



# COMMUNITY ENGAGEMENT TECHNIQUES TOOLKIT

Mapping approaches to community engagement for preparedness in Australia

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Cover: A fireman explaining a fire plan to the public. Photo: Country Fire Authority



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## INTRODUCTION TO THIS TOOLKIT

### BACKGROUND

This toolkit builds on National Strategy for Disaster Resilience: Community Engagement Framework Handbook 6 (Australian Institute for Disaster Resilience, 2013) by providing details of:

- The Australian generative model of community engagement (Johnston, Ryan & Taylor, 2019), a framework developed in 2019 based on current community engagement for preparedness approaches used by Australian agencies
- A series of emergency management-tested community engagement techniques ranging from information campaigns through to community development and community led approaches

The model travels through a series of levels of community engagement planning and implementation, which helps practitioners to map and undertake the best community engagement approach for a specific community.

The base articles used to build the suite of techniques were found during a systematic literature review of preparedness activity. A systematic literature review is a rigorous, procedural approach to drawing out all available literature on a topic. The value of a systematic literature review is that it provides a wide ranging view of the accessible knowledge around a topic. Articles were included based on whether they measured impact of engagement techniques (such as preparedness levels, lives saved), and the quality of the research. The full list of articles can be found in the references section.

### AIM OF THE TOOLKIT

This toolkit is designed to introduce new agency communicators and community engagement practitioners to a collection of frameworks and methods of community engagement that have been tested in an emergency management setting.

Tools are described and recommendations made on the contexts where the tool might be most useful. These recommendations are informed by the agency-based framework for community engagement for preparedness, which is explained over the page. Examples of how to monitor and evaluate each engagement tool are included. Each monitoring and evaluation section includes a sample objective with suggestions for collecting and reporting outputs, outcomes and impacts.

## MAPPING APPROACHES TO COMMUNITY ENGAGEMENT FOR PREPAREDNESS IN AUSTRALIA

The framework for community engagement for preparedness presented here is a map of the approaches used in Australian emergency management to motivate and sustain community preparedness for natural hazards. It is informed by discourse and research in community engagement practiced in a wider setting, and could also be used to support recovery after a hazard and to encourage and assist communities build general community resilience.

The model provides an important structure for this toolkit, because the tools are organised in order of the context they can be used in, which is explained by the model. The model shows a foundation three contexts and purposes for community engagement techniques. The foundation is Community Profiling, and the purposes for community engagement techniques are Relational Ties, Capacity Building and Community Programs. The tools in this document appear in this order.

*The framework overview – stages of community engagement for preparedness*

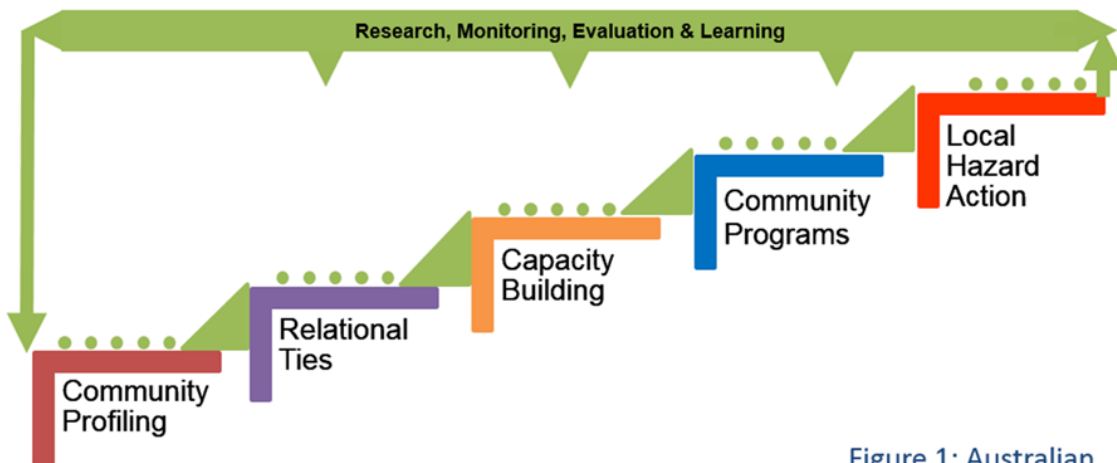
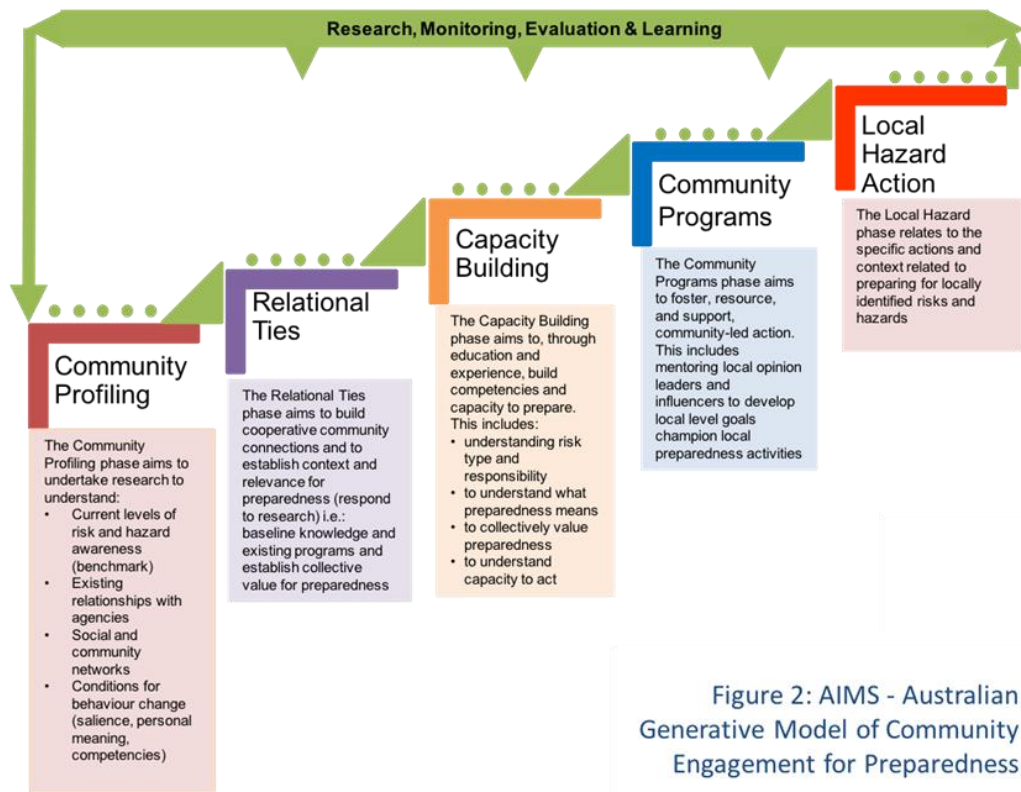
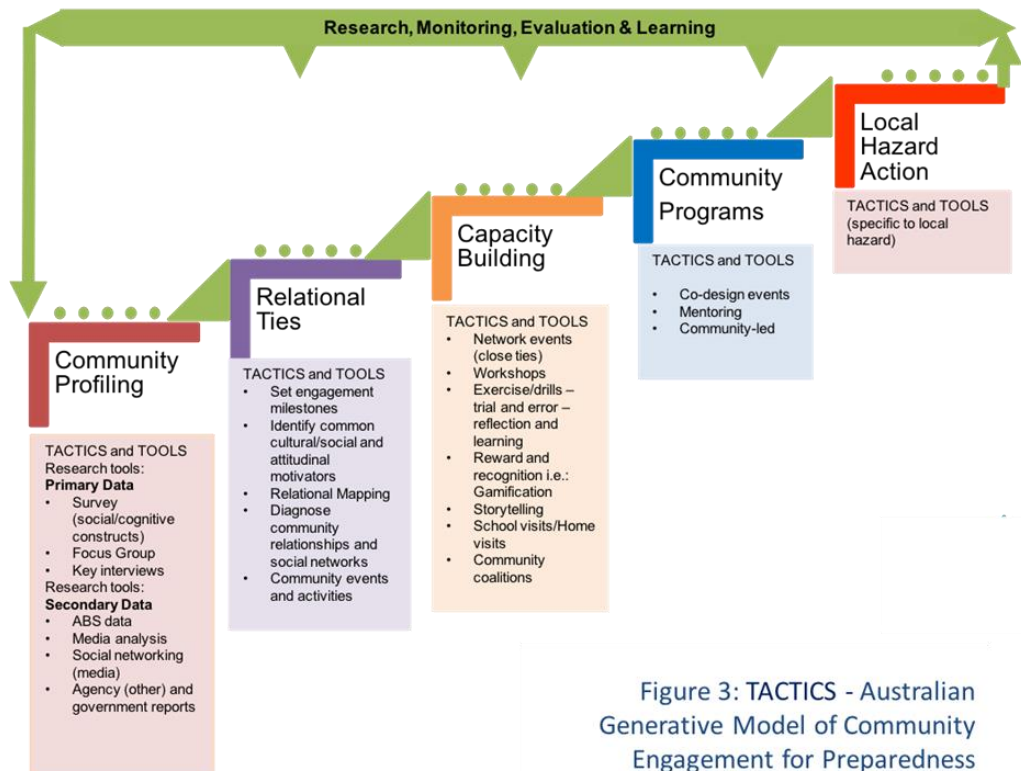


