Sustaining Health and Environmental Behavior Change: Potential Assistance from Community Based Policy Making and Marketing (CBPM²)

Robert J. McDermott, Ph.D., Carol A. Bryant, Ph.D., James H. Lindenberger, B.A., Anita H. Courtney, M.S., R.D.

Florida Prevention Research Center, University of South Florida, Tampa, Florida, USA

ABSTRACT

Community Based Prevention Marketing (CBPM) is a program planning framework that applies marketing theories to design or tailor preventive health interventions. CBPM has been used to plan and evaluate prevention activities from physical activity to safety eyewear use. However, sustaining gains resulting from programs is difficult when funding ceases. The emergence of evidence-based public health has fostered renewed interest in policy development for changing health behaviors. One agent for advancing policy is community-based coalitions. However, coalitions lack a systematic framework for identifying, selecting, tailoring, and promoting evidence-based policies. Capitalizing on successes of CBPM, university-based researchers partnering with a community-based coalition are adapting CBPM to improve capacity for identifying and promoting evidence-based public health policies. This revised framework, Community Based Policy Making and Marketing (CBPM²) may provide communities with a marketing driven, systematic, planning framework and toolkit for selecting and enacting evidence-based policy changes at the organizational, local, or state level. This paper describes the CBPM² systematic process from policy selection to evaluation.

McDermott, R.J., Bryant, C.A., Lindenberger, J.H., & Courtney, A.H. (2012). Sustaining environmental and health behavior change potential assistance from community based policy making and marketing CBPM². *Umwelt und Gesundheit Online, 5, 29-39.*

Background and Historic Overview

In 1998, the U.S. Centers for Disease Control and Prevention (CDC) first provided core funding for the Florida Prevention Research Center (FPRC) at the University of South Florida College of Public Health (Tampa, Florida, USA). Since that time the FPRC has created and field tested a community-directed health program planning framework known as *Community Based Prevention Marketing* (CBPM) that applies marketing theories and techniques to design or tailor preventive health interventions (Bryant, Brown, McDermott, Forthofer, Bumpus, Calkins et al., 2007; Bryant, Forthofer, Brown, Landis, McDermott, 2000). Several projects have used CBPM as the framework to change individual health behaviors and the health "cultures" of participating communities (Bryant et al., 2007; Monaghan, Forst, Tovar-Aguilar, Bryant, Israel, Galindo-Gonzalez et al., 2011), including

work emanating from other institutions (Burroughs, Peck, Sharpe, Granner, Bryant, & Fields, 2006). The hallmarks of CBPM include community participation, community ownership, and community empowerment. With CBPM, marketing is the organizing framework that guides program planning, implementation, and evaluation. Moreover, community action boards or coalitions work with academic partners to learn about marketing techniques and use them to target specific health behaviors and audiences, carry out pertinent audience research, and interpret the results to design, implement, and evaluate strategic marketing plans for promoting health and preventing disease. CBPM has been used to prevent the initiation of youth smoking and drinking (Ellison, Forthofer, Zapata, Nearns, Curran, Calkins et al., 2009; Bryant et al., 2007; Bryant et al., 2000), to promote physical activity among African American women (Burroughs et al., 2006) and among "tweens" – i.e., youth 9-13 years old who are moving from childhood into adolescence (Alfonso, Thompson, McDermott, Bryant, Courtney, Jones, et al. 2007; Bryant, Courtney, McDermott, Alfonso, Baldwin, Nickelson et al., 2010; McDermott, Davis, Bryant, Courtney, & Alfonso, 2010; Nickelson, Alfonso, McDermott, Bryant, & Baldwin, 2011), and to increase use of safety eyewear among farm workers (harvesters) in the citrus industry (Luque, Monaghan, Contreras, August, Baldwin, Bryant et al., 2007; Monaghan, Forst, McDermott, Bryant, Luque, & Contreras, 2011; Monaghan, Forst, Tovar-Aguilar, Bryant, Israel, Galindo-Gonzalez et al., 2011).[9-11]

Despite the fact that numerous program planning models have been introduced for health promotion during the last three decades or so, with many having successfully changed health behaviors and favorably influenced chronic disease risks (McDermott, Baldwin, Bryant, & DeBate, 2010), sustaining these interventions so that accrued health status gains are maintained when funding decreases or disappears is an ongoing concern for public health officials (Bracht, Finnegan, Rissel, Weisbrod, Gleason, Corbett et al., 1994; Schwartz, Smith, Speers, Dusenbury, Bright, Hedlund et al., 1993).

