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## Disaster Management Community



# Solution Exchange for the Disaster Management Community Consolidated Reply

*Query: Strengthening Pre-Hospital Care Systems during Emergencies - Experiences; Advice*

Compiled by [G Padmanabhan](#), Resource Person and [Nupur Arora](#), Research Associate  
Issue Date: 28 February 2008

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**From Deepa Prasad, United Nations Development Programme, Bhubaneswar  
Posted 5 December 2007**

Relating to the query on Mass Casualty Management, I wish to put forth a pertinent issue on strengthening Pre-hospital Care systems.

It's a generally known fact that community is the first to provide emergency assistance in any crises paying little or no regard to their own safety. First-aid training is a key component of community preparedness for mass casualty incidents, and is especially important where limited professional pre-hospital Emergency Medical System exists.

The first responders from public service (Police, Traffic Police personnel) are also not trained adequately in first aid and proper transportation of the injured in our county. In some cases further injury and loss of life is avoided. More often than not, spontaneous rescue efforts result in serious injuries and compounded problems to the victim and the volunteer.

The GOI- UNDP Disaster Risk Management Programme emphasizes on Community Based Disaster Preparedness and under this programme state Governments have trained large number of volunteers in first aid across 169 districts of the country in addition to selected trainings for the personnel from the police (including traffic) and home guards.

Many organizations and institutions have also taken up initiatives to identify and train particularly motivated or well-placed workers and community volunteers who can assist in pre-hospital care.

However, it has been observed that these initiatives fail in-terms of adequate utilization of the services of the trained personnel and integration with other service providers; amalgamation into any kind of organized emergency pre-hospital services or care; and scope for refresher trainings, thus reducing skills and motivation levels of the volunteers.

I request the members to share experiences and provide advice on:

- Linking trained first aid volunteers with existing public health and health-care infrastructures
- Strengthening the pre-hospital care through capacity building of first responders from public services and on regularizing their trainings
- Simple and effective approaches in utilizing community volunteers in Mass Casualty Incidents

Your responses and experiences would guide us to frame a sustainable action plan, facilitating in strengthening the pre-hospital care using the trained community volunteers and other first responders.

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### Responses were received, with thanks, from

1. [Rahul Banerji](#), Amity Humanity Foundation, Noida
2. [Shoib Akhter](#), Change Innovators, New Delhi
3. [Ravishwar Sinha](#), Independent Consultant, New Delhi
4. [Garima Aggarwal](#), GoI-UNDP DRM Programme, New Delhi
5. [Toms K. Thomas](#), Evangelical Social Action Forum (ESAF), Trichur
6. [Pranay Dutta](#), World Health Organization (WHO), New Delhi

*Further contributions are welcome!*

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[Summary of Responses](#)  
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### Summary of Responses

Strengthening pre-hospital care systems is a pertinent issue. Responding to the query on the issue, members provided insightful experiences and suggestions on strengthening pre-hospital care systems through capacity building of first responders, linking trained first aid volunteers with existing public health and health-care infrastructures, and looking at ways of utilizing trained community volunteers in mass casualty incidents.

Discussing ways to **develop the capacity** of first responders from the public services and regularize their training, respondents suggested creating some mechanism to garner and allot resources, and advised developing need-based agreements at the institutional level according to the regional vulnerability and resources.

Members felt that in the case of pre-hospital services apart from the public sector, informal and private sector healthcare staff require diverse capacity building. They suggested organizing training and capacity building initiatives for them, including interactive sessions with the police, hospital personnel and the staff of local NGOs on the important coordination role civil societies have to play and organizing awareness programme for local school and college students, who can act as volunteers in an emergency.

Highlighting the importance of regular training members shared an experience from [Delhi](#) where the government organized training workshop for the representatives of major hospitals from state and central government and private hospitals on the importance of hospital preparedness plans and mass casualty systems.

