Intraosseous needles or intraosseous devices appropriate for children and adults; and
 - (i) Pediatric drug dosage tape or equivalent that provides easy reference for pediatric and infant treatment and drug dosages.
- (5) All items with expiration dates shall not be expired.
 - (6) An ALS agency shall stock and maintain drugs and medications as required by the master drug list contained in protocols established in accordance with this section.
 - (7) Controlled drugs shall be stored in a locked storage box in a locked compartment that is immediately accessible to personnel.
 - (8) This administrative regulation shall not prevent an agency from maintaining other supplies or equipment that are required to carry out its protocols as approved by the board in accordance with KRS 311A.180.

Section 9. Safety Equipment.

(1) Each ground agency licensed to respond to emergency pre-hospital responses shall provide and maintain in full operational order the following minimum light access and extrication equipment on the ambulance for each staff member:

- (a) Eye protection goggles or safety glasses;
- (b) Heavy work gloves;
- (c) Hard hats that meet ANSI standards, as stated in 29 C.F.R. 1910.135;
- (d) Reflective safety wear for each crew member that meet current ANSI standard ANSI 107-2010 or ANSI 207-2011; and
- (e) Three (3) reflective triangles or strobes, or equivalent warning devices.

(2) A ground ambulance agency subject to emergency pre-hospital response not equipped to provide extrication and rescue services shall execute an agreement with an agency capable of providing extrication and rescue services to the primary geographic service area.

(3) Each Class II, III ACC, III PSC, III NSC, and VIII agency shall be exempt from the requirements of this section unless emergency pre-hospital response is included in the agency's scope of care.

Section 10. Equipment or Medication Waiver.

(1) The board for good cause shall grant a waiver of any section of this administrative regulation upon request. An applicant for waiver shall submit an:

- (a) "EMS Equipment or Staff Waiver Request"; and
- (b) A nonrefundable application fee of \$500 per waiver request.

(2) The application request shall include:

- (a) Evidence of prior good faith efforts to comply with each section for which a waiver is requested;
- (b) A written explanation of the agency's inability to comply with each section for which a waiver is requested, including any financial or other significant hardship resulting from the agency's efforts to comply;
- (c) A written plan for providing adequate care to patients;
- (d) The length of time the waiver is requested; and
- (e) A plan for compliance with each section of this administrative regulation for which a waiver has been requested.

(3) Requests for waivers shall be submitted to the executive director of the board.

(4) The administrator and medical director of the agency requesting a waiver shall appear before the board's executive committee and the full board at a regularly scheduled meeting to present evidence of hardship that compliance with this administrative regulation will cause.

(5) Waivers shall not be issued for minimum staffing requirements.

(6) Any waiver issued by the board shall expire on December 31 of the year of issue.

(7) Within twenty (20) days of the board's decision, the executive director shall notify the applicant of the decision in writing.

(8) A waiver approved by the board upon a finding of good cause shall be considered a fulfillment of the licensing requirements established in the waiver through December 31 of the year of issue.

(9) The board shall deny the waiver request if, after reviewing the application, it is determined that if the waiver is granted the:

- (a) Agency is no longer able to meet the needs of the agency's patients or geographic service area; or
- (b) Health or safety of the agency's patients or geographic service area may be jeopardized.

(10) An applicant whose request for waiver is denied may file a written request for a hearing before the board within thirty (30) days of the written notice of denial.

(11) A hearing shall be conducted in accordance with KRS Chapter 13B.

Section 11. Public Notice of Negative Action. The board office shall cause to be published, on the KBEMS Web site or similar publication of the board, or otherwise disseminate, the name of any licensed agency that is fined, placed on probationary status, placed on restricted status, suspended, or had a license revoked.

Section 12. Incorporation by Reference.

(1) The following material is incorporated by reference:

(a) "EMS Equipment or Staff Waiver Request", (12/2017), <http://kemsis.ky.gov/>;

(b) "U.S. Department of Transportation, Emergency Response Guidebook", (2020), www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2021-01/ERG2020-WEB.pdf[(2016)];

(c) "Commission on Accreditation of Ambulance Services Ground Vehicle Standard for Ambulances (GVS)", (7/2022), www.groundvehiclestandard.org/wp-content/uploads/2022/06/CAAS_GVS_V3_Final_07_01_2022_2.pdf[(7/2016)]; and

(d) "U.S. General Services Administration Federal Specification for the Star-of-Life Ambulance (GSA KKK-A-1822F)", (8/2007), www.ehsf.org/sites/default/files/2017-07/Federal%20Specification%20for%20the%20Star-of-Life%20Ambulance.pdf.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Office of the Kentucky Board of Emergency Medical Services, 500 Mero Street, 5th Floor, 5SE32, Frankfort, Kentucky 40601~~[118 James Court, Suite 50, Lexington, Kentucky 40505]~~, Monday through Friday, 8 a.m. to 4:30 p.m.

JOHN R. HOLDER, Chair

APPROVED BY AGENCY: June 8, 2023

FILED WITH LRC: July 13, 2023 at 10:00 a.m.

