Public awareness and public education for disaster risk reduction: a guide
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Strategy 2020 voices the collective determination of the IFRC to move forward in tackling the major challenges that confront humanity in the next decade. Informed by the needs and vulnerabilities of the diverse communities with whom we work, as well as the basic rights and freedoms to which all are entitled, this strategy seeks to benefit all who look to Red Cross Red Crescent to help to build a more humane, dignified and peaceful world.

Over the next ten years, the collective focus of the IFRC will be on achieving the following strategic aims:

1. Save lives, protect livelihoods and strengthen recovery from disasters and crises
2. Enable healthy and safe living
3. Promote social inclusion and a culture of non-violence and peace
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Powerful imagery
An engaging and compelling tone
Adapted, localized content

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## Abbreviations and acronyms

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<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tr>
<td>CBDM/CBDRR</td>
<td>Community-based disaster management, community-based disaster risk reduction (sometimes preceded by ‘I’ for integrated)</td>
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<td>CBHFA</td>
<td>Community-based health and first aid</td>
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<td>DRR</td>
<td>Disaster risk reduction</td>
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<td>IFRC</td>
<td>International Federation of Red Cross and Red Crescent Societies</td>
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<td>ISDR</td>
<td>International Strategy for Disaster Reduction</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
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<td>UNISDR</td>
<td>United Nations International Strategy for Disaster Reduction</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>VCA</td>
<td>Vulnerability and capacity assessment</td>
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Glossary

**Disaster** – A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts that exceed the ability of the affected community or society to cope using its own resources.

**Disaster risk reduction** – The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, reduced vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

**Hazard** – A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

**Mitigation** – The lessening or limitation of the adverse impacts of hazards and related disasters.

**Preparedness** – The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from the impacts of likely, imminent or current hazard events or conditions.

**Prevention** – The outright avoidance of adverse impacts of hazards and related disasters.

**Public awareness** – The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken, individually and collectively, to reduce exposure and vulnerability to hazards.

**Resilience** – The ability of a system, community or society exposed to hazards to resist, absorb, adapt to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

**Risk** – The probability of an event and its negative consequences.

**Vulnerability** – The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

The definitions in this section are adapted from the United Nations International Strategy for Disaster Reduction’s publication *Terminology of Disaster Risk Reduction*[^48].
1. Introduction

The Red Cross Red Crescent has a long tradition of educating communities on disaster risks, increasing safety and resilience through campaigns, informal education, participatory learning and formal school-based interventions. National Societies, chapters and programmes have developed a wide array of tools to support these activities. Indeed, in 2005–08, research found that 50 out of 82 National Societies had carried out structured public-awareness and education activities on disaster reduction, 38 per cent of which were connected to children and schools [74]. But there was no source for an overview of all these different types of work, no synthesis of good practices, and no means for sharing this wealth of experience.

This guide is designed to help National Societies to plan and develop public awareness and public education efforts for disaster risk reduction. It supports two key IFRC documents – Strategy 2020 [55] and A Framework for Community Safety and Resilience in the Face of Disaster Risk [56], and will help to implement the Hyogo Framework for Action [47] – a global blueprint for disaster risk reduction efforts between 2005 and 2015 – by providing specific operational guidance for promoting disaster risk reduction. It is designed to help guide planning for public awareness and public education efforts, to produce increasingly successful and high-impact outcomes. We expect technical guidance about standard and harmonized messages to be developed in the near future.

Why is this guide needed?

There is currently a strong emphasis on public awareness and public education for disaster risk reduction [47, 55, 56]. This emphasis stems from four major areas of activity:

- **Public health** This area emerged first, boldly demonstrating that human behaviour can be changed and diseases eradicated. The many examples of successful efforts where public education has brought about dramatic changes in human behaviour include: potable water, hydration, hand washing, road safety, waterborne and airborne diseases, medication compliance, smoking cessation, tuberculosis treatment and the wearing of seat belts.
- **Environmental stewardship** has been promoted by activists working to highlight the impact of human activity on the environment. As a result, there is increasingly pro-social behaviour, both at household and community level. Education has also influenced policy controls on hazardous materials, safe and renewable energy, recycling and water conservation.
- **Earth science and geology** Earth scientists and geologists began to share their knowledge about natural hazard mechanisms in the 1970s, leading to widespread introduction, by the 1990s, of hazard awareness through science and geography curricula.
• **The International Red Cross Red Crescent Movement** For many decades, the Movement has played an active role in delivering public education focused on first aid and family and community response preparedness. As early as 1966 the Bangladesh RC, with support from the Swedish RC, was educating communities by developing people-centred cyclone early-warning systems. These activities grew significantly during the International Decade for Disaster Risk Reduction during the 1990s.

For the Movement, the 1984 publication *Prevention Better than Cure – Report on human and environmental disasters in the Third World*[^15] registered the emerging concern that narrow international disaster appeals and media reports were giving the public the mistaken impression that disasters are inevitable. These messages obscured the more important message: that there are “significant man-made elements in all types of disasters”, and that understanding this is “a necessary prerequisite for attacking the root causes and preventing them.” The document continued: “Once this basic understanding has been acknowledged, further awareness is needed concerning the various options to prevent disasters. Training in ecological awareness is one important side, but to understand people and human behaviour is equally important.”[^15 pp 171, 41]

All this pointed to a need for increasing focus on raising public awareness, and providing education, to help reduce the risk of disaster. This guide will support staff and volunteers in planning strategies, programmes and activities for public awareness and public education in disaster risk reduction.

More recently, Priority 3 of the Hyogo Framework of Action was set as: “to use knowledge, innovation and education to build a culture of safety and resilience at all levels”[^47], and to be widely relevant to field practitioners in both development assistance and humanitarian response.

This guide seeks to help National Societies meet this priority, by pulling together all the information they need into one place.

**Background: related publications**

The Movement strives to bring together its vision through a number of documents that this guide, *Public awareness and public education for disaster risk reduction: a guide*, sits alongside.

Its vision statement, *Strategy 2020*[^55], describes the Movement’s plans to incorporate its work to reduce disaster risk, promote better health and tackle climate change into global efforts to build community safety and resilience. Meanwhile, the *Framework for Community Safety and Resilience in the Face of Disaster Risk*[^56] sets out key elements for implementing risk-informed humanitarian response; country-specific mitigation, prevention and adaptation activities, and sector-based programming.
This guide is the latest addition to this body of work. It takes a vital step in implementing this vision, by setting out common approaches, minimum tools and guidelines and standard messages, across national contexts.

Strategy 2020 expresses the Movement’s mission to “do more, do better, reach further”, with three strategic aims:

- to save lives, protect livelihoods and strengthen recovery from disasters and crises
- to enable healthy and safe living
- to promote social inclusion and a culture of non-violence and peace.

Disaster risk reduction is explicitly an important part of the Movement’s mandate at a global level. This vision contributes to sustainable development by strengthening community resilience, promoting better health, reducing disaster risk, and tackling climate change.

In 2009 the Movement developed A Framework for Community Safety and Resilience in the Face of Disaster Risk\(^\text{[56]}\) (see page 7). This framework established a foundation for all the Red Cross Red Crescent programmes, projects and interventions designed to contribute to the building of safe and resilient communities. The key elements of this framework are:

- risk-informed humanitarian response
- country-specific mitigation, prevention and adaptation activities
- sector-based programming.

Advocacy, education and awareness raising are cross-cutting components aimed at all possible actors. The core pillars of these, across national contexts, are common approaches, minimum tools and guidelines, and standard messages.

The global context for disaster risk reduction is shaped by the Hyogo Framework of Action, which was adopted by 168 nation states in 2005. Priority 3 of this five-point framework is to “use knowledge, innovation and education to build a culture of safety and resilience at all levels” \(^\text{[47]}\). As a partner in the UN International Strategy for Disaster Reduction, the Movement intends for its efforts to support the broader community of humanitarian and development organizations, as well as public, private and civic-sector actors working to achieve these goals.

**How the guide was developed**

To develop these guidelines, the International Federation of Red Cross and Red Crescent Societies (IFRC) carried out a scoping study, to learn more about the
approaches and strategies already in use for public education and disaster reduction, within the Movement. This included:

- carrying out a comprehensive desk study of more than 150 documents
- examining more than 150 web sites
- interviewing 50 staff at National Society regional offices worldwide.

These findings are presented along with sound guidance from research on risk communications, social marketing and public education for behavioural change.

The box below sets out the key IFRC document, to show how this guide fits into the broader context of IFRC guidance for DRR and global strategy.

Key IFRC reference documents

- Strategy 2020
- A Framework for Community Safety and Resilience in the Face of Disaster Risk
- A Practical Guide to Advocacy and Disaster Risk Reduction
- Disaster Risk Reduction National Plan/Programme Suggested Performance Framework
- How the Red Cross Reduces Risk
- Communicating in Emergencies
- Prevention Better than Cure

Contents of the guide

Tackling the most serious disaster risks, at national or local levels, requires systematic approaches geared towards large-scale implementation, with the kind of commitment and sustained actions described in Community Health and First Aid in Action Implementation Guide. These require management by the National Society or chapter, commitment, political will, and a long-term perspective. The IFRC normal project-planning process provides overall guidance, with inbuilt accountability. This guide should serve to help those planning focused public-awareness and public-education efforts for disaster risk reduction.

The guide synthesizes the range of approaches taken across the Movement, to provide an overview of what works and what does not, backed up by research evidence where possible. This will help National Societies to make an informed choice about the most appropriate approaches, and to draw on existing resources wherever possible, to create a system that is more efficient and effective. It sets out approaches and tools for public awareness and public education in disaster risk reduction already widely in use by National Societies. It pulls together a range of research on risk communications and public education for behaviour change, and practitioners’ own discoveries in applying these.

The guide focuses on four key approaches:

- campaigns
- participatory learning
- informal education
- formal school-based interventions.

It considers the following tools for implementing these approaches, including publications, curricula, modules and presentations, e-learning, performing and cultural arts, games and competitions, audio and video materials, web pages
and activities, and social media and telecommunications. It then explains how to ensure that these tools are high quality, focusing on powerful images and well-crafted messages that are engaging, proven, adapted and localized. It also highlights the principles needed to apply these effectively: ensuring legitimacy and credibility, consistency and standard messaging, scalability, and sustainability.

Through a wealth of examples, the guide highlights integrated experiences, approaches and tools, by region. These provide an opportunity for the reader to look more closely at specific examples, and to communicate directly with the teams that carried them out, if required. The examples are not classified in terms of outcomes, as readers can learn as much from experiences that fall short of expectations as they can from those considered extremely successful.

A final chapter on managing the knowledge describes monitoring and evaluation, knowledge sharing and capacity building – all of which will play increasingly important roles in the design and implementation of high-impact strategies in the future.

Public awareness and education programmes can be started modestly, and tailored to meet the needs of specific populations, risks, and target groups. These approaches can be integrated into almost all existing initiatives, whenever and wherever they take place. They can build on and support existing volunteer mobilization and peer-to-peer communications. To support this, you will need strong and unified disaster reduction messages, and clear and targeted information, education and communication materials.

Throughout the guide you will find boxed-out information, tables, figures, step-by-step guides and practical examples to bring the theory to life and help you apply the learning to your own situation.

Chapter-by-chapter summary

1 Introduction
This chapter explains why this guide is needed and highlights related resources before explaining how it was developed and setting out the key contents.

2 Planning: questions to ask
This chapter answers questions such as “Why?”, “Who for?”, “What?”, “Who with?”, “When and where?”, “How?”, “With what tools?”, and “What else?”. It identifies public awareness and public education both as a specific planned intervention, and for integration into pre-existing activities.

3 Four key approaches
This chapter explains how to carry out each of the four major approaches – campaigns, participatory learning, informal education and formal school-based efforts. It outlines a wide range of applications and methods, to provide ideas and guidance for the strategic planning process.

4 Principles for effective implementation
This chapter provides the underlying principles on which the strategic framework and the approaches rest: legitimacy and credibility, consistency, scalability and sustainability. Strategies and ideas under consideration can be measured against these principles during the planning process.

5 Tools
This chapter describes the wide range of tools in use to implement these approaches, including publications, games and competitions, and social media, and explains the advantages and disadvantages of each.
6 Ensuring quality

This chapter highlights key issues to consider in order to ensure that initiatives are high quality, focusing on well-crafted messages, powerful images, an engaging and compelling tone, and adapted, localized content.

7 Knowledge management

This chapter addresses some of the challenges raised by the growing area of knowledge management. It provides some initial direction for designing future interventions in order to improve existing processes, monitoring and evaluation, knowledge sharing and capacity building.

The guide is supported by a list of abbreviations and acronyms (page 4), a glossary (page 5) and a detailed references list (page 70). A full set of annexes is available that highlights examples of initiatives by Red Cross Red Crescent actors that integrate public awareness and public education and that demonstrate principles, approaches and tools.
2. Planning: questions to ask

The first step in developing public awareness or public education for disaster risk reduction is to bring together a small, dedicated and creative group to develop a plan of action. Whether you begin at national, district or local level, this guidance will help you involve others and develop a strong and effective plan that will gain the confidence and commitment of the organization.

This process follows the familiar cycle promoted in programme development throughout the Movement. In the case of a public awareness or education initiative for disaster risk reduction, a good place to start is to ask the following set of familiar questions and review the answers.

Why is the initiative so important?

The Movement recognizes that response alone is not sufficient to meet the increasing demand caused by hazard impacts on larger populations. It bears the obligation to share knowledge that can help with identifying hazards and risks, taking action to build safety and resilience, and reducing future hazard impacts. Communities and individuals usually can – and want to – become partners in this. Public awareness and public education for disaster risk reduction can empower normal people everywhere to participate in reducing future suffering.

The IFRC’s Disaster Response and Contingency Planning Guide (published in 2007 and currently under revision) provides detailed guidance on how to analyse risks, including hazards, vulnerabilities and capacities. Although it is challenging to be selective, we need to focus on those risks that are most likely to occur as well as having the most severe impact on the highest number of people. In some cases recurrent smaller risks add up to severe impacts. And in some cases chronic issues such as unclean water and poor sanitation are the key issues to be tackled. Today, urban areas account for more than half of the world’s population, and are at the heart of economic and political life, so we must also be prepared to systematically tackle these risks in their urban contexts. And complex emergencies may layer these risks on top of one another, also demanding systematic approaches.

Figure 1, on the next page, provides a quick way for you to prioritize your focus for public awareness and public education. To use it, consider each of the hazards listed in the box below for their relative probability and impact. Then insert each of the hazards relevant to your context into the corresponding box in the risk matrix.
Next to each hazard, you may want to insert the number of people who will be affected at this level (for example, by death, injury or loss of shelter, livelihood or community). Keep in mind the classic definition of disaster, which is: “a serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources” [48].

Those items entered in the pink and red boxes should be addressed as matters of highest priority.

**Figure 1: Risk matrix**

Geographical area covered:

<table>
<thead>
<tr>
<th>Probability</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example:</td>
<td>• road accidents</td>
<td>• transportation accident</td>
<td>• tornado</td>
</tr>
<tr>
<td>Probability</td>
<td>Example:</td>
<td>Example:</td>
<td>Examples:</td>
</tr>
<tr>
<td></td>
<td>• annual flooding</td>
<td>• power shortage</td>
<td>• urban earthquake</td>
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<td></td>
<td></td>
<td></td>
<td>• fire after earthquake</td>
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<td></td>
<td></td>
<td></td>
<td>• cigarette smoking</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Examples:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• severe winter storm</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>• heatwave</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Examples:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• water shortage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• urban flooding</td>
</tr>
</tbody>
</table>

From the sample entries added to the risk matrix shown above, we can see that earthquake, fire after earthquake or cigarette smoking are the three areas that should be focused on.
Who is the initiative aimed at?

The target audiences for public awareness and public education extend like ripples in a pond. At the core are those people that are already acting consistently to make themselves and those around them safer and more resilient. But this core (especially enthusiastic staff and volunteers) can always benefit from expanding itself.

