



## EVALUATION AND COMPARISON OF PUBLIC HOSPITAL AMBULANCE EFFECTIVENESS WITH NATIONAL AMBULANCE CODE

### Medical Science

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### ABSTRACT

**Introduction:** Road Ambulance or Ambulance is a specially equipped and ergonomically designed vehicle for transportation / emergent treatment of sick or injured people and capable of providing out of hospital medical care during transit / when stationary, commensurate with its designated level of care when appropriately staffed.

The Govt of India released Constructional and Functional Requirements for Road Ambulances (National Ambulance Code) in year 2014. Road Ambulances are designated as follows based on the level of care they can provide.

Ambulance plays a vital role in emergency medical care. In-order to be able to provide best ambulance services to emergency cases.

The study is based on model checklist for Type C Road Ambulance: Basic Life Support Ambulance based on National Ambulance code of India for veh fitness on road and medical equipment & medicines required for safe transport of patient.

### KEYWORDS

Ambulance, Checklist, National ambulance code

### INTRODUCTION

Road Ambulance or Ambulance is a specially equipped and ergonomically designed vehicle for transportation / emergent treatment of sick or injured people and capable of providing out of hospital medical care during transit / when stationary, commensurate with its designated level of care when appropriately staffed.

The Govt of India released Constructional and Functional Requirements for Road Ambulances (National Ambulance Code) in year 2014. Road Ambulances are designated as follows based on the level of care they can provide.

"About 40-50 per cent of the patients die on their way to the hospitals due to mismanagement of ambulance network in India. The National Ambulance Code will bring a standardisation in ambulances, which at present is missing and majority of the ambulances in India are violating the Central Motor Vehicles Rules (CMVR) and the Motor Vehicles Act of India."

### Methodology

#### Study Design : Descriptive analytical study

**RESULT :** Study was conducted in 3 Public hospital at Meerut on validated checklist based on national ambulance code of India. Total 28 Type C Road Ambulance: Basic Life Support Ambulance were checked by checklist and 60 drivers were interviewed. None of the 28 ambulance meeting the criteria of national ambulance code fully. Only 8 ambulance were meeting 70 % of requisite criteria. Drivers were not trained for BLS and properly trained for maintaining ambulance. Only one hospital was having critical care ambulance which was utilizing for all such critical patients. The drivers were suddenly detailed to take patients from hospital. Ambulances were not equipped with all essentials equipment and drugs. Only the paramedic going with ambulance check the equipment and drugs in casual manner. No records were available of checking of ambulance except one hospital. Some of ambulance were found nonfunctional for want of batteries and tyres due to fund deficiencies.

**Table 1 : Checklist for Type C Road Ambulance: Basic Life Support Ambulance**

**Part 1 : To be filled by Driver / Ambulance in charge**

Item / function to be checked	Public Hospital 1	Public hospital 2	Public Hospital 3
Infrastructure in hospital			
Number of ambulance (auth / held )	18 / 13	8 / 6	18 / 9
The vehicle should be registered as an ambulance	Yes	Yes	Yes
Un-obstructed way for ambulance to reach till emergency entrance and take a U-turn	Yes	Yes	Yes
An identified parking spot near to emergency department should be used for parking ambulances	Yes	Yes	No
Driver to check	Yes in 13 amb	Yes in 4 amb	Yes in 8 amb
1. Tools available for serviceability .	Yes in 10 amb	Yes in 4 amb	Yes in 5 amb



**Fig 1 : Ambulance**

The checklist was developed and validated as shown in table 1 by users ( Driver / paramedics / Nurses / Doctors ). After validation of checklist the ambulance of were checked in all three public hospital . The date of checking was kept anonymous to avoid bias. The glaring results were as under :

1. None of the hospital were having number of ambulance required . one hospital was having 50 % deficiency while other two were having 25 % ambulance deficient.
2. One public was not having an identified parking spot near to emergency department .
3. None of the public hospital drivers of ambulance were checking as per checklist especially Checking fuel tank for any leakage , Checking generator , Break & Tyre pressure , all documents for updated entries , and First Aid box and available of all items. The reason revealed by all the drivers and authority of public hospital conveyed , they were not aware about such things should be checked.
4. None of the hospital ambulance were having Insurance Certificate.
5. Patient Handling Equipment, Diagnostic Equipment, and medicines were present only in 50 % ambulance .
6. Personal protection Equipment (for Each Member of the Crew for Protection and to Identify the Staff as Road Ambulance Personnel) were available only in 45 % of ambulances and it was taken on rotation whenever ambulances carries the patient.
7. Drugs were available Only 60 % , 54 % and 48 % of all three public hospitals respectively . Which indicate none of the hospitals were able to deal with any emergency en route.
8. SOP and checklist were not available in any of public hospital.

