

Emergency Medical Team Deployment Standard Operating Procedure 2024 (2081)

Ministerial Level Approval on 24 September, 2024



Government of Nepal

Ministry of Health and Population

Emergency Medical Team Deployment, Standard Operating Procedure, 2080 (2024)

Preamble:

Based upon the provisions mentioned in the **Public Health Service Act 2075, (2018), Chapter-6 “Emergency Health Service Management”** and **Article 48 , Sub-Article 1 – There shall be a rapid response team and emergency medical team as prescribed in order to extend health service immediately during emergency circumstances** and using the rights given by the **Article 64 Power To make standards, directives, or procedures: The Ministry may make necessary standards, directives or procedures subject to this act or the rules framed under this act,** The Ministry of Health and Population has framed following Standard Operating Procedures for the Deployment of Emergency Medical Team.

Chapter 1

Preliminary

- 1. Brief title and Commencement:** (1). This procedure shall be collectively called as “Emergency Medical Team Deployment Standard Operating Procedure 2080 (2024)”.
(2). The Standard Operating Procedure shall come into force immediately.
- 2. Definitions:** (1) “Act” means Public Health Service Act, 2018
(2) “Regulation” means Public Health Service Regulation, 2020
(3) “Guideline” means Guideline on Rapid Response Team and Emergency Medical Team Deployment, 2022.

(4) “Emergency Medical Team” here forth terms as EMT are defined as a group of health professionals, including doctors, nurses, paramedics, support workers, logisticians, who are deployed for treatment of patients of affected by emergency and disasters.

(5) “Ministry” means Ministry of Health and Population.

(6) “Disaster” means a natural or non-natural events causing a threatening situation in any place that results in loss of lives and properties and makes severe impact on livelihood and the environment.

(7) “Mass Casualty” means an event which generates more patients at one time than locally available resources can manage using routine procedure and requires exceptional arrangements.

(8) “Infectious disease” means illness which can spread from one person to another directly or indirectly through an infectious agent or medium.

(9) “Health Work Force” means a person registered in the concerned Council as a health worker under the prevailing law.

(9) “Center” means Health Emergency Operation center established at Ministry of Health and population.

(10) “Provincial Center” means Provincial Health Emergency Operation Center established under relevant ministry/ directorate at each provincial government.

(11) “Committee” means Emergency Medical Teams Operational Committee as defined in the guideline.

Chapter 2

Objective and Principle

3. **Rationale of EMT:** (1) To reduce avoidable morbidities and mortalities by timely deployment of pre-identified and trained emergency medical teams to health facilities during time of emergencies to the affected areas within Nepal.

4. **Principle of EMT:** The Principles of EMTs are:
- (1) Ensure safety.
 - (2) Treat with respect, dignity, and empathy.
 - (3) Optimum utilization of available resources.
 - (4) Treat colleagues with politeness and respect.
 - (5) Proper handling and care of the equipment, amenities, and other facilities.
 - (6) Respect the local culture and protect the environment.

Chapter 3

Emergency Medical Teams – Formation and Composition

5. **Formation of EMT:** (1) There shall be two types of EMTs: Mass Casualty Management EMT and Infectious Disease Management EMT
(2) Each hub hospital shall form both types of EMTs.
6. **Composition of EMTs** (1): The Composition of Mass casualty Management (MCM) shall be as defined in Annex 1.
(2) The composition of Infectious Disease Management (IDM) shall be as defined in Annex 2.
(3) EMT shall be formed by each hub hospitals in close coordination with their satellite hospitals including members from hub and satellite hospital networks.
(4) A minimum of 1 MCM EMT and IDM EMT shall be formed in each hub and satellite hospital network.
(5) Each EMT shall define 1 Team Lead and each hub hospital shall define 1 EMT focal person.
(6) Roster of EMT shall be prepared and updated on quarterly basis by each hub hospital.

(7) EMT focal person shall identify at least two alternative persons for each member of EMT.

7. EMT Roster

- a. Each Hub Hospital shall update the EMT Roster every three monthly.
- b. Each Hub Hospital shall routinely inform the unit about the updated list.

Chapter 4

Emergency Medical Teams – Roles and Responsibilities

8. EMT Focal Persons Roles and Responsibility:

- a. hub focal Person shall coordinate and liaise with satellite hospitals for formation of EMTs
- b. hub focal person shall ensure regular update of EMT roster, its readiness and preparedness.
- c. hub focal person shall coordinate and communicate with HEOC during pre-deployment, for deployment and post-deployment of EMT.
- d. hub focal person shall be responsible for mobilization of EMT upon receiving request from EMT Operational Committee.
- e. hub focal person shall submit report and lesson learned with recommendations to EMT Operational Committee upon completion of deployment.

9. EMT, Team Lead Roles and Responsibilities:

- a. The team Lead shall be defined by EMT focal Person of deploying hospital.

- b. The team lead shall perform and deliver his expertise during deployment in addition to role of team lead.
- c. The team lead shall coordinate with EMT Focal Person for and during deployment of EMT.
- d. Upon arrival at disaster site, the team lead shall coordinate and liaise with collapsed structure, search and Rescue, / Medical First Responders/ Community First Responders /Rapid Response Team / Basic Emergency Medical Technicians
- e. The team lead shall receive handover from previous deployed EMTs if present on site.
- f. The team lead shall conduct and review rapid assessment (Annex – 3) of the situation and determine the additional needs.
- g. The team lead shall supervise the team members for their designated tasks and evaluate their performance at the end of the deployment using evaluation form (Annex 4)
- h. The team lead shall provide situation report to PHEOC / HEOC.

10. EMT members, Doctors Roles and Responsibility:

- a. The doctors shall perform as per team lead direction to his area of expertise,
- b. The doctor shall ensure provision of best treatment to victims using available resources at the site / hospital.
- c. The doctor shall work to the best of their ability keeping in mind the safety of themselves and team members.
- d. The doctor shall guide paramedics and nursing staffs for providing needed optimal care to the affected.

11. EMT members, Paramedics Roles and Responsibility:

- a. The paramedics shall ensure provision of best care of the patient based on their own clinical ability and under supervision of the doctors.
- b. The paramedics shall assist doctors for the management of patients.
- c. The paramedics shall ensure maintenance of clinical records of the service provided.

