



Global Disaster  
Preparedness Center



# Growing the Global Disaster Preparedness Community

## Partners contributed to the following FY13 Global Disaster Preparedness Center Initiatives:

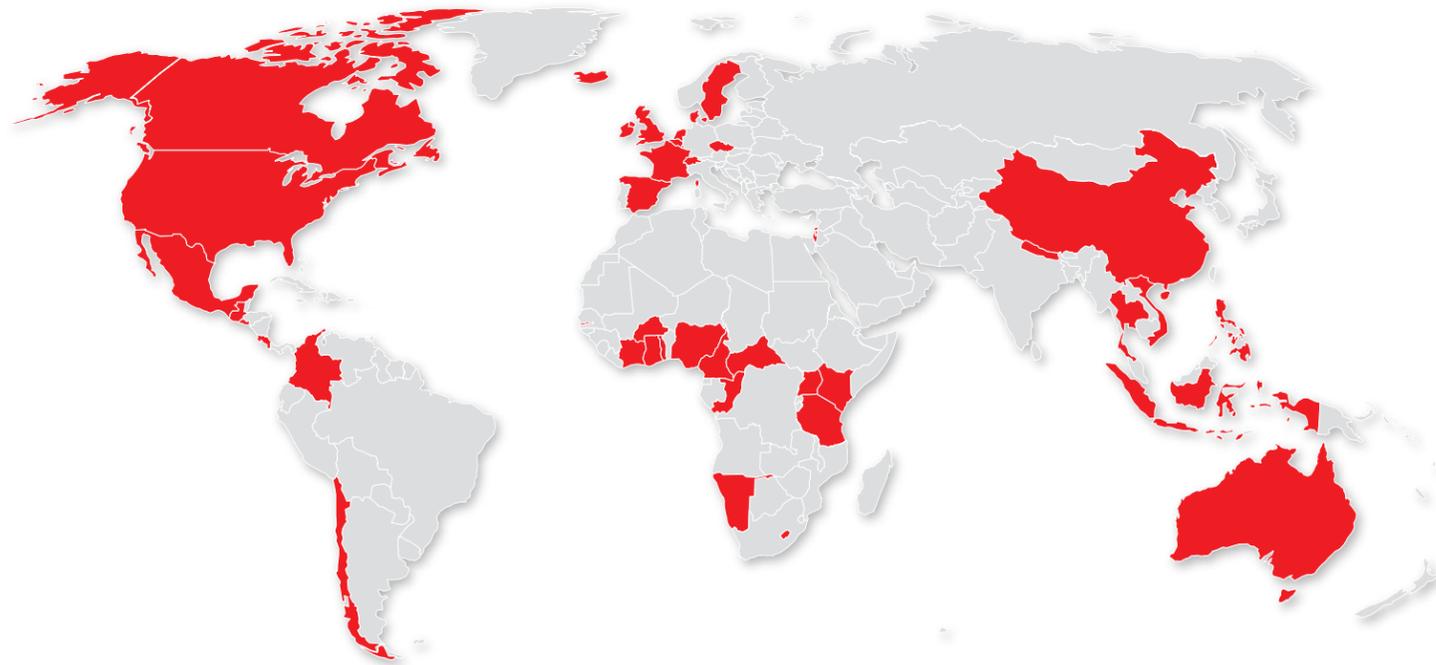
- Building Urban Resilience Workshop, Arusha, Tanzania
- Red Cross/Red Crescent Centers Meeting
- Resilience Research (Arup International Development)
- SMS Messaging (Trilogy Emergency Relief Application)
- Universal First Aid App Pilot
- Iconathon

### Countries Where Red Cross Partners Supported Our Work

- Australia
- Burkina Faso
- Cameroon
- Canada
- Central African Republic
- Chile
- China
- Colombia
- Congo
- Cote d'Ivoire
- Czech Republic
- France
- The Gambia
- Ghana
- Guatemala
- Iceland
- Indonesia
- Ireland
- Israel
- Kenya
- Lesotho
- Mexico
- Namibia
- Nepal
- Nigeria
- Philippines
- Seychelles
- St. Lucia
- Sweden
- Switzerland
- Tanzania
- Thailand
- Togo
- Uganda
- United Kingdom
- United States

