

# STATE OF CONNECTICUT

## DEPARTMENT OF PUBLIC HEALTH



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Commissioner

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### OFFICE OF EMERGENCY MEDICAL SERVICES *OEMS COMMUNICATIONS STATEMENT 16-11*

Date: September 26, 2016

To: All Connecticut certified & licensed EMS Organizations  
All Connecticut Sponsor Hospitals

From: Raffaella Coler RN, MEd. <sup>R</sup>  
Director, Office of Emergency Medical Services  
Richard Kamin, MD, FACEP <sup>RK</sup>  
Medical Director, Office of Emergency Medical Services

Re: 2016 Connecticut EMS Minimum Equipment List

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The purpose of this Communications Statement is to publish the 2016 Connecticut EMS Minimum Equipment List for EMS vehicles, which are attached. This review brought some changes to existing lists, and added a list for helicopters. Consistent with past practice, 2016 changes are noted in **bold**. Review was completed by the Connecticut EMS Medical Advisory Committee (CEMSMAC), and the Connecticut EMS Advisory Board (CEMSAB).

In accordance with [C.G.S. Section 19a-177\(13\)](#), **EMS organizations have until September 26, 2017 to comply with these minimum equipment standards**. For any vehicle inspections occurring prior to this deadline, EMS organizations must notify the OEMS inspector, in advance of their inspection, which equipment standard their vehicles will be adhering to for the inspection (the 2015 standard or 2016 standard). Vehicles shall be inspected for compliance with all elements of the indicated standard.

The 2016 Connecticut EMS Minimum Equipment List details the required minimum equipment to be provided at the scene of each EMS call to which it responds, by the specified level of EMS provider (in accordance with Regulations of Connecticut State Agencies [19a-179-10 Categorization of and staffing requirement for services](#)). All required equipment shall be present, appropriately clean and in working order. Substitution for equipment may be made only with the prior written approval of OEMS.

The 2016 Connecticut EMS Minimum Equipment List can also be found on the [Communications and Reference Documents page](#) of the OEMS website.

If you have any questions, please contact your [Regional EMS coordinator](#).



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## MINIMUM

## FIRST RESPONDER VEHICLE EQUIPMENT LIST

CATEGORY	QTY	EQUIPMENT DESCRIPTION
<b>Ventilation &amp; Airway Equipment</b>	1	Portable oxygen administration apparatus with 30 minutes supply at 7 lpm flow rate, which is operable totally detached from parent vehicle. Such unit shall be capable of accepting attachment to a nasal cannula, mouth/nose mask or as enrichment feed to a forced ventilation unit.
	1	Adequate length oxygen tubing. May be separate or incorporated into each of the delivery devices listed below.
	2	Adult Nasal Cannulas
	1	Child Nasal Cannula
	2	Adult non-rebreathing transparent masks
	1	Child non-rebreathing transparent mask
	1	Adult BVM (Hand-operated, self-re-expanding bag [ $>1000$ ml] with oxygen reservoir/accumulator and tubing, valve (clear, disposable, operable in cold weather) and transparent adult mask
	1	Child BVM (Hand-operated, self-re-expanding bag [450-750 ml] with oxygen reservoir/accumulator, valve (clear, disposable, operable in cold weather) and transparent child mask. Suitable substitute for BLS units only: mouth-barrier ventilation devices that allow for ventilation of both infants and children.
	1	Infant mask for BVM. Labeling may vary but should be sized to accommodate appropriate seal on full-term infants ( $<5$ kg or 11 lb). Suitable substitute for BLS units only: mouth-barrier ventilation devices that allow for ventilation of both infants and children.
	1	Neonatal mask for BVM. Labeling may vary but should be sized to accommodate appropriate seal on low-birth weight infants ( $<2.5$ kg or 5.5 lb). Suitable substitute for BLS units only: mouth-barrier ventilation devices that allow for ventilation of both infants and children.
	1	Complete set infant to adult sized oropharyngeal airways
<b>Bandages</b>	2	Sterile multitrauma dressing 10x30" or larger
	5	Abdominal dressing, 5"x9" or larger
	1	Roll of self-adhering elastic bandage suitable for applying a pressure dressing
	10	4" x 4" gauze sponges or suitable size
	4	Gauze rolls
	2	Sterile 3" x 8" or larger occlusive dressings, or equivalent sufficient to permit an air-tight seal of wounds to the chest cavity
	<b>2</b>	<b>Triangular bandages</b>
	1	Hypoallergenic roll of adhesive tape
	1	Roll athletic-type adhesive tape
	2	Arterial tourniquets (commercially manufactured)
	1	Sterile burn sheet
<b>Misc.</b>	500 mL	Sterile saline solution for irrigation (plastic bottle or bag)
	1	Adult Sphygmomanometer (with standard adult and large adult cuffs)
	1	Adult stethoscope
	1	Heavy scissors or shears for cutting clothing, belts, boots, etc.
	1	Battery operated, hand-carried flashlight suitable for illuminating both a localized work area or walkway. Rechargeable or has extra set of batteries. Penlights do not meet this requirement.
	1	Thermal blanket. "Bath blanket" does not meet this requirement.
	1	Complete SMART triage pack

*All quantities represent minimums believed to be adequate for a provider to render care on a single medical/trauma response. MCIs, prolonged transports or multiple consecutive responses may require additional supplies. Services may need to carry additional supplies and/or establish restocking procedures to assure adequate supplies are available for all responses.*

