



# NCCEP Standards for EMS Equipment



# North Carolina College of Emergency Physicians Standards for EMS Equipment



- B.** The baseline equipment required in all systems (including Specialty Care Transport Programs) with EMS personnel credentialed at the specified level.
- S.** The equipment required in all Specialty Care Transport Programs (in addition to the baseline equipment required in all EMS Systems). All Air Medical Specialty Care Transport Programs and dedicated Neonatal Transport Programs are required to carry and maintain equipment and medications specific to each mission, as defined by medical control and OEMS approved protocols.
- O.** The equipment, which is optional for any system with EMS personnel, credentialed at the specified level.

EMS Equipment	Conv.	EMT	EMT-I	EMT-P
<b>Ventilation and Airway Equipment</b>				
Bag Valve Mask (adult and child size bag with 4 sizes of masks)	B	B	B	B
Bulb Syringe	O	B	B	B
Blind Insertion Airway Device (BIAD) with 2 sizes (one adult and one pediatric)		B <sup>5</sup>	B <sup>5</sup>	B <sup>3</sup>
Cricothyroidotomy (Surgical) equipment				B <sup>3</sup>
Endotracheal tubes (ETT)-cuffed in all 10 sizes from 2.5 through 7.0			B	B
Capnometry (Color) ETCO2 detectors		B <sup>4</sup>	B <sup>4</sup>	B <sup>4</sup>
Laryngoscope blades in 4 straight sizes 0-4 and 3 curves sizes 2-4			B	B
Laryngoscope handle with extra batteries, bulbs			B	B
McGill forceps or equivalent with 2 sizes (one adult and one pediatric)			B	B
Meconium Aspirator adaptor			B	B
Nasal cannula for Oxygen Delivery with 2 sizes (one adult and one pediatric)	B	B	B	B
Nasopharyngeal airways in sizes 14, 18, 20, 22, 24, 26, 28, 30, and 32	O	B	B	B
Nebulizer			B	B
Needle at least 3.25 in. and large bore for Chest Decompression				B
Oropharyngeal airways in 6 sizes 0-5	B	B	B	B
Oxygen Mask (Non-Rebreathing) in 2 sizes (one adult and one pediatric)	B	B	B	B
Oxygen Tubing	B	B	B	B
Portable Oxygen with variable flow regulator (Portable and Fixed)	B	B	B	B
Rigid pharyngeal suction device	B	B	B	B
Stylettes for every required Endotracheal tube size			B	B
Suction apparatus (Portable and Fixed)	B	B	B	B
Suction catheters (one between 6 and 10F size, one between 12 and 16F size)	O	B	B	B
Syringe in 10ml size (non-luerlock)		B	B	B
Ventilator (Pressure or Volume based with PEEP)*				S, O
Wide-bore suction tubing	O	B	B	B
<b>Monitoring and Defibrillation</b>				
Automatic External Defibrillator with 2 pad sizes (one adult and one pediatric)	O	B <sup>1</sup>	B <sup>1</sup>	O
Capnography (ETCO2) monitoring, continuous		B <sup>7</sup>	B <sup>7</sup>	B <sup>7</sup>



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Glucose Measuring Device		B <sup>2</sup>	B	B
Pacemaker- External				B
Pacemaker-Transvenous				S
Monitor with 12 lead EKG		B <sup>6</sup>	B <sup>6</sup>	B <sup>6</sup>
Monitor/defibrillator with electrodes and 2 sizes of pads or paddles				B
Pulse oximeter with 2 probe sizes (one adult and one pediatric)	O	B <sup>2</sup>	B	B
<b>Immobilization Devices</b>				
Cervical spine immobilization device in at least 3 sizes (small, medium, and large)	O	B	B	B, S <sup>1</sup>
CPR Board	B			
Femur traction device in at least 2 sizes (one adult and one pediatric)	O	B	B	B, S <sup>1</sup>
Head immobilization device	O	B	B	B, S <sup>1</sup>
Backboards, short and long (Radiolucent preferred) with appropriate restraints (minimum of 3 straps)	O	B <sup>8</sup>	B <sup>8</sup>	B <sup>8</sup> , S <sup>1</sup>
Spinal immobilization and extrication device	O	B	B	B, S <sup>1</sup>
Upper and Lower extremity immobilization devices	O	B	B	B, S <sup>1</sup>
<b>Bandages</b>				
Burn sheet	O	B	B	B
Cold packs	O	B	B	B
Dressings, bandages, gauze rolls, adhesive tape (must have 2 triangular bandages with 2 safety pins each)	B	B	B	B
Heavy scissors for clothing removal	B	B	B	B
Occlusive dressing	O	B	B	B
Sterile saline solution for irrigation (may use IV solution)	O	B	B	B
<b>Medication Administration</b>				
Alcohol wipes	O	B	B	B
Intraosseous needles in at least 2 sizes (one adult and one pediatric)				B
IV administration sets			B	B
IV arm boards			B	B
IV catheters in at least 4 sizes (14, 18, 20, and 24 Gauge)			B	B
IV pole/hook	O	O	B <sup>8</sup>	B <sup>8</sup>
Needles in various sizes (at least 1 must be 1.5 in. for IM injections)			B	B
Syringes in at least 3 sizes (1ml, 5ml, and 10ml)			B	B
Tourniquet		O	B	B
<b>Obstetrical</b>				
Thermal blanket capable of also covering the head	B	B	B	B
Sterile OB kit, scissors, bulb suction, cord clamps	O	B	B	B
<b>Miscellaneous</b>				
Bedpan and urinal	B	B <sup>8</sup>	B <sup>8</sup>	B <sup>8</sup>
Broselow Tape or equivalent	B	B	B	B
Cellular phone	O	B	B	B
Emesis basins	B	B	B	B
Lubricating jelly	O	B	B	B
Gastric tubes in at least 6 sizes (6, 8, 10, 12, 14, and 16F)				S, O
Sheets, pillows, pillow cases, and towels	B	B <sup>8</sup>	B <sup>8</sup>	B <sup>8</sup>
Sphygmomanometer (cuffs and device) with at least 3 sizes (pediatric, normal adult, and large adult)	B	B	B	B
Stair chair/folding stretcher	O	B <sup>8</sup>	B <sup>8</sup>	B <sup>8</sup> , S <sup>1</sup>
Stethoscope	B	B	B	B
Thermometer with low temperature capability	O	B	B	B