### Red Cross Red Crescent Centers Meeting Participants

- Caribbean Disaster Risk Management Resource Center (Barbados)
- Center for Evidence-Based Practice (Belgium)
- Centre for Community Resilience (Costa Rica)
- Centre for Disaster Preparedness (El Salvador)
- Climate Center (Netherlands)
- Global Advisory Panel on Corporate Governance and Risk Management in RCRC National Societies (Australia)
- Global Disaster Preparedness Center (United States)
- Global First Aid Reference Center (France)
- Livelihoods Resource Centre (Spain)
- Psychosocial Resource Center (Denmark)
- Shelter Research Unit (Benelux and Switzerland)
- Volunteer Reference Center (United Kingdom and Spain)



The shaded areas in the map above represent the countries where Red Cross partners contributed to Global Disaster Preparedness Center activities in fiscal year 2013.



## Message from the Director

Every year, unpredictable disasters devastate lives and property around the world. In October 2012, Superstorm Sandy wreaked havoc first in Cuba, Jamaica and Haiti in the Caribbean and then on the eastern seaboard of the United States. While the media focus was on Sandy's impact in the U.S., in Cuba alone the storm damaged or completely destroyed over 200,000 homes. Across the world seven months later, Cyclone Mahasen developed so quickly that coastal communities in Bangladesh had little warning it was approaching, and the storm washed away homes, boats and crops, and affected more than 1.5 million people.

When disasters strike, people with limited resources or safety nets are often left to respond and cope with the impacts on their own. Climate change and rapid urbanization are exacerbating and shifting vulnerability to disasters, making it more difficult for people to anticipate and prepare for what may be coming. The global Red Cross and Red Crescent network is making a concerted effort to enhance disaster preparedness capacities at the community, local and national levels.

Local Red Cross or Red Crescent volunteers are often the first responders in their countries and their communities. In order to strengthen the ability of Red Cross and Red Crescent workers to prepare for and respond to disasters, the International Federation of Red Cross and Red Crescent Societies (IFRC) and the American Red Cross partnered to establish the Global Disaster Preparedness Center. Since its launch in October 2012, the Center has been gearing up to render services in pivotal areas with a focus on promoting innovation and capacity building in disaster preparedness, and supporting learning and networking among disaster preparedness professionals worldwide.

Reflecting on our work to date, one thing that stands out in my mind is the importance of our partnerships with the IFRC, other Red Cross Red Crescent resource centers and external organizations. Since the Center's launch, partners in over 40 countries worldwide have supported our endeavors. From contributing ideas around urban resilience to helping us pilot and expand the use of mobile apps, the valuable contributions of our partners this year have paved the way for greater reach and impact.

Looking ahead, the Center is eager to take new initiatives to scale and grow the disaster preparedness network further through our website, additional learning forums and other practitioner events. The Center will also continue to capitalize on new technologies, innovative approaches and good practices to enhance preparedness efforts and save lives around the world.

We have an exciting year ahead and welcome your ideas to help us build a global community for disaster preparedness and innovation.

Rebecca Scheurer  
Director, Global Disaster Preparedness Center



Rebecca Scheurer, Director of the Global Disaster Preparedness Center © Niki Clark, American Red Cross

# About the Global Disaster Preparedness Center

The Global Disaster Preparedness Center (“Center”) is both a resource center and think tank that promotes innovation in disaster preparedness and supports research and knowledge sharing amongst disaster preparedness professionals worldwide. Established in 2012 by the American Red Cross and the IFRC, our primary aim is to strengthen the disaster preparedness capacities of the global Red Cross and Red Crescent network, while also contributing to wider preparedness efforts in order to help safeguard communities from future disasters. Through research and the promotion of innovation and effective approaches to disaster preparedness, the Center strives to increase the impact of preparedness activities around the world.