12. EMT members, Nursing Staffs Roles and Responsibility::

- a. The nursing staffs shall work with diligence and empathy to help the patient get cure.
- b. The nursing staffs shall use proper safety techniques for protection of oneself and the patients.
- c. The nursing staff shall ensure maintenance of IPC measures and work as focal Person for Infection Prevention and Control.
- d. The nursing staff experience in IPC and /or health care waste management shall be emphasized for Infectious Disease Management EMT.

13. EMT members, Attendants Roles and Responsibility:

- a. The attendants shall ensure working area to be clean.
- b. The attendants shall follow proper waste management techniques depending upon available resources under supervision of IPC nurse.
- c. The attendants shall assist in transportation of patients to the treatment site.
- d. The attendant shall ensure continued coordination for proper functioning of medical equipment and report to team lead.

Chapter 5

Receiving Hub Hospital –Roles and Responsibilities

14. Hub Focal Person Roles and Responsibility:

- a. If EMT deployment is required, Rapid Risk Assessment (Annex 7) shall be conducted.
- b. EMT focal person shall coordinate and liaise with HEOCs for requesting EMT deployment.
- c. EMT focal person shall support for arrangement of necessary logistics and administrative process upon EMT arrival.
- d. EMT focal person shall submit report and lesson learned with recommendations to EMT Operational Committee upon completion of mission within 15 days.

15. Administrative and Financial Staff Roles and Responsibility:

- a. Coordinate and communicate with different tiers of government for financial arrangements.
- b. Maintain logbook of incoming EMTs and in case of additional HR support required from the hub hospital, in coordination with EMT focal person of receiving hub hospital and EMT team lead and communicate accordingly with EMTOC.
- c. Coordinate with relevant stakeholders to ensure optimal functioning of EMTs along with necessary arrangement of food and accommodation.
- d. Coordinate with local health facilities, provincial health logistic management center and federal management division to ensure availability of required resources.
- e. Coordinate with ambulance service providers or dispatch center for 24 Hours availability of ambulances.

Chapter 6

EMT Deployment

16. Committee shall be deciding body for deployment of EMTs within the country.
17. EMT Deployment shall be proceeded as per Annex 8.
18. Committee shall identify and define the need of international EMT support, coordinate with relevant stakeholders for international support, coordinate with International EMTs deployed in the country and coordinate for deployment of National EMTs for international support.
19. The key steps of EMT deployment within the country shall be as:
 - a. **Alert Source:**
 - I. When emergency occurs, initial communication shall come from various channels and forms including but not limited to hub and satellite hospital network, Rapid Response team, and media.
 - II. The hub hospitals of the affected area shall verify the incident and hub focal person shall conduct Rapid Assessment of the situation using Annex 7.
 - III. The hub focal person shall inform the HEOCs about the findings of the analysis.
 - b. **Need assessment of EMT Deployment**
 - I. Upon receiving the findings of analysis, HEOC shall coordinate meeting of the committee.
 - II. Chief, HEOC working as member secretary of the committee shall call for an emergency meeting.
 - III. The committee shall deploy EMT based on provided Rapid Situation Analysis by Hub hospital.

- IV. In case, Need of EMT deployment was not decided, the respective hub hospital in coordination with respective Provincial centers shall continue to manage the situation.
- V. The turnaround time between team assembly and supply transportation and deployment shall be between 24 hours.

c. Daily Situation Reporting

- I. EMT Team Lead shall update center and Hub Hospital about daily situation using Annex 4.
- II. Ministry shall conduct onsite monitoring for quality assurance.

d. Handing Over

- I. The maximum time of deployment shall be defined as two weeks. In case continued EMT support is required, a new team shall be deployed by the center.
- II. Irrespective of time duration mentioned in sub-article I, the duration of deployment period shall be varied by committee depending upon situational analysis.
- III. Committee shall coordinate for deployment and arrival of second EMT team ensuring continued service delivery.
- IV. First deployed team shall hand over the situation as per Annex 5 to incoming second EMT team.

e. Monitoring

- I. The team lead shall conduct monitoring and evaluation of the performance of the team using Annex 6.
- II. The team lead shall submit the finding of the assessment to EMT Focal Person.
- III. Based on findings of, the EMT focal person shall submit report to HEOC with recommendations and lesson learned to ensure better and stronger future deployments.

Chapter 7

EMT Logistic Resources

20. The minimum list of equipment for MCM team shall be as defined in Annex 9.
21. The minimum list of equipment for IDM team shall be defined as Annex 10.

Chapter 8

Miscellaneous

22. Capacity Building and Training:

- a. Ministry shall ensure continued capacity building activities of EMTs.
- b. Provincial Center shall coordinate with Center to identify and roll out of capacity building activities including trainings and simulations exercise.
- c. Center and Provincial Center shall ensure pre-deployment briefing before each deployment (Virtual or in-person).

23. Resource Management

Ministry shall coordinate with three tiers of government for required resource for EMT deployment.

24. Coordination, Facilitation and Implementation

For the implementation of this Standard Operating Procedure, ministry shall coordinate with federal, provincial and local level government. This shall be responsibility of all level of government. Depending upon the situation and severity of the disaster, ministry shall coordinate with other sectors and international community for providing rapid services.

25. List of Hub hospitals

The list of Hub Hospital shall be as defined in Annex 11

26. Amendments

- a. In case of any confusion during implementation, ministry shall decide as required.
- b. Ministry shall change or edit Annexes as required.

Unofficial Translation

Annex 1: In relation to Chapter 3, 6 (a)
Composition of Mass Casualty Management EMT

Mass Casualty Management (MCM)	Nos.
General Practitioner and Emergency Physician (MD-GP/EM)	1
General Surgeon*- (MS General Surgery)	1
Orthopedic Surgeon*(MS-Orthopedic)	1
Anesthesiologist* (MD-Anesthesiology)	1
Medical Officer (MBBS)	2
Paramedics (HA/AHW)	3
Nursing Staffs (ER and OT experienced)	2
Attendant	2
Laboratory Personnel (LA/LT)	1

* To be deployed as per need.