## MINIMUM

## FIRST RESPONDER VEHICLE EQUIPMENT LIST

CATEGORY	QTY	EQUIPMENT DESCRIPTION
<b>Infection Control</b> <i>Latex-free equipment should be available</i>		Single-use examination gloves, non-sterile, 4 pairs of appropriately sized gloves per crewmember (must meet NFPA 1999 requirements found at <a href="http://www.nfpa.org">www.nfpa.org</a> )
	1	Disposable isolation gown
	1	Disposable isolation coverall. Must be fluid resistant or impermeable with sealed seams.
	1	Face protection (for example, surgical mask)
	1	Single-use (disposable) transparent full face shield
	1	Eye protection (full peripheral glasses or goggles)
	1	Pairs of single-use (disposable), fluid-resistant or impermeable boot covers that extend to at least mid-calf. Suitable substitute: Single-use (disposable) fluid-resistant or impermeable shoe covers if they will be used in combination with a coverall with integrated socks. Boot and shoe covers should allow for ease of movement and not present a slip hazard.
	1	Waterless hand cleanser, commercial antimicrobial (towlette, spray, liquid)
	1	Disposable biohazard bag
	1 per crew member	Disposable respiratory protection - appropriately sized to crew member based on fit-testing - filtration standard N95 or better.
<b>Injury Prevention</b>	1	<b>At least 5 lb. or larger ABC UL fire extinguisher, which must be certified in the last 12 months by appropriate certifying agency.</b>
	1	Emergency Response Guidebook (most recent edition - electronic or hardcopy)
	3	Traffic signaling devices (reflective material triangles or other reflective, non-igniting devices.) Suitable substitute: a minimum of 3 hours duration red burning flares.
	1 per crew member	Reflective safety wear for each crewmember (must meet or exceed ANSI/ISEA performance class II or III if working within the right of way of any federal-aid highway (visit <a href="http://www.reflectivevest.com/federalhighwayruling.html">www.reflectivevest.com/federalhighwayruling.html</a> for more information)

**Reminder:** Services must review applicable OSHA standards and carry all required personal protective equipment.

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**MINIMUM**  
**BASIC AMBULANCE VEHICLE EQUIPMENT LIST**

CATEGORY	QTY	EQUIPMENT DESCRIPTION
Ventilation & Airway Equipment	1	Fixed oxygen administration apparatus with 2 hours supply at 7 lpm flow rate.
	1	Variable controlled flow oxygen regulator permitting adjustment from a minimum of 2 lpm - 25 lpm with visual indication of flow rate.
	1	Variable controlled flow oxygen regulator permitting adjustment from a minimum of 2 lpm - 10 lpm with visual indication of flow rate.
	2	Adequate lengths oxygen tubing. May be separate or incorporated into each of the delivery devices listed below.
	2	Adult Nasal Cannulas
	2	Child Nasal Cannulas
	2	Adult non-rebreathing transparent masks
	2	Child non-rebreathing transparent masks
	1	Portable oxygen administration apparatus with 30 minutes supply at 7 lpm flow rate, which is operable totally detached from parent vehicle. Such unit shall be capable of accepting attachment to a nasal cannula, mouth/nose mask or as enrichment feed to a forced ventilation unit.
	1	Fixed Suction apparatus with a regulator capable of drawing a vacuum of 300mm of mercury. Must be adjustable for use with pediatrics.
	1	Battery operated portable suction apparatus. Such unit shall be operable completely independent of parent vehicle for a minimum period of 15 minutes.
	1	Wide-bore suction tubing
	1	Rigid pharyngeal curved suction tip (e.g. yankauer)
	1	Flexible suction catheter between 6F-10F
	1	Flexible suction catheter between 12F-16F
	2	Adult BVMs (Hand-operated, self-re-expanding bag [>1000 ml] with oxygen reservoir/accumulator and tubing, valve (clear, disposable, operable in cold weather) and transparent adult mask
	2	Child BVMs (Hand-operated, self-re-expanding bag [450-750 ml] with oxygen reservoir/accumulator, valve (clear, disposable, operable in cold weather) and transparent child mask
	2	Infant masks for BVM. Labeling may vary but should be sized to accommodate appropriate seal on full-term infants (<5 kg or 11 lb)
	2	Neonatal masks for BVM. Labeling may vary but should be sized to accommodate appropriate seal on low-birth weight infants (<2.5 kg or 5.5 lb)
	2	Adult Nasopharyngeal Airways (at least two different sizes in the range of 26F-34F)
	2	Child Nasopharyngeal Airways (at least two different sizes in the range of 16F-24F)
	2	Complete set infant to adult sized oropharyngeal airways
	1	Pulse oximeter
	1	Adult probe. Suitable substitute: Pulse oximeter approved for use on adults.
	1	Pediatric probe. Suitable substitute: Pulse oximeter approved for use on infants and small children.
	1	Bulb suction for infants