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Triage tags	O	B	B	B, S <sup>1</sup>
Wheeled cot with security for patient transport	B	B <sup>8</sup>	B <sup>8</sup>	B <sup>8</sup> , S <sup>1</sup>
<b>Injury Prevention Equipment</b>				
Appropriate Restraints for Crew and non-patient passengers	B	B	B	B
Fire Extinguisher	B	B	B	B
Flashlight with extra batteries	B	B	B	B
Heat and cooling source for ambulance compartment	B <sup>8</sup>	B <sup>8</sup>	B <sup>8</sup>	B <sup>8</sup>
Thermal blanket or other heat conserving device	B	B	B	B
<b>Infection Control</b>				
Disinfectant hand wash	B	B	B	B
Disinfectant solution for cleaning equipment	B	B	B	B
Disposable biohazard trash bags	B	B	B	B
Eye protection	O	B	B	B
Gloves, non-sterile	B	B	B	B
N-95 or HEPA Masks	B	B	B	B
Jumpsuits/gown	O	B	B	B
Latex Allergy Kit (If not using latex free equipment)****	O	B	B	B
Latex Free Gloves	B	B	B	B
Masks	B	B	B	B
Sharps containers (Fixed and Portable)	O	B	B	B
Shoe covers	O	B	B	B

**Conv. = Convalescent Transport Program, EMT = Emergency Medical Technician, EMT-I = EMT-Intermediate, EMT-P = EMT-Paramedic**

**B<sup>1</sup>** = Automated External Defibrillators (AED) currently in service may or may not be capable of using pediatric sized pads. As AEDs that are not capable of accepting pediatric pads are retired and replaced, pediatric capable devices should be implemented.

**B<sup>2</sup>** = Glucose Measuring Devices and Pulse Oximetry must be available to monitor any patient cared for within an EMT-Basic System. This should be monitored by the EMS System Peer Review Process if not required by the EMS System.

**B<sup>3</sup>** = All EMT-Paramedic Systems must have an airway backup. This can be a any Blind Insertion Airway Device such as the Combitube, King LT, Laryngeal Mask Airway (LMA). It is highly recommended that this airway backup have pediatric sizes. Systems performing Drug Assisted Intubation must also have the ability to perform Surgical Cricothyrotomy. Commercial Cricothyrotomy or Tracheostomy kits that create an airway comparable to a surgical Cricothyrotomy are acceptable.

**B<sup>4</sup>** = All EMT-Basic, EMT-Intermediate and Paramedic Systems must at a minimum use Capnometry (Color) to confirm the placement of every BIAD or intubation. EMT-Paramedic systems performing Drug Assisted Intubation must use Capnography (numeric or waveform) to confirm tube placement. Waveform Capnography is recommended for this requirement.

**B<sup>5</sup>** = All EMS System at all levels must have a Blind Insertion Airway Device of some type. This could be a Combitube, King LT, or LMA. BIAD devices with pediatric sizes are highly recommended.

**B<sup>6</sup>** = It is not required but highly recommended that all EMS Systems at all levels work to have 12 lead ECG capability at the scene of every emergent event.

**B<sup>7</sup>** = It is not required but highly recommended that all EMS Systems at all levels work to have waveform Capnography capability at the scene of every emergent event.

**B<sup>8</sup>** = Equipment which is considered optional (not mandatory) to non-transport EMS vehicles.



**S<sup>1</sup>** = Specialty Care Transport Programs are not required to maintain this equipment on every response, but the equipment must be available on a case by case basis dependent on the patient care scenario.

**All Specialty Care Transport Programs which are listed in a counties primary 911 response plan or provide backup 911 primary response service, are required to maintain the same level of skills, medications and equipment which the county system maintains.**

**\*For the purposes of this document, a “ventilator” is a ventilation device, which attaches to an endotracheal or tracheostomy tube. It is capable of ventilating by a pressure or volume delivery mechanism. It must have adjustments for respiratory rate, volume/pressure settings, and for assisted or full ventilation. It has the capabilities of PEEP or other pressure based manipulations. A “respirator” is any other device that assists with ventilations during a respiratory/cardiac arrest.**

**\*\*All EMS Systems must carry at a minimum the equipment associated with the EMT Level unless functioning as a convalescent transport service.**

**\*\*All EMS Systems must carry pediatric and adult when size is important. Items that require pediatric sizes are shaded **ORANGE**.**

**\*\*\*\*A Latex Allergy Kit should be composed of all the necessary personal protection equipment and materials necessary to obtain and maintain IV access.**