Figure 1: Australian Generative Model of Community Engagement

Aims of each stage of community engagement



Where specific tactics fit in each stage of community engagement



Monitoring and evaluation of each stage of community engagement

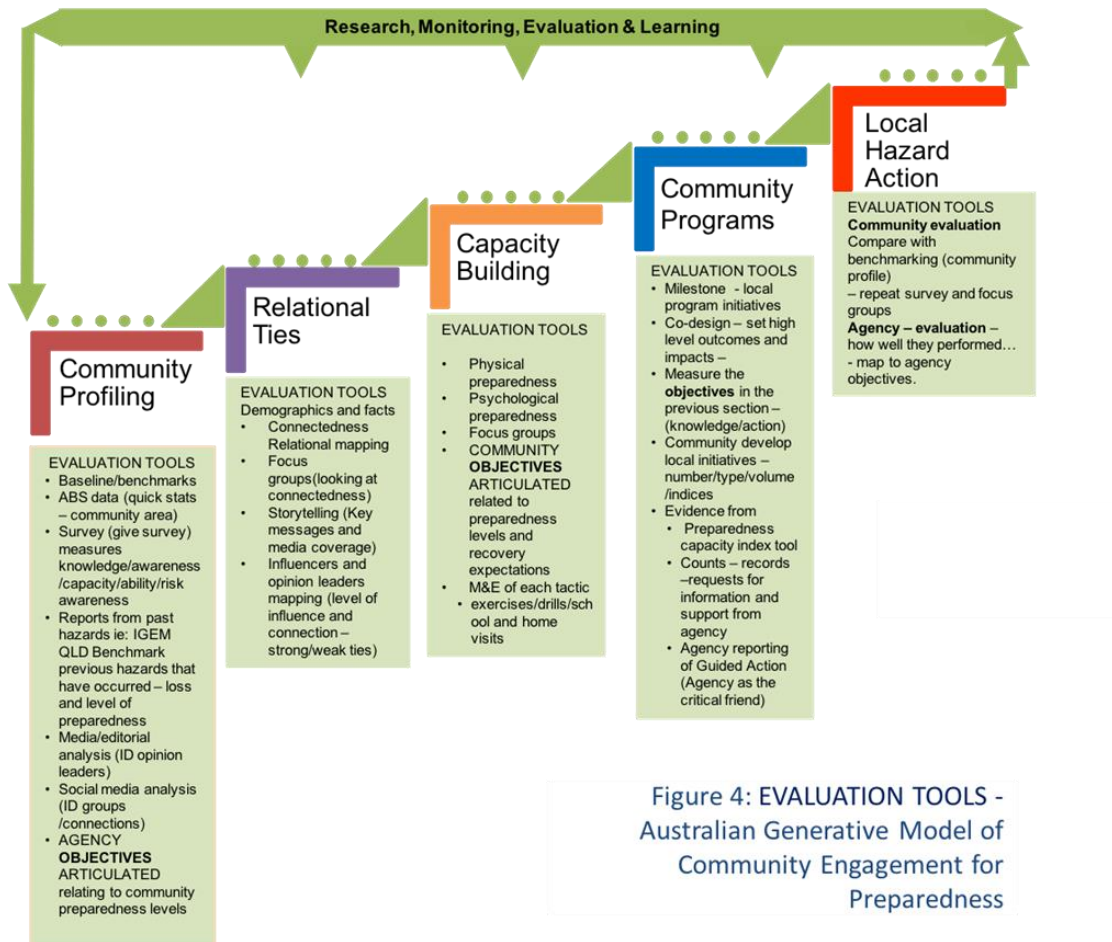


Figure 4: EVALUATION TOOLS - Australian Generative Model of Community Engagement for Preparedness

Using community preparedness competencies to plan community engagement

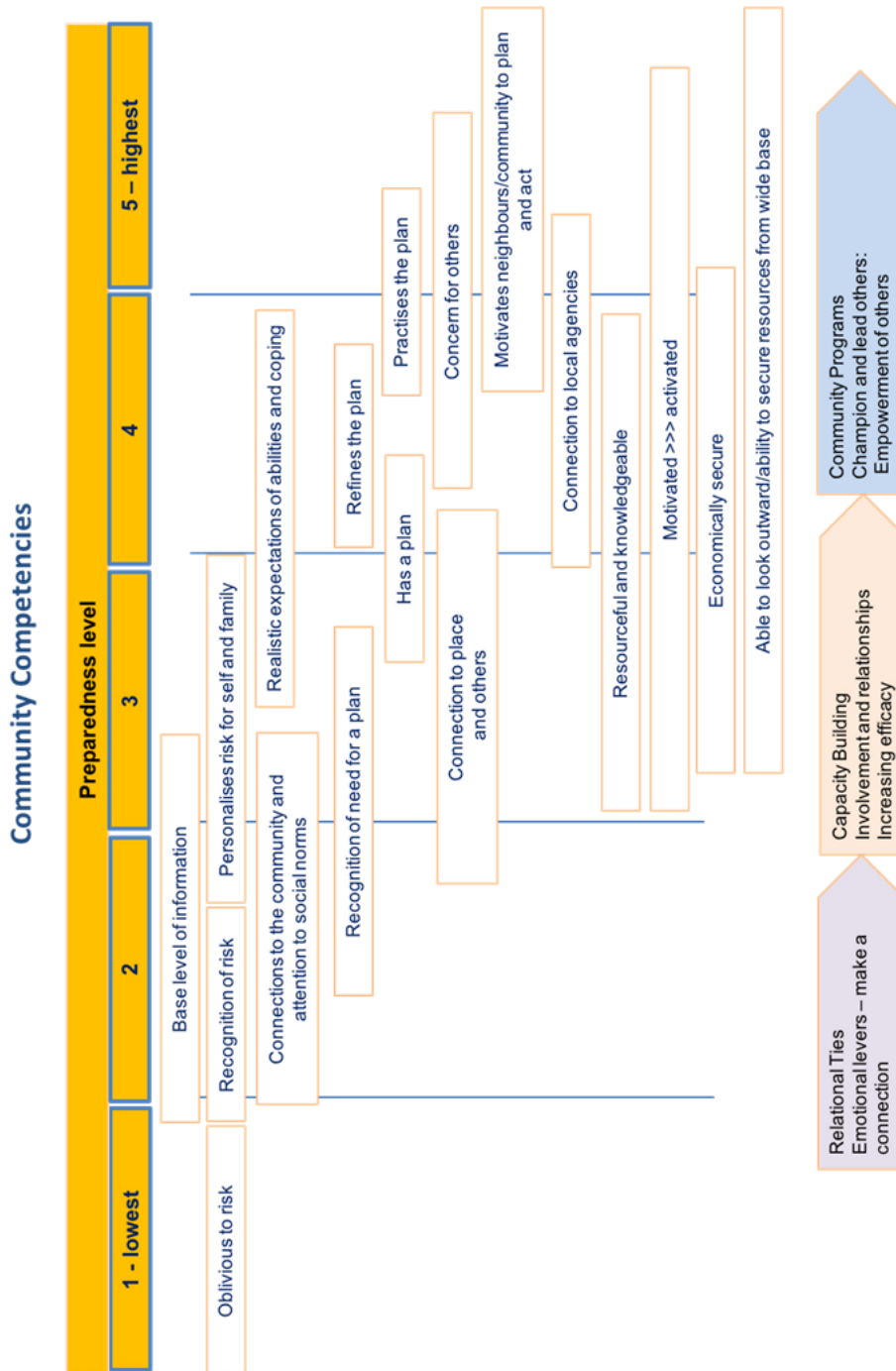


Figure 5: Community Competencies Index – for Community Engagement for Preparedness





## HOW TO USE THIS TOOL KIT

First, you need to understand your complex and dynamic community by developing a **Community Profile (the first step in the model)**. This section provides a brief summary – there is much more detail in the **Monitoring, Evaluation and Learning Toolkit**, which can also be found on the BNHCRC website.

Community (or stakeholder) profiles help you to develop an understanding of the people in your community of interest. Profiles can illustrate the makeup of a community and could include information about the diversity within the community, their history, social and economic characteristics, how active people are (i.e. the groups and networks used) and what social and infrastructure services are provided.

A community profile will provide information on the level of interest community members may have in being actively involved in a project and their preferred method of engagement. You can understand your community better through a **Community Profile Exercise (CPE)**. A CPE provides background data that helps you understand the foundational pieces of information about a community. The CPE will provide the following information:

- What hazards are the community most susceptible to, and what are attitudes to these hazards?
- The community's demographic features
- The relationships that already exist
- What institutions and volunteer organisations and activities are already part of the community fabric for instance show society, mothers' groups, schools, community support networks?
- Where are the community leaders already working and who are they? These are community leaders, not necessarily people in power such as councillors and politicians?
- Where are the tensions within the community?
- What are the key relationships, positive and negative, that you need to be mindful of?
- How do the agencies already work together and what potential is there for closer co-operation?
- What work have emergency agencies already undertaken in this community and how well did that go?

Try these resources to answer the questions above plus any other unique questions that you need to answer:

- ABS Quick Stats:  
[https://quickstats.censusdata.abs.gov.au/census\\_services/getproduct/census/2016/quickstat/036](https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/036) (and enter your locality)
- Your oversight agency for reviews and debriefs (for example, IGEM Qld, Office of Emergency Management, Emergency Management Victoria etc.)



This information will allow you to further **SEGMENT** the community, and then use this information to plot your community's needs on the model in terms of approaches:

**Relational ties** – a community that needs to build relationships and knowledge of risk and is one that your agency and other organisations have had little to do with. It will be low on the preparedness scale with either no or little recognition of risk, or is a community that is aware of the risk, but not sure where to start to get ready.

