

1103 **109-2-11 Standards for type V air ambulance ambulances and equipment.**

1104 (a) The operator shall ensure that the patient compartment is configured in
1105 such a way that air medical personnel have adequate access to the patient in order to
1106 begin and maintain care commensurate with the patients needs both basic and
1107 advanced life support. The operator shall ensure that the air ambulance has adequate
1108 access and necessary space to maintain the patient's airway and to provide adequate
1109 ventilatory support by an attendant from the secured, seat-belted position within the air
1110 ambulance.

1111 (b) Each air ambulance operator shall have a policy that addresses climate
1112 control of the aircraft for the comfort and safety of both the patient and air medical
1113 personnel. The air medical crew shall take precautions to prevent temperature
1114 extremes that could adversely affect patient care.

1115 ~~(a) Each type V ground ambulance shall meet the vehicle and equipment~~
1116 ~~standards which are applicable to that class of ambulance.~~

1117 ~~(b) The patient compartment size shall meet or exceed the following minimum~~
1118 ~~specifications:~~

1119 ~~-(1) headroom: 60 inches; and~~

1120 ~~-(2) length: 116 inches.~~

1121 ~~-(c) Each ambulance shall have a heating and cooling system which is~~
1122 ~~controlled separately for the patient and the driver compartments. The air conditioners~~
1123 ~~for each compartment shall have separate evaporators.~~

1124 ~~-(d) Each ambulance shall have separate ventilation systems for the driver and~~
1125 ~~patient compartments. These systems shall be separately controlled within each~~

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1127 ~~compartment. Fresh air intakes shall be located in the most practical, contaminant-free~~
1128 ~~air space on the ambulance. The patient compartment shall be ventilated through the~~
1129 ~~heating and cooling systems.~~

1130 ~~heating and cooling systems.~~

1131 ~~-(e) The patient compartment in each ambulance shall have adequate lighting~~
1132 ~~so that patient care can be given and the patient's status monitored without the need for~~
1133 ~~portable or hand-held lighting. A reduced lighting level shall also be provided. A patient~~
1134 ~~compartment light and step-well light shall be automatically activated by opening the~~
1135 ~~entrance doors. Interior light fixtures shall be recessed and shall not protrude more~~
1136 ~~than 11 2 inches.~~

1137 ~~-(f) Each ambulance shall have a at least two 80-amp/hr batteries and a 165-~~
1138 ~~amp alternator. All conversion equipment shall have individual fusing which is separate~~
1139 ~~from the chassis fuse system. Each ambulance shall have a 110-volt power source~~
1140 ~~adequate to power all equipment which may be carried.~~

1141 ~~-(g) Each ambulance shall have lights and sirens as required by K.S.A. 8-1720~~
1142 ~~and K.S.A. 8-1738.~~

1143 ~~-(h) Each ambulance shall have an exterior patient loading light over the door~~
1144 ~~which shall be activated both manually by an inside switch and automatically when the~~
1145 ~~door is opened.~~

1146 ~~(i) The operator shall mark each ambulance licensed by the board as follows:~~

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1149 ~~(1) The name of the ambulance service shall be in block letters, not less than~~
1150 ~~four inches in height, and in a color that contrasts with the background color.~~

1151 ~~The service name shall be located on both sides of the ambulance, and shall be~~
1152 ~~placed in such a manner that it is readily identifiable to other motor vehicle~~
1153 ~~operators.~~

1154 ~~(2) Any operator may use a decal or logo which identifies the ambulance service~~
1155 ~~in place of lettering. A decal or logo shall not be less than 10 inches in height,~~
1156 ~~and in a color that contrasts with the background color. The decal or logo shall~~
1157 ~~be located on both sides of the ambulance and shall be placed in such a manner~~
1158 ~~that it is readily identifiable to other motor vehicle operators.~~

1159 ~~(3) Any ambulance licensed by the board before January 1, 1995 which is~~
1160 ~~identified either by letters or a logo on both sides of the ambulance shall be~~
1161 ~~exempt from the minimum size requirements as indicated in paragraphs (1) and~~
1162 ~~(2) of this subsection.~~

1163 ~~(j) The operator shall equip each type V ground ambulance with a direct, two-~~
1164 ~~way radio communications system which is readily accessible to both the attendant and~~
1165 ~~the driver. This system shall be capable of providing direct communications between~~
1166 ~~dispatch and medical control at a hospital.~~

1188 (7) ~~(11)~~ a “no smoking” sign posted in the patient compartment and cockpit
1189 driver compartments; and
1190 ~~(12) one pillow.~~

1191 (d) Each ~~fixed-wing~~ air ambulance shall have a two way communications
1192 system which is readily accessible to both the medical personnel and the pilot,
1193 and which shall meet the following requirements:

1194 (1) Allows communication between the aircraft and air traffic control
1195 systems

1196 (2) Allows medical personnel to communicate at all times with medical
1197 control exclusive of the air traffic control system

1198 (e) The pilot or pilots shall be sufficiently isolated from the patient care area to
1199 minimize in-flight distractions or interference.

