

Communities Mobilizing for Change on Alcohol (CMCA)

Communities Mobilizing for Change on Alcohol (CMCA) is a community-organizing program designed to reduce teens' (13 to 20 years of age) access to alcohol by changing community policies and practices. CMCA seeks both to limit youths' access to alcohol and to communicate a clear message to the community that underage drinking is inappropriate and unacceptable. It employs a range of social-organizing techniques to address legal, institutional, social, and health issues related to underage drinking. The goals of these organizing efforts are to eliminate illegal alcohol sales to minors, obstruct the provision of alcohol to youth, and ultimately reduce alcohol use by teens. The program involves community members in seeking and achieving changes in local public policies and the practices of community institutions that can affect youths' access to alcohol.

CMCA is based on established research that has demonstrated the importance of the social and policy environment in facilitating or impeding drinking among youth. CMCA community-organizing methods draw on a range of traditions in organizing efforts to deal with the social and health consequences of alcohol consumption.

Descriptive Information

Areas of Interest	Substance use disorder prevention
Outcomes	<p>Review Date: April 2007</p> <p>1: Youth access to alcohol through commercial outlets</p> <p>2: Youth access to alcohol through noncommercial outlets</p> <p>3: Driving under the influence (DUI) arrests</p>
Outcome Categories	Alcohol Crime/delinquency Environmental change
Ages	18-25 (Young adult)
Genders	Data were not reported/available.
Races/Ethnicities	Data were not reported/available.
Settings	Other community settings
Geographic Locations	Urban Suburban
Implementation History	CMCA was first implemented and evaluated in a fully randomized 5-year trial across 15 U.S. communities. Since that initial trial in the early 1990s, numerous communities in the United States, Sweden, and other countries have implemented interventions based closely on the CMCA model.
NIH Funding/CER Studies	Partially/fully funded by National Institutes of Health: Yes Evaluated in comparative effectiveness research studies: No
Adaptations	No population- or culture-specific adaptations of the intervention were identified by the developer.
Adverse Effects	No adverse effects, concerns, or unintended consequences were identified by the developer.
IOM Prevention Categories	Universal

Quality of Research

Review Date: April 2007

Documents Reviewed

The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

Study 1

Wagenaar, A. C., Gehan, J. P., Jones-Webb, R., Toomey, T. L., Forster, J. L., Wolfson, M., et al. (1999). Communities Mobilizing for Change on Alcohol: Lessons and results from a 15-community randomized trial. *Journal of Community Psychology*, 27(3), 315-326.

Wagenaar, A. C., Murray, D. M., Gehan, J. P., Wolfson, M., Forster, J. L., Toomey, T. L., et al. (2000). Communities Mobilizing for Change on Alcohol: Outcomes from a randomized community trial. *Journal of Studies on Alcohol*, 61, 85-94.

[Wagenaar, A. C., Murray, D. M., & Toomey, T. L. \(2000\). Communities Mobilizing for Change on Alcohol \(CMCA\): Effects of a randomized trial on arrests and traffic crashes. *Addiction*, 95\(2\), 209-217.](#)  Pub Med icon

Wagenaar, A. C., Murray, D. M., Wolfson, M., Forster, J. L., & Finnegan, J. R. (1994). Communities Mobilizing for Change on Alcohol: Design of a randomized trial. *Journal of Community Psychology*, 22(CSAP Special Issue), 79-101.

Supplementary Materials

Alcohol Epidemiology Program. (2000, May). Alcohol compliance checks: A procedures manual for enforcing alcohol age-of-sale laws. Minneapolis: University of Minnesota.

Alcohol Epidemiology Program. (2001). Model ordinances to reduce the supply of alcohol to youth under age 21. Minneapolis: University of Minnesota, School of Public Health.

Alcohol Epidemiology Program. (2002). What civic groups can do. Minneapolis: University of Minnesota.

Alcohol Epidemiology Program. (n.d.). Alcohol advertising. Minneapolis: University of Minnesota.

Alcohol Epidemiology Program. (n.d.). Beer keg registration. Minneapolis: University of Minnesota.

