

National Programme for Prevention and Management of Trauma and Burn Injuries (NPPMTBI)

Trauma Care Programme:

As per the report of World Health Organization (WHO), Globally the number of road traffic deaths continues to climb, reaching 1.35 million in 2016 and have become the eighth leading cause of death. Also one of the leading causes of death for children and young adults aged 5-29 years. More than half of road traffic deaths are amongst pedestrians, cyclists and motorcyclists who are often neglected in road traffic system design in many countries. As projected by WHO, by the year 2020 road traffic accidents would be the third major cause of disability adjusted life years (DALY) lost.

In India, road traffic crashes are one of the major causes of disability, morbidity and mortality. As per Ministry of Road Transport and Highways (MoRTH), road injuries are one of the top four leading causes of death and health loss among persons of age group 15-49 years. As per the report of MoRTH, during 2017, the total number of road accidents are reported to be 4,64,910 causing injuries to 4,70,975 persons and claiming 1,47,913 lives in the country. This would translate, on an average, into 53 accidents and 16 deaths every hour.

Keeping in view the gravity of the situation, Government of India initiated a project during 9th FYP namely- "Pilot Project for Strengthening Emergency Facilities along the Highways" with the objective to bring down the preventable deaths in road accidents. The project was continued during the 10th FY Plan and a total of 103 Hospitals were identified and provided financial assistance. Thereafter, during 11th FYP period, the project was re-modified and a scheme namely-"Assistance for Capacity Building for Developing Trauma Care Facilities in Government Hospitals on National Highways," was approved with the overall objective to bring down preventable deaths due to road accidents to 10 per cent by developing a pan-India trauma care network in which no trauma victim has to be transported for more than 50 kilometers and a designated trauma center is available at every 100 Km. Developing a network of trauma care facilities (TCFs) in the Government Hospitals along the Golden Quadrilateral highway corridor as well as North-South & East-West Corridors was envisaged. Under this programme, 116 TCFs were approved in 17 States on 100% Central assistance. The scheme was further extended to the 12th plan wherein 80 new trauma care facilities have been supported along with initiation of National Injury Surveillance; Trauma Registry & Capacity building center (NISC) at Dr. RML Hospital, undertaking various

IEC activities for prevention & management of road traffic injuries, good Samaritan and undertaking various capacity building activities, etc.

The scheme has now been extended upto March, 2020 for continuing financial support on reimbursement basis to already approved TCFs as per the norms of the scheme.

It was envisaged to implement the scheme in such a manner that Designated Trauma Care Facilities (TCFs) viz. Level I, II & III – is available at every 100kms on the National/State Highway. **Level III TCF** will provide initial evaluation and stabilization (surgically if appropriate) to the trauma patient. The district/ tehsil hospitals with a bed capacity of **100 to 200** beds have been selected for level III care. **Level II TCF** will provide definitive care for severe trauma victims. Emergency physicians, surgeons, Orthopaedicians and Anesthetists are in-house. The college hospitals or hospitals with bed strength of **300 to 500** are identified as Level II Trauma Center. **Level I TCF** will provide the highest level of definitive and comprehensive care for patient with complex injuries. Level I Trauma Centers is only in medical college hospitals with more than 500 beds.

The salient feature of 11thFYP:-

- 116 District Hospitals/Medical Colleges in 17 States were identified for implementation during this period.
- Total number of Level III TCF - 58, Level II TCF - 57 and L I TCF - 1.
- Financial Assistance given to Level III - Rs. 4.775 Cr, Level II - Rs. 9.630 Cr and Level I - Rs. 15.93 Cr for construction, equipment, manpower, communication, legal assistance and training **(Details at Annexure 1)**.
- Out of 116 TCFs, 105 TCFs are reported to be functional **(Details at Annexure 2)**.