Immediately outside that core are people who are receptive, and are thinking about acting, but need supportive information and more confidence in order to act. Next are those people who have heard about your efforts, and are beginning to think and talk about the issues. Then comes a larger group that seems resistant to acting, or that lacks wherewithal. People in this category are vaguely aware of the issues but have no intention to act yet. They are often mislabelled “fatalistic”.

Finally, there are many more who have never heard about their risks, or thought much about what they might do about them. Public education and awareness efforts need to reach each of these layers and draw them towards the centre.

As the figure above indicates, there really is no one, single ‘general public’. Instead, there are many different publics, each affected on by a wide variety of social and cultural dynamics and vulnerabilities[9, 12, 52]. Very early in the planning process, it is important to decide which of the various public market segments the initiative will target. Even those approaches that are intended to have broad appeal should be considered in relation to each of the targeted market segments.
Step-by-step guide: Getting to know your market segments

Step 1: List all the different target groups that you can think of, and note down subsets of these. For example, consider:
- geographic location (including urban neighbourhoods, villages, remote areas, slums and suburbs)
- gender
- age
- education level
- language and ethnic groups
- type of workplace.

Include people with disabilities, recent immigrants, displaced or homeless people, non-literate people, street children and working youth, and identify the particular ways to reach these marginalized parts of your audience (see the checklist below).

Step 2: List the kinds of organizations, associations and groups that people belong to. Include neighbourhood associations, workplaces, schools, places of worship, professional and alumni associations, clubs and teams, place-of-origin associations and gangs.

Step 3: Consider how people communicate within their social networks. Discuss and list the opportunities and barriers that each of these present.

This awareness will help you later to select approaches and tools appropriate to the different segments of your target audience.

Checklist: Including marginalized groups

- Consider providing different meeting places or times for women and men. Would providing childcare help?
- Should meetings be run in different languages, and if so do you need translators?
- Consider door-to-door and street outreach.
- Make sure activities include children and youth in age-appropriate ways.
- Provide sign-language interpreters for deaf people.
- Run meetings in wheelchair-accessible locations.
- Provide print and broadcast materials in all the necessary languages.
- Make sure that audio and visual material conveys messages without depending on reading skills.
- Use radio broadcasts to reach remote locations and socially isolated.
- Make sure any captions on video materials are multi-lingual as needed.
- Make sure that web pages can be read and translated by automated systems.
What could the initiative consist of?

Public awareness and public education for disaster reduction seek to turn available human knowledge into specific local action to reduce disaster risks. It mobilizes people through clear messages, supported with detailed information.

Hazard awareness alone does not lead directly to people adopting risk-reduction measures [25, 27, 31, 33]. Researchers have found that people take action only when:

- they know what specific actions can be taken to reduce their risks
- they are convinced that these actions will be effective
- they believe in their own ability to carry out the tasks. [27, 29]

Key research findings can inform the design of successful public education. For example, the following facts are well established:

- People need to be stimulated to seek information. [25, 29]
- People seek consensus, and want validation from many sources (for example, friends, experts, public authorities, respected community leaders, radio, television and web sites) before they act. [25, 29, 32]
- People go along with what they think others are doing [7]. (This means that it is important to focus on all of the positive and local examples: negative threats do not work.)
- Three types of people start ‘pro-social epidemics’: connectors who bring people together, information specialists (in other words, experts), and salespeople who have the ability to persuade [13].
- The most memorable lessons are learned from stories that are simple, unexpected, concrete, credible and emotional [16].
- The gradual process of behaviour change moves from contemplation to planning, then to action, and finally to maintenance [1, 6, 39, 41, 49].

It is good practice start with the easy, little things that will make a difference, and to help people to experience, document and share their successes. It important to face and address the actual physical and environmental measures that reduce risk – for example, fastening furniture against earthquake shaking, or clearing drainage channels to prevent flooding. Similarly, first aid cannot fill the gap if primary healthcare facilities are not open because they failed to take physical risk-reduction measures against wind and ground shaking. And people at risk of flood, wind and earthquake need to learn the basics of disaster-resilient construction. If mitigation requires expertise that is not readily available, now is the time to access it.

Jumping directly from hazard awareness to response-preparedness skills can reinforce the view that disasters are inevitable, and that the only thing people can do is to react to them afterwards [11, 23, 31]. This can inadvertently support a fatalistic attitude [51].

Who should we work with?

Partnerships are important to the success of public education and awareness efforts. Good strategies grow from collaboration, and cooperation is essential for developing consistent, harmonized and standardized messages that will be scaled up and repeated frequently enough to become common knowledge. Meaningful partnerships generally require a decision to invest in relationship building over a long period of time. Many stakeholders are ready to partner with
National Societies, yet the mutual process of getting to know one another, developing trust and committing resources requires long-term dedication.

If you start small, you can grow together from one success to the next. One post-disaster programme with staff responsible for outreach in separate sectors discovered that the team itself was most effective when members partnered each other, in order to saturate one geographic area at a time.

Remember it is not necessary that National Societies lead every effort. Simply being a participant, and lending your weight and credibility, can play a valuable role in winning public support for shared goals. Your leadership, or your presence at the table, is powerful advocacy for the cause.

And finally – your key partners for ‘ground-truthing’ (gathering on-site data to verify information gleaned from remote sources) are representatives of all of your intended beneficiaries. Involve these individuals in the process of developing methods and approaches, as well as in reviewing programmes and materials. An advisory council of this kind will take its job seriously and help promote your objectives.

Table 1, below, sets out a range of different actors that may become partners (in the left-hand column) and gives examples of the rationale and roles that each might be ideally placed to support (in the right-hand column).

<table>
<thead>
<tr>
<th><strong>Table 1: Partnership</strong></th>
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<tbody>
<tr>
<td><strong>Who?</strong></td>
</tr>
<tr>
<td><strong>Ourselves:</strong> Red Cross Red Crescent volunteers, youth and staff</td>
</tr>
<tr>
<td><strong>National governments:</strong> Especially national platforms for disaster risk reduction, and all relevant ministries, agencies or departments</td>
</tr>
<tr>
<td><strong>Local government:</strong> Municipal and district departments and agencies</td>
</tr>
<tr>
<td><strong>Local communities, villages and urban neighbourhoods:</strong> Areas where Red Cross and Red Crescent volunteers live and work</td>
</tr>
<tr>
<td><strong>Target audiences:</strong> Selected representatives of all segments of the intended beneficiary population</td>
</tr>
<tr>
<td><strong>Governments:</strong> A wide variety of agencies and departments at all levels of government, including health, education, emergency management, environment, and planning authorities</td>
</tr>
</tbody>
</table>
Who?

Scientific and technical and local knowledge experts: People who can provide expertise on topics from a broad range of disciplines, including physical sciences, engineering, health, education, marketing, design, communications

Civic sector: All those with similar goals and working in overlapping geographic areas. They may include non-governmental organizations (NGOs), professional and trade organizations, school administrators, teachers and parents

Private sector: Large corporations, including utility and insurance companies, mass media, medium-sized local businesses and small businesses and individual entrepreneurs

Children and youth: Younger children and youth are influential drivers of disaster-prevention behaviour

International partners: Governmental, intergovernmental and non-governmental actors, and business

Donors: Governmental, intergovernmental, private and civic organizations and individuals

Why?

To access legitimate sources of knowledge and experience, in order to formulate and validate messages and guidance. Being able to exchange technical and local knowledge, transform this into actionable information, and to inform and be informed by research, are all essential to progress in risk reduction.

To help in a range of ways. Collaboration is more effective than competition. Some of these partners will act as important bridges to different parts of your target audience. Some partnerships may be official and formal, while others may be as simple and informal.

To help reach wide audiences with clear and simple messages. Corporate social responsibility can be designed to be mutually beneficial. When employers support a cause, this strengthens credibility.

To promote health and well-being, develop confidence and skills, ensure that policies and services are improved and act as an investment in the future. Younger children are most effective in communicating with their parents, while youth are most effective with their peers.

To access, exchange and build on cross-border experience.

The more that donors understand and appreciate the work that you do, the more likely they will be to support you in your long-term and sustained efforts at public education for risk reduction.

When and where is the initiative appropriate?

National Societies are involved in a wide range of activities, most of which offer a ready opportunity to integrate public awareness and public education for disaster reduction. Strategic planning can help take full advantage of these, as well as identifying specific opportunities to elevate public education and awareness as a main focus, and to reach out to high-risk areas and communities.

When woven together, the different strands of traditional Red Cross Red Crescent core activities combine to make communities safer and more resilient, contributing to the process of sustainable development. Public awareness and public education for disaster reduction are expected to find a heightened role in this process in the future. Many of the same measures that promote safe shelter, clean water, sanitation and hygiene, health, environmental restoration, food security and livelihood protection are the very same key behaviours needed for reducing disaster risks. All the accumulated technical expertise from these sectors is needed, along with additional inputs from multi-hazard risk assessment and specific hazard mitigation measures, and cross-disciplinary problem solving.
Table 2, below, shows the many opportunities for integration of public education and disaster reduction.

**Table 2: Integrating public education for disaster reduction**

<table>
<thead>
<tr>
<th>Core activity</th>
<th>Activities supported by public education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessment and planning</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Vulnerability and capacity assessment | • Hazard identification  
• Vulnerability and capacity assessment  
• Hazard, vulnerability and resource mapping  |
| Planning and advocacy              | • Community-based disaster preparedness planning  
• Integrated community planning  
• Family disaster planning  
• Safe land-use planning  
• Business continuity planning  
• Educational continuity planning  
• Legislative advocacy  
• Insurance planning  |
| Early warning systems              | • End-to-end early warning systems  
• Early warning message formulation, delivery and verification  
• Evacuation planning  |
| **Physical and environmental mitigation** |                                                                                                                                                                               |
| Structural and non-structural safety | • Safe land-use practices  
• Disaster-resilient construction (homes, schools, health facilities)  
• Retrofit existing construction  
• Building and maintaining shelters and safe havens  
• Fastening tall and heavy furnishings against earthquake shaking  
• Fastening equipment and arranging supplies to safeguard against shaking  
• Making sure doors open outwards  
• Raising supplies and assets above flood levels  
• Advocacy for building code development and enforcement  |
| Infrastructure safety, including water and sanitation | • Evacuation route construction  
• Solid waste management  
• Clearing flood channels  
• Landslide mitigation  
• Household water supply and treatment  
• Water conservation (including rainwater harvesting, groundwater recharge, run-off catchments and sand dams)  
• Watershed clean-ups  
• Eco-san recycling toilets  
• Energy conservation  
• Clean and renewable energy for heating, cooking and lighting (including solar, wind, and water pumps)  |
| Food security and livelihood protection | • Wetland and coastal restoration  
• Forestation and reforestation  
• Restoration of biodiversity  
• Crop selection for drought adaptation  
• School and community gardens  
• Vocational training  |
## Physical and environmental mitigation

### Health
- Hygiene and sanitation promotion
- Environmental health surveillance
- Awareness to prevent airborne and water-borne diseases
- Insecticide-treated mosquito nets
- Malaria prophylaxis and treatment
- Oral rehydration education
- Condom distribution

## Preparedness, response and recovery

### Preparedness skills, psychosocial support community-based first aid
- Drills, tabletop exercises and simulations
- Early warning compliance and evacuation
- Organization of response
- Light search and rescue
- First aid skills
- Mass casualty triage
- Psychological first aid
- Life skills and conflict resolution
- Swimming lessons
- Wireless communications

### Response provisioning
- Emergency water and food supplies and storage
- First aid supplies (such as standardized first aid kit guidance)
- Life jackets and flotation devices
- Emergency communications equipment
- Emergency shelter supplies

---

**Structural safety (China)**

**Non-structural safety (Turkey)**

**Environmental protection (Indonesia)**

**Guidance materials for response and recovery as well as development**
How will we approach the initiative?

This guide sets out the key ways to approach public awareness or public education for disaster risk reduction. Chapter 3 highlights four major types of approaches that can be used:

- campaigns
- participatory learning
- informal education
- formal school-based interventions.

These are not mutually exclusive. The idea is to find the best fit between purposes, target audiences, and the strengths and resources you have available. Successful programmes may use many approaches, settings and tools to repeat their messages for maximum impact.

There are three important principles that guide these efforts (see Chapter 4):

- consistency and standard messaging
- legitimacy and credibility
- scalability
- sustainability.

All the standard professional rubrics for programme planning apply to this process, including:

- the need to identify indicators
- staff and volunteer needs
- resource requirements
- detailed description of methodology for implementation
- monitoring and evaluation.

Further important considerations are:

- lessons learned from other attempts in the past – both locally and globally
- evidence from research findings about best practices from risk communications, social marketing, and public health traditions
- feasibility of starting at home (literally) and in the workplace.

What tools should we use?

Once you have decided on the approach, the next step is to select a range of tools to disseminate the messages. Chapter 5 describes a wide variety of options, including publications, training modules and presentations, e-learning curricula, formal curriculum materials, performing arts, games and competitions, audio and video materials, web pages and activities, social media, and telecommunications.

These can be divided into three different types of contact:

- one-way broadcast (from one single source to a wide audience)
- two-way face-to-face interactions
- ‘many-to-many’ interactions (as in social networking using telephone and web tools).

Evidence shows that using a combination of these types of contact is the best way to support the ongoing process of behaviour change[41]. As people cope with ever-increasing information loads, it is clear that social networks will continue to play a critical role in social learning.
Your choice of tools will depend on your audiences, approaches and resource availability. The quality of those tools relies upon well-crafted messages, powerful images, the ability to engage the audience, social proof of their value, and how well they are adapted and localized. While tools for desktop publishing, web design, and even video production make quality production more feasible for amateurs, professional support from local university design and communications departments, and even professional advertising firms, have become important.

For tips on enhancing the quality of these tools, see Chapter 6.

**What else do we need to consider?**

The expected impacts of public awareness and public education for disaster reduction are directly aligned to expected impacts of Strategy 2020. The best evidence of success takes the form of potential disasters that are avoided. This means that real-life events in the future (both rapid onset and slow onset) will provide the ultimate tests.

However, in the meantime we need evidence to help us find the most effective means of educating and mobilizing for disaster risk reduction. Systematic evaluation is vital to developing a culture of prevention, and knowledge management is increasingly important – both for quality assurance and for ongoing capacity building and sustainability.

Historically, public awareness and education activity outcomes and indicators have measured either the number of activities (for example, the number of participants in training or the number of copies of handouts) or the knowledge gains. However, a far more reliable way of assessing impact is to measure indicators of behaviour change associated with resilience, response preparedness, risk-reduction measures and advocacy activities.

Monitoring is essential, as it enables you to refine approaches and tools mid-way through the project. As well thought-out approaches and high-impact tools emerge, it is important to evaluate them, as successes and shortcomings can provide lessons for the future. However, lessons documented can only become lessons learned when they become part of institutional memory. For this to take place, systematic knowledge management, both within the Movement and within regions and National Societies, is also essential.

The challenges to information sharing and capacity building include language differences, cultural barriers and widely differing access to communications infrastructure. Regional and international resource centres play a vital role in information sharing, filtering, quality assurance and capacity building. Chapter 7 addresses some of the means for doing this that already exist, and is intended to stimulate discussion on ways to continue to improve knowledge sharing and capacity development, using and optimizing tools of the digital age.
This chapter sets out four key approaches to public awareness or public education for disaster risk reduction:

• **campaigns**
• **participatory learning**
• **informal education**
• **formal school-based interventions**.

For each of these approaches, the guide sets out background information, useful tools (such as checklists and templates), advantages and disadvantages of the approach, and tools that can be used within this approach.

### Approach 1: Campaigns

The focus of campaigns is to provide uniform, large-scale impact with standard messages. There are many examples of large-scale national and international public awareness campaigns that have led to massive social change. Examples include childhood immunization, the wearing of seat belts in cars, and smoking restrictions.

Campaigns comprise a set of activities that may include:

• publications, including billboards, posters, newspaper or magazine coverage, information cards, flyers, bookmarks and brochures
• curricula, modules and presentations, including slide presentations and oral presentations
• e-learning
• performing and cultural arts
• games and competitions
• audio and video materials
• web pages and activities
• social media and telecommunications.