[Toomey, T. L., & Wagenaar, A. C. \(1999\). Policy options for prevention: The case of alcohol. *Journal of Public Health Policy*, 20\(2\), 192-213.](#)  Pub Med icon

Wagenaar, A. C., & Perry, C. L. (1994). Community strategies for the reduction of youth drinking: Theory and application. *Journal of Research on Adolescence*, 4(2), 319-345.

[Wagenaar, A. C., Toomey, T. L., Murray, D. M., Short, B. J., Wolfson, M., & Jones-Webb, R. \(1996\). Sources of alcohol for underage drinkers. *Journal of Studies on Alcohol*, 57, 325-333.](#)  Pub Med icon

Outcomes

Outcome 1: Youth access to alcohol through commercial outlets

Description of Measures

Youth access to alcohol through commercial outlets was measured by direct observation and by telephone survey of managers of alcohol sales outlets, including establishments where alcohol is consumed on site (bars and restaurants) and those where alcohol is purchased but consumed off site (liquor stores). Observations included attempts to buy alcohol by researchers who were of legal drinking age but looked younger and observations of age-ID checking. Telephone surveys of outlet managers included questions about their practices of checking age-ID of anyone who appears under 30 years old and their perceived likelihood of being cited for selling alcohol to minors.

Key Findings

Analysis of the overall CMCA effects on outlets where alcohol is consumed (bars and restaurants) in the treatment communities found a large effect (Cohen's $d = 1.18$) relative to on-site outlets in control communities that did not implement the intervention. The overall CMCA effects on on-site outlets included the summed scores on measures of buy attempts by research staff who were 21 years old but looked younger; observed age-ID checking; and managers' self-reported age-ID checking of anyone who appeared under 30 years old, perceived likelihood of being cited for selling to minors, and willingness to sell to a 21-year-old accompanied by a 19-year-old.

	There were no statistically significant effects on outlets where alcohol is purchased but consumed off site (liquor stores).
Studies Measuring Outcome	Study 1
Study Designs	Experimental
Quality of Research Rating	2.9 (0.0-4.0 scale)

Outcome 2: Youth access to alcohol through noncommercial outlets

Description of Measures	Eighteen- to 20-year-olds were surveyed by telephone regarding their use of alcohol and their provision of alcohol to other teens. They were asked if they had attempted to buy alcohol, if they had provided alcohol to other teens, and the amount and frequency of their drinking in the past month.
Key Findings	Analyses of the summed scores assessing overall CMCA effects on 18- to 20-year-olds in the treatment communities found a medium effect (Cohen's $d = 0.76$) relative to youth in control communities that did not implement the intervention. The overall CMCA effects on 18- to 20-year-olds included the summed scores on self-reported reductions in their attempts to buy alcohol, provision of alcohol to underage teens, the number of drinks consumed the last time they drank, and the number of times in the last month that they drank. Communities implementing CMCA also experienced a 17% decline in the proportion of 18- to 20-year-olds who reported providing alcohol to other youth ($p = .01$).
Studies Measuring Outcome	Study 1
Study Designs	Experimental
Quality of Research Rating	2.9 (0.0-4.0 scale)

Outcome 3: Driving under the influence (DUI) arrests

Description of Measures	DUI arrest data were collected annually for 6 years following the initiation of the intervention (3 years during intervention implementation and 3 years after the intervention ended). The data came from State records and were stated in terms of arrests per population level.
Key Findings	DUI arrests among 18- to 20-year-olds in the treatment communities declined by about 30 arrests per 100,000 persons per year ($p = .05$).
Studies Measuring Outcome	Study 1
Study Designs	Experimental
Quality of Research Rating	2.7 (0.0-4.0 scale)

Study Populations

The following populations were identified in the studies reviewed for Quality of Research.

Study	Age	Gender	Race/Ethnicity
Study 1	18-25 (Young adult)	Data not reported/available	Data not reported/available

Quality of Research Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables

6. Appropriateness of analysis

For more information about these criteria and the meaning of the ratings, see [Quality of Research](#).