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**MINIMUM**  
**BASIC AMBULANCE VEHICLE EQUIPMENT LIST**

CATEGORY	QTY	EQUIPMENT DESCRIPTION
<b>Monitoring and Defibrillation</b>	1	Automatic External Defibrillator. Manual monitor/defibrillator may be substituted in ambulances staffed at the paramedic level.
	2	Adult defibrillation pads
	1	Pediatric Defibrillation pads
	1	Shaving device capable of removing excessive chest hair.
<b>Immobilization Devices</b>	2	Adult Rigid Cervical collars: Complete set of fixed collars across adult size range (e.g. No-neck, short, medium, tall) Suitable substitute: 2 adjustable height collars (e.g. adjustable to fit full range of adult patients).
	2	Child Rigid Cervical collars for ages 2 years or older
	2	Head immobilization devices (not sandbags) with chin and forehead straps; firm padding or commercial device
	1	Adult lower extremity (femur) traction device - lower extremity, limb-support slings, padded ankle hitch, padded pelvic support, traction strap. CT-DPH approved: Hare traction, Thomas half-ring, commercial rigid traction frame with padded head, attached securing strap at head, ankle lift support and with a design to accept traction strap(s) at the foot.
	1	Child lower extremity (femur) traction device - lower extremity, limb-support slings, padded ankle hitch, padded pelvic support, traction strap. CT-DPH approved: Hare traction, Thomas half-ring, commercial rigid traction frame with padded head, attached securing strap at head, ankle lift support and with a design to accept traction strap(s) at the foot.
	2	Sets of splinting materials or immobilization devices sufficient to permit immobilization and protection to any portion of an adult or child upper or lower extremity in any position such that the joint-above and joint-below the fracture are also immobilized. Must be rigid-support constructed with appropriate material [cardboard, metal, pneumatic, vacuum, wood, or plastic]. Generally a set will consist of small, medium and large splints.
	1	Impervious long board (transport, head-to-foot length) with handholds for moving patients. <b>Suitable substitute: "Scoop stretcher" style lifting/moving device</b>
	4	Restraint straps compatible with long board and appropriate for securing torso and legs (single restraint system such as "Spider Strap" may be substituted.)
	1	Impervious short extrication device (head-to-pelvis length)with handholds for moving patients and at least three appropriate torso restraint straps, head and chin straps.
<b>Bandages</b>	4	Sterile multitrauma dressings 10x30" or larger
	10	Abdominal dressings, 5"x9" or larger
	1	Roll of self-adhering elastic bandage suitable for applying a pressure dressing
	20	4" x 4" sterile gauze pads/sponges or suitable size
	6	Soft, self-adhering gauze rolls
	4	Sterile 3" x 8" or larger occlusive dressings, or equivalent sufficient to permit an air-tight seal of wounds to the chest cavity
	<b>6</b>	<b>Triangular bandages</b>
	2	Hypoallergenic adhesive tape, various sizes including 1" and 2"
	2	Adhesive tape, various sizes including 1" and 2"
	2	Arterial tourniquets (commercially manufactured)
	2	Sterile burn sheets

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## MINIMUM BASIC AMBULANCE VEHICLE EQUIPMENT LIST

CATEGORY	QTY	EQUIPMENT DESCRIPTION
OB Kit	1	Obstetrical kit (separate, sterile kit) containing a minimum of 1 pair sterile gloves, sterile scissors or other cutting utensil, umbilical clamps or tape, sterile vaginal dressings, 2 towels, large plastic bag and swaddling material
	1	Newborn head cover
Misc.	1	Adult Sphygmomanometer (with standard adult and large adult size cuffs)
	1	Child/Pediatric Sphygmomanometer
	1	Adult stethoscope
	1	Pediatric Stethoscope. Suitable substitute: Stethoscope that integrates both pediatric and adult sized diaphragms.
	1	Penlight. Suitable substitute: small flashlight suitable for checking pupillary response and eye movement
	1	Heavy scissors or shears for cutting clothing, belts, boots, etc.
	4	Cold packs
	2000 mL	Sterile saline solution for irrigation (plastic bottles or bags)
	2	Battery operated, hand-carried flashlights suitable for illuminating both a localized work area or walkway. Rechargeable or has extra set of batteries. Penlights do not meet this requirement.
	2	Thermal blankets. "Bath blanket" does not meet this requirement.
	2	Pillows
	4	Pillow Cases. May be reusable or disposable.
	4	Sheets. May be reusable or disposable.
	4	Towels
	1	SMART Triage Pack
	2	Disposable emesis bags or basins
	1	Disposable bedpan
	<b>1</b>	<b>Disposable urinal with lid or sealed bag substitute</b>
	1	Wheeled cot (conforming to national standard at the time of manufacture) with at least three transverse strap type restraining devices (chest, hip, knee) incorporating metal quick-release buckles and upper torso (over the shoulder) restraints that mitigate cephalic motion of the patient.
	3	Extension straps compatible with cot straps' metal quick-release buckles
	1	Stair chair or carry chair
		Electronic patient care reporting system or patient care charts/forms.
		Printed copy or access to electronic version of patient care guidelines.
	3	Lubricating jelly (water soluble). Single use packets or tubes.
	<b>1</b>	<b>Set of commercially manufactured, soft and padded wrist and ankle patient restraints labeled by vendor as appropriate for restraining violent patients.</b>
	2	Liters of potable water in factory sealed container (may be divided into multiple smaller sealed containers.)
	30 grams	Glucose in a form easily ingested orally
1	Epinephrine 0.3 mg auto injector	
1	Epinephrine 0.15 mg auto injector	
Infection Control Latex-free equipment	1	Single-use examination gloves, non-sterile, 16 pairs of each size small, medium, large and extra large (must meet NFPA 1999 requirements found at www.nfpa.org). May be in original boxes or in other storage containers or bags, separated by size.