These activities can be divided into the key components and variations of this approach, shown in Table 3[41].
Table 3: Key components of campaigns and variations

<table>
<thead>
<tr>
<th>Key components</th>
<th>Variations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Message</strong></td>
<td>• One message or several  • All together or separately</td>
</tr>
<tr>
<td><strong>Audience</strong></td>
<td>• National  • District  • Local</td>
</tr>
<tr>
<td><strong>Strategy</strong></td>
<td>• Launch  • Focal days, such as an anniversary or memorial day  • A national preparedness day or week  • A Red Cross Red Crescent day or week  • International Disaster Reduction Day (in October)  • Weekly or monthly events or activities  • Awards or competitions  • Demonstrations</td>
</tr>
<tr>
<td><strong>Timing</strong></td>
<td>• Length: short term or long term  • Duration: year round or seasonal  • Frequency: one off or recurring</td>
</tr>
</tbody>
</table>

The usual pattern is that ‘early adopters’ (such as National Societies) lead the way, using their enthusiasm and energy to convince the ‘early majority’ (the deliberate and sceptical masses) to join them. Gradually, as public support and voluntary compliance builds, public policy change becomes easier to implement. Rules and incentives can help to bring the ‘late majority’ in. Finally, there will be ‘stragglers’, who may resist until there are penalties.

Most successful campaigns require a sustained, repeated and consistent thematic set of messages repeated over a long period of time, through activities in the public, education, private and civic sectors. These are often built by a unifying coalition under a single umbrella. Some recur seasonally (for example, in the case of hurricane season). Others are ongoing, and select an annually changing sub-theme, or a monthly calendar with 10–12 messages per year.

The strongest, and most memorable, campaigns have been built around a single unifying and enduring slogan, expressed and delivered in a multitude of creative ways through both predictable and recurring outlets as well as new surprises. A good example is ‘Clunk Click Every Trip’. This slogan was at the heart of road safety in the UK from 1971, and laid the groundwork for compulsory seat belt legislation introduced in 1983 (http://en.wikipedia.org/wiki/Clunk_Click_Every_Trip). Some campaigns have an enduring mascot. In the United States, Smokey Bear has delivered the slogan ‘Only YOU can prevent forest fires’ since 1944. About 95 per cent of adults and 77 per cent of children recognize him and his message. (http://en.wikipedia.org/wiki/Only_you_can_prevent_forest_fires).

Where campaigns are short term and time limited because they successfully meet their goals (as with Thailand’s measles eradication campaign), the tools developed can then be adapted and used at another time or place, when a similar intervention is needed.

Because campaigns need newsworthy moments and high visibility, participation is often focused around designated days such as a commemorative event, a community-wide drill, a festival, fair or exhibition, or through demonstrations and simulations. In between these focal events, volunteers continue to deliver the key messages through live interactions. These may take place in a range of ways...
– for example:
• at school assemblies and after-school activities
• at an outreach table at a local farmers’ market
• at cultural or performing arts events
• during outreach and advocacy visits.

In addition to Red Cross Red Crescent volunteers, actors such as community coalitions, scouts, civil defence organizations, university students and members of professional associations are often enthusiastic participants. Campaigns can also make excellent use of participatory learning approaches.

Use the simple campaign-planning template below to help you get started. [41]

**Figure 2: Campaign-planning template**

<table>
<thead>
<tr>
<th>Campaign planning overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campaign name:</td>
</tr>
<tr>
<td>Coordinators:</td>
</tr>
<tr>
<td>Duration:</td>
</tr>
<tr>
<td>Overview:</td>
</tr>
<tr>
<td>Goals and objectives:</td>
</tr>
<tr>
<td>Campaign messages:</td>
</tr>
<tr>
<td>Target audiences:</td>
</tr>
<tr>
<td>Communication strategy:</td>
</tr>
<tr>
<td>Partners and responsibilities:</td>
</tr>
<tr>
<td>Budget and in-kind contributions:</td>
</tr>
</tbody>
</table>

The advantages and disadvantages of campaigns are set out in Table 4, below.

**Table 4: Advantages and disadvantages of the campaigns approach**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reaches the largest numbers of people with standard messages</td>
<td>• Must be carefully planned and thought through</td>
</tr>
<tr>
<td>• Attract mass media attention</td>
<td>• Require excellent organization</td>
</tr>
<tr>
<td>• Builds on strengths of all partners</td>
<td>• Requires strong support of partners</td>
</tr>
<tr>
<td></td>
<td>• Stamina is required: campaigns should not end until they succeed</td>
</tr>
</tbody>
</table>

Having considered the campaigns approach, we now move on to Approach 2: participatory learning.

**Approach 2: Participatory learning**

People are especially motivated by approaches in which they themselves participate in a solution, and especially when they believe it is their own idea. The focus of participatory learning is to engage people in discovery and problem solving for disaster risk reduction. At the heart of all of these activities is the community’s own experience of empowerment.
This involves using language, stories, songs and traditions to strengthen the emerging culture of prevention. This is typically accomplished through tools such as:

- action-oriented research such as vulnerability and capacity assessment
- disaster management planning
- implementing risk reduction measures
- monitoring and improving on plans through drills and simulations.

These four elements of participatory learning can be applied at three levels:

- The organizational level – headquarters, branches, schools, businesses, workplaces, homes
- The community level – being scaled up to reach villages, towns, cities, school systems, and regions
- The population level – being expanded to incorporate entire urban populations, by taking advantage of internet-based tools and social media.

Parallel tools specifically for use with children, and for marginalized populations can be valuable as well.

Specific tools within this approach include:

- publications such as booklets
- curricula, modules and presentations
- participatory activities such as transect walk, risk and asset mapping, seasonal calendar, group discussion, drills, simulations and tabletop exercises
- audio and video materials, including videos, audio clips and songs or other music
- web pages and activities such as workspaces
- social media and telephone-based initiatives, such as text messaging and polling.

**Vulnerability and capacity assessment**

More than 60 National Societies have some experience with vulnerability and capacity assessment (VCA) approaches, using traditional tools incorporated into facilitator training modules and supplementary toolkits for application in rural communities. These include:

- transect walk
- community risk and capacity mapping
- seasonal calendar
- focus-group discussions.

In recent innovations, National Societies such as Paraguay, Indonesia, Sri Lanka and China have used VCA effectively for integrated community-based disaster reduction. Meanwhile staff and volunteers are discovering a wide range of tools through the ProVention Consortium's CRA Toolkit (available at www.proventionconsortium.org) [63], and are actively exploring ways of adapting and developing tools for urban settings (in Costa Rica, Guatemala, Honduras and the United States) and tools that integrate climate change concerns.
In VCA, the focus of the learning is identifying and prioritizing threats and hazards, recognizing and mobilizing resources and capacities, and beginning disaster reduction action planning. This process may result in the community doing one of the following:

- fulfiling the task themselves and making their community safer (change)
- enlisting support from the municipality or other organizations (advocate for or influence change)
- acknowledge that the solution is very complex and will require a longer-term process (transform). This may also lead to legislative advocacy.

Participatory disaster management planning

Participatory disaster management planning takes the VCA approach forward one more step by establishing a model for the long-term ongoing process of planning for risk reduction and response.

**Step-by-step guide: Planning participatory disaster management**

**Step 1: Develop guidance and training materials**
Guidance and training materials are needed for the following reasons:

- to evaluate and apply appropriate physical and/or environmental protection measures
- for risk reduction
- to develop disaster response skills.

**Step 2: Learn and practise skills**
Participatory learning takes place as skills are learned and practised, for example, in the following areas:

- evacuation route planning
- cyclone and flood shelter construction and maintenance
- creating rainwater drainage channels and harvesting rainwater
- fastening furnishing and equipment against earthquake shaking
- response simulation drills.

**Step 3: Provide training**
The need for disaster response skills may be met through training in:

- community first aid
- mass casualty triage
- response organization
- light search and rescue
- fire suppression
- emergency communications
- psychosocial support
- family reunification.

**Step 4: Carry out drills and simulations**
At their best, drills and simulations provide much more than simply an occasion for professional responders to practise their skills and monitor their plans. They also offer an opportunity for the public to do some reality testing, allowing lessons to be learned in advance of hazard impacts.
The most important part of the drill is the full participation of the communities, and the reflection and renewed round of action planning that occurs after the drill, which leads to the plan being modified. Large-scale annual community-wide drills can sustain public awareness and ongoing learning by doing. Two excellent examples of drills and simulations draw from Latin America (Guía Práctica Para la Realización de Simulaciones y Simulacros[75]) and the United States (see the Great California ShakeOut web site at www.shakeout.org).

The advantages and disadvantages of this approach are set out in Table 5, below.

**Table 5: Advantages and disadvantages of the campaigns approach**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| • This approach begins with communities’ self-identified threats and vulnerabilities, developing strong risk awareness  
• Identifying resources and capacities leads to greater confidence and self-sufficiency  
• Builds local and personal ownership  
• Provides opportunity to integrate disaster reduction, health, water and sanitation, livelihood protection and climate-change adaptation  
• Requires participant communities to own their own data and plans  
• Enables National Societies and branches to work with people rather than for them  
• Attracts social volunteers, building organizational capacity and improving relationships among all partners  
• Can draw on the wide range of community risk assessment tools available for adaptation  
• Possible for schoolchildren and youth to participate in similar processes | • Identifying risk without carrying out other activities does not lead automatically to knowledge of solutions  
• It can be labour intensive to create impact on small population  
• Facilitators need substantial training in participatory research methods, culture and cultural sensitivity, team building, group dynamics, recording and interpreting data  
• Comprehensive VCA processes require significant time commitment from volunteers and community participants  
• Solutions may be complex  
• Adaptations are required for urban applications  
• Community needs and priorities may go beyond donor priorities and regional committees’ ability to support  
• Mitigation activities require a range of high-quality guidance materials and training programmes  
• Advocacy actions that are called for may encounter resistance and need additional skills and support |

**Approach 3: Informal education**

The focus of informal education is taking advantage of brief moments and encounters to stimulate thinking and engage people in discovery of actions and behaviours to increase safety and resilience. Informal education in communities and schools is the most flexible of all approaches with respect to setting, audience and timeframe.

Table 6 shows the various types of informal education available.
Table 6: Types of informal education

<table>
<thead>
<tr>
<th>Public</th>
<th>Group</th>
<th>Solitary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>School</td>
<td>Work</td>
</tr>
<tr>
<td>Television</td>
<td>Radio</td>
<td>Internet</td>
</tr>
<tr>
<td>A few minutes</td>
<td>A couple of hours</td>
<td>A day or two</td>
</tr>
<tr>
<td>Specially planned</td>
<td>Infused into ongoing projects</td>
<td>Spontaneous or viral elements</td>
</tr>
</tbody>
</table>

Specific tools that can be used for informal education include:
- **Publications** – posters, guidelines, flyers, brochures, booklets, activity books, paper models, comic books, story books, colouring books, assembly kits and teacher resources
- **Curricula, modules and presentations** – teacher briefings and community training
- **E-learning** – self-study curricula
- **Performing and cultural arts** – plays, dances, poems, songs, street theatre, puppet theatre
- **Games and competitions** – card games, board games, cooperative, activities role play, drawing competitions, writing competitions, tournaments, radio quizzes
- **Audio and video materials** – short videos, radio programmes, television programmes
- **Web pages and activities** – web sites, online games, online quizzes
- **Social media and telecommunications** – SMS, early warning.

Informal education involves disseminating standard messaging but with the flexibility to accommodate the needs and concerns of specific local audiences. This is particularly effective because peer information, social proof and social support are vital to shifting human behaviour. Volunteers are leaders and role models that offer powerful examples as they engage the wider public. Tools focused on stimulating discovery and problem solving allow scope for endless creative activities and materials to appeal to various target-audience segments.

Many facilitation tools from the IFRC’s Community-Based Health and First Aid in Action initiative are familiar models, including the facilitator’s guide[65]. Other examples include the Caribbean Red Cross Societies’ Better Be Ready campaign kit[66] and Expect the Unexpected: Facilitator’s guide by the Canadian Red Cross[67]. These include:
- presentations
- guided discussion
- demonstration, visual aids
- role play
- storytelling
- case studies.
- brainstorming
- small group discussion
- question box
- dramatization
- simulation

Similarly, a number of tools for social mobilization, such as the Volunteer Manual for Community-Based Health and First Aid[68] are familiar to facilitators and volunteers trained in the Community-Based Health and First Aid (CBHFA) programme. They involve communicating and building relationships, and organizing, sensitizing and mobilizing communities.

Peer-to-peer activities work equally well with adults, youth and children. Much of the best informal education has cross-generational appeal. Often the energy, enthusiasm and curiosity of children and youth are the hooks for adult involvement. Tools can, and should, be attention grabbing, engaging, participatory and practical, so that learning and acting become one and the same thing.
Informal school-based disaster risk reduction has formed part of Red Cross Red Crescent activities since the 1970s. It is widely practised partly because it is much easier to access than formal education, and because it does not compete with the regular curriculum. Schools welcome the help, and students welcome some fun. Schools also offer the opportunity to develop junior or youth Red Cross Red Crescent groups – a continuous source of new members and volunteers.

This is especially true if teachers can be identified within the school to lead these ongoing groups. Informal education in schools can take many forms, including:
- disseminating publications
- giving presentations
- role play
- community-service projects
- after-school clubs.

One of the strengths of school-based informal education is that the school can act as a hub to attract the wider community, through special programmes, by showcasing student work and by sending messages home with students.

Just like other strategies, the potential benefits of informal education will be reached through scaling up, consistent messaging and a focus on behaviour change.

The advantages and disadvantages of this approach are set out in Table 7, below.

### Table 7: Advantages and disadvantages of the campaigns approach

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fun for volunteers</td>
<td>• Variable penetration across geography and time</td>
</tr>
<tr>
<td>• Fun for participants</td>
<td>• Planning for scale and sustainability are challenging</td>
</tr>
<tr>
<td>• Can support and strengthen wider campaigns</td>
<td>• Should not attempt involvement in school disaster management or school curriculum without education authorities’ consent</td>
</tr>
<tr>
<td>• Takes full advantage of volunteer strengths and skills</td>
<td>• Where other organizations provide similar school-based programmes, consistency requires inter-agency coordination</td>
</tr>
<tr>
<td>• Includes younger children</td>
<td>• Special outreach may be needed to reach children and youth not in school</td>
</tr>
<tr>
<td>• Schools can be hub for attracting parents</td>
<td></td>
</tr>
<tr>
<td>• Young children can involve parents</td>
<td></td>
</tr>
<tr>
<td>• Youth can involve one another</td>
<td></td>
</tr>
<tr>
<td>• Activities can be designed to reach women and men, boys and girls, people with disabilities, and many language groups</td>
<td></td>
</tr>
<tr>
<td>• Informal education in schools can be a stepping stone to formal introduction into curriculum</td>
<td></td>
</tr>
</tbody>
</table>

### Approach 4: Formal school-based interventions

The focus of formal school-based interventions covers two areas: school disaster management and disaster risk reduction in school curricula. These are considered to be formal because accountability and responsibility for school safety and curricula belong exclusively to education authorities, so they require support for long-term planning and capacity building. Whether there is one such authority, many, or seemingly none, the same issues of caution remain.
Unless efforts are being officially and systematically piloted or tested, inconsistency may undermine rather than support the goal.

No matter how schools are organized, where possible a proper approach should begin with a group of interested NGOs and intergovernmental organizations that approach school authorities in a spirit of collaboration, in order to offer support and identify a single focal point within the system. Expecting schools to contend separately, with multiple uncoordinated projects and programmes, places a burden on school authorities and is ultimately unproductive. The goal is not to run a parallel system, but to support and help develop capacity within existing public education systems. The team should also approach and involve national disaster management authorities.

School disaster management

The primary goals of school disaster management are to ensure the safety of students and staff, and for education to continue. Sustained school disaster management requires the familiar participatory and ongoing process of identification of hazards and risks, mitigation and reduction of risks, and developing response capacity. In order to be effective, these need to be led by school staff and supported by consistent policies throughout the jurisdiction.