**Capacity Building** – a community ready for this level of engagement is one where relationships are forming or pre-existing, and there are segments of this community that are motivated, and on the verge of (or at) medium levels of preparedness.

**Community Programs** – communities at this level are, as a whole or within the majority of segments, highly knowledgeable about its risk and is actively getting ready to reduce the risk. These communities seek guidance and support, but you might see yourself moving from the role of facilitator to critical friend.

You will find that the tools that follow are identified in terms of each of these levels of preparedness and context starting with tools for building the **Relational ties** phase through supporting **Capacity Building** to maintaining the **Community Programs** phase. Tools that have been tested in an emergency management context are clearly identified. Tools that have not, but have been successful anecdotally in emergency management or measured in non-emergency contexts, are also included.



## BEFORE YOU GET STARTED

There are a number of valuable and comprehensive tools developed by agencies and agency collaborations that will guide your community engagement journey. Most have been developed collaboratively by practitioners in preparedness and recovery communications and engagement.

### **The Australian Institute of Disaster Resilience Knowledge Hub**

The knowledge hub is here: <https://knowledge.aidr.org.au/collections/>

- National Strategy for Disaster Resilience: Community Engagement Framework (Handbook 6):
  - <https://knowledge.aidr.org.au/resources/handbook-6-community-engagement-framework/>
- Guidelines for the Development of Communication Education, Awareness and Engagement Programs (Manual 45):
  - <https://knowledge.aidr.org.au/resources/manual-series/>
- Lessons management: <https://knowledge.aidr.org.au/collections/lessons-management/>

### **The Australian Journal of Emergency Management**

This journal can also be found at the AIDR Knowledge Hub and is where many Australian case studies in community engagement for preparedness, recovery and resilience have been published:

- <https://knowledge.aidr.org.au/collections/australian-journal-of-emergency-management/>

### **Queensland Council of Social Services**

Place-based approaches for community change (toolkit):

- <https://www.qcoss.org.au/contents-page-for-place-based-approach-and-toolkit/>



## TECHNIQUES

The following lists the techniques that were found to have some evaluation in peer and grey literature of their application in community engagement for natural hazard preparedness, as well as some techniques that have been tested and found to work in other contexts.

### Relational Ties

Tool	Information campaigns
<b>Aim of this tool</b>	To engage a community in the issue of preparedness and move them to from an unaware state to some level of higher knowledge and activity. This tool is usually used for the initial contact within a community, and to provide the common language on which more dialogic techniques are based.
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What it looks like</b>	A themed mainstream media and social media campaign that has been planned and based on research. It has tight and focused key messages and a simple call to action around personalising a hazard risk and/or getting ready for a natural hazard season. The most effective campaigns use PR, advertising and community engagement tools in a coordinated, scheduled and deliberate way.
<b>Outcomes achieved by others using this tool</b>	50% increase – correct assessment of risk 27% increase – discussed bushfire plan 32% increase – level of preparation (Daniels, 2017) However, these can also be expensively ineffective – an example of this is the US CDC's Zombie Apocalypse campaign – it went viral but seemed to have no effect on natural hazard preparedness. The call to action must be simple and easy to achieve (Adame, 2018) .
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building • Community Programs •
<b>Most effective when...</b>	Used in conjunction with other activities such as seminars and home visits. For instance, NSW RFS bushfire planning materials in a behavioural change campaign worked most effectively when there was also contact with a volunteer.
<b>Not so good for...</b>	If not based on good research and science of behaviour change, it will not cut through in disengaged communities and where volunteers are not able to undertake support activities.
<b>What to watch out for</b>	Success of information campaigns are highly dependent on research, planning, organisation of implementation, creativity, budgets and followup. Problems can be: <ul style="list-style-type: none"> <li>• No or poor research</li> <li>• Poor planning</li> <li>• Lack of resourcing for testing and measurement</li> <li>• Lack of range and co-ordination of channels</li> <li>• Lack of opportunities for target publics to interact with agency staff/volunteers during or after the campaign</li> <li>• Lack of quality materials with clear messages</li> <li>• Lack of a simple call to action</li> </ul>
<b>Financial resources</b>	Flexible, but a bigger budget can enable wider reach across more channels and ensure an evidence-based approach with careful planning
<b>Skill level</b>	Medium to high
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>• Skilled campaign planners</li> <li>• Access to research results, the more depth the better</li> <li>• Social marketing collateral and access to a wide range of channels</li> <li>• Preferably a healthy budget</li> </ul>
<b>Evaluation methods</b>	Longitudinal surveys to test for message recall, knowledge, attitudes and behaviour change



	<p>Example of an information campaign objective: To increase homeowners' correct assessment of risk by 25% over a one year period.</p> <p>Baseline: First survey creates baseline data for comparison, follow up surveys show percentage change</p> <p>Sample SMART Indicators are: Outputs:</p> <ul style="list-style-type: none"> <li>• Number of households that participate</li> <li>• Number of households that complete risk analysis</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Percentage of households that correctly assess risk of the hazard</li> <li>• Percentage of households that report that they have made plans for bushfire evacuation</li> <li>• Percentage of households that have practiced their plans</li> </ul> <p>Impacts:</p> <ul style="list-style-type: none"> <li>• Community better prepared for hazards</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<p><b>For a deeper dive</b></p>	<p>Duffy 2008: <a href="https://works.bepress.com/neil_duffy/26/">https://works.bepress.com/neil_duffy/26/</a> This article provides an information campaign survey measuring the outcome of the campaign. Changes over time in knowledge, attitudes and behaviours can be measured by repeating the survey. The Behavioural Architects: <i>The Real Story Ends in Landfill (unsolicited disaster donations)</i> - <a href="https://thebearchitects.s3-eu-west-1.amazonaws.com/Case%20Studies/18594%20-%20ACFID%20-%20Landfill%20Pub%20-%20V7%20copy.pdf">https://thebearchitects.s3-eu-west-1.amazonaws.com/Case%20Studies/18594%20-%20ACFID%20-%20Landfill%20Pub%20-%20V7%20copy.pdf</a></p>



## Relational Ties

<b>Tool</b>	<b>School programs and school holiday programs</b>
<b>Aim of this tool</b>	To engage a community in the issue of preparedness and move them to from an unaware state to some level of higher knowledge and activity
<b>Tested in emergency management?</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (A project was being evaluated by BNHCRC researchers as this toolkit went to print)
<b>What it looks like</b>	Ranges from a one hour/half day information session (not effective), to a module in curriculum, to an embedded, school driven program. Can cover topics such as weather (using portable weather stations), fire behaviour, the science behind cyclone/storm/bushfire forecasting, fire danger rating development, planting for bushfire safety and the ecology of effects of fire on the environment etc.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>• Knowledgeable, motivated and prepared children and parents</li> <li>• Transfer to wider community</li> </ul>
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs <input checked="" type="checkbox"/>
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• School staff are motivated to make room for the program or support a school holiday program</li> <li>• You have access to tools and people who can support the science</li> <li>• Community is experienced</li> <li>• Activities are well planned and connect with the curriculum</li> <li>• A statewide curriculum approach is used</li> </ul>
<b>Not so good for...</b>	<ul style="list-style-type: none"> <li>• Basic information delivery – students are difficult to engage</li> <li>• When the teachers are disengaged</li> </ul>
<b>What to watch out for</b>	<ul style="list-style-type: none"> <li>• Poor planning or delivery “on the fly”</li> <li>• Requirements for working with children</li> </ul>
<b>Financial resources</b>	Low to medium (depends on level/length of involvement)
<b>Skill level</b>	Medium to high
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>• Helps to have a trained teacher to help plan</li> <li>• Access to science/scientists</li> <li>• If facilitated by an agency, contributions by a range of members</li> </ul>
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>• Pre- and post-event surveys</li> <li>• Longitudinal surveys of general community</li> </ul> <p>Example of School Program Objective: To increase students' positive attitudes toward family preparedness by 50% by (date).</p> <p>Baseline: First survey creates baseline data for comparison Sample SMART Indicators are: Outputs:</p> <ul style="list-style-type: none"> <li>• Number of students who participated</li> <li>• Number of programs completed</li> <li>• Number of hours of training completed</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Percentage of students who correctly assess risk of hazard to their family</li> <li>• Percentage of students who report that they have talked with their parents about hazard preparedness</li> </ul> <p>Impacts:</p> <ul style="list-style-type: none"> <li>• Percentage of students (and their families) who have made preparedness plans</li> </ul>



	For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b> .
<b>For a deeper dive</b>	Towers, 2019: <a href="https://www.bnhcrc.com.au/news/2019/children-agents-change-disaster-preparedness">https://www.bnhcrc.com.au/news/2019/children-agents-change-disaster-preparedness</a> Strathewen-Arthurs Creek education partnership: <a href="https://www.facebook.com/pages/category/Product-Service/Strathewen-Arthurs-Creek-Bushfire-Education-Partnership-948935338592270/">https://www.facebook.com/pages/category/Product-Service/Strathewen-Arthurs-Creek-Bushfire-Education-Partnership-948935338592270/</a>