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**MINIMUM  
BASIC AMBULANCE VEHICLE EQUIPMENT LIST**

CATEGORY	QTY	EQUIPMENT DESCRIPTION
<i>should be available</i>	2	Disposable isolation gowns
	2	Disposable isolation coveralls. Must be fluid resistant or impermeable with sealed seams.
	2	Single-use (disposable) surgical hoods extending to shoulders. Suitable substitutes: Coverall with integrated hood or Powered Air Purifying Respirator (PAPR) with integrated hood.
	2	Single-use (disposable) transparent full face shield
	2	Splash/droplet eye protection (full peripheral glasses or goggles)
	2	Pairs of single-use (disposable), fluid-resistant or impermeable boot covers that extend to at least mid-calf. Suitable substitute: Single-use (disposable) fluid-resistant or impermeable shoe covers if they will be used in combination with a coverall with integrated socks. Boot and shoe covers should allow for ease of movement and not present a slip hazard.
	1	Waterless hand cleanser, commercial antimicrobial (towelette, spray, liquid)
	1	Disinfectant solution for cleaning equipment
	1	Standard sharps container, fixed
	2	Disposable biohazard bags
<b>Injury Prevention</b>	1 per crew member	Disposable respiratory protection - appropriately sized to crew member based on fit-testing - filtration standard N95 or better.
	1	Pediatric passenger restraint system that either 1) is commercially manufactured for the specific purpose of securing a pediatric patient within the patient compartment of an ambulance during transport or 2) a child passenger restraint system that meets the requirements of the Code of Federal Regulations, Title 49, Part 571.213, as amended, child restraint systems, and displays a permanent label indicating all information required by such regulations, including but not limited to the following: "This child restraint system conforms to all applicable Federal Motor Vehicle Safety Standards."
	2	<b>At least 5 lb. or larger ABC UL fire extinguishers, one in driver compartment, one in patient compartment. Both must be certified in the last 12 months by appropriate certifying agency.</b>
	1	Wrecking Bar minimum 24" Length
	2	Pairs leather gloves. Suitable substitute: Cut/puncture resistant extrication or structural firefighting gloves.
	1	Window glass breaking device
	2	OSHA compliant eye protection from flying particles. Same device may be used to meet both splash/droplet and flying particle eye protection requirements.
	1	Emergency Response Guidebook (most recent edition - electronic or hardcopy)
	3	Traffic signaling devices (reflective material triangles or other reflective, non-igniting devices)
1 per crew member	Reflective safety wear for each crewmember (must meet or exceed ANSI/ISEA performance class II or III if working within the right of way of any federal-aid highway (visit <a href="http://www.reflectivevest.com/federalhighwayruling.html">www.reflectivevest.com/federalhighwayruling.html</a> for more information)	

**Reminder:** Services must review applicable OSHA standards and carry all required personal protective equipment.

**NOTE:** Basic ambulances are strongly encouraged to carry a child passenger restraint system(s) that meets the requirements of the Code of Federal Regulations, Title 49, Part 571.213, as amended, *child restraint systems*, and is able to accommodate both infants and children up to a weight of at least 60 pounds. Ambulances may only transport children who are not patients but weigh less than 60 pounds and or are less than 6 years of age if the child is restrained in a compliant child restraint system.

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## MINIMUM

## MIC-AEMT AMBULANCE VEHICLE EQUIPMENT LIST

**NOTE: Must comply with minimum equipment either as a basic first responder vehicle or basic ambulance in addition to this list.**

	QTY	EQUIPMENT DESCRIPTION
ALS Vascular Access	4	Crystalloid intravenous solutions, such as Ringer's lactate or normal saline solution (1000 mL bags); fluid must be in bags or plastic containers, not glass bottles; type of fluid may vary depending on local requirements
	<b>10</b>	<b>Chlorhexidine preps</b>
	2	Sets of intravenous catheters, one each 14G through 24G
	2	Venous tourniquets
	1	Sharps container, portable
	4	Intravenous administration sets (macro drip)
	1	Intravenous arm board, pediatric

**MIC-AEMT first responder vehicles must carry the following additional basic level minimum equipment:**

**NOTE: Must comply with minimum equipment either as a basic first responder vehicle or basic ambulance in addition to this list.**

Additional medical supplies for MIC-AEMT first responder vehicles	1	Battery operated portable suction apparatus. Such unit shall be operable completely independent of parent vehicle for a minimum period of 15 minutes.
	1	Rigid pharyngeal curved suction tip (e.g. yankauer)
	1	Flexible suction catheter between 6F-10F
	1	Flexible suction catheter between 12F-16F
	1	Penlight. Suitable substitute: small flashlight suitable for checking pupillary response and eye movement
	1	Pulse oximeter
	1	Adult probe. Suitable substitute: Pulse oximeter approved for use on adults.
	1	Pediatric probe. Suitable substitute: Pulse oximeter approved for use on infants and small children.
	1	Child/Pediatric Sphygmomanometer
	1	Pediatric Stethoscope. Suitable substitute: Stethoscope that integrates both pediatric and adult sized diaphragms.
	1	Bulb suction for infants
	1	Adult Rigid Cervical collars: Complete set of fixed collars across adult size range (e.g. No-neck, short, medium, tall) Suitable substitute: 2 adjustable height collars (e.g. adjustable to fit full range of adult patients).
	2	Child Rigid Cervical collars for ages 2 years or older
	1	Obstetrical kit (separate, sterile kit) containing a minimum of 1 pair sterile gloves, sterile scissors or other cutting utensil, umbilical clamps or tape, sterile vaginal dressings, 2 towels, large plastic bag and swaddling material
	1	Newborn head cover
		Printed copy or access to electronic version of patient care guidelines
		Electronic patient care reporting system or patient care charts/forms
1	SMART Triage Pack (required)	
15 grams	Glucose in a form easily ingested orally	

