

Norms of infrastructure for the trauma care facilities (level-wise)

L-I	L-II	L-III
30 beds (10 ICU and 20 General trauma beds) and 4 Operation Theatres	20 beds (10 ICU and 10 General trauma beds) and 2 Operation Theatres	10 beds (5 ICU and 5 General trauma beds) and 1 Operation Theatre

Provision of services at Level – I Trauma Care Facility

- ✓ Highest level of trauma care services round the clock.
- ✓ Availability of services of all major super- specialties associated with trauma care including rehabilitation services with bed strength of more than 500
- ✓ Apex institutions providing leadership in clinical management, research, training, community outreach services, community education, and maintenance of trauma registry.

Provisions of services at Level-II Trauma Care Facility

- ✓ Provides definitive care for severe trauma patients.
- ✓ Round the clock availability of physicians, surgeons, orthopaedic surgeons and anaesthetists.
- ✓ On-call facility for neurosurgeons.
- ✓ Well equipped Emergency Department, ICU, blood bank, rehabilitation services, comprehensive diagnostic capabilities and supportive services.
- ✓ Medical college or district hospital with bed strength of 300 to 500.

Provision of services at Level-III Trauma Care Facility

- ✓ Provides initial evaluation and stabilization.
- ✓ Comprehensive medical and surgical inpatient services. Emergency doctors and nurses round the clock.
- ✓ Intensive care facility, diagnostic capability, blood bank and other supportive services.
- ✓ The district/ tehsil hospitals with a bed capacity of 100 to 200 beds.

Provision of services at L-IV Trauma Care Facility

- ✓ Level IV care is to be provided by an ambulance manned by a driver and two trained paramedics.
- ✓ Evaluate and provide first aid/ basic life support while transporting the trauma patient to the nearest identified trauma center.
- ✓ The fully equipped basic life support ambulances stationed at a distance of 50 km apart to give round the clock cover.

Norms of manpower for Trauma Care Facilities (Level-wise)

S.N.	Human Resource	Level I	Level II	Level III
1	Neuro Surgeon	4	1	-
2	Radiologist	2	2	-
3	Plastic Surgeon	1	-	-
4	Anaesthetist	6	3	2
5	Orthopaedic Surgeon	4	3	2
6	General Surgeon	6	2	2
7	Casualty Medical Officer	30	8	6
8	Staff Nurse (including Trauma Nurse Coordinators)	100	40	25
9	Nursing attendant	24	16	13
10	OT Technician	10	5	5
11	Radiographer	4	4	4
12	Lab Technician	4	2	2
13	MRI Technician	2	-	-
14	Multi task worker	40	15	12
	Total	237	101	73

** Preferably PG / Diploma in General Surgery / Anaesthesia*

** The specialists can be engaged under public private mode in case they are not available on contractual basis. A one-time remuneration between Rs. 5000-10000 per visit may be fixed by the states on the basis of specialists and the nature of emergency*

Norms for equipments in Trauma care facilities identified under 12th FYP

List of Equipments recommended- Speciality Wise

Radiology Equipments

S. No	L-I	L-II	L-III
1.	100 mA portable X-Ray machine	100 mA Portable X-ray Machine	100 mA Portable X-ray Machine
2.	1000 mA digital X-Ray Machine	500 mA X-ray Machine	500 mA X-ray Machine
3.	3-D Ultrasonography-Trolley Based	3 D Ultrasonography – Trolley based	Ultrasonography – Trolley based
4.	Image Intensifier (C-Arm)-with CD ROM, Printer, 12" CCD, Double Monitor, Electronic Transmission and Networking for tele-Radiology with X-Ray and DSA facility for OT	Image Intensifier (C-Arm) – With CD Rom, Printer, 12" CCD, Double Monitor, Electronic Transmission and Networking for tele-Radiology with X-ray and DSA facilities	-
5.	Angiography C-Arm based + Angiosuite	-	-
6.	CT Scan more than 32 Slices	CT Scan 32 Slice	CT Scan
7.	3 Tesla MRI	-	-
8.	Portable USG	Portable USG	Portable USG

Rehabilitation Equipments:

S. No	L-I	L-II	L-III
1.	SW Diathermy	SW Diathermy	NA
2.	IFT machine	IFT machine	-
3.	Cervical and Lumbar Traction	Cervical and Lumbar Traction	-
4.	Physiotherapy equipments	Physiotherapy equipments	-