PUBLIC HEARING AND COMMENT PERIOD: A public hearing on this administrative regulation shall be held on September 27, 2023 at 1:00 p.m. ET at the Kentucky Board of Emergency Medical Services, 500 Mero Street, 5th Floor 5SE32, Frankfort, Kentucky 40601. Individuals interested in being heard at this hearing shall notify this agency in writing by five (5) workdays prior to the hearing of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be canceled. This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Written comments shall be accepted through September 30, 2023. Send written notification of intent to be heard at the public hearing or written comments on the proposed administrative regulation to the contact person.

CONTACT PERSON: John K. Wood, Legal Counsel, Kentucky Board of Emergency Medical Services, 163 E. Main Street, Suite 200, Lexington, Kentucky 40507, phone (859) 225-4714, fax (859) 225-1493, email administrativeregulations@wgmfirm.com.

REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Contact Person: John K. Wood

(1) Provide a brief summary of:

(a) What this administrative regulation does:

KRS 311A.020 requires the board to exercise all administrative functions in the regulation of the emergency medical services system and the licensing of ambulance services and medical first response agencies, except those regulated by the Board of Medical Licensure or the Cabinet for Health and Family Services. KRS 311A.030 requires the board to promulgate administrative regulations for the licensing, inspection, and regulation of ambulance providers and medical first response agencies. This administrative regulation establishes the required supplies and equipment to operate an ambulance service or medical first response agency.

(b) The necessity of this administrative regulation:

KRS 311A.020 requires the board to exercise all administrative functions in the regulation of the emergency medical services system and the licensing of ambulance services and medical first response agencies, except those regulated by the Board of Medical Licensure or the Cabinet for Health and Family Services. KRS 311A.030 requires the board to promulgate administrative regulations for the licensing, inspection, and regulation of ambulance providers and medical first response agencies. This administrative regulation is necessary to establish the required supplies and equipment to operate an ambulance service or medical first response agency.

(c) How this administrative regulation conforms to the content of the authorizing statutes:

This administrative regulation conforms to the content of KRS 311A.020 and 311A.030 by establishing the required supplies and equipment to operate an ambulance service.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes:

KRS 311A.020 requires the board to exercise all administrative functions in the regulation of the emergency medical services system and the licensing of ambulance services and medical first response agencies, except those regulated by the Board of Medical Licensure or the Cabinet for Health and Family Services. KRS 311A.030 requires the board to promulgate administrative regulations for the licensing, inspection, and regulation of ambulance providers and medical first response agencies. This administrative regulation assists in the effective administration of the foregoing statutes by establishing the required supplies and equipment to operate an ambulance service or medical first response agency.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation:

This amendment modifies the supplies and equipment required to operate an ambulance service. This amendment brings ambulance supplies and equipment requirements into conformity with current EMS practices and standards and removes unnecessary or outdated supplies and equipment.

(b) The necessity of the amendment to this administrative regulation:

This amendment is necessary to bring ambulance supplies and equipment requirements into conformity with current EMS practices and standards.

(c) How the amendment conforms to the content of the authorizing statutes:

This administrative regulation conforms to the content of KRS 311A.020, KRS 311A.030 by establishing the required supplies and equipment to operate an ambulance service or medical first response agency.

(d) How the amendment will assist in the effective administration of the statutes:

KRS 311A.020 requires the board to exercise all administrative functions in the regulation of the emergency medical services system and the licensing of ambulance services and medical first response agencies, except those regulated by the Board of Medical Licensure or the Cabinet for Health and Family Services. KRS 311A.030 requires the board to promulgate administrative regulations for the licensing, inspection, and regulation of ambulance providers and medical first response agencies. This administrative regulation will assist in the effective administration of the foregoing statutes by establishing the required supplies and equipment to operate an ambulance service or medical first response agency.

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation:

This administrative regulation will affect the Board, local governments, and all ambulance providers, medical first response agencies, EMS personnel, and EMS patients.

(4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:

(a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment:

The Board shall implement and enforce the supplies and equipment requirements established by this amendment. Ambulance providers and medical first response agencies shall satisfy the supplies and equipment requirements established by this amendment, which will require agencies affected by this amendment to purchase additional supplies and equipment not currently required. Ambulance provider and medical first response personnel are expected to be aware of all supplies and equipment on their ambulance and proficient in the use of such supplies and equipment.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3):

Compliance with this amendment will cost ambulance providers and medical first response agencies affected by the changes in this amendment approximately \$1,800 per ambulance. This value represents the estimated costs of additional supplies and equipment required by this amendment (\$2,020) minus the estimated costs of supplies and equipment that will no longer be required under this amendment (\$220). Costs will vary for each ambulance depending on the equipment and supplies currently carried. For example, some ambulances affected by this amendment already carry a capnography monitor, which costs approximately \$1,095. The \$1,800 in estimated additional costs per ambulance does not include replacement costs of supplies and equipment, which will vary for each ambulance. The Board and EMS personnel will not incur any additional costs in complying with this amendment. This amendment also will not result in any additional costs to EMS patients.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (3):

All affected entities will benefit from ambulances being equipped with supplies and equipment that conforms with current EMS practices and standards. The modified supplies and equipment requirements will assist agencies in providing quality and effective emergency medical care.