A school disaster management plan, developed at the school level, should be the living document that expresses this. Standard operating procedures in response to various hazards should be consistent. Training in response skills is vital. The following elements are essential:

- an incident command
- type of system to organize
- the local responder
- fire suppression
- psychosocial support
- sanitation
- evacuation
- community-based first aid
- mass casualty triage
- light search and rescue
- communications
- shelter
- nutrition
- student–family reunification procedures.

A recent global mapping of the Red Cross Red Crescent initiatives shows several elements of school disaster management have been successfully piloted, including:

- the Safer Schools campaign
- school disaster management training materials for teachers and students
- schools as emergency evacuation centres
- school first aid
- community maintenance of schools.

Guidance materials for school is beginning to emerge and will play an important role.

School drills

School drills form a vital part of the school disaster management process, and provide an intensive learning experience. They should be followed by reflection and assessment by all members of the school community. Lessons learned are incorporated into the school disaster management plan, and goals set for improvement next time. Depending on hazards faced, there several major types of drills that can be practised:

- building evacuation (if the building is unsafe)
- site evacuation (if the site is unsafe)
- shelter in place (a procedure for taking shelter if the outdoors is unsafe)
- lockdown (keeping students inside in case of violent attack).

Many individual skills and protocols can also be practised separately, and as part of more complete simulation drills:

- student release procedures (safe family reunification)
- drop, cover and hold (for earthquake)
- putting on life jackets and practising water safety (for flood or tsunami)
International Federation of Red Cross and Red Crescent Societies

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- extinguishing small fires
- light search and rescue
- mass casualty non-medical triage
- emergency communications
- flexible organization and assignment of response roles
- public relations, communications and documentation
- stop, drop, and roll (when on fire)
- lightning strike safety
- first aid
- incident command systems
- availability of response provisions
- transportation and procedures for locations away from school
- reverse building evacuation.

Schools need to master building evacuation rules such as those shown in the box below to ensure that staff and children can respond safely if an emergency arises.

**School building evacuation drill rules**

- Don't push. Don't run. Don't talk. Don't go back.
- Teachers should buddy up, with one leading and one behind two classes.
- On exit, move away from building for safety.
- Assemble quietly and account for all students.

Curriculum work

School-based curriculum work in disaster reduction takes three main forms, each appropriate to different contexts:

- standalone courses
- integrating short modules (specific subjects and grade levels)
- infusion throughout the curriculum (multi-subject, using readings, examples, problems and activities).

Tools in this area fall into the category of curricula, modules and presentations, including:

- textbooks
- modules
- case studies
- exercises
- hands-on learning materials
- informal education tools, as listed earlier in this chapter (see page 29).

Standalone courses are much easier for ‘outsiders’ to contribute to, but much harder to incorporate into the available time in the curriculum. All forms require roughly the same sequence of steps and leadership from skilled curriculum experts, as described below.

**Step-by-step guide: Developing a standalone course**

**Step 1:** Identify public education curriculum development focal points and content experts with whom you can work in partnership.

**Step 2:** Familiarize yourself with, or audit, the existing school curriculum to find out where disaster reduction and climate adaptation and mitigation issues are already being addressed, and where they can be enhanced or introduced.

**Step 3:** Articulate and agree on the scope and sequence of competency outcomes.
Step 4: Develop content for students.

Step 5: Develop support materials and/or training for teachers (self-study, in-service, and/or training through teacher-training colleges or universities).

Well-developed education systems go through curriculum adoption cycles that typically last five-to-ten years. Professional educators look at the scope and sequence of knowledge, competencies and skills for each subject area, aligning reading, problem solving, and discovery activities. Printed and digital curriculum materials must be identified or developed to support this. This means that integrating new modules in a specific subject and grade level, or ensuring infusion throughout the curriculum in many grade levels and subjects, is typically a long-term undertaking.

Many educators believe that the curriculum should be designed to come alive, and should be flexible enough to incorporate local content about local realities. For example, while science and geography courses often include information about natural hazards, this can be structured so that teachers can link it to local concerns, such as:

• identifying the precursors of landslides
• incorporating local rainfall monitoring into the design and delivery of people-centred early warning systems
• methods of stabilizing slopes and preventing landslides
• land-use planning
• safe evacuation routes and procedures.

In other words, simple hazard awareness and abstract science or geography education is not enough.

Initially, capable staff or volunteers can build teacher capacity through a cascading model. However, sustainability requires capacity building through formal ongoing teacher-training institutions. E-learning, in the form of digital self-study courses for teachers and students, may also be developed for delivery via DVD or the internet, where resources permit. The advantages and disadvantages of this approach are set out in Table 8, below.

Table 8: Advantages and disadvantages of the curriculum approach

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Integrating disaster reduction into the curriculum assures sustained</td>
<td>• Education authorities and teachers may feel that they cannot add one more</td>
</tr>
<tr>
<td>learning across generations</td>
<td>thing to an already full curriculum</td>
</tr>
<tr>
<td>• Articulated subject matter leaves no room for doubt about its importance</td>
<td>• Standalone courses may be offered only as electives, and modules may be used</td>
</tr>
<tr>
<td>• Entry points into curricula are fairly easily identified within existing</td>
<td>only on a voluntary basis by interested teachers</td>
</tr>
<tr>
<td>curricula at all grade levels, and in many different subjects, including</td>
<td>• Teachers may not feel capable of teaching unfamiliar material, and may</td>
</tr>
<tr>
<td>natural sciences, environment, geography, history, social studies, language</td>
<td>require extensive support</td>
</tr>
<tr>
<td>and literature, health and safety, and civics</td>
<td>• Working with education authorities in the context of curriculum adoption</td>
</tr>
<tr>
<td>• Module materials can be developed relatively easily</td>
<td>cycles requires a long-term commitment by professional educators and content</td>
</tr>
<tr>
<td>• Without adding to the curriculum, disaster reduction examples can be</td>
<td>experts</td>
</tr>
<tr>
<td>supported to support objectives in literacy, writing, numeracy, critical</td>
<td>• Once infusion is accomplished, it can be difficult to discern and point to</td>
</tr>
<tr>
<td>thinking, problem solving and cooperative learning</td>
<td></td>
</tr>
<tr>
<td>• Infusion into the curriculum requires less capacity building as the</td>
<td></td>
</tr>
<tr>
<td>content is introduced subtly through many subjects</td>
<td></td>
</tr>
</tbody>
</table>
This chapter sets out four key principles that need to be applied throughout public awareness and public education for disaster risk reduction:

• **Consistency and standard messaging**
• **Legitimacy and credibility**
• **Scalability**
• **Sustainability**.

Each of these is described in turn.

**Principle 1: Consistency and standard messaging**

Key safety and resilience messages are needed to promote urgent action to the broad general public. These messages must be standard and consistent in order to have credibility, legitimacy and strong impact. They must also be backed by a consensus of key stakeholders, and based on the best scientific and local knowledge available.

Standard messaging is considered to be an urgent goal in disaster reduction education, and is particularly important when it comes to scaling up efforts to create a culture of safety. If messages seem inconsistent or unclear the direct result is confusion, mistrust, apathy and inaction. When the same messages come from a variety of authorities, it becomes much easier to decide to take the positive action steps recommended [10, 32].

The content of standard messaging may refer to mitigation, preparedness and response behaviour, either in relation to all hazards or to specific hazards. Standards can usefully be developed at global, regional and national levels. Since these messages are delivered to a wide audience, they tend not to contain specific guidance for any particular locality.

One example of standard messaging successfully implemented at a global scale was the international effort to avert a pandemic of the H1N1 virus (commonly known as ‘swine flu’) in 2009. The IFRC’s messages were developed in line with guidelines established by the World Health Organization. They were carefully crafted under the catchy slogan “Your best defence is you”. The five simple instructions intended for all audiences, everywhere, focused on individual behaviour:
• Wash your hands.
• Cover your mouth.
• Keep your distance.
• Separate your sick family members.
• Dispose of your waste.

The final instruction was “For more information, call this number...”.

The campaign web pages included interactive multimedia elements and downloadable print materials. Each of these messages is valuable if remembered and practised on its own. Together, the five messages form a comprehensive and effective approach to prevention of airborne diseases. Many National Societies were able to implement the programme with their own adaptations.

Similarly, the Red Cross/EU Office’s standard messaging regarding general disaster preparedness contains ten steps, summarized by the umbrella slogan “Informed. Prepared. Together.”

Regional standards

An example of the need for regional standards arose in South Asia. Red Cross volunteers were frustrated to see that although first aid is recognized as a cost-effective, safe and simple way to save lives, and everyone is advised to have ‘a first aid kit’, there was no guidance at all on exactly what such a kit should contain.

The Building Safer Communities initiative decided to engage with all the South Asian Red Cross and Red Crescent Societies to develop standardized first aid kit guidance. They also sought input from the broad United Nations Solutions Exchange Network. The consultation process led to the development of four model kits, all presented within the volume *Standard Criteria for First Aid Kits*(69):

- Family First Aid Kit
- First Aid Kit for Trained Volunteers
- School First Aid Kit
- Search and Rescue (SAR) Kit.

Guidance on personal protection and hygiene was also included. Some localization is suggested, where it is needed, to meet specific threats, such as snakebites.

In this example, the regional standard is especially useful for general guidance. This provides a model for each National Society. In each country, health and civil protection authorities would be valuable participants in developing a national consensus around these standards or recommendations.

At a national level, a family disaster plan is often the starting place for standard messaging. A good example is the Australian Red Cross’s RediPlan, based upon a simple four-step message “Be informed. Make a plan. Get an emergency kit. Know your neighbours.” (www.redcross.org.au/ourservices_acrossaustralia_emergencyservices_prepare.htm). The message is sufficiently comprehensive to cover a full range of disaster reduction activities in relation to any hazards faced. The steps are short enough to memorize, and are recognized as an invitation to action. Each of the four messages is presented with a reinforcing colour code, backed up by easily available detailed information. The ‘Redi’ name gently brands the message without excluding or alienating other stakeholders.
Consistency usually requires partnerships. Often donors fund several organizations to work on disaster risk reduction activities in a particular country. Here collaboration in standard messaging, and often in developing joint information, education and communication materials, with multiple logos, helps all approaches to succeed.

For several decades, standard disaster preparedness messaging in the United States has inspired public confidence because it bore the logos of three familiar institutions: the American Red Cross, the Federal Emergency Management Agency and the US Geological Society. In recent years, a forum known as the Coalition of Organizations for Disaster Education has brought together 25 government agencies and non-profit public-interest education organizations to agree on a broad range of disaster preparedness awareness and education messages, updated in the title Talking about Disaster: Guide for Standard Messages.

This document ensures consistent, accurate and timely messages. Subject-matter experts help the group to achieve a consensus on messages that organizations voluntarily follow. The American Red Cross provides staff time to organize this voluntary coalition.

In the context of the framework for community safety and resilience, much more can be done to strengthen standard messaging – globally, regionally and nationally – in the future.

**Principle 2: Legitimacy and credibility**

Legitimacy, in general, is the quality of conforming to one’s principles. Credibility is the quality of being trusted or believed in. Some people subscribe to the simple notion that the Movement’s legitimacy and credibility come primarily from its unique relationship to government and its effective role in disaster response. However, evidence from grassroots volunteers, who form the lifeblood of the National Societies, suggests that legitimacy comes from the living demonstration of its principles, and credibility comes from all of the work undertaken to empower communities and reduce human suffering.

As the Movement knows that the impact of disasters, poverty, inequality, insecurity and climate change are far greater than its capacity to respond to these situations, and as it has access to the knowledge needed to achieve safety and resilience, it is bound by its principles to share and develop this knowledge. Large-scale public education is therefore essential for its legitimacy and credibility. A key aspect of legitimacy and credibility is to “be the change you want to see”. National Societies, staff and volunteers need to act as role models for everyone else, in all areas. For individuals, this may mean:

- giving blood
- practising good hygiene and hand washing
- adhering to road safety and wearing seat belts
- following health promotion guidance
- not smoking in the workplace.
Organizationally, this may mean:
- making sure that headquarters and branch offices are located and constructed to be disaster resilient
- keeping exit paths clear for evacuation
- having doors that open outwards
- in seismic risk zones, fastening equipment and furnishings in health centres
- carrying out regular drills.

If those at headquarters and branches do not believe in and act on the mitigation messages themselves, public education efforts will have very little chance of success. Just as we are instructed on an airplane “If there is a drop in cabin pressure... put on your own mask first”, staff and volunteers must realize that if they are to be effective in protecting the most vulnerable, they must first take care of themselves.

While this might seem straightforward, research has found that even when people understand their disaster risks at a general level, an optimistic bias makes almost everyone inclined to think that “others will be more severely affected than me”. This bias can also be seen among international organizations, civil society organizations, and National Societies as well.

There are a number of recent examples of programmes that have strengthened legitimacy:
- The Japanese Red Cross headquarters has been retrofitted for seismic safety, and food and water sufficient for 400 staff for three days is now stored on site.
- The Colombian Red Cross is striving towards a paperless office in order to reduce waste and reduce environmental degradation.
- Several National Societies have issued statements reconfirming advice to “drop, cover and hold on” during an earthquake, to counter disinformation – poor advice with no basis in scientific evidence, distributed by email and passed around virally by hundreds of thousands of people, with good intentions, but with harmful effects.

As National Societies undertake their own risk assessment and mitigation activities, we expect to see many more such examples.

Credibility also rests on the quality and consensus around public education messages. The IFRC is relied upon globally to integrate up-to-date research findings and lessons learned to current guidance. It is in a unique position to transform complex information (in academic-sounding subjects such as “risk communications”, “warning compliance”, “household hazard adjustments”, and “epidemiology of deaths and injuries”) into understandable and actionable messages.
Principle 3: Scalability

Scalability refers to the extent to which it is possible to “do more” (one of the cornerstones of Strategy 2020) by rolling out activities to a larger number of people. Whatever strategies, approaches and tools are selected, one of the underlying challenges is whether these can be applied at a sufficiently large scale that the disasters and suffering being faced can be reduced.

There are two extreme challenges to scalability, both requiring cost-effective solutions. On the one hand, more than half of the world’s population now lives in cities. Most of the world’s megacities (with populations of more than 10 million) face serious seismic risks. Many hundreds of cities face recurring flood and storm hazards. There is urgent need to reach these large urban populations in economic and political heartlands. On the other hand, the wide geographic spread of rural populations in remote and inaccessible locations poses a different set of challenges in scaling up.

Occasionally, Red Cross or Red Crescent Societies find themselves the fortunate victims of their own success. In Syria, the National Society started a road safety campaign with 20 schools, and developed an engaging snakes and ladders game in cooperation with UNICEF. This pilot was so successful that the government asked for the programme to be extended throughout its 13,000–14,000 schools. One staff member remarked: “You have to ask yourself, ‘What will you do if you succeed?’”

Usually, the most daunting barrier to scaling up is cost. Good programme design should always include strategies for affordable replication, because needs multiply at a faster rate than pilot programme solutions can be applied.

Table 9 sets out some of the popular ways to scale up impacts.

Table 9: Methods for scaling up impacts

<table>
<thead>
<tr>
<th>Method</th>
<th>Tips on how to do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disseminate all of your tools freely</td>
<td>Make them easily discoverable online and available in multiple formats and multiple languages</td>
</tr>
<tr>
<td>Share costs</td>
<td>Invite private-sector sponsors and local government to help print and distribute materials</td>
</tr>
<tr>
<td>Use cascading models of training</td>
<td>First, instructor–trainers to train trainers, then those trainers train more people, and so on. Each group in the chain needs to be capable, and to commit to reaching targets. Monitor for quality</td>
</tr>
<tr>
<td>Radio and television</td>
<td>Entertainment, public service announcements and news reach millions of people – but only for a few minutes at a time. Negotiate for public service airtime by finding win–win propositions for mass media outlets. Repetition is essential</td>
</tr>
<tr>
<td>E-learning</td>
<td>When well designed, this is proven to be as effective as classroom learning. People have 24/7 access, and are not embarrassed by their mistakes. It is most useful when you face a shortage of skilled trainers or have limited funds. It reduces the need to travel, with associated environmental, cost and time benefits</td>
</tr>
</tbody>
</table>
Chapter 4  Principles for effective implementation

Principle 4: Sustainability

Sustainability refers to continuing public awareness and public education intervention efforts over a long enough period of time to achieve a shift to culture of safety.