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1202 (f) ~~(4)~~ The operator shall equip each type V ground air ambulance with an internal
1203 medical system which includes:

1204 (1) an internal oxygen system with at least two outlets located inside the patient
1205 compartment and with at least 2,500 ~~3,000~~ liters of storage capacity with a
1206 minimum of 200 psi. ~~The cylinder shall be in a compartment which is vented to~~
1207 ~~the outside.~~ The pressure gauge and regulator control valve shall be readily
1208 accessible to the attendant from inside the patient compartment; ~~and~~

1209 (2) The air ambulance operator shall ensure that the oxygen delivery system, all
1210 necessary regulators, gauges and humidifying accessories are available to the
1211 air medical personnel during in-flight operations;

1212 ~~(2)~~ (3) an electrically-powered suction aspirator system with an airflow of at least
1213 28 30 liters per minute and a vacuum of at least 300 millimeters of mercury. The
1214 unit shall be equipped with large bore, non-kinking suction tubing and a semi-
1215 rigid, non-metallic oropharyngeal suction tip; and

1216 (4) The air ambulance operator shall ensure that oxygen flow meters and outlets
1217 are padded, flush mounted, or located to prevent injury to air medical personnel,
1218 unless helmets are worn by all crew members during all phases of flight
1219 operations.

1220 (g) (m) The operator shall equip each type V-ground air ambulance with the
1221 following:

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1224 (1) a portable oxygen unit of at least 300-liter storage capacity complete
1225 with yoke, pressure gauge, and flowmeter with a minimum of 200 psi. The
1226 unit shall be readily accessible from inside the patient compartment;

1227 (2) a portable, self-contained battery or manual suction aspirator with an airflow
1228 of at least 28 liters per minute and a vacuum of at least 300 millimeters of
1229 mercury. The unit shall be fitted with large bore, non-kinking suction tubing and
1230 semi-rigid, non-metallic, oropharyngeal suction tip;

1231 (3) medical supplies and equipment which includes:

1232 (A) airway management equipment, including tracheal intubation equipment,
1233 adult and pediatric and infant bag-valve mask, and ventilatory support
1234 equipment;

1235 (B) a cardiac monitor/defibrillator and an extra battery or power source;

1236 (C) advanced cardiac life support drugs and therapeutic modalities, as
1237 indicated by the service's medical protocols;

1238 (D) neonate specialty equipment and supplies for neonatal missions and as
1239 indicated by the service's medical protocols;

1240 (E) advanced trauma life support supplies and treatment modalities, as
1241 indicated in the service's medical protocols; and

1242 (F) a pulse oximeter and an intravenous infusion pump; and

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1245 (4) blood borne and body fluid pathogen protection equipment as described in
1246 K.A.R. 109-2-8.

1247 ~~(n) Each type V ground ambulance operator shall develop a list of supplies~~
1248 ~~and equipment which is either carried on the ambulance or immediately available for~~
1249 ~~use as each mission requires. This list shall include the supplies and equipment~~
1250 ~~required by the board and any additional supplies or equipment necessary to carry out~~
1251 ~~the patient care activities as indicated in the service's medical protocols.~~

1252 ~~(1) Each operator shall receive annual written approval from the emergency~~
1253 ~~committee of the county medical society for the list of supplies and equipment carried~~
1254 ~~on each ambulance.~~

1255 ~~(2) In those counties where there is no emergency committee of the county~~
1256 ~~medical society, the operator shall receive approval for the list~~
1257 ~~of supplies and equipment carried on each ambulance by the medical staff of the~~
1258 ~~hospital to which the ambulance service primarily transports patients.~~

1259 ~~(3) Each operator shall submit the list of supplies and equipment carried on~~
1260 ~~each ambulance to the board each year with the service's application for an ambulance~~
1261 ~~service permit.~~

1262 (h) ~~(e)~~ If an operator's medical protocols or equipment list are amended, the
1263 operator shall submit these changes to the board with a letter of approval pursuant to
1264 K.S.A. 65-6112 (n) and amendments to within 15 days of implementation of the change.

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1267 (i) ~~(f)~~ Equipment and supplies obtained on a trial basis or for temporary use by
1268 the operator need not be reported to the board by the operator. If the operator's
1269 medical equipment list is amended, the operator shall submit these changes to the
1270 board within 15 days with a letter of approval from the service medical director.

1271 (j) Each air ambulance operator shall ensure that each air ambulance shall
1272 have on board, at all times, appropriate survival equipment for the mission and terrain of
1273 the service's geographic area of operations

1274 (k) Each air ambulance operator shall ensure the aircraft has an adequate
1275 interior lighting system so that patient care can be provided and the patient's status
1276 monitored without interfering with the pilot's vision. The air ambulance operator shall
1277 ensure the aircraft cockpit is capable of being shielded from light in the patient care area
1278 during night operations or red lighting or a reduced lighting level shall also be provided
1279 for the pilot and air ambulance personnel.

