

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

Registration of Ambulances

The Committee of Health and Family Welfare department of NCT of Delhi for certification of vehicles for registration as Ambulances has approved the amendments in the guidelines/policy on the subject matter after duly considering the suggestions/comments from general public/NGOs/institutions etc. on the proposed amendments. The following will be the norms for vehicles to be certified / registered as different type of Ambulances:-

DEFINITIONS.

A. Advanced Life Support Ambulance:

Ambulance is 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 is capable of providing basic life support to the patients.

C. Patient Transport Ambulance:

A vehicle that is used for making non emergency calls such as scheduled visits to a physician's office for treatment, routine physical examinations, x-rays or laboratory tests, or is used for transporting patients upon discharge from a hospital or nursing home to a hospital or nursing home or residence, or attending to other non emergency calls. Services and transportation is provided to a patient whose condition is considered stable. A stable patient is one whose condition can be expected to remain the same throughout the transport and for whom none of the criteria for emergency transport has been met. These patient transport ambulances are not usually (although there are exceptions) equipped with life-support equipment, and are usually crewed by staff with fewer qualifications than the crew of emergency ambulances. Their purpose is simply to transport patients to, from or between places of treatment. These can be vans, buses or other vehicles.

Ambulance Design and Equipment

Essentially Design and Equipment of Advanced life support ambulance and Basic life support ambulance will be similar. The differences are in the medical equipments and staff available in the Ambulance.

Advanced Life Support Ambulance

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

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.

Essential Medical Equipment and other items to be placed on Ambulance

Head of Equipment	Group of equipment	Name of Items / Equipments	Details
A	Ventilation and Airway Equipment	1. Transport Ventilator	
		2. Portable suction apparatus	Wide-bore tubing, rigid pharyngeal curved suction tip; Tonsillar and flexible suction catheters, 5 F-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 and infant sizes), with oxygen reservoir/accumulator, clear mask (adult, child, infant, and neonate sizes); valve (clear, disposable, operable in cold weather)
		7. Intubation equipments,	Magill's forceps, Laryngoscope blades & other accessories, endotracheal tubes& connecting tubes etc.
		8. Airways	Nasopharyngeal, Oropharyngeal (adult, child, and infant sizes)
		9. Oxygen saturation monitor with different probes for adult and child	
B	Monitoring And Defibrillation	1. Automatic external defibrillator	
		2. Multi parameter monitor	
		3. End Tidal CO2 Monitor	
C	Infusions	1. Syringe Pump	
		2. IV Lines	
D	Immobilization Devices	1. Cervical collars	Rigid for children ages 2 years or older, infant, child, and adult sizes (small, medium, large, and other available sizes)
		2. Head immobilization device (not sandbags)	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 at least 3 appropriate restraint straps
E.	Stretchers & Splints	1. Collapsible chair cum trolley stretcher 2. Spine Board 3. Pneumatic Splints	
F.	Communication	Two-way radio communication (UHS, VHF) between EMT, dispatcher, and medical direction (physician) OR Cellular phone	
G.	Obstetrical Kit *	1. (separate sterile kit) Baby receiving tray with warmer	Towels, 4"x4" 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 newborn)	
		3. Appropriate heat source for ambulance compartment.	
H.	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. Flashlights (2) with extra batteries and bulbs.	
I.	Injury Prevention Equipment	1. Appropriate restraints (seat belts, 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)	

* = OPTIONAL

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.	Mistdress 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.	Binasal Cannula, Combitube, COPA
24.	Tracheostomy tube cuff & Plain (all sizes)
25.	Mini Tracheostomy kit
26.	Ventimask, facemask with nebulizer
27.	Pressure Infusion Bags
28.	Rightangled 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") 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

B (iii) LIST OF EMERGENCY DRUGS

1. Inj. Adrenaline
2. Inj. Atroine
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. Deriphyllin
15. Inj. Phenytoin sodium
16. Inj. Avil
17. Inj. Metochlorpropamide
18. Inj. Ondansetrone
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 bititrate 4mg, 2 ml. Ampule
26. Activated charcoal
27. Inj. Naloxone HCl
28. Inj. Fentanyl
29. Bacteriostatic water for Injection
30. Inj. Sodium Valporate
31. Inj. Voveran
32. Inj. Paracetamol

(Thirty Two items only)

Basic Life Support Ambulances

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

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 8 cm 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 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 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 "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.

Inner Dimensions of the ambulance:

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.

Patient cabin should have following features:

Properly ventilated patient cabin
Whether vehicle has reinforced suspension system for providing to patient a comfortable ride, free from external noise
Adequate power supply arrangements including power backup for support power requirements of the Head lights, Tail lights and the power requirements of Medical equipments etc.
Adequate Patient Cabin space for patient (in comfortable position), at-least one attendant and two paramedics
Complete flooring free of joints suitable for easy cleaning / scientific fumigation and treatment with disinfectants.
Two(at-least) superior quality Fans and sufficient Lighting arrangement
Storage space for keeping Medical equipments and consumables required.
Siren and beacon as per approved norms of Government with at least 3 flashers on both sides of ambulance.

Equipment to be placed on BLS Ambulance:

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

A. Minimum of two stretchers.

1. One multilevel, elevating, wheeled stretcher with elevating back. Two patient restraining straps (chest and thigh) minimum, at least two inches wide shall be provided.
2. One secondary patient transport stretcher, with a minimum of two patient restraining straps. Minimum acceptable stretcher is vinyl covered, aluminum frame, folding stretcher.

B. Suction Devices.

1. 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.
2. A manual suction device, age and weight appropriate, with wide bore tubing and at least a six ounce reservoir.
3. 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.

C. Bag Mask Ventilation Units.

1. 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.
2. 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.
3. 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.
4. The following sized masks will be carried aboard all permitted ambulances to be used in conjunction with the ventilation units above, 0,1,2,3,4,5. Masks must be clear. Either the disposable or non-disposable types are acceptable.

D. Nonmetallic Oropharyngeal (Berman type)/ Nasopharyngeal Airways - adult, child and infant sizes. All airways shall be clean and individually wrapped.

1. Large adult
2. Med. adult
3. Large child
4. Child
5. Infant

E. "S" tube type airways may not be substituted for Berman type airways.

F. Oxygen Equipment.

1. Portable oxygen equipment: Minimum one 360 Liter capacity oxygen cylinder. Liter 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.
2. 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.
3. Single use, individually wrapped, non-rebreather masks and cannulas in adult and pediatric sizes shall be provided (3 each).

4. A "no smoking" sign will be prominently displayed in the patient compartment.

G. Bite sticks commercially made.(Clean and individually wrapped).

H. Twelve sterile dressings (minimum size 5 inches x 9 inches).

I. Thirty-six each sterile gauze pads 4 inches x 4 inches .

J. Twelve each bandages, self-adhering type, minimum three inches by five yards. Bandages must be individually wrapped or in clean containers.

K. A minimum of four commercial sterile occlusive dressings, four inches by four inches.

L. Adhesive Tape, hypoallergenic, one, two and three inches wide.

M. Burn sheets, two, sterile.

N. Splints:

1. Pneumatic splints set of six with carrying case

2. Wooden splints

O. Spinal immobilization devices:

1. Spine board, at least 16 inches by 72 inches 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 handholds are accessible even with gloves on.

2. Cervical collars to accommodate the infant, child, medium adult and large adult sizes. Collars must be manufactured of semi-rigid or rigid material.

3. Three, two inches by nine foot patient restraint straps.

4. Head immobilization device, commercially available or towel/blanket rolls.

P. Five each triangular bandages.

Q. Two blankets.

R. Bandage shears, large size.

S. 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.

T. Blood pressure manometer, cuff and stethoscope.

1. Blood pressure set, portable, both pediatric and adult (non mercurial type).

2. Stethoscopes.

U. Emesis basin or commercially available emesis container.

V. Bedpan and urinal.

W. Two dependable flashlights /emergency light or electric lanterns, minimum size, two-D-cell or six volt lanterns.

X. Minimum of one fire extinguisher, CO2 or dry chemical or type ABC.

Y. Working gloves, two pair for each crewmember.

Z. Minimum of 1000 cc of sterile water or normal saline solution for irrigation.

AA. Automatic External Defibrillator (A.E.D.)

BB. Personal protective equipment (gloves, masks, gowns and eye shields).

CC. Protective head gear and eye protection devices (minimum two each) must be carried on each ambulance.

DD. At the option of the medical control the following equipment may be added:

1. Laryngoscope handle with batteries.

2. Laryngoscope blades, adult, child and infant sizes. Infant sizes shall be 0,1,2 (straight). In addition, a #2 curved blade will be carried.

3. Six disposable endotracheal tubes, sizes to be from 2.5-9.0 with at least one of each size available. An intubation stylette sized for the neonate patient shall also be available (6 fr.).

4. Dual Lumen or LMA airways, COPA, Combitube, age and weight appropriate.

5. Magill's Forceps.

Adult.

Pediatric.

Minimum Ambulance Rescue Equipment

The following additional items will be carried by each ALS and BLS ambulance:

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

Patient Transport Ambulance

Design and Equipment of Patient Transport Ambulance may be different and fewer medical equipments available in the ambulance.

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

B. **Emblems and Markings:** There shall be No "Star of Life". Convalescent transport units may not have any emergency markings, but shall display the words "Patient transport Ambulances" and the name of the licensee in letters a minimum of 8 cm in height, on each side of the ambulance. Siren and beacon will be as per provisions under Central Motor Vehicle Rules under Motor Vehicles Act.

C. **Interior Patient space dimensions:**

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

D. **Standard Safety features** such as Belts for Drivers and Attendants.

E. **Medical Equipments to be places in Patient Transport Ambulance:**

- 1. Resuscitation kit
- 2. First aid box
- 3. Ambu Bag set Oropharyngeal airways
- 4. Oxygen cylinder and accessories

IMPORTANT TO NOTE

The applicant shall note that:-

- (1) **The guidelines will be applicable only for registration of new ambulances. Ambulances already registered need not apply to the Committee.**
- (2) **The Certificate shall be valid for a period of five years from the date of issue. During the validity of the certificate, the Committee shall have the right to inspect/check ambulance(s) for ensuring compliance of the guidelines and cancel/withdraw the certificate in case of violation of guidelines/amendments/additions thereto which may be issued from time to time.**
- (3) Ambulances certified by the Committee shall have to obtain fitness certificate and get the same renewed as per time schedules prescribed under Central Motor Vehicle Act and Rules there-under from the Transport Department, GNCT of Delhi.
- (4) The applicant shall have to get certificate revalidated on expiry of the validity of the certificate.
- (5) However, the Committee can withdraw the certification at any point of time, if it is found that the certified ambulance is not adhering to standards/guidelines made applicable from time to time.
- (6) All the equipment should be in working condition. If, at any point of time, it is found that that equipment placed on the ambulance is not in working condition, the certificate issued by the Committee shall be withdrawn.

The guidelines/conditions and standards are determined by the expert committee in the interest of the patient care, and therefore are requested to abide by these as prescribed from time to time.