Outcome	Reliability of Measures	Validity of Measures	Fidelity	Missing Data/Attrition	Confounding Variables	Data Analysis	Overall Rating
1: Youth access to alcohol through commercial outlets	2.5	2.5	3.5	2.5	3.5	3.0	2.9
2: Youth access to alcohol through noncommercial outlets	2.5	3.0	3.0	2.5	3.0	3.5	2.9
3: Driving under the influence (DUI) arrests	2.5	2.5	3.0	2.5	2.5	3.0	2.7

Study Strengths

The evaluation used diverse survey operations that included four independent surveys (school-based surveys, telephone surveys of students and of retail outlet managers, and a survey of teenagers regarding their alcohol purchase attempts). Many of the surveys used were standards in the field, and others were based on national surveys such as the Monitoring the Future survey. The instruments generally had good reliability and validity.

Several fidelity instruments were used in the implementation phase, including contact forms, telephone interviews, monthly report forms, and meeting minutes. The community organizer tailored the intervention to meet the needs of each community, and the communities had direct input into developing local strategies.

Although the rate of attrition over 2.5 years was about 40% of the students surveyed, this was largely due to relocation out of the community. Missing data were handled appropriately in the analyses. The developers minimized the impact of confounding variables by using exclusionary criteria (e.g., communities were not concurrently doing another alcohol education initiative and were not contiguous) and through the research design and analyses. Sample size and statistical power were adequate.

Study Weaknesses

While the sample was large, the cultural diversity of the sample is unclear, and the impact of cultural factors associated with alcohol use were not discussed.

Readiness for Dissemination

Review Date: April 2007

Materials Reviewed

The materials below were reviewed for Readiness for Dissemination. The implementation point of contact can provide information regarding implementation of the intervention and the availability of additional, updated, or new materials.

CMCA materials on CD-ROM

Youth Leadership Institute. (2006). CMCA facilitator's guidebook and training materials. San Francisco, CA: Author.

Youth Leadership Institute. (2006). The CMCA Model Program training overview curriculum. San Francisco, CA: Author.

Youth Leadership Institute Web site, <http://www.yli.org>

Readiness for Dissemination Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the intervention's Readiness for Dissemination using three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see [Readiness for Dissemination](#).

Implementation Materials	Training and Support Resources	Quality Assurance Procedures	Overall Rating
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Dissemination Strengths

Contextual information and implementation information for communities are both provided in program materials. The sample alcohol policies can be helpful to communities inexperienced in this area. Training materials are comprehensive and easy to read. The developer offers support resources to implementers. A fidelity checklist tool and guidance for process evaluations and outcome measurement are available to support quality assurance.

Dissemination Weaknesses

Reviewers noted some inconsistencies between the hard copy and electronic-format (CD-ROM) dissemination materials. The implementation manual indicates materials are available on the program Web site, but some of these materials can be difficult to find on the site.

Costs

The cost information below was provided by the developer. Although this cost information may have been updated by the developer since the time of review, it may not reflect the current costs or availability of items (including newly developed or discontinued items). The implementation point of contact can provide current information and discuss implementation requirements.

Item Description	Cost	Required by Developer
Program materials	\$50 per set	Yes
2-day overview training (includes 8 hours of phone or electronic consultation or technical assistance)	\$7,500 per site	Yes
6-day advanced training (includes 8-24 hours of phone/Webinar or electronic consultation or technical assistance)	\$21,000 per site	Yes

Additional Information

Implementation costs vary by community and circumstances. A full-time community organizer is required; salary and benefits typically are around \$40,000 annually. Other costs include an initial investment in materials and supplies for the community organizer (about \$3,000) and about \$300-\$500 per month for supplies, travel, and project-related expenses.

Replications

No replications were identified by the developer.

Contact Information

To learn more about implementation, contact:

Youth Leadership Institute, Training & Technical Assistance
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To learn more about research, contact:

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Consider these [Questions to Ask](#) (PDF, 54KB) as you explore the possible use of this intervention.

Web Site(s):

- www.yli.org