Changing the Emphasis from Health Programs to Health Policy: An Example with Obesity

At the population level, moving from a programming mode to a policy mode may be both wise and fiscally more efficient for a number of reasons. In the case of combating the obesity epidemic that has affected much of the developed world, effective health policies significantly impact the public's health (Faith, Fontaine, Baskin, & Allison, 2007; Frieden, Dietz, & Collins, 2010). Obesity policies can alter the physical and social environments to make engaging in physical activity and choosing more healthful food options more accessible as well as more normative. Policy enactment can have lasting impact with less need for recurring funds (Mello, Studdert, & Brennan, 2006). In the United States, some funding agencies (e.g., the Robert Wood Johnson Foundation) have shifted their funding agenda from *program development* to *policy change* (Ottoson, Green, Beery, Senter, Cahill, Pearson et al., 2009), a redirection that reflects the belief that policy change can be sustained longer and impact a greater proportion of the population than can health programs that prioritize behavior change at the level of the individual (Brownson, Haire-Joshu, & Luke, 2006). Consequently, there is now an evolving interest in policy development as an "upstream determinant" for health behavior that can be maintained longer and have a more sustained effect than programs targeting individual behavior change (Jilcott, Ammerman, & Sommers, 2007). Worldwide, public health policies include laws, regulations, written standards, and other rules that restrict or guide behavior to improve population-based health (Jilcott et al., 2007; Schmid, Pratt, & Howze, 1995). One reason for this evolving interest in policy development is the emergence of evidence-based public health (Brownson, Baker, Leet, & Gillespie, 2002) and increasing experience with social-ecological approaches to health behavior change that include interventions at

the individual, family, school, worksite, and community levels and involve both politics and multiple change strategies (McLeroy, Bibeau, Steckler, & Glanz, 1988).

Leading authorities agree that policy change is more effective than behavior change interventions alone (Brownson, Haire-Joshu, & Luke, 2006; Brownson, Royer, Ewing, & McBride, 2006; Frieden et al., 2010; Mensah, Goodman, Zaza, Moulton, Kocher, Dietz et al., 2004). Mello et al. (2006) remind us that some of the most important public health achievements in the United States came about from such things as legislation, a more acutely focused regulatory environment, and legal challenges in the justice system (e.g., reduced rates of smoking, better motor vehicle safety, and improved vaccination rates). As noted earlier, when effective policies are enacted and enforced consistently, they can be maintained for longer periods of time and with less funding than that required to maintain programs (Mello et al., 2006). An important consideration is that community action groups have more access to the kind of human resources that monitor and sustain policy change than to the financial resources required to sustain (and sometimes, reinvent) programs. Although health programs are designed to change individual behavior, policy enactment not only can impact large segments of the population (Brownson, Haire-Joshu, & Luke, 2006), it also can affect health outcomes (Brownson, Seiler, & Eyler, 2010; Institute of Medicine, 1988).

The CDC's *Measures Project* (Khan, Sobush, Keener, Goodman, Lowry, Kakietek et al., 2009) report offers 24 environmental or policy level strategies for communities to use in combating the obesity epidemic based on five criteria: *reach*, *mutability*, *transferability*, *potential effect size*, and *sustainability*. Unfortunately, ways and means for communities to employ these evidence-based strategies, and translate them for local adoption, are more obscure. Jilcott et al. (2007) write that a public health priority needs to be the development of tools or systems to guide policy priorities.