## The Global Disaster Preparedness Center’s Work

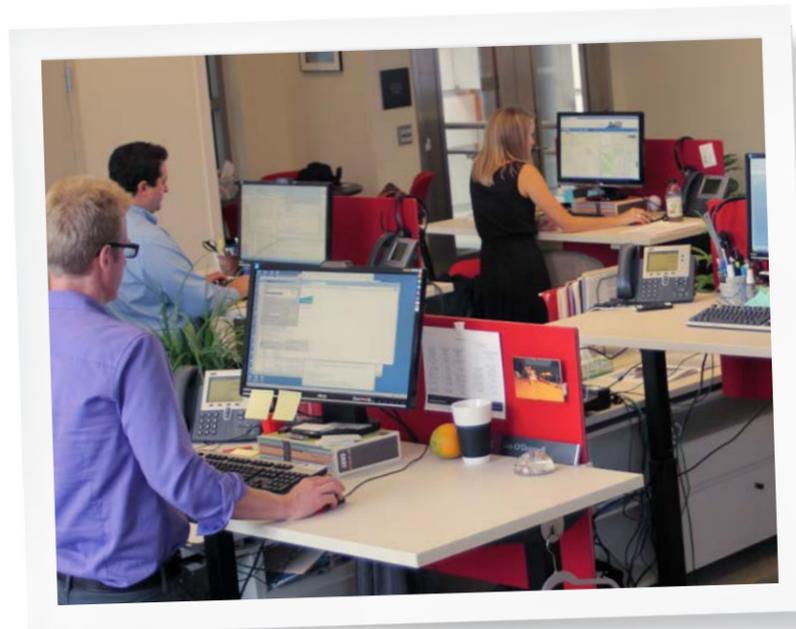
The Center works in four key areas: knowledge management, research, technical assistance and collaboration. We play an important coordination role inside and outside of the Red Cross and Red Crescent network on issues related to disaster preparedness. In each area, the Center identifies opportunities to complement the work of others and fills existing disaster preparedness gaps within the network, as follows:

**Knowledge Management:** Identifies, collects, stores and disseminates disaster preparedness material and resources to disaster professionals around the world.

**Research:** Strengthens the disaster preparedness evidence base through applied research.

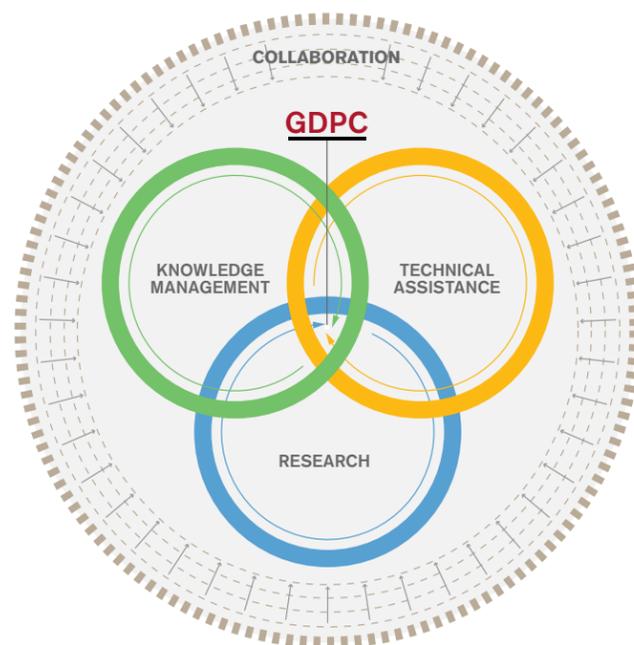
**Technical Assistance:** Provides programmatic guidance to and shares targeted good practices with Red Cross and Red Crescent partners around the world.

**Collaboration:** Promotes effective cross-learning amongst disaster preparedness professionals inside and outside of the Red Cross and Red Crescent network.



Members of the Center team right to left: Jamie Liebentritt, Omar Abou-Samra and Ian O'Donnell at work in the Center's new space in Washington, DC. © Niki Clark, American Red Cross

## Center Priority Areas at a Glance



- Technical Assistance
- Knowledge Management
- Research
- Collaboration

# Urban Preparedness

Urban disaster preparedness is receiving more attention throughout the world and within the Red Cross Red Crescent network as communities face increasing challenges in addressing disaster risks. The rate of growth in cities is outpacing the ability of urban planners to design necessary levels of protection (United Nations Office for Disaster Risk Reduction<sup>1</sup>). In addition, the changing climate and increase in extreme weather events expose an increasing number of urban residents to landslides, sea-level rise, flooding, and other hazards (World Bank<sup>2</sup>).

Disaster preparedness tools used in rural settings often require adaptation for urban application. In many cases, new approaches that take advantage of evolving technologies and recent research are needed. Despite increasing vulnerability, many urban areas—particularly mega-cities in high risk regions—have access to resources that can help to take disaster preparedness efforts to scale. To create opportunities for learning and dialogue, the Center, with support from the Rockefeller Foundation, is convening a series of regional workshops focused on urban disaster preparedness.