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## MINIMUM

## MIC-PARAMEDIC VEHICLE EQUIPMENT LIST

**NOTE: Must comply with applicable minimum equipment either as a basic first responder vehicle or basic ambulance.**

CATEGORY	QTY	EQUIPMENT DESCRIPTION	
ALS Ventilation & Airway Equipment	1	Adult laryngoscope handle with one set of extra batteries.	
	1	Pediatric laryngoscope handle	
	1	Set of Laryngoscope blades, sizes 0-4, straight; Sizes 2-4, curved	
	1	Extra bulb(s) for laryngoscope blades. Must have at least one spare bulb for each size/type of bulb used in required blades. Fiber optic systems in which the bulb is integrated into the handle are exempt from this requirement provided that two handles (may be adult and/or pediatric) are carried that are interchangeable with all required blades.	
	2	Sets of endotracheal tubes, both whole and half sizes 2.5-5.5 mm (cuffed or uncuffed) and 6-8 mm cuffed. Other sizes optional. Must be sterile and individually wrapped.	
	2	Sets of sterile, soft suction catheters in the following sizes: 6 F, 8 F, 10 F and 12 or 14 F. Must be sterile and in original, unbroken packaging.	
	1	Meconium aspirator or adaptor for endotracheal tube	
	1	10 or 12 mL syringes	
	1	Set of stylets suitable for neonatal, pediatric and adult endotracheal tubes (e.g. Sizes 6, 10 and 14 F). Sterile in original packaging.	
	1	Supplies to secure an adult endotracheal tube	
	1	Supplies to secure a pediatric endotracheal tube	
	1	Adult Magill forceps	
	1	Pediatric Magill forceps	
	1	Set of extra-glottic airway devices (LMA, King, Combitube or similar as approved by sponsor hospital) in a range of sizes to fit adult patients with associated supplies necessary for insertion and securing of device.	
	1	End-tidal CO2 quantitative waveform canography	
	2	Endotracheal tube adapter for end-tidal CO2 capnography (pediatric and adult)	
	1	Endotracheal tube introducer (Bougie) - sterile in original packaging.	
	1	Cricothyrotomy supplies suitable for establishing an emergency airway on adult and pediatric patients.	
		<b>1</b>	<b>Adapter to allow for administration of nebulized medications through BVM and CPAP.</b>
	ALS Vascular Access	4000 mL	Crystalloid intravenous solutions, such as Ringer's lactate or normal saline solution (1000 mL bags); fluid must be in bags or plastic containers, not glass bottles; type of fluid may vary depending on local requirements
<b>10</b>		<b>Chlorhexidine preps</b>	
2		Sets of intravenous catheters, one each 14G through 24G	
2		Intraosseous needles or devices appropriate for adults	
2		Intraosseous needles or devices appropriate for infants and children	
2		Venous tourniquets	
1		Sharps container, portable	
4		1 mL syringes	
6		3 or 5 mL syringes	
4		10 or 12 mL syringes	
4		Hypodermic needles individually packaged or integrated into syringes suitable for intramuscular medication administration	
8		Needles or adapters suitable for insertion/connection into IV line. May omit for IV sets with integral syringe adapters.	

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## MINIMUM

## MIC-PARAMEDIC VEHICLE EQUIPMENT LIST

CATEGORY	QTY	EQUIPMENT DESCRIPTION
	4	Intravenous administration sets (macro drip)
	2	Intravenous administration sets (micro drip)
	1	Intravenous arm boards, pediatric
ALS Cardiac	1	Portable, battery-operated monitor/defibrillator with tape write-out/recorder and 12 lead ECG acquisition /interpretation capability.
	2	Adult-sized electrical therapy (defibrillation/cardioversion) electrodes/pads
	2	Pediatric-sized electrical therapy (defibrillation/cardioversion) electrodes/pads
	20	Adult monitoring electrodes
	20	Infant-sized pediatric monitoring electrodes
	1	Spare monitor battery
	1	Spare ECG paper
	1	Transcutaneous cardiac pacemaker and cables - Either stand-alone unit or integrated into monitor/defibrillator
	2	Adult transcutaneous pacing electrodes/pads. Previously listed defibrillation pads count toward this requirement if they function as combination defibrillation/transcutaneous pacing electrodes
	2	Pediatric transcutaneous pacing electrodes/pads. Previously listed defibrillation pads count toward this requirement if they function as combination defibrillation/transcutaneous pacing electrodes
Other Advanced Equipment	1	Length/weight-based tape or appropriate reference material for pediatric equipment sizing and drug dosing based on estimated or known weight
	2	<b>Direct eye irrigation systems (e.g. Morgan lens or equivalent)</b>
	2	Medication nebulizer assemblies
	1	Adult clear plastic nebulizer mask with strap.
	1	Pediatric clear plastic nebulizer mask with strap.
	1	Non-invasive continuous positive airway pressure (CPAP) or bi-level positive airway pressure delivery device (BiPAP) with all appropriate circuits, connectors and masks to fit small, medium, and large facial structures as defined by the device manufacturer.
	1	Glucometer or blood glucose measuring device with reagent strips and lancets
	2	Large bore over-the-needle catheters capable of attachment of a syringe to the needle lumen (should be at least 3.25" in length for needle chest decompression in large adults)
	2	Medium-bore over-the-needle catheters capable of attachment of a syringe to the needle lumen (suitable gauge and length for needle chest decompression in infants/children).