## Relational Ties

<b>Tool</b>	<b>Workshops – focus groups/viewing panels as engagement</b>
<b>Aim of this tool</b>	To understand the community's knowledge of their risk and where to get information, and to build on this knowledge
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What this looks like</b>	A fairly homogenous group of householders takes part in a facilitated discussion on certain topics. Consultation tools, such as mapping ideas, post-it notes, group work can be used to vary the interactivity and encourage discussion, particularly amongst people unused to this sort of exercise or are uncomfortable with the focus on themselves.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>• Creates community networks where none exist</li> <li>• Exposes and tests assumptions of agencies</li> <li>• Provides a starting point for other programs where the hurdle has been lack of recognition of risk</li> <li>• Realisation that individual's own preparedness is not as good as thought</li> <li>• Increases community and individual preparation (Jurjonas, 2018)</li> </ul>
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building <input type="checkbox"/> Community Programs <input type="checkbox"/>
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• Communities don't recognise their risk, and are therefore not motivated to prepare</li> <li>• Agencies are new to a community with engagement activities</li> <li>• Agencies are not sure where community is at in terms of risk recognition</li> <li>• Good for identifying potential champions</li> </ul>
<b>Not so good...</b>	<ul style="list-style-type: none"> <li>• When large numbers/larger communities needed to be reached and motivated</li> <li>• In areas where an event has occurred and the community is unhappy with agencies as a result</li> </ul>
<b>What to watch out for</b>	<ul style="list-style-type: none"> <li>• Dominant personalities that hijack conversations</li> <li>• Grievances</li> <li>• Power imbalances</li> <li>• Disparate individuals in terms of demographics and experiences which could contribute to the previous three problems</li> </ul>
<b>Financial resources</b>	Low – medium
<b>Skill level</b>	Medium
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>• Skilled facilitator</li> <li>• Tactile resources e.g. paper, pens, soft construction materials</li> <li>• Preparedness support materials</li> </ul>
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>• Questionnaire testing knowledge before and after</li> <li>• Observation</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<b>For a deeper dive</b>	Tasmanian Department of Health and Human Services (online resource) This resource identifies the steps for planning this tool: <a href="https://tinyurl.com/yxwsanee">https://tinyurl.com/yxwsanee</a>





## Relational Ties

<b>Tool</b>	<b>Arts/music workshops</b>
<b>Aim of this tool</b>	To engage with hard to reach groups with a special interest
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What it looks like</b>	This is a themed workshop where guided creative expression encourages participants to build knowledge and make connections. Often an outcome can be a performance or exhibition that helps audience members better understand a topic.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>Improved relationships between agencies and the target group.</li> <li>Improved community networks</li> <li>Improved comprehension of individuals of their situation (Phillips et al, 2016) .</li> </ul>
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building <input type="checkbox"/> Community Programs •
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>Used in situations of low trust</li> <li>Used with hard to reach groups</li> <li>Used in a recovery situation</li> </ul>
<b>Bad for...</b>	Situations where it is being used as a trust-building exercise in a tricky community even and no further activities are planned for that community.
<b>What to watch out for</b>	A group that is not segmented sufficiently – participants in each workshop need to have some commonalities (such as age, life stage, skill levels etc) to encourage ongoing outcomes.
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>Skilled facilitator/s</li> <li>Space</li> <li>Resource intensive</li> <li>Instruments or art materials</li> </ul>
<b>Financial resources</b>	Medium
<b>Skill level</b>	High: specialists in the selected arts area required
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>Semi-structured interviews</li> <li>Observation</li> <li>Pre- and post-workshop survey</li> </ul> <p>Example of Art/Music Objective: To increase participants' comprehension of their risk situation by 25% by (date).</p> <p>Baseline: First survey creates baseline data for comparison, follow up surveys show percentage change Sample SMART Indicators: Outputs:</p> <ul style="list-style-type: none"> <li>Number of participants</li> <li>Number of workshops completed</li> <li>Number of engagement hours completed</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>Percentage of people who report that they better understand the topic of the workshop</li> <li>Percentage of people who report that they feel more connected to their community</li> <li>Percentage of people who have engaged in desired behaviours discussed in the workshop</li> </ul> <p>Impacts:</p> <ul style="list-style-type: none"> <li>Community better prepared to address risk and hazards</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>



<b>For a deeper dive</b>	Phillips et al., 2016: <a href="https://knowledge.aidr.org.au/media/1210/ajem-31-04-16.pdf">https://knowledge.aidr.org.au/media/1210/ajem-31-04-16.pdf</a>  City of Melbourne Arts House 'Refuge' Project 2019: <a href="https://www.artshouse.com.au/?s=refuge">https://www.artshouse.com.au/?s=refuge</a>
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## Relational Ties

<b>Tool</b>	<b>School drills</b>
<b>Aim of this tool</b>	To educate school children on the process of evacuation and the reasons for an evacuation and to involve them and their parents in introductory preparation activities
<b>Tested in emergency management?</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (not empirically tested and results published)
<b>What it looks like</b>	Evacuation of smaller schools or Grade 5s and/or 6s in response to a generic hazard by bus to the local Neighbourhood Safer Place, where other activities can be undertaken (e.g. science-related natural hazard education such as fire danger rating measurements, operation of a mobile weather station). A community meeting is held locally that night or the night after and children asked to bring their parents along.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>Not measured empirically, but other types of drills have improved risk knowledge, and preparedness knowledge and activity</li> </ul>
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs <input type="checkbox"/>
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>Used in situations of low trust</li> <li>Used with hard to reach groups</li> <li>Used in tandem with Grade 5/6 curriculum requirements</li> <li>Well-publicised in the school newsletter</li> </ul>
<b>Bad for...</b>	Soon after an event
<b>What to watch out for</b>	Lack of buy-in by the school
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>Transport for large numbers of children</li> <li>Long term organisation – this could take a full term to organise</li> <li>Engaging activities at the evacuation destination</li> <li>Access to specialists for the activities (if necessary)</li> </ul>
<b>Financial resources</b>	High
<b>Skill level</b>	Low-medium
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>Semi-structured interviews</li> <li>Observation</li> <li>Pre- and post-drill survey across the community</li> </ul> <p>Example of drill objective: To increase by 50% children's understanding of what triggers an evacuation by the end of the year.</p> <p>Baseline: First survey creates baseline data for comparison, follow up surveys show percentage change</p> <p>Sample SMART Indicators: Outputs:</p> <ul style="list-style-type: none"> <li>Number of participants at post-drill seminar</li> <li>Number of children taking part in the drill</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>Increase in the percentage of people who understand their level of risk</li> <li>Percentage of people who have engaged in preparation behaviour listed in the materials</li> </ul> <p>Impacts:</p> <ul style="list-style-type: none"> <li>Community better prepared to address risk and hazards</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<b>For a deeper dive</b>	Coomer et al. An earthquake emergency response and evacuation exercise in a New Zealand school: A 2011 case study <a href="#">report</a> .



## Relational Ties/Capacity Building

<b>Tool</b>	<b>Seminars</b>
<b>Aim of this tool</b>	To improve knowledge of communities of their risk and how to prepare
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What it looks like</b>	Community meetings or business/organisational/church/ special interest group presentations are the most often used format of the seminar, where community members attend a venue and a presentation made by agencies. These presentations can deliver basic, intermediate or advanced levels of information and are supported by printed materials and often follow-up activities or appointments.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>• Significant increase in levels of preparation, probably because seminar attendees are already motivated to take action</li> <li>• Improved social networks</li> <li>• Potential for decreased social isolation (Ashida et al 2017; McNeill, I.M. et al, 2016a, 2016b)</li> </ul>
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs •
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• Other engagement activities have already been undertaken and segments of the community are motivated to take action and learn what to do</li> <li>• Combined with information campaigns</li> </ul>
<b>Not so good...</b>	<ul style="list-style-type: none"> <li>• In communities with extremely low trust factors (but should not be discounted as one of the initial events)</li> <li>• Where preliminary profile-raising or information campaigns have not been undertaken</li> <li>• Out of season or when other contexts or cues conflict with messages (such as flood information during a drought)</li> </ul>
<b>What to watch out for</b>	<ul style="list-style-type: none"> <li>• Overload of information – make the steps simple and achievable; however, some people will embrace the checklist concept, so have materials on hand for this</li> <li>• Ensure the volunteers are well trained; make no assumptions about their social skills; scripting and role play of introductions is a good idea as part of the training</li> </ul>
<b>Financial resources</b>	Low
<b>Skill level</b>	Medium
<b>Resource requirements</b>	Venue, staff and support materials.
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>• Semi-structured interviews</li> <li>• Observation</li> <li>• Pre and post-workshop survey</li> </ul> <p>Example of Seminar Objective: To increase participants' knowledge of their risk by 50% by the end of the session. Baseline: First survey creates baseline data for comparison, follow up surveys show percentage change</p> <p>Sample SMART Indicators: Outputs:</p> <ul style="list-style-type: none"> <li>• Number of participants</li> <li>• Number of seminars on hazard topics</li> <li>• Number of seminar engagement hours</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Percentage of people who report that they better understand the topic of the workshop</li> <li>• Percentage of people who report that they feel more connected to their community</li> <li>• Percentage of people who have engaged in desired behaviours discussed in the workshop</li> </ul>



	<p>Impacts:</p> <ul style="list-style-type: none"> <li>• The community is better prepared for the hazard</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<p><b>For a deeper dive</b></p>	<p>Redshaw et al. 2017:  <a href="https://search.informit.com.au/fullText;dn=815768558415190;res=IELHSS">https://search.informit.com.au/fullText;dn=815768558415190;res=IELHSS</a></p>



