

**COMMITTEE FOR REGISTRATION OF AMBULANCES IN DELHI
GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI
(HEALTH & FAMILY WELFARE DEPARTMENT)
ROOM No.905, 9th FLOOR, A WING, DELHI SECRETARIAT, NEW DELHI**

Revised Guidelines for Registration of Ambulances in Delhi
(w.e.f. 13-07-2012)

An ambulance vehicle can be registered by Transport Department in Delhi only after it has the approval of Committee for Registration of Ambulances (CRA). The following will be the norms for vehicles to be certified / registered as different type of Ambulances: -

A. Advanced Life Support Ambulance:

Ambulance should be capable of providing treatment of life-threatening medical emergencies through the use of techniques such as endo - tracheal intubations, administration of drugs or intravenous fluids, cardiac monitoring, and electrical therapy by a qualified person.

B. Basic Life Support Ambulance:

Ambulance should be capable of providing basic life support to the patients.

C. Ambulance:

A vehicle that is used for transporting injured to the nearby health facility in case of emergencies such as accident / disaster etc. As also for transporting patients in non-emergency situations such as scheduled visits to a doctor for treatment, routine physical examinations, X-ray or laboratory tests, transporting a woman for delivery to a hospital or after delivery and discharge to her home, transporting patients upon discharge from a hospital / nursing home, to another hospital / nursing home or to residence etc.

Ambulance Design and Equipment

Specific requirements for different categories of ambulances shall be as under

Advanced Life Support ambulance (ALS)

- A. **Color:** There shall be no restrictions concerning the painted color of the ambulance vehicle.
- B. **Emblems and Markings:** All items in this section shall be of reflective quality and in contrasting color to the exterior painted surface of the ambulance.
1. There shall be a continuous blue stripe, of not less than 8cm on cab and 15 cm on patient compartment, to encircle the entire ambulance with the exclusion of the hood panel.
 2. Emblems and markings shall be of the type, size and location as follows:
 - a. Front: The word "AMBULANCE", minimum of 10 cm in height, shall be in mirror image (reverse reading) for mirror identification by drivers ahead, with a blue "Star of Life", minimum of 8cm height, to the left and right of the word "AMBULANCE." If vehicle design permits, there shall be a blue "Star of Life" of no less than 30 cm in height on the front section of the patient compartment.
 - b. Side: Each side of the patient compartment shall have the blue "Star of Life" not less than 30 cm in height. The word "AMBULANCE", not less than 15 cm in height, shall be under or beside each star. The name of the licensee as stated on their provider's license shall be of lettering not less than 8 cm in height.
 - c. Rear: The word "AMBULANCE", not less than 15 cm in height, and two blue "Star of Life" emblems of not less than 30 cm in height.
 - d. Top (roof): There shall be a blue "Star of Life" of not less than 60 cm in height as well as the individual provider's ambulance number (example: unit "23") of not less than 30 cm in height.
 3. Prior to private sale of ambulance vehicles to the public, all emblems and markings must be removed.
- C. **Interior Patient Compartment Dimensions:**
1. Minimum Patient Compartment Length : 2700 mm.
 2. Minimum Patient Compartment Width : 1500 mm.
 3. Minimum Patient Compartment Height : 1500 mm from floor to ceiling.

D. Essential Medical Equipment and other items to be placed on ALS Ambulance

S. No.	Group of Equipment	Name of items/Equipment	Details
1.	Ventilation and Airway Equipments	1. Transport Ventilator	
		2. Portable Suction Apparatus	Wide - bore tubing, rigid pharyngeal curved suction tip; Tonsillar and flexible suction catheters, 5F - 14F
		3. Portable & Fixed Oxygen equipment with key wrench & trolley	Variable flow regulator
		4. Oxygen administration equipment	Adequate length tubing, mask (adult, child and infant sizes), transparent, non-rebreathing, venturi, and valveless nasal cannulas (adult, child and infant sizes)
		5. Pocket mask with one-way valve	
		6. AMBU Resuscitation Bags (Adult & Paed)	Hand operated, self re-expanding bag (adult & infant sizes), with oxygen reservoir/accumulator, clear mask (adult, child, infant and neonate sizes); valve (clear, disposable, operatable in cold weather)
		7. Intubation equipments	Magill's forceps, Laryngoscope blades and other accessories, endotracheal tubes and connecting tubes etc.
		8. Airways	Nasopharyngeal, Oropharyngeal (adult, child and infant sizes)
		9. Oxygen saturation monitor with different probes for adult and child	
2.	Monitoring and Defibrillation	1. Automatic External Defibrillator	
		2. Multi Parameter Monitor	
		3. End Tidal CO2 Monitor	
3.	Infusions	1. Syringe Pump	
		2. IV Lines	
4.	Immobilization Devices	1. Cervical Collars	Rigid for children aged 2 years or older, infant, child and adult sizes (small, medium, large and other available sizes)
		2. Head Immobilization devices (not sand bags)	Firm padding or commercial device