Sustainability is challenged by:
- rapid population growth, urbanization and migration
- new technologies that produce greater risks (such as certain construction materials and practices)
- lack of awareness of technologies available to reduce risks
- the long intervals between some natural hazard impacts (such as volcanic eruptions, earthquakes, tsunamis and ‘100-year’ floods)
- the impacts of climate change
- loss of collective memory of indigenous knowledge, or inability to adapt it
- reduced inter-generational transmission of knowledge
- short-term donor project funding models
- donor expectations of ‘new’ rather than ‘improved and sustained’ approaches
- lack of financial resources for scaling up
- volunteer fatigue
- failure to measure progress.

Sustainability can be enhanced by:
- identifying activities that can be repeated at regular intervals without being a burden
- building in opportunities for innovation and creativity
- making activities part of membership expectations for volunteers and youth
- using these activities to grow volunteer base
- sharing ownership with government partners to institutionalize efforts
- sharing ownership with education authorities to universalize efforts
- sharing ownership with other NGOs to share the responsibilities
- thinking ahead and having processes in place to allow adjustments and improvements in order to maintain and continue momentum
- integrating a competitive element (for example, giving awards and recognitions)
- measuring and advertising successes
- selecting capable leadership
- sharing the labour and acknowledging all parties’ contributions.

| Billboards and banners | This approach conveys key messages to mass audiences. The quality must be excellent to make an impact, so learn from others and find out what works. Try advertising on public transport |
| Sports matches, benefit concerts and telethons | At an event where lots of people are watching, you have a chance to popularize your issue and to give the impression that ‘everyone is doing it’. Connect with champions willing to support your cause |
| Piggy backing | Collaborate with other programmes, integrate and cut costs. Insert messages into public utility bills. Provide information in clinic waiting rooms. Ask for advertisements on web site landing pages |
| Use response and recovery | Promote disaster reduction education at every opportunity – particularly when salience is high and people are seeking answers |
5. Tools

This chapter describes each of the following tools in detail:

- publications
- curricula, modules and presentations
- e-learning
- performance and the arts
- games and competitions
- audio and video materials
- web resources
- social media
- telecommunications.

It offers examples of activities within each category, and considers the pros and cons of each as a tool for public awareness and public education. It then looks at the importance of combining different tools in order to produce behaviour change.

Publications

For a long time, publications have been the favourite means of distributing public awareness and public education messages. With seemingly endless flexibility, publications may take the form of print or digital materials, and come in many forms and sizes. They can be used for broadcast (as in billboards and posters), communication (for example, training materials or games), and many other functions besides. The many options, their main purposes, potential target audiences and scale of distribution are shown in Table 10, below.

Table 10: Publication types

<table>
<thead>
<tr>
<th>Type</th>
<th>Target audience</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General public</td>
<td>Youth</td>
</tr>
<tr>
<td>Bookmarks – reminders for key messages and contact information</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Factsheets, flyers, brochures – key campaign messages</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Booklets – mitigation guidance, summaries, standard instructions</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Information cards – fold-up pocket reminders of important procedures and methods such as evacuation, emergency routes, triage, first aid, cardio-pulmonary resuscitation and water and sanitation</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Type</td>
<td>Target audience</td>
<td>Distribution</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>-----------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td></td>
<td>General public</td>
<td>Youth</td>
</tr>
<tr>
<td><strong>Family disaster plan and other key messages</strong> – guidance and behaviour-change reinforcement materials.</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Handbooks and guidelines</strong> – comprehensive materials, including those for trainers and trainees</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Workbooks and activity books</strong> – interactive materials to reinforce learning</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Flipcharts</strong> – materials with a sturdy, portable and credible format for use by trainers for live instruction</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Case studies</strong> – materials that document and share lessons and resources</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Calendars</strong> – useful ongoing reminders and triggers for sets of 12 or more messages</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Posters</strong> – displays that are informative but not too detailed</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Banners and signs</strong> – high-impact, large-scale event advertising</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Billboards</strong> – major, large-scale campaign messages that are compelling and carefully crafted but not distracting</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Magazines</strong> – whether producing an entire title, a special issue, or content for other titles</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Comic books</strong> – regular strip, graphic novel, short story, edutainment</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Colouring books</strong> – preparedness guidance, edutainment</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Storybooks</strong> – true or fictional</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Paper games, card games, board games, models</strong> – make your own or professionally printed and boxed</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Press kits</strong> – packages for journalists and broadcasters (print, audio or video)</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Resources for DVD, CD-ROM or memory stick</strong> – various combination of materials</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Smaller incentive items</strong> – stickers, magnets, temporary tattoos, pencils, erasers, notebooks, emergency supplies</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Larger incentive items</strong> – T-shirts, caps, reusable shopping bags, reusable water bottles, pillowcases, torches, first aid kits</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>
The decision about which type of published material is the most appropriate will depend on:

- the target audience
- the amount of content to be conveyed
- the number needed for distribution
- the methods of dissemination
- the required durability of the product.

Almost all published materials can be made available to a wide audience as web pages for online viewing or as downloadable documents, via DVDs, CD-ROMs and memory sticks. Some messages can also be optimized to distribute on mobile phones and handheld devices.

There is an enormous amount of published information and education material, and publications compete for attention. So, for mass distribution, the content and design of materials must be accessible and visually appealing. Think about how and when you expect people to use each product, and what you want people to do as a result of reading them. Set clear objectives for materials, and test them before producing large quantities. This testing may feel like an unnecessary delay, but it is an extremely important investment that is well worth the time and effort.

Whether a publication is printed or distributed electronically, it should be informative, convincing and memorable. The more interactive the materials are, the more effective they will be at engaging the reader in action and promoting behaviour change. Publications can be designed for specific target audiences and may contain key messages or more in-depth information for instructor training or self-study. Some are designed to be used just once, while others will be referred to time and time again.
Tables 11 and 12, below, set out the advantages and disadvantages of print and digital distribution.

**Table 11: Advantages and disadvantages of print distribution**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Everyone likes something to hold and touch</td>
<td>• Environmental impact, including trees for paper and transporting</td>
</tr>
<tr>
<td>• Attention-grabbing and eye-catching</td>
<td>• May not be read</td>
</tr>
<tr>
<td>• May be useful and retained and sustained</td>
<td>• If impacts are not tested, they will be unknown</td>
</tr>
<tr>
<td>• Can be targeted to different audiences</td>
<td>• May be poor quality, skip the mitigation or leave the wrong impression</td>
</tr>
<tr>
<td>• Can be interactive and promote behaviour change</td>
<td></td>
</tr>
</tbody>
</table>

**Table 12: Advantages and disadvantages of digital distribution**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reduces costs of printing and shipping</td>
<td>• Unavailable to those without access to a DVD player</td>
</tr>
<tr>
<td>• Can be delivered via internet (so free of charge)</td>
<td>• Unavailable to those without computer access or skills</td>
</tr>
<tr>
<td>• Can be delivered via CD-ROM and DVD (at lower cost than print)</td>
<td>• May not be available to those without internet access</td>
</tr>
<tr>
<td>• Can be updated and amended without incurring print and distribution costs</td>
<td></td>
</tr>
<tr>
<td>• Can contain greater quantity of material</td>
<td></td>
</tr>
<tr>
<td>• Can be structured in layers for deeper exploration</td>
<td></td>
</tr>
<tr>
<td>• Youth make use of digital media when available</td>
<td></td>
</tr>
<tr>
<td>• May be accessed by bridging people in community</td>
<td></td>
</tr>
<tr>
<td>• Readily discoverable and searchable</td>
<td></td>
</tr>
</tbody>
</table>

**Curricula, modules and presentations**

Curricula, training modules and presentations are traditional means of bringing a large amount of knowledge and information under a formal, standard and unifying cover. Important information has often been conveyed through serious events, such as meetings, seminars, workshops and webinars (online seminars), originally developed to structure and support face-to-face training for staff, volunteers, teachers, students, and community members. New elements, such as interactive exercises, learning by doing and social networking make these approaches more satisfying, meaningful and effective.
This type of material is typically designed to:
• support participant learning in a course of face-to-face instruction
• support facilitation of community-based intervention
• provide standalone guidance to users.

Presentations
Presentations can be delivered very simply, with a speaker supported by a few cue cards, flipcharts or a poster board, with an overhead projector, or through a digital presentation program, perhaps incorporating video and animation. They may be effective as standalone introductions to variety of subjects, and can also be designed deliver comprehensive curricula.

Training modules
Training modules are designed to go beyond the introductory level. The best-known training modules are the various Community-Based Health and First Aid in Action modules in use throughout the world as well as the many disaster response volunteer training modules. The Vulnerability and Capacity Assessment (VCA) module is in widespread use, and a number of regional adaptations have been made. Several National Societies (including the Cambodia and Philippines Red Cross Societies) have standard induction courses in disaster risk reduction for staff and volunteers, and several more are developing modules in integrated community-based disaster reduction. In some cases, modules are only accessible to registered training participants.

Training modules have also been developed to support school teachers introducing disaster awareness subjects to schoolchildren. There is wider scope for development of training modules for specific target audiences, such as health facilities or businesses.

Systematic efforts to share some of the highest-quality training modules for wider adaptation are beginning to take place. For example, the Regional Centre of Reference in Community Based Education for the Prevention of Disasters (CCREC) publishes its 13 education modules in Spanish, Portuguese and English.

Some of the modules designed initially for community-based education, or for informal application in schools, have lent themselves to further development into resources for formal school-based curriculum. Curriculum materials for formal adoption by schools have additional requirements. For example:
• scope and sequence, to identify the full range of knowledge, skills, and competencies to be conveyed at each grade level
• alignment with existing curriculum, in order to identify appropriate insertion points throughout the full range of subjects and grade levels.

Curriculum materials have been developed for integration into school curricula in Swaziland, Mozambique, and Angola, covering six major regional hazards. In Viet Nam the first materials on flood and typhoon safety were developed in 1999 for children in fourth and fifth grade. These materials were used with more than 0.5 million schoolchildren, and are credited with massive and successful typhoon evacuations, with many lives saved. The materials are now being updated. In Fiji, the National Society curriculum has been approved by education authorities.
In Canada, a National Society programme called Expect the Unexpected introduces multi-hazard disaster reduction through three titles:

- **It Can Happen, Be Ready** (7–8 year olds)
- **Facing the Unexpected, Be Prepared** (10–11 year olds)
- **Be Ready, Be Safe** (12–13 year olds).

By 2008 the programme had reached 750,000 children.

The Canadian Red Cross Society also developed a publication, later adapted for the United States, called **Facing Fear** designed to help 5–16 year olds feel better prepared for disasters in the aftermath of the terrorist attacks on 9 September 2001 in Washington DC. The resource is now included in the US Masters of Disaster curriculum.

Table 13, below, sets out the pros and cons of curricula, modules and presentations.

**Table 13: Advantages and disadvantages of curricula, modules and presentations**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides a logical and comprehensive scope and sequence to a large amount of information</td>
<td>May be costly to publish</td>
</tr>
<tr>
<td>Establishes quality and consistency in service delivery</td>
<td>May be costly to deliver face to face</td>
</tr>
<tr>
<td>Provides common foundation for staff and volunteers</td>
<td>Training programmes may exclude many people due to time and location constraints</td>
</tr>
<tr>
<td>Can be made available in print or digital form</td>
<td></td>
</tr>
</tbody>
</table>

**E-learning**

Computer-based training (which requires a computer and DVD) or web-based training (which requires a computer plus internet access) are two means of access to collaborative learning. E-learning has been widely studied, and in higher education and business it has been demonstrated that students in online learning have actually performed better than those in face-to-face courses.

The main benefits of e-learning, where internet access is available and affordable are:

- flexible access, 24/7, to study materials
- the possibility for instructors of the highest calibre to share knowledge widely
- the option of self-paced learning, which accommodates individual requirements
- the availability of text, audio and video, to accommodate different learning modalities (whether an individual absorbs learning better through auditory, visual, textual or kinaesthetic means)
- very low cost per student.

E-learning has developed rapidly over the past decade. The initial e-learning products, known as first-generation curricula, delivered step-by-step structured learning along linear, teacher-controlled learning paths, often with flat page views punctuated by audio-visual elements (for example, a digital slideshow). Theory and practice remained separate. These linear approaches still work well for content where conformity, standards, and mastery of skills are important.
A later approach, known as second-generation curricula, produced a more free-flow learning experience, driven by learners’ interests and needs. The structure is often referred to as ‘layered’, so that learners can delve more deeply into those areas that interest them. Evaluation is based on self-assessment, successive trials, and reflective practice.

These learner-centred approaches work especially well where discovery, critical thinking, leadership development, flexibility and problem solving are priorities. Teacher-driven and learner-driven methods can be blended. Second-generation systems can link self-study and project-based action learning. Learning outcomes can be measured and monitored, achievements recognized, and knowledge captured and shared within learning communities.

E-learning curricula can draw upon a wide range of content, including:
• lessons (whether through self-paced or time-bounded study)
• interactive activities and games
• self-administered quizzes and tests (in various formats, and automatically graded)
• audio and video clips
• synchronous (virtual classrooms and chats) and asynchronous (forums) discussions through which the online communities communicate, with virtual classrooms requiring facilitation
• tools such as blogs and wikis, to capture and share knowledge
• tutoring, coaching, mentoring, facilitated through online and offline options
• administration and tracking (including certification).

One of the chief benefits of developing the e-learning curricula is the potential for ease of reuse and adaptation of e-learning content. This requires development of a learning object repository (or federation of these) sharing standards-compliant content.

Over the past decade some National Societies have made training modules available in video and CD self-study formats. There is now growing interest in converting many training modules to e-learning formats that can be delivered on CD, DVD or online.

The IFRC is currently piloting use of a learning management system to enable many training efforts to be integrated. The system, entitled One Red Cross, seeks to allow volunteers to self-manage their own career study track – especially in first aid and disaster response. Also available to the general public is a 20-minute self-study course on H1N1 preparedness.

The American Red Cross Society is piloting the Ready Rating Program for businesses and other organizations, including schools. It includes enterprise-level, action-oriented disaster management, incorporating live support from local chapters.
Table 14, below, sets out the advantages and disadvantages of e-learning.

**Table 14: Advantages and disadvantages of e-learning**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• As effective as classroom learning</td>
<td>• Requires access to DVD player or computer</td>
</tr>
<tr>
<td>• Lower cost per person than classroom learning</td>
<td>• Requires access to internet for full functionality</td>
</tr>
<tr>
<td>• Expertise can be widely shared</td>
<td>• Development of e-learning curriculum requires a new set of skills and tools</td>
</tr>
<tr>
<td>• Self-paced</td>
<td>• Flexible and participatory development platform may be complex and costly to set up</td>
</tr>
<tr>
<td>• Does not depend on time and location</td>
<td>• Can be less social, unless organized for group interaction in person or electronically</td>
</tr>
<tr>
<td>• Can be linked to action-oriented projects</td>
<td>• Less staff satisfaction, due to less or distant interaction</td>
</tr>
<tr>
<td>• Outcomes can be monitored on large scale</td>
<td></td>
</tr>
</tbody>
</table>

**Performance and the arts**

Performance and the arts provide a variety of creative opportunities to communicate important, serious messages through enriching, often live, experiences. Examples include:

• street theatre, dramatic readings, skits and plays
• puppet shows
• poetry reading
• dance
• flashmob activities in large urban settings (a group of people who assemble suddenly in a public place, perform an unusual act and then disperse)
• tapping into oral traditions such as story-telling, music and sing-alongs
• mural-making and other hands-on art and design activities.

All of these can involve volunteers and community members, as performers and audiences. Skilled performers find creative ways to engage their audience.