Community Action Boards Lack Skills for Advocating Policy Enactment

The community action board or coalition is an important agent for advancing policy change. (NOTE: In this paper, the terms "community action board," "coalition," "community board," and "community group" are used interchangeably to refer to a group of people representing various organizations or interested individuals in a community that have a common goal to support or advocate for a particular policy action). The literature demonstrates how coalitions have successfully undertaken such problems as alcohol, tobacco, and other drug use (Butterfoss, Goodman, & Wandersman, 1993; Hallfors, Cho, Livert, & Kadushin, 2002; Wandersman & Florin, 2003). The resurgent interest in policy implementation notwithstanding, coalitions have had variable success in effecting health policy change at state and local venues (Butterfoss et al., 1993; Hallfors et al., 2002; Wandersman & Florin, 2003). These mixed results may be a consequence of their lacking a systematic approach or framework for selecting and tailoring evidence-based policies that could produce more favorable policy enactment results. Furthermore, such community action boards usually have no formal training to identify, select, tailor, or promoting evidence-based policies (Snell-Johns, Imm, Wandersman, & Claypool, 2003). Access to the evidence base itself may be lacking, resulting in frequent "reinvention of the wheel." Although policy transfer across settings, populations, and times may not be perfect, a policy that succeeds in California may, with a certain amount of tinkering, also work in Florida if local proponents wisely examine the tactics that led to success in California. However, because such policy transfer is rare, among many action groups, policy analysis takes on a daunting appearance and appears too challenging to at-

tempt. In addition, even when coalitions successfully involve themselves in policy development that results in enactment, few have the know-how or experience to monitor their efforts, track the policy's impact, or disseminate results that further support the evidence base and accelerate the research-to-policy/practice time clock (Brownson, Seiler, & Eyler, 2010).

A Mechanism for Moving from Program to Policy for Promoting Health Behavior Change

Since 2009, the FPRC has been adapting CBPM to enhance community coalitions' capacity to select, tailor, promote, monitor, and evaluate evidence-based policies in the realm of public health. The modified framework, *Community Based Policy Making and Marketing* (CBPM²), provides community action groups and their academic partners with a framework that is marketing driven, systematic, and planning-focused. Further, in time, it will also provide an Internet-based toolkit to offer advice for selecting and promoting evidence-based policy changes at the organizational, local, or state level. The current demonstration project involving CBPM² targets policies about obesity prevention. Nevertheless, the CBPM² framework and training materials are expected to be sufficiently "flexible" to assist the needs of diverse communities that must address a challenging array of public health problems. Therefore, although the frame of reference in the present tense is obesity prevention, the relevant action research being conducted intends to aim for developing a framework and community-based process for that can be applied to translating *any* evidence-based health policy and tailor it for local application.

The increase in overweight and obesity in the United States, as well as in developed countries globally, has been incremental over three or more decades. Metaphorically speaking, it may be akin to bathing in a tub of water in which the temperature is rising by only a degree or two per hour over an extended period of time. At some point you know you have to scream from the burning pain but just when the scream occurs is unclear. Although some evidence of the obesity trend began to emerge some years ago, public health policymakers were slow to react or "scream" as it were. Lang and Rayner (2007) note that obesity prevention is a topic that illustrates what they call "policy cacophony." To bring order to prevention efforts, they call for a new framework that improves obesity prevention policy advocacy initiatives by: *taking a systems approach*; *reshaping the behavioral, social and cultural environments in which diet and physical activity occur*; *focusing on long-term strategy*; *reformulating the rules of the government and markets*; *establishing obesity prevention as a norm*; and *crafting policy strategies that engage organizations and people across sectors and agencies in advocacy.*

CBPM²: A New Conceptual Approach

To meet community groups' requirement for a systematic planning framework and toolkit with which to translate evidence-based policies to practice, the working iteration of CBPM² is a community-driven planning process that blends elements of *social marketing*, *behavioral economics*, and *public health advocacy* skills to enhance coalitions' capacity to promote policy change at the organizational, local community, and state levels. Andreasen (1995) defines *social marketing* as "…the application of commercial marketing technologies to the analysis, planning, execution, and evaluation of programs designed to influence the voluntary behavior of target audiences in order to improve their personal welfare and that of their society" (p. 2). Mullainathan and Thaler (2001, p. 1) define *behavioral economics* as "the combination of psychology and economics that investigates what happens in markets in which some of the agents display human limitations and com-

plications" (p. 1). Finally, the North Carolina Public Health Academy defines *public health advocacy* as: "the primary tool for effectively communicating with local officials, media and the public about important public health issues in your community. It is the process that assists public health professionals in overcoming barriers and opposition against public health goals." Moreover the goal of any advocacy initiative is to increase the abilities and willingness of communities to actively participate in identifying important health issues and developing and implementing strategies to best meet these health needs (Wallack, Dorfman, Jernigan, & Themba, 1993).