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## MINIMUM

## MIC-PARAMEDIC VEHICLE EQUIPMENT LIST

CATEGORY	QTY	EQUIPMENT DESCRIPTION
Medications (pre-loaded syringes when available). Drug dosing in children should use processes minimizing the need for calculations, preferably a length-based system.	8 mg	Epinephrine 1:10,000. Suitable substitute: 8 mg 1:1000 epinephrine with supplies sufficient to dilute to (8) 1 mg unit doses of 1:10,000 epinephrine.
	3 mg	Atropine
	18 mg	Adenosine
	450 mg	Amiodarone
	50 mg	Diltiazem
	<b>30 mg</b>	<b>Metoprolol</b>
	8 tablets or 1 spray bottle	Nitroglycerine
	324 mg	Aspirin
	<b>8 mg</b>	<b>Norepinephrine</b>
	10 mg	Albuterol for inhalation
	0.5 mg	Ipratropium for inhalation. Suitable substitute: Ipratropium contained in premixed ipratropium and albuterol solution may be counted toward this requirement.
	0.9 mg	Epinephrine 1:1000. Must be supplied so as to be able to deliver three (3) intramuscular injections of 0.15 mg for pediatric patients and 0.3 mg for adult patients.
	<b>50 grams</b>	<b>D10 intravenous solution. Must carry at least 50 grams in D10 form or another concentration of dextrose and sufficient sterile diluent to prepare same.</b>
	200 mEq	Sodium bicarbonate solution for injection
	2 grams	Magnesium sulfate
	<b>2 mg</b>	<b>Glucagon with bacteriostatic water for dilution</b>
	4 mg	Naloxone hydrochloride
	2	Supplies to dilute and administer intravenous medication in a measured volume of fluid at a controlled rate (e.g. 50-250 mL IV solution bags, buretrol set, etc.)
	50 mg	Diphenhydramine
	1	Eye anesthetic solution (e.g. tetracaine)
		At least one of the following narcotic analgesics:
	300 mcg	Fentanyl citrate
	20 mg	Morphine sulfate
	<b>4 mg</b>	<b>Hydromorphone</b>
		At least one of the following benzodiazepines:
	8 mg	Lorazepam
	20 mg	Midazolam
	30 mg	Diazepam
		At least one of the following intravenous calcium medications:
	2 grams	Calcium chloride
6 grams	Calcium gluconate	
	At least one of the following anti-emetic medications:	
8 mg	Ondansetron	
10 mg	Metoclopramide	
10 mg	Prochlorperazine	

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## MINIMUM

**MIC-PARAMEDIC VEHICLE EQUIPMENT LIST**

<b>CATEGORY</b>	<b>QTY</b>	<b>EQUIPMENT DESCRIPTION</b>
<b>All other equipment</b>	1	Battery operated portable suction apparatus. Such unit shall be operable completely independent of parent vehicle for a minimum period of 15 minutes.
ALS-Paramedic <i>first responder vehicles</i> must carry the following additional minimum equipment:	1	Rigid pharyngeal curved suction tip (e.g. yankauer)
<b>Additional medical supplies for ALS first responder vehicles</b>	3	Lubricating Jelly (water soluble). Single use packet or tube.
	1	Penlight. Suitable substitute: small flashlight suitable for checking pupillary response and eye movement
	1	Pulse oximeter
	1	Adult probe. Suitable substitute: Pulse oximeter approved for use on adults.
	1	Pediatric probe. Suitable substitute: Pulse oximeter approved for use on infants and small children.
	1	Child/Pediatric Sphygmomanometer
	1	Pediatric Stethoscope. Suitable substitute: Stethoscope that integrates both pediatric and adult sized diaphragms.
	1	Bulb suction for infants
	1	Shaving device capable of removing excessive chest hair
	1	Adult Rigid Cervical collar set: Complete set of fixed collars across adult size range (e.g. No-neck, short, medium, tall) Suitable substitute: 2 adjustable height collars (e.g. adjustable to fit full range of adult patients).
	<b>1</b>	<b>Child Rigid Cervical collars for ages 2 years or older</b>
	1	Obstetrical kit (separate, sterile kit) containing a minimum of 1 pair sterile gloves, sterile scissors or other cutting utensil, umbilical clamps or tape, sterile vaginal dressings, 2 towels, large plastic bag and swaddling material
	1	Newborn head cover
		Electronic patient care reporting system or patient care charts/forms
		Printed copy or access to electronic version of patient care guidelines
	1	SMART Triage Pack (required)
<b>1</b>	<b>Medication Pump or IV flow restricting/metering device</b>	
15 grams	Glucose in a form easily ingested orally	