(5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:

(a) Initially:

There will be no cost to the administrative body to implement this administrative regulation.

(b) On a continuing basis:

There will be no cost to the administrative body to implement this administrative regulation.

(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation:

The Board's general appropriations will be used to implement and enforce this administrative regulation.

(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment:

No increase in fees or funding will be necessary.

(8) State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees:

This regulation does not establish any fees.

(9) TIERING: Is tiering applied?

Tiering is not applied to this administrative regulation because this amendment applies equally to all ambulance providers and medical first response agencies.

FISCAL NOTE

(1) What units, parts, or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation?

This administrative regulation will affect the Board, ambulance providers, medical first response agencies, and local governments.

(2) Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation.

KRS 311A.020 requires the board to exercise all administrative functions in the regulation of the emergency medical services system and the licensing of ambulance services and medical first response agencies, except those regulated by the Board of Medical Licensure or the Cabinet for Health and Family Services. KRS 311A.030 requires the board to promulgate administrative regulations for the licensing, inspection, and regulation of ambulance providers and medical first response agencies. These statutes authorize the Board to establish the required supplies and equipment to operate an ambulance service or medical first response agency.

(3) Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.

(a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year?

This administrative regulation will generate no revenue for the first year.

(b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years?

This administrative regulation will generate no revenue for subsequent years.

(c) How much will it cost to administer this program for the first year?

This administrative regulation will not require the Board to incur any additional administrative costs.

(d) How much will it cost to administer this program for subsequent years?

This administrative regulation will not require the Board to incur any additional administrative costs.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): This administrative regulation will not generate revenue.

Expenditures (+/-): This administrative regulation will not affect the Board's expenditures.

Other Explanation:

(4) Estimate the effect of this administrative regulation on the expenditures and cost savings of regulated entities for the first full year the administrative regulation is to be in effect.

(a) How much cost savings will this administrative regulation generate for the regulated entities for the first year?

This administrative regulation will not generate any net cost savings.

(b) How much cost savings will this administrative regulation generate for the regulated entities for subsequent years?

This administrative regulation will not generate any net cost savings.

(c) How much will it cost the regulated entities for the first year?

Compliance with this amendment during the first year after it becomes effective will cost ambulance providers and medical first response agencies affected by the changes in this amendment approximately \$1,000 per ambulance. This value represents the estimated costs of additional supplies and equipment required by this amendment during the first year after it becomes effective (\$1,220) minus the estimated costs of supplies and equipment that will no longer be required under this amendment (approximately \$220). Costs will vary for each ambulance depending on the equipment and supplies currently carried. For example, some ambulances affected by this amendment already carry a capnography monitor, which costs approximately \$1,095.

(d) How much will it cost the regulated entities for subsequent years?

Beginning January 1, 2025, ambulances affected by this amendment will be required to carry a pediatric transport device with a minimum weight range of five (5) to ninety-nine (99) pounds. Accordingly, for the second year of compliance with this amendment, agencies that do not currently carry on their ambulances pediatric transport devices with a minimum weight range of five (5) to ninety-nine (99) pounds, will be required to purchase them. This will cost affected agencies approximately \$800 or less per ambulance. Additionally, ambulance providers and medical first response agencies will be required to maintain the supplies and equipment required by this amendment. However, such costs will vary in subsequent years depending on a variety of factors, such as the number of patients each ambulance transports each year, the amount of supplies used, and the condition of equipment.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Cost Savings (+/-): This administrative regulation will not generate any net cost savings.

Expenditures (+/-): This administrative regulation will require an expenditure of approximately \$1,800 per ambulance operated by an ambulance provider or medical first response agency affected by the changes in this amendment. However, actual costs will vary by agency. Some agencies may already carry some or all of the additional equipment required by this amendment on their ambulances. Moreover, the price of required equipment will vary by manufacturer.

Other Explanation:

Ambulance providers and medical first response agencies affected by the changes in this amendment will be required to maintain supplies and equipment, which will require additional expenditures as supplies are used and equipment fails or become inoperable. The exact dollar amount of such expenditures will vary for each ambulance.

(5) Explain whether this administrative regulation will have a major economic impact, as defined below.

"Major economic impact" means an overall negative or adverse economic impact from an administrative regulation of five hundred thousand dollars (\$500,000) or more on state or local government or regulated entities, in aggregate, as determined by the promulgating administrative bodies. This administrative regulation will have a major economic impact. Approximately 1,119 ambulances will be affected by this amendment. Multiplying the number of affected ambulances by the approximate additional costs per ambulance (\$1,800) results in approximately \$2,014,200 in aggregate costs to regulated entities.