At the Colombian Red Cross Society’s annual youth camp, teams had 20 minutes to create their own puppet shows to convey climate change awareness to their fellow campers, using specially created character puppets and inflatable theatre.

Performance and the arts can be used in settings where people are gathered for any purposes at all: information booths at health and safety fairs, exhibitions, school and community events, and public parks. In particular, youth are often ready to engage in any of these events. A light-hearted competitive element can help attract more people. It is important to remember that everyone who participates will appreciate respect and acknowledgement.
In Argentina, performance art in a city park drew attention to flood risks, and in the Philippines, a type of performance referred to as ‘construction theatre’ made disaster-resilient construction a spectator event. Meanwhile, singer-song-writers in Colombia are popularizing songs about environmental conservation.

Table 15, below, sets out the pros and cons of performance and the arts.

**Table 15: Advantages and disadvantages of performance and the arts**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fun, attracts a crowd, provides a good ‘hook’ for serious subjects that people try to avoid</td>
<td></td>
</tr>
<tr>
<td>• Endless creativity can be tapped</td>
<td></td>
</tr>
<tr>
<td>• Youth volunteers enjoy leading these activities</td>
<td></td>
</tr>
<tr>
<td>• Messages can be lost</td>
<td></td>
</tr>
<tr>
<td>• May require additional reinforcers to convey clear messages</td>
<td></td>
</tr>
<tr>
<td>• Informality may make it challenging to scale up</td>
<td></td>
</tr>
</tbody>
</table>

**Games and competitions**

Games and competitions offer another engaging route to what is sometimes known as ‘edutainment’. Board games may be printed for small-group play, blown up onto sturdy fabrics, or modelled for painting onto schoolyard asphalt for more full-body and spectator involvement.

The performing arts (see above) can also be arranged competitively, between school-based or regional teams, to maximize involvement. Challenges in the form of poster design, knowledge quizzes, and writing essays, songs, poetry, plays or slogans all make for interesting competitions. Whenever children or youth work is displayed and recognized, parents and community members will attend. Radio and television are often successfully used either to broadcast the competitions themselves or to publicize them.

Games can also be extremely effective when working with adults, who also become engaged and learn more when they use their whole body and are having fun. This may be as simple as getting people out of their seats to move around the room to interact in a game of ‘four corners’ to see what they have in common, or catching a ball or a balloon before responding to a dilemma. Or it may involve role play, problem solving and simulation. These ‘serious games’ have been found very effective in helping to learn about complex information. More work is needed in collecting examples of these innovative and easily replicable efforts and testing their outcomes.

For competitors, some of the fun involves the opportunity to leave with incentives and prizes. People often like winning items, however simple, and T-shirts, caps, bracelets and other goodies are favourites with volunteers and the public. It is an important challenge to make these items environmentally friendly and good quality, and they provide another valuable opportunity to reinforce educational messages. Smaller items include:

• stickers
• temporary tattoos
• bookmarks
• pencils, pens and erasers
• badges.
More costly items may be intended for individuals, family or community, such as:

- reusable water bottles
- shopping bags
- decorate-your-own pillowcases
- card games
- first aid kits
- solar-powered torches
- evacuation backpacks
- megaphones
- wind-up or solar-powered radios.

Business sponsors may be willing to donate some of these items. In larger competitions, prizes of phones or cameras act as incentives while also giving youth the means to engage in outreach, or in producing their own educational materials. Raffles can also be used to raise awareness.

**Table 16: Advantages and disadvantages of games and competitions**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Highly participatory, engaging and motivating</td>
<td>• Need research and thoughtful design</td>
</tr>
<tr>
<td>• Stimulate problem solving</td>
<td>• Require a sense of fun</td>
</tr>
<tr>
<td>• Stimulate peer-to-peer dialogue</td>
<td>• Realistic narrative-based games and simulation can be costly to develop and test</td>
</tr>
<tr>
<td>• Improve knowledge acquisition and retention</td>
<td>• Computer-based games require a high ratio of computers to participants</td>
</tr>
<tr>
<td>• Helpful for tackling complex and open-ended subjects</td>
<td></td>
</tr>
<tr>
<td>• Competitions can link people across a wide geographic area</td>
<td></td>
</tr>
<tr>
<td>• Web-based or computer-based games can engage people inexpensively from a distance</td>
<td></td>
</tr>
</tbody>
</table>

**Audio and video materials**

There is a broad continuum in audio and video production. At one end are professionally produced, pre-scripted products where the messages are highly controlled. At the other end are participatory videos, which are individually or collectively produced with more spontaneously captured material using inexpensive video cameras and recording devices.

Professionally produced videos are important for documentation, donor communications and public relations, while more informal video production can be an important means of tapping into indigenous knowledge, stimulating local creativity, sharing stories, and disseminating peer-to-peer education. In the case of participatory video, the production process itself becomes an educational experience, with the primary objective being to stimulate local dialogue and problem solving.

Audio and television have unparalleled ability to disseminate information to virtually every household. Until recently, production and distribution remained solely in the hands of public or private owners, so National Societies had little
control over the content. However, this picture is changing as production has been made simpler and less costly, and there are now additional distribution channels with tremendous potential.

Three major types of audio and video production vary by length, distribution channels and professionalism of production:

• short radio and television public service announcements (spots)
• short audio and video podcasts
• longer audio and video productions.

Each of these is described below.

**Short radio and television public service announcements (spots)**

Many countries require mass media outlets to provide public service messages on the public airwaves, and some do so voluntarily as a matter of corporate social responsibility. Spots are typically 20, 30 or 50 seconds long. They must be short and memorable, and tell people how to find more information (with a phone number or web address that can be easily memorized). Celebrity voices, catchy slogans, and a positive, upbeat tone all help.

Professional design and communications experts can be very valuable in crafting your spots, but today you can produce your own broadcast-quality spots, or adapt an international or national resource, with just a little volunteer help. The most sought-after spots are during prime-time hours, after the normal working day, around the time of the evening news. Well-produced spots on important social issues can make a big difference, so it can help to develop good relations with the mass media.

Table 17, below, sets out the pros and cons of short radio and television public service announcements (spots).

**Table 17: Advantages and disadvantages of spots**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass outreach, large audience</td>
<td>Might be buried in late-night or daytime slot</td>
</tr>
<tr>
<td>Consistent standard messages</td>
<td>Must be well conceived to be effective</td>
</tr>
<tr>
<td>Grabs attention and creates recognition</td>
<td>Broadcasters may not provide publicity</td>
</tr>
<tr>
<td>Can usually be negotiated free of charge</td>
<td>as a public service but may see it as a source of income</td>
</tr>
<tr>
<td>Can be tailored to season and hazard</td>
<td></td>
</tr>
<tr>
<td>Can be produced as a series, for sustained intervention</td>
<td></td>
</tr>
<tr>
<td>Can inspire people to seek more information</td>
<td></td>
</tr>
</tbody>
</table>
Early warning messaging: key tips

- **Source** – It is important to establish reliable communications systems with clear lines of communication. However, don’t rely on one single source, however authoritative – instead, put a mixed panel of trusted sources, ahead of time, to agree on early warning messages.

- **Content** – Make sure messages describe exactly who should do what, and when. Paint a simple picture, and be specific. Explain the pending hazard consequences.

- **Style** – Be clear, using simple wording and no jargon. Be precise and non-ambiguous. Express certainty. Explain that the event is sufficiently likely that everyone should act now.

- **Accuracy** – Think about what people will understand by your message.

- **Consistency** – Be consistent within and across messages. Don’t put out messages that contradict each other or cause confusion.

Short audio and video podcasts

A podcast is a pre-recorded audio, visual or multimedia piece distributed over the internet for playback on a handheld device or computer. Audio and video podcasts less than five minutes long are more often watched by computer users with internet access, during short breaks, while reading email and browsing social media. Longer audio podcasts (more than ten minutes long) are more often downloaded for listening to on portable audio players. Whatever the length, they should be compelling and maintain attention.

YouTube, the most popular means of sharing and watching video podcasts (www.youtube.com) offers several desirable features, including:

- showing the length of a video and the number of times it has been viewed
- enabling viewers to add video to their own playlists and share them with others
- giving viewers the option to comment and rate videos, allowing them to be listed by popularity as well as the number of views.

However, YouTube is not accessible in some countries. This means that alternative avenues for viewing are also needed.

The IFRC maintains three YouTube channels with hundreds of videos. By the end of 2009 the channel had received about 75,000 visits. A total of 750,000 videos had been viewed and 1,000 individuals had become subscribers. The most-viewed video had been seen 130,000 times. Some of the top-rated videos include building bamboo houses in Indonesia and how to build safer wooden houses to resist hurricanes. Red Cross or Red Crescent society volunteers also use YouTube for one-off uploads of short video content.

One example was a series of exceptionally creative winning submissions, produced by Colombian youth to present public service messages about environmental protection, aired on ‘Un Minuto al Aire’ (One Minute on Air). The Argentinian Red Cross Society’s video of ‘Casa Inundada’ (Flooded House) is also provocative (www.youtube.com/watch?v=5bZKCT7aonE).
Videos can also be viewed on many IFRC and National Society web pages. The Spanish Red Cross Society, and the Caribbean region and National Society, maintain special web pages with videos offering a range of very good disaster reduction messages.

Participatory video is an especially effective tool to use among communities that are wary of engaging with the authorities or NGOs. The most vulnerable communities lack power. Both video and audio production enable these groups to hear messages in their own voices, which can be very empowering and reach them more effectively.

Table 18, below, sets out the pros and cons of short audio and video podcasts.

**Table 18: Advantages and disadvantages of short podcasts**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Can be produced and updated quickly and easily</td>
<td>• Must be checked carefully to avoid bias or misinformation – a process that is sometimes overlooked in this medium</td>
</tr>
<tr>
<td>• Can be distributed via the internet</td>
<td>• Must be well produced to be effective</td>
</tr>
<tr>
<td>• Can be easily shared via social networks</td>
<td>• May be ignored</td>
</tr>
<tr>
<td>• Audio can be disseminated by radio</td>
<td>• Requires promotion through social networks</td>
</tr>
<tr>
<td>• Can be understood by non-literate people</td>
<td>• Distribution requires thought and planning</td>
</tr>
<tr>
<td>• Can be produced with high levels of participation</td>
<td>• Participatory production requires training, practice, collaboration and consistent feedback</td>
</tr>
<tr>
<td>• Can be very low cost to produce</td>
<td></td>
</tr>
<tr>
<td>• Can be part of a series or channel</td>
<td></td>
</tr>
<tr>
<td>• Can lead to recognition</td>
<td></td>
</tr>
<tr>
<td>• Can be current and relevant</td>
<td></td>
</tr>
<tr>
<td>• Can convey detailed examples and demonstrations</td>
<td></td>
</tr>
<tr>
<td>• Cost-effective for peer-to-peer communications across distances</td>
<td></td>
</tr>
<tr>
<td>• Video podcasts can include hearing impaired people through an inset sign-language interpreter</td>
<td></td>
</tr>
<tr>
<td>• A preferred means among the younger generation</td>
<td></td>
</tr>
</tbody>
</table>

**Longer audio and video productions**

Professionally produced videos are widely used to promote the Movement, attract donations, and provide coverage and documentation of projects or significant issues. One of the most innovative and successful educational uses is a series of audio soap operas (radio novellas) that became popular in Latin America. ‘Better to Prevent than Lament’ (in Spanish) has two 25-episode series. ‘The Rough Season’ (in English) covers recurrent natural hazards in the Caribbean. There is one series, with ten 15-minute episodes.

Regular live radio and television talk programmes have also been successfully used in Uganda. The Tuvalu Red Cross Society has a regular slot on national radio, broadcasting messages on disaster preparedness, health, climate change, environment, and water conservation during the dry season. Competitions are used to raise awareness among school children.
Table 19, below, sets out the pros and cons of longer audio and visual productions.

**Table 19: Advantages and disadvantages of longer audio and video productions**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Can tell a complete story</td>
<td>• Distribution for widest viewing requires planning and effort</td>
</tr>
<tr>
<td>• Can enhance accountability</td>
<td>• Video requires professional production</td>
</tr>
<tr>
<td>• Radio is widely available distribution channel</td>
<td>• Regular radio show series requires significant planning and lively presenters</td>
</tr>
<tr>
<td>• Soap operas can be compelling</td>
<td>• Soap operas require high-quality concepts, writing and content</td>
</tr>
<tr>
<td>• Can be a regular radio broadcast</td>
<td></td>
</tr>
<tr>
<td>• DVD players for viewing are relatively low cost</td>
<td></td>
</tr>
<tr>
<td>• □ Distribution for widest viewing requires planning and effort</td>
<td></td>
</tr>
<tr>
<td>□ DVD players for viewing are relatively low cost</td>
<td></td>
</tr>
</tbody>
</table>

Since the Movement has an enormous base to which it is accountable, a great deal of attention needs to go into generating reports. Capturing local photographs and video remains important in almost all settings – not only for documentation purposes, but for use in awareness and education materials. Video can, and should, be used increasingly for reporting purposes.

**Web resources**

One of the simplest and least expensive ways of demonstrating transparency, accountability and consistency is to use the National Society corporate web presence to promote public education for disaster reduction. It is important that these messages are easy to find and are no more than one click away from the home or landing page. This means promoting and highlighting disaster risk reduction as ongoing action items that involve everyone, so that information does not become buried somewhere hard to find.

Web sites should be leveraged to share whatever resources you have available. They should be a primary distribution tool from National Societies to branches and chapters, as well as to the general public. Useful facilities include:

- RSS feeds, so that subscribers can follow changes and updates
- Widgets and e-badges so that others can promote your messages on their web sites and through social media networks
- Interface language selection (enabling users to select their preferred language in which to view the site).

Some examples of resource-rich sites include:

- [http://www.ifrc.org/en/what-we-do/disaster-management/](http://www.ifrc.org/en/what-we-do/disaster-management/) – This opens up into a wealth of resources. You can also access DMIS (Disaster Management Information System) from the new IFRC web site (top right hand corner)
- A comprehensive resource site from the Regional Reference Centre for Education and Disaster Preparedness, in the Americas
- [www.climatecentre.org](http://www.climatecentre.org) – the Climate Centre’s web site, including a special section for youth at www.climatecentre.org/site/youth
• [www.informedprepared.eu](http://www.informedprepared.eu) – a European Red Cross Society site, in English, French, German, Spanish, Polish, and Turkish, which promotes the unifying slogan “Informed. Prepared. Together”

• presents the British Red Cross Society’s “decisions for recovery” lesson plans, which provide students with scenarios related to disaster prevention and response, and focus on the complexities of decision-making. The lesson plans on floods, swine flu, and “the tsunami five years on” all contain powerful educational messages.

• [http://pirac.croix-rouge.fr](http://pirac.croix-rouge.fr) – the French Red Cross Society’s resource, held jointly with the Caribbean region, includes a natural disaster awareness tool catalogue – a database of pertinent educational materials from across the region

• the Australian Red Cross uses its web site to publish Red Cross Youth – an e-zine that focuses on issues such as climate change, with local and international stories.

• [http://adsoftheworld.com/media/online/red_cross_colombia_game](http://adsoftheworld.com/media/online/red_cross_colombia_game) – The Colombian Red Cross Society has pioneered an online game that raises awareness for blood-bank donations in the face of violence.

• [www.redcross.org](http://www.redcross.org) – the American Red Cross provides a series of “preparedness facts” that are easily accessible from the landing page.

• [www.redcrossroommates.org/en](http://www.redcrossroommates.org/en) – American Red Cross Bay Area Chapter has six episodes with simple interactive animation using four roommate characters that charm and support users to make their own plan and create their own wallet card with important information.

Table 20, below, sets out the pros and cons of web activities.