On the issue of **linking** trained first aid volunteers **with existing public health** and healthcare infrastructures, respondents underscored the need for Hospital Emergency Plans. They felt that hospital plans could address issues like:

- Determining roles and responsibilities for hospital staff in case of any emergency,
- Caring for hospital employees and their families to ensure continued operations during an emergency,
- Educating staff to encourage professional interaction among staff and between staff of public health agencies,
- Providing incentives to improve staff performance in disaster preparedness,
- Notifying and recalling staff during mass casualty events and
- Mapping all the people in and around a hospital to determine how best to communicate with each other during an emergency.

Members also outlined various programmes and institutions that are linking trained first aid volunteers with other programmes, specifically mentioning national level programmes like the [National Rural Health Mission \(NHRM\)](#), [Reproductive and Child Health \(RCH-II\) Programme](#), and the [Integrated Child Health Services \(ICDS\)](#) which are successfully integrating First aid training with their training programmes in **various states**. Additionally, under the [GoI-UNDP DRM Programme](#), focus has been largely on training first responders (i.e. primarily the community taskforces) in first-aid techniques so that they can serve their communities before taking to the hospitals.

Respondents felt that schools and colleges are another source of volunteers, and recommended integrating the First Aid training into the programmes of National Cadet Corps and some institutions could add value. Further, they suggested that educational institutes could form emergency response teams, which linked to the local health and development bodies could volunteer during emergencies.

While discussing the role and approaches to **utilizing community volunteers** during mass casualty incidents, members pointed out that in the case of slow onset and recurring disasters like floods, droughts or cyclones in coastal areas communities often have some coping mechanism in place. In the case of disasters like earthquakes and fires that give no prior notice, discussants suggested developing mechanisms to coordinate among and inform volunteers during emergencies.

Finally, discussants brought up some challenges, mentioning that merely linking the existing public health personnel and infrastructure may not benefit much for ensuring prompt pre hospital care during disaster. It requires a complete set of skills and mind set which probably need to be build on through various capacity building initiatives.

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## Comparative Experiences

From [Garima Aggarwal](#), *GoI-UNDP DRM Programme, New Delhi*

### Delhi

#### Training Workshops for Hospital Staff, New Delhi

The government organizes training for various Government and private hospitals. In one of such workshops various hospitals were called together and sensitised about the importance of hospital preparedness plans and also preparation of mass casualty system which include management of casualties, injuries, transportation of injured people to near by hospitals through heli-ambulances etc. More than 70 hospitals employees were trained in the process.

### Multiple States

## **Training Communities for pre hospital care**

Under the GoI-UNDP Disaster Risk Management Programme, in 169 multi-hazard prone districts the focus has been to train first responders. Training is given primarily to community taskforces in first-aid techniques so that they can serve their communities before taking to the hospitals. These measures taken up at the community, local government and other levels have created a culture of disaster preparedness and risk reduction. Read [more](#)

## **Integrating First Aid in Public Health Infrastructure** (from [Ravishwar Sinha](#), Independent Consultant, New Delhi)

Government initiatives like the National Rural Health Mission, Reproductive and Child Health and universalisation and expansion of the Integrated Child Health Services, successfully integrate first aid training with their ongoing training programmes. This helps to improve routine work and provides skills to field level ASHAs and Anganwadi workers, adding value to the original programs and also trains volunteers who can be an asset in times of emergency. Read [more](#)

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## **Related Resources**

### **Recommended Organizations and Programmes**

From [Ravishwar Sinha](#), Independent Consultant, New Delhi

#### **National Rural Health Mission (NHRM), New Delhi**

Ministry of Health and Family Welfare, Government of India, Nirman Bhawan, Maulana Azad Marg, New Delhi; [healthmission@nic.in](mailto:healthmission@nic.in); <http://mohfw.nic.in/NRHM.htm>

*Provides medical training as part of its health programmes which includes first aid training to field level workers Astha and Anganwadi Workers.*

#### **Reproductive and Child Health (RCH) Programme, New Delhi**

Ministry of Health and Family Welfare, Government of India, Nirman Bhawan, Maulana Azad Marg, New Delhi; [resp-health@hub.nic.in](mailto:resp-health@hub.nic.in);

<http://mohfw.nic.in/dofw%20website/aided%20projects/rchp%20frame.htm>

*Under the RCH programme medical training is a part, this training includes first aid training for doctors.*