		3. Lower extremity traction devices	Lower extremity, limb support slings, padded ankle hitch, padded pelvic support, traction strap (adult and child sizes)
		4. Upper and lower extremity immobilization devices	To immobilize one joint above and joint below fracture (adult and child sizes), rigid support appropriate material (cardboard, metal, pneumatic, vacuum, wood or plastic)
		5. Radio-lucent backboards (long, short) and extrication device	Joint above and joint below fracture site (chin strap alone should not be used for head immobilization), adult and child sizes, with padding for children, hand holds for moving patients, short (extrication, head-to-pelvis length), long (transport, head to feet), with atleast 3 appropriate restraint straps
5.	Stretchers and Splints	1. Collapsible chair cum trolley stretcher	
		2. Spine Board	
		3. Pneumatic Splints	
6.	Communication	Two-way radio communication (UHF, VHF) between EMT, dispatcher and medical direction (physician) or Cellular phone	
7.	Obstetrical Kit *	1. (Separate sterile kit) Baby receiving tray with warmer	Towels, 4" x 4" dressing, umbilical tape, sterile scissors or other cutting utensil, bulb suction, clamps for cord, sterile gloves, blanket
		2. Thermal absorbent blanket and head cover, aluminum foil roll, or appropriate heat reflective material (enough to cover new born)	
		3. Appropriate heat source for ambulance compartment	

8.	Miscellaneous	1. Sphygmomanometer (infant, pediatric and adult - regular, large and extra large)	
		2. Stethoscope (Pediatric and adult)	
		3. Digital Thermometer	
		4. Heavy duty scissors for cutting clothing, belts and boots	
		5. Search Lights (Two)	Portable with spot beam of around 500 Meters, sealed lead acid/NiCd battery operated, capacity of 60 minutes with full intensity, rechargeable
9.	Injury Prevention Equipment	1. Appropriate restraints (Seat belt, air bags) for patient, crew and family members	
		2. Child safety restraints	
		3. Fire extinguisher	
		4. Traffic signaling devices (reflective material triangles or other reflective, non-igniting devices)	
10.	Rescue Equipments	1. Hammer, one four pound with 15 inch handle.	
		2. One axe.	
		3. Wrecking Bar, minimum 24-inch (bar and two preceding items can either be separate or combined as a forcible entry tool).	
		4. Crowbar, minimum 48 inches, with pinch point.	

* Optional

E. LIST OF CONSUMABLE ITEMS

S.No. Name of the item

1. Cotton
2. Bandage (a) 15cm (b) 10cm (c) 6cm
3. Savlon
4. Betadine
5. Leucoplast
6. Pain Spray
7. Misdress Spray
8. Vinodine Spray
9. Coolex Spray
10. Face Mask (Disposable)

11. Surgical Gloves
12. LMA disposable
13. Wide bore needles
14. Disposable L.P. Needles
15. Syringes ABG (2 & 5 ml)
16. Three way stop cork
17. Extension I/V lines
18. Disposable suction pumps
19. ECG electrodes
20. Lighted Stylets of different sizes
21. Guedel's airway 00-5 (00,0,1,2,3,4,5)
22. Nasal airways (all sizes) & catheters
23. Bi-nasal Cannula, Comb tube
24. Tracheostomy tube cuff & Plain (all sizes)
25. Mini Tracheostomy kit
26. Ventimask, facemask with nebulizer
27. Pressure Infusion Bags
28. Right angled Shivel Connector
29. G.V. Paint
30. I.V. Fluids
31. Micro drip-set & Drip-set
32. Nasogastric Tubes
33. Burn Pack: Standard package, clean burn sheets (or towels for children)
34. Triangular bandages (Minimum 2 safety pins each)
35. Dressings: Sterile multi-trauma dressings (various large and small sizes) ABDs, 10"x12" or larger, 4"x4' gauze sponges, Cotton Rolls
36. Gauze rolls Sterile (various sizes)
37. Elastic bandages Non-sterile (various sizes)
38. Occlusive dressing Sterile, 3"x8" or larger
39. Adhesive tape: Various sizes (including 2" or 3") and Adhesive tape (hypoallergenic): Various sizes (including 2" or 3")
40. Cold packs
41. Waste bin for sharp needles, etc.
42. Disposable bags for vomiting, etc.
43. Teeth guard
44. Sample collection kits