**Table 20: Advantages and disadvantages of web activities**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Can be comprehensive of resources</td>
<td>• Requires professional user-friendly design</td>
</tr>
<tr>
<td>• Can enhance accountability and transparency</td>
<td>• Requires good search and browse design and tools</td>
</tr>
<tr>
<td>• Can accommodate many versions for different target audiences, languages and preferences</td>
<td>• Requires regular addition of new content</td>
</tr>
<tr>
<td>• Can be supported with visuals</td>
<td>• Can be difficult to access with low bandwidth</td>
</tr>
<tr>
<td>• Can describe resources and invite more inquiry</td>
<td>• Can be difficult or expensive to access</td>
</tr>
<tr>
<td>• Can be tracked by users for new content</td>
<td>• Must be designed with low bandwidth in mind</td>
</tr>
<tr>
<td>• Can become a trusted source of information</td>
<td>• Must be designed for delivery on different browsers</td>
</tr>
<tr>
<td>• Can raise profile and enhance credibility</td>
<td>• Must be adapted to handheld and mobile devices as well as computers</td>
</tr>
</tbody>
</table>

**Social media**

Social media includes all of those online tools that permit people to communicate and network without needing traditional organizational support. They can be used to build trust and cohesiveness and reach out to others. A revolution in digital communications makes it very easy and inexpensive for groups of people to form, share and work for common purposes.
Small or large-group broadcasting, collaboration, knowledge sharing, multimedia sharing and collective assessment are easily managed, making it possible to experiment to see what works. As young people take these new forms for granted, they are increasingly becoming an even more important way to deliver public awareness and public education.

Table 21, below, describes types of social media, their strengths and examples.

**Table 21: Strengths of social media and examples**

<table>
<thead>
<tr>
<th>Type</th>
<th>Useful for</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>Individual and group communications</td>
<td><a href="http://www.ifrc.org">www.ifrc.org</a>, your National Society</td>
</tr>
<tr>
<td>Listservs</td>
<td>Mass e-mail communications, newsletters</td>
<td>The Gender and Disaster Network</td>
</tr>
<tr>
<td>Social networks</td>
<td>A-synchronous broadcasting, media sharing, friend-of-a-friend networking</td>
<td>Facebook, Myspace, LinkedIn</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.facebook.com">www.facebook.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.myspace.com">www.myspace.com</a></td>
</tr>
<tr>
<td>Blogs and discussion forums</td>
<td>Disseminating opinions, news, questions and discussions</td>
<td><a href="http://www.blogspot.com">www.blogspot.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.wordpress.com">www.wordpress.com</a></td>
</tr>
<tr>
<td>Moderated communities of practice</td>
<td>Drawing on and recording the expertise of a community of practice for easy discovery</td>
<td>UN India’s Solutions Exchange</td>
</tr>
<tr>
<td>Communities</td>
<td>Networking across geographic boundaries</td>
<td>ning</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.ning.com">www.ning.com</a></td>
</tr>
<tr>
<td>Crowd-sourced content</td>
<td>Filtering and amplifying messages, recommendations based on “wisdom of the crowd”</td>
<td>digg</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.digg.com">www.digg.com</a></td>
</tr>
<tr>
<td>Social bookmarks</td>
<td>Sharing and organizing web-resources (filtering and amplifying)</td>
<td>del.i.cio.us, drlibrary.com</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.del.i.cio.us.com">www.del.i.cio.us.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.drlibrary.org">www.drlibrary.org</a></td>
</tr>
<tr>
<td>Photo sharing</td>
<td>Crowd sourcing, organizing, aggregating image resources</td>
<td>flickr, picassa</td>
</tr>
<tr>
<td>Wiki</td>
<td>Collective authoring</td>
<td>Wikipedia, Google</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.wikipedia.org">www.wikipedia.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.docs.google.com">www.docs.google.com</a></td>
</tr>
<tr>
<td>Video sharing</td>
<td>Sharing, organizing, filtering and amplifying video</td>
<td>YouTube, TED Video</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.youtube.com">www.youtube.com</a> – <a href="http://www.ted.com">www.ted.com</a></td>
</tr>
<tr>
<td>Location</td>
<td>Location-based meeting and action</td>
<td>Meet-up, Doodle, Flashmob, Triplt</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.flashmob.com">www.flashmob.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.tripit.com">www.tripit.com</a></td>
</tr>
<tr>
<td>Micromedia and SMS</td>
<td>Mass text messaging</td>
<td>Twitter, Twhir</td>
</tr>
<tr>
<td></td>
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<td><a href="http://www.twitter.com">www.twitter.com</a> – <a href="http://www.twirl.org">www.twirl.org</a></td>
</tr>
<tr>
<td>Voice messaging</td>
<td>On-demand voice messaging (push and pull)</td>
<td>IVRS</td>
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<tr>
<td></td>
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<td>IVRS (various)</td>
</tr>
<tr>
<td>Document sharing and curriculum-sharing</td>
<td>Publishing and sharing documents, presentations and courseware</td>
<td>Scribd, Slideshare, the Open Courseware Consortium</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.ocwconsortium.org">www.ocwconsortium.org</a></td>
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</tbody>
</table>
The IFRC and several National Societies have begun to leverage social media for public awareness and education. The IFRC’s Your Move campaign currently has a presence on Facebook, YouTube, Flickr and Twitter and a blog. Red Cross Red Crescent Youth also make use of Facebook and Twitter. These presences make it easy for Red Cross or Red Crescent Societies and youth volunteers to share official organizational messages with their own social networks.

Table 22, below, sets out the pros and cons of social media.

### Table 22: Advantages and disadvantages of social media

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Low overhead cost leverages large-scale distribution channels such as Facebook and Twitter</td>
<td>• Content must be updated regularly</td>
</tr>
<tr>
<td>• Shareable – engages volunteers, and uses word-of-mouth and reputation to snowball</td>
<td>• Needs feedback system to interact with audience</td>
</tr>
<tr>
<td>• Has the power to drive traffic to other resources, such as campaign sites, web pages, blogs and articles</td>
<td>• Needs to keep pace with technology</td>
</tr>
<tr>
<td>• Enables regular communication, which builds relationships</td>
<td>• Requires commitment of time and creativity</td>
</tr>
<tr>
<td>• Enables short messages to be pushed regularly, in bite-sized chunks</td>
<td></td>
</tr>
</tbody>
</table>

### Telecommunications

Telecoms activities offer a range of opportunities. Automated systems can be set up to both push (send out) text messages and for users to pull (call in to select recorded messages). Telephone-based information and messaging systems are not yet widely used in the Movement, although a promising pilot in Sri Lanka is focusing on developing early warning systems through this medium.

Pushing messages is valuable for delivering early warning messages. It can also be used and tested regularly with other preparedness messages. The same system using touch-tone or interactive voice response systems (IVRS) allows users to call in, select from different options, and receive pre-recorded information. Callers may first select their language, and then drill down from a short list of general topics to a pre-recorded message containing the specific information that they want to hear.

The technology involves a server connected to the internet, which can be operated from anywhere. Those who will receive push messages are registered (either in bulk or individually). The telephone number for pull messages may be widely disseminated as the first source for information seekers.

Table 23, below, sets out the pros and cons of telecommunications.
Having looked at the full range of tools available, we now look at the importance of combining two or more options, in order to ensure the most appropriate approach is taken.

Combining tools

There is no single, most effective way to convey public education messages. Each person learns and remembers differently, whether by using their sight, hearing, touch, or even their taste or sense of smell. We eat and sleep among family and circulate in neighbourhoods, workplaces or other communities with friends, neighbours, colleagues and others. So, success is most often found in a robust combination of modalities. Some examples from around the world are given in the box below.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Eliminates need for live response to many information seekers</td>
<td>• Initial investment for set-up</td>
</tr>
<tr>
<td>• Available 24/7, almost universally accessible</td>
<td>• May require incoming toll-free number</td>
</tr>
<tr>
<td>• A phone number can be widely distributed as tag-line</td>
<td>• If system will be used for emergencies it may need to be equipped to handle large numbers of calls</td>
</tr>
<tr>
<td>• Accessible for people who cannot read</td>
<td>• If used for verification, messages must be updated, even in response to false alarms, bad weather, and so forth</td>
</tr>
<tr>
<td>• Can be created in wide range of languages</td>
<td>• If used for early warning, coordination with meteorological authorities is required</td>
</tr>
<tr>
<td>• Low cost means of multi-lingual message delivery</td>
<td>• Messages can be short and tailored to individual needs</td>
</tr>
<tr>
<td>• Early warning messages can be verified by trusted source</td>
<td>• In disasters and emergencies this can relieve organizations from overwhelming inquiries</td>
</tr>
<tr>
<td>• Messages can be short and tailored to individual needs</td>
<td>• Increases accountability and transparency</td>
</tr>
<tr>
<td>• In disasters and emergencies this can relieve organizations from overwhelming inquiries</td>
<td></td>
</tr>
</tbody>
</table>

Examples of interventions combining different approaches

- **Nepal** – theatre, folksongs, radio programmes, community meetings, peer education and reaching out through religious leaders
- **Bangladesh** – all the approaches described under Nepal, as well as posters and flipcharts
- **Indonesia** – evacuation route signage, drills, household visits, and training in first aid, water and sanitation, health, search and rescue
- **Sri Lanka** – posters, leaflets, billboards, signboards, community meetings, community sports events, cricket tournaments, school events, and raffle draws
- **Colombia** – songs and videos, participatory puppetry and outdoor games, to raise awareness of climate change among youth
- **Argentina** – educational performance art at a public park
- **Caribbean** – radio drama, radio spots, posters, flyers, and newspaper adverts, to distribute safety messages for hurricane season
- **United States** – online learning supplemented by volunteer outreach, and branches routinely maintaining their presence at health and safety fairs
- **Turkey** – outreach to target elected neighbourhood officials, religious leaders, and teachers.

Each of the initiatives described in the box is an avenue of learning, and all are appropriate ways to promote public education messages.

Having looked at the various tools available to be used, we now go on to consider the issue of quality.
6. Ensuring quality

There is strong evidence \cite{4, 11, 25, 33, 41, 46} that all of the tools described in Chapter 5 can be used to raise awareness and provide education. However, in order to be effective they must be of high quality. This chapter explains the four key ingredients for effectiveness:

- **well-crafted messages**
- **powerful imagery**
- **an engaging and compelling tone**
- **adapted, localized content.**

**Well-crafted messages**

Messages that are well crafted have the following characteristics:

- **They are clear and consistent** – The audience needs to understand who is at risk, the expected physical, economic, communal and cultural heritage losses, the specific timeframe within which this will take place, and what to do to improve the situation. When people are clearly informed about what they can do to reduce their risks (before, during, and after a disaster), they are quite capable of understanding and remembering the basics.

  Clear messages are needed, to answer questions such as:\cite{32}
  
  • “What is the hazard?”
  • “What damage can it do?”
  • “How has the hazard affected us previously?”
  • “How will we be affected at home, at work or at school?”
  • “Can I do anything to avert these effects?”
  • “How complicated is it?”
  • “How much does it cost?”
  • “Has anyone I know done it?”
  • “What do I need to begin?”

- **They use everyday language** – Complicated phenomena and complex information are explained in non-technical terms, using terms and concepts that are widely understood. Because probabilities involve higher mathematics concepts, many people find them difficult to understand, so they should be avoided\cite{29, 41}. However, even people with no formal education can understand concepts of high-impact, low-frequency hazards (such as earthquakes) as well as slow-onset changes and uncertainty (such as weather), and are willing to apply that knowledge to long-term planning.

- **They promote effective action** – It is important to convey the consequences of inaction as well as the effectiveness of proactive behaviour. Efforts to scare people
into action can be counter-productive and lead to denial and avoidance\(^{[11, 26]}\). Stay positive and be specific, providing accurate and feasible examples, and make it clear that the work can be done in small steps (for example, at different times of the year, or week by week). Your messages will have impacts at a range of levels: on direct beneficiaries who engage immediately, on indirect beneficiaries who will receive the messages second hand, and on those who will remain vaguely aware and more receptive in the future.

### Powerful Imagery

Even for highly literate people, pictures speak louder than words. People often remember visual messages, such as photos, graphics, animation or video, more clearly than text. When people see visual proof of the effectiveness of disaster reduction measures, in the form of a photo or video, they are much more convinced than when they hear or read about it. For example, shake-table tests showing the impact of earthquake shaking on resilient versus non-resilient construction create lasting determination for behaviour change. Pictures of people are always effective at engaging audiences, as they bring the issue to life.

People are motivated more by positive examples than they are by fear. So, it is important to provide immediate and accurate visual images to illustrate the proactive behaviour that is needed, and to encourage problem solving\(^{[23, 31]}\). If you need to show a picture of something that has gone wrong, make sure it is marked as such prominently (for example, with a big red X or frowning face, not relying on text). Remember that images of death and destruction can be overwhelming, and can reinforce a sense of helplessness rather than making people feel inspired\(^{[26]}\).

Visual organizers such as colour coding, icons, symbols, design and layout are all important in helping an audience find and understand information. Symbols that are widely understood can be very useful, such as a cross for wrong, a tick for right, and traffic-light colours, with red meaning stop or danger, yellow meaning slow, or take care, and green meaning go, or safe. However, do check with your audience before using these devices. You may be surprised at how they interpret your symbols. For example, many audiences do not understand stick-figure representation, and bird’s-eye views, tables, and diagrams such as pie charts must be explained before they can be readily understood.

Maps can be very useful, as long as you use easily recognizable landmarks, political boundaries and main transportation routes and design a clear key. Iconic colours work best – in other words, blue for water, green for vegetation, brown for soil and so on. However, bear in mind that when documents are downloaded and printed from the internet they will usually be printed in black and white. So make sure that print versions of documents avoid pages full of solid photos or coloured graphics. Use shading, dots or cross-hatching so graphics will be understood even without colour.

Do take into account the specific needs, languages and cultures of target audiences, remembering to include positive and empowering illustrations of women, children and members of minority groups and allowing the audience to identify positively with the examples.
An engaging and compelling tone

Much disaster prevention involves thinking about things we would rather avoid, so it is especially important that educational materials be engaging, attractive and interactive. They can also be fun, humorous, surprising or musical – this will also help. Many different activities – for example, filling in a checklist or a form, singing along, answering quiz questions, writing a puppet skit, designing a poster or participating in a drill – engage the viewer in actions that reinforce the message. These are far more powerful than simply providing a prescriptive list. Games, toys, models, videos, live demonstrations, mascots and catchy slogans can also be effective at heightening interest [27, 44].

Quality educational initiatives engage people actively, making use of ‘social proof’ (the assumption that if the people around them are doing something, then it is for a good reason, and therefore serves as an example).

People tend to follow social norms. These can be divided into two aspects:

- what we are told we should and shouldn’t be doing
- what we are actually doing.

To change behaviour, people need to see both of these aspects coming into alignment. People tend to do whatever they think other people are doing, so draw attention to what people are already doing, not what they are not doing [7] rather than appealing to people’s sense of social responsibility, their desire to save money or even their hope of safeguarding the earth for future generations. Mocking anti-social behaviour in a humorous way can also be effective.

Everyone needs role models, and following a good example is much easier than pioneering a new approach. Until there are other pioneers and role models to emulate, most people will believe that a change is too hard to make, or not worth trying. For this reason, it is important that National Society staff and volunteers act as frontline role models. If they do something, others are likely to follow. So if you make your own household and office adjustments proudly known, they are more likely to become the norm and spread more rapidly.

Use a variety of role models and spokespeople. Respected elders, regular community members and beloved teachers are especially effective as role models [42]. Celebrity spokespeople, such as actors or sports figures, can also act as role models – for example, by putting their name to e-mails or letters, making appearances, or being visible on billboards or television and radio. Selecting a celebrity spokesperson requires special care, as scandals in their lives can affect your campaign too. Doing some contingency planning, and having a mascot of your own (a fictitious character, animal or object that serves as a symbol for your organization or cause) are both wise steps to take.
Adapted, localized content

Developing high-quality educational materials is labour intensive, so it makes sense to build on existing resources, rather than reinventing the wheel. To take a responsible approach to adapting, localizing and developing educational materials for disaster risk reduction in local languages, ask yourself the following questions:

• **What should we adapt?** Excellent educational materials for disaster risk reduction have been developed all over the world, for various target audiences. Many are copyright free, or the organizations that developed them are willing to share them. There is already a wealth of materials from within the Movement to draw upon.