Annex 2: In relation to chapter 3, 6 (b)
Infectious Disease Management (IDM) Team

Infectious Disease Management (IDM)	Nos.
General Practitioner and Emergency Physician (MD-GP/EM)	1
General Physician (MD-Internal medicine)	1
Anesthesiologist* (MD-Anesthesiology)	1
Medical Officer (MBBS)	2
Nursing staff (SN/ANM; IPC Experienced)	3
Paramedics (HA/AHW)	2
Attendant	2
Laboratory Personnel (LA/LT)	1

* To be deployed as per need

Annex 3: In relation to Chapter 3, 6 €

Additional EMTs (Optional) to be prepared as back up by HUB Satellite Network

Bed Capacity (Hub and Satellite Hospital Network)	MCM	IDM
If two hospitals with 300 or more beds in a network	2	2
If three hospitals with 300 or more beds in a network	3	3
If four hospitals with 300 or more beds in a network	4	4

Unofficial Translation

Annex 4: In relation to Chapter 4 , 9(e)

Daily Situation Update



Government of Nepal
Ministry of Health and Population
DAILY SITUATION UPDATE FORM

Situation Update: _____ **Date:** _____

Location: Province _____ District _____ Municipality _____ Ward _____

Type of disaster/incident: Mass Casualty Incident Infectious Disease Incident

Date and Time of Incidence: _____ **Name health facility:** _____

1. Triage of the Patient (Under Treatment for last 24 Hrs.)

Age / Gender \ Triage Category	<5 years		5-15 years		>15 years		Total	
	M	F	M	F	M	F	M	F
Red								
Yellow								
Green								
Black								
Total								

2. Detail of the Referred Patient (In Last 24 Hrs.)

Age / Gender \ Triage Category	<5 years		5-15 years		>15 years		Total	
	M	F	M	F	M	F	M	F
Red								
Yellow								
Green								
Black								
Total								

3. Any Immediate Required Support:

Source of information

Name: _____

Designation: _____

Mobile Number: _____

Signature: _____

Instruction for filling in and using Daily Situation Update form:

1. This form should be filled by the EMT Team Lead and submitted to HEOC at the end of working day.
2. This form should include only the new data (Update of last 24 Hrs).
3. The Team lead in coordination with his/her team and receiving hospital should elaborate the point no. 3 for any additional support expected from the ministry.

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Unofficial Translation

Annex 5. In relation to Chapter 4, 9(f)

Handover Form



Government of Nepal
Ministry of Health and Population
EMT HANDOVER FORM

Date: _____

Location of Incidence: Province _____ District _____ Municipality _____ Ward _____

Type of disaster/incident: Mass Casualty Incident Infectious Disease Incident

Health facility where the EMT is Located: _____

1. Information on Cumulative number of patients following incidence:

Age	Numbers	Deaths		Injured	
		M	F	M	F
< 5 yrs.					
5-15 yrs.					
≥ 15 yrs.					
Total					

2. Triage of the Patient (Under Treatment)

Age / Gender	<5 years		5-15 years		>15 years		Total	
	M	F	M	F	M	F	M	F
Red								
Yellow								
Green								
Black								
Total								

Any Recommendations:

Handover Given by

Total number of deployed EMT members:
 EMT Deployed From:
 Name of hub hospital:
 Address:
 Duration of Deployment:
 Name of EMT Team Lead:
 Contact Number:
 Signature:

Handover Received by

Total number of deployed EMT members:
 EMT Deployed From:
 Name of hub hospital:
 Address:
 Date of Deployment:
 Name of EMT Team Lead:
 Contact Number:
 Signature:

Instruction for filling in and using EMT Handover form:

1. This form should be filled by the EMT Team Lead and submitted to incoming EMT to replace the team.
2. Upon receiving the handover, the incoming EMT Team Lead should sign the handover form and gracefully takeover from there. The copy of handover form should be sent to HEOC by replacing EMT Team Lead.

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Annex 6: In relation to Chapter 4, 9(g)

Monitoring and Evaluation Form



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Ministry of Health and Population

EMT Monitoring and Evaluation form

Instruction for filling in and using the form:

1. This form should be filled by the EMT Team Lead and submitted to HEOC at the end of deployment along with the end of deployment report.
2. This form is applied to all the members of EMT.
3. The performance is evaluated on a scale from 1-5, with grade 5 representing the best level and grade 1 representing lowest.
4. The result will be automatically calculated by finding the mean average for all items according to the following table

Excellent	Very Good	Good	Weak
Between 4.2 – 5	Between 4.2 – 3.3	Between 3.3 – 2.5	Less than 2.5

Details of EMT Member:

Name	
EMT Designation	
Name of Hospital	
Date of Deployment	
Deployed For (Incidence)	

Personal Traits		
No.	Items	Degree of Fulfilment (Score 5-1)
1	Ability to take responsibility and adhere to good conduct	
2	Communication and Coordination skill	
3	Accepts guidance and is willing to implement it	
4	Team player	
Job Performance		
No.	Items	Degree of Fulfilment (Score 5-1)
1	Awareness of work objectives and tasks	
2	Sound knowledge of field of specialization	
3	Adhering to workplace job description	
4	Ability to overcome work difficulties	

Name of EMT Team Lead:

Signature:

Date:

Annex 7. In Relation to Chapter 5, 14 (a)

Rapid Assessment Form



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RAPID ASSESSMENT FOR DEPLOYMENT of EMERGENCY MEDICAL TEAM

Report no: _____ Date: _____

Location: Province _____ District _____ Municipality _____ Ward _____

Type of disaster/incident: Mass Casualty Incident Infectious Disease Incident

Date and Time of Incidence: _____ Name of Health Facility: _____

1. Information on number of patients (current and/or expected):

Age	Numbers	Deaths		Injured		Missing	
		M	F	M	F	M	F
< 5 yrs.							
5-15 yrs.							
≥ 15 yrs.							
Total							

2. Is your Health facility operational: Fully Partially Non-operational?

If not fully operation, why? Structural damage Non-Structural damage
 Details _____

Existing hospital capacity: _____ (in terms of beds)

3. Catchment Population of the affected Health facility _____

4. What percentage of the health workforce of the health facility are affected/absent?

Total number of existing HR in the facility: _____

- a. 0 %
- b. <25%
- c. 25-75%
- d. >75%

5. By what percentage has the health facility's (either Emergency or in-Patient) capacity exceeded by?

- a. <100%
- b. 100-149%
- c. 150-199%
- d. >200%

6. Do you expect a surge of patient in the next 24 hours?

- a. Yes
- b. No

Source of information

Name: _____ Designation: _____

Mobile Number: _____ Signature: _____

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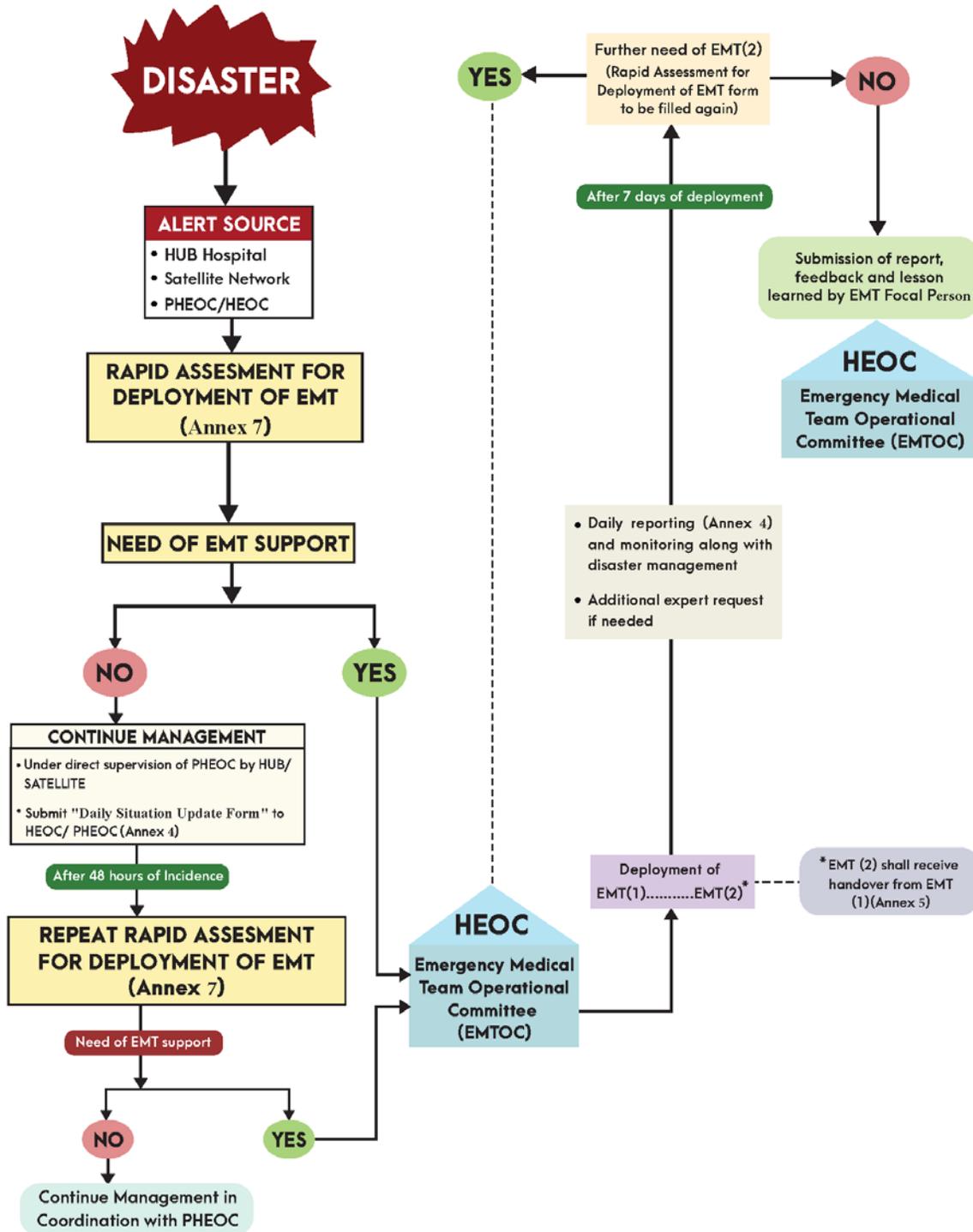
Criteria for Need of EMT (Depending upon question 4 and 5)

Q 4 \ Q 5	0%	<25%	25-75%	>75%
<100%	Green	Green	Yellow	Red
>100%	Green	Yellow	Yellow	Red
>150%	Yellow	Yellow	Red	Red
>200%	Red	Red	Red	Red

-  Need of more than 1 EMT.
-  Need of at least 1 EMT.
-  No need of EMT. However, if answer to question 6 is Yes – might need EMT.

Unofficial Translation

EMT Deployment Framework



Annex 9: MCM EMT List of Equipment*

1	SET 1, AIRWAY		
<i>Content of the set to be placed in detachable colored coded pocket</i>			
#	Item description	presentation	Quantity
1.1	Resuscitator, hand-operated, adult, children, baby w/valve+ reservoir bag mask, single use (Laerdal©)	set	1
1.3	TUBE, GUEDEL, airways, No 1 length 60mm, child	each	1
1.4	TUBE, GUEDEL, airways, No 2 length 70mm, adolescent	each	1
1.5	TUBE, GUEDEL, airways, No 4 length 90mm, adult	each	1
1.6	RESCUE SHEET, silver/gold insulating foil, 210 cm x 160 cm	each	1
2	SET 2, INSTRUMENT		
<i>Content of the set to be placed in detachable colored coded pocket</i>			
#	Item description	presentation	Quantity
2.1	Anatomic forceps, 145mm	each	1
2.2	Bandage scissors, Lister, 145mm	each	1
2.3	Stopwatch timer	each	1
2.4	Cloth scissors (trauma shears) 185mm	each	1
2.5	Diagnostic / pen light	each	1
2.6	Digital thermometer, individual, in plastic case	each	1
2.7	Finger Pulse oximeter adult	each	1
2.8	Sphygmomanometer, aneroid, with adult/child cuff	each	1
2.9	Splinter forceps, 115mm	each	1
2.1	Stethoscope, binaural, double cup, adult/child	each	1
2.11	Surgical forceps, 145 mm	each	1
3	SET 3, INTUBATION		
<i>Content of the set to be placed in detachable colored coded pocket</i>			
#	Item description	presentation	Quantity
3.1	Cuff syringe	each	3
3.4	Tube, endotracheal, No. 4.0 with cuff, sterile, single use	each	1
3.5	Tube, endotracheal, No. 6.0 with cuff, sterile, single use	each	1
3.6	Tube, endotracheal, No. 7.0, with cuff, sterile, single use	each	1
3.7	Tube, endotracheal, No. 8.0, with cuff, sterile, single use	each	1
3.2	Dual-tube laryngeal mask airway (LMA) size 2.5	each	1
3.3	Dual-tube laryngeal mask airway (LMA) size 4	each	1
3.8	Glove, EXAMINATION, NITRILE, size L, pair	pair	2
3.9	Glove, EXAMINATION, NITRILE, size M, pair	pair	2
3.1	laryngoscope cast with 1 handle and 2 blades of different sizes	each	1
3.11	Magill forceps 20cm	each	1
3.12	Stylet for Endotracheal tube, single use 6Fr malleable	each	1
3.13	Stylet for Endotracheal tube, single use 9Fr malleable	each	1

3.14	surgical tape, tissue, 25mm x 5m	each	1
3.15	Tongue depressor, wood	each	2
4	SET 4, INFUSION		

Content of the set to be placed in detachable colored coded pocket

#	Item description	presentation	Quantity
4.1	ALCOHOL SWAB (BD), 70% isopropyl alcohol,	each	10
4.2	Bandage, elastic, adhesive, woven, 6 cm x 2.5 m, non-sterile, single use	each	3
4.3	Cannula, IV, short, with injection port, 16 G (1.7 x 50 mm), grey, sterile, single use	each	3
4.4	Cannula, IV, short, with injection port, 18 G (1.3 x 45 mm), green, sterile, single use	each	3
4.5	Cannula, IV, short, with injection port, 20 G (1.1 x 33 mm), pink, sterile, single use	each	3
	Canula IV plaster, 6cm X 8 cm	each	9
4.6	Glove, EXAMINATION, NITRILE, size L, pair	pair	2
4.7	Glove EXAMINATION, NITRILE, size M, pair	pair	2
4.8	Povidone iodine Prep pad, sterile, 10X 10 cm	each	10
4.9	Pressure bag for IV infusion or pressure pump 500 ml	each	1
4.1	Ringer lactate, 500 mL, plastic bottle, w/ IV giving	each	3
4.11	Tourniquet, Cotton, 42x2.4cm, elastic, with buckle	each	1
5	SET 5, INJECTION		

Content of the set to be placed in detachable colored coded pocket

#	Item description	presentation	Quantity
5.1	Alcohol Swab (BD), 70% isopropyl alcohol,	each	10
5.2	Gloves, EXAMINATION, NITRILE, size L, pair	pair	2
5.3	Glove, EXAMINATION, NITRILE, size M, pair	pair	2
5.4	Hand sanitizer 50 ml	each	1
5.5	Needle for IM injection	each	10
5.6	Needle for IV injection	each	10
5.7	Needle for SC injection	each	10
5.8	Safety Container, sharps, 0.3 l, plastic	each	2
5.9	Syringes, disposable, 10ml	each	1
5.1	Syringes, disposable, 2ml	each	5
5.11	Syringes, disposable, 5ml	each	5
6	SET 6, WOUND DRESSING		

Content of the set to be placed in detachable colored coded pocket

#	Item description	presentation	Quantity
6.1	zinc oxide tape, roll, 2,50 cm x 5m	each	1
6.2	Adhesive Skin Closures Steri Strip 1/4-inch x 4 inch (6mm x 100mm), envelopes	each	5

6.3	Bandage, elastic, adhesive, woven, 10 cm x 2.5 m, non-sterile, single use	each	2
6.4	Compress, gauze, With paraffin, 10X10 cm, sterile, single use	each	10
6.5	Compress, gauze, 10 x 10 cm, 8 to 12 ply, non-sterile, single use, pack 100	pack 100	1
6.6	Compress, gauze, 10 x 20 cm, 8 to 12 ply, sterile, single use, pack of 2	Pack 2	25
6.7	Glove, EXAMINATION, NITRILE, size L, pair	pair	2
6.8	Glove, EXAMINATION, NITRILE, size M, pair	pair	2
6.9	Hemostatic dressing (Wound Clot Trauma Gauze) 5" x 9"	each	1
6.10	Hemostatic tourniquet SOFT TACTICAL Tourniquet 1.5in. Rescue Orange	each	1
6.11	Bandage, Pressure, pad+ elastic band. + pressure bar, sterile (Israeli bandage)	each	1
6.12	Bandage, Extensive, non-adhesive, 6-7 cm x 4 m	each	1
6.13	Bandage, Crepe (Velpeau), 10 cm x 4 m	each	1
7	SET 7, SMALL SUPPLIES		

Content of the set to be placed in detachable colored coded pocket

#	Item description	Presentation	Quantity
7.1	Foldable soft stretcher	each	1
7.2	Patient identification bracelets adults , write on type	each	20
7.3	Glasses, safety, for surgical procedures	each	2
7.4	SAM© pelvic splint /belt sling II	each	1
7.5	Mask, surgical, flat rectangular, non-sterile, single use	each	10
7.6	Pen black	each	1

Annex 10. IDM EMT list of Equipment.**

1	SET 1, AIRWAY		
<i>Content of the set to be placed in detachable colored coded pocket</i>			
#	Item description	presentation	Quantity
1.1	Resuscitator, hand-operated, adult, children, baby w/valve+ reservoir bag mask, single use (Laerdal©)	set	1
1.3	TUBE, GUEDEL, airways, No 1 length 60mm, child	each	1
1.4	TUBE, GUEDEL, airways, No 2 length 70mm, adolescent	each	1
1.5	TUBE, GUEDEL, airways, No 4 length 90mm, adult	each	1
1.6	RESCUE SHEET, silver/gold insulating foil, 210 cm x 160 cm	each	1
2	SET 2, INSTRUMENT		
<i>Content of the set to be placed in detachable colored coded pocket</i>			
#	Item description	presentation	Quantity
2.1	Anatomic forceps, 145mm	each	1
2.2	Bandage scissors, Lister, 145mm	each	1
2.3	Stopwatch timer	each	1
2.4	Cloth scissors (trauma shears) 185mm	each	1
2.5	Diagnostic / pen light	each	1
2.6	Digital thermometer, individual, in plastic case	each	1
2.7	Finger Pulse oximeter adult	each	1
2.8	Sphygmomanometer, aneroid, with adult/child cuff	each	1
2.9	Splinter forceps, 115mm	each	1
2.1	Stethoscope, binaural, double cup, adult/child	each	1
2.11	Surgical forceps, 145 mm	each	1
3	SET 3, INTUBATION		
<i>Content of the set to be placed in detachable colored coded pocket</i>			
#	Item description	presentation	Quantity
3.1	Cuff syringe	each	3
3.4	Tube, endotracheal, No. 4.0 with cuff, sterile, single use	each	1
3.5	Tube, endotracheal, No. 6.0 with cuff, sterile, single use	each	1
3.6	Tube, endotracheal, No. 7.0, with cuff, sterile, single use	each	1
3.7	Tube, endotracheal, No. 8.0, with cuff, sterile, single use	each	1
3.2	Dual-tube laryngeal mask airway (LMA) size 2.5	each	1
3.3	Dual-tube laryngeal mask airway (LMA) size 4	each	1
3.8	Glove, EXAMINATION, NITRILE, size L, pair	pair	2
3.9	Glove, EXAMINATION, NITRILE, size M, pair	pair	2
3.1	laryngoscope cast with 1 handle and 2 blades of different sizes	each	1
3.11	Magill forceps 20cm	each	1