With CBPM² members of a community board not only select the policies they want to promote, but also learn new research and strategic techniques for gaining insights into factors that influence how policy beneficiaries, stakeholders, and decision makers view and make decisions about policy. These insights enable community groups to modify policy elements and frame issues to build common ground, optimize support, and influence decision makers. CBPM² gives community groups practical planning tools (analysis scenarios and exercises, links to Web-based tools, and other resources) to guide them in strategy development, advocacy, and implementation monitoring. The framework also enhances group capacity to evaluate impact – an often overlooked skill that can contribute to the policy's evidence base (Faith et al., 2007; Frieden et al., 2010; Sallis & Glanz, 2006).

The CBPM² process is expected to work best when a coalition partners with researchers who can: (1) *assist in the identification and interpretation of the evidence base*; (2) *provide professionally prepared personnel for conducting community surveys or other data collection tasks*; (3) *assist in collating or interpreting data*; and (4) *contribute to the advancement of participatory action research*. These researchers may come from institutions of higher education with research expertise, or professional research firms.

The working iteration of CBPM² is designed for community groups that have completed the initial groundwork involved in organizing a well-functioning body and selecting a priority policy issue (e.g., obesity prevention, tobacco control, motor vehicle safety). For this reason, problem definition activities are relatively focused and limited to policy selection. However, because some coalitions may not have the requisite foundation for using CBPM², the training program includes a "readiness check sheet" that identifies resources needed to initiate the CBPM² process. The Web-based program and other training materials also provide coalitions that are just forming with guidance and resources to aid this process, as well as to engage in problem definition and selection. Once coalitions begin the CBPM² process, training materials direct them to analyze their strengths and weaknesses as well as external opportunities and threats so they can recruit additional members, partners, and other resources that strengthen their cause and increase the probability of success.

The CBPM² framework also assumes that a coalition has selected a public health issue for which effective policies have been developed and evaluated. In fact, a primary goal of the CBPM² framework is to accelerate dissemination of evidence-based policies and the research-to-policy/practice process. A Web-based training program links coalitions to reports and other documents summarizing evidence on a variety of public health problems, and coalitions are discouraged from tackling less-explored problems because primary research needed for this phase of policy analysis can be daunting even to academic researchers (Collins, 2005). Additional time and effort needed to collect and analyze primary data to evaluate alternatives is typically beyond the reach of community coalitions and the necessary protracted timeline for conducting such research defeats the purpose of having a systemat-

ic framework to achieve rapid policy adoption.

CBPM² is divided into 3 phases, *Get Ready*; *Get Set*; and *Go*, and includes 8 steps: (1) *create a foundation for success*; (2) *review policy options*; (3) *select a policy to promote*; (4) *identify priority audiences among beneficiaries, stakeholders, decision-makers*; (5) *conduct formative research with priority audiences*; (6) *develop a marketing plan for promoting the policy*; (7) *advocate for policy adoption*; and (8) *monitor policy implementation and evaluate impact*. Further details of these steps appear below.

CBPM² combines many of the current streams of thought and action in public health.: a social-ecological perspective on change (individuals, families, community systems/coalitions, organizations, built environment and policy); an evidence-based approach to mobilize people into strategically focused actions through the application of social marketing principles; and evidence-based policies and behavioral economics principles to tailor relevant and feasible policy development at appropriate levels.

The activities undertaken build upon and extend a number of strands of research in obesity prevention, policy development and evaluation, and coalition action for policy implementation that complement other work being done around the United States. In particular, CBPM² addresses the call by Sallis and Glanz (2006) for research to "improve the understanding of policy change processes of greatest relevance to youth physical activity, eating, and obesity." It also adds to the evidence base for teaching community groups how to monitor progress and assess impact (Faith et al., 2006; Frieden et al., 2010). By using Web-based and other technologies to augment coalition support efforts, this work also can scale up to meet the emerging needs of funders that want to capitalize on the wisdom and power of local coalitions and the sustainability of policy-advocacy. The objective is to create a research-based set of strategies that can be used by communities to address obesity prevention policy. Moreover, the training program is designed to equip coalitions working on a variety of public health topics, for which evidence-based policies have been identified, and to use the CBPM² framework to guide policy analysis and advocacy activities.