The salient feature of 12th FYP :-

- 85 Trauma Care Facilities have been identified however 80 TCFs have been supported **(Details at Annexure 3)**.
- Total number of Level –III TCF is 56, Level-II TCF is 19 and L-I TCF is 5.
- Financial Assistance given to Level-III is Rs. 4.942 Cr, Level-II is Rs. 10.272 Cr and Level-I is Rs. 17.132 Cr for construction, equipment, manpower, communication and legal assistance **(Details at Annexure 1)**.
- No TCF have become functional.
- NISC has been established.

The achievements under the programme are as under:

- National Trauma Injury Surveillance and Capacity Building Centre (NISC) has been established at Dr. RML Hospital (website www.nisc.gov.in). So far, NISC is connected with 46 Hospitals/TCFs in 14 States for collection of injury related data.
- For capacity building, the pre-hospital trauma technician (PTT) course was started and so far more than 500 PTT students trained since 2007, First Aid course developed and training imparted, Training of Trainers (TOT) organized for Medical Officers, Basic Life Support (BLS) and Advanced Trauma Life Support (ATLS) training organized for nurses and doctors of TCFs, etc
- Various IEC material including audio-visuals, documentary films, print material in the form of posters, charts and stickers on awareness on Good Samaritan Guidelines and on First Aid on Trauma have been developed under the Programme and circulated to the States for wide dissemination. Publicity campaigns of telecast, broadcast and bulk SMS have been undertaken. 'Hand Book on Prevention of Accidents and Awareness of First Aid' has been developed in Hindi and English.
- Technical documents such as operational guidelines, monitoring formats, rehabilitation guidelines (for L-II TCFs), Minimum Standards for TCFs, Standard Treatment Guidelines for trauma injuries, Key performance indicators for pre-hospital, hospital and rehabilitation care for trauma victims, etc. have been developed for smooth implementation of the programme.
- World Trauma Day, Remembrance day for road accident victims, Road Safety Week 2018 & 2019 were observed wherein various awareness generation activities were undertaken. Felicitation of Good Samaritans was undertaken during the Road Safety Week 2019.
- In compliance to development of National Trauma System Plan, State Action Plans have been received from 32 States/UTs.

Annexure-1

Unit Cost-TCFs-11th FYP**(Rs in crore)**

Cost estimation			
Items for grant	L-III	L-II	L-I
Manpower	2.1000	3.8000	4.3000
Building	0.6500	0.8000	1.5000
Equipment	2.0000	5.0000	10.000
Communication	0.0200	0.0200	0.0200
Legal Services & Data Entry	0.0050	0.0100	0.0100
Training	-	-	0.1000
Total	4.775	9.63	15.93

Unit Cost-12th FYP:**(Rs in crore)**

Cost estimation			
Items for grant	L-III	L-II	L-I
Manpower	1.5120	2.7360	3.0960
Building	1.0000*	1.5000*	2.0000*
Equipment	2.4000	6.0000	12.0000
Communication	0.0240	0.0240	0.0240
Legal Services & Data Entry	0.0060	0.0120	0.0120
Total	4.9420	10.2720	17.1320

Annexure-2

Status of TRAUMA CARE FACILITIES Identified during 11th FYP (116)

CONSTRUCTION COMPLETED (Total: 105)

S. No	Name of the Hospital	Level	Status of Functionality
Andhra Pradesh			
1.	Community Hospital, Penukonda	III	Functional
2.	Taluk Hospital, Tekkali	III	Functional
3.	King George Hospital/Andhra Medical College, Visakhapatnam	II	Functional
4.	Area/ Tuni taluk Hospital, east Godavari District	III	Functional
5.	District Hospital , Rajahmundry, East Godavari	II	Functional
6.	District Hospital, Eluru, West Godavari	III	Functional
7.	District Hospital, Ongole	III	Functional
8.	Dist Hospital, Nellore	II	Functional
9.	Taluk Hos. Nayadupet	III	Functional
10.	Govt. General Hospital & Medical College, Kurnool	II	Functional
11.	District Hospital, Srikakulam	II	Functional
12.	Medical College, Guntur	II	Functional
13.	Dist. Hospital Anantpur	II	Functional
Assam			
14.	Medical College & Hospital, Silchar	II	Functional
15.	Civil Hospital, Haflong	III	Functional
16.	Civil Hospital, Diphu	III	Functional
17.	District Hospital, Nagaon	II	Functional