The first of these workshops was held in February 2013 in Arusha, Tanzania. Staff and volunteers from 15 Red Cross societies in Africa met and exchanged ideas, proposed new solutions to ongoing challenges, and identified opportunities to further collaborate and combine efforts to achieve greater scale and impact.

Participants presented case studies and highlighted recommended practices based on their experience for building urban resilience. For example, the Uganda Red Cross shared its experience using Geospatial Information Systems (GIS) data and satellite phones to better prepare their cities and mitigate the risks of floods and fires. Using mobile phones to collect coordinates, the Uganda Red Cross, with technical support from the ARC, was able to map a unique aerial view of housing in Gulu, the second largest city in Uganda. The map revealed the potential fire hazard for many grass-thatched roofs in close proximity to one another. In eastern Uganda, open source data showing community

1 United Nations, Disaster Risk Reduction Must Keep Pace with Rapid Urbanization, Say Urban Planners: <http://www.un.org/News/Press/docs/2013/iha1323.doc.htm>  
 2 Adelekan, Ibidun O. World Bank: <http://siteresources.worldbank.org/INTURBANDEVELOPMENT/Resources/336387-1256566800920/6505269-1268260567624/Adelekan.pdf>

assets—i.e., churches, schools and evacuation routes—was overlaid onto sophisticated flood models provided by other agencies. The overlaid maps helped communities identify assets most at risk of flooding. This innovative use of technology provided a base for collaboration with civil society organizations and local government to make data open and accessible to a wide set of organizations interested in reducing risk and increasing the resilience of urban communities.

By sharing their work and experiences with each other, participants were able to bring new ideas and knowledge back to their respective national Red Cross societies and local communities. The case studies shared will also contribute to a broader base of knowledge on urban resilience-building practices of the Red Cross and Red Crescent around the world. In the coming year, the Center will host similar workshops in Asia and Latin America, to help the Red Cross and Red Crescent network learn from the knowledge and resources developed by national societies working to reduce risks in their own cities.



A Red Cross volunteer distributes preparedness education materials in central Kathmandu. © Rob Few, International Federation of Red Cross and Red Crescent Societies

**In 2011, one in every two people lived in urban areas. The UN predicts that almost 70% of the world’s population will live in urban areas by 2050.**

Data Source: United Nations, Department of Economic and Social Affairs, Population Division (2012). World Urbanization Prospects: The 2011 Revision

## Using Technology for Greater Reach and Impact

Recognizing the potential for technology to enhance disaster preparedness work globally, the Global Disaster Preparedness Center kicked off a number of new technology initiatives this year.

### Universal Preparedness Apps Approach

The Center's universal preparedness app approach is designed to provide efficient and cost-effective access to mobile applications to better inform millions of people about what to do before, during and after an emergency. This year, the Center partnered with a pilot group of Red Cross and Red Crescent societies to begin releasing the first aid app to new markets.

With the flexibility to customize language, content, images and branding, the universal First Aid app may be adapted to be culturally appropriate and address regionally-specific first aid needs. Red Cross societies are localizing the app's content on a user-friendly, web-based platform and the Global Red Cross and Red Crescent First Aid Reference Center hosted by the French Red Cross, a partner of the Center, will review and approve any clinical content changes. The first of these apps were released in Mexico, Australia and Canada in September 2013. The remaining 14 countries are expected to release their apps by October 2013.

The First Aid app was originally released by the British Red Cross in 2011, with the American Red Cross version released in 2012. It has been downloaded more than 3 million times combined in the United Kingdom and United States, demonstrating the potential for the universal app approach. The Center plans to offer this opportunity to additional Red Cross or Red Crescent societies to take advantage of the growth in mobile and smart phone usage and because the apps can distribute preparedness messages in highly dynamic, congested, and hard-to-reach places.

By putting life-saving information in the hands of individuals around the world, the Red Cross and Red Crescent network can make a lasting impact on global preparedness. With the support of the United States Agency for International Development's Office of Foreign Disaster Assistance, the Center also plans to expand app adaptation to introduce a flood preparedness app in Southeast Asia, and will look to build upon both efforts in the future to include the roll-out of other hazard-specific apps.