## Relational Ties/Capacity Building

<b>Tool</b>	<b>Gamification</b>
<b>Aim of this tool</b>	To involve specific community segments in personalisation of risk and to motivate preparation
<b>Tested in emergency management?</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>What it looks like</b>	A competition or application that awards points or some other reward for activity or engagement. It involves the application of game-design elements and game principles in non-game contexts. Participants engage in a set of activities to solve problems by using or applying the characteristics of game elements.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>Increases in level of activity</li> <li>Increases in the effect of social norms in segments involved in the game (Tanwattana, 2018)</li> </ul>
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs •
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>Well promoted with an effective information campaign</li> <li>Rewards are tangible</li> <li>Used to engage young people</li> <li>Developed at an agency level</li> </ul>
<b>Not so good...</b>	When relying on competitive nature only.
<b>What to watch out for</b>	<ul style="list-style-type: none"> <li>Time investment in planning.</li> <li>Legal aspects may need to be considered (terms and conditions).</li> <li>Need for prizes.</li> </ul>
<b>Financial resources</b>	Medium to high
<b>Skill level</b>	Medium – high
<b>Resource requirements</b>	High
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>Surveys</li> <li>Semi-structured interviews</li> <li>Observation</li> </ul> <p>Example of Gamification Objective: To increase participants' preparedness for a hazard by 25% before next (hazard season). Baseline: First survey creates baseline data for comparison, follow up surveys show percentage change</p> <p>Sample SMART Indicators: Outputs:</p> <ul style="list-style-type: none"> <li>Number of hours the game is played</li> <li>Number of people who have played the game</li> <li>Number of levels completed</li> <li>Amount of knowledge acquired</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>Percentage of people who played the game who report that they better understand the topic of the workshop</li> <li>Percentage of people who have engaged in desired behaviours modelled in the game</li> </ul> <p>Impacts:</p> <ul style="list-style-type: none"> <li>People who played the game are better prepared to address risk.</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<b>For a deeper dive</b>	Queensland's Great Escape: <a href="https://www.qfes.qld.gov.au/fireescape/fireescapeplan/">https://www.qfes.qld.gov.au/fireescape/fireescapeplan/</a>



	<p>New Zealand's Shakeout: <a href="https://www.civildefence.govt.nz/get-ready/new-zealand-shakeout-2019/">https://www.civildefence.govt.nz/get-ready/new-zealand-shakeout-2019/</a></p>
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## Relational Ties/Capacity Building

<b>Tool</b>	<b>Home visits</b>
<b>Aim of this tool</b>	Connection with previously disengaged communities that can motivate interest and/or action and also develop relationships
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What it looks like</b>	Staff undertake a doorknock or a by-appointment home visit program to deliver information at various levels. At a Relational level, staff undergo training on scripted introductions, aims of the visits, and key questions to ask that can start a conversation. At Capacity Building levels, qualified and skilled staff give advice on property preparation, usually relating to bushfire preparedness or recovery outreach.
<b>Outcomes achieved by others using this tool</b>	In Victoria, 98% of people studied held on to their fire preparation materials; 77% kept their flood info kit. Seems to be more effective for bushfire and storm than flood in terms of preparation activity – with flood, preparation activity can tail off over next few months (Foster, 2013) . Three-fold increase in knowledge of earthquake risk and preparation in Tehran (Ardalan et al, 2013) . Face to face interaction in Los Angeles Latino communities shifted people's stage of thinking about a plan and a communication plan. Compared with information delivery with no interaction (such as information campaigns), home visits were more successful (Glik et al, 2014).
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs •
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• Communities are too busy to register interest in an issue – home visits cut through and help people realise their own risk</li> <li>• Simple materials back up the interaction with the volunteer – these can be saved and referred to later</li> <li>• Volunteers are available to undertake the visits</li> <li>• Training is undertaken by the staff doing the activity</li> <li>• Supported by some social marketing activities</li> </ul>
<b>Not so good...</b>	<ul style="list-style-type: none"> <li>• In communities with extremely low trust factors or high levels of disconnection, in which case home visits not booked by the householder can have an elevated risk for the volunteer</li> <li>• When staff don't have much time to work on these</li> </ul>
<b>What to watch out for</b>	<ul style="list-style-type: none"> <li>• Overload of information – one or two carefully selected support materials is optimum and ONE call to action (NOT a further information seeking action)</li> <li>• Ensure the volunteers are well trained - make no assumptions about their social skills</li> <li>• Scripting and role play of introductions is a good idea as part of the training</li> </ul>
<b>Financial resources</b>	<ul style="list-style-type: none"> <li>• Low</li> </ul>
<b>Skill level</b>	<ul style="list-style-type: none"> <li>• Low to medium</li> </ul>
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>• Support materials; time</li> </ul>
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>• Semi-structured interviews</li> <li>• Observation</li> <li>• Pre and post-workshop survey</li> </ul> <p>Example of Home Visit Objective: To increase homeowners' preparedness for a hazard by 25% before next storm season.</p>





	<p>Baseline: First in home survey creates baseline data for comparison, follow up surveys show percentage change</p> <p>Sample SMART Indicators:</p> <p>Outputs:</p> <ul style="list-style-type: none"> <li>• Number of homes visited</li> <li>• Number of materials delivered</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Percentage of people who report that they better understand the topic of the home visit</li> <li>• Percentage of people who have read and used the materials</li> <li>• Percentage of people who have engaged in desired behaviours discussed in the home visit</li> </ul> <p>Impacts:</p> <ul style="list-style-type: none"> <li>• Families are more prepared to deal with hazards</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<p><b>For a deeper dive</b></p>	<p>Duffy, 2008: <a href="https://works.bepress.com/neil_duffy/26/">https://works.bepress.com/neil_duffy/26/</a></p> <p>Foster, 2013: <a href="https://ajem.infoservices.com.au/items/AJEM-28-01-04">https://ajem.infoservices.com.au/items/AJEM-28-01-04</a></p>



### Relational Ties/Capacity Building

<b>Tool</b>	<b>Workshops – field activities</b>
<b>Aim of this tool</b>	To improve the community's comfort levels with more advanced forms of preparation.
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What this looks like</b>	An on-property field day where weaknesses in preparation and the process by which they could be fixed are identified by agency staff. Generally introduces individuals to more advanced preparation activities such as storm/fire shutters (or where they might be needed), vegetation management, cyclone strapping, sprinklers, fire pumps and reticulation systems, tanks, and levels of preparedness that will give a property the best chance of survival (for instance, Eriksen 2014).
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>• Felt by agencies to be effective</li> <li>• Agencies thought this type of activity was particularly effective for women</li> <li>• Women are more likely to personalise risk and convert that perception to preparation activity</li> </ul>
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs •
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• People are motivated to prepare but unsure how to progress beyond tidying up their properties</li> <li>• Recruitment can occur from community meetings devoted to other topics</li> <li>• The unit or brigade has a householder willing to open their property to scrutiny and demonstration</li> <li>• Unit or brigade can demonstrate a few of the activities that they might use to protect a storm-affected or fire/flood threatened property</li> </ul>
<b>Not so good...</b>	In urban areas.
<b>What to watch out for</b>	As individuals learn how to use equipment, watch out for facilitators and onlookers jumping in to help when the learner hesitates. People learn by thinking a problem out and then doing – they just need time to nut out the process and the equipment when they have a turn to go through.
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>• A property with some potential vulnerabilities</li> <li>• Knowledgeable and patient volunteers</li> <li>• Support materials</li> </ul>
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>• Semi-structured interviews</li> <li>• Observation</li> <li>• Pre and post-seminar survey</li> </ul> <p>Example of Field Activity Objective: To increase participants' capacity to safely experience a hazard by 25% over a one year period.</p> <p>Baseline: First survey creates baseline data for comparison, follow up surveys show percentage change</p> <p>Sample SMART Indicators:</p> <p>Outputs:</p> <ul style="list-style-type: none"> <li>• Number of household/ participants</li> <li>• Number of field activities</li> <li>• Number of engagement hours</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Percentage of people who report that they better understand the topic of the workshop</li> </ul>



	<ul style="list-style-type: none"> <li>Percentage of people who have engaged in desired behaviours discussed in the workshop</li> </ul> <p>Impacts:</p> <ul style="list-style-type: none"> <li>Properties are more prepared for a hazard</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<b>For a deeper dive</b>	Eriksen 2014: <a href="https://ro.uow.edu.au/smhpapers/1442/">https://ro.uow.edu.au/smhpapers/1442/</a>



### Relational Ties/Capacity Building/Community Programs

<b>Tool</b>	<b>Storytelling</b>
<b>Aim of this tool</b>	A high impact tool that aims to cut through other distractions and connect with the target public, promoting them to identify with the storytellers and take action on preparedness
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What it looks like</b>	Formal storytelling tools such as books, film or audio are used to connect with residents and to personalise a risk that had previously seemed remote. Often stories will trigger some action. Informal storytelling can be undertaken within seminars or workshops, but the storytellers generally need to have some credibility related to their experience, skills or knowledge.
<b>Outcomes achieved by others using this tool</b>	Increase in developing and rehearsing plans, preparing gutters and gardens, even installing extra water tanks, purchasing fire pumps and fire protection equipment (Chapple et al 2017).
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs <input checked="" type="checkbox"/>
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• Communities are too busy to take action or are not sure what to do.</li> <li>• Used in uninvolved communities or with community segments who are less likely to pay attention (such as school groups)</li> <li>• Indigenous story tellers can be very effective</li> </ul>
<b>Not so good...</b>	When the stories or story tellers don't have/make some common connection to the viewer/reader – such as geographic location.
<b>What to watch out for</b>	<ul style="list-style-type: none"> <li>• Using stories or story tellers that don't have something in common with the target public</li> <li>• Ensuring production values align with the target community</li> </ul>
<b>Financial resources</b>	Low to medium
<b>Skill level</b>	Low to medium
<b>Resource requirements</b>	These can range from a social media video clip to a full scale documentary or published book.
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>• Pre- and post-viewing/listening survey</li> <li>• Semi-structured interviews</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<b>For a deeper dive</b>	<p>Chapple et al. 2017: Fire stories – a lesson in time  <a href="https://www.youtube.com/watch?v=ZPOJml0I4E">https://www.youtube.com/watch?v=ZPOJml0I4E</a></p> <p>Strathewen community 2019: <a href="https://tinyurl.com/yyol6mbk">https://tinyurl.com/yyol6mbk</a></p>