#### **National Disaster Management Authority (NDMA), New Delhi** (from [Ravishwar Sinha](#), Independent Consultant, New Delhi)

Centaur Hotel, Near IGI Airport, New Delhi 110037; Tel: 25655012; [www.ndma.gov.in](http://www.ndma.gov.in)

*Authority has issued guidelines for Medical Preparedness and Mass Casualty management and has constituted various committees to tackle the problem.*

From [Garima Aggarwal](#), GoI-UNDP DRM Programme, New Delhi

#### **Government of India-UNDP Disaster Risk Management Programme, New Delhi**

55 Lodhi Estate, New Delhi 110003; Tel: 4653233; Fax: 24627612;

[http://www.undp.org.in/index.php?option=com\\_content&task=view&id=80&Itemid=163](http://www.undp.org.in/index.php?option=com_content&task=view&id=80&Itemid=163)

*Programme in 169 multi-hazard prone districts of 17 India states focuses on providing community taskforces training in first-aid techniques for better pre hospital care.*

#### **Indian Federation for Red Cross and Crescent Societies (IFRC), New Delhi**

Red Cross Building, 1 Red Cross Road, New Delhi 110001; Tel: 91-112- 371 64 24; [indcross@vsnl.com](mailto:indcross@vsnl.com)

<http://www.ifrc.org/what/disasters/response/tsunamis/index.asp>

*IFRC is involved in disaster preparedness and healthcare work and provides support to government for emergency support functions for medical and trauma counseling.*

### **Related Consolidated Replies**

**Mass Casualty Management, from Deepa Prasad, United Nations Development Programme, Bhubaneswar (Experiences; Advice).** Disaster Management Community. Issued 28 December 2007  
Available at <http://www.solutionexchange-un.net.in/drm/cr/cr-se-drm-11110701-public.pdf> (PDF, Size: 139 KB)

*Shares experiences on existing Mass Casualty Management systems at city level, challenges faced to implement them and ways to improve in cities and hospitals*

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### **Responses in Full**

#### **Rahul Banerji, Amity Humanity Foundation, Noida**

In a disaster, grassroots people are getting affected more than any other community is. Any organization or Government department can reach to them not before two or three hours and thereafter it takes some time to understand the whole situation and to initiate aid programme. Sometime they even need to establish shelter houses and organize the matter. This whole programme takes 5-6 hours before initiate practical programme. Therefore, it is important first to sensitise community and train them for some beginning steps. A few suggestions are mentioned below:

1. Community should be trained about some important steps like at the time of disaster what they should carry before living their place.
  2. If the whole family are on road or abandoned then where they should go.
  3. If any small casualty happens (physically) then what should be the duty of other members of family.
  4. Most of the cases nervous breakdown create chaos, so tips on emergency management should be initiated.
  5. A particular interactive session in between police, hospital staffs and local NGOs should be incorporated in those training programme.
  6. All the civil societies can organise awareness programme for local school and college students as they can act as volunteer in urgency.
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#### **Shoib Akhter, Change Innovators, New Delhi**

I was recently going through various reports and documents on Pre and Post hospital care during emergencies. The points I want to share are mainly on Hospital Emergency Plans. A few of them, I could take from there are mentioned below. The Hospital emergency plans should address these issues:

- **Care for hospital employees:** In an event involving weapons of mass destruction (WMD), the staff needs to be assured of the physical security of the work environment. They also need to know that the hospital is addressing staff members' safety and well-being. Frequent communications with all internal hospital audiences is necessary. Screening may also be needed to assess how employees are affected by the stress and emotion of the situation.
- **Care for employees' families:** Establish a dependent-care plan for family members of staff. Ask staff about their families' needs. Inform staff that the hospital may need to lock down during an incident, but recognize that employees won't stay on the job if they think their loved ones are not being taken care of. Establish a separate telephone number for employees' families to call during emergencies.