### SMS Preparedness Messaging Through Trilogy Emergency Relief Application (TERA)

This year, the Global Disaster Preparedness Center also supported the global expansion of an IFRC-led initiative focused on SMS technology. In 2011, the IFRC teamed up with Trilogy International Partners, a wireless telecommunications company, to develop and test an SMS text system that allows for two-way communication between disaster-affected people and aid agencies. TERA is designed to operate remotely as soon as a disaster develops. Unlike traditional SMS services which require broadcast messages be delivered to subscribers on a carrier's network, TERA allows the Red Cross and Red Crescent to send text messages to all mobile phones in a targeted region or neighborhood. This year, the Preparedness Center supported the roll out of TERA in Nepal, a country that is highly vulnerable to disasters.

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**Mobile cellular subscriptions continue to rise yearly at double-digit growth rates in the developing world. In 2011, 75% of the worldwide subscriptions were in developing regions. Mobile cellular penetration in sub-Saharan Africa now exceeds 50 per cent.**

Data Source: United Nations, Millennium Development Goals Report 2012.



## Research

To increase the effectiveness and scale of disaster preparedness efforts around the world, there is a great need to build out the knowledge and evidence-base around disaster preparedness through applied research. Studies show that investments in disaster preparedness and prevention pay off in lives saved and reduced economic losses, but there is still much we do not know regarding the comprehension, use and institutionalization of good practices in the area of disaster preparedness.

In response, the Center is engaging universities, research institutions and practitioners to strengthen this evidence-base by supporting research studies and creating cross-learning opportunities for preparedness professionals. This past year, the Center has initiated or supported research such as the following:

- The expansion of a global study to understand the factors that make a community resilient and, in doing so, enhances the effectiveness of community-based, disaster risk reduction programs. The original study, commissioned by the IFRC and conducted by Arup International Development, evaluated community-based, disaster risk reduction programs implemented in dozens of communities in response to the 2004 Indian Ocean Tsunami. The findings have been instrumental in helping the Red Cross and Red Crescent network rethink the way we approach resilience and risk reduction programming. The Preparedness Center supported the expansion of this study beyond Asia to Latin America and the Caribbean.
- A research project in cooperation with the University of Washington to better understand how frontline disaster preparedness practitioners inform and guide their work—what information they use, how they access this information and what spheres of influence exist among practitioners. The results of this research will help the Preparedness Center and other partners ensure that their products and services are accessible, practical and relevant.
- The introduction of a small grants program in cooperation with the Response 2 Resilience Institute (R2R), affiliated with the Disaster Resilience Leadership Academy and Tulane University. Modest grants will be provided to aspiring researchers through R2R's worldwide network of 18 universities and research institutions to facilitate exploration of key disaster preparedness and resilience topics with great relevance for the local context. Researchers will collaborate with Red Cross and Red Crescent societies and other civil society organizations to identify research priorities and conduct research with direct relevance to local risks and vulnerabilities.



A Red Cross advanced search and rescue team in Thailand heads out to sea for a simulation. © Siriponn Othavonn, Finish Red Cross



**Global Disaster  
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© Rob Few, International Federation of Red Cross and Red Crescent Societies

## Connecting Preparedness Professionals

To facilitate greater communication and collaboration among Red Cross and Red Crescent disaster preparedness practitioners and our partners, the Global Disaster Preparedness Center is developing a website that will serve as the cornerstone of our knowledge management strategy.

This past year, the Center launched a beta site and initiated the development of the full site which will include a library of field-tested resources, cross-language search tools to increase access to resources developed in different regions of the world, and other features that will help practitioners to access resources on the wide variety of topics related to disaster preparedness. The site will also allow practitioners to upload lessons, best practices and creative tools, and to connect with one another through online dialogue, social media and related networks. One of the goals of the site is to help practitioners expand their reach, perspective and learning.

The website will provide an interactive platform for gathering and accessing a wide and expandable set of disaster preparedness services and resources. Whenever possible, the site will link to existing resources and provide added value through user ratings and extensive search tools. At the same time, by providing greater visibility on the range of existing resources, continuing gaps, and the people involved in the disaster preparedness practitioner community, the site will provide more opportunity for connection and collaboration among the diverse range of disaster preparedness practitioners around the world.

The Center also initiated a fellowship program this year for American Red Cross chapter staff as a mechanism to promote knowledge-sharing and cross-learning. The Center's Chapter Fellowship Program provides experienced American Red Cross staff with an opportunity to join the Global Disaster Preparedness Center team in Washington, DC for a two-week term. Four fellows this year have provided valuable input to Center initiatives and have shared innovative disaster preparedness practices implemented across the United States. The Center plans to expand the fellowship program this coming year to include Red Cross and Red Crescent practitioners from around the world.

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