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**2016 CONNECTICUT  
MINIMUM  
HELICOPTER EQUIPMENT LIST**

<b>CATEGORY</b>	<b>QTY</b>	<b>EQUIPMENT DESCRIPTION</b>
<b>Ventilation &amp; Airway Equipment</b>	1	Fixed oxygen administration apparatus with 2 hours supply at 7 lpm flow rate.
	1	Variable controlled flow oxygen regulator permitting adjustment from a minimum of 2 lpm - 15 lpm with visual indication of flow rate.
	1	Variable controlled flow oxygen regulator permitting adjustment from a minimum of 2 lpm - 10 lpm with visual indication of flow rate.
	1	Adult Nasal Cannulas
	1	Child Nasal Cannulas
	1	Adult non-rebreathing transparent masks
	1	Child non-rebreathing transparent masks
	1	Portable oxygen administration apparatus with 30 minutes supply at 7 lpm flow rate, which is operable totally detached from parent vehicle. Such unit shall be capable of accepting attachment to a nasal cannula, mouth/nose mask or as enrichment feed to a forced ventilation unit.
	1	Fixed Suction apparatus with a regulator capable of drawing a vacuum of 300mm of mercury. Must be adjustable for use with pediatrics.
	1	Battery operated portable suction apparatus. Such unit shall be operable completely independent of parent vehicle for a minimum period of 15 minutes.
	1	Wide-bore suction tubing
	1	Rigid pharyngeal curved suction tip (e.g. yankauer)
	1	Flexible suction catheter between 6F-10F
	1	Flexible suction catheter between 12F-16F
	2	Adult BVMs (Hand-operated, self-re-expanding bag [>1000 ml] with oxygen reservoir/accumulator and tubing, valve (clear, disposable, operable in cold weather) and transparent adult mask
	1	Child BVMs (Hand-operated, self-re-expanding bag [450-750 ml] with oxygen reservoir/accumulator, valve (clear, disposable, operable in cold weather) and transparent child mask
	1	Infant masks for BVM. Labeling may vary but should be sized to accommodate appropriate seal on full-term infants (<5 kg or 11 lb)
	1	Neonatal masks for BVM. Labeling may vary but should be sized to accommodate appropriate seal on low-birth weight infants (<2.5 kg or 5.5 lb)
	1	Complete set infant to adult sized oropharyngeal airways
	1	Pulse oximeter
	1	Adult probe. Suitable substitute: Pulse oximeter approved for use on adults.
1	Pediatric probe. Suitable substitute: Pulse oximeter approved for use on infants and small children.	
1	Bulb suction for infants	
<b>Immobilization Devices</b>	1	Adult Rigid Cervical collars: Complete set of fixed collars across adult size range (e.g. No-neck, short, medium, tall) Suitable substitute: 2 adjustable height collars (e.g. adjustable to fit full range of adult patients).
	1	Child Rigid Cervical collars for ages 2 years or older
<b>Bandages</b>	3	Abdominal dressings, 5"x9" or larger
	6	4" x 4" sterile gauze pads/sponges or suitable size
	2	Soft, self-adhering gauze rolls
	1	Hypoallergenic adhesive tape
	1	Adhesive tape

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	2	Arterial tourniquets (commercially manufactured)
<b>OB Kit</b>	1	Obstetrical kit (separate, sterile kit) containing a minimum of 1 pair sterile gloves, sterile scissors or other cutting utensil, umbilical clamps or tape, sterile vaginal dressings, 2 towels, large plastic bag and swaddling material
<b>Misc.</b>	1	Adult Sphygmomanometer (with standard adult and large adult size cuffs)
	1	Child/Pediatric Sphygmomanometer
	1	Stethoscope(s) suitable for adult and pediatric patients
	1	Penlight. Suitable substitute: small flashlight suitable for checking pupillary response and eye movement
	1	Heavy scissors or shears for cutting clothing, belts, boots, etc.
	1	Battery operated, hand-carried flashlights suitable for illuminating both a localized work area or walkway. Rechargeable or has extra set of batteries. Penlights do not meet this requirement.
	2	Thermal blankets. "Bath blanket" does not meet this requirement.
	2	Towels
	<b>1</b>	<b>Set of commercially manufactured, soft and padded wrist and ankle patient restraints labeled by vendor as appropriate for restraining violent patients.</b>
	1	Electronic patient care reporting system or patient care charts/forms
	1	Printed copy or access to electronic version of patient care guidelines
	2	Lubricating jelly (water soluble). Single use packets or tubes.
<b>Infection Control Latex-free equipment should be available</b>	1	Single-use examination gloves, non-sterile, 8 pairs of each size small, medium, large and extra large (must meet NFPA 1999 requirements found at www.nfpa.org). May be in original boxes or in other storage containers or bags, separated by size.
	2	Disposable isolation gowns
	2	Face protection (for example, surgical masks)
	2	Splash/droplet eye protection (full peripheral glasses, goggles or face shield)
	2	Pairs of shoe covers
	1	Waterless hand cleanser, commercial antimicrobial (towelette, spray, liquid)
	1	Sharps container
	1 per crew member	Disposable respiratory protection - appropriately sized to crew member based on fit-testing - filtration standard N95 or better.
<b>Injury Prevention</b>	1	Pediatric passenger restraint system that either 1) is commercially manufactured for the specific purpose of securing a pediatric patient within the patient compartment of an ambulance during transport <u>or</u> 2) a child passenger restraint system that meets the requirements of the Code of Federal Regulations, Title 49, Part 571.213, as amended, child restraint systems, and displays a permanent label indicating all information required by such regulations, including but not limited to the following: "This child restraint system conforms to all applicable Federal Motor Vehicle Safety Standards."
	1	Emergency Response Guidebook (most recent edition - electronic or hardcopy)
	1 per crew member	Reflective safety wear for each crewmember (must meet or exceed ANSI/ISEA performance class II or III if working within the right of way of any federal-aid highway (visit <a href="http://www.reflectivevest.com/federalhighwayruling.html">www.reflectivevest.com/federalhighwayruling.html</a> for more information)

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HELICOPTER EQUIPMENT LIST**

<b>ALS Ventilation &amp; Airway Equipment</b>	1	Adult laryngoscope handle with one set of extra batteries.
	1	Pediatric laryngoscope handle
	1	Set of Laryngoscope blades, sizes 0-4, straight; Sizes 2-4, curved
	1	Extra bulb(s) for laryngoscope blades. Must have at least one spare bulb for each size/type of bulb used in required blades. Fiber optic systems in which the bulb is integrated into the handle are exempt from this requirement provided that two handles (may be adult and/or pediatric) are carried that are interchangeable with all required blades.
	1	Sets of endotracheal tubes, both whole and half sizes 2.5-5.5 mm (cuffed or uncuffed) and 6-8 mm cuffed. Other sizes optional. Must be sterile and individually wrapped.
	1	Sets of sterile, soft suction catheters in the following sizes: 6 F, 8 F, 10 F and 12 or 14 F. Must be sterile and in original, unbroken packaging.
	1	Meconium aspirator or adaptor for endotracheal tube
	2	10 mL syringes
	1	Set of stylets suitable for neonatal, pediatric and adult endotracheal tubes (e.g. Sizes 6, 10 and 14 F). Sterile in original packaging.
	1	Supplies to secure an adult endotracheal tube
	1	Supplies to secure a pediatric endotracheal tube
	1	Adult Magill forceps
	1	Pediatric Magill forceps
	1	End-tidal CO <sub>2</sub> quantitative waveform canography
	2	Endotracheal tube adapter for end-tidal CO <sub>2</sub> capnography (pediatric and adult)
	1	Endotracheal tube introducer (Bougie) - sterile in original packaging.
	1	Ventilator capable of both volume and pressure limited ventilation
	1	Cricothyrotomy supplies suitable for establishing an emergency airway on adult and pediatric patients.
	1	Adapter to allow for administration of nebulized medications through BVM and CPAP.
	<b>Vascular Access</b>	4000 mL
<b>10</b>		<b>Chlorhexidine preps</b>
2		Sets of intravenous catheters, one each 14G through 24G
2		Intraosseous needles or devices appropriate for adults
2		Intraosseous needles or devices appropriate for infants and children
2		Venous tourniquets
2		1 mL syringes
2		3 or 5 mL syringes
2		10 mL syringes
2		Hypodermic needles individually packaged or integrated into syringes suitable for intramuscular medication administration
4		Needles or adapters suitable for insertion/connection into IV line. May omit for IV sets with integral syringe adapters.
2		Intravenous administration sets (macro drip)
1		IV pump(s) capable of administering at least 3 continuous infusions

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	1	Ability to monitor at least 1 invasive pressure line
	1	Intravenous arm boards, pediatric
<b>Cardiac</b>	1	Portable, battery-operated monitor/defibrillator with tape write-out/recorder and 12 lead ECG acquisition /interpretation capability.
	2	Adult-sized electrical therapy (defibrillation/cardioversion) electrodes/pads
	2	Pediatric-sized electrical therapy (defibrillation/cardioversion) electrodes/pads
	10	Adult monitoring electrodes
	20	Infant-sized pediatric monitoring electrodes
	1	Spare monitor battery
	1	Spare ECG paper
	1	Transcutaneous cardiac pacemaker and cables - Either stand-alone unit or integrated into monitor/defibrillator
	2	Adult transcutaneous pacing electrodes/pads. Previously listed defibrillation pads count toward this requirement if they function as combination defibrillation/transcutaneous pacing electrodes
	2	Pediatric transcutaneous pacing electrodes/pads. Previously listed defibrillation pads count toward this requirement if they function as combination defibrillation/transcutaneous pacing electrodes
	1	Shaving device capable of removing excessive chest hair.
	<b>Other Advanced Equipment</b>	1
1		Medication nebulizer assemblies
1		Adult clear plastic nebulizer mask with strap.
1		Pediatric clear plastic nebulizer mask with strap.
1		Non-invasive continuous positive airway pressure or bi-level positive airway pressure delivery device with mask sizes sufficient to fit a range of adult patients.
1		Glucometer or blood glucose measuring device with reagent strips and lancets
2		Large bore over-the-needle catheters capable of attachment of a syringe to the needle lumen (should be at least 3.25" in length for needle chest decompression in large adults)
2		Medium-bore over-the-needle catheters capable of attachment of a syringe to the needle lumen (suitable gauge and length for needle chest decompression in infants/children)
<b>Medications (pre-loaded syringes when available). Drug dosing in children should use processes minimizing the need for calculations, preferably a length-based system.</b>	8 mg	Epinephrine 1:10,000. Suitable substitute: 8 mg 1:1000 epinephrine with supplies sufficient to dilute to (8) 1 mg unit doses of 1:10,000 epinephrine.
	3 mg	Atropine
	18 mg	Adenosine
	450 mg	Amiodarone
	50 mg	Diltiazem
	<b>30 mg</b>	<b>Metoprolol</b>
	8 tablets or 1 spray bottle	Nitroglycerine
	324 mg	Aspirin
	<b>8 mg</b>	<b>Norepinephrine</b>
10 mg	Albuterol for inhalation	

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0.5 mg	Ipratropium for inhalation. Suitable substitute: Ipratropium contained in premixed ipratropium and albuterol solution may be counted toward this requirement.
0.9 mg	Epinephrine 1:1000. Must be supplied so as to be able to deliver three (3) intramuscular injections of 0.15 mg for pediatric patients and 0.3 mg for adult patients.
<b>50 grams</b>	<b>D10 intravenous solution. Must carry at least 50 grams in D10 form or another concentration of dextrose and sufficient sterile diluent to prepare same.</b>
200 mEq	Sodium bicarbonate solution for injection
2 grams	Magnesium sulfate
4 mg	Naloxone hydrochloride
2	Supplies to dilute and administer intravenous medication in a measured volume of fluid at a controlled rate (e.g. 50-250 mL IV solution bags, buretrol set, etc.)
50 mg	Diphenhydramine
	<b>At least one of the following narcotic analgesics:</b>
300 mcg	Fentanyl citrate
20 mg	Morphine sulfate
<b>4 mg</b>	<b>Hydromorphone</b>
	<b>At least one of the following benzodiazepines:</b>
8 mg	Lorazepam
20 mg	Midazolam
30 mg	Diazepam
	<b>At least one of the following intravenous calcium medications:</b>
2 grams	Calcium chloride
6 grams	Calcium gluconate
	<b>At least one of the following anti-emetic medications:</b>
8 mg	Ondansetron
10 mg	Metoclopramide
10 mg	Prochlorperazine

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