F. LIST OF EMERGENCY DRUGS

1. Inj. Adrenaline
2. Inj. Atropine
3. Inj. Calcium Carbonate
4. Inj. Dopamine
5. Inj. Dobutamine
6. Inj. Noradrenaline
7. Inj. Nitroglycerine

8. Inj. Sodium Bicarbonate
9. Inj. Hydrocortisone
10. Inhaler Beclomethasone (250 micro/dose)
11. Inhaler Salbutamol (200 micrograms)
12. Inj. Frusemide
13. Inj. Diazepam/Midazolam
14. Inj. Beriphyllin
15. Inj. Phenytoin sodium
16. Inj. Avil
17. Inj. Metochlorpropamide
18. Inj. Ondansetron
19. Inj. KC1
20. Inj. Lignocaine 2%
21. Inj. Amiodarone (50 mg/ ml)
22. Inj. Magnesium sulphate 25% 2ml.
23. Inj. Mannitol 20 %
24. Inj. Morphine/Inj. Pethidine
25. Inj. Noradrenaline bitartrate 4mg, 2 ml. Ampoule
26. Activated charcoal
27. Inj. Naloxone HCl
28. Inj. Fentanyl
29. Bacteriostatic water for Injection
30. Inj. Sodium Valproate
31. Inj. Voveran
32. Inj. Paracetamol

(Total Thirty Two items)

Basic Life Support ambulance (BLS)

- A. **Color:** There shall be no restrictions concerning the painted color of the ambulance vehicle.
- B. **Emblems and Markings:** All items in this section shall be of reflective quality and in contrasting color to the exterior painted surface of the ambulance.
1. There shall be a continuous green stripe, of not less than 8cm on cab and 15 cm on patient compartment, to encircle the entire ambulance with the exclusion of the hood panel.
 2. Emblems and markings shall be of the type, size and location as follows:
 - a. Front: The word "AMBULANCE", minimum of 10 cm in height, shall be in mirror image (reverse reading) for mirror identification by drivers ahead, with a green "Star of Life", minimum of 8 cm height, to the left and right of the word "AMBULANCE." If vehicle design permits, there shall be a green "Star of Life" of not less than 30 cm in height on the front section of the patient compartment.
 - b. Side: Each side of the patient compartment shall have the green "Star of Life" not less than 30 cm in height. The word "AMBULANCE", not less than 15 cm in height, shall be under or beside each star. The name of the licensee as stated on their provider's license shall be of lettering not less than 8 cm in height.
 - c. Rear: The word "AMBULANCE", not less than 15 cm in height, and two green "Star of Life" emblems of not less than 30 cm in height.
 - d. Top (roof): There shall be a green "Star of Life" of not less than 60 cm in height as well as the individual provider's ambulance number (example: unit "21") of not less than 30 cm in height.
 3. Prior to private sale of ambulance vehicles to the public, all emblems and markings must be removed.

C. **Inner Patient Compartment Dimensions:**

- | | | |
|---------------------------------------|---|--------------------------------|
| 1. Minimum Patient Compartment Length | : | 2700 mm. |
| 2. Minimum Patient Compartment Width | : | 1500 mm. |
| 3. Minimum Patient Compartment Height | : | 1500 mm from floor to ceiling. |

D. Patient cabin should have the following features:

1. Properly ventilated patient cabin
2. Vehicle should have reinforced suspension system for providing to patient a comfortable ride, free from external noise
3. Adequate power supply arrangements including power backup for support power requirements of the Headlights, Taillights and the power requirements of Medical equipments etc.
4. Adequate Patient Cabin space for patient (in comfortable position), at-least one attendant and two paramedics
5. Complete flooring free of joints, suitable for easy cleaning / scientific fumigation and treatment with disinfectants.
6. Atleast Two superior quality Fans and sufficient Lighting arrangement
7. Storage space for keeping Medical equipments and consumables required.
8. Siren and beacon as per approved norms of Government with at least 3 flashers on both sides of ambulance.
9. A "no smoking" sign shall be prominently displayed in the patient compartment.