Specifics of the CBPM² Framework

By evaluating the CBPM² framework, the research-to-policy/practice gap can be narrowed, thereby helping coalitions select, modify, monitor, and evaluate evidence-based policies. This approach addresses previously noted barriers to disseminating evidence-based policies, including the lack of: (1) *criteria for systematically selecting and tailoring evidence-based policies*; (2) *effective advocacy skills*; (3) *systematic methods for monitoring and evaluating policies following implementation* (Association of State and Territorial Directors of Health Promotion and Public Health Education, 2001; Jilcott et al., 2007). This approach also improves dissemination of policy evaluation results that enables other communities and policy analysts to assess their political feasibility and impact (Brescoll, Kersh, & Brownell, 2008; Brownson, seiler, & Eyler, 2010). CBPM² is a systematic process presented in 8 steps where each step directs the group's attention to key questions. A summary of the purpose of each of the 8 steps follows.

Phase One: Get Ready

Step 1: *How can we create the foundation for success?* This step provides the community board with an overview of the CBPM² process and its underlying marketing principles. It is designed to help the coalition assess its readiness to apply the framework. By the end of this step, coalition members are familiar with the 8 steps of CBPM² so as to identify roles and responsibilities they would like to play in the process; decide if they have the resources and commitment to use CBPM² effectively; and identify addi-

tional members and other resources needed for success.

Step 2: *What should we change?* In this step, the coalition reviews a compilation of evidence-based obesity prevention policies recommended by CDC and/or other organizations and considers the impact they have had on the problem. The facilitator points coalition members to gaps in the marketplace (e.g., lack of access to products or services, environmental constraints), and contextual factors and local priorities that should drive the discussion of evidence-based policies. Using this frame of reference, the coalition reviews the evidence base and eliminates policies it is unwilling or unable to promote. Concluding Step 1, the coalition reduces the policy options to ≤10, enabling more thorough analysis in Step 3.

Phase Two: Get Set

Step 3: *Which policy or policies should we promote?* In this step, the coalition assesses the potential "return on investment" of each policy by combining evidence of each policy's relative impact and likelihood of adoption. The coalition uses behavioral economics principles and the evidence base assembled on each policy to weigh its health outcomes or impact with the political feasibility of enacting it in a timely fashion. Concluding Step 3, the coalition selects a priority policy, though in rare instances, it may have resources to promote more than one.

Step 4: *Which audiences should we give our greatest priority in building support for policy change?* This step provides the coalition with guidance for identifying groups and individuals that will be directly affected by the policy (beneficiaries), have a stake in its outcome (stakeholders), or decide if it is enacted (policy makers). Using the concept of "return on investment" again, members assess the potential impact and responsiveness of segments in each of these audience groups. By the end of the step, the coalition has identified people and organizations that are most likely to support or oppose the proposed policy, and has selected those to whom they will give the greatest priority in their advocacy activities.

Step 5: *How can we build common ground and gain audience support?* This step generates insights for understanding how priority audiences view the policy issue and finds opportunities to build common ground among beneficiaries, key stakeholders, and decision makers. The coalition develops a plan for selecting and recruiting members of each priority audience for interviews. Some coalition members also are trained to collect data along side of researchers. By the end of this step, the coalition has information needed to modify the policy to optimize support. The information obtained from these interviews or listening sessions plays a critical role in developing a marketing plan to guide advocacy activities in Step 6.

Step 6: *How can we make it happen?* This step features the development of an integrated marketing plan to guide advocacy. Coalition members review research findings for each priority audience and use results to make the marketing decisions that comprise an integrated strategic plan. Thus, the coalition creates a positioning statement or "frame" for the policy, uses behavioral economic principles to modify policy elements to optimize support, and identifies the core benefits that the policy should offer priority audiences. Moreover, this strategic plan recommends ways to lower costs and barriers to supporting the policy, suggests spokespersons and partners to engage decision makers and advocates for the policy, and directs agenda-setting tactics and communication guidelines, information channels for communicating with priority audiences, and other promotional activities for garnering support.