18.	Medical College & Hospital, Guwahati.	II	Functional
19.	District hospital, Nalbari	III	Functional
20.	Civil Hospital, Bogaigaon	III	Functional
Gujarat			
21.	Civil Hospital, Palanpur.	II	Functional
22.	Civil Hospital, Radhanpur	III	Functional
23.	General Hospital, Morbi	II	Functional
24.	Pt. Deen dayal Upadhayaya Hospital, Rajkot	II	Functional
25.	CHC, Jetpur	III	Functional
26.	General Hospital, Porbandar	III	Functional
27.	General Hospital, Valsad	II	Functional
28.	Govt. Medical College, Surat	II	Functional
29.	District Hospital, Bharuch	III	Functional
30.	SSG Hospital & Medical College, Vadodara	II	Functional
31.	District Hospital , Himmat Nagar	III	Functional
32.	SA Hospital, Bachau, Kutch	III	Functional
Haryana			
33.	Dist. Hospital, Ambala	II	Functional
34.	District Hospital, Rewari	III	Functional
35.	B.S.S. General Hospital, Panipat	III	Functional
Jammu & Kashmir			
36.	MMAM District Hospital, Anantnag	III	Functional
37.	Trauma Hospital, Ramban, Doda	III	Functional
38.	Govt. District Hospital, Udhampur	II	Functional
Karnataka			
39.	Tumkur District Hospital	III	Functional

40.	Taluq Hospital, Sira	III	Functional
41.	Civil Hospital, Chitradurga	II	Functional
42.	Civil Hospital, Devangiri	III	Functional
43.	Karnataka Institute of Medical Science, Hubli, Dharward	II	Functional
44.	District Hospital, Haveri	III	Functional
45.	District Hospital, Belgaum	III	Functional
46.	District Hospital, Chickbalapur	III	Functional
Madhya Pradesh			
47.	Civil Hospital, Shivpuri	II	Functional
48.	G R Medical College Hospital, Gwalior	II	Functional
49.	District Hospital Narsimhapur	III	Functional
50.	District Hospital, Seoni	III	Functional
51.	District Hospital, Sagar	II	Functional
Maharashtra			
52.	GMCH, Kolhapur	II	Functional
53.	District Hospital, Satara	III	Functional
54.	BJ Medical College, Pune	II	Functional
55.	Municipal Hospital, Vashi	III	Functional
56.	Sub District Hospital, Hinganghat, Wardha	III	Functional
Odisha			
57.	District Hospital, Balasore	II	Functional
58.	District Hospital, Bhadrak	III	Functional
59.	SCB Medical College, Cuttack	I	Functional
60.	District Hospital, Khurda	III	Functional
61.	MKCG Medical College, Behrampur	II	Functional

Punjab			
62.	Sub-District Hospital, Pathankot	III	Functional
63.	District Hospital, Jalandhar	II	Functional
64.	District Hospital, Khanna	III	Functional
Rajasthan			
65.	Government Hospital, Baran	III	Functional
66.	New Medical College Hospital, Kota	II	Functional
67.	SS Hospital, Chittorgarh	III	Functional
68.	RNT Medical College, Udaipur	II	Functional
69.	District Hospital, Bhilwara	III	Functional
70.	JLN Medical College, Ajmer	II	Functional
71.	SMS Medical College, Jaipur	II	Functional
72.	Taluk Hospital, Kotputli, Alwar	III	Functional
73.	Govt. Hospital, Sirohi	III	Functional
74.	Civil Hospital Dungarpur. Sabarkantha	III	Functional
Telangana			
75.	District Hospital, Mehboobnagar	III	Functional
76.	Rajiv Gandhi Inst. Of Medical sciences, Adilabad	II	Functional
77.	Area Hospital, Kamareddy	III	Functional
78.	Distt. Hqr Hospital, Nizamabad		Functional
Tamil Nadu			
79.	Kilpauk Medical College, Chennai	II	Functional
80.	GMC, Vellore	II	Functional
81.	Taluk Hospital, Krishnagiri	III	Functional
82.	Govt. District Hqr. Hospital, Karur	III	Functional