3.12	Stylet for Endotracheal tube, single use 6Fr malleable	each	1
3.13	Stylet for Endotracheal tube, single use 9Fr malleable	each	1
3.14	surgical tape, tissue, 25mm x 5m	each	1
3.15	Tongue depressor, wood	each	2
4	SET 4, INFUSION		

Content of the set to be placed in detachable colored coded pocket

#	Item description	presentation	Quantity
4.1	ALCOHOL SWAB (BD), 70% isopropyl alcohol,	each	10
4.2	Bandage, elastic, adhesive, woven, 6 cm x 2.5 m, non-sterile, single use	each	3
4.3	Cannula, IV, short, with injection port, 16 G (1.7 x 50 mm), grey, sterile, single use	each	3
4.4	Cannula, IV, short, with injection port, 18 G (1.3 x 45 mm), green, sterile, single use	each	3
4.5	Cannula, IV, short, with injection port, 20 G (1.1 x 33 mm), pink, sterile, single use	each	3
	Canula IV plaster, 6cm X 8 cm	each	9
4.6	Glove, EXAMINATION, NITRILE, size L, pair	pair	2
4.7	Glove EXAMINATION, NITRILE, size M, pair	pair	2
4.8	Povidone iodine Prep pad, sterile, 10X 10 cm	each	10
4.9	Pressure bag for IV infusion or pressure pump 500 ml	each	1
4.1	Ringer lactate, 500 mL, plastic bottle, w/ IV giving	each	3
4.11	Tourniquet, Cotton, 42x2.4cm, elastic, with buckle	each	1
5	SET 5, INJECTION		

Content of the set to be placed in detachable colored coded pocket

#	Item description	presentation	Quantity
5.1	Alcohol Swab (BD), 70% isopropyl alcohol,	each	10
5.2	Gloves, EXAMINATION, NITRILE, size L, pair	pair	2
5.3	Glove, EXAMINATION, NITRILE, size M, pair	pair	2
5.4	Hand sanitizer 50 ml	each	1
5.5	Needle for IM injection	each	10
5.6	Needle for IV injection	each	10
5.7	Needle for SC injection	each	10
5.8	Safety Container, sharps, 0.3 l, plastic	each	2
5.9	Syringes, disposable, 10ml	each	1
5.1	Syringes, disposable, 2ml	each	5
5.11	Syringes, disposable, 5ml	each	5
6	SET 6, WOUND DRESSING		

Content of the set to be placed in detachable colored coded pocket

#	Item description	presentation	Quantity
6.1	zinc oxide tape, roll, 2,50 cm x 5m	each	1

6.2	Adhesive Skin Closures Steri Strip 1/4-inch x 4 inch (6mm x 100mm), envelopes	each	5
6.3	Bandage, elastic, adhesive, woven, 10 cm x 2.5 m, non-sterile, single use	each	2
6.4	Compress, gauze, With paraffin, 10X10 cm, sterile, single use	each	10
6.5	Compress, gauze, 10 x 10 cm, 8 to 12 ply, non-sterile, single use, pack 100	pack 100	1
6.6	Compress, gauze, 10 x 20 cm, 8 to 12 ply, sterile, single use, pack of 2	Pack 2	25
6.7	Glove, EXAMINATION, NITRILE, size L, pair	pair	2
6.8	Glove, EXAMINATION, NITRILE, size M, pair	pair	2
6.9	Hemostatic dressing (Wound Clot Trauma Gauze) 5" x 9"	each	1
6.10	Hemostatic tourniquet SOFT TACTICAL Tourniquet 1.5in. Rescue Orange	each	1
6.11	Bandage, Pressure, pad+ elastic band. + pressure bar, sterile (Israeli bandage)	each	1
6.12	Bandage, Extensive, non-adhesive, 6-7 cm x 4 m	each	1
6.13	Bandage, Crepe (Velpeau), 10 cm x 4 m	each	1
7	SET 7, SMALL SUPPLIES		

Content of the set to be placed in detachable colored coded pocket

#	Item description	Presentation	Quantity
7.1	Foldable soft stretcher	each	1
7.2	Patient identification bracelets adults , write on type	each	20
7.3	Glasses, safety, for surgical procedures	each	2
7.4	SAM© pelvic splint /belt sling II	each	1
7.5	Mask, surgical, flat rectangular, non-sterile, single use	each	10
7.6	Pen black	each	1
8	SET 8, PPE and Diagnostic tools		