Phase Three: Go

Step 7: *Are we following the plan?* During this step, the marketing plan serves as a blueprint for the coalition's advocacy activities. Resources are provided to teach interested coalition members

the wide variety of skills needed to advocate for policy change. Depending on individual members' level of interest or abilities, they may use training resources in this module to learn how to: lobby or advocate (e.g., create an "elevator speech," meet with decision makers); prepare op-ed articles, letters to the editor, and policy briefs; deal with the media (e.g., talking points to shape the conversation and provide a consistent message; handle reporters' questions); develop media strategies for getting the issue on an agenda; and create community support for policy change. The coalition also develops a rapid response plan to enable its members to share breaking news, monitor the political context, and make mid-course adjustments as needed. This step continues until the policy is enacted; however, incremental successes (e.g., media coverage, sponsorship by key stakeholders) are celebrated along the way and advocacy strategies may be adjusted to fit the changing political landscape.

Step 8: *How well is it working?* In this step, the coalition develops a plan for monitoring policy implementation and assessing impact. Coalition members use this plan to monitor how the policy is implemented, and use results to identify the need for mid-course activities to ensure fidelity with the original policy goals. The RE-AIM framework is modified as suggested by Jilcott et al. (2007) for use in evaluating the policy's effects.

Conclusion

Obesity is a national public health crisis in the United States and for many other developed countries. Stewart, Cutler, and Rosen (2009) have concluded that public health gains made during the latter portion of the 20th century in the United States may be lost in the 21st century if the trend toward greater prevalence of overweight and obesity is left unchecked. Communities need tools for taking policy actions that will make environments more hospitable and enabling for persons seeking to reduce their risk of overweight and obesity, and concomitantly, the associated chronic disease conditions. The food and physical activity environments are two such venues to which policy makers can respond. Although the CBPM² framework still requires much testing and refinement prior to its being scaled up and widely used, its theory and logic are sound. When its beta testing stage has been completed, its potential to reduce the length of the research-to-policy/practice translation and to influence the health status of communities hopefully will be realized.

References

Alfonso, M.L., Thompson, Z., McDermott, R.J., Bryant, C.A., Courtney, A.H., Jones, J.A. et al. (2011). Kentucky's VERB™ Summer Scorecard: change in tweens' vigorous physical activity 2004-2007. *Preventing Chronic Disease. 8*(5), A104. Retrieved January 10, 2012 from http://www.cdc.gov/pcd/issues/2011/sep/pdf/10_0173.pdf.

Andreasen, A. (1995). *Marketing social change: changing behavior to promote health, social development, and the environment*. San Francisco: Jossey-Bass.

Association of State and Territorial Directors of Health Promotion and Public Health Education (ASTDHPPHE). (2001). *Policy and environmental change: new directions for public health*. Atlanta GA: ASTDHPPHE, CDC.

Bell-Ellison, B.A., Forthofer, M.S., Zapata, L.B., Nearns, J.L., Curran, K.T., Calkins, S.A. et al. (2009). Theater-as-education: a demonstration project to discourage alcohol and tobacco use by middle school youth. *Middle School Journal, 41*(1), 11-19.

Bracht, N., Finnegan, J., Rissel, C., Weisbrod, R., Gleason, J., Corbett, J., et al. (1994). Community ownership and program continuation following a health demonstration project. *Health Education Research, 9*(2), 243-255.

Brescoll, V., Kersh, R., & Brownell KD. (2008). Assessing the feasibility and impact of federal childhood obesity policies. *Annals of the Ameri-*

can Academy of Political and Social Science. 615(1), 178-194.

Brownson, R.C., Baker, E.A., Leet, T.L., & Gillespie KN. eds. (2002). *Evidence-based public health.* New York: Oxford University Press.

Brownson, R.C., Royer, C., Ewing, R., & McBride, T. (2006). Researchers and policymakers: travelers in parallel universes. *American Journal of Preventive Medicine. 30*(2), 164-172.

Brownson, R., Haire-Joshu, D., & Luke, D.A. (2006) Shaping the context of health: a review of environmental and policy approaches in the prevention of chronic diseases. *Annual Review of Public Health, 27,* 341-370.

Brownson, R.C., Seiler, R., & Eyler, A.A. (2010). Measuring the impact of public health policy. *Preventing Chronic Disease. 7*(4), A77. Retrieved January 10, 2012 from http://www.cdc.gov/pcd/issues/2010/jul/09_0249.htm.