83.	District Hospital, Dindigul	II	Functional
84.	Govt. Rajaji Hospital Medical college, Madurai	II	Functional
85.	District Hqr. Hospital, Kovilpatti	III	Functional
86.	GMCH, Tirunelveli	II	Functional
87.	GMCH, Kanyakumari	II	Functional
Uttar Pradesh			
88.	BRD Medical College, Gorakhpur	II	Functional
89.	District Hospital, Faizabad	III	Functional
90.	KGM College, Lucknow	II	Functional
91.	LLR Hospital & GSVM College, Kanpur	II	Functional
92.	District Hospital, Jaluan, Orai	III	Functional
93.	MLB Medical College, Jhnasi	II	Functional
94.	District Hospital, Basti	III	Functional
95.	SN Medical College, Agra	II	Functional
96.	Shri BA District Hospital, Etawah	III	Functional
97.	District Hospital, Fatehpur	III	Functional
98.	MLN Medical College, Allahabad	II	Functional
99.	LLRM Medical College, Meerut	II	Functional
100.	District Hospital, Lalitpur	II	Functional
West Bengal			
101.	North Bengal Medical College & hospital, Siliguri	II	Functional
102.	Islampur SD Hospital, Uttar Dinajpur	III	Functional
103.	Sub Divisional, Asansol	II	Functional
104.	Burdwan Medical College & Hospital, Burdwan	II	Functional
105.	Sub-District Hospital, Kharagpur	III	Functional

TRAUMA CARE FACILITIES UNDER CONSTRUCTION (Total:07)

S. No	Name of the Hospital	Level
Maharashtra		
1.	Sub District Hospital Danau, Thane	III
Bihar		
2.	District Hospital, Purnia.	III
3.	S.K. Medical College Hospital, Muzaffarpur.	II
4.	Sadar Hospital, Sasaram, Rohtas	III
5.	AN Magadh Medical College Hospital, Gaya	II
6.	Civil Hospital, Madhepura	III
7.	Darbhanga Medical College Hospital, Darbhanga.	II

Funds to these TCFS have been released only for construction.

TRAUMA CARE FACILITIES CONSTRUCTION NOT YET STARTED (Total: 4)

S. No	Name of the Hospital	Level
BIHAR		
1.	Civil Hospital, Kishanganj.	III
2.	Civil Hospital, Jhanjarpur.	III
3.	Civil Hospital, Gopalgunj.	III
Jharkhand		
4.	Patliputra Medical college, Dhanbad	II

Annexure-3**List of Trauma Care Facilities supported during 12th FYP**

Sl. No.	State	Name of Hospital	Level
1.	Andhra Pradesh	General Hospital Kakinada	L-II
2.	Andaman & Nikobar	Dr. R P Hospital, Mayabunder	L-III
3.	Arunachal Pradesh	General Hospital, Bomdila	L-III
4.		District Hospital, Roing	L-III
5.		District Hospital, Tezu	L-III
6.		District Hospital, Khonsa	L-III
7.	Chhattisgarh	BR Ambedkar Memorial Hospital, Raipur	L-II
8.		Chhattisgarh Institute of Medical Sciences, Bilaspur	L-II
9.		Govt. Komaldeo District Hospital, Kanker	L-III
10.		District Hospital, Raigarh	L-III
11.		Baliram Kashyap Memorial Medical College, Jagdalpur	L-II
12.		District Hospital, Ambikapur	L-III
13.	Dadar & Nagar Haveli	CHC Khanvel	L-III
14.	Jharkhand	District Hospital Koderma	L-III
15.		Sadar Hospital Daltanganj	L-III
16.		District Hospital, Gumla	L-III
17.	Jammu & Kashmir	S.N.M. Hospital, Leh	L-III
18.		District Hospital, Kupwara	L-III
19.	Gujarat	Guru Govind Singh Hospital Jamnagar	L-II