2. Wire gauge in funnels are serviceable	Yes in 10 amb	Yes in 5 amb	Yes in 4 amb
3. All grease nipples are lubricated	Yes in 10 amb	Yes in 4 amb	Yes in 4 amb
4. Oil chock cable , throttle cable and accelerator linkage are functional	Yes in 10 amb	Yes in 4 amb	Yes in 5 amb
5. Clutch pedal and break pedal bushes have grease	Yes in 10 amb	Yes in 4 amb	Yes in 4 amb
6. Oiled hand break linkage	Yes in 10 amb	Yes in 5 amb	Yes in 4 amb
7. Self starter / Dynamo is functional and oiled .	Yes in 10 amb	Yes in 5 amb	Yes in 4 amb
8. Grease Water pump	Yes in 10 amb	Yes in 4 amb	Yes in 4 amb
9. Oil propeller shaft and spider bearing is functional	Yes in 10 amb	Yes in 3 amb	Yes in 4 amb
10. Road spring shackle pin is greased	Yes in 10 amb	Yes in 4 amb	Yes in 5 amb
11. Wheel hub greasing is done	Yes in 10 amb	Yes in 4 amb	Yes in 5 amb
12. Oil tail board hinges functional	None of the driver do this checking	None of the driver do this checking	None of the driver do this checking
13. Gear box oil top up done	Yes in 10 amb	Yes in 4 amb	Yes in 4 amb
14. Drive the veh over a short distance and checking done for functioning of all	Yes in 13 amb	Yes in 6 amb	Yes in 4 amb
15. Top up done front and rear differential , if required	Yes in 11 amb	Yes in 6 amb	Yes in 9 amb
16. Functional speedometer	Yes in 10 amb	Yes in 4 amb	Yes in 7 amb
17. Serviceability of temperature guage after driving	None	None	Yes in 5 amb
18. Top up master cylinder	None	None	None
19. Check fuel tank for any leakage	None	None	None
20. Check generator	Yes in 12 amb	Yes in 5 amb	None
21. Check Break & Tyre pressure	Yes in 6 amb	Yes in 2 amb	Yes in 8 amb
22. Check all documents for updated entries	Yes in 6 amb	Yes in 2 amb	Yes in 4 amb
23. Check First Aid box and available of all items	Yes in 13 amb	Yes in 2 amb	Yes in 5 amb
24. Fuel	Yes in 13 amb	Yes in 6 amb	Yes in 9 amb
25. Coolant	Yes in 5 amb	Yes in 6 amb	Yes in 9 amb
26. Life Saving equipment	Yes in 5 amb	Yes in 2 amb	Yes in 6 amb
27. Stretcher in place	Yes in 13 amb	Yes in 6 amb	Yes in 4 amb
28. Hooter is working	Yes in 6 amb	Yes in 2 amb	Yes in 3 amb
30. Battery for the mobile phone is fully charged	Yes in 6 amb	Yes in 2 amb	Yes in 5 amb
	Yes in 2 amb only	Yes in 1 amb only	Yes in 2 amb
Vehicle documents required			
Certificate of Registration	Yes in 13 amb	Yes in 6 amb	Yes in 9 amb
Certificate of Road Worthiness/fitness	Yes in 13 amb but not updated last year	Yes in 6 amb	Yes in 9 amb
Insurance Certificate	No	No	No
Pollution Certificate	Yes in 13 amb	Yes in 6 amb	Yes in 9 amb

