

SRI LANKA

**Use of Traffic Light Signs to Indicate Status of Emergency: An
Innovative Visual Management Tool for Health Sector**

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Sri Lankan health sector is an active stakeholder in the disaster preparedness and response ecosystem, as laid-down in the Disaster Management Act No. 13 of 2005. Number of initiatives are being carried out to ensure that the health sector is ready to respond to any disaster. Communication between different levels of health administrations is critical for synchronizing effective, efficient and smooth emergency and disaster response. Four levels of emergencies have been identified internationally to signify the status of emergency. Level 1 emergency could be managed with local resources while level 2 needs mobilization of regional resources. Level 3 emergency would need national level assistance whereas Level 4 emergency would need international assistance. Having a visual communication tool between different tiers of health sectors is essential in emergency and disaster response as well as dynamic nature of the emergency or disaster. However, there is no visual management tool available to communicate levels of emergency between different health administrations: local, regional, national and international.

Objective of this initiative was to develop and use a visual management tool to communicate levels of emergency between different levels of health administration. Four levels were considered for the visual management tool development. Local or divisional level was taken as Medical Officer of Health area (MOH). Regional level was taken as a health district which was demarcated by a Regional Director of Health Services area (RDHS). National level defined as involvement of the Ministry of Health at the central level. International level was defined as engagement of other countries. For the purposes of the visual management, three traffic lights with green, orange and red colors depicting local, regional and national levels were used. An

emergency was defined as any incident which needed operations beyond the normal function as well as need for assistance from the next immediate level of health administration. When a level was functioning at normal operation threshold, it was displayed by green. When operations were needed to be performed beyond normal operations, it was deemed orange. In addition to functioning beyond normal, needing assistance from the next immediate level of health administration was marked as red. When a certain level became red, which meant need of assistance from the next immediate level, the next immediate level too indicated their response through becoming orange. Same principles were used to downscale any emergency as well.

Following interpretations were given for the traffic lights symbols:

Green at MOH, RDHS and National level = No emergency

Orange at MOH level, Green at RDHS and National levels = Emergency level 1 (The incident could be managed with local surge capacity).

Red at MOH level, Orange at RDHS level, Green at National level = Emergency level 2 (Local surge capacity is exhausted. Support needed from the regional level).

Red at MOH and RDHS level. Orange at national level. = Emergency level 3 (Local and Regional surge capacity is exhausted. Support needed from national level).

Red at MOH, RDHS and National levels. = Emergency level 4 (Local, Regional and National Surge Capacity is exhausted. Support needed from international level).

It was concluded that traffic light model is a practical and simple visual management tool to communicate interaction between different emergency levels across different health administration levels in Sri Lanka. This model facilitate to promote the understanding and coordination between different health administrations during emergencies and disasters.

Hospitals and health institutions at all levels could be trained on improving communication and coordination for effective response during emergencies and disasters with the use of traffic light model. In addition, this model could be used to demonstrate the dynamic nature of the emergencies and disasters during disaster and emergency desktop drills and simulations.