1280 (l) Each aircraft shall have at least one stretcher which meets the following
1281 requirements:

1282 (1) accommodates a patient who is up to six ft. tall, 212 pounds;

1283 (2) is capable of elevating the patient's head at least 30 degrees for patient
1284 care and comfort; and

1285 (3) has three securing straps for adult patients; or

1286 (4) a specifically designed mechanism for securing pediatric patients.

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1289 (m) (†) Each air ambulance operator shall ensure that all equipment, stretchers,
1290 and seating are so arranged as not to block rapid egress by air medical personnel or
1291 patients from the aircraft. The operator shall ensure that all equipment on board the
1292 aircraft is affixed or secured in either approved racks or compartments or by strap
1293 restraint while the aircraft is in operation.

1294 (n) The aircraft shall have an electric inverter or appropriate power source
1295 which is sufficient to power patient specific medical equipment without compromising
1296 the operation of any electrical aircraft equipment.

1297 (o) When an isolette is used during patient transport, the operator shall ensure
1298 that the isolette is able to be opened from its secured in-flight position in order to
1299 provide full access to the infant.

1300 (p) The aircraft shall have an external search light which shall be:

1301 (1) at least 400,000 candlepower illumination at 200 feet;

1302 (2) separate from the aircraft landing lights;

1303 (3) moveable 90 degrees longitudinally and 180 degrees laterally; and

1304 (4) capable of being controlled from inside the aircraft.

1305 (q) Each air ambulance operator shall ensure that each air ambulance has on
1306 board, at all times, appropriate survival equipment for the mission and terrain of the
1307 service's geographic area of operations.

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1310 ~~(e) Each air ambulance operator shall equip each rotorwing air ambulance with~~
1311 ~~medical supplies and equipment which includes the following:~~

1312 ~~———— (1) airway management equipment including tracheal intubation equipment,~~

1313 ~~adult and pediatric bag-valve masks and ventilatory support equipment;~~

1314 ~~———— (2) a cardiac monitor/defibrillator and an extra battery or power source;~~

1315 ~~_____ (3) advanced cardiac life support drugs and therapeutic modalities as indicated~~
1316 ~~by the air ambulance operator's medical protocols;~~

1317 ~~_____ (4) neonate specialty equipment and supplies for neonatal missions as~~
1318 ~~indicated in the service's medical protocols;~~

1319 ~~_____ (5) advanced trauma life support treatment modalities as indicated in the~~
1320 ~~service's medical protocols;~~

1321 ~~_____ (6) a pulse oximeter and an intravenous infusion pump; and~~

1322 ~~_____ (7) blood borne and body fluid pathogen protection equipment as described in~~
1323 ~~K.A.R. 109-2-8.~~

1324 (r) Each air ambulance operator shall ensure that all medical equipment is
1325 maintained according to the manufacturer's recommendations and does not interfere
1326 with the aircraft's navigation or on-board systems.

1327 (s) Each type V service operator shall staff each type V air ambulance in
1328 accordance with 109-2-7 type V staffing. a driver or pilot, an attendant, or at least two
1329 allied health care personnel, one of whom shall be a physician, or a licensed
1330 professional nurse. Additional staffing shall be commensurate

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1333 with the patients care needs as determined by the services medical advisor or as
1334 described in the services medical protocols. The medical personnel shall remain in the
1335 patient compartment during patient transport.

1336 (t) Each type V service operator shall staff each type V ambulance with a driver
1337 or pilot and at least two attendants one of which has to be a MICT or paramedic with
1338 specialized training as defined in 109-1-1 subsection (r) or two health care personnel as
1339 defined in 109-1-1 subsection (r) medically-trained persons, one of whom shall be a
1340 physician, or a licensed professional nurse. Additional staffing shall be commensurate
1341 with the patients care needs as determined by the services medical advisor or as
1342 described in the services medical protocols. The medical personnel shall remain in the
1343 patient compartment during patient transport.

1344 (1) At least one of the medical personnel on each type V ambulance shall have
1345 completed and be current in Advanced Cardiac Life Support (ACLS) as in effect on
1346 January 1, 2011 which is adopted herein by reference, or the equivalent, as approved
1347 by the board.

1348 (2) When performing neonatal or pediatric missions, at least one of the medical
1349 personnel on each type V ambulance shall have completed and be current in Pediatric
1350 Advanced Life Support (PALS) as in effect on January 1, 2011 which is adopted herein
1351 by reference, or the equivalent as approved by the board.

1352 (3) When responding to the scene of an accident or medical emergency, not including
1353 transports between medical facilities, at least one of the medical personnel on each type
1354 V ambulance shall have completed and be current in one of the following programs as
1355 in effect on January 1, 2011;

1356 (A) Advanced Trauma Life Support (ATLS)

1357 (B) Transport Nurse Advanced Trauma Course (TNATC)

1358 (C) Trauma Nurse Core Course (TNCC)

1359 (D) Pre-Hospital Trauma Life Support (PHTLS) or

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1362 (Authorized by and implementing K.S.A. 1995 Supp. 65-6110; effective May 1, 1987;

1363 amended July 17, 1989; amended Jan. 31, 1997.)

