This case study is part of a broader ProVention Consortium initiative aimed at collecting and analyzing community risk assessment cases. For more information on this project, see www.proventionconsortium.org.

Click-on reference to the ReliefWeb country file for Turkey: http://www.reliefweb.int/rw/dbc.nsf/doc104?OpenForm&rc=3&cc=tur.

Note:
A Guidance Note has been developed for this case study. It contains an abstract, analyzes the main findings of the study, provides contextual and strategic notes and highlights the main lessons learned from the case. The guidance note has been developed by Dr. Ben Wisner in close collaboration with the author(s) of the case study and the organization(s) involved.
ÜMRANIYE WOMEN’S OUTREACH
COMMUNITY DISASTER PREPAREDNESS PROJECT
B.U. – K.R.D.A.E. Disaster Preparedness Education Project

FINAL REPORT – OCTOBER 2002
Marla Petal, Suha Ülgen, Gül Okoh, Ümit Alniacik,

ADMINISTRATIVE
Bogazici University Kandilli Observatory and Earthquake Research Institute, Istanbul Community Impact Project administrated the “Umraniye Family Disaster Preparedness Project” with the financial support of CARITAS and CORDAID.

The project team consisted of: Marla Petal, administrator. Gul Sat Okoh, project coordinator. Suha Ulgen, research director. Zeynep Turkmen, training director. Sinan Zeyneloglu, research assistant. Omer Caliskan, non-structural mitigation instructor. Umit Alniacik data-entry supervisor. Ten women from Ümraniye formed the training team. Five individuals worked with us on an expense-paid volunteer basis doing data entry.

COMMUNITY OUTREACH
We initiated the project by reaching out to a number of public sector and community-based organizations to build relationships, which would strengthen the project. The Ümraniye Municipality Public Relation Desk. Municipality staff and the Mayor expressed their goodwill in supporting this project and immediately expressed an interest in reproducing extra quantities of Basic Disaster Info Cards to distribute on their own. They reprinted 5,000 cards and began by distributing them during the “Week of Local Governments Activities”, and then continued distribution in Ümraniye.

The District Administrator welcomed the project while expressing his doubt in the value of such awareness projects. Nonetheless, he invited the Project Coordinator to an “earthquake coordination meeting” for Umraniye where all Heads of Neighborhoods (Muhtars) and Civil Defense Department representatives were present. This served as an important opportunity to build interest and awareness and garner the support of the muhtars.

The muhtars, in general, welcomed the project and facilitated the home visits and group trainings in their neighborhoods. In particular, the Namık Kemal and Inkılap Neighborhood Muhtars have been extremely helpful in identifying potential staff, providing meeting space for the projects coordinator’s visits and facilitating in any other way requested.

Other potential stakeholders in the district included:
The Civil Defense Directorate staff for the district meets with muhtars and the Municipalities regularly, in order to set up the locations for the post-disaster assistance activities and tent cities. Presently they regard their primary role as the distribution of the material aid and complain about lack of coordination among the local institutions and work overload.

The Mustafa Kemal Neighborhood Community Center is the only community center in Umranıye run by public Social Services. They have 80-100 regular participants. The center works in collaboration with a non-governmental organizations People’s Health Education Foundation, INSEV, on a training program for 18 “Local Women Leaders”. The center also runs courses such as literacy and preventative health education.

The Ümraniye Women Center Association is a local association established by educated and active local women. They provide support to the project by providing their meeting room.
The Ümraniye Public Education Center staff welcomed the project and referred 2 of their teachers for the first ABCD training.

Ümraniye Health Group Directorate: This is the coordination office for 15 local health centers. It is a collaborative effort of the Ministry of Health and Marmara University.

One of the national news TV channels CNN TURK, sent a reporter along with a cameraman to shoot the first group training meeting at a school in Umraniye. The next day 2 of the trainers attended at a live morning talk show where they described the objectives of the project and specifics of the training program.

Towards the end of the field work, which coincided with the 3rd anniversary of the August 17th 1999 Kocaeli Earthquake, another trainer appeared on a program, called SECRET HEROS, by the other national TV news channels, NTV. During the program, she emphasized the values of volunteer work in disaster preparedness. The national TV coverage of the “Ümraniye Family Disaster Preparedness Project” raised nation-wide awareness, which also helped the trainers in the field because Ümraniye residents were more willing to participate in the project.

7,000 information cards were distributed during the project. At the end of the project 3,000 were delivered to the “muhtars” offices for distribution in the neighborhood. And the municipality produced and began distribution of an additional 5,000 copies. The information card was well-received, and as an object of interest and small size, it appears to be an item, which will be kept and referred to in the future.

RECRUITMENT OF TRAINERS

Based on our initial community outreach efforts 70 women were invited to participate in the first 3-hour seminar on basic disaster awareness at Kandilli Observatory and Earthquake Research Institute on April 16th. The assembled women were an enthusiastic and diverse group of women of all ages, and education levels, and all active in some way in their Ümraniye communities. They made a special effort to come to the training, some taking several forms of public transportation and taking over an hour to commute each way.

At the time of the initial seminar all were considered potential trainer candidates. Pre and post training tests were used as a screening tool for potential trainers. Through the tests we were able to assess roughly the level of knowledge of basic disaster awareness that each individual had absorbed both prior to, and as a result of the seminar. Due to the demands of survey interviews and data collection we also needed to identify trainers with good literacy skills. The test results quickly resulted in identifying 19 potential trainer candidates. We contacted all 19, asking if they were interested in become a trainer – either a short-term, paid research-trainer, or a community-based volunteer trainer. 18 accepted the opportunities to interview with the project coordinator.

The interviews were held in Umraniye in a variety of locations. The interviews aimed at knowing getting to know the individuals, their motivations, and their verbal expression skills, and sharing more information with them about the scope of the work. Among 18 candidates, 13 requested further education. Expecting some drop out, and prior to making a commitment to hiring, we offered a full day of basic disaster awareness instructor training to all 13 candidates. As a prerequisite all candidates were asked to complete their own Earthquake Hazard Hunt and Family Preparedness Plan and submit it prior to training.

EDUCATION FOR TRAINERS

Instructor training was planned in 5 sessions:

ABCD Basic Disaster Awareness Training -1 day.
Non Structural Hazard Mitigation theoretical and practical Training -.5 day
Data collection (Proposed forms, sampling procedure and field work techniques) - .5 day
Team-building and basic communication skills - .5 day

The Basic Disaster Awareness training repeated the model seminar, this time using the flipchart that the women would use in their presentations (rather than a computer slide presentation used earlier). It provided an opportunity for “deep questions” and for exploring a strong understanding of the whys and wherefores of all of the content, and a focus on the most important part of the training – the Family Disaster Preparedness Plan. It also provided an opportunity to learn some tips and to practice presentation skills with each other.

The non-structural hazard mitigation training involved hands-on instruction in how to use simple hand-tools and the right anchors, screws, brackets and fasteners to stabilize tall and heavy furniture items in the home.

The data collection training explained the purpose of the program evaluation, the rationale for a rigorous random sample selection to be used in selecting households for door-to-door training, the hypotheses underlying the questions on the survey form, and the details of the survey questions themselves. We invited the team to pilot the survey and return with their suggestions for improving it.

The team-building and communication and skills training focused on warming-up as a group, seeing themselves as part of a bigger picture, self-expression, and active listening.

By the end of the training 3 women for whom the program seemed too rigorous chose not to continue. As the remaining 10 women were all enthusiastic and capable, yet fearing dropout, we decided to share the work among 10 trainers, rather than 8 as originally planned.

After the home visits were completed, and before the group training meetings started, the trainers received a refresher session on the ABCD flip chart. Shortly after this each woman met individually with the coordinator to practice her presentation skills, and mastery of the content.

The team met again to review survey modified for use in the group meetings, based on a second round of input received in the course of implementation during the home visits.

The team building and communication skills training were addressed as needed during biweekly team meetings.

**TRAINING MATERIALS:**
Each Trainer was furnished with an ABCD Instructor’s Bag containing the following materials:

- ABCD flipchart
- ABCD instructor’s manual
- ABCD Information Cards (10,000 copies were printed specially for this project with the emergency numbers for Ümraniye.)
- Non-Structural Hazard Mitigation Demonstration materials (e.g. drill and easily available tools.)
- Personal disaster survival supplies: water, long-life food, flashlight, work-gloves, radio, batteries, first aid kit, waterproof plastic bag for document.

**HOME VISIT EDUCATION & SURVEY METHODS**

Instructors piloted the home-visits trainings and survey data collection for the first 10 days with two team meetings in between to share observations. They provided important feedback to improve the survey, suggesting changes in the wording of the questions, eliminating some duplicative questions, shortening other sections, and re-ordering the questions They were committed, however, to collecting the wide range of data sought to investigate a multitude of variables.
A spatially-stratified random sample was selected by placing a 1,000 small dots uniformly over a grid of the residential sections of Umraniye. 100 dots with a specific latitude and longitude were selected randomly as starting points. Research designers visited each spot and identified the starting address and 10 additional addresses selected by choosing every 5th residence in circle beginning with the initial address. A substitution protocol was developed should the households be unoccupied on successive visits, or uninterested in participating.

Each trainer was given 10 different starting points for a total of 100 addresses to visit. A cover page was used for each address visited. Information and tracks collected on cover page was tracked and monitored ensuring a rigorous scientific method. Trainers met regularly with the program coordinator at one of the muhtars office, sharing the home visit experiences, and turning in completed surveys.

The women quickly became comfortable delivering the core training in whatever time the family could allocate. They learned to fend off assumptions that they might be vendors. And they learned to involve the widest possible group in their training and outreach. Generally families welcomed them warmly, often inviting visiting neighbors and friends to participate as well. Sometimes they met with people in their gardens or on their front steps, often in their living rooms. Once in a while they were sent away, occasionally even rudely. The lowest income, new-migrant neighborhoods were most resistant. Residents’ fears of being identified for a variety of illegal practices (from squatter housing to multiple wives) make them more resistant to strangers visiting. However, the trainers persisted and felt strongly that if they could reach a small number of people, the ripple effects would be shared throughout the neighborhood.

At the end of the training, each family was offered 3-5 copies of the information card to be distributed to friends and neighbors. Over 3,000 information cards were distributed during the household visits.

The household visits were completed in 8 weeks. The average time spent at each household is around an hour, half of which was used for formal training. During this time, 1077 households were reached out of which 1015 received ABCD Disaster Preparedness Training.

GROUP EDUCATION & SURVEY METHODS

In the second phase, each trainer was expected to reach 100 households through group meetings, by using their own social network.

These initial meetings were challenging for a number of reasons: Group instruction requires more confidence and practice than 1-to-1 training. The full group of trainers tried to participate in delivery of the education, their enthusiasm resulted in chaos. And the first groups were held with a literacy class, and group with low literacy levels. Filling out the survey form was extremely labor intensive for this group.

The group decided to take more time to develop their presentation skills and organization skills to arrange help with survey completion. The project team provided another half day of review of the content, use of the flipchart, and presentation skills practice. Then each trainer met with the coordinator and did a training demonstration. The questionnaire was simplified once again. Group meetings started full-steam at the beginning of July.

Even though trainers prepared their group meetings schedules in advance in order to coordinate all the meetings, sometimes they delivered the training to spontaneously gathered groups.

84 group meetings were held in total, taking place in public health centers, schools, association of people with disabilities, conference halls, arts & crafts seminars, and in the evenings in front of the buildings where neighbors meet informally.
Thus, 1308 people were trained, of whom 1013 family representatives completed questionnaires. The average time spent at each group meeting was about an hour and a half. The group sizes varied considerably. The smallest group consisted of 4 persons. The largest gathering had 95 participants. Most group meetings were handled by a pair of trainers. The average group size was 6.

Over 4,000 information cards were distributed during the group meetings.

**FOLLOW-UP TELEPHONE SURVEY**

Due to the challenges of the spatially distributed random sample, we modified the initial research design to conduct follow-up by telephone survey rather than a second home visit. However, the same trainer contacts the individuals she had taught in order to convey concern for taking action steps and strengthen their relationship.

Telephone follow-up was conducted between 4 to 8 weeks after the training was completed.

The objective of the telephone follow-up survey was to determine which preparedness measures the respondents expressed an intention to take were implemented, and to encourage them to continue their preparedness activities. A special one-page survey instrument was designed and utilized for the telephone follow-up survey. Every surveyor was instructed to call each number up to 3 different times for an answer.

1015 household questionnaires completed revealed 812 phone numbers. 124 of these did not answer. 36 trainees refused to answer the questionnaire. 26 were incorrect numbers. Calls made to 17 numbers could not locate the right respondent. The number of follow-up questionnaires completed for the home-visited group was 609.

1013 group meetings questionnaires completed revealed 765 phone numbers. 87 of these did not answer. Calls made to 18 numbers could not locate the right respondent. 16 trainees refused to answer the questionnaire. 16 were incorrect numbers. The total number of follow-up questionnaires completed for the group meetings attendees was 628.

Overall 1,237 follow-up questionnaires were completed for a 60% follow-up response rate. The refusal rate was less than 3%. This is considered very good. Many respondents expressed appreciation for the caring expressed by the follow-up telephone calls. Having these calls made by the trainers themselves was considered very effective in reinforcing the training.

**TRAINERS INDIVIDUALLY AND COLLECTIVELY**

Trainers come from various backgrounds. Most of the trainers didn’t know each other before the program. 2 of them are neighbors also working voluntarily at their neighborhood’s primary school, 2 other knew each other since they were children. The rest of the group met during the recruitment and training process.

We observed that an easy and strong communication was built between them in short time. They started to help and support other members of the group not only in the working difficulties but also in their private lives. The group welcomed the Project management team and they expressed that they are eager to learn and transfer their knowledge to their own community.

One trainer agreed to leave when a conflict developed between her and the project coordinator around perceived lack of acknowledgement and struggle for power (withholding surveys, demanding more money). However, she remains committed to our common goal of community disaster preparedness.

The trainers have each in their own way and style enthusiastically embraced their mission. Their anecdotes perhaps best illustrate the strengths of the program:
One trainer was sitting on a “dolmus” a public transit minibus and the person sitting next to her asked what she was carrying. She started to explain earthquake preparedness. The people sitting nearby were straining to hear. Soon she got up and moved to the front of the minibus and turned to face everyone. She started delivering earthquake preparedness training to all of the passengers. Several stayed on past their stops in order to hear more. At the end of the route the minibus driver drove her to her door and expressed his gratitude.

Later another trainer did a similar training on a public transit bus.

Another trainer visited an apartment in an upper middle class neighborhood. The woman of the house told her that they were prepared for earthquakes because her husband had purchased an “earthquake log” which they kept under their beds. Curious, the trainer asked to learn more, and was shown what appeared to be a simple wood log. She sat down on the bed and bounced on it to create vibrations – nothing happened. She resisted her impulse to smile and convinced the lady of the house to learn more about earthquake preparedness.

The women have clearly been empowered by their systematic acquisition of knowledge, their confidence in the material they are presenting because of its validation by a respected educational institution, and their joy in being able to make a difference in their neighborhoods. They are clear in the knowledge that their work will save lives – perhaps more surely than the heroes associated with search and rescue. They are beginning to identify and struggle with the harder issues of sustainable development and sound construction practices.

During the last week of August some trainers participated in some culminating activities, visiting the Police Hospital and The Topkapi Palace Museum along with the Project Coordinator. The objective of the site visits was to observe model non-structural hazard mitigation measures taken by those institutions.

**TRAINER’S EVALUATION OF THE PROJECT**

One month after completion of the project a follow-up evaluation meeting and celebration was held with the training team. The group expressed their overall evaluative comments, the impact on themselves and their communities, things that could be improved, and their hopes for the future.

The women expressed their gratitude for being able to be part of this important project, and their belief in the changes that they have been able to stimulate in their communities, knowing that the increase in knowledge and changes in behavior will reduce the loss of lives, the injuries, and the economic and communal losses from future disasters. They believe that the program should be implemented throughout Turkey, and they are willing to be advocates for the program.

Interestingly, when asked if they found the home visits or the group meetings more effective, the women were unanimous in selected home visits. Although home visits are more time consuming, and although the people visited have not “sought information” by attending a meeting, the women had some excellent reasons for preferring this method:

- Reaching people at home usually means including their extended families, neighbors and friends, who are present or nearby and are included in the training.
- The ability to include this extended support system creates a synergy and ripple effect so that people can energize one another to take make the behavior changes needed.
- The home meetings felt more personal – the trainers felt a greater connection to their audience, even though they were strangers, than they did to a larger group of acquaintances.

We pointed out that the before and after results were not remarkably different between the home-visit and group-taught cohorts, and that the group-taught was more time-efficient. This did not sway the women. They explained that the people who need the information most are those least likely to hear about and attend a group meeting.
Trainers also reported a phenomena observed in other studies. Those with fewer socio-economic advantages seemed significantly more receptive to the intervention efforts. They were more willing to take the time, and to acknowledge the need to take action. Those living in upper middle class areas were more likely to feel that they already knew what they needed, and in many cases seem to believe that their socio-economic level alone conferred some protection. The women wonder whether a similar door-to-door program in other parts of the city would be as well-received. The relative complacency of those with higher levels of education and economic resources is cause for concern.

The trainers all expressed their willingness to continue teaching ABCD Basic Disaster Awareness Training voluntarily in the future. Their “trainer profiles” were recorded in the IAHEP Database. Moreover some will participate in public first-aid courses and further disaster preparedness trainings in order to increase their skills.

**PRE- and POST- TESTING RESULTS**

**Households and Individuals Reached:** A total of 7,727 people were directly (face-to-face) reached via the 2,000 households. 4,029 people were reached through 1,013 home visits. 3,698 people from 1,011 families were reached through approximately 90 small and medium group meetings. It is estimated that these individuals represent more than 2,500 households, each with an average of 4 members for a total of at least 10,000 individuals in households reached directly. Telephone follow-up responses were completed with 62% of respondents, or 86% of those who had provided a telephone number.

**Demographics of the Population Reached:** The residents reached were well-distributed between all 14 neighborhoods of Umra, 60% of the families reached own their own apartments or homes, 31% rent, 8% reside in homes owned by family members, and 1% in company-owned housing. Mean family monthly income was approximately 300 Euros per month. Modal monthly family income was about 200 Euros per month.

67% of families live in reinforced concrete buildings and 23% in brick/masonry buildings. 42% of these dwellings were built by professional builders, 23% by local builders, 18% by self, and 17% don’t know. Mean number of floors per building is 4. Mean number of apartments per building was 9. Buildings range from 1-48 years old with the mean being 13.5 years.

**Attitudes & Beliefs:** More than 90% of residents agree that their knowledge of earthquakes has increased since the 1999 Kocaeli earthquake. While talking about the subject makes more than half of the people anxious, 91% agree that the more knowledge they have the safer they feel. 66% of respondents don’t think that taking precautions is troublesome and 95% believe that individual and household preparedness are very important and that education will reduce damage. 85% share responsibility for communicating earthquake risk information with others.

40% of respondents described their knowledge level about earthquake protection as low, very low or none. 75% get their information from television, 12% from newspapers and magazines and 6% from radio. 19% had previously received documents about earthquakes (56% of these were from AHEP, 20% from provincial or district government and 24% from their municipality). 70% of people reported practicing some or most of the recommended actions. 81% report practicing some or most of the recommended actions learned in training programs.

**Evaluation of Training:** 99% of respondents rated instructor’s knowledge as good or very good. 98% rated scope of course and training materials as good or very good. 97% rated training usefulness as good or very good.

**Risk Awareness:** Risk awareness was assessed using eight multiple-choice questions. The choices were designed to reflect the most common misconceptions, and only one answer to each was considered correct. Interestingly, some of the test items were relatively well understood prior to training (the most common building construction mistakes, and how much water to store). Other items were not well understood (the risks in the Marmara region, the percentage of pancaked
buildings in the Kocaeli earthquake, who provides the most help after an earthquake, the most important things to protect lives after an earthquake). The women felt that learning the correct knowledge about these items was very important in motivating people to take action to protect themselves. Once they understood that there will be a major earthquake and every day brings it closer, that most buildings don’t collapse and most people don’t die – so you may as well imagine being a survivor, and that in the first 72 hours people will rely mostly upon themselves and those around them, then they understand and agree that there are worthwhile measures that they can take to protect themselves.

<table>
<thead>
<tr>
<th>RISK AWARENESS TEST</th>
<th>Before Training % Correct</th>
<th>After Training % Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the earthquake risks in the Marmara Region?</td>
<td>38%</td>
<td>80%</td>
</tr>
<tr>
<td>What percentage of the damaged buildings in the Kocaeli Earthquake pancaked?</td>
<td>12%</td>
<td>83%</td>
</tr>
<tr>
<td>What are the most common mistakes in Turkish construction practices?</td>
<td>76%</td>
<td>92%</td>
</tr>
<tr>
<td>What are the most important items to secure to prevent from falling and sliding?</td>
<td>53%</td>
<td>70%</td>
</tr>
<tr>
<td>What is the minimum amount of water you should store per person?</td>
<td>88%</td>
<td>96%</td>
</tr>
<tr>
<td>What are the two things you should remember to protect lives after an earthquake?</td>
<td>48%</td>
<td>82%</td>
</tr>
<tr>
<td>Who will provide the most important help in the first 72 hours after an earthquake?</td>
<td>49%</td>
<td>91%</td>
</tr>
<tr>
<td>What is the name of the emergency response organization systems used internationally</td>
<td>15%</td>
<td>77%</td>
</tr>
<tr>
<td><strong>Average TOTAL CORRECT answers</strong></td>
<td><strong>46%</strong></td>
<td><strong>84%</strong></td>
</tr>
</tbody>
</table>

The increase in knowledge and awareness after training was substantial. The lowest post-test scores were 68% and the highest 98%. The trainers were very pleased with their results.

**Adoption of Hazard Adjustments:** The rate of adoption of household hazard adjustments following training compares very favorably when compared with similar surveys in California after 20 years of public education in earthquake preparedness. The results clearly indicate that most of those activities that can be undertaken with little effort or cost are being undertaken. Those that require more effort and cost have also increased substantially. This is extremely encouraging for everyone concerned with disaster mitigation.
**PREPAREDNESS ACTIVITIES COMPLETED BEFORE & AFTER TRAINING**

<table>
<thead>
<tr>
<th>PREPAREDNESS ACTIVITY</th>
<th>Before %</th>
<th>After %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Meeting and Preparedness Plan</td>
<td>26%</td>
<td>80%</td>
</tr>
<tr>
<td>Know Not to Use Telephone</td>
<td>44%</td>
<td>88%</td>
</tr>
<tr>
<td>Out-of-Area Contact Person</td>
<td>10%</td>
<td>39%</td>
</tr>
<tr>
<td>Purchased Earthquake Insurance</td>
<td>16%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>SURVIVAL PROVISIONS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Store Drinking Water</td>
<td>47%</td>
<td>84%</td>
</tr>
<tr>
<td>Store Food</td>
<td>30%</td>
<td>69%</td>
</tr>
<tr>
<td>Prepare Evacuation Bag</td>
<td>15%</td>
<td>32%</td>
</tr>
<tr>
<td>First Aid Kit</td>
<td>21%</td>
<td>41%</td>
</tr>
<tr>
<td>Battery-operated Radio</td>
<td>41%</td>
<td>67%</td>
</tr>
<tr>
<td>Flashlight</td>
<td>53%</td>
<td>77%</td>
</tr>
<tr>
<td>Extra Batteries</td>
<td>44%</td>
<td>70%</td>
</tr>
<tr>
<td>Fire Extinguisher (have and use)</td>
<td>9%</td>
<td>14%</td>
</tr>
<tr>
<td><strong>PHYSICAL PROTECTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoes Next to Bed</td>
<td>42%</td>
<td>84%</td>
</tr>
<tr>
<td>Fasten Tall and Heavy Furniture</td>
<td>8%</td>
<td>18%</td>
</tr>
<tr>
<td>Know Not to Light Flame After EQ</td>
<td>51%</td>
<td>90%</td>
</tr>
<tr>
<td>Engineer Has Checked Home</td>
<td>22%</td>
<td>25%</td>
</tr>
<tr>
<td>Have Repaired or Retrofitted Home</td>
<td>17%</td>
<td>22%</td>
</tr>
<tr>
<td><strong>SKILLS ACQUISITION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know How to Turn Off Utilities</td>
<td>61%</td>
<td>92%</td>
</tr>
<tr>
<td>First Aid Class</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>Attend Disaster Preparedness Class</td>
<td>3%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>OVERALL</strong></td>
<td>29%</td>
<td>52%</td>
</tr>
</tbody>
</table>

**Door-to-Door vs. Group Training:** The two approaches to teaching which we attempted to differentiate were a) having a local trainer approach unknown individuals to train them in their own places of residence and b) having local trainers use their existing social networks to reach friends and acquaintances. Indeed using the randomly assigned door-to-door approach only a handful of the beneficiaries had ever met the trainer before. In the group meetings more than half knew the trainer as a friend, neighbor, relative or acquaintance. Although statistical tests have not yet been run, it looks as though the prior knowledge of the social networked individuals, those who had to take an interest and make an effort to participate in the training, were only marginally higher than those for the people approached randomly. There appears to be little, if any difference between these two sample groups on post-test knowledge and hazard adjustment adoption.

Despite the time efficiency of the group meetings, given that the

**Conclusions**

Overall the indications of impact are nothing short of spectacular. The trainers, the team, and our generous sponsors have every reason to feel extremely proud of their efforts, and the contribution that they have made to the safety and survival of the people of Umraniye.

The baseline research data, and the program effectiveness indicators collected for the Umraniye project, should provide justification and direction to similar disaster preparedness education efforts contemplated in Istanbul, Turkey, and in other parts of the world.

The enthusiasm and success of the local women’s outreach and training efforts is proof that education is both needed and wanted, that this effort is appreciated, and that the population continues to be
respond to the caring and concern expressed for their well-being, and are ready to take advantage of the opportunity provided.

The model and the baseline data can be used as a starting point to test a variety of other questions about specific educational approaches and materials in the future.
IMPLICATIONS FOR THE FUTURE:
Important questions linger in the minds of community educators and disaster preparedness professionals: How long do the effects last? Do changes in preparedness behavior drop off or increase with time? Do people remember what they have learned? Do people feel that others have learned from them and responded?

It would be most interesting to learn whether, given some more time, more adjustments are adopted – i.e. whether it takes a while longer for families to take the measures they have learned about, or whether the adoption of new adjustments drops off soon after training. It would also be interesting to ask more open-ended questions to test awareness, and see to what extent people’s own articulation of their knowledge is consistent with the objectives of the training program.

It would also be very instructive to find out to what extent the training offered to people in “every fifth house” had an impact on neighbors and extended families. This might be explored by asking the same respondents to evaluate the hazard adjustments of these groups and rate their own impact upon others. A random telephone survey throughout the targeted district may be able to detect whether networking effects on dissemination of data have increased knowledge or hazard adjustment adoption among the untrained neighbors.

Since we have such excellent baseline data, it would be extremely valuable to follow the 1,500 cohort for whom we have before and after data. The next step would be to conduct another telephone follow-up survey approximately 6 months after the last survey (i.e. February 2003).
70 women from Umraniye participated in the initial ABCD Basic Disaster Awareness Seminar

10 women were selected to participate in the ABCD Instructor Training Program
<table>
<thead>
<tr>
<th>Team-Building and Leadership Development</th>
<th>Non-structural Mitigation Training</th>
</tr>
</thead>
<tbody>
<tr>
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Project Posters at S.O.S. Fair 2002
In their own words, the trainers conclude:

PERİHAN ÇALIKIRAN
I am Perihan Çalı̈kan, married with 3 children. Here are my observations about the KRDAE Training Project, which I worked in. First I received personal benefit, by learning about a subject that I didn’t pay attention to before. I believe the training gave us a chance to review our previous knowledge.

I had some unfortunate incidents during the fieldwork, but I never gave up. Those times, I remembered Ms Zeynep’s words and I didn’t take them personally. Some other times I had good times and I didn’t take them personally either.

Personally, I had great experiences from the fieldwork. I would like to thank to you all, who put effort in this labor. I won’t forget you all, but especially Ms Zeynep and Ms Gül. I thank all of you. I wish you all a long life and success.

HANÎFE ÇELİK
That day, August 17th, through great loss, we recognized the reality of earthquakes. Until that day neither myself nor anyone around me cared about this natural phenomenon called “earthquakes”. Nobody recognized that precautions should be taken.

It was a great experience for me: a serious earthquake training, to give training in homes and seminars and the phone follow-ups. We explained everything in our training sessions. However, during the phone follow-ups I witnessed that some people still neglected the precautions and used financial reasons as an excuses.

They were some that used to say to take precautions was not necessary. We tried to convince them. Some used to say that it was the will of God. Sometimes there were some who took the training seriously and did it all, recognizing that it is a natural threat and precautions should be taken.

I have fastened my furniture at home and it gives a good example to other people. Seeing my house makes them think over it. Some ask me to help to fasten their furniture’s.

Finally, I am happy to share what I’ve learned. I believe that this training made many people aware. Being an Umraniye residents and taking part in this project, I would like to thank to you all, who put effort in this labor on behalf of my district.

SEMRA GÜVEN
Before I started, I was expecting that I would face several difficulties in this project. However, it was not as difficult as I thought. I overlooked the difficulties, because I was giving useful training. Beside, it was nice to meet some sensible people. For example, the passengers in the minibus started to ask me many questions since they heard I was taking to driver about earthquake preparedness. I was pleased to inform people.

The best part of the project was meeting new people and working in harmony. Thanks to Mr. Ömer we learned about YOTA and thanks to Mr. Suha, Ms. Zeynep and Ms. Marla we learned a lot about earthquakes. Towards the 3rd anniversary of the August 17th, I received may calls from several people asking about the earthquake!

Everything was fine in general. The communication lectures given by Ms. Zeynep was very pleasurable, I’ve gained confidence in myself. Finally, Ms Gül should be specially thanked, as she has take care all of us, one by one.

NERMİN KIRICI
Turkey lived that bitter feeling of the (Kocaeli) earthquake by paying a giant bill. That day something changed for me as well. Watching those helpless people, made me deeply sad. I felt that I needed to do something. Later, by chance I got the opportunity to join this organization. I wanted to be a part of a group where I could put my efforts and my talents to work for people’s benefit.
Within IAHEP, a thousand of houses were visited, door-to-door; earthquake preparedness training was given. Beside this, group meetings and telephone follow-up were done. When I faced some unfortunate incidents, I never gave up, not even for one moment. Together with other members of group – each of them is valuable as much as diamond- we cooperated and were able to reach many people.

During the project period I was able to learn a lot and meet many people and made new friends. I was able to learn about earthquakes and see the public’s point of view. I witnessed the attitude of people toward the earthquake. From this I believe that other people living in different places, under earthquake risks need such useful programs. If IAHEP would extend the efforts to other part of the country, I will continue to work.

We are all proud of the training we gave to Umraniye population. Knowing that we raised the awareness of thousand of people, made us forget about our tiredness. I would like to thank to BUKRDAE, Mr. Suha, Ms. Gul and Ms. Zeynep for them to let me use my abilities for the public benefit.

HÜLYA MUHSİR

The first time I heard this project, I just thought I would one training seminar. I was aiming to avoid being a victim of earthquakes. I didn’t want to be among those who are “voluntarily unfortunates”. In fact I had been reading a lot, but which one was right, which was wrong? After participating the [ABCD] training, I found the answers to many questions in my mind. I wanted to share what I’ve learned. By having the support training, I was ready.

The fear in people’s eyes when I start to talk about earthquake, left for the twinkle, glimmer when they become informed. If they had not been visited in their homes, they would never have had the chance to learn. I believe that these people are informed enough now to practice what they learned. This project gives individuals and their beloved’s lives and earthquake preparedness guideline into their own hands. I know about that awareness is very much related to economic status, beliefs, environment, age and even gender. Umraniye contains a wide spectrum of these differences.

I have learned a lot about social concepts from this project. It was a good teamwork. I consider myself lucky to be a part of it. What I know is that “We all are in the same team”. Thanks to all, who put effort into this work.

KAMURAN TURAN

Hello, I am sure that I and my team’s other members fulfill the duties we accepted between may-August. Some days were joyful, some sad. I am very pleased with my role in this project. To look into the eyes of people, to be hand in hand, and to understand them, was great. When we visited them in their poor homes, they were very generous. I would like to thank from bottom of my heart, to whom have written the project. Thanks to the project I’ve met such nice people who had nothing to eat but one bowl of soup and still invite us to share. I lost nothing, but I gained a lot. When I feel tired, I recall those good times I had and feel pleased. This is the best feeling for a person who has some conscience, some mercy, and little bit national pride as well.

With Respect,

ŞADUMAN YILMAZ

When I participated in the first [ABCD] training I never expected to be chosen for this program. The first training was very useful. Before everything started, I took it as an ordinary job. In time, through the trainings, I could see that how serious it was. I saw that Ms. Gül and Ms. Zeynep took care of everything very carefully; I realized that there was something more important than money to earn. It became a responsibility. It was not easy to study for the training. Being the youngest member of the group first I was afraid, but in time everyone helped me and I did my best.

Finally, I think everything went smoothly, I hope the results will be the same.
Five years after completion of the project, Coordinator Gül Şat made contact with four of the original group of women who carried out the outreach project. The women continue to meet each other regularly in the Neighborhood Head Office. Two of the group have move away, one is working full-time, and another was out of town. Some follow-up issues were explored with the women:

**Feelings about impact of the project**

In general, they say they definitely feel safer and prepared for an earthquake and say that they have gained respect among our neighbors by being part of this project.

**Continuing work to spread the word**

Hülya: For a long time after the project, she kept handing over the info cards to people she talked about the earthquake related issues. She still shares her knowledge with interested people. She highlights the measurements to be taken and she even gives a hand to people who are interested in non-structural mitigation. Recently she helped a new-wed couple to fix their closet to the wall and to select a proper cupboard, with a strong fastener mechanism.

Nermin: Has kept on with some training when it is asked for. She met a woman two weeks ago and they have set a day for training.

Perihan: She still spreads the word, especially to her neighbors. However, she adds that the best test-proving if this training is working well, would be the earthquake itself.

Hülya: She closely follows the earthquake related news. Sometimes she cannot help herself to have some doubts if her knowledge is up-to-date. She shares the opinion of Perihan that we shall see after an earthquake if these measurements would work well.

**Personal measures taken**

Kamuran: They had an earthquake bag ready at home for long time, however when they moved to a new home they have not re-compose it.
Nermin: She expressed that the earthquake bag seemed a mess around home after sometime, therefore she de-composed it. However, other basic measurements she still keeps, e.g. having a flashlight next to bed and storing some drinking water.

Hülya: She still has the earthquake bag, but “it might be not well- up-to-date one”. Their mostheavy furniture at home was the closet at the entry, which is still fastened. They haven't unfastened it not even when painting the house.

Perihan: She has also decomposed the earthquake bag after moving to a new house. Again, basic measurements like having a flashlight next to bed and storing some drinking water still on. The fastened furniture have been unfastening when painting the house and didnt re-fasten after that. However, she willingly explains what to do to people around her.

**Long-term impact on the people they reached and educated**

Hülya: Many people around her, whom she had given some training, implemented the out-of-area contact person method and they welcomed it as a very helpful idea and kept on since.

Nermin: “People still ask questions about earthquakes. But by the end of the day they expect to hear the exact date of the earthquake to be happen, for them to have some time to run away.”

Perihan/Kamuran: “People expect the emergency response organizations would come and save their lives anyway. They are still somehow far from the acceptance of taking self-responsibilities. Maybe we could not get our message across.”

Kamuran: “People who can afford, are re-building their buildings, in order to meet earthquake safe standards. Even though our previous building was an “illegal” one, we had asked to an engineer to make necessary measurement. Now, with the new building we are building, we have all the standards respected and implemented.”

Perihan: “We held some measurements for our previous building in the year 2000. Then 2 years ago when we decided to remodel, we have asked for an earthquake safe building and since it was going to be rented as a kindergarten, there is even a compulsory fire escape stairs.”

Perihan: “There are some schools buildings strengthen and some earthquake trainings given.”

**Disappointments**

Nermin: They hear about some public institutions that convey some studies about earthquake etc, but nothing has reached them. They don’t know of any concrete steps taken yet.
Kamuran: “Even if there are some efforts out there, the public has no idea about the measurements taken. Here in Umranıye what is done is only some corpse bags purchased! And that kind of information I got is because I am at the Neighborhood Office! Another thing I heard was that they have identified Eyuboglu Koleji garden as an emergency desk spot.”

Hülya: “Nothing happened regarding preparedness. Once we heard that earthquake/disaster center was to be established, and then nothing happened. I am an online member of Umranıye municipality website, where I receive regular announcements/news from, there is nothing concerning earthquake. Neighborhood Head Offices should be the spots for the information to be gathered and distributed. However, they do nothing.

Kamuran: “Sometimes civil defense asks for names of people who might be interested and we give them some information. I always give our project’s leaders names as first on the list. However, they seem do not keep on after receiving such lists. Sometimes of those contacted by civil defense, are angry at us, for giving their names.”

Nermin: “Last year in September, I was contacted from District Governor’s Office and asked to visit Civil Defense Office. They said some further training programs were planned. After filling some forms etc. Nothing happened.”

Hülya: “Civil defense Office had contacted the other leaders for some training etc, I haven’t been contacted. Plus I think they call some people only to impress, as they have initiated something. I think if they really wanted to do anything, we, as leaders of this Project should have been first people they ask to involve.”