• **Why do we need to adapt it?** Materials developed for one context should not be translated and transplanted without very careful consideration and without being adapted to the needs of the new audience. It is important to demonstrate understanding of local hazard conditions, locally available risk reduction measures, and local experience, and to use the language and images most likely to motivate the specific audience in question, thinking about factors such as age, ethnicity, religion and occupation. Similarly, a simple translation may fail to use existing terminology, or the translator may be unaware of new terminology that has been introduced based on wide consensus of stakeholders.

• **Who should be involved in the process?** You need to set up a working group of five-to-ten people, representing key stakeholder agencies and groups. Members should include, ideally:
  • a carefully selected translator
  • the national disaster management organization
  • the National Red Cross/Red Crescent Society
  • highly respected academic or scientific experts
  • representatives from the ministry of education and/or other concerned government agencies
  • representatives of other NGOs or professional organizations concerned
  • skilled public educators
  • representatives of target audience groups.

At least one or two members of the group should have fluent knowledge of the source language, and most should be native speakers of the target language.

• **How should we do it?** For a detailed explanation of how to adapt resources, see the step-by-step guide below.

**Step-by-step guide: Adapting existing resources**

**Step 1: Form the team to guide the adaptation effort**
Obtain commitment from participating organizations and designated individuals who will put their names to the adaptation. Ideally partners will agree to add their logos to the final product too. Before anything further is done, the team need to clarify the purpose and target audience for the materials, and make sure everyone else (translators, designers, editors and so on) are aware of this as part of their brief.
Step 2: Draft the translation
The translator and the team leader should prepare a list of key terms for discussion, both in the source language and target languages. This list can be developed as an ongoing resource that can be used for current and future translations. If new concepts need to be introduced, a consensus among key stakeholders is extremely important. Once the translation begins, translators should aim at conceptual equivalents, rather than word-for-word translations, avoiding ambiguous words or concepts and long sentences with many clauses. The translator also needs to make sure that the copy reads in a way that is appropriate to the gender and age of the target audience, as well as considering other cultural norms. [76]

Step 3: Review and revise
Once the text is translated, the team members need to review and revise the document. This involves the following tasks:

- preparing and reviewing, by making notes on first professional draft translation
- review the document together, section by section, paragraph by paragraph and line by line, as necessary
- eliminate and/or replace sections that do not apply. Divide labour as necessary for development of additional materials
- asking the original authors of the material to clarify anything confusing
- discussing and agreeing on terminology, considering adding explanations in brackets or examples to explain new or unfamiliar words
- wherever appropriate and possible, adapting the contents to refer to local hazards, maps, laws, historical data, examples, experiences, quotations, names, measurements, materials and solutions.

Step 4: Consider the graphics
Graphics should be appealing to the target culture, easy to identify with and accurately understood. They will be remembered better than the text. Determine whether the graphics can – or should – be adapted, or whether they should be redesigned. Test the graphics with target group to see what meanings they derive from the illustrations. Make sure that any illustrations offering technical advice are accurate and clear, so that they can guide behaviour successfully, and that any symbols used are widely understood.

Step 5: Test, revise and credit
Give your document a version number and date. Field-test it with your target audience and revise. The next version will be ‘new and improved’. Credit sources of original materials, obtaining approval of credits from authors, and include logos of all willing partners. Share copies of your new version with original authors and stay in touch.

Having considered the key ingredients for an effective initiative, we now go on to look at how to manage the knowledge that built up during these experiences.
7. Managing knowledge

Having worked to ensure a high-quality resource, it is time to consider how to manage the knowledge and experience gained over time.

This chapter focuses on three areas of work:

- monitoring and evaluation
- sharing knowledge
- building capacity.

Monitoring and evaluation

Monitoring and evaluation are critically important to accountability and improvement. Measures of effort expended, copies made and the number of people reached are interesting but insufficient. Impact and effectiveness need to be measured against the behavioural goals that were set during the planning process, along with baseline data. Through disaster reduction research we know that the prerequisites for disaster reduction action are:

- access to the very specific knowledge needed for risk reduction
- being convinced that it will be effective
- knowing that you are capable of doing it
- believing that “everyone is doing it”.

In other words, our task is to popularize specific protective and preventative behaviours and actions.

Community-level assessments and baseline measures need to focus more on access to specific knowledge, and specific behaviour sought, rather than on perceptions, attitudes or values. The kinds of questions you might want to ask include:

- Do people know their evacuation routes and which shelter they are heading to?
- Are safe havens stocked with necessary supplies?
- Has the warning system been tested?
- How many people know how to prevent bleeding or open an airway?
- What percentage of homes take measures to make sure their furniture does not topple on them while they are sleeping, or on their toddlers?
- Do self-builders know the three main causes of building failure of their housing type, and do they implement specific disaster-resilient construction methods?
- How many families include their childcare providers in their reunification plans?

Let us say, for example, that baseline data suggest that people in a certain city do not know how to construct safely for earthquake resilience. The goal of your education campaign will be to ensure that beneficiaries recognize the dos and don’ts of safe construction. An objective of your selected approach is that beneficiaries will learn three effective measures to mitigate a given risk. Effectiveness
will measure, first, whether beneficiaries can remember and express this new knowledge, and second, whether they are acting on this knowledge. Action does not have to be measured in “all or nothing” terms. Subtle but important progress can be measured by considering the continuum of behaviour change, which consists of five distinct stages, shown in Figure 3.

**Figure 3: Five stages of behaviour change**

Using this framework, you can more accurately plan and measure the impacts of your programmes, and will be less likely to give up before reaching your goal.

While piloting is a valuable and vital strategy for monitoring and adjusting your approach, this should be planned with the intention to scale up, rather than an end in itself. In other words, the pilot itself will need to reach a critical mass of people to catch on.

How successful any approach is at increasing knowledge and changing behaviour depends heavily on the educational tools used. Since developing, producing and disseminating tools is expensive and time consuming, and target audiences may have limited attention, the tools themselves require rigorous and ongoing testing. They should be evaluated first by content experts, to be certain that the core messages and supporting details are technically accurate. Then they can be tested with focus groups made up of target audience members. Measures of knowledge gained, intention to act, and satisfaction with materials are all useful.

Satisfaction measures may look at:
- **Content** – clear, simple, and consistent messages; accuracy; relevance; age-appropriateness; interest level
- **Design** – appeal; user-friendliness; interest; easy to use; understandable; convenient format
- **Engagement** – qualities that promote interaction and participation; provoke questions; suggests action; fresh, creative, fun and enjoyable.

The production cycle for new materials can be long, so it is wise to use and improve upon materials over the course of several projects. Experimenting with changes in design, presentation, and quantity of materials can help develop increasingly effective educational materials over time.

**Sharing knowledge**

The IFRC well recognizes its need for a consolidated but flexible strategy for collecting and exchanging experience, expertise, and educational tools [77]. There are four mechanisms for knowledge sharing that can make important contributions to public education and public awareness:

- live mechanisms
- communities of practice
- the written word and published records
- information management tools.

Each of these is described below.
Live mechanisms and promotion

The most familiar approaches to knowledge sharing involve face-to-face gatherings at global, regional and national levels. These include:

- IFRC regional and sub-regional networks
- meetings, workshops and forums within the Movement and with other international partners such as the Disaster Preparedness programme of the European Commission’s Humanitarian Aid department (DIPECHO) and the United Nations’ International Strategy for Disaster Reduction (UNISDR)
- global, regional and national networks and platforms for disaster risk reduction, to discuss and plan for common hazards (for example, the sub-regional Mekong Commission for better cooperation and mutual support in preparing for floods).

Communities of practice

Communities of practice encourage participants to exchange and work together beyond and between occasional live events. Within the Movement itself there are many emergent groups beginning to use digital communications to work together across regions, nations, and branches.

Beyond the Movement, many robust collaborative groups or communities of practice pre-date national platforms for disaster reduction, or have grown larger than these national bodies. Some of these that have participation from National Societies include:

- the Southeast Asia Regional Disaster Management Committee
- the South Asia Disaster Management Working Group
- the Pacific Emergency Management Core Group
- the Cambodia Disaster Risk Reduction Forum
- the Disaster Preparedness Network in Nepal
- the Consortium for Disaster Education in Indonesia.

Some communities of practice are simple but very effective. For example, DRR (disaster risk reduction) Library www.drrlibrary.org exists simply to tag and share disaster risk reduction bookmarks. This community would mutually benefit from wider involvement of Red Cross Red Crescent members, as would many others, including:

- Desaprender www.desaprender.org
- the Coalition for Global School Safety and Disaster Prevention Education http://cogssdpe.ning.com
- Edu4DRR Teacher’s Network http://edu4drr.ning.com
- the InterAgency Network on Education in Emergencies www.ineesite.org

Details of others (organized by theme and hazard) are available at Prevention Web http://www.preventionweb.net/english/professional/networks/

The written word and published records

The purpose of writing and publishing (including video and audio) is to reach a wider audience than can be reached face to face. Case studies, modules and toolkits are fundamental mechanisms for knowledge sharing. However, the usefulness of these publications depends on networking activities to promote two areas of work:

- sharing and amplifying
- filtering and discovering.

Each of these areas is described below.
Sharing and amplifying

For many years now, the desire for branding and recognition, as well as concerns about intellectual property and protecting personal livelihoods have made National Societies eager to distinguish and protect their products. But in our rapidly moving and increasingly disaster-prone world (due to the increased concentration of populations in high-risk areas, the impacts of climate change, and the failure to implement known mitigation measures\(^5\)), the power of digital communications makes simply hoarding knowledge products seem passé. One of the most important roles that humanitarian institutions now play is that of gathering available knowledge, filtering it and then amplifying it. New methods of copyright (known as copyleft and Creative Commons – see http://en.wikipedia.org/wiki/copyleft and www.creativecommons.org) have emerged to help protect integrity and quality and to facilitate a greater degree of knowledge sharing.

National Societies, the IFRC, governments and NGOs everywhere face significant challenges in trying to keep track of the educational materials and resources they have developed. A new resource called the UNISDR Prevention Web Education and Training Materials Collection seeks to address this, by providing a comprehensive archive of all published educational materials for disaster risk reduction worldwide.

The site enables users to upload digital files of up to 5MB, to create a comprehensive resource for individual departments, the Movement, and disaster prevention educators worldwide. It also tracks copyright and copyleft restrictions, locates hard copy and disseminates data and contact information, providing a tool for monitoring and reporting. The Community Preparedness and Risk Reduction Department of IFRC encourages regional focal points and National Societies to submit all existing publications and educational materials links to the site.

Filtering and discovering

As more and more work is carried out, it seems harder and harder to make use of earlier experience. A way forward is presented by the following tools for filtering and discovering:

- UNISDR’s Prevention Web – Education and Training Materials Collection currently houses nearly 2,000 published materials that can be searched by hazard, theme, country, language and audience. Refined search can be done by type of material, region, and organization type as well. A general search will also find by author, publisher and title. The collection is kept current through the contributions of users. Each National Society is encouraged to systematically submit new publications here to become part of a shared collection globally.

- ProVention Consortium’s Community Risk Assessment Network, now maintained by the IFRC, provides a valuable international collection with dozens of VCA tools, implementation guides, and case studies shared by practitioners worldwide. www.proventionconsortium.org/?pageid=32&projectid=8

- Reference Centres play an important role in adding value through efficient filtering and discovering, through a combination of human expertise and digital tools. www.cruzroja.org/desastres/redcamp/crrec.htm and www.cruzroja.org/desastres/redcamp/crepd.htm
International Federation of Red Cross and Red Crescent Societies

Chapter 7 Managing knowledge

• A web site supported by the French Red Cross Society in the Caribbean has collected dozens of public education tools of specific interest to the region. 
http://pirac.croix-rouge.fr/

Knowledge management tools

Further developments in information technology are still needed in order to manage multi-lingual resources so that they are easily accessible to all users. These tools will streamline the process of developing educational materials by making the raw materials easily reusable, enabling collaborative authoring and managing the workflows of collaborators in different locations.

In the meantime, taking an experimental approach, trying out new tools and sharing them is an important aspect of developing capacity. Small groups might try Google Docs (docs.google.com) for collaboration. Individuals can use the Google Translate toolbar to explore web sites in other languages, to broaden their horizons (http://translate.google.com/#). The American Red Cross is supporting development of the experimental DREAMS Portal for sharing a learning objects repository where partners will be able to access source materials (including text, graphics, video, audio and layouts) in order to develop disaster reduction education materials and online courseware.

Building capacity

Leadership development in public awareness and public education need to address the following areas of work:
• strategic planning
• developing, testing and improving educational materials
• communicating and promoting disaster risk reduction
• developing and transmitting technical knowledge for specific risk reduction mitigation measures.

Movement-wide capacity development needs to be replicable and affordable, maintain consistent standards, and be locally relevant and adaptable. This leads to an emphasis on a regional approach that makes use of collective wisdom and economies of scale, a basic set of standardized training materials, and web-based knowledge management tools for sustained information sharing.

One example of this capacity development is the Regional Reference Centre for Education and Disaster Preparedness, which has been hosted by the Costa Rican Red Cross Society for the past six years. The centre provides a strong package of services for capacity building, working systematically with National Societies in community-based disaster prevention in Central America to perform the classic network functions of filtering and amplifying information.

The centre has collected information, tools and experience, and has analysed these for relevance, focusing on harmonization, to develop a single model for Central America. A consultative development process has resulted in a highly respected series of 14 modules, covering a wide body of community-based disaster mitigation knowledge and action. The centre provides a leadership development hub, with instructor training and vibrant knowledge exchange through visiting interns from many countries. Similar regionally based centres have been suggested in other regions, each specializing and offering the opportunity to develop a centre of excellence.
Other innovative capacity-building programmes have identified and targeted specific gaps. The Syrian Red Cross Society, with support from the public information section of the University of Damascus, has addressed capacity building with the mass media. A group of volunteers spent a week studying topics such as:

• editorial practices
• social marketing
• measuring public opinion
• how to communicate with journalists
• advertising design
• planning information campaigns.

In another example, the Turkish Red Crescent partnered with a leading university-based programme providing curriculum and instructor training in earthquake non-structural mitigation (teaching tools and techniques for fastening building furnishings and equipment to prevent injuries and improve business continuity). Meanwhile, in China and Haiti, post-disaster reconstruction projects have partnered to develop capacity in constructing safe shelters. In the future, many more such disaster mitigation skills will become indispensable for National Society staff and volunteers.
Summary

This operational guidance has been designed to support National Societies to develop or improve on their efforts to implement large-scale public awareness and public education for disaster risk reduction. All of the examples are drawn from existing practices in National Societies worldwide.

The process begins with strategic planning, and by using any combination of the four standard approaches: campaigns, participatory learning, informal education, and formal education, following the four key principles of legitimacy and credibility, consistency and standard messaging, scalability and sustainability.

We have seen a wide variety of tools that can be used, and the advantages and disadvantages of each. Specific guidance for quality assurance focuses on the importance of well-crafted messages, powerful images, engaging and proven content that is adapted and localized. Finally, we have seen a range of promising practices in knowledge management, including monitoring and evaluation, knowledge sharing and capacity building.

The References section sets out key IFRC documents and research references that will act as a starting point if you are ready to delve more deeply into these materials.

Finally, the guide and its annexes are available for download at http://preventionweb.net/go/20158. In the Annexes, you will find resources to help you move on to the next step with links to numerous examples from around the Movement. These include efforts to integrate disaster risk reduction with other National Society priorities, as well as exemplary use of the four approaches described above, along with examples for successful use of each type of tool described in the guide (again, divided by region). If you are interested in these, do not hesitate to contact sister societies to ask for more information.
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73 American Red Cross Society. Facing Fear. [place]: Canadian Red Cross, [year].


The Fundamental Principles of the International Red Cross and Red Crescent Movement

**Humanity** The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

**Impartiality** It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

**Neutrality** In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

**Independence** The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

**Voluntary service** It is a voluntary relief movement not prompted in any manner by desire for gain.

**Unity** There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

**Universality** The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.