20.		Sir Takhtsinh General Hospital & Govt. Medical College, Bhavnagar	L-II
21.		District Hospital, Veraval	L-III
22.	Goa	Govt. Medical College, Goa	L-I
23.	Himachal Pradesh	District Hospital, Chamba	L-III
24.		Regional Hospital Hamirpur	L-III
25.		RP Medical College, Tanda,	L-II
26.		Zonal Hospital Mandi	L-III
27.		Regional Hospital Rampur, Shimla	L-III
28.		IGMC Govt. Hospital, Shimla, Himachal Pradesh	L-I
29.		Kerala	Govt. Medical College, Alappuzha
30.	General Hospital, Ernakulam		L-III
31.	District Hospital, Kannur		L-III
32.	District Hospital Palakkad		L-II
33.	Govt. Medical College Hospital, Kozhikode		L-I
34.	Government Medical College & Hospital, Thiruvananthapuram		L-II
35.	Manipur		Regional Institute of Medical Sciences, Imphal
36.		District Hospital, Churachandpur	L-III
37.		District Hospital Senapati	L-III
38.		District Hospital Bishunpur	L-III
39.		Thoubal District Hospital	L-III
40.		Chandel District Hospital	L-III
41.	Meghalaya	Civil Hospital, Tura	L-III
42.		Civil Hospital Nongpoh	L-III
43.		Civil Hospital Shillong	L-II
44.	Mizoram	Civil Hospital, Aizawl	L-II
45.		District Hospital, Lawngtlai	L-III

46.		District Hospital, Saiha	L-III
47.		District Hospital, Lunglei	L-III
48.		District Hospital Kolasib	L-III
49.		District Hospital Champhai	L-III
50.		District Hospital Serchhip	L-III
51.	Nagaland	District Hospital, Tuensang	L-III
52.		District Hospital, Kiphiri	L-III
53.		District Hospital, Mon	L-III
54.		Naga Hospital Kohima	L-II
55.		District Hospital, Dimapur	L-III
56.	Odisha	District Hospital, Puri	L-III
57.	Punjab	District Hospital Fazailka	L-III
58.		District Hospital Ferozpur	L-III
59.	Uttrakhand	District Hospital, Baurari, New Tehri	L-III
60.		Government Medical College, Haldwani	L-II
61.		Combined Hospital Roorkee	L-III
62.		Doon Medical College & Hospital	L-II
63.	Tripura	Dharma Nagar, Sub-Divisional Hospital	L-III
64.		Santirbazar PHC, Divisional Hospital	L-III
65.		District Hospital, Gomati	L-III
66.		Agartala Govt. Medical College	L-II
67.		District Hospital, Dhalai	L-III
68.	Tamil Nadu	Govt. District Head Quarters Hospital Kallakurichi	L- III
69.		Govt. District Head Quarters Hospital Kumbakonam	L-III.
70.		Chengalpattu Govt. Medical College & Hospital	L-I.

71.		Coimbatore Medical College	L-II.
72.	Sikkim	District Hospital Namachi	L-III
73.		District Hospital, Singtam	L-III
74.		District Hospital, Mangan	L-III
75.		STNM Hospital Gangtok	L-II
76.		West Bengal	District Hospital, Alipurduar
77.	Murshidabad Medical College		L-II
78.	Ranaghat Sub Divisional Hospital, Nadia		L-III
79.	Diamod Harbour District Hospital		L-III
80.	Raiganj District Hospital, Uttar Dinajpur		L-III