## Capacity Building/Community Programs

<b>Tool</b>	<b>Participatory mapping</b>
<b>Aim of this tool</b>	To improve the community's knowledge of their risk and also to improve agency knowledge of the types of risks communities face
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What it looks like</b>	Workshops are held, dividing the attendees into groups where they work together to progressively identify and draw layers of risk in a geographic area. Layers might include weather, topography, infrastructure (access, mobile phone/radio reception, weak points), social structures, local residents' capabilities and equipment, vulnerable households etc. At the end of the workshop, each group produces a map with risk factors identified and can personalise this to their own and neighbours' properties.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>• Creates community networks where none exist</li> <li>• Exposes and tests assumptions of agencies</li> <li>• Provides a starting point for other programs where the hurdle has been lack of recognition of risk</li> <li>• Improved reciprocity of relationships</li> <li>• Increases community and individual preparation</li> </ul> <p>(Akama &amp; Ivanka 2010; Gaillard et al 2013; Haworth et al 2016; Tran &amp; Shaw 2009; Yusuf et al, 2018)</p>
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs <input checked="" type="checkbox"/>
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• Communities don't recognise their risk, and are therefore not motivated to prepare</li> <li>• Agencies are new to a community with engagement activities</li> <li>• Agencies are not sure where community is at in terms of risk recognition</li> <li>• You have some access to community members via volunteers or other agencies, or a social media account</li> </ul>
<b>Not so good...</b>	In disconnected communities or where residents don't want to participate in their local community.
<b>What to watch out for</b>	<ul style="list-style-type: none"> <li>• Making the area covered by the map too large (segment areas and participants)</li> <li>• Running the activity in groups too large for all participants to participate in a hands-on way</li> <li>• Ensuring the workshop is conducted in stages so participants can be focused on the purpose for each task</li> <li>• Hazard behaviour in the local context should be explained</li> <li>• Visit a range of levels of potential risk – topographic, weather, social, infrastructure, community capabilities</li> <li>• To get people there, you will need to follow up by phone</li> </ul>
<b>Financial resources</b>	Low – medium
<b>Skill level</b>	Medium – high
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>• Maps</li> <li>• Coloured pencils, stickers and icons, classroom construction materials (for 3D mapping)</li> <li>• GIS support (for digitising maps).</li> <li>• Time – these can take place in a number of sessions over days, but at least one three hour session is required</li> <li>• Some facilitation experience would be helpful, but a clear agenda will guide a novice through this process</li> </ul>
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>• Pre- and post-workshop survey</li> <li>• Semi-structured interviews</li> </ul>



	<ul style="list-style-type: none"> <li>• Observation</li> </ul> <p>Example of Participatory Mapping Objective: To increase participants' social and agency connections by 50% within their own community by the end of the year.</p> <p>Baseline: First survey creates baseline data for comparison, follow up surveys show percentage change</p> <p>Sample SMART Indicators:</p> <p>Outputs:</p> <ul style="list-style-type: none"> <li>• Number of people who participate</li> <li>• Number of field activities that occur after the mapping exercise</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Percentage of people who report that they better understand the layers of risk in the community</li> <li>• Percentage of people who have engaged in desired behaviours discussed in the workshop</li> </ul> <p>Impacts:</p> <ul style="list-style-type: none"> <li>• Properties are more prepared for a hazard</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<p><b>For a deeper dive</b></p>	<p>Warner, 2015: <a href="http://web.mit.edu/cwarner/www/SocialHubfinal.pdf">http://web.mit.edu/cwarner/www/SocialHubfinal.pdf</a></p> <p>Haworth et al 2016: <a href="https://knowledge.aidr.org.au/resources/ajem-jul-2015-emerging-technologies-for-risk-reduction-assessing-the-potential-use-of-social-media-and-vgi-for-increasing-community-engagement/">https://knowledge.aidr.org.au/resources/ajem-jul-2015-emerging-technologies-for-risk-reduction-assessing-the-potential-use-of-social-media-and-vgi-for-increasing-community-engagement/</a></p>



### Relational Ties/Capacity Building/Community Programs

<b>Tool</b>	<b>Workshops – game-based</b>
<b>Aim of this tool</b>	To improve understanding of the way a natural hazard can affect a community and facilitate decision-making through preparedness, response and recovery phases.
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What it looks like</b>	A scenario-based game where each situation allows a range of choices with certain consequences. The choices inform participants, which allows the game to be played by people of all levels of knowledge. This method is focused on team and knowledge building amongst a forming or existing community coalition whose members have common connections to a location. It is different from gamification because it is conducted in a workshop setting and has specific community segments in mind.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>Creates community networks where none exist</li> <li>Develops the coping and action skills of a community from a very low base</li> </ul>
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs <input checked="" type="checkbox"/>
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>Communities don't recognise their risk, and are therefore not motivated to prepare</li> <li>Communities have a very low understanding of agency roles</li> <li>Community members have self-identified as wanting to learn more</li> <li>Has potential to build cohesive community quickly</li> <li>Agencies are working in areas where education/literacy levels are lower, or working with children</li> </ul>
<b>Not so good...</b>	<ul style="list-style-type: none"> <li>For inexperienced facilitators</li> <li>Where workshop organisers are not familiar with local community networks and relationships</li> </ul>
<b>What to watch out for</b>	<ul style="list-style-type: none"> <li>The scenario and game must be tested before the workshop.</li> <li>Assumptions in developing the game</li> </ul>
<b>Financial resources</b>	Low - medium
<b>Skill level</b>	Medium
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>Facilitation skills</li> <li>Clear game tools and instructions</li> <li>Time (one study conducted a game over one week)</li> </ul>
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>In-workshop observation</li> <li>Pre- and post-surveys or interviews</li> <li>Semi-structured interviews</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<b>For a deeper dive</b>	<p>Tomaszewski et al. 2014:  <a href="https://people.rit.edu/bmtski/docs/giscience2014_submission_97_final_c_amer_ready_11_August_2014.pdf">https://people.rit.edu/bmtski/docs/giscience2014_submission_97_final_c_amer_ready_11_August_2014.pdf</a></p> <p>Yamori 2013:  <a href="https://ideas.repec.org/a/spr/grdene/v22y2013i1d10.1007_s10726-012-9307-5.html">https://ideas.repec.org/a/spr/grdene/v22y2013i1d10.1007_s10726-012-9307-5.html</a></p>

### Capacity Building/Community Programs

<b>Tool</b>	<b>Ideation workshop/community brainstorming</b>
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<b>Aim of this tool</b>	To increase self-efficacy in a range of emergency-related settings – mitigation, preparedness and recovery.
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What it looks like</b>	Participants brainstorm a set of questions and develop solutions to issues specific to their community. Usually four key questions are enough for a workshop of three or more hours – such as the big challenge; how can we overcome this/these; what opportunities do we have; how can we take advantage of these. Other questions can be used. Participants brainstorm their answers and then discuss these with the wider workshop.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>• Risk identification and responsibility transfer</li> <li>• Increased preparation for volcanic eruption</li> <li>• Capacity building</li> <li>• The process provides agency staff with insights into why people don't prepare</li> </ul>
<b>Should be used for</b>	Relational Ties <input type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs <input checked="" type="checkbox"/>
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• The community is under imminent threat, or has experienced a large event</li> <li>• When some follow-up activity is planned</li> </ul>
<b>Not so good...</b>	When the threat is not specific – this type of workshop needs a clear issue to work on.
<b>What to watch out for</b>	<ul style="list-style-type: none"> <li>• The way the brainstorming component flows – be careful to allow all ideas onto the table and for these to be considered in detail at some stage</li> <li>• Lack of knowledge of the issue and agency capabilities by the facilitator or attending staff. The brainstorming process may present technical questions that the group would like answered in order to consider a solution</li> </ul>
<b>Financial resources</b>	Low – medium
<b>Skill level</b>	High
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>• Skilled facilitator</li> <li>• Venue</li> <li>• Catering</li> <li>• Time (from three hours to one day)</li> <li>• Attending experts (weather, response, fire)</li> <li>• Support for collating and distributing results</li> </ul>
<b>Evaluation methods</b>	<p>Longitudinal surveys to test for message recall, knowledge, attitudes and behaviour change</p> <p>Example of Community Brainstorm Objective: To increase community members' preparedness 25% before next storm season. Baseline: First survey creates baseline data for comparison, follow up surveys show percentage change</p> <p>Sample SMART Indicators: Outputs:</p> <ul style="list-style-type: none"> <li>• Number of community members that participate</li> <li>• Number of community members that complete risk analysis</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Percentage of community members that correctly assess risk of hazard</li> <li>• Percentage of community members that report they have made plans for evacuation</li> <li>• Percentage of households that have practiced their evacuation plans</li> </ul>





	<p>Impacts:</p> <ul style="list-style-type: none"> <li>• Community better prepared for hazards</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<p><b>For a deeper dive</b></p>	<p>Van Manen et al 2015: <a href="https://www.sciencedirect.com/science/article/pii/S0142694X15000423">https://www.sciencedirect.com/science/article/pii/S0142694X15000423</a></p> <p>Barbour 2016: <a href="https://ozcontent.com/blog/how-to-lead-an-ideation-workshop-that-results-in-innovation/">https://ozcontent.com/blog/how-to-lead-an-ideation-workshop-that-results-in-innovation/</a></p>



## Capacity Building/Community Programs

<b>Tool</b>	<b>World Cafe</b>
<b>Aim of this tool</b>	As a simple but powerful process, the World Cafe (Brown and Isaacs, 2005) allows exchange of ideas and creative thinking to solve problems. It is a conversational process that helps groups to engage in constructive dialogue around critical questions and to build personal relationships.
<b>Tested in emergency management?</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>What it looks like</b>	Tables of five to eight chairs are set up around the room containing pens, paper and post-it notes. The facilitator sets the context and then ask one of a set of key questions. The question will prompt discussion at each of the tables. Once discussion wanes, a new question can be posed. Participants can wander around the room, sitting wherever there is a spare chair. Responses are recorded by each group. Often a two hours session will cover four to six key questions.
<b>Outcomes achieved by others using this tool</b>	Positive results if the facilitator is skilled (positive opinions in the community, enthusiasm to contribute further)
<b>Should be used for</b>	Relational Ties <input type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs <input checked="" type="checkbox"/>
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• An agency or individual has started the process of capacity building, but still in the early stages</li> <li>• In the recovery stage in a cohesive community – useful for needs assessments/enabling the community to prioritise/plan a recovery process</li> </ul>
<b>Not so good...</b>	When the community is disconnected or suffers tensions, or of community members have low trust in agencies.
<b>What to watch out for</b>	<ul style="list-style-type: none"> <li>• Poorly thought-out questions</li> <li>• Dominating personalities – movement of people around the tables should be encouraged in this case.</li> </ul>
<b>Financial resources</b>	Low - medium
<b>Skill level</b>	Medium to high
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>• Competent facilitator</li> <li>• Venue</li> <li>• Catering</li> <li>• Time (from two hours)</li> <li>• Support for collating and distributing results back to the community</li> </ul>
<b>Evaluation methods</b>	<p>Longitudinal surveys to test for message recall, knowledge, attitudes and behaviour change.</p> <p>Example of World Café objective: To identify community priorities for the coming season.</p> <p>Baseline: First survey creates baseline data for comparison, follow up surveys show percentage change</p> <p>Sample SMART Indicators:</p> <p>Outputs:</p> <ul style="list-style-type: none"> <li>• Number of community members that participate</li> <li>• Number of community members that complete risk analysis</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Percentage of community members that correctly assess risk of hazard</li> <li>• Percentage of community members that report they have made plans for evacuation</li> <li>• Percentage of households that have practiced their evacuation plans</li> </ul> <p>Impacts:</p> <ul style="list-style-type: none"> <li>• Community better prepared for hazards</li> </ul>



	<p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<p><b>For a deeper dive</b></p>	<p>Carson, Lyn. Designing a public conversation using the World Cafe method:  <a href="https://search.informit.com.au/fullText;res=IELAPA;dn=201106325">https://search.informit.com.au/fullText;res=IELAPA;dn=201106325</a></p> <p>Prewitt, Vana. Working in the cafe: lessons in group dialogue  <a href="http://www.dialogicod.net/academic_papers/Prewitt_2011.pdf">http://www.dialogicod.net/academic_papers/Prewitt_2011.pdf</a></p>



## Capacity Building/Community Programs

<b>Tool</b>	<b>The Pillowcase Project (by Red Cross)</b>
<b>Aim of this tool</b>	To help build children's knowledge, skills and confidence to act in times of adversity
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What it looks like</b>	<p>This is a formal program developed and delivered by Red Cross volunteers and staff. The workshop encourages children to be active participants in their own emergency preparedness. The content is non-hazard specific and includes activities to highlight the importance of being prepared and how to prepare both psychologically and practically for an emergency.</p> <p>Aimed at students in Years 3 and 4 (ages 8-10), the one hour workshop involves engaging discussions and interactive activities to help students:</p> <ul style="list-style-type: none"> <li>• Understand and discuss the importance of being prepared</li> <li>• Prepare their mind for the thoughts and feelings that may arise before, during and after an emergency</li> <li>• Know the difference between need and want items and what to pack in an emergency kit</li> </ul>
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>• 82% of students feeling more prepared,</li> <li>• 90% of children going home and speaking about disaster preparedness</li> <li>• 79% of parents/guardians stating they would be likely to take action in the light of the initiative (Selby &amp; Kagawa 2016)</li> </ul>
<b>Should be used for</b>	Relational Ties <input type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Community Programs <input checked="" type="checkbox"/>
<b>Most effective when...</b>	The community has experienced an emergency and it can be used in a recovery context.
<b>Not so good...</b>	(No drawbacks identified)
<b>What to watch out for</b>	The temptation to make this a one-off. It needs followup.
<b>Financial resources</b>	Low - medium
<b>Skill level</b>	High
<b>Resource requirements</b>	Red Cross registration, guidance and materials (see website below) Teaching staff or staff who have met formal requirements to work with children.
<b>Evaluation methods</b>	<p>Longitudinal surveys to test for message recall, knowledge, attitudes and behaviour change</p> <p>Example of Pillowcase Project objective: To increase children's confidence in their preparedness by 25% by bushfire season. Baseline: First survey creates baseline data for comparison, follow up surveys show percentage change</p> <p>Sample SMART Indicators: Outputs:</p> <ul style="list-style-type: none"> <li>• Number of children involved</li> <li>• Number of community members who attend meetings around the time the Pillowcase Project is undertaken in schools</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Percentage of community members that correctly assess risk of hazard</li> <li>• Percentage of community members that report they have made plans for evacuation</li> <li>• Percentage of households that have practiced their evacuation plans</li> </ul> <p>Impacts:</p>



	<ul style="list-style-type: none"> <li>• Community better prepared for hazards</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<p><b>For a deeper dive</b></p>	<p>All the information is contained in the Red Cross's Pillowcase Project page at <a href="https://www.redcross.org.au/get-help/emergencies/resources-about-disasters/resources-for-parents-and-teachers/pillowcase-project">https://www.redcross.org.au/get-help/emergencies/resources-about-disasters/resources-for-parents-and-teachers/pillowcase-project</a></p> <p>Red Cross trains 1 million children to prepare for disasters through the Pillowcase Project: <a href="https://www.redcross.org/about-us/news-and-events/press-release/2018/red-cross-trains-1-million-children-to-prepare-for-disasters-thr.html">https://www.redcross.org/about-us/news-and-events/press-release/2018/red-cross-trains-1-million-children-to-prepare-for-disasters-thr.html</a></p> <p>Selby, D. &amp; Kagawa, F. (2016), Learn, Practice, Share: A Comparative Review of the Pillowcase Project, Sustainability Frontiers, available at: <a href="http://preparecenter.org/sites/default/files/comparativereview_thepillowcaseproject.pdf">http://preparecenter.org/sites/default/files/comparativereview_thepillowcaseproject.pdf</a>.</p>



## Community Programs

<b>Tool</b>	<b>Community coalitions</b>
<b>Aim of this tool</b>	To encourage communities to recognise risk and lead their own preparedness activity.
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What this looks like</b>	A group (or individual leading a group) leading preparation or recovery activities where the group takes on more responsibility and comes up with creative ideas of their own over time.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>• No fatalities during Typhoon Haiyan on one island in the Philippines was attributed to active community coalitions</li> <li>• Committed community involvement in earthquake preparation planning in New Zealand</li> <li>• Trust factor elevates during the coalition development and working together</li> <li>• Members of coalitions more likely to champion an issue outside their coalition</li> <li>• Improved relationships between agency and community</li> <li>• Better role understanding by both the group and the agency</li> <li>• Better understanding of risk by the community generally</li> <li>• Examples are Victoria Country Fire Authority's FireGuard and South Australia Country Fire Service's Fire Safe</li> </ul> <p>(see Bromley et al. 2017; Curato &amp; Calamba 2018; Every et al. 2015; Gilbert 2007; Mitchell et al. 2010; Nous group 2013; Williams et al. 2018)</p>
<b>Should be used for</b>	Relational Ties <input type="checkbox"/> Capacity Building <input type="checkbox"/> Community Programs <input checked="" type="checkbox"/>
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• Groups or individuals can be identified as champions (or they self-identify)</li> <li>• Threat is already recognised by a group within a community</li> <li>• Agencies can recognise opportunities to step back from role of facilitator to role of critical friend</li> <li>• At least some parts of the community are engaged</li> <li>• Street level activities have already been undertaken</li> <li>• Neighbourhoods have had hazard experience</li> </ul>
<b>Not so good...</b>	Hard to establish in areas that have low social cohesion or low levels of social networking, but can be facilitated by an experienced person.
<b>What to watch out for</b>	Group dynamics.
<b>Financial resources</b>	Medium – high
<b>Skill level</b>	Medium – high
<b>Resource requirements</b>	This can be flexible depending on the hazard, the community and the geography of the region. Some groups may want a meeting place, support materials, access to subject matter experts. Some communities might need a skilled facilitator to get them on their way
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>• Milestone index</li> <li>• Focus groups</li> <li>• Semi-structured interviews</li> <li>• Economic analysis of losses/avoided losses</li> <li>• Street-level photography</li> <li>• Online/telephone/face to face survey interviews</li> <li>• Observation – case study approach</li> <li>• Social network survey and analysis</li> </ul> <p>Example of Community Coalitions Objective: Coalition creates and implements one emergency management plan for their neighborhood by the end of 2019 Baseline: Milestone index used to set baseline and track changes over time toward accomplishing objective</p>



	<p>Sample SMART Indicators:</p> <p>Outputs:</p> <ul style="list-style-type: none"> <li>• Number of community members that participate</li> <li>• Number of ideas generated</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Score on Milestone Index based on percentage of plan completed</li> </ul> <p>Impacts:</p> <ul style="list-style-type: none"> <li>• Neighborhood has a plan and uses it during a hazard</li> </ul> <p>For more detailed information, refer to the Monitoring and Evaluation Toolkit.</p>
<p><b>For a deeper dive</b></p>	<p>CFA Victoria:  <a href="https://cdn.cfa.vic.gov.au/documents/20143/50918/CommunityFireguard-factsheet.pdf/463f6118-2216-b47b-f434-d690fda0010a">https://cdn.cfa.vic.gov.au/documents/20143/50918/CommunityFireguard-factsheet.pdf/463f6118-2216-b47b-f434-d690fda0010a</a></p> <p>Fairbrother et al. 2013: <a href="https://tinyurl.com/y5erozuj">https://tinyurl.com/y5erozuj</a></p>



## Community Programs

<b>Tool</b>	<b>Community Champions</b>
<b>Aim of this tool</b>	To motivate communities to recognise risk and undertake preparation activity, led by someone respected in the community.
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>What it looks like</b>	Individuals or small groups lead the community in preparation or recovery activities aimed at making the community more cohesive, risk knowledgeable, and resilient. Often the scope is wider than emergency management. Champions can emerge and act voluntarily or be recruited, paid and trained. This type of program contributes to development of a social norm of preparedness within the community.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>• Reduced frequency of landslides and subsequent reduced fatalities</li> <li>• Improved recognition of risk and increased preparedness for earthquake</li> </ul>
<b>Should be used for</b>	Relational Ties <input type="checkbox"/> Capacity Building <input type="checkbox"/> Community Programs <input checked="" type="checkbox"/>
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• Local leaders/influencers become evident</li> <li>• Social networks are evident in the target community</li> <li>• When agency staff are focused on community capacity building</li> <li>• Part of an organised program</li> </ul>
<b>Not so good...</b>	<ul style="list-style-type: none"> <li>• In fragmented communities or communities with low levels of trust between residents</li> <li>• When initial foundation work has not been undertaken e.g. information campaigns, seminars, mapping exercises, field days etc</li> <li>• When social networks are fragmented into factions</li> </ul>
<b>What to watch out for</b>	<ul style="list-style-type: none"> <li>• Careful consideration of candidates is necessary. The candidates must be inclusive and consistent</li> <li>• Candidates must be given training and support</li> </ul>
<b>Financial resources</b>	Low – high
<b>Skill level</b>	Medium
<b>Resource requirements</b>	From low (in the case of recruiting volunteer champions) to high in the Colombian case where champions were paid and given sound training for their work.
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>• Longitudinal surveys to test for message recall, knowledge, attitudes and behaviour change</li> <li>• Social networking analysis</li> </ul> <p>Example of Champions Objective: To increase the number of people who serve as community champions in hazard preparedness by (pick number) by December 31.</p> <p>Baseline: Agency identifies the number of champions at baseline and counts community champions each reporting cycle</p> <p>Sample SMART Indicators:</p> <p>Outputs:</p> <ul style="list-style-type: none"> <li>• Number of community members that self-select as champions</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Number of champions that complete training and sustain as champions over the year</li> </ul> <p>Impacts:</p> <ul style="list-style-type: none"> <li>• Community champions better prepare their community for hazards.</li> </ul>





	For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b> .
<b>For a deeper dive</b>	Coles et al 2018: <a href="https://tinyurl.com/yxrpoxvu">https://tinyurl.com/yxrpoxvu</a>



## Community Programs

<b>Tool</b>	<b>Community level simulations and scenario planning</b>
<b>Aim of this tool</b>	To embed practices and processes into the way individuals cope with specific aspects of a natural hazard.
<b>Tested in emergency management?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (Testing mostly undertaken with professional employees within agencies rather than with communities)
<b>What it looks like</b>	Participants take on designated roles and act out characters according to a predetermined scenario based on . People may choose from a range of set roles. By getting people to take on a role that may be unfamiliar to them, this process enhances understanding of the issue from another perspective.
<b>Outcomes achieved by others using this tool</b>	<ul style="list-style-type: none"> <li>• Obstacles that might hinder preparation, response or recovery are exposed</li> <li>• Strengths and weaknesses of the community's ability to respond are highlighted</li> <li>• Community members better understand the stresses and demands of a situation, as well as how it will unfold</li> <li>• Increased understanding of complexity and increased community ownership of problems that arise as a result</li> </ul>
<b>Should be used for</b>	Relational Ties <input checked="" type="checkbox"/> Capacity Building • Community Programs •
<b>Most effective when...</b>	<ul style="list-style-type: none"> <li>• Motivated community members are willing to participate</li> <li>• When a community coalition has already formed and has worked together in the past</li> <li>• Community connections are strong, even outside the coalition</li> </ul>
<b>Not so good for...</b>	<ul style="list-style-type: none"> <li>• In fragmented communities or communities with low levels of trust between residents</li> <li>• When social networks are fragmented into factions</li> <li>• In a wider community application without a strong information campaign to support it</li> </ul>
<b>What to watch out for</b>	Success of role playing and simulations are highly dependent on who takes part.
<b>Financial resources</b>	Low
<b>Skill level</b>	Medium to high
<b>Resource requirements</b>	<ul style="list-style-type: none"> <li>• Realistic scenarios and a good imagination.</li> <li>• Good understanding of how hazards affect communities.</li> </ul>
<b>Evaluation methods</b>	<ul style="list-style-type: none"> <li>• Pre and post surveys</li> <li>• Semi-structured interviews</li> <li>• Observations</li> </ul> <p>Example of Simulation and Role Playing Objective: Participants develop a sound understanding of the demands a community will face during a hazard and how to respond to these demands during the scenario. Baseline: pre and post survey</p> <p>Sample SMART Indicators: Outputs:</p> <ul style="list-style-type: none"> <li>• Number of community members that participate</li> <li>• Number of hours of simulation and role playing</li> </ul> <p>Outcomes:</p> <ul style="list-style-type: none"> <li>• Percentage of participants that correctly assess risk of hazard</li> </ul>



	<ul style="list-style-type: none"> <li>• Percentage of participants that report they have made plans</li> <li>• Percentage of participants that have practiced their plans</li> </ul> <p><i>Impacts:</i></p> <ul style="list-style-type: none"> <li>• Community better prepared for hazards</li> </ul> <p>For more detailed information, refer to the <b>Monitoring, Evaluation and Learning Toolkit</b>.</p>
<p><b>For a deeper dive</b></p>	<p>World Vision:  <a href="https://assets.worldvision.org.uk/files/9813/7871/8703/Planning_For_Community_Resilience.pdf">https://assets.worldvision.org.uk/files/9813/7871/8703/Planning_For_Community_Resilience.pdf</a></p> <p>Perry et al. (earthquake): <a href="https://pubs.usgs.gov/circ/1324/c1324.pdf">https://pubs.usgs.gov/circ/1324/c1324.pdf</a></p>

## WHERE YOU CAN FIND DETAILS ON THE EVALUATED TECHNIQUES

This table provides you with the references that we used to get the details on each of the emergency management tested techniques. You will find the full details of the studies in the Reference section.

P = peer – academically reviewed literature.

G = grey – reports, case studies and research published by agencies and research centres rather than in academic journals.

Type	Literature	Type	Literature
<b>Champions</b>	Jamshidi 2016 P Coles 2018 P Gilbert 2007 G	<b>Community coalitions</b>	Bromley 2017 P Curato 2018 P Every 2015 G Gilbert 2007 G Mitchell 2010 P Nous group 2013 G Williams 2018 P
<b>Exercises and drills</b>	Adams 2017 P Gilbert 2007 G Nguyen 2013 P	<b>Focus groups</b>	Jurjonas 2018 P
<b>Gaming simulation</b>	Tanwattana 2018 P	<b>Home visits</b>	Ardalan et al 2013 P Glik et al 2014 P Foster 2013 P Gilbert 2007 G Dufty 2008 G
<b>Information campaigns /individual tactics and tools</b>	Adame 2018 P Daniels 2017 G Mackie 2013 G Soane 2010 P Gilbert 2007 G Dufty 2013 G Glik 2014 P McNeill, C.C. 2016 P McNeill I.M. 2016a G (bushfire) McNeill I.M. 2016b G (flood) McNeill 2018 G Molino 2004 G	<b>Participatory mapping</b>	Akama 2010 P Gaillard 2013 P Haworth 2016 P Tran 2009 P Yusuf 2018 P
<b>School programs</b>	Dufty 2004 G Schmidt 2018 P	<b>Seminars/ education/ meetings</b>	Ashida 2017 P Gilbert 2007 G Glik 2014 P McNeill, C.C. 2016 P McNeill I.M. 2016a G (bushfire) McNeill I.M. 2016b G (flood) Redshaw 2017 P
<b>Social networking and mapping</b>	Dufty 2004 G Redshaw 2017 P	<b>Storytelling</b>	Chapple 2017 P
<b>Workshops</b>	Ardalan 2013 P Eriksen 2014 P Frandsen 2011 P Gilbert 2007 G Grillos 2018 P Phillips 2016 P Van Manen 2015 P Mitchell 2010 P Nguyen 2013 P Webber 2017 G		



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