- **Staff education:** Encourage professional interaction among staff and between staff and public health agencies. Offer incentives to improve staff performance in disaster preparedness. Prepare fact sheets, and use the hospital Intranet to educate staff about the clinical aspects of radiation, e.g., signs and symptoms of contamination, and short- and long-term health effects. Incorporate radiological preparedness into existing mass casualty training and educational forums.
- **Staffing:** Determine roles and responsibilities for each member of the response team. Be ready to rotate communications staff during emergencies. Be aware of overload; you can't have the entire staff working at the same time. Employees need to get away from the stress once in a while to be effective when they return to the job. Ask other departments, such as the billing office, to support the emergency communications function. Ask medical, nursing, and dental students to help. Draw upon the nuclear medicine department for technical expertise. Use volunteers, such as communications professionals from local universities.
- **Employee notification:** Create a checklist for notifying and recalling staff during mass casualty events. Identify all audiences in the hospital and determine how to communicate with each. In addition to medical and professional personnel, consider part-time staff, volunteers, vendors, and the board of directors. Assemble 24-hour contact information for all staff (home phones, cell phones, pagers, e-mail addresses). Determine who's responsible for calling these people.
- **Communications systems:** Implement and test redundant communications systems to be established.

Hope this helps.

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### **Ravishwar Sinha, Independent Consultant**

Thank you for the important topic.

On the basis of my experiences as doctor at the grassroots level, district hospitals and as a program manager and plan formulator and implementer, I welcome the discussion.

The point wise response based on my experiences are:-

### **Linking trained first aid volunteers with existing public health and health-care infrastructures**

There is a shortage of properly trained volunteers in hospitals to handle medical emergencies. Many lives are lost during transportation or improper handling of the traumatized person. Enthusiasm of community is helpful but it needs to be supported with training for better results.

Initiatives The National Rural Health Mission (NHRM), Reproductive and Child Health (RCH) and Universalisation and expansion of the Integrated Child Health Services (ICDS) offers big opportunity of integrating the First aid training with their training programs. This would not only add value to their day to day activities in the community but the skills gained by the field level workers such as Asha and Anganwadi Workers and helper, which are basically part time workers/ volunteers will also enhance their incomes and prestige in the communities they work in. This would add value to the original programs also and would be an asset in times of Disasters/emergency.

The schools and colleges are the other source of volunteers. Integrating the First Aid training, it's also been happening in the National Cadet Corps and some institutions, could also add value.

Educational Institutes would also form emergency response teams, these could be linked to the local institutions of health and development and also engaged in the some projects in the community as volunteers. This would foster team work and would be an asset in case of emergencies.

### **Strengthening the pre-hospital care through capacity building of first responders from public services and on regularizing their trainings**

The hospital infrastructure in the country whether Government like in India and private that is growing are facing many challenges. The Government programs of NRHM, RCH and public private partnerships are supporting in overcoming the challenges. In the private sector resources for meeting the needs both human and materials are a big constraint.

Some mechanism to garner and allot resources needs to be developed for this. As the emergencies and disaster are by the very definitions unpredictable, a locally need based arrangement/ agreement should be in place for this. There are some in the Government sector from very old British days and these have been not so very regularly supplemented. The National Disaster Management Authority (NDMA) has initiated the steps to update and improve. This is very commendable.

Training is another component that needs to be strengthened to bring the available resources in sync.

### **Simple and effective approaches in utilizing community volunteers in Mass Casualty Incidents\_**

In case of disasters that are more predictable like flood and famines, cyclones in costal areas, the community in a many cases has some coping mechanism in place from community memory and practices . This need s to be look into these in designing and putting into place a community response teams .This I believe is part of the the training needs outlined above.

Keeping the coherence of such teams some sort of periodical social service such as health camps, Public system distribution camps and organising of Melas/fairs should be done. Otherwise I feel the interest of the team of volunteers would wane and in effect there would not in position when needed most.

Look forward to an interesting discussion.

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### **Garima Aggarwal, GoI-UNDP DRM Programme, New Delhi**

As rightly pointed out that mass casualty management is not possible without linking various health related facilities with each other and also linking them with administration. Under the GoI-UNDP DRM Programme, wherein focus has been largely to train first responders i.e. primarily the community taskforces in first-aid techniques so that they can serve their communities before taking to the hospitals.