Bryant, C.A., Brown, K., McDermott. R.J., Forthofer, M.S., Bumpus, E.C., Calkins, S.A., et al. (2007). Community-based prevention marketing: a framework for facilitating health behavior change. *Health Promotion Practice, 8*(2), 154-163.

Bryant, C.A., Courtney, A.H., McDermott, R.J., Alfonso, M.L., Baldwin, J.A., Nickelson, J.E., et al. (2010). Promoting physical activity among youth through community-based prevention marketing. *Journal of School Health, 80*(5), 214-224.

Bryant, C.A., Forthofer, M., Brown, K., Landis, D., & McDermott, R.J. (2000). Community-based prevention marketing: the next steps in disseminating behavior change. *American Journal of Health Behavior. 24*(1), 61-68.

Burroughs, E., Peck, L., Sharpe, P., Granner, M., Bryant, C., & Fields, R. (2006). Using focus groups in the consumer research of a social marketing program to promote moderate intensity physical activity. *Preventing Chronic Disease, 3*(1), A08. Retrieved January 10, 2012 from URL:http://www.cdc.gov/pcd/issues/2006/jan/05_0093.htm.

Butterfoss, F., Goodman, R., & Wandersman, A. (1993). Community coalitions for prevention and health promotion. *Health Education Research, 8*(3), 315-330.

Collins, T. (2005). Health policy analysis: a simple tool for policy makers. *Public Health, 119*(3), 192-196.

Faith, M., Fontaine, K., Baskin, M., & Allison, D. (2007). Toward the reduction of population obesity: macro-level environmental approaches to the problems of food, eating, and obesity. *Psychological Bulletin, 133*(2), 205-226.

Frieden, T., Dietz, W., & Collins, J. (2010). Reducing childhood obesity through policy change: acting now to prevent obesity. *Health Affairs, 29*(3), 357-363.

Hallfors, D., Cho, S., Livert, D., & Kadushin, C. (2002). Fighting back against substance abuse: are community coalitions winning? *American Journal of Preventive* Medicine, *23*(4), 237-245.

Institute of Medicine. (1998). *The future of public health.* Washington DC: National Academy Press.

Jilcott, S., Ammerman, A., & Sommers, J. (2007). Applying the RE-AIM framework to assess the public health impact of policy change. *Annals of Behavioral Medicine,* 2007, *34*(2), 105-114.

Khan, L.K., Sobush, K., Keener, D., Goodman, K., Lowry, A., Kakietek, J., et al. (2009). Recommended community strategies and measurements to prevent obesity in the United States. *Morbidity & Mortality Weekly Report Recommendations and Reports. 58*(RR-7), 1-26

Lang, T., & Rayner, G. (2007). Overcoming policy cacophony on obesity: an ecological public health framework for policymakers. *Obesity Review, 8*(s1):165–181. Retrieved January 10, 2012 from http://www3.interscience.wiley.com/cgi-bin/fulltext/117981406/PDFSTART.

Luque, J.S., Monaghan, P., Contreras, R.B., August, E., Baldwin, J.A., Bryant, C.A. et al. (2007). Implementation evaluation of a culturally competent eye injury preven-

tion program for citrus workers in a Florida migrant community. *Progress in Community Health Partnerships. 1*(4), 359-369.

McDermott, R.J., Baldwin, J.A., Bryant, C.A., & DeBate, R.D. (2010). Intervention methods for chronic disease control. In: Remington, P.L., Brownson, R.C., & Wegner, M. (eds.), *Chronic disease epidemiology and control* (3rd ed.). Washington DC: American Public Health Association, pp. 59-93.

McDermott, R.J., Davis, J.L., Bryant, C.A., Courtney, A.H., & Alfonso, M.L. (2010). Increasing physical activity levels in children 8 to 12 years old: experiences with VERB™ Summer Scorecard. *Perceptual & Motor Skills, 111*(1), 1-9.

McLeroy, K.R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly, 15*(4), 351-377.

Mello, M.M., Studdert, D.M., & Brennan, T.A. (2006). Obesity - the new frontier of public health law. *New England Journal of Medicine. 354*(24), 2601-2610.

Mensah, G.A., Goodman, R.A., Zaza, S., Moulton, A.D., Kocher, P.L., Dietz, W.H. et al. (2004). Law as a tool for preventing chronic diseases: expanding the spectrum of effective public health strategies (part 2). *Preventing Chronic Disease, 1*(2). Retrieved January 10, 2012 from http://www.cdc.gov/pcd/issues/2004/apr/04_0009.htm.

Monaghan, P.F., Forst, L.S., McDermott, R.J., Bryant, C.A., Luque, J.S., & Contreras, R.B. (2011). Adoption of safety eyewear among citrus harvesters in rural Florida. *Journal of Immigrant & Minority Health.* [E-pub ahead of print - DOI: 10.1007/s10903-011-9484-3]

Monaghan, P.F., Forst, L.S., Tovar-Aguilar, J.A., Bryant, C.A., Israel, G.D., Galindo-Gonzalez, S., et al. (2011) Preventing eye injuries among citrus harvesters: the community health worker model. *American Journal of Public Health, 101*(12), 2269-2274.

Mullainathan, S., & Thaler, R. H. (2001). *Behavioral economics.* Retrieved November 28, 2011 from http://www.economics.harvard.edu/faculty/mullainathan/files/Encyclopedia.pdf.

Nickelson, J.E., Alfonso, M.L., McDermott, R.J., Bryant, C.A., & Baldwin, J.A. (2011). Characteristics of "tween" participants and non-participants in VERB™ Summer Scorecard. *Health Education Research, 26*(2), 225-238.

North Carolina Public Health Academy. (n.d.).Section I: understanding public health advocacy. Retrieved November 28, 2011 from http://www.ncpublichealthacademy.org/AdvocacySection-2.pdf.

Ottoson, J.M., Green, L.W., Beery, W.L., Senter, S.K., Cahill, C.L., Pearson, D.C. et al. (2009). Policy-contribution assessment and field-building analysis of the Robert Wood Johnson Foundation's Active Living Research Program. *American Journal of Preventive Medicine, 36*(2S), 534-543.

Sallis, J., & Glanz, K. (2006). The role of built environments in physical activity, eating, and obesity in childhood. *The Future of Children, 16*(1), 89-108.

Schmid, T.L., Pratt, M., & Howze, E. (1995). Policy as intervention: environmental and policy approaches to the prevention of cardiovascular disease. *American Journal of Public Health, 85*(9), 1207-1211.

Schwartz, R., Smith, C., Speers, M.A., Dusenbury, L.J., Bright, F., Hedlund, S. et al. (1993). Capacity building and resource needs of state health agencies to implement community-based cardiovascular disease programs. *Journal of Public Health Policy, 14*(4), 480-494.

Snell-Johns, J., Imm, P., Wandersman, A., & Claypool, J. (2003). Roles assumed by a community coalition when creating environmental and policy-level changes. *Journal of Community Psychology, 31*(6), 661-670.

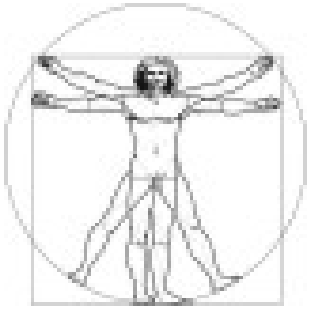
Stewart, S.T., Cutler, D.M., & Rosen, A.B. (2009). Forecasting the effects of obesity and smoking on U.S. life expectancy. *New England Jour-*

nal of Medicine, 361, 2252-2260.

Wallack, L. Dorfman, L., Jernigan, D., & Themba, M. (1993). *Media advocacy and public health: power for prevention.* Newbury Park, CA: Sage Publications, Inc.

Wandersman, A., & Florin, P. (2003). Community interventions and effective prevention. *American Psychologist, 58*(6-7), 441-448.

.



ABOUT THE AUTHORS

Robert J. McDermott (rmcdermo@health.usf.edu) is Professor and Co-director, Florida Prevention Research Center, University of South Florida College of Public Health, Tampa, Florida, USA. Carol A. Bryant (cbryant@health.usf.edu is Professor and Co-director, Florida Prevention Research Center, University of South Florida College of Public Health, Tampa, Florida, USA. James H. Lindenberger (jlindenb@health.usf.edu) is Director, Social Marketing Group, University of South Florida College of Public Health, Tampa, Florida, USA. Anita H. Courtