

# ASSESSING THE LINKS BETWEEN FIRST AID TRAINING AND COMMUNITY RESILIENCE

Research report | Research, Evaluation & Impact



# ASSESSING THE LINKS BETWEEN FIRST AID TRAINING AND COMMUNITY RESILIENCE

Joanna White, Researcher, British Red Cross Alison McNulty, Senior Researcher, British Red Cross

### Acknowledgements

Research, Evaluation & Impact are very grateful for the support of the First Aid Education team. We are also grateful to all of the wonderful participants, and the first aid training coordinators and members of the community and workplaces who helped us contact them.

Copyright © 2011

Any part of this publication may be cited, translated into other languages or adapted to meet local needs without prior permission of the British Red Cross, provided that the source is clearly stated.

This publication does not necessarily represent the decisions or stated policy of the British Red Cross.

ISBN 978-0-900228-09-4

Executive summary		
1	Introduction	13
	1.1 Defining 'community'	13
	1.2 Understanding community resilience	14
	1.3 Identifying the outcomes of first aid training at the British Red Cross	15
2	Method	17
	2.1 Focus groups	17
	2.2 Survey	18
	2.3 Measuring our concepts	18
3	Results	21
	3.1 Response rate	21
	3.2 Respondents	21
	3.3 Indicators of community resilience	22
	3.4 Individual resilience	28
	3.5 Elaborating on the outcomes of first aid training	30
	3.6 Interrelationships between community and individual resilience	31
4	Conclusions	35
5	Recommendations	39
6	References	43

### **Executive Summary**

### **1. The Context**

- 1.1 From July 2010 to January 2011 the Research, Evaluation and Impact team undertook a study to assess the links between first aid training and community resilience.
- 2 As a starting point, we defined three primary concepts or features of concepts used in this study – community, community resilience, and first aid outcomes.
- 1.3 Focus groups and a survey were the primary tools used for data collection. The survey was administered to both a control as well as an intervention (experimental) group.
- **1.4** Five main indicators of community resilience were identified as:
  - > Social connectedness feel part of the community, people in the community know the respondent, watch out for each other, and are willing to help each other.
  - > Community efficacy people in the community are willing to provide first aid to each other, can be relied upon to provide first aid, and are likely to take action in a scenario in which no emergency services are available.

- > Learning this refers to the acquisition of information, where people in the community know the respondent has had first aid training, know first aid themselves, and the respondent knows someone in the community to go to for help if ever they need first aid.
- > Readiness to respond have preparations in place to respond to a first aid emergency, and reason for attending first aid training.
- > Facilitating economic wellbeing and equality of access to first aid training – attending first aid training for employment purposes, and removing financial barriers to first aid training (financial barriers to first aid training were identified from the qualitative data and were not asked about in the survey itself).

### 2. Our findings

### 2.1 Outcomes of first aid training

### 2.1.1 Confidence

This study supports confidence as an outcome of first aid training, with attendance at first aid training, especially multiple training, helping to increase people's confidence to provide first aid. However this confidence was found to dissipate over time when comparing those with recent training to those who had previously received training.

#### 2.1.2 Willingness

Willingness to provide first aid as a first aid training outcome, in contrast, is not found to be related to having been trained in first aid, and is thus not supported as an outcome of first aid training. However, willingness was found to be related to some community resilience indicators – specifically, social connectedness, community efficacy, and knowing someone who can be turned to for help (learning). As such, willingness may be able to be influenced through a greater understanding of these indicators.

### 2.2 Community resilience indicators

Taking each indicator of community resilience separately, a fuller picture of the relationships with first aid training can be illustrated:

#### 2.2.1 Social connectedness

Being socially connected is related to an individual's willingness to act, with those stating a willingness to act also reporting they feel part of a community, the community watch out for each other, and that people in the community are willing to help each other. Communities trained together showed greater social connectedness in terms of the respondent feeling more strongly a part of the community than those that were not (94% vs. 91%), and those individuals trained more than once more strongly agreed that people in their community watch out for each other (85% vs. 75%).



#### 2.2.2 Community efficacy

- Similar to social connectedness, community efficacy did not appear to be a direct result of first aid training, however aspects were related to willingness and confidence to provide first aid. Community efficacy is heightened in those who are trained together as a community, compared to those who are not. In addition, those who are trained more than once more strongly agreed that people in their community are willing to provide first aid to each other in an emergency, compared to those trained only once (76% vs. 65%).
- > Analysis of qualitative data also suggests a benefit to community efficacy if community members are trained together. In the words of one participant:

"I feel that if you are learning with people you know you are more likely to undertake the challenge together and be more comfortable with touching people initially that you know than a complete stranger. Once people are trained they are more willing to go into the outside world knowing they are qualified and capable of doing first aid to a stranger."

In terms of first aid outcomes, the willingness of a respondent to provide first aid was significantly positively related to all aspects of community efficacy, where people who are willing to provide first aid are also likely to agree that their community has each of the community efficacy measures.

#### 2.2.3 Learning

- > People who agreed that they know someone in their community to go to for first aid help were both more willing and confident to give first aid than those who did not agree.
- It is encouraging that Trained respondents > (intervention/experimental group) more so than the Control respondents know who to turn to for first aid help (35% vs. 25%). However, this is likely to be driven, at least in part, by having attended that training with other members of their community, since those in the Control group had similar levels of agreement to those in the Trained group who had not been trained with other members of their community (25% and 26% respectively). In addition, given the positive relationship between the number of training sessions and increased knowledge, and those individually trained reporting lesser knowledge of who in



their community has first aid skills, it seems that learning may be further enhanced by training people as a community.

#### 2.2.4 Spread of knowledge

- Levels of both willingness and confidence were higher for people who had shared first aid skills or knowledge or had recommended training to someone else, than those who had not.
- Nearly all (95%) of the Trained respondents had told someone they had received first aid training, and around two thirds had shared first aid skills or knowledge (63%) or recommended first aid training to someone else (67%). This knowledge was most often spread to family and friends. However, these figures appear to be at odds with the lower reports of knowing who to turn to for first aid help (71%) and knowing people who can give first aid (28%). This perhaps suggests that the spread of knowledge may occur beyond the identified communities or families/friends – into other arenas of people's lives.

#### 2.2.5 Readiness to respond

Communities which have undertaken preparations in order to be ready to respond to a first aid emergency are likely to be those in which other community members were trained alongside the respondent. Indeed, communities in which the respondent was trained as an individual were three times more likely to report they had no preparations in



place than communities in which other members were also trained (9% vs. 3%).

> People tended to view first aid training itself as being an important step towards being ready to respond. For example, one respondent noted that first aid training "would help communities by enabling people to take steps to protect themselves and others from further injury".

### 2.2.6 Facilitating economic wellbeing and equality of access to first aid training

The study found first aid training had a potential to impact upon economic wellbeing (that is, first aid as an employment facilitator). Where the reason for attendance at a first aid session was employment related, respondents were significantly more willing and confident to give first aid than those who attended because it was part of a course they were on (for example academic or vocational) and therefore a requirement.

# 2.3 Effects of community type on community resilience

Communities based, at least in part, on where a respondent lives geographically scored lower on nearly all measures of community resilience as compared to other types of communities, such as those based on social groups. This reinforces the need to consider many different types of communities when targeting training.

### 2.4 Individual resilience

- First aid training appears to be positively related to individual resilience. The majority of Trained respondents thought they were more capable as a person (84%), and reliable in an emergency (73%), as a result of their first aid training.
- Willingness and confidence to give first aid were both positively related to individual resilience, where those who were willing and confident were likely to exhibit resilience traits.
- However, the relationship between first aid training and individual resilience differed between respondents – respondents who had received workplace training tended to exhibit overall higher levels of individual resilience traits.
- There are links between individual and community resilience, for example people who more strongly agreed that they could usually find their way out of difficult situations rated their communities higher in social connectedness in terms of people watching out for, and being willing to help each other. Similarly, those who more strongly agreed that they are someone others can generally rely on in an emergency also more strongly agreed that people in their community know that they (the respondent) have had first aid training.
- Not all aspects of individual resilience relate to community resilience. It seems that the resilience of individuals may contribute to certain features of community resilience, but for the community to be resilient as a whole other conditions must also be present.

### 2.5 The effect of age

The age of the respondent was also an important factor in both community and individual resilience, as younger respondents often exhibited lower resilience than older respondents. Respondents aged 19 years and under were also the least willing and confident to give first aid. To get greater clarity on what was driving these relationships, we examined the data on young people who had attended first aid training in a group and/or who had attended training repeatedly compared to those who had not. The age effect did not diminish in any significant way. It does appear that younger people are less likely to exhibit strong resilience features. British Red Cross' focus on young people/schools, therefore, is an important strategy to facilitate the growth of young people's resilience using first aid as a vehicle.

### **3. Conclusions**

- 3.1 This study has identified linkages between features of community resilience and first aid training. While it is not possible to establish a causal relationship, we do identify significant relationships between features such as willingness and confidence to administer first aid and constituent elements of resilience such as social connectedness, community efficacy, learning and the spread of learning/ knowledge/skills.
- **3.2** We have also identified that the context and frequency of training are significant factors where community resilience features are present. In other words, in those people trained together and repeatedly we find heightened measures of the resilience elements tested for.
- 3.3 We have found significant evidence to suggest that willingness is not an outcome of first aid training. Put another way, first aid training per se will not increase our willingness to administer first aid in an emergency. However, confidence to administer first aid is an outcome of first aid training, although this wanes with the passing of time.
- 3.4 Age appears to be an important factor young people (19 and under) exhibited lower levels of the resilience features measured in the study than those over 19, suggesting this age group may be a one for greater focus.
- 3.5 The study suggests that the current first aid approach – in particular CBFA – has significant potential to support the development of resilience, especially when administered within the context of social groupings and repeated training. The findings also support the current CBFA approach as a means to reduce inequality (of access), and promote a beneficiary-led/tailored approach to delivering the service.
- 3.6 One way forward for the first aid department, therefore, is to ensure that training increasingly happens within the

types of environment that the study suggests are conducive to growing resilience features.

### 4. Recommendations/Ways Forward

- **4.1** Disseminate the findings of this survey in accessible and creative ways and to a range of audiences both internal and external to the British Red Cross.
- **4.2** Explore the targeting of training to existing 'communities'. Qualitative data suggest that those who attend as a group feel more comfortable together and thus learn more, and there is a sense that they could work together in an emergency. Additionally, the training should be targeted at social groups rather than groups defined solely by geography, as this is where we see most impact.<sup>1</sup>
- **4.3** Offer repeat training to first aid trainees in light of the benefits raised herein, and given the fact that confidence is known to dissipate after a time.
- 4.4 A further examination by the first aid and Research, Evaluation and Impact teams of those resilience features that appear to influence willingness (in particular) and confidence – that is, social connectedness and community efficacy.
- **4.5** Continue to focus on first aid training through youth and schools as a way of targeting young people and creating an environment in which they can grow their own resilience.
- **4.6** Apply caution when labelling/defining communities as 'vulnerable'. Many of the communities defined as vulnerable in this study did not see themselves in this way.
- **4.7** Explore how the messages of positive benefits can be best communicated to potential beneficiaries with the aim of encouraging a greater uptake of first aid training.

<sup>1</sup> As of November 2011, the Research, Evaluation & Impact and First Aid Education teams are carrying out a second research study to further examine the relationship between being trained together as a community and the links between first aid training and community resilience. This research will examine additional factors such as type of course, type of community, and proportion of community members trained.



### **1** Introduction

key aim of the British Red Cross Saving Lives, Changing Lives strategy 2010 -2015 is to facilitate the building of resilience in communities to help them prepare for and withstand disasters. An underlying assumption at the British Red Cross is that first aid training helps to build community resilience, through communities being better able to "rely on their own skills to save lives" (ICRC, 2010, *p*11). In March 2010 the Senior Management Team agreed to commission internal research into the outcomes and impacts of first aid training in communities and the links with community resilience, to ensure that this British Red Cross strategic priority is underpinned by evidence.

The aim of this research, therefore, is to examine whether there is evidence of community resilience as a result of receiving British Red Cross first aid training.

### 1.1 Defining 'community'

The majority of community resilience literature views communities in geographic terms, for example groups of people living in



the same neighbourhood, town or city, who are likely to be vulnerable to the same risks. As pointed out by Twigg (2007), this does not take into account other conceptual types of communities, such as those based around a shared culture or interest. In addition, people can be members of more than one community at the same time, and large communities can contain smaller ones (*Twigg*, 2007).

The current research, therefore, considers a community to be a group of people who interact with each other on a regular basis and share common characteristics, interests, or activities.

# **1.2 Understanding community resilience**

The Civil Contingencies Secretariat (CCS), on behalf of the UK government, defines

community resilience as "communities and individuals harnessing local resources and expertise to help themselves in an emergency, in a way that complements the response of the emergency services" (Cabinet Office, 2011, p4). Accordingly, resilient communities recognise and value the resources they have, and actively engage with their vulnerabilities to cope with and adapt to the situation (Nzegwu, 2010).

The resilience of a community differs depending on the scenario (Forgette & Van Boening, 2009), for example a community may be resilient against an economic downturn but not a health epidemic. In order to examine whether there is evidence of community resilience as a result of receiving first aid training, the current research focuses on community resilience in terms of a first aid emergency (that is, an emergency in which first aid could help).

Accordingly, core components of resilience were only included in this research if they were considered to contribute to a community's ability to withstand or overcome a first aid emergency. The key recurring components of community resilience to a first aid emergency, as identified by the British Red Cross and in external literature, are listed below:

- Social connectedness including sense of community and perceived social support within the community (*Nzegwu*, 2010; *Cutter*, *Emrich & Burton*, 2009; *Norris et al.*, 2008; *Gurwitch et al.*, 2007).
- Community efficacy for a first aid emergency – including belief in the community's capacity to deal with an emergency, and expectation for action (*Daly et al.*, 2009; *Norris et al.*, 2008; *Sampson, Raudenbush & Earls*, 1997).
- Learning including acquisition of information, knowledge of risks and mitigation, skills, and having the resource within the community and knowing where

to access it (Nzegwu, 2010; Cabinet Office, 2010; Twigg, 2007).

- Readiness to respond to a first aid emergency (*Twigg*, 2007).
- > Economic wellbeing and equality (*Nzegwu*, 2010; *Norris et al.*, 2008).
- Health which can affect a community's ability to deliver first aid as well as the number of people in the community who might need it (*Nzegwu*, 2010; *Cutter et al.*, 2009).

In addition, resilient communities are considered to consist of resilient individuals (*Cabinet Office*, 2010).

# 1.3 Identifying the outcomes of first aid training at the British Red Cross

Following a review of external literature and internal British Red Cross documents relating to first aid training, the following key outcomes of British Red Cross first aid training were identified:

- Increased competence in first aid delivery, confidence in first aid skills, and willingness to provide first aid in an emergency situation (*British Red Cross, 2010; Penrose, 2009;* Van de Velde et al., 2009).
- > Increased self-esteem and social confidence (*British Red Cross*, 2009).
- Increased knowledge of and engagement with other British Red Cross services (British Red Cross, 2010).
- > Help with employment (*Laurie*, 2008).
- > Reduced accident injury rates (ICRC, 2010; Lingard, 2002; McKenna & Hale, 1982).





### 2 Method

The present research had a mixed-methods design, using both focus groups and a survey to gather data.

### 2.1 Focus groups

There were two stages of focus groups. The first stage (n=2) were used to test theoretical concepts gained from the existing literature and inform the questionnaire design. The second (n=4) sought qualitative data to further elucidate the quantitative findings of the survey.

Participants (n=37) had previously received community based first aid (CBFA) for vulnerable groups from the British Red Cross. The groups were:

- > Elderly in supported living, Dundee (n=8)
- Young people who were not in employment, education or training (Prince's Trust), London (n=6) and Colne (n=8)
- > Heart support group, Nottingham (n=7)
- > People with learning disabilities, Ipswich (n=4)
- > Congolese refugee group, Norwich (n=4).

It was not possible to organise focus groups with people who received workplace training within the available timeframe due to not being able to access the data.

### 2.2 Survey

The survey included questions on respondent demographics, features of the first aid training they received (or will receive) from the British Red Cross, individual resilience, community resilience, and willingness and confidence to provide first aid.

The first stage of focus groups helped to test out the questionnaire and make amendments. In addition, 83 participants formed a pilot for the questionnaire.

There were two different versions of the questionnaire. The first was for those people who had already received first aid training. The second was for those who had not yet received their training, and did not include the questions from the first version that related specifically to having had first aid training.

### 2.2.1 Sample

The survey sample comprised of two groups: an intervention group who had received first aid training from the British Red Cross between April and September 2010 (referred to herein as 'Trained'), and a control group, for comparison, from those who were booked on to receive first aid training in 2011. All, therefore, had either received, or were booked to receive, first aid training provided by the British Red Cross – including Red Cross Training, community-based first aid (CBFA – both public and in groups), and schools.

### 2.3 Measuring our concepts

### 2.3.1 'Community'

Respondents were given our definition of community (see section 1.1), and asked to think of a community that they belonged to and told that the subsequent questions about community in the questionnaire referred to their chosen community.



# 2.3.2 Key indicators of community resilience considered

The indicators of community resilience considered appropriate to include in the survey were: social connectedness ("I feel I am a part of this community", "most members of this community know me", "people in this community watch out for each other", and "people in this community are willing to help each other"); community efficacy for a first aid emergency ("people in this community are willing to provide first aid to each other in an emergency", "people in this community cannot rely on each other to provide first aid in an emergency" (negatively coded), and in a disaster scenario "how likely do you think people in your community would be to take action and give first aid?"); learning ("not many people in this community know that I have had first aid training" (negatively coded), "if I ever need first aid, I know someone in the community who I can go to for help", and "not many people in this community know how to give first aid in an emergency" (negatively coded)); readiness to respond; and economic wellbeing and equality of access to first aid training.

# 2.3.3 Key indicators of individual resilience considered

The indicators of individual resilience included were feeling capable or determined as a person (both of which are aspects of self-esteem also), feeling that you can find a way out of difficult situations, feeling that people can rely on you in an emergency, and feeling proud of accomplishments in life.

# 2.3.4 Key components of first aid training considered

The proposed first aid training outcomes included in the research were willingness to provide first aid, confidence to provide first aid, increased knowledge of other British Red Cross services, increased self-esteem, and help with employment.

In addition, certain features of the first aid training itself were also considered in terms of whether they relate to community resilience. These features were:



- Whether the respondent had received first aid training from the British Red Cross between April and September 2010 (Trained group), or were booked on to receive first aid training in 2011 (Control group).
- > Whether people had ever, or never, been trained.
- > Whether other members of the community were trained alongside the respondent.
- > Whether people had been trained once or multiple times.
- > Recency of previous first aid training.



### 3 Results

### 3.1 Response rate

The exact response rate cannot be calculated because it is unknown how many questionnaires were actually passed on by third-party community contacts. However, we are satisfied that the response rate is at least 42% (n=622).

### **3.2 Respondents**

Of the 622 respondents, the large majority (87%, n=542) were in the Trained group, and only 13% (n=80) were in the Control group. One reason that the Control group was smaller is because attendance is often not organised very far in advance, and so potential respondents cannot be identified. Only 23% (n=18) of the Control group had never had first aid training before. Of all respondents, one-third (33%) were classified by the British Red Cross as vulnerable to a first aid emergency.

Respondents were asked about the reasons why they attended, or will attend, the British Red Cross first aid training. As shown in figure 1, the most common reason for attending first aid training was "to be prepared in case of an

#### FIGURE 1 REASON FOR ATTENDING FIRST AID TRAINING



*emergency*", although people were able to give more than one reason. Where people said they had *"another reason"* for attending first aid training, it was often because they belonged to Guides or Scouts, or coached a sports team. Note that the reason *"part of a course"* refers, for example, to a vocational or academic course, rather than a specific first aid course.

Almost all (97%) of the Trained respondents were satisfied or very satisfied with the first aid training they received from the British Red Cross. In illustration, one respondent commented that *"I am very grateful for the brilliant training I received from the British Red Cross"*.

# 3.3 Indicators of community resilience

### 3.3.1 Social connectedness

- The social connectedness of a community was similar between the Trained and Control groups, and, within the Control group, those having had previous training or not.
- Respondents were significantly<sup>2</sup> more likely

to agree that they felt part of the community if other members of that community were trained alongside them, compared with if they received the first aid training as an individual (94% compared with 91%, respectively).<sup>3</sup>

- Trained respondents who had received first aid training more than once were significantly more likely to agree that people in their community watch out for each other as compared with those who had only been trained the once (85% compared with 75%, respectively).<sup>4</sup>
- People who were more willing to give first aid in an emergency were significantly more likely to agree that they felt part of their community, that people in the community watch out for each other, and that people in the community are willing to help each other, than those who were less willing.<sup>5</sup>
- Conversely, confidence in ability to provide first aid was not related to any aspects of social connectedness. This suggests that the degree of social connectedness is not affected by this more cognitive feature of first aid – that is,

<sup>2</sup> The terms 'significant' and 'statistically significant' in this report refer to the findings having been statistically tested with the results of this test indicating that the results obtained were less than 5% due to chance. This is expressed as the probability (p) of the result occurring by chance being (=) less than (<) a given percentage (0.05).</p>

<sup>3</sup> Mean is displayed within the range of 1-5, others trained 4.4: trained individually 4.3, t(447)=-2.25, p<0.05.</p>

<sup>4</sup> Mean is displayed within the range of 1-5, more than once 4.1: once 4.0, t(489)=-2, p<0.05.

<sup>5</sup> Mean is displayed within the range of 1-40. Feel part of community, agree 34.8: do not agree 32.7, t(564)=-2.74, p<0.01. Watch out for each other, agree 34.8: do not agree 33.4, t(559)=-2.43, p<0.05. Willing to help each other, agree 34.8: do not agree 32.8, t(562)=-3.15, p<0.01.</p>

people's confidence in their ability to provide first aid.

It seems, therefore, that social connectedness is not a result of first aid training as a whole and instead may already be established before attending training, although it is heightened in those who are trained together as a community, and for those individuals who are trained more than once.

# 3.3.2 Community efficacy for a first aid emergency

- Community efficacy was similar between the Trained and Control groups, and, within the Control group, those having had previous training or not. This suggests that community efficacy is also not a result of first aid training as a whole.
- Respondents in the Trained group tended to more strongly agree with all aspects of community efficacy if other members of that community were trained alongside them, compared with if they received the first aid training as an individual.<sup>6</sup>
- Trained respondents who had received first aid training more than once were significantly more likely to agree that people in their community are willing to provide first aid to each other in emergency, as compared with those who had only been trained the once (76% compared with 65%, respectively).<sup>7</sup>
- > Analysis of qualitative data also suggests a benefit to community efficacy if community members are trained together:

"I feel that if you are learning with people you know you are more likely to undertake the challenge together and be more comfortable with touching people initially that you know than a complete stranger. Once people are trained they are more willing to go into the outside world knowing they are qualified and capable of doing first aid to a stranger."

### > Qualitative data further suggests that communities in which more people were



trained would be able to cope better in an emergency, for example in one respondent's words "between us, we're going to be able to cope".

- > People who were more willing to provide first aid were also significantly more likely to agree that their community had each of the community efficacy measures.<sup>8</sup>
- Confidence was only significantly related to two out of the three community efficacy measures. Respondents who more strongly agreed that people in their community could rely on each other to provide first aid, or that their community would take action in the scenario described, were more confident about their personal ability to give first aid than those who did not.<sup>9</sup> Respondent confidence was not related to a community's willingness to provide first aid to each other.

As with social connectedness, this suggests that while community efficacy is not caused by attendance at first aid training, it is heightened in those who are trained together as a community, and for those who are trained more than once.

<sup>6</sup> Mean is displayed within the range of 1-5. Willing to provide first aid to each other, agree 4.0: do not agree 3.9, t(407)=-2.31, p<0.05. Rely on each other to provide first aid, agree 3.9: do not agree 3.7, t(410)=-2.63, p<0.01. Take action in scenario, agree 3.4: do not agree 3.2, t(371)=-2.07, p<0.05.</p>

<sup>7</sup> Mean is displayed within the range of 1-5, more than once 4.0: once 3.8, t(444)=-2.31, p<0.05.

<sup>8</sup> Mean is displayed within the range of 1-40. Willing to provide first aid to each other, agree 34.9: do not agree 33.6, t(511)=-2.49, p<0.05. Rely on each other to provide first aid, agree 35.1: do not agree 33.6, t(516)=-3.17, p<0.01. Take action in scenario, agree 34.6: do not agree 32.8, t(468)=-2.14, p<0.05.</p>

Mean is displayed within the range of 1-20. Rely on each other to provide first aid, agree 16.2: do not agree 15.2, t(513)=-3.65, p<0.01. Take action in scenario, agree 15.8: do not agree 14.6, t(468)=-2.34, p<0.05.</p>

#### FIGURE 2 AGREEMENT THAT PEOPLE IN THEIR COMMUNITY KNOW HOW TO GIVE FIRST AID BY RECENCY OF RESPONDENT'S PREVIOUS TRAINING





### 3.3.3 Learning

- A direct link emerged between learning and first aid training, where Trained respondents were one-and-a-half times more likely to agree that people in their community know how to give first aid in an emergency (35% compared with 25%, respectively).<sup>10</sup> However, this link appears to have been driven by having attended training with other community members rather than attending training at all, as Control respondents had similar levels of agreement to those in the Trained group who had not been trained with other members of their community (25% and 26% respectively agreed or strongly agreed).
- In terms of knowing someone in the community to go to for first aid help, Control respondents had similar agreement to Trained, but were two-and-a-half times more likely than Trained to answer "don't know" to the question (13% compared with 5%, respectively).
- > Within the Control group itself, people who had been trained previously were over six times more likely to agree that people in their community know that they will be receiving first aid training than those who had never been trained (50% compared with 8%, respectively).<sup>11</sup>
- 10 Mean is displayed within the range of 1-5, Trained 3.1: Control 2.8, t(412)=1.99, p<0.05.
- 11 Mean is displayed within the range of 1-5, trained previously 3.4: never trained 2.5, t(69)=-2.75, p<0.01.</p>

- > Of those in the Control group who had been trained at some point in the past, people who had been trained more recently were more likely to agree or strongly agree that people in their community know how to give first aid (figure 2).
- > Within the Trained group, people who had been trained more than once were significantly more likely than those who had only been trained the once to agree that people in their community know they (the respondent) had been trained (41% compared with 30%, respectively).<sup>12</sup>
- Communities in which other members had attended the first aid training alongside the respondent scored higher on all aspects of learning than communities in which the respondent was trained as an individual.<sup>13</sup>
- > Respondents who did not attend the first aid training alongside other members of their community were two-and-a-half times more likely than those who did to answer that they "don't know" if many people in the community know how to give first aid (25% compared with 10%, respectively).

<sup>12</sup> Mean is displayed within the range of 1-5, more than once 3.1: once 2.8, t(397)=-2.74, p<0.01.

<sup>13</sup> Mean is displayed within the range of 1-5. People know that respondent had first aid training, others trained 3.2: trained individually 2.8, t(365)=-3.75, p<0.01. Know someone to go to for first aid help, others trained 4.1: trained individually 3.6, t(430)=-5.63, p<0.01. People know how to give first aid, others trained 3.2: trained individually 2.9, t(324)=-2.45, p<0.05.</p>

- > The benefits of learning as a community, rather than an individual, were also commented on in the focus groups, as captured in the following words: "*if one of us has forgotten, another two will remember*".
- > People who agreed that they know someone in their community to go to for first aid help were both more willing and confident to give first aid than those who did not agree.<sup>14</sup>
- Confidence was also related to whether others in the community know the respondent has had first aid training. People who reported that they did know were more confident in their own ability to give first aid than those who did not.<sup>15</sup> Willingness was not related to this.
- > Qualitative responses also support a link between first aid training and learning. Many identified first aid knowledge as a key gain of first aid training, and thought that training would equip people in the community with the skills needed to act in an emergency. In addition, one respondent noted that first aid training would only build community resilience if "the communities were aware of who was first aid trained".

This implies that first aid training, regardless of recency, has an impact on the resilience of a community through learning about the resource of first aid and who can provide this when required. And as with social connectedness and community efficacy, learning in the community is enhanced through training as a community.

#### Spread of knowledge

- Nearly all (95%) of the Trained respondents had told someone they had received first aid training, and around two thirds had shared first aid skills or knowledge (63%) or recommended first aid training to someone else (67%). This knowledge was most often spread to family and friends.
- The importance of spreading knowledge about first aid training is illustrated by one respondent in response to an open-ended question:



"When I told other members of my community I had attended a first aid course, 4 others went on to do first aid courses also so we can be better able to cope with accidents and emergencies."

Levels of both willingness and confidence were higher for people who had shared first aid skills or knowledge or recommended training to someone else than those who had not.<sup>16</sup> Whether or not people had told someone about their training was not related to either willingness or confidence.

The high rate of spread of knowledge is promising, as is the evidence that it is has an effect on the community and appears to be influenced by the outcomes of first aid training.

### 3.3.4 Readiness to respond

> Over half of respondents said their community had access to a first aid kit (68%) or had taken steps to reduce risks to their health and safety (54%). Eleven percent had done "something else", and this often included having a designated trained first aider, or having taken the first aid training itself. Qualitative evidence

<sup>14</sup> Mean is displayed within the range of 1-40 for willingness, and 1-20 for confidence. Willingness, agree 34.9: do not agree 33.8, t(536)=-2.02, p<0.05. Confidence, agree 16.1: do not agree 15.3, t(534)=-2.53, p<0.05.</p>

<sup>15</sup> Mean is displayed within the range of 1-40 for willingness, and 1-20 for confidence. Willingness, agree 34.9: do not agree 33.8, t(536)=-2.02, p<0.05. Confidence, agree 16.1: do not agree 15.3, t(534)=-2.53, p<0.05.</p>

<sup>16</sup> Mean is displayed within the range of 1-40 for willingness, and 1-20 for confidence. Willingness by whether shared, shared 35.3: did not share 33.2, t(529)=-4.52, p<0.01. Willingness by whether recommended, recommended 35.0: did not recommend 33.6, t(532)=-2.84, p<0.01. Confidence by whether shared, shared 16.5: did not share 15.1, t(527)=-5.33, p<0.01. Confidence by whether recommended, recommended to a share 15.4, t(529)=-3.55, p<0.01.</p>



suggested that first aid training would, in the words of one respondent, "help communities by enabling people to take steps to protect themselves and others from further injury".

- Having preparations in place was generally similar between Trained and Control respondents, although Trained were significantly more likely than Control to say their community had done "something else" (12% compared with 1%, respectively).<sup>17</sup>
- Within the Control group itself, respondents who had been trained previously were almost twice as likely as those who had never been trained to say their community had taken steps to reduce risks to health and safety (63% compared with 33%, respectively).<sup>18</sup>
- > Within the Trained group, communities in which other members did not attend first aid training alongside the respondent were three times more likely to have no preparations in place than communities in which the respondent was trained alongside other members (9% compared with 3%, respectively).<sup>19</sup>
- > As previously mentioned, two-thirds (63%) of respondents attended or will attend first
- 17 Mean is displayed within the range of 0-1, Trained 0.12: Control 0.01, t(507)=2.90, p<0.01.
- 18 Mean is displayed within the range of 0-1, trained previously 0.63: never trained 0.33, t(75)=-2.11, p<0.05.</p>

aid training to be prepared in case of an emergency. This, along with attending training for the safety of family (47%), to be of assistance to others outside of the family (46%) and for one's own safety (29%) could also be considered as putting preparations in place to enable an effective response.

- Reason for attending training also showed a difference between those in the Control group who had previously or had never been trained; where those with previous training were almost one-and-a-half times more likely to say they were attending the upcoming training in order to be prepared for an emergency (79% compared with 56%, respectively).<sup>20</sup>
- People in the Trained group who had been trained multiple times were one-and-a-half times more likely than those trained once to say that they attended the training for their job or to help find work (34% compared with 21%, respectively), whereas those trained only once were almost twice as likely to say it was for a course they were on (32% compared with 17%, respectively).<sup>21</sup>
- People who attended or will attend the training because of a course they were on were less willing to give first aid than people who attended or will attend for any other reason.<sup>22</sup> This suggests that people who attend first aid training for their own personal reasons are more willing to give first aid than those who attend because it is mandatory, or again, this could be a result of multiple training, as those on a course were likely to have only been trained the once.

Communities which have undertaken preparations in order to be ready to respond to a first aid emergency are likely to be those in which other community members were trained alongside the respondent. In addition, it is promising that people see first aid training itself as being an important step towards being ready to respond.

<sup>19</sup> Mean is displayed within the range of 0-1, others trained 0.03: trained individually 0.09, t(387) =2.52, p<0.05.</p>

<sup>20</sup> Mean is displayed within the range of 0-1, trained previously 0.79: never trained 0.56, t(78)=-2.02, p<0.05.</p>

<sup>21</sup> Mean is displayed within the range of 0-1. For a job or to help find work, more than once 0.34: once 0.21, t(536)=-2.70, p<0.01. For a course, more than once 0.17: once 0.32, t(536)=3.63, p<0.01.</p>

<sup>22</sup> Mean is displayed within the range of 0-40, attended for a course 32.5: did not attend for a course 35.0, t(585) =4.44, p<0.01.

# 3.3.5 Economic wellbeing and equality of access to first aid training

- > As previously shown, one-third (33%) of all respondents attended or will attend first aid training for their jobs or to help find work. This is considered to contribute to facilitating the economic wellbeing of the respondent by assisting with employment.
- > People who attended or will attend first aid training for their job or to help find work were significantly more willing and confident than those who attended because of a course they were on.<sup>23</sup> However, levels of willingness and confidence were similar between economic and the other reasons for attending training.
- The importance of first aid training for people seeking employment was illustrated in the focus groups. For one respondent, "it shows you can do something", and for another, who was seeking work as a carer, "everywhere that you go for a job they ask you if you have done first aid training". They also noted that they thought employers would particularly respect first aid training delivered by the British Red Cross because it is a reputable organisation.
- In addition to help with employment, the whole CBFA approach to first aid training, which offers free training to people considered by the British Red Cross to be vulnerable to a first aid emergency but who might not otherwise be able to afford it, is designed to reduce inequality in the access to first aid training.
- The importance of offering free or affordable training was illustrated in the qualitative analysis. One respondent stated:

"The only thing preventing people attending first aid courses may be cost. If training could be arranged in large community groups and costing could be brought down, there may be more people joining in."



Removing financial barriers to accessing first aid learning and providing this skill to those seeking to enhance their employability are both community resilience indicators. Their presence in British Red Cross first aid training is clearly positive evidence of the presence and potential growth of these community resilience elements in our current approach.

# 3.3.6 Effect of community type on community resilience

- Communities based, at least in part, on where the respondent lived geographically scored lower on nearly all community resilience measures than other types of communities.<sup>24</sup>
- > Geographic communities were also significantly less likely than other types of community to have access to a first aid kit (59% compared with 76%, respectively) or have taken steps to reduce health and

<sup>23</sup> Mean willingness score is displayed within the range of 0-40, and the confidence intervals are 31.2-33.8 (mean 32.5) for 'course', and 35.1-36.4 (mean 35.7) for 'job or to find work' (at the 95% confidence level). The mean confidence score is displayed within the range of 0-20, and the confidence intervals are 14.8-16.1 (mean 15.4) for 'course', and 16.2-17.0 (mean 16.6) for 'job or to find work' (at the 95% confidence level). Confidence intervals give an estimated range of values in which the 'true' value is likely to fall. Because neither of the confidence intervals for willingness or confidence to give first aid for people who attended for a course or for a job overlaps, we can be 95% confident that the scores are significantly different from each other.

<sup>24</sup> Mean is displayed within the range of 1-5. Feel part of community, based on where live 4.2: not based on where live 4.4, t(568)=2.91, p<0.01. Members know me, based on where live 4.0: not based on where live 4.3, t(565)=4.26, p<0.01. Watch out for each other, based on where live 4.0: not based on where live 4.1, t(563)=2.48, p<0.05. Willing to help each other, based on where live 4.0: not based on where live 4.2, t(568)=2.76, p<0.01. Willing to provide first aid to each other, based on where live 3.8; not based on where live 4.0, t(515)=3.31, p<0.01, Rely on each other to provide first aid, based on where live 3.6; not based on where live 3.9, t(518)=4.84, p<0.01. People know respondent had first aid training, based on where live 2.6: not based on where live 3.3, t(397)=6.40, p<0.01. Know someone to go to for first aid help, based on where live 3.7: not based on where live 4.0, t(540)=3.72, p<0.01. People know how to give first aid, based on where live 2.9: not based on where live 3.2, t(410)=2.86, p<0.01. Take action in scenario, no significant difference

FIGURE 3 AGREEMENT THAT INDIVIDUAL RESILIENCE INCREASED AS A RESULT OF FIRST AID TRAINING



safety risks (46% compared with 62%, respectively).<sup>25</sup>

This reinforces the need to consider a range of different types of communities when targeting or promoting training.

# 3.3.7 Effect of age on community resilience

While we cannot determine to what extent other community members matched the respondent in terms of age, the age of a respondent also appeared to relate to the degree to which they agreed with the community resilience measures; where those aged 19 years or under had the lowest levels of agreement across the questions asked.<sup>26</sup>

### **3.4 Individual resilience**

# 3.4.1 Relationship between individual resilience and first aid training

The majority of Trained respondents thought that they were more capable and reliable in an emergency as a result of their first aid training (figure 3).

- The qualitative data also suggests that first aid training can have a positive psychological effect that is separate from learning the specific skills. For example one respondent explained "having this kind of training makes people feel more capable and valued to provide useful help to others", and another commented "it feels good being able to help".
- The focus groups also revealed that people thought they would now feel less helpless in an emergency as a result of their first aid training. In the words of one respondent:

"It's an emotional thing as well, you know, like you won't feel helpless if you came across that. If you're in that position then you wouldn't just be standing there not knowing what to do. You are able to take action."

> Although Trained respondents rated the factors of individual resilience highly, it was the Control group who exhibited the

<sup>25</sup> Mean is displayed within the range of 0-1. Access to a first aid kit, based on where live 0.59: not based on where live 0.76, t(504)=4.30, p<0.01. Reduce risks to health and safety, based on where live 0.46: not based on where live 0.62, t(504)=3.62, p<0.01.</p>

<sup>26</sup> The following percentages are for those in each age group who agreed or strongly agreed with each question. Percentages are given in the following age group order: 19 years or under, 20 – 39 years, 40 – 59 years, 60 years or over. Feel part of community: 75%, 91%, 92%, 98%. Members know me: 78%, 81%, 88%, 90%. Watch out for each other: 65%, 83%, 82%, 89%. Willing to help each other: 64%, 88%, 89%, 94%. Willing to provide first aid to each other: 64%, 88%, 89%, 84%. On each other to provide first aid: 58%, 66%, 68%, 67%. Take action in scenario: 83%, 92%, 96%, 95%. People know respondent had first aid training: 32%, 40%, 41%, 46%. Know someone to go to for first aid help: 71%, 76%, 77%, 80%. People know how to give first aid: 26%, 39%, 34%, 31%.

strongest individual resilience. Control respondents agreed with all aspects of individual resilience, apart from pride in accomplishment, more strongly than Trained respondents.<sup>27</sup> However, this difference could potentially be explained by the high percentage of workplace respondents in the Control group (53%), which was more than twice that of the Trained group (21%). When explored further, it was the workplace respondents who exhibited significantly higher levels of individual resilience.<sup>28</sup>

- Willingness and confidence to give first aid were both moderately positively correlated with the capable and reliable aspects of individual resilience.29 The more willing respondents were to give first aid, the more strongly they agreed that they were a capable person (r=0.35) or reliable in an emergency (r=0.46). Confidence showed the same pattern, where respondents who were more confident to give first aid were likely to more strongly agree they were a capable person (r=0.41)or reliable in an emergency (r=0.43). With regards to feeling that aspects of individual resilience had increased as a result of first aid, willingness was higher amongst those who more strongly agreed that their capability had increased (r=0.41), and both willingness and confidence were higher amongst those who more strongly agreed they were more reliable in an emergency following training (willingness r=0.41; confidence r=0.43).
- Comparison of individual resilience across respondents also revealed that it varies with age. Strength of agreement that the respondent was a determined person, reliable in an emergency, and proud that they had accomplished things in life, all increased<sup>30</sup> with age, where older respondents tended

to agree with these statements more strongly than younger respondents.<sup>31</sup>

It is promising that first aid training is positively related to individual resilience; namely that people think they are more capable as a person and reliable in an emergency as a result of their training, and that people with greater individual resilience exhibit greater willingness and confidence to provide first aid. However, the relationships appear to be stronger for some people than others, where those who received training in the workplace exhibited greater individual resilience than those who received other types of training, and those aged 19 years or under exhibited lower individual resilience than older respondents.

It must also be noted that we cannot determine the direction of these relationships, so it is unclear as to whether individual resilience is built as a result of first aid training, or that people with greater resilience to begin with are naturally more willing, confident, or likely to recognise the benefits of training.



31 Positive linear relationship. Determined F(1,597)=8.32, p<0.01. Reliable in an emergency F(1,599)=3.91, p<0.05. Proud of accomplishments F(1,599)=8.22, p<0.01.</p>

<sup>27</sup> Mean is displayed within the range of 1-5. Capable, Trained 4.1: Control 4.4, t(608)=-3.97, p<0.01. Determined, Trained 4.0: Control 4.3, t(605)=-3.23, p<0.01. Can find a way out of difficult situations, Trained 4.0: Control 4.2, t(607)=-3.24, p<0.01. Reliable in an emergency, Trained 3.9: Control 4.2, t(607)=-2.89, p<0.01.</p>

<sup>28</sup> Mean is displayed within the range of 1-5. Capable, workplace 4.4: not workplace 4.1, t(576)=-4.87, p<0.01. Can find a way out of difficult situations, workplace 4.1: not workplace 4.0, t(575)=-3.29, p<0.01. Reliable in an emergency, workplace 4.1: not workplace 3.9, t(575)=-3.72, p<0.01.</p>

<sup>29</sup> The correlation between two variables is the extent to which there is a linear relationship between them. That is, the degree to which one increases if the other increases (positive correlation), or one decreases as the other increases (negative correlation). The closer to 1 or -1, the stronger the relationship.

<sup>30</sup> Reported as a statistically significant positive linear regression. Regressions indicate the relationship between two variables, where the typical value of a dependent variable changes when the independent variable varies. Positive linear relationships show that the higher the score on one variable, the higher the other is on average.

### TABLE 1

Willingness and confidence to give first aid by age				
	Very/quite willing	Very/quite confident		
Age	Percent			
19 years and under	84	77		
20 – 39 years	93	87		
40 – 59 years	95	89		
60 years and over	92	79		

# **3.5 Elaborating on the outcomes of first aid training**

- Overall, people were significantly more willing to provide first aid to people they know than people they did not know.<sup>32</sup>
- > People were also more willing to help if the incident was less severe. That is, more people were quite or very willing to help someone who was choking (94%) or had a minor burn (94%) compared with someone who was unconscious and breathing (92%) or not breathing (89%), or who had a severe bleed (90%). Similarly, more people were quite or very confident in their ability to give first aid in less severe situations (88% for minor situations compared with 82% for severe).
- > Willingness and confidence also varied depending on age. As shown in table 1, those aged 19 years and under had lower levels of willingness and confidence than people in older age groups.

# 3.5.1 Evidence for increased confidence as an outcome of first aid training

- > When comparing the confidence of the Control group versus the Trained group, the Trained group were more confident in their ability to provide first aid.<sup>33</sup>
- Confidence was also compared between those in the Trained group who had received first aid training previous to their most recent training, and those who had only been trained once.

People who had been trained more than once were more confident to provide first aid than those who had only been trained once.<sup>34</sup>

- Within the Control group, there was no difference in confidence between those who had or had never received training. However, among those in the Control group who had been trained, there was a significant relationship between recency of training and confidence to give first aid, where people who had been trained within the last 5 years were significantly more confident than those who had been trained 6 or more years ago.<sup>35</sup>
- > There was strong qualitative evidence that people felt more confident to provide first aid as a result of their training. According to one respondent:

"Ignorance of how to apply first aid can lead to a lack of confidence, which can lead to no action being taken... I might hesitate in case I made things worse, but if I have repeated refresher courses, my confidence should increase, leading to me having a try! Memory fades very fast and I would welcome yearly courses (if money available)."

# 3.5.2 Questioning willingness as an outcome of first aid training

There was no difference in willingness between the Trained and Control group, or between those within the Control group who had or had never been trained.

<sup>32</sup> Mean is displayed within the range of 1-20, know 17.8: did not know 16.7, t(1224)=7.37, p<0.01.

<sup>33</sup> Mean is displayed within the range of 1-20, Trained 16.0: Control 14.4, t(608)=4.50, p<0.01.</p>

<sup>34</sup> Mean is displayed within the range of 1-20, more than once 16.3: once 15.2, t(529)=-3.83, p<0.01.

<sup>35</sup> Mean is displayed within the range of 1-20, within the last 5 years 15.9: 6 or more years ago 12.7, t(54)=3.61, p<0.01.</p>

Debate within the focus groups also indicated that willingness was not always affected by first aid training. In some cases people were more willing as a result of their training, for example the refugee group had previously thought they might get in trouble for helping someone who later died, and "didn't know that if someone collapses that you can help them". However, other people said they were willing to help anyway without training, and several referred to this willingness as "instinct".

It appears, therefore, that first aid training, especially multiple training, helps increase people's confidence to provide first aid, although this confidence may dissipate over time. However first aid training did not appear to influence people's willingness to help, and willingness may therefore be an inherent trait that people bring with them to the training, and/or is a trait that can be influenced by other factors.

### 3.5.3 Increased knowledge of and engagement with other British Red Cross services

Less than one-third (28%) had learnt about other British Red Cross services at their first aid training. Of these, half (52%) had shared this information with someone else.

# 3.6 Interrelationships between community and individual resilience

## 3.6.1 Community resilience interrelationships

Social connectedness may be a conduit through which other indicators can operate. In particular, feeling part of the community was positively linked to knowing someone to go to for help and the likelihood that a community would take action in the disaster scenario. In addition, respondents who agreed that people in their community watch out for each other were also likely to agree that they knew someone in the community to go to for first aid help if necessary.<sup>36</sup>



- Community efficacy appears to be facilitated by learning. Communities in which many people knew how to give first aid were also considered to be willing to provide first aid and likely to take action in a disaster scenario. Similarly, respondents were more likely to agree that people in their community could rely on each other to provide first aid if they (the respondent) knew someone within that community who they could go to for first aid help.<sup>37</sup>
- Regarding learning, respondents who more strongly agreed that they knew someone in the community to whom they could go for first aid help also tended to agree that others in the community knew that they (the respondent) had had first aid training. This suggests a reciprocal relationship, resulting in each knowing the other has first aid skills that could be accessed if necessary.<sup>38</sup>
- Knowing someone in the community to go to for first aid help was, perhaps unsurprisingly, positively related to whether many people in that community knew how to give first aid.<sup>39</sup> This illustrates the importance of knowing what resources are available and where to access them.

<sup>36</sup> Positive linear relationships between: feel part of community and know someone to go to for first aid help, F(27,248)=12.54, p<0.01; feel part of community and community action in scenario, F(27,248)=12.54, p<0.05; watch out for each other and know someone to go to for first aid help, F(27,248)=24.28, p<0.05.</p>

<sup>Positive linear relationships between: people know how to give first aid and willing to provide first aid to each other, F(27,248)=5.86, p<0.05; people know how to give first aid and community action in scenario, F(27,248)=5.86, p<0.05; rely on each other to provide first aid and know someone to go to for first aid help, F(27,248)=7.56, p<0.01.</li>
Positive linear relationship. F(27,248)=7.23, p<0.01.</li></sup> 

Positive linear relationship, F(27,248)=7.23, p<0.01. 39 Positive linear relationship, F(27,248)=7.23, p<0.01.



## 3.6.2 Spread of knowledge and community resilience

It is not possible to determine whether the people who respondents had told, shared, or recommended first aid training to belonged to the same community they were answering the community resilience questions about. Despite this, spread of knowledge still showed some interesting relationships with community resilience.

- Those who had told someone about their training were significantly more likely than those who had not to agree that the people in their community are willing to help each other (87% compared with 74%, respectively). Similarly, those who had shared first aid skills or knowledge were significantly more likely than those who had not to agree that they felt a part of their community (91% compared with 89%, respectively).<sup>40</sup>
- > People who had shared skills or knowledge, or recommended training, were significantly more likely to agree that people in their community

are willing to provide first aid to each other in an emergency (shared 77% compared with 67%, respectively; recommended 77% compared with 68%, respectively).<sup>41</sup>

> People who had shared or recommended were significantly more likely to agree that they knew someone in the community they could go to for help (shared 79% compared with 70%, respectively; recommended 79% compared with 69%, respectively).<sup>42</sup>

This suggests that knowledge may be spread internally within and external to the communities a respondent belongs to. However, communities to which knowledge is spread do exhibit higher community resilience.

# 3.6.3 Relationship between community and individual resilience

> People who more strongly agreed that they could usually find their way out of difficult

<sup>40</sup> Mean is displayed within the range of 1-5. Told 4.2: did not tell 3.8, t(491)=-2.14, p<0.05. Shared 4.3: did not share 4.2, t(493)=-2.06, p<0.05.</p>

<sup>41</sup> Mean is displayed within the range of 1-5. Shared 4.0: did not share 3.8, t(441)=-2.80, p<0.05. Recommended 4.0: did not recommend 3.8, t(445)=-2.77, p<0.01.</p>

<sup>2</sup> Mean is displayed within the range of 1-5. Shared 3.9: did not share 3.7, t(471)=-2.56, p<0.05. Recommended 3.9: did not recommend 3.7, t(474)=-2.78, p<0.01.</p>



situations rated their communities higher in social connectedness in terms of people watching out for, and being willing to help, each other.<sup>43</sup>

- > Those who more strongly agreed that they were someone others could generally rely on in an emergency also more strongly agreed that people in their community knew they had had first aid training.<sup>44</sup>
- > People who felt proud that they had accomplished things in life were likely to have told someone about the first aid training they had received.<sup>45</sup>
- > Pride in having accomplished first aid training was significantly related to all aspects of spreading knowledge, where people who told (85% compared with 56%, respectively), shared (88% compared with 77%, respectively), or recommended (85% compared with 81%, respectively) were significantly more likely to agree that

they felt proud of accomplishing first aid training.<sup>46</sup>

Communities that had no preparations in place to be ready to respond to a first aid emergency were significantly more likely than those who did to have low levels of certain aspects of social connectedness, community efficacy, and learning.<sup>47</sup>

It appears, therefore, that while there is a link between individual and community resilience to a first aid emergency, there is a distinction between them. The resilience of individuals may contribute to certain aspects of community resilience, but for the community to be resilient as a whole, other conditions must also be present.

<sup>43</sup> Positive linear relationships between: can find a way out of difficult situations and community watch out for each other, F(27,248)=5.73, p<0.05; can find a way out of difficult situations and community willing to help each other, F(27,248)=5.86, p<0.05.</p>

<sup>44</sup> Positive linear relationship, F(27,248)=6.33, p<0.05

<sup>45</sup> Positive linear relationship, F(27,248)=7.50, p<0.05

<sup>46</sup> Mean is displayed within the range of 1-5. Told 4.1: did not tell 3.4, t(526)=-4.74, p<0.01. Shared 4.2: did not share 3.9, t(524)=-4.15, p<0.01. Recommended 4.1: did not recommend 3.9, t(527)=-3.37, p<0.01.</p>

<sup>47</sup> Mean is displayed within the range of 1-5, and 1-4 for the scenario. Members know me, no preparations 3.8: have preparations 4.2, t(489)=2.49, p<0.05. Watch out for each other, no preparations 3.6: have preparations 3.5: have preparations 4.0, t1(451)=2.86, p<0.05. Rely on each other to provide first aid, no preparations 3.3: have preparations 3.3: have preparations 3.8, t(452)=2.37 p<0.05. Know someone to go to for first aid help, no preparations 3.2: have preparations 3.9, t(467)=3.93, p<0.01. Take action in scenario, no preparations 3.8: have preparations 4.2, t(471)=3.59, p<0.01.</p>



### 4 Conclusions

- > This study has identified linkages between features of community resilience and first aid training. While it is not possible to establish a causal relationship, we do identify significant relationships between features such as willingness and confidence to administer first aid and constituent elements of resilience such as social connectedness, community efficacy, learning and the spread of learning/ knowledge/skills.
- > We have also identified that the context and frequency of training are significant factors where community resilience features are present. In other words, in those people trained together and repeatedly we find heightened measures of the resilience elements tested for.
- We have found significant evidence to suggest that willingness is not an outcome of first aid training. Put another way, first aid training per se will not increase our willingness to administer first aid in an emergency. However, confidence to administer first aid is an outcome of first aid training, although this wanes with the passing of time.

- > Age appears to be an important factor young people (19 and under) exhibited lower levels of the resilience features measured in the study than those over 19, suggesting this age group may be a one for greater focus.
- The study suggests that the current first aid approach – in particular CBFA – has significant potential to support the development of resilience, especially when administered within the context of social groupings and repeated training. The findings also support the current CBFA approach as a means to reduce inequality (of access), and promote a beneficiary-led/tailored approach to delivering the service.
- > One way forward for the first aid department, therefore, is to ensure that training increasingly happens within the types of environment that the study suggests are conducive to growing resilience features.
- In conclusion, therefore, this study has found support for a positive relationship between first aid training and features of community resilience. Although this is not unanimous support, the study has highlighted areas where relationships can be heightened by influencing the community resilience factor itself through means not directly related to a first aid outcome. Namely, this study makes recommendations towards achieving greater community resilience by enhancing what is already present; for example, working with a group where members know and interact with each other. In addition, the benefits of attending training more than once and the subsequent impact on community resilience, have also been identified.





![](_page_39_Picture_1.jpeg)

### **5** Recommendations

- 5.1 Disseminate the findings of this survey in accessible and creative ways and to a range of audiences both internal and external to the British Red Cross.
- 5.2 Explore the targeting of training to existing 'communities' (defined by the group as themselves constituting a group of people who interact with each other regularly). The qualitative and quantitative data both suggest that those who attend as a group feel more comfortable together and thus learn more, and there is a sense that they could work together in an emergency. Additionally, the training should be targeted at social groups rather than groups defined solely by geography, as this is where we may see the most impact.<sup>48</sup>

<sup>48</sup> As of November 2011, the Research, Evaluation & Impact and First Aid Education teams are carrying out a second research study to further examine the relationship between being trained together as a community and the links between first aid training and community resilience. This research will examine additional factors such as type of course, type of community, and proportion of community members trained.

- 5.3 Offer repeat training to first aid trainees in light of the benefits raised herein, and given the fact that confidence is known to dissipate after a time.
- 5.4 A further examination by the First Aid and Research, Evaluation & Impact teams of those resilience features that appear to influence willingness (in particular) and confidence – that is, social connectedness and community efficacy.
- 5.5 The findings support the CBFA approach as a means to reduce inequality (of access), and promote a beneficiary-led/tailored approach to delivering the service.
- 5.6 Continue to focus on youth and schools as a way of targeting young people and creating an environment in which they can grow their own resilience.

- 5.7 Apply caution when labelling/defining communities as 'vulnerable'. Many of the communities defined as vulnerable in this study did not see themselves in this way.
- 5.8 Explore how the messages of positive benefits can be best communicated to potential beneficiaries with the aim of encouraging a greater uptake of first aid training.

![](_page_41_Picture_7.jpeg)

![](_page_42_Picture_1.jpeg)

![](_page_43_Picture_1.jpeg)

### 6 References

British Red Cross (2010). Community-based First Aid Outputs and Outcomes. First Aid Education Department, British Red Cross internal document.

British Red Cross (2009). *Inclusive First Aid: Programme Report and Evaluation*. British Red Cross internal document.

Cabinet Office (2010). *Building the Big Society*. Retrieved February 27, 2011, from www.cabinet-office.gov.uk/news/building-big-society

Cutter, S.L., Emrich, C.T., & Burton, C.G. (2009). *Baseline Indicators for Disaster Resilient Communities*. University of South Carolina, Community and Regional Resilience Institute (CARRI) workshop presentation. Retrieved August 09, 2010, from http://www.resilientus. org/library/Susan\_Cutter\_1248296816.pdf

Daly, M., Becker, J., Parkes, B., Johnston, D., & Paton, D., (2009). Defining and measuring community resilience to natural disasters. *Tephra*, 22, 15-18.

Forgette, R., & Van Boening, M. (2009). *Measuring and Modelling Community Resilience: SERP and DyME*. Retrieved August 05, 2010, from http://www.serri.org/publications/ Documents/Ole%20Miss%20Project%20 80038%20Measuring%20and%20Modeling%20 Community%20Resilience%20%20Global%20 Horizons%20Submission%20(Forgette%20 and%20Boening).pdf

Glendon, A.I., & McKenna, S.P. (1985). Using accident injury data to assess the impact of community first aid training. *Public Health*, *99(2)*, 98-109.

Gurwitch, R.H., Pfefferbaum, B., Montgomery, J.M., Klomp, R.W., & Reissman, D.B. (2007). *Building Community Resilience for Children and Families*. Retrieved September 16, 2010, from http://www.nctsnet.org/nctsn\_assets/pdfs/edu\_ materials/BuildingCommunity\_FINAL\_02-12-07. pdf

Home Office (2011). Strategic National Framework on Community Resilience, March 2011. Retrieved November 07, 2011, from http://www.oxfordshire.gov.uk/cms/sites/default/ files/folders/documents/fireandpublicsafety/ emergency/StrategicNationalFramework.pdf

International Federation of Red Cross and Red Crescent Societies (ICRC), 2010. *First Aid for a Safer Future, Updated Global Edition*. Advocacy report 2010.

Laurie, E. (2008). Is There a Need for Community-based First Aid (CBFA) in the Northwest of Northern Ireland? British Red Cross internal document.

Lingard, H. (2002). The effect of first aid training on Australian construction workers' occupational health and safety motivation and risk control behaviour. *Journal of Safety Research*, 33(2), 209-230.

McKenna, S.P., & Hale, A.R. (1982). Changing behaviour towards danger: The effect of first aid training. *Journal of Occupational Accidents*, 4, 47-59.

Norris, F., Stevens, S., Pfefferbaum, B., Wyche, K., & Pfefferbaum, R. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41, 127-150.

Nzegwu, F. (2010). *Defining Resilience at British Red Cross: A Research Study*. British Red Cross internal document.

Penrose, H. (2009). First Aid Research Amongst the General Public Measuring Confidence, Competence and Willingness to Act. British Red Cross internal document.

Sampson, R.J., Raudenbush, S.W., & Earls, F. (1997). Neighbourhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277, 918-924.

Twigg, J. (2007). Characteristics of a Disaster Resilient Community: A guidance note. Retrieved September 06, 2010, from http:// www.proventionconsortium.org/themes/default/ pdfs/characteristics/community\_characteristics\_ en\_lowres.pdf

Van de Velde, S., Heselmans, A., Roex, A., Vandekerckhove, P., Ramaekers, D., & Aertgeerts, B. (2009). Effectiveness of non-resuscitative first aid training in laypersons: A systematic review. *Annals of Emergency Medicine*, *54*(*3*), 447-457.

Photo credits are listed from left to right, in clockwise order © BRC

Front Cover: Steve Watkins, Justin Grainge, Page 8: Jonathan Banks, Page 9: Ben Stickley, Page 10: Justin Grainge, Page 12: Layton Thompson, Page 14: Alex Rumford, Page 15: Justin Grainge, Page 16: Justin Grainge, Page 18: Jonathan Banks, Page 19: Alex Rumford, Page 20: Jane Rogers, Page 23: Jonathan Banks, Page 25: Lewis Houghton, Page 26: Aaron McCracken/UNP, Page 27: Jane Rogers, Page 29: Jonathan Banks, Page 31: Mark Edwards, Page 32: Ben Stickley, Page 33: Lloyd Sturdy, Page 34: Jonathan Banks, Page 36: Layton Thompson, Page 37: Simon Clark, Lloyd Sturdy, Page 38: Jonathan Banks, Lloyd Sturdy, Page 40: Catherine Mead, Page 41: Jonathan Banks, Lloyd Sturdy, Page 42: Simon Clark

British Red Cross UK Office 44 Moorfields London EC2Y 9AL

The British Red Cross Society, incorporated by Royal Charter 1908, is a charity registered in England and Wales (220949) and Scotland (SC037738)

redcross.org.uk