Content of the set to be placed in a separate bag based on the incident

8.1	PPE		
8.2	Diagnostic Tool		

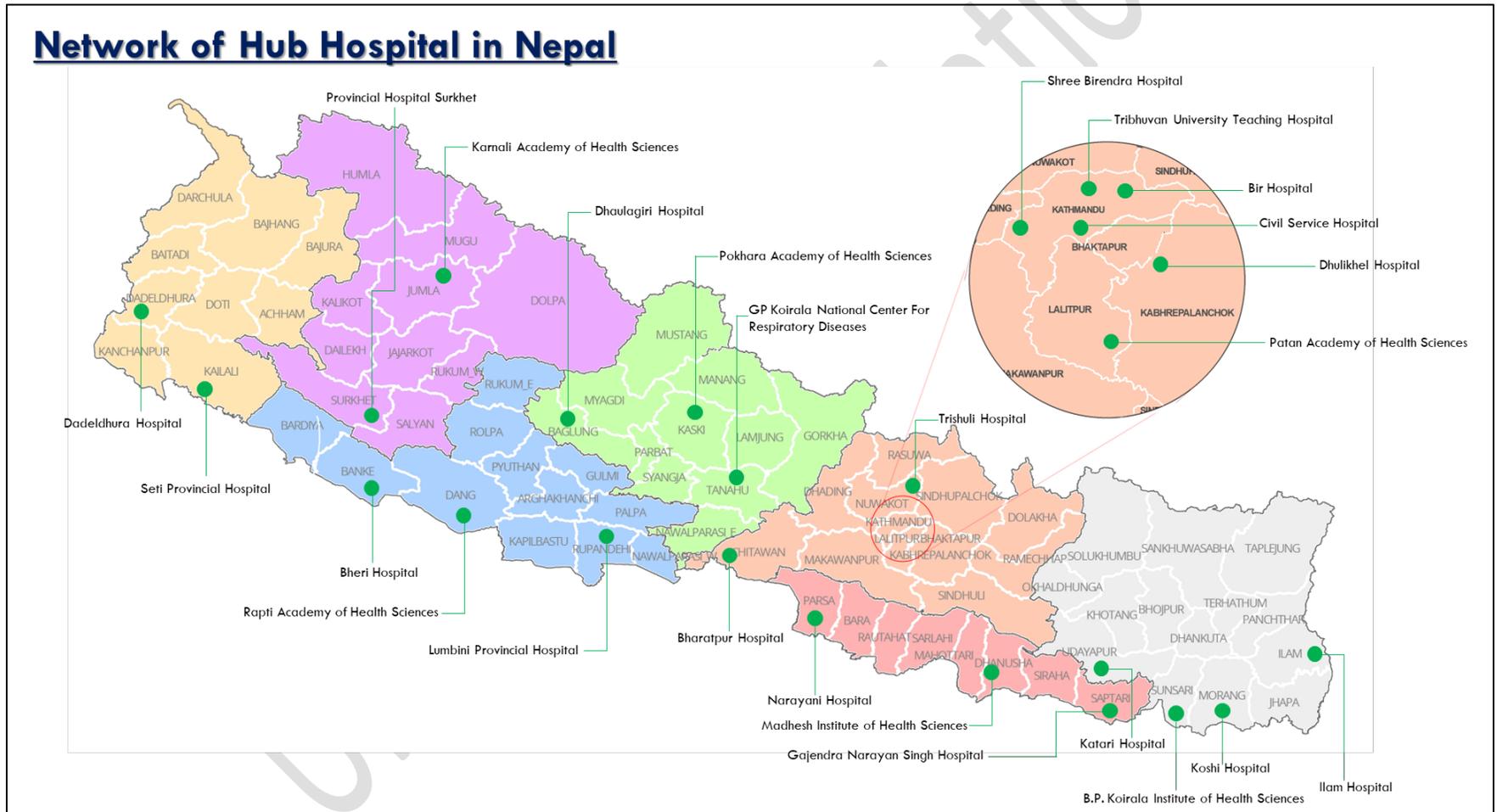
*<https://www.who.int/emergencies/emergency-health-kits/major-trauma-backpack>

**Addition of PPE and diagnostic tool to WHO Major trauma backpack 2021.

Annex 11 – In relation to Chapter 8, 25

Distribution of Hub and Satellite hospital network across the country

(Hub hospital as the base location for EMTs)



(Not Included in Endorsed Guideline)

Annex 12 - Introduction and Background

11.1 Background

Nepal has diverse topography, complex geology, and highly varying climatic conditions. It is one of the most disaster-prone countries in the world and has frequently experienced a wider range of hazards such as earthquakes, floods, landslides, lightening, avalanches, thunderbolts, disease outbreaks. The fragile geology and steep topography have made Nepal the 20th topmost disaster-prone country in the world. Among 200 countries, Nepal ranks 4th, 11th and 30th with regard to relative vulnerability to climate change, earthquake and flood hazards respectively. It faces high magnitudes and intensities of a multitude of natural hazards such as flood, landslide, earthquake, fire, cold waves, hailstone, windstorm, thunderbolt, cloudburst, drought, Glacier Lake outburst flood (GLOF), avalanches and epidemics. Unstable steep slopes and fragile geological formation of a young mountain range with heavy monsoon rainfall leads to a wide range of geological and hydro-meteorological disasters across the country. The variation in geological characteristics, together with torrential rain during rainy season, results in landslides, debris flows, floods, etc.

Some of the disasters in the past that impacted thousands of human lives include 1990 and 2015 mega earthquakes, floods (in Sunsari-2008, Melamchi-2021, Myagdi-2021 and other parts of Nepal), Bara-Parsa windstorm in 2018, etc. Likewise, some of the major public health emergencies experienced by Nepal include Cholera outbreak in Jajarkot, Influenza, Japanese encephalitis, COVID-19, Dengue Outbreak etc. During the April 25, 2015, earthquake; 8979 people lost their life and more than 22,300 people were injured due to the earthquake. At least 498,852 private houses and 2,656 government buildings had been destroyed. Similarly, 256,697 private houses and 3,622 Government buildings were partially damaged.³Jajarkot earthquake November 2023 event has resulted 154 deaths, over 900 injuries and affected 76 health facilities.

The Government of Nepal (GoN) holds the responsibility to ensure that no one in Nepal is deprived of basic health services and emergency health services. This constitutional right is guaranteed during disasters and public health emergencies as well. Thus, Nepal has adopted a policy “to make advance warning, preparedness,

rescue, relief and rehabilitation in order to mitigate risks from natural disasters”. To fulfill the policy, the Public Health Services Act, 2075 (2018) was enacted by the Federal Parliament to make necessary legal provisions for implementing the right to get basic health services and emergency health service guaranteed by the constitution and establishing access of the citizens to health service by making it regular, effective, qualitative and easily available. Its corresponding Public Health Service Regulations, 2020 has framed specific Rules of the provisions.

To extend health service immediately during emergency circumstances, the Public Health Services Act, 2075 (2018); Section 48 and its corresponding Rules respectively have specific provisions and rules for the Emergency Medical Team. The Public Health Service Regulation, 2020; Section 27 (Management of Emergency Health Services) states that during an emergency pursuant to Sub-Section (1) of Section 48 of the Act, the Ministry shall mobilize a Rapid Response Team (RRT) and Emergency Medical Team (EMT) for the immediate management of health services. The Sub-Rule (5) frames that the GoN, Provincial Government or Local Government shall be able to give necessary instruction and operate the non-governmental, private, co-operative, non-profit community and teaching hospitals or other health institutions or direct these health institutions to provide concerned health services; mobilize the health staff working in the health institutions or operate such health institutions by taking them under control if a public health emergency is declared.

Likewise, the GoN has endorsed the Disaster Risk Reduction and Management Act (DRRM Act), 2074, under which, the Ministry of Home Affairs (MoHA) is the main responsible body to manage the response during disasters. Under this ministry, National Emergency Operation Centre (NEOC) was established in 2010 as a coordination, communication, and information management center for emergencies/disasters across Nepal.

But the lessons learnt from response to different disasters demanded the need of a dedicated operation center to coordinate different stakeholders for health-related emergency preparedness, response readiness, and disaster management. As a result, The Health Emergency Operation Centre (HEOC) was conceptualized in 2012, and it was established with the support of WHO at the premises of MoHP in 2014. In 2018, Health Emergency and Disaster Management Unit (HEDMU) was formed, in which HEOC was devised to act as the secretariat of the Incident Command

System (ICS) of the MoHP for any public health emergency or disaster. HEDMU works closely with different stakeholders in health sector and coordinates directly with the National Disaster Risk Reduction and Management Authority (NDDRMA) and National Emergency Operation Center (NEOC).

Following the success of effective coordination, communication and response by the HEOC during Nepal Earthquake in 2015, Provincial Health Emergency Operation Centers (PHEOCs) were conceptualized and then established in all 7 Provinces of Nepal.

HEOC, established in 2014, is the high-level operation command center of HEDMU within MoHP. It carries out functional operations in all phases of disaster and public health emergency (before, during and after).

PHEOC is the command center for the provincial MoHP/MoSD (Ministry of Social Development)/Provincial Health Directorate (PHD)/Health Service Directorate (HSD) in case of any public health emergencies and disasters in all 7 provinces of Nepal.

Furthermore, in the process of responding to several calamities, the GoN gained insight into the significance of hospital disaster preparedness and response readiness. Moreover, perception of high vulnerability of Nepal to earthquakes led to multi-sectoral disaster risk reduction interventions through a consortium approach. Both hospital and district level health contingency plans were envisioned, and necessary activities were conducted to capacitate hospitals and district health offices for health-related emergency preparedness and response readiness. In 2014, Hub and Satellite Hospital Network was conceptualized and after federalization specific Hub and Satellite hospital networks were designated across the country to enable strategic and structured sharing of available resources and capacities in coordination with HEOC/PHEOCs.

At present, there are 25 Hub hospitals across the nation that coordinate with satellite hospitals within their defined catchment areas focusing on public health emergencies and disasters.

Each hospital is mandated to develop their hospital disaster preparedness and response plan (HDPRP) highlighting their disaster management system. After a disaster strikes, the Hospital Incident Command System (HICS) is activated in order to respond to health emergency and disaster.

HDPRP also includes Emergency Medical Team (EMT) and alternate care site required for response by EMT in case of structural collapse of receiving health facilities.

All of these strengthening of legal frameworks, plans and policies, establishment of HEOC, PHEOCs, Hub and satellite hospital network and formation of EMT are in accordance with the International Health Regulations (2005).

11.2 EMT in Nepal

Emergency Medical Team (EMT) is a group of health professionals from Hub and satellite hospitals who are on standby positions for deployment at the sites of disasters and public health emergencies to provide direct clinical care to the affected populations. Each Hub Hospitals forms two categories of EMT of various composition and roles

11.3 Importance of EMT

Disaster and public health emergency always warrant help from outer sector—be it Local, Provincial, Federal, or International—because of the exceeding number of affected populations which could not always be managed by local resources. EMT can save lives, preserve health, and alleviate suffering by enhancing surge capacity of countries through promotion of rapid mobilization and efficient coordination of EMT to reduce loss of life and prevent long term disability caused by disaster, outbreaks, and other emergencies.

11.4 History of EMT in Nepal

“No one shall be deprived of Emergency Health Services” and “Every citizen shall have the right to equal access to health services”, aligning to this statement as mentioned in Article 35 of the Constitution of Nepal, 2072, the concept of Emergency Medical Team (EMT) has been envisioned in Chapter 6, Section 48 of the Public Health Act 2075” to provide immediate health care in any public health emergencies and disasters.

During Nepal earthquake 2015, the health sector response was augmented with the assistance of the then called foreign medical teams (FMTs). The Foreign Medical Team Coordination Cell (FMTCC) was established to coordinate and manage FMTs in responding health sector needs by HEOC with support from WHO. Since then,

various drills were conducted in Nepal where EMT concept was practiced formulating team of RRT, doctors and nurses; however, the typology EMT was yet to be used.

The concept of EMT was more evident during COVID-19 pandemic when health facilities started to report being overwhelmed with cases and service delivery was affected. Therefore, the need for backup healthcare workers to support the treatment facilities in case of shortage/unavailability of health care workers and mentor the health workers for better case management and clinical readiness, MoHP decided to form two teams from each Hub Hospitals including their satellite hospitals named as “Emergency Medical Deployment Team (EMDT)”; which is the first National EMT. The terminology EMDT was used instead of EMT to avoid duplication of same terminology as EMT was also abbreviated for Emergency Medical Technicians, now known as Basic Emergency Medical Technician- BEMT, which is a trained pre-hospital care provider.

After the formulation of EMDT, a guideline for deployment (COVID-19 Emergency Medical Deployment Teams Mobilization Guidelines) was developed by MoHP on May 28, 2020. Based on this guidelines, more than 200 members of EMTs from 25 Hub Hospitals has been trained during COVID-19 Pandemic to prepare as a part of surge capacity enhancement, and more than 190 EMT backpack has been distributed to all EMTs as a part of readiness for any possible response if required.

Lesson learned from COVID-19 response and frequent disasters realized the need of RRT and EMT Mobilization Guideline. In 2079, MoHP developed and endorsed RRT and EMT Mobilization Guidelines. 2079.