**Part 2 : To be checked by Paramedic in charge of Ambulance**

Item / function to be checked	Public Hospital 1	Public hospital 2	Public Hospital 3
<b>Type of Patient Handling Equipment ( number )</b>			
Main Stretcher / Undercarriage (If the vehicle characteristics so require, the length of the stretcher maybe reduced to 1800mm and height from the loading assembly increased to 380mm) . EN 1865 std ( 01 set)	Yes in 13 amb	Yes in 6 amb	Yes in 9 amb
Pick up stretcher (01 set)	Yes in 13 amb	Yes in 6 amb	Yes in 9 amb
<b>Type of Immobilization Equipment</b>			
Immobilization, Set of fractures : 01	Yes in 6 amb	Yes in 3 amb	Yes in 4 amb
Cervical upper spinal immobilization devices Cervical Collar Set : 01	Yes in 8 amb	Yes in 5 amb	Yes in 6 amb
Extended Upper Spinal Immobilization Extrication Devices or Short Spinal Board (one of these) -01set	Yes in 7 amb	Yes in 3 amb	Yes in 5 amb
<b>Type of Life SOT Equipment</b>			
Stationary Oxygen Minimum 2 Nos. of 10L Water Capacity Cylinders at maximum 150 kgf/cm2 filling pressure manufactured as per IS:7285 and certified by Chief Controller of Explosives, Nagpur	Yes in 13 amb	Yes in 6 amb	Yes in 9 amb
Portable Oxygen Minimum 1 No. of 2.2L Water Capacity Aluminium Cylinder at maximum 150 kgf/cm2 filling pressure manufactured as per IS:7285 and certified by Chief Controller of Explosives, Nagpur Or Portable oxygen equipment • 1246 ltr -1 , 623 ltr -1 • Portable Min 200 L capacity • Constant flow regulator with adjustable flow rate (2-15 lpm)	Yes in 13 amb	Yes in 6 amb	Yes in 9 amb
Valve for Cylinders at 1 and 2 above. 3/8" Bull Nose Valve as per IS:3224 : 01 set Or Oxygen administration equipment • Nasal cannula : adult ( 04 ) , Pediatric ( 03 ) • Transparent non-breathing and valve-less mask : adult ( 04 ) , Pediatric ( 03 ) • Oxygen tubing (adequate length) : 01 • Pocket mask with one way valve : adult ( 01 ) , Pediatric : (01)	Yes in 13 amb	Yes in 6 amb	Yes in 9 amb
Resuscitator with Oxygen inlet and masks and airways for all ages and Oxygen reservoir : 01 set	Yes in 6 amb	Yes in 4 amb	Yes in 4 amb
Airways ( 02 set each) • Nasopharyngeal sizes 20F- 34F • Oropharyngeal sizes 55mm- 115mm	Yes in 6 amb	Yes in 3 amb	Yes in 4 amb
Electric Portable Suction Aspirator with air flow of at least 30 L/min and a vacuum level of at least 600 mm Hg (ISO 10079-1-1999) : 01 set	Yes in 10 amb	Yes in 4 amb	Yes in 6 amb

Portable Suction Aspirator, Manual	Yes in 13 amb	Yes in 6 amb	Yes in 9 amb
<b>Type of Diagnostic Equipment</b>			
Manual B. P. Monitor Cuff Size: 10 cm. - 66 cm. : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Oximeter : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Stethoscope : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Thermometer Minimum Range: 28oC to 42oC : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Device for Blood Sugar Determination : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Diagnostic Light : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
<b>Type of Infusion Material or Equipment</b>			
Infusion Solutions, 4 Liters	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Equipment for injections and infusions set : 02	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Infusion Mounting : 02	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Suction Apparatus and accessories / foot suction			
• Portable Suction : 01			
• Wide bore tubing : 02			
• curved suction tip : 02			
• Flexible suction catheters 5F -14F : 02			
<b>Type of Equipment for Management of Life Threatening Problems</b>			
• Portable airways care system (p.a.c.s.) : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
• Manual resuscitator : 01 set			
• Mouth to mask ventilator with oxygen inlet : 01 set			
• Airways oro- or Nasopharyngeal airway : 01 set			
• Aspirator : 01 set			
• Suction catheter : 01 set			
Nebulization Apparatus	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
<b>Bandaging and Nursing</b>			
Bedding Equipment : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Blanket : 02	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Material for treatment of wounds : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Materials for treatment of burns and corrosives : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Kidney Bowl : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Vomiting Bag : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Non-Glass Urine Bottle	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Sharps Container : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Sterile Surgical Gloves, Pairs : 05 pairs	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Non-Sterile Gloves for Single Use : 100 pairs	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Emergency Delivery Kit : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Waste Bag : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Non-Woven Stretcher Sheet : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
<b>Personal protection Equipment (for Each Member of the Crew for Protection and to Identify the Staff as Road Ambulance Personnel)</b>			
Basic protective clothing including high visibility reflective jacket or tabard : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Safety / Debris Gloves, Pair : 01 pair	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Safety Shoes, Pairs : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Safety Helmet : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Personal Protection Equipment against Infection : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
<b>Rescue and Protection Material</b>			
Cleaning and disinfection material : 01 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Seat belt cutter : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Warning Triangle Lights : 02 set	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Spotlight : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Fire Extinguisher, ABC Type (minimum 2.5 kg capacity complying with IS:13849 or IS:2171) : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
<b>Communication</b>			
Access to the public telephone network e.g. via the normal radio transmitter or by mobile (cellular) telephone : 01	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Internal communication between driver and patient compartment	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
Medicine as decided by sending MO / Specialist	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb

**Part 3 : To be checked by Paramedic / Nursing in charge of Ambulance**

Item / function to be checked	Public Hospital 1	Public hospital 2	Public Hospital 3
<b>Drugs ( number )</b>			
<b>Medication</b>			
1- Activated charcoal ( 02 bottles)	Yes in 06 amb	Yes in 4 amb	Yes in 5 amb
2- oral / IV glucose ( 50 ml)	Only 60 % of these medicine were available	Only 54 % of these medicine were available	Only 48 % of these medicine were available
3- Burn cream ( 02 )			
4- I.V fluids (various dissolution, sizes and concentrations) : 02 each			
5- Antibacterial lubricating jelly ( 02 )			
6- Aromatic Ammonia box ( 01)			
7- Alcohol swabs x 20 ( 20 piece )			
8- Blank labels x 20 ( 20 piece )			
9- Ventolin Neb ( 01 vial)			

<p>10- Sealed Code Box opened under a physician supervision regularly checked for expired items by a pharmacist arranged inside as per attached chart mainly including the following :</p> <ul style="list-style-type: none"> <li>• Atropine Sulfate 1mg/ml 15 vials</li> <li>• Isoproterenol 1mg/5ml : 2 amp</li> <li>• Epinephrine 1mg/10ml tubexes (Intracardial &amp; I.V) : 15 vials</li> <li>• Normal saline Inj : 02 vials</li> <li>• Sterile water for Inj 10ml: 02 vials</li> <li>• Phynetoine Amp/ vial (50mg/ml) : 03 vials</li> <li>• Adenosine 6mg/2ml: 03 vials</li> <li>• Methyl prednisolone 500mg: 02 vials</li> <li>• Dobutamine 250mg: 02 vials</li> <li>• Norepinephrine 1mg/ml: 02 vials</li> <li>• Epinephrine 1mg/ml 30ml vial: 02 vials</li> <li>• Hydrocortisone 250mg/2ml : 02 vials</li> <li>• Bretylium 500mg/10ml: 02 vials</li> <li>• Procainamide 1000mg/10ml: 02 vials</li> <li>• Dopamine 400mg/5ml: 02 vials</li> <li>• Lidocaine 1gm/25ml: 02 vials</li> <li>• Lidocaine 5ml: 04 vials</li> <li>• human Regular Insulin 100mg/ml: 02 vials</li> <li>• Aminophylline 500mg/20mg: 02 vials</li> <li>• calcium gluconate 10% 1mg/10ml: 02 vials</li> <li>• Potassium chloride 20mg/10ml: 02 vials</li> <li>• furosemide 100mg/10ml x2 amp / 20mg/2ml</li> <li>• Labetalol 100mg/20ml: 02 vials</li> <li>• Magnesium SO4 50% 1gm/2ml: 02 vials</li> <li>• Digoxin 0.1mg/ml x2 amp 0.5mg/2ml: 04 vials</li> <li>• Verapamil 5mg/2ml: 02 vials</li> <li>• Naloxone 0.4mg/ml x2amp</li> <li>• Propranolol 1mg/ml x3amp</li> <li>• Diphenhydramine 50mg/ml x2vial</li> <li>• Vercuronium 10mg x 2vial</li> <li>• Epinephrine 1mg/ml x4amp</li> <li>• Sodium bicarbonate 10ml Ped syringe : 01</li> <li>• Dextrose 50ml syringe : 01</li> <li>• calcium chloride 10% : 02 vials</li> <li>• sodium bicarbonate 50ml syringe: 04 vials</li> <li>• Nitroglycerin Spray/ Sublingual : 05 vials</li> <li>• Inj Diazepam: 05 vials</li> <li>• Inj-Morphine: 05 vials</li> <li>• Inj- Perinorm : 03 vials</li> <li>• Inj-Voveron: 02 vials</li> <li>• Inj- Sodium Dialantin: 04 vials</li> <li>• Inj- Buscopan: 02 vials</li> <li>• Inj- Tramadol: 02 vials</li> </ul>			
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**DISCUSSION :**

Well-equipped ambulance with requisite facilities should be made available round the clock for meeting emergency requirements. The ambulance shall be used on shifting the patient to this hospital and / or other hospitals as and when need arises. National Ambulance Code (AIS-125) specifies the constructional and functional requirements of Category M (four wheelers) and L (two and three wheelers) vehicles used for transport and / or emergent care of patients (road ambulance). AIS-125 for the first time in the history of India legally enshrines the definition of a road ambulance as *road ambulance or ambulance is a specially equipped and ergonomically designed vehicle for transportation/emergent treatment of sick or injured people and capable of providing out of hospital medical care during transit/when stationary, commensurate with its designated level of care when appropriately staffed. The national ambulance code classified type of road ambulance as under*