Anaesthesia Equipments:

S. No	L-I	L-II	L-III
1.	O.T. Table – 4 segments, translucent top with orthopaedics attachment -2	O.T. Table – 4 segments, translucent top with orthopaedics attachment-2	O.T. Table – 3 segments, translucent top with orthopaedics attachment- 2
2.	Cautery Machine – Mono & Bi Polar with underwater	Cautery Machine – Mono & Bi Polar-2	Cautery Machine – Mono & Bi Polar-2

	cutting -2		
3.	O.T. ceiling light – shadow less with inbuilt camera and monitor -2	O.T. ceiling light – shadow less-2	O.T. ceiling light- shadow less-2
4.	Central suction and central pipe line-1	Central suction and central pipe line - 1	-
5.	High Vacuum Suction Machine -2	High Vacuum Suction Machine -2	Suction Machine- 4
6.	Anaesthesia Machine with Monitor 6-8 Channel-4, Parameters: Agent monitoring, NIBP, SPO2, ET CO2, ECG, Temp., IBP	Anaesthesia Machine with Monitor 6-8 Channel -2, Parameters: Agent monitoring, NIBP, SPO2, ET CO2, ECG, Temp, IBP	Anaesthesia Machine with Monitor-2, Parameters: Agent monitoring, NIBP, SPO2, ET CO2, ECG, Temp, IBP
7.	Ventilator with high end compressor -10	Ventilator with high end compressor - 10	Ventilator with high end compressor-5
8.	Transport Ventilator-1	Transport Ventilator-1	Transport Ventilator-1
9.	Lab. Automatic Blood Gas Analyser	Lab. Automatic Blood Gas Analyser	ABG Machine -1 (Hand held Analyzer)
10.	Patient warming system	Patient warming system	-
11.	Defibrillator with Monitor-10 Parameters: NIBP, ECG, SPO2 with AED	Defibrillator with Monitor- 10 Parameters NIBP, ECG, SPO2 with AED	Defibrillator with Monitor-5, Parameters: NIBP, ECG, SPO2 with AED
12.	Monitor-20 Large Screen, with ECG, SPO2, NIBP, ETCO2	Monitor- 10 Large Screen, with ECG, SPO2, NIBP, ETCO2	Monitor- 5 Large Screen, with ECG, SPO2, NIBP, ETCO2
13.	Operating Microscope -2	-	-
14.	Operating Head Lights-2	Operating Head Lights -2	-
15.	Syringe infusion pump- 5	Syringe infusion pump- 3	Syringe infusion pump- 1
16.	Manifold system in ICU	Manifold system in ICU	-

Orthopaedic Equipments:

S. No	L-I	L-II	L-III
1.	Power drill and Power saw -2	Power drill and Power saw- 1	Power drill & power saw-1
2.	Pneumatic tourniquet -2	Pneumatic tourniquet -2	Pneumatic tourniquet -2
3.	Splints and traction devices-2	Splints and traction devices -2	Splints and traction devices --1
4.	General orthopaedic instrument- 2 sets	General orthopaedic instrument- 2 sets	General orthopaedic instrument- 1 set

OT Equipments:

S. No	L-I	L-II	L-III
1.	General surgical instruments -2 Sets	General surgical instruments - 2 sets	General surgical instruments - 2 sets
2.	Thoracotomy instrument -1	Thoracotomy instrument-1 set	-
3.	Spinal surgery instrument -1	Spinal surgery instrument- 1 set	-
4.	Faciomaxillary instrument -1	-	-
5.	Craniotomy instrument -2	Craniotomy instrument- 2 sets	Craniotomy set
6.	Automatic Bio-Analyser	Automatic Bio-Analyser	-
7.	Humidity Control Meter	Humidity Control Meter	Humidity Control Meter

Others Facilities:

S. No	L-I	L-II	L-III
1.	Fully functional Blood Bank and Microbiology facility	Fully functional Blood Bank and Microbiology facility	-
2.	Electricity Back-Up	Electricity Back-up	Electricity Back-up
3.	Laminar air flow	Laminar air flow	-
4.	10 bedded step down / recovery unit with 5 monitors (4 channels)	5 bedded step down / recovery unit with 3 monitors (4 channels)	5 bedded step down / recovery unit with 3 monitors (4 channels)
5.	ICU beds-10	ICU beds-10	ICU beds-5