E. Equipment to be placed on BLIS Ambulance:

All ambulances will be required to be equipped with, but not limited to the following:

1. **Minimum of two stretchers**
 - a. One multilevel, elevating, wheeled stretcher with elevating back. Two patient restraining straps (chest and thigh) minimum, at least two inches wide shall be provided.
 - b. One secondary patient transport stretcher, with a minimum of two patient restraining straps. Minimum acceptable stretcher is vinyl covered, aluminum frame, folding stretcher.
2. **Suction Devices**
 - a. An engine vacuum operated or electrically powered, complete suction aspiration system, shall be installed permanently on board to provide for the primary patient. It shall have wide bore tubing.
 - b. A manual suction device, age and weight appropriate, with wide bore tubing and at least a six-ounce reservoir.
 - c. There must be an assortment of suction catheters (minimum of 2 each) on board. Sizes 6 fr, 8 fr, 10 fr, 16 fr, 18 fr. A rigid suction catheter (e. g. Yankaur) will also be carried (Minimum 2 each).

3. **Bag Mask Ventilation Units**

- a. One adult, hand-operated. Valves must operate in all weather, and unit must be equipped to be capable of delivering 90-100% oxygen to the patient.
- b. One pediatric, hand-operated. Valves must operate in all weather and unit must be equipped to be capable of delivering 90-100% oxygen to the patient. Must include safety pop off mechanism with override capability.
- c. One infant, hand-operated. Valves must operate in all weather and unit must be equipped to be capable of delivering 90-100% oxygen to the patient. Must include safety pop-off mechanism with override capability.
- d. The masks (size 0,1,2,3,4 and 5) should be carried, for use in conjunction with the ventilation units above. Masks must be clear and can be either disposable or non-disposable.

4. **Nonmetallic Oropharyngeal (Berman type)/ Nasopharyngeal Airways** - adult, child and infant sizes (large adult, medium adult, large child, child, infant). All airways shall be clean and individually wrapped. "S" tube type airways may not be substituted for Berman type airways.

5. **Oxygen Equipment**

- a. Portable oxygen equipment: Minimum one 360 Litre capacity oxygen cylinder. Litre flow gauges shall be non-gravity, dependent (Bourdon Gauge) type. Additionally, when the vehicle is in motion, all oxygen cylinders shall be readily accessible and securely stored.
 - b. Permanent On-Board Oxygen Equipment: The ambulance shall have a hospital type piped oxygen system, capable of storing and supplying a minimum of 2400 liters of humidified medical oxygen.
 - c. Single use, individually wrapped, non-rebreather masks and cannulas in adult and pediatric sizes shall be provided (3 each).
6. Bite sticks commercially made. (Clean and individually wrapped).
7. Twelve sterile dressings (minimum size 5" x 9").
8. Sterile gauze pads (4" x 4") - 36 No.
9. Twelve bandages, self-adhering type, minimum three inches by five yards. Bandages must be individually wrapped or in clean containers.
10. A minimum of four commercial sterile occlusive dressings (size 4" x 4").

11. Adhesive Tape, hypoallergenic (1", 2" and 3" width).
12. Burn sheets (Sterile) - 2 No.
13. **Splints:**
 - a. Pneumatic splints set of six with carrying case.
 - b. Wooden / metallic or other splints.
14. **Spinal immobilization devices:**
 - a. Spine board, at least 16" x 72", constructed of three-quarter inch ply-board or equivalent material and having at least three quarter inch runners on each side for lifting with appropriate straps. If not equipped with runners, board must be designed so that handholds are accessible even with gloves on.
 - b. Cervical collars to accommodate the infant, child, medium adult and large adult sizes. Collars must be manufactured of semi-rigid or rigid material.
 - c. Patient restraint straps (two inches by nine foot) - 3 No.
 - d. Head immobilization device, commercially available or towel/blanket rolls.
15. Triangular bandages (Different sizes) - 5 each
16. Blankets - 2 No.
17. Bandage shears - large size.
18. Obstetrical kit (sterile) - The kit shall contain gloves, scissors or surgical blades, umbilical cord clamps or tapes, dressings, towels, perinatal pad, bulb syringe and a receiving blanket for delivery of infant.
19. Blood pressure sphygmomanometer, cuff and stethoscope.
 - a. Blood pressure set portable, both pediatric and adult (non mercurial type).
 - b. Stethoscopes.
20. Emesis basins or commercially available emesis container.
21. Bedpan and urinal.
22. Search Lights (2 No.) - Portable with spot beam of around 500 Meters, sealed lead acid/NiCd battery operated, capacity of 60 minutes with full intensity, rechargeable.

23. Minimum of one fire extinguisher, CO2 or dry chemical or type ABC.
24. Working gloves, atleast two pair for each crewmember.
25. Minimum of 1000 cc of sterile water or normal saline solution for irrigation.
26. Automatic External Defibrillator (A.E. D.)
27. Personal protective equipment (gloves, masks, gowns and eye shields).
28. Protective head gear and eye protection devices (minimum two each).
29. At the option of the medical control the following equipment may be added:
 - a. Laryngoscope handle with batteries.
 - b. Laryngoscope blades, adult, child and infant sizes. Infant sizes shall be 0,1,2 (straight). In addition, a #2 curved blade will be carried.
 - c. Six disposable endotracheal tubes, sizes to be from 2.5-9.0 with atleast one of each size available. An intubation stylet sized for the neonate patient shall also be available (6 fr.).
 - d. Dual Lumen or LMA airways, Combitube, age and weight appropriate.
 - e. Magill's Forceps - Adult and Pediatric.

F. Minimum Ambulance Rescue Equipment

The following additional items shall be carried by BLS ambulance:

1. Hammer, four pound with 15 inch handle.
2. One axe.
3. Wrecking Bar, minimum 24-inch (bar and two preceding items can either be separate or combined as a forcible entry tool).
4. Crowbar, minimum 48 inches, with pinch point.

Ambulance

A. Color: There shall be no restrictions concerning the painted color of the ambulance.

B. Emblems and Markings : There shall be no restriction for "Star of Life" marking and shall display the words "Ambulance" and the name of the licensee in letters of minimum 8 cm in height, on each side of the ambulance.

C. Color Strip: Ambulance **shall not have any color strip** around it.

D. Siren and beacon shall be as per provisions of Central Motor Vehicle Rules under Motor Vehicles Act.

E. Interior Patient space dimensions :

1. Minimum Compartment Length : **1600 mm**
2. Minimum Compartment width : **940 mm**
3. Minimum Compartment Height : **1000 mm**

F. Standard Safety features such as Belts for Drivers and Attendants.

G. Medical Equipments to be placed in Ambulance:

- a. Resuscitation kit
- b. First aid box
- c. AMBU Bag set Oropharyngeal airways
- d. Oxygen cylinder and accessories

(to be submitted by each category of ambulance on letter-head of the applicant)

To,

The Chairman,
Committee for Registration of Ambulances,
Government of National Capital Territory of Delhi
Health & Family Welfare Department,
Room No.905, 9th Floor, 'A' Wing,
Delhi Secretariat, New Delhi

Sir,

1. I / We hereby inform that the following qualified medical person shall function as Medical Control Physician in respect of the ambulance purchased by us vide Invoice No. _____ dated _____, having Engine No. _____ and chassis No. _____.

Name : _____

Father's Name : _____

Address: _____

Qualifications : _____

DMC Regn. No. : _____

2. I / We further undertake that in case of any change in the details of Medical Control Physician, I / we shall inform the Committee for Registration of Ambulances, within one week, alongwith the details of and undertaking from the new physician.
3. I / we further undertake that I / we shall comply with the ambulance manpower training requirements, as and when required.

Yours faithfully,

Sign. _____

Name : _____

Designation : _____

UNDERTAKING

Before the committee for Registration of Ambulances

(To be furnished by the Medical Control Physician)

I hereby undertaking that I shall be responsible for maintaining quality control of service provide by Ambulance / staff owned and operated by M/s.
.....Engine No.
.....and Chassis No.....
.....

I hereby undertaking that I shall inform the committee for registration of Ambulances if and I dissociate myself form the above charge.

Signature

Name:

Address:

DMC Regd. No.

Stamp: