Communities Mobilizing for Change on Alcohol (CMCA) is a 15-community randomized trial designed to develop, implement, and evaluate a 2½ year community organizing intervention to change policies and practices of major community institutions. Pre- and post-data were collected via: surveys of high school students, surveys of youth age 18–20, surveys of alcohol retailers, alcohol purchase attempts, content analyses of media coverage, arrest and car crash indicators, surveys of strategy team members, and process records. Organizers and local strategy teams changed policies and practices of community institutions such as law enforcement agencies, alcohol merchants, and sponsors of community events, leading to significant changes in alcohol-related behaviors among 18- to 20-year-olds, and significant reductions in the propensity of alcohol establishments to serve alcohol to youth. © 1999 John Wiley & Sons, Inc.
The Communities Mobilizing for Change on Alcohol (CMCA) project is a randomized 15-community trial designed to develop, implement, and evaluate a community organizing intervention to change policies and practices of major community institutions. The goal of the CMCA project was to improve the public health of communities by changing institutional policies, procedures, and practices to reduce the flow of alcohol to youth under age 21 (Boyte, 1989; Minkler & Wallerstein, 1997). The project sought to reduce the number of alcohol outlets that sell to young people; reduce the availability of alcohol from non-commercial sources, such as parents, siblings, and peers; and reduce community tolerance for underage purchase and consumption of alcohol by changing cultural norms that permit and glamorize underage drinking. The project worked with local public officials, enforcement agencies, alcohol merchants and merchant associations, the media, schools, and other community institutions that influence the environment. The target of the intervention was the entire community rather than individual young people. We hypothesized that reductions in underage drinking would result from changes in community- and institutional-level policies and practices, with consequent reductions in injury morbidity and other social and health problems associated with underage drinking. We also expected, through involvement with CMCA, that communities would develop public problem-solving skills that could be used to address other health and social issues. The theoretical bases for the project are discussed in Wagenaar and Perry (1994).

Statistical analyses of the many CMCA outcome measures are presented elsewhere (Wagenaar et al., in press). In short, results demonstrated that the community organizing intervention significantly affected the behavior of 18- to 20-year-olds, and changed the selling and serving practices of bars, restaurants, and taverns in the intervention communities. Not only were these changes statistically significant when analyzed at the community level (n = 15), they were also substantively important, with effect sizes of 0.76 and 1.18 respectively, for those two key target populations. The intervention did not affect younger adolescents.

The objective of this paper is to describe specific actions taken by organizers and strategy teams across the seven intervention communities and to share lessons and results from our experience implementing this large-scale community trial that go beyond the statistical analyses of outcome measures.

METHODS

Intervention Design

CMCA used a community organizing approach to implement changes in local institutional policies. Institutional change included both formalized behavior, such as new ordinances and written policies, and informal practices such as more frequent patrolling by local police agencies or increased media coverage of alcohol-related issues. Organized citizens in each of the seven CMCA intervention communities identified and promoted a variety of policy initiatives designed to change the local environment in a way that made it more difficult for young people to obtain alcohol, and made underage drinking less acceptable within the local culture.

Part-time local organizers in each intervention community followed an organizing process that included seven stages (Figure 1):

1. Assessing the community—assessing community wants, needs and resources.
2. Creating a core leadership group—identifying key supporters to plan and implement the organizing campaign.
3. **Developing a plan of action**—creating a workplan and timeline for implementing activities and accomplishing goals.

4. **Building a mass base of support**—attracting new supporters and building community awareness and involvement in the campaign.

5. **Implementing the action plan**—implementing activities identified by the campaign leadership that were designed to achieve the goals.

6. **Maintaining the organization and institutionalizing change**—initiating activities to sustain the campaign and its accomplishments.

7. **Evaluating changes**—evaluating campaign activities and outcomes.

None of these stages is self-contained; in the organizing process, each stage often continues at some lower level of intensity while emphasis shifts to a new stage. At each stage, CMCA organizers performed a variety of functions such as advising, teaching, modeling, persuading, selling, agitating, facilitating, coaching, confidence-building, guiding, mobilizing, inspiring, educating, and leading.

**Evaluation Design**

To assess the effects of the intervention on youth alcohol access, alcohol use, and related problems, we used a combination randomized community trial and time-series design (Riecken & Boruch, 1974), including seven socially and geographically distinct upper midwestern communities in the United States randomly assigned to receive the intervention program, with eight others randomly assigned to serve as controls. We conducted baseline surveys in each community among a number of targeted groups and repeated the surveys three years later. The multiple time-series design was nested within the randomized community trial such that the time-series outcome measures were collected from the same communities, but those variables were measured at
many more points in time both prior to and after the onset of the intervention program.

All school districts in a geographic circle with a diameter of 500 miles in the upper Midwest region of the U.S. were screened for 9th grade enrollments of at least 200, no participation in other major alcohol-related or community studies, at least 25 miles in distance from other eligible communities, and concentration of students in three or fewer municipal jurisdictions. Twenty-four districts met these criteria and were invited to participate in the school surveys. Fifteen of the 24 eligible school districts agreed to participate in the surveys.

The 15 participating districts were matched on state, presence of a residential college or university, population size, and on the results of the baseline alcohol purchase survey. Given the odd number of sites, six pairs were formed, along with one triplet. One site from within each pair or triplet was selected at random for allocation to Group A and the remaining sites were assigned to Group B; in this way, the two groups were structured so as to be similar at baseline on the matching factors. One of the two groups was then assigned at random to become the Intervention Group; the other became the Control Group. Additional details on the research design can be found in Wagenaar, Murray, Wolfson, Forster, and Finnegan (1994).

**DESCRIPTION OF COMMUNITIES**

The average population of the study communities was 20,836 (range 8,029 to 64,797). Three of the communities were home to a four-year college. There were on average 35 “on-sale” (bar and restaurant) retail alcohol outlets and 14 “off-sale” (liquor and convenience store) retail alcohol outlets in each community.

The study communities were relatively homogeneous, largely the descendants of German and Scandinavian immigrants, with relatively few racial minorities. Most residents were no more than a generation or two off the farm, bringing with them the familiarity and habits of a rural culture. The communities were perceived as safe, predictable, and somewhat insulated from urban crises. Community leaders often affirmed their independence of big-city life and their capacity to solve local problems without outside interference.

Because the study communities were randomly selected, they did not request the introduction of CMCA and were, therefore, not necessarily “ready” to address the issue of underage drinking. In fact, communities that were already organized around the issue of underage drinking, or were participating in other major funded efforts, were eliminated from the pool of communities considered for CMCA. Not only were the selected communities not necessarily ready, but many of the communities had a strongly pro-alcohol culture, and were resistant to defining youth drinking as a serious problem in their community.

**Data Collection and Analyses**

We collected key pre-and post-intervention data from a variety of sources, including: (1) self-administered surveys of 9th graders \((n = 5885)\) and 12th graders \((n = 4506)\) at baseline and 12th graders at follow-up \((n = 4487)\); (2) telephone surveys of young adults aged 18 to 20 \((n = 3095\) at baseline and 1721 at follow-up); (3) telephone surveys of alcohol outlet owners and managers \((n = 502\) at baseline and 556 at follow-up); (4) pseu-
do-underage alcohol purchase attempts (n = 1004 at baseline and 1112 at follow-up); (5) content analyses of newspaper coverage of alcohol issues; (6) collection of archival data on community-level indicators, such as arrests and car crashes; and (7) a variety of process evaluation data. All data collection protocols included approved provisions for the protection of human subjects. We conducted the first four data collection components in 1992 as a baseline, before the community was organized for action on underage drinking, and again in 1995 to measure changes that may be attributable to the organizing efforts. Data collection components five through seven continued throughout the baseline and intervention phases of the project. Outcome analyses of the pre-post surveys and alcohol purchase attempts are reported in Wagenaar et al., in press. Analyses of the indicator data are in process and will be the subject of a forthcoming paper.

Process evaluation is essential to understanding how community-based prevention strategies decrease the supply of alcohol to youth, and under what conditions these types of interventions are most likely to be successful. Process evaluation data: (1) provide contextual information to inform research outcomes; (2) provide indicators of progress toward desired outcomes; (3) document the activities of staff, organizers, and strategy teams; (4) test the adequacy of the theoretical model underpinning a project; and (5) facilitate project replication and diffusion. Process evaluation data for the CMCA project were collected from the following sources: (1) contact forms; (2) policy journals; (3) monthly report forms; (4) project meeting minutes; (5) strategy team surveys; (6) and organizer analyses and interviewers.

**Contact Forms.** Organizers were asked to complete contact forms on all individuals or groups of individuals with whom they conducted one-on-one interviews. Contact forms included information on the contact’s background, relationships in the community, attitudes about alcohol and underage drinking, and willingness to join with other community members to work on the issue.

**Policy Journals.** Research staff at the University conducted an in-depth telephone interview with each organizer every month to determine changes in community policies and practices regarding youth access to alcohol. Notes from these interviews were entered into a journal log, which provided a summary of activities, issues, and problems encountered by the organizers in each intervention community. Standard questions were asked of each organizer.

**Monthly Report Forms.** Each organizer submitted a monthly report form with counts of one-on-one interviews conducted, meetings held, presentations made, and the number and types of people involved in various activities. Organizers also clipped and submitted relevant local news articles with their report forms, which were summarized to provide a measure of the volume of media coverage over time.

**Project Meeting Minutes.** Approximately every other month, all project staff participated in a two-day meeting at which organizers reported on the progress of the project in each specific community. The minutes from these meetings were recorded and transcribed by project staff.

**Strategy Team Surveys.** At the end of the intervention phase, the project conducted mail surveys of all active members of the strategy teams in each community. The survey asked...
about attitudes about underage drinking, participation in the campaign, and perceptions of how the community had changed as a result of the organizing process.

**Organizer Papers and Interviews.** At the end of the intervention phase, each organizer wrote a political analysis of the project, touching both on how it unfolded in their respective communities and how it was implemented across communities.

**RESULTS**

**Community Analysis and Assessment**

Early in the organizing process, CMCA organizers made an inventory of their respective communities. Organizers became familiar with the demographics of their communities, perceptions of underage alcohol use in the community, the power relationships within the community, potential supporters and opponents, self-interests of various stakeholders, and composition of local decision-making bodies, such as city councils and administrative agencies. Organizers also became familiar with research that supported the claims they would make, as well as the arguments expected from opposing forces.

Various strategies were used to collect community-level data: extensive one-on-one interviews with residents, group interviews, media analyses, power-mapping, and surveys. The organizers completed a total of 1,518 one-on-ones with diverse sectors of the communities (Figure 2). During these interviews, organizers learned that there were diverse and conflicting views about the importance of underage drinking and underage access to alcohol, compared to other important community issues.

**Building a Core Group**

Building upon the initial contacts made during the assessment stage, in particular those established during one-on-one interviews with community members, the CMCA organizers began to identify potential core group members who had both expressed an interest in underage drinking and possessed a set of skills or contacts useful to the cam-

![Figure 2. CMCA One-on-Ones, by Sector, 1993–1995](image-url)
Supporters were also recruited through group presentations, media coverage, and recommendations from other core group members. Each organizer began assembling a core group of individuals into a strategy team that met regularly, usually monthly, to provide leadership to the campaign.

A total of 141 community residents actively participated in the seven CMCA strategy teams (Figure 3). They represented many sectors of the community, including youth and parents, law enforcement, education, public officials, health, media, religion, businesses, and civic groups. Unlike the conventional coalition model, these strategy teams were not necessarily composed of professionals in traditional power roles. They included a variety of citizens with differing connections to the community who were committed to the issue of underage drinking and were able to influence others in some way. Some team members held positions of power, such as a police chief or mayor. Other members were parents who influenced other parents, youth who were active in school activities, social service workers who had connections with community organizations, or merchants with connections in the business community. Some strategy teams included local alcohol retailers. One community organizer organized a separate group for alcohol retailers. Other teams felt it was too difficult to change alcohol policies with alcohol sellers present, and thus did not include them in their strategy team.

**Developing a Plan of Action**

Strategy team members developed workplans that included a description of a proposed alcohol control policy, the rationale for selecting the policy, steps needed to implement the polices, and a timeline for accomplishing tasks. A number of the CMCA strategy teams initially had difficulty achieving consensus among strategy team members regarding the policy focus. Some communities felt that underage drinking was not a problem and wanted to address a broader range of issues. Others wanted to focus broadly on youth issues, including, but not limited to underage alcohol use. Some felt that alcohol use by both adults and young people should be the focus. Others felt that a policy focus was too narrow or too controversial, preferring to focus on public education or development of new youth services. Some were uncomfortable with holding adult suppliers
accountable, preferring approaches that reduced the demand for alcohol by either “get-
ting tough on kids who drink” or diverting youth with alcohol-free teen activities.

Building a Mass Base

In addition to the core strategy team members, CMCA organizers involved 2,415 resi-
dents who supported the strategy teams’ efforts but did not participate in ongoing CMCA
meetings and activities. Supporters performed a number of tasks such as attending cam-
paign events, communicating with public officials, and providing in-kind support. Orga-
nizers also made 333 presentations to 2,048 people and generated 101 newspaper arti-
cles on CMCA activities. Newspaper coverage increased each year as the intervention
progressed (Figure 4). Building a mass base of support requires skills in a host of tasks,
such as letter writing, phone calling, offering testimony, lobbying, public speaking and
presentations, conducting productive meetings, working with the media, creating phone
trees, building a data base, producing mass mailings, conducting research, fundraising,
and negotiating. Members of the CMCA strategy teams developed many of these skills
during the intervention period.

Implementing the Plan of Action

The plans of action varied across CMCA communities, depending on each community’s
needs and interests, the skills and confidence of each strategy team, and the local polit-
cal climate. Strategies, developed during team meetings, ranged from trying to increase
awareness of the issue in certain sectors, to initiating community responses to alcohol-
youth problems, to proposing policy changes in both private and public institutions.

The actions engaged in by the strategy teams resulted in a number of changes in in-
istitutional policies, procedures, and practices (Table 1). For example, two communities
developed and implemented a report form for merchants to record (and report to po-
lice) underage buy attempts. One community worked with a local legislator to draft state
legislation to repeal a law exempting alcohol licensees from punishment for serving un-

![Figure 4. CMCA Articles in Print Media, 1993–1995](image-url)
derage drinkers. Several communities made changes in drinking policies at major community events, such as the prohibition of beer kegs at the local university’s homecoming and the restriction of drinking to a small, monitored area. Another community helped establish regular police compliance checks of alcohol outlets to reduce underage purchasing. In the same community, new policies were established at local motels to discourage underage drinking parties. One community reinstated security at high school dances following reports of easy access to alcohol. Three communities distributed a flier to graduating seniors and their parents discussing summertime drinking and drinking at prom and graduation parties. This flier was distributed by law enforcement officers in two of the communities, and by schools and the local newspaper in the third. Another community produced several videos about alcohol use by underage people, airing on a local cable station. Later in the intervention phase, project staff developed a series of model local ordinances that restricted underage access to alcohol. While these were distributed to local public officials, no ordinances were yet enacted by the end of the formal 2.5 year intervention phase. After our involvement with the communities ended, however, several communities passed revised versions of some of the model ordinances. See internet site www.epi.umn.edu/alcohol for numerous model local alcohol control ordinances developed in the course of the project.

Other CMCA activities focused on increasing community awareness. Five communities developed a flier, distributed by alcohol outlets, warning customers of the legal consequences of purchasing alcohol for youth. One community distributed more than 1,000 fliers; liquor stores in another community distributed more than 2,000 and inserted 4,000 in a local newspaper. Still another community adapted the flier for use as a bank statement insert; two local banks inserted more than 12,000 fliers into business and personal account statements. Finally, many organizers and strategy team members wrote periodic columns for local newspapers.

Table 1. Shifts in Policies and Practices

<table>
<thead>
<tr>
<th>Alcohol Merchants</th>
<th>Hotels</th>
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<tbody>
<tr>
<td>Merchant/police report forms</td>
<td>Enforcement of age and noise policies</td>
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<tr>
<td>Warning flier distribution</td>
<td>Alcohol removed from large parties</td>
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<td>Policy manual development</td>
<td>Room rental fee for parties increased</td>
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<td>Server training</td>
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<td>Counter advertising</td>
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<th>Law Enforcement</th>
<th>Media</th>
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<tr>
<td>Merchant/police report form</td>
<td>Reporting of CMCA and alcohol-related issues increased</td>
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<tr>
<td>Compliance checks</td>
<td>Weekly CMCA columns</td>
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<td>House visits</td>
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<td>Prevention training</td>
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<tr>
<td>Sponsor server training</td>
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<tr>
<th>Community Events</th>
<th>Treatment Agencies</th>
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<tbody>
<tr>
<td>Designated drinking areas</td>
<td>Focus expanded to include youth access issues</td>
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<tr>
<td>Keg bans</td>
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<tr>
<td>Limited hours of sale</td>
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<tr>
<td>Alcohol-free drinks provided</td>
<td></td>
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<tr>
<td>Only ticket holders allowed</td>
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<tr>
<td>Warning signs</td>
<td></td>
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<tr>
<td>Consolidation of sales</td>
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<td>Marginalize sales location</td>
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<tr>
<th>Religious</th>
<th>Criminal Justice</th>
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<tbody>
<tr>
<td>Only ticket holders allowed</td>
<td>Alternative sentencing program</td>
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<tr>
<td>Parent education</td>
<td></td>
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<tr>
<td>Fact sheets in weekly bulletin</td>
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Communities Mobilizing for Change on Alcohol
Strategy teams helped initiate new programs in many communities. Responsible beverage service training was sponsored by five strategy teams to train servers and sellers in methods to prevent sale of alcohol to underage youth. Three of the five conducted repeat trainings with follow-up sessions. In two communities, CMCA was involved in the planning and approval of an alternative sentencing program for youth who violate drinking laws. Two strategy teams helped initiate a program that places plain-clothes police officers in liquor stores to monitor underage purchase attempts. One strategy team played a central role in opening a youth center in their community, while another received $7,000 from the local district attorney from fines paid for alcohol-related violations to support the strategy team's prevention work.

Institutionalize and Maintain Effort. During this stage, CMCA strategy teams confronted the difficult issue of how to continue their work in the absence of university funding. At the end of the CMCA intervention, six out of seven of the CMCA communities were continuing their efforts to address underage drinking in some way and at least four of the strategy teams were seeking other funding sources to maintain their work.

DISCUSSION

The CMCA project successfully mobilized randomly selected communities, initiated a number of changes in institutional policies and practices, improved the sales practices of alcohol merchants, and significantly changed the behavior of 18- to 20-year-olds in the communities. These results suggest that a community organizing approach to changing public policy and institutional practices can be useful and effective in reducing risk and creating healthier communities.

Several lessons were learned from the process evaluation that should be useful to health researchers and activists interested in using a community-based policy approach to youth alcohol prevention. First, it is important to allow adequate time to obtain consensus, mobilize citizens, and influence local policy. This process of gathering consensus around a campaign issue, identifying appropriate policy responses, and moving policies through the approval process is often both difficult and lengthy. Second, organizers may wish to initially work with communities that have already developed local control policies in related areas such as tobacco control. It may be easier to work with communities that demonstrate readiness to change local policies than with communities that have little experience with prevention policies. Third, it is important to “do our homework.” In the organizing process, it is extremely important that the organizer know the issue as thoroughly as possible. Organizers should be familiar with the research and other evidence that both supports and refutes their claims. Organizers must know the opposition and the arguments they make. Organizers must be able to present and defend their point of view effectively, translating research results into a usable and understandable form. Most of all, organizers should know and understand the people they are organizing: their values, perspectives, needs, fears, and strengths. Effectively achieving these ends requires sufficient time for the development of organizers, and sufficient time for them to accomplish their work in a particular community.

Fourth, recruit supporters one-by-one. The heart of organizing is careful building of interpersonal relationships, one-by-one. Rarely do people join local organizing efforts en masse; most often they come one at a time, recruited by the organizer or others active
in the core group. Organizing efforts should pay careful attention, particularly in the early stages of the campaign, to making contact with as many individuals as possible. These initial contacts, usually called “one-on-one interviews,” help ensure a diversity of representation and a more accurate understanding of the issues that need to be addressed.

Fifth, use multiple packaging for the issue. Most issues can be presented in ways that increase their appeal to various sectors. For example, underage alcohol use can be presented as a public health issue to local health workers, a family issue when talking to parents, a business issue for local stores and shops, a crime issue when talking with police and other enforcement agencies, a productivity issue for employers, a budget issue for city leaders, and so on. The organizing campaign should strive to develop overlapping and interconnected explanations of the nature and impact of the issue on various subsets of the community. Such an approach enhances the credibility of the campaign by giving the issue depth and increasing the base of support.

Sixth, build a large base and recognize the value of allies. While action is essential to successful organizing, premature action can weaken the effort and unnecessarily alienate potential allies. Building a strong and broad power base takes time. While an organizer may be ready to move, other key sectors may need more time. External support, in the form of formal endorsements or informal cooperation, is an essential ingredient for success.

Seventh, cultivate ownership. Any group works best if its members are confident of their own authority and power to act. At the same time, most efforts have multiple stakeholders who have a legitimate interest in the process and outcome. It is important to clarify as early as possible the focus of the effort, interests and respective roles of participants, and the process by which decisions will be made. Eighth, don’t unnecessarily delay action. It is action, rather than talk, that will move the process forward and attract new participants. Finally, it is important to celebrate victories. It is important to claim victories, however small or partial, to build morale and cultivate a sense of momentum. The organizing process should serve to empower people and their organizations by celebrating the achievements of their work.

In summary, the CMCA project, with a strong randomized design, demonstrated that typical, randomly selected communities that had not previously addressed an issue such as youth drinking could be successfully mobilized to do so in a relatively short two-year period of time, and that such mobilized communities changed policies and practices to improve the health and safety of their citizens. Lessons learned from the CMCA project can be usefully applied to community organizing efforts designed to reduce a wide range of contemporary public health problems.

ACKNOWLEDGMENTS

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A project of this scope over a six-year period involves the contributions of hundreds of individuals. Warm thanks to all the investigators, coordinators, community organizers, interviewers, research assistants, support staff, and the citizens of the participating communities for their efforts on behalf of the CMCA project.
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