In Delhi, first-aid taskforces are being formed in schools, resident's colonies and offices and have been trained with the help of St John Ambulance Brigade.

The district administration has been maintaining database of the trained personnel as a part of Community Based Disaster Management Planning process.

These Community Disaster Management Plans have details of evacuation and response methods of the communities and also has Standard Operating Procedures [SOPs] for the first-aid team. The first-aid teams are expected to act as a first-responder during any kind of local disaster until external help reaches. The taskforces have also been guided to help the teams of medical responders, which will come from the government and NGOs. For strengthening the coordination system, several times, mock-drills have been conducted at community, district and state level wherein taskforces have rehearsed their SOPs

along with the local administration and hospitals and NGOs etc. A separate Emergency Support Function [ESF] for Medical and Trauma Counseling has been formed at district level, which has team of doctors and Para-medical staff belonging to various hospitals and supporting organizations like Delhi Civil Defence, St. John Ambulance Brigade and Indian Red Cross society etc.

The team leaders of Medical and Trauma Counseling ESF has to coordinate with the State level ESF for meeting requirements of manpower and resources and the team leader of State level ESF will also take updates from the field teams and team leaders. The mechanism has also been tested through mock-drills.

However, Government of Delhi is conscious about handling large-scale disasters like earthquake and the effectiveness of the existing health support system.

Therefore, in April 2007, Delhi had organized a workshop for the representatives of major hospitals under State and Central Government and Private hospitals. More than 70 hospitals were called together and sensitized about the importance of hospital preparedness plans and also preparation of mass casualty system which shall include management of casualties, injuries, transportation of injured people to near by hospitals through heli-ambulances etc. Critical issues during disasters like Media management system and disposal of carcasses and dead-bodies etc. were also discussed in detail. At the last, a road map was prepared and district administration was encouraged to prepared district-level mass casualty plans with the involvement of hospitals and clinics. District administration was also suggested to prepare inventory of resources, medicos/chemist shops and trained medical and para-medical staff and also to link the community taskforces with the emergency response system by conducting regular mock drills.

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### **Toms K. Thomas, Evangelical Social Action Forum (ESAF), Trichur**

I am a development Practitioners Associated with Evangelical Social Action Forum (ESAF) an MFI based in South India. I think the issue is a verity important one especially in relation to the community based disaster preparedness initiatives. Finding personal to handle disaster effectively is a great challenge. It could be an ideal strategy to develop locally available man power.

### **Linking trained first aid volunteers with existing public health and health-care infrastructures**

I think mere linking of the existing public health persons and infrastructure may not benefit much for disaster mitigation and management initiatives. It requires a complete set of skills and mind set which probably need to be build on through various capacity building initiatives. Though this is a good strategy it needs to be supported with effective capacity building programs which transform the mind set of the people.

### **Strengthening the pre-hospital care through capacity building of first responders from public services and on regularizing their trainings.**

In case of the pre hospital services there is an informal sector health care staff and the private sector start apart from the public sector staff. I think there require diverse capacity building initiatives for these three categories of the people and has to plan appropriate methods to transform them.

### **Simple and effective approaches in utilizing community volunteers in Mass Casualty Incidents**

Use of community volunteers is great however since disaster is not a confirmed incident keeping such volunteers trained and active for an anticipated disaster is a challenge. Probably for localities with more frequent disasters the use of volunteers could be done more effectively. However it is important to institution like them. More over the existing actors like fire force, Scout and Guides NCC / NSS could be better used for managing disaster risks.



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**Pranay Dutta, World Health Organization, New Delhi**

Please refer to a note on pre hospital care for the needful at <http://www.solutionexchange-un.net.in/drm/cr/res-05120702.doc>

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***Many thanks to all who contributed to this query!***

*If you have further information to share on this topic, please send it to Solution Exchange for the Disaster Management Community in India at [se-drm@solutionexchange-un.net.in](mailto:se-drm@solutionexchange-un.net.in) with the subject heading "Re: [se-drm] Query: Strengthening Pre-hospital Care Systems during Emergencies- Experiences; Advice. Additional Reply."*

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