Strengthening SEA Region EMTs for health emergency response

The South-East Asia Region is vulnerable to different types of disasters and emergencies. Experiences from health emergencies in the Region have shown that following a sudden-onset disaster, a large number of emergency medical teams (EMTs) or emergency response teams often arrive in the affected country to provide emergency care to patients with traumatic injuries and other life-threatening conditions. In many such situations, it was found that the deployment of these teams was not based on assessed needs and there was wide variation in their capacities, competencies and adherence to professional ethics. There is a lack of quality-assured, internationally classified and/or nationally accredited EMTs in the Region.

The purpose of the EMT Initiative of WHO is to improve the timeliness and quality of health services provided by national and international EMTs, and enhance the capacity of national health systems for leading the activation and coordination of the response in the immediate aftermath of a disaster, outbreak and/or other emergency.

Considering the Region’s prevailing risks, hazards and vulnerabilities, it is important to strengthen implementation of the EMT Initiative of WHO in the Region. A regional consultation was organized in Bangkok, Thailand, during 28–29 November 2017 to strengthen operational partnerships for an emergency response. It was strongly recommended by the majority of delegates from operational partners that EMTs in the Region need to be standardized, strengthened and well-coordinated under the regional coordination mechanisms. It was also recommended to endorse “strengthening of EMTs in the Region” as an Agenda item at the Seventy-first Session of the Regional Committee in September 2018.

A regional consultation for strengthening of EMTs was organized by the Health Emergencies Programme (WHE) of the WHO Regional Office for South-East Asia (SEA) in New Delhi on 5–6 June 2018. It was attended by more than 60 participants from all 11 Member States of the Region, including representatives from the ministries of health and defence, and civil society partners. The main recommendations from the delegates of this consultation were directed at policy-makers and health administrators in the Region to make them aware of the EMT Initiative of WHO, and strengthen EMT capacity.
The attached Working Paper was presented to the High-Level Preparatory (HLP) Meeting for its review and recommendations. The HLP Meeting reviewed the paper and made the following recommendations for consideration by the Seventy-first Session of the Regional Committee:

**Actions by Member States**

- Establish policies and procedures for strengthening EMTs in the countries of the Region linked to existing systems and IHR (2005) capacities through:
  - developing national guidelines/policies on EMTs and adopt national minimum standards for EMTs;
  - designating national focal points for EMTs at the ministries of health;
  - establishing and training national EMTs; and maintaining a national database on EMTs and sharing this with WHO; and
  - signing up selected national EMTs for a mentorship and classification process coordinated by WHO.

- Establish an EMT Coordination Cell through the Ministry of Health’s Health Emergency Operations Centre to allow for the smooth coordination of EMTs, including the arrival and deployment of EMTs

**Actions by WHO**

- Establish a Regional EMT Working Group to help the implementation of the EMT Initiative with WHO-SEARO serving as Secretariat.
- Provide technical assistance and support for training, quality assurance, coordination, experience sharing and other activities for strengthening EMTs in Member States of the Region.
- Identify, promote and facilitate areas of research and innovation to strengthen EMTs (e.g. the medical camp kits that were developed in a local context following the Nepal earthquake of 2015).

This Working Paper and the HLP Meeting recommendations are submitted to the Seventy-first Session of the WHO Regional Committee for South-East Asia for its consideration and decision, and a request to consider a resolution on this Agenda item.
Introduction

1. Emergency medical teams (EMTs) could be governmental (both civilian and military) or nongovernmental teams, and include both national and international teams. In essence, the work of EMTs is clinical, and the scope of EMT services ranges from the management of trauma due to sudden-onset disasters (mass casualty management) to acute medical emergency care, especially in highly infectious outbreaks (e.g. Ebola, plague, yellow fever). EMTs also provide clinical care to populations affected by conflict and other emergencies.

2. The vision of the WHO EMT Initiative is saving lives, preserving health and protecting dignity. It aims to support Member States, nongovernmental organizations (NGOs) and international organizations by identifying minimum standards, best practices, logistics and standard operating procedures (SOPs) for operational field coordination. The purpose of the EMT Initiative is to improve the timeliness and quality of health services provided by national and international EMTs, and enhance the capacity of national health systems for leading the activation and coordination of this response in the immediate aftermath of a disaster, outbreak and/or other emergency. Teams shall also have public health expertise and logistics support included in them or as specific public health or logistics rapid response teams.

3. WHO has developed a global mentorship and classification process through which EMTs are being mentored to improve their capacity in line with international standards. Those willing to be deployed internationally are classified through an external peer review process, which confirms the achievement of the standards for international deployment. EMTs have been categorized into three types:

   (1) **Type 1**: EMT that provides outpatient initial emergency care for injuries and other significant health-care needs. Under Type 1 EMT, there are two variants:
   - Mobile EMT: 50 patients/day
   - Fixed EMT: 100 patients/day

   (2) **Type 2**: Provides inpatient emergency care, including surgery, 24 hours per day (with infrastructure; at least seven major or 15 minor operations daily with at least 20 inpatient beds per one operating table).

   (3) **Type 3**: Provides complex inpatient referral surgical care, and has intensive care capacity (at least two operating tables in two separate rooms within the theatre, and at least 40 inpatient beds with the capacity to treat 15 major or 30 minor surgical cases a day).

Current situation, response and challenges

4. The South-East Asia (SEA) Region is vulnerable to different types of disasters and emergencies. Member States of this Region face a broad range of disasters, from natural hazards such as earthquakes, floods, tsunamis, landslides and volcanic eruptions to outbreaks and other types of emergencies. These may require immediate assistance from national EMTs within the affected country or by international EMTs. Recent examples of public health emergencies in the SEA Region are given in Table 1.

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1 An EMT is a group of health professionals (e.g. doctors, nurses, paramedics) providing direct clinical care to populations affected by disasters, outbreaks and/or other emergencies as a surge capacity to support the local health system.
5. In addition, the Region also utilizes EMTs for responding to possible emergency needs during mass gatherings (e.g. Eid and Hajj gatherings and the 2018 Asian Games in Indonesia).

6. In an emergency, the outcome of the response depends on how quickly the right expertise reaches the right place at the right time to meet the needs of the affected people. Global and regional experiences have shown that following a sudden-onset disaster, a large number of EMTs often arrive in the affected country to provide immediate emergency medical care and trauma management services for life-threatening conditions. It was found that in many situations, the deployment of these teams was not based on assessed needs and there was a wide variation in their capacities, competencies and adherence to professional ethics.

**Table 1:** Public health emergencies in the South-East Asia Region that required EMT intervention

<table>
<thead>
<tr>
<th>Year</th>
<th>Public health emergency</th>
<th>Morbidity</th>
<th>Mortality</th>
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<tbody>
<tr>
<td>2001</td>
<td><strong>Gujarat earthquake</strong></td>
<td>India (Richter scale 7.7) on 26 January</td>
<td>167 000 injured, 6.3 million affected</td>
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<tr>
<td>2004</td>
<td><strong>Indian Ocean tsunami</strong></td>
<td>Indonesia, India, Bangladesh, Sri Lanka, Thailand, December</td>
<td>125 000 injured</td>
</tr>
<tr>
<td>2005</td>
<td><strong>Kashmir earthquake</strong></td>
<td>(Richter scale 7.6) on 8 October</td>
<td>4 million became homeless</td>
</tr>
<tr>
<td>2006</td>
<td><strong>Yogyakarta earthquake</strong></td>
<td>Indonesia (Richter scale 6.4) on 27 May</td>
<td>37 000 injured</td>
</tr>
<tr>
<td>2008</td>
<td><strong>Cyclone Nargis</strong></td>
<td>Myanmar May 2018</td>
<td>2.4 million affected</td>
</tr>
<tr>
<td>2015</td>
<td><strong>Earthquake</strong></td>
<td>Nepal (Richter scale 7.8) on 25 April</td>
<td>22 303 injured, 41 199 hospitalized, 462 health facilities completely damaged, 765 partially damaged</td>
</tr>
<tr>
<td>2016</td>
<td><strong>Floods/Typhoon Lionrock</strong></td>
<td>DPR Korea August 2016</td>
<td>100 000 became homeless</td>
</tr>
<tr>
<td>2016</td>
<td><strong>Aceh earthquake</strong></td>
<td>Indonesia (Richter scale 6.5) on 7 December</td>
<td>1000 injured</td>
</tr>
<tr>
<td>2017</td>
<td><strong>Cyclone Storm Mora</strong></td>
<td>Bangladesh in May</td>
<td>3.3 million people affected, 260 000 internally displaced persons (IDPs), 17 000 houses damaged</td>
</tr>
<tr>
<td>2017</td>
<td><strong>Rohingya refugee conflict</strong></td>
<td>Myanmar/Bangladesh on 25 August</td>
<td>646 000 Rohingya people displaced to Bangladesh since 25 August 2017 Public health risk of outbreaks of cholera, measles, diphtheria and tuberculosis, along with malnutrition</td>
</tr>
</tbody>
</table>
7. Such teams are often unfamiliar with international emergency response systems and standards, and may find it difficult to integrate smoothly into the usual coordination mechanisms. Real-time evaluation of the field activities of most EMTs showed that these were of good quality. The coordination mechanism established by the Ministry of Health (MoH), Nepal and supported by WHO and partners worked very well to address the challenges and needs of EMTs.

8. During the diphtheria outbreak in the Rohingya camps in Cox’s Bazar, Bangladesh, an international call for assistance was made by the health sector coordination working group, to which the United Kingdom – EMT and Samaritan Purse – responded. It was observed that situations related to security or emergencies linked to hazardous pathogens caused delays or bottlenecks in the deployment of the EMTs.

9. The work on implementing the global EMT initiative and strengthening existing national EMTs has recently been taken up in the Region. In October 2016, a regional training on EMT coordination was conducted by the Regional Office. In 2017, the Regional Office facilitated national EMT workshops in Bhutan, Indonesia and Thailand. After the national EMT workshop, Bhutan applied for classification of its national EMT and also developed national guidelines for EMTs.

10. A regional consultation was organized in Bangkok, Thailand, during 28–29 November 2017 to strengthen operational partnerships for an emergency response. The majority of delegates from operational partners strongly recommended that EMTs in the Region need to be standardized.

\[\text{Table 2: Overview of EMTs in Member States of the SEA Region}^2\]

<table>
<thead>
<tr>
<th>Country</th>
<th>EMTs</th>
</tr>
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<tbody>
<tr>
<td>Bangladesh</td>
<td>6 teams - MoH, Disaster Management, Building Resources Across Communities - BRAC, Bangladesh Red Crescent Society</td>
</tr>
<tr>
<td>Bhutan</td>
<td>1 team – Type 1 Fixed – signed up for WHO verification</td>
</tr>
<tr>
<td>DPR Korea</td>
<td>Several teams at central and provincial levels</td>
</tr>
<tr>
<td>India</td>
<td>Several teams, including Military and National Disaster Response Force’s EMTs</td>
</tr>
<tr>
<td>Indonesia</td>
<td>11 teams – MOH, Military, Hajj and Muhammadiyah EMTs</td>
</tr>
<tr>
<td>Maldives</td>
<td>4 teams – MOH, Indira Gandhi Memorial Hospital (IGMH), ADK Hospital, Maldivian Red Crescent Society</td>
</tr>
<tr>
<td>Myanmar</td>
<td>5 teams including MOH, Yangon General Hospital</td>
</tr>
<tr>
<td>Nepal</td>
<td>7 teams including Army Hospital’s team</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1 team – Military EMT</td>
</tr>
<tr>
<td>Thailand</td>
<td>77 Medical Emergency Response Teams, 1 Bangkok city team, 4 military teams</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>One Rapid Response Team with MoH</td>
</tr>
</tbody>
</table>

\[\text{Mapping of EMTs is a continuing process; some teams may not fit the criteria/definition of an EMT.}\]
strengthened and coordinated efficiently under regional coordination mechanisms. It was recommended to include EMTs as an Agenda item for the Seventy-first Session of the WHO SEA Regional Committee in September 2018.

11. Following the recommendations, a regional consultation was organized by WHE on 5–6 June 2018 in New Delhi to understand the strengths and challenges of EMTs, and to develop a roadmap for strengthening EMTs in the Region. Member States and partners shared information on their existing capacity on EMTs (see Table 2) and the challenges to EMT coordination and implementation mechanisms. Information about EMTs in Member States of the SEA Region will be updated in due course.

**Strategic issues and the way forward**

12. WHO’s EMT Initiative aims to support Member States, NGOs and international organizations by providing a platform for collaboration to jointly achieve the following objectives:

1. Support and implement EMT capacity-strengthening and training activities at the national, regional and international levels.

2. Promote and lead (or support, as relevant) the establishment of the EMT Coordination Cell for efficient and timely activation and coordination of the EMT response following an emergency.

3. Continuously develop, agree on and promote clinical, technical and operational minimum standards for EMTs.

4. Provide a framework for quality assurance of EMTs, manage the peer review and classification process of international EMTs, and support Member States to develop their national EMT accreditation systems.

5. Ensure commitment and ownership of the EMT Initiative by EMTs and their organizations, and Member States as well as other relevant national, regional and international stakeholders.

13. The following strategic interventions for strengthening EMTs in the SEA Region have been considered and recommended by Member States and partners during the regional consultation in New Delhi on 5–6 June 2018. These are also in line with WHO’s EMT Global Strategy, 2018.

1. **National guidelines on EMTs**
   A national policy or guidelines on strengthening EMTs should be in place. It may be national guidelines exclusively on EMTs or part of a broader national “Emergency Preparedness and Response Plan”. The mechanisms for coordination of EMTs should be in place at the Health Emergency Operations Centre (HEOC) of the MoH of each country. Member States also suggested having SOPs for coordination of EMTs.

2. **National EMT focal point**
   It is important to ensure a structure for appropriate information exchange at the right levels and with the right entities and persons. Therefore, Member States of the Region should consider designating an EMT focal point who can facilitate, oversee and coordinate EMTs during an emergency. Focal points (policy, operational/technical) are to be designated by the competent national or organizational authority, i.e. the MoH in most cases at the country level, or senior management in the case of organizations, and represent the country or organization in the EMT Initiative.
(3) **National emergency medical teams**

Each Member State of the SEA Region is to establish, train and build the capacity of their own national EMTs because international EMTs are deployed only in case of an emergency of overwhelming proportions. National EMTs are the first to be deployed and can be mobilized quickly from unaffected areas to the disaster-hit area of a country. There are distinct advantages in having national EMTs. They are culturally sensitive, familiar with the terrain and local health context, work within the national health system, speak the local language and are already licensed to operate in the affected country. Thailand, Bhutan and Indonesia are examples of the fact that national capacity-building of response teams do save lives. EMTs from neighbouring countries in the Region bring similar advantages. Member States of the Region can also support each other in building the capacity of EMTs by twinning. A classified EMT of a particular Member State can extend support for training and emergency response to a neighbouring Member State in the Region.

(4) **Quality assurance of teams**

Member States are encouraged to adopt national EMT standards, using and, if required adapting, the globally agreed minimum standards to the national context. Member States are further encouraged to establish national accreditation mechanisms for the confirmation of these standards for national teams. Teams are encouraged to sign up for the mentorship and classification process coordinated by WHO. A national database of EMTs can be maintained to facilitate easy identification, tasking and deployment in times of crisis.

(5) **EMT implementation mechanisms**

Promotion, facilitation and strengthening of governance mechanisms for EMTs in the SEA Region are needed to establish and strengthen EMTs. Member States are encouraged to consider establishing a Regional EMT Working Group that ensures membership of each country and organization that provides EMTs.

The Regional EMT Working Group in South-East Asia will provide a forum for active participation of Member States, EMTs and relevant stakeholders of the Region in shaping and driving implementation of the EMT Initiative. The Regional Office will provide Secretariat support for the functioning of the Regional EMT Working Group and will organize their meetings.

(6) **Coordination of surge**

It is important to establish mechanisms for the coordination of surge in case of an emergency. Member States of the Region can pre-identify potential international teams that could provide support in emergencies and make the required arrangements for their rapid deployment. EMTs classified by WHO should be processed faster by the MoH of the affected country than those unable to show their adherence to minimum quality standards. A Member State can inform that the MoH will send and receive only EMTs that have achieved and adhere to the minimum standards of quality. There can be mutual agreements in place between neighbouring countries in the SEA Region for the deployment of classified EMTs in the event of a disaster, outbreak and/or other emergency.
(7) Research and innovation

The Regional Working Group will identify areas of research and innovation to strengthen EMTs. For example, the medical camp kit (MCK) that evolved following the Nepal earthquake of 2015 is an excellent solution for providing camp structure and basic equipment and medicines for the functioning of an EMT. Similarly, there is enough scope for undertaking research in logistics and operational aspects as well. The ability to use locally and regionally produced material and medicines will hugely reduce the cost associated with EMTs. The newly established Preparedness Stream of the South-East Asia Region Health Emergency Fund (SEARHEF) could be a mechanism for exploring such research opportunities.

Conclusions

14. The prevailing vulnerabilities and multifarious hazards that affect the SEA Region need immediate attention. The capacity for risk reduction, readiness and emergency response of Member States and partners needs to be strengthened. The Region has significant capacity and potential (medical response teams and rapid response teams) that can be further strengthened under the EMT Initiative of WHO to provide a high-quality response that reaches international minimum standards.

15. Civil–military and NGO coordination mechanisms for utilizing EMTs at the right time, the right place, and with the right quality of services for people in need must be improved to save the maximum number of lives. Strengthening national and international EMTs is a high-impact investment for making the Region disaster-resilient. Member States in the Region need to consider integrating strategic interventions for strengthening EMTs in their policy and operational plan while optimizing the contributions (expertise, equipment, human and material resources) of partner agencies.

16. The following actions are proposed to strengthen EMTs in the SEA Region:

- Designate national EMT focal points in the MoH.
- Develop national guidelines for deployment, arrival and coordination of EMTs in case of an emergency.
- Adopt national minimum standards for EMTs and establish and train national EMTs.
- Sign up and select national EMTs for the mentorship and classification process coordinated by WHO.
- Establish a regional working group to help implement the EMT Initiative with the Regional Office as the Secretariat.
- Maintain a database of EMTs and share it with WHO.