**Types of Road Ambulances<sup>1</sup>**

Road Ambulances are designated as follows based on the level of care they can provide

- **Type A Road Ambulance /Medical First Responder :** Road Ambulance designed to provide emergent out of hospital medical care to patients when stationary. This vehicle maybe any CMVR approved Category M or L vehicle suitable for the terrain to be used in but will not have the capability to transport patients in supine state or provide them medical care inside the vehicle.
- **Type B Road Ambulance/ Patient Transport Vehicle :** Road ambulance designed and equipped for the transport patients who are not expected to become emergency patients.
- **Type C Road Ambulance: Basic Life Support Ambulance :** A vehicle ergonomically designed, suitably equipped and

appropriately staffed for the transport and treatment of patients requiring non-invasive airway management / basic monitoring.

- **Type D Road Ambulance: Advanced Life Support Ambulance :** A vehicle ergonomically designed, suitably equipped and appropriately staffed for the transport and treatment of emergency patients requiring invasive airway management / intensive monitoring.

The ambulance code also addresses other vehicle specific parameters like seating, electricals, fire safety, stretcher loading angle, etc., with a view to simplify the matters for healthcare providers who are often not well versed in automobile engineering aspects. *With the NAC in place, all the healthcare provider needs to specify for the base ambulance vehicle is that the vehicle should be as per AIS-125 (Part 1).* The code also negates the requirement of cramping the patient compartment with additional seats to meet CMVR M2 category requirements of nine passenger seats as it enables stretchers to be accounted for four passenger seats and also prescribes minimum seating requirements for each category of ambulances.

The ambulance code also standardizes the recognition and visibility requirements of ambulances. Special stress has been laid on increasing the conspicuity of ambulances on the road such that these vehicles shall be uniformly identifiable across the country<sup>2</sup>.

All the ambulance should be roadworthy 24 x 7, with well-equipped as per classification of ambulance to cater all emergency en-route for safe transport. The driver / attendants should follow following code of conduct :

**Code of conduct of the driver/Attendant<sup>3</sup>**

- Will be cleanly dressed in uniform

- Will be polite
- Will be sympathetic
- Will be punctual and on time
- Will complete paperwork
- Will check all operational details of the ambulance every morning and before leaving for an assignment as per checklist.
- At all-time will drive the ambulance within permissible speed limits.
- Will not use the hooter indiscriminately.
- Will not chew or smoke in front of patients and during transportation.
- Will not consume alcohol during duty hours.
- Will not shout or use abusive language.

The ambulance should be Washed and cleaned once daily and in between transportation of patents. Fuel, oxygen cylinder and other necessary equipment as per the checklist provided. The cleaning of vehicle, cleaning of equipment, continuing maintenance of the vehicle. Driver and the attendant will be available for ambulance duty at any point of time to perform the duty. The driver and the attendant will wear uniforms as specified. Driver and the attendant will remain physically and mentally fit and sound so as to be able to perform their duties at all times. Patients should be transported to the hospital as per the guidelines specified. Proper communication protocols need to be maintained<sup>5</sup>.

#### **The Preventative measures to be taken:**

- (a) Use all protective gears for handling patients at all times.
- (b) Exposure to blood or other body fluid exists, gloves are recommended. If hands accidentally become contaminated with blood, they should be washed thoroughly as soon possible.
- © Masks should be worn by the ambulance staff or patients for those infectious agents transmitted by airborne diseases.
- (d) Equipment should be thoroughly cleaned after each use.
- (e) All significant exposures shall be reported to the in charge immediately.

#### **Recommendation for public hospitals<sup>5-6</sup>:**

- (a) The checklist should be implemented and checked everyday before transporting any patients .
- (b) All drivers / paramedics / Nursing and medical officers should be trained in medical emergency and especially to provide BLS / ALS /ATLS during transportation.
- © All persons responsible for checking the ambulance should their portion for safe transport and availability of all items in ambulance .
- (d) Monthly audit should be conducted to check for availability and any deficiency should be reported to authority immediately .

#### **CONCLUSION**

Ambulance is a specially equipped and ergonomically designed vehicle for transportation / emergent treatment of sick or injured people and capable of providing out of hospital medical care during transit / when stationary, commensurate with its designated level of care when appropriately staffed. It should be functional 24 x 7 and all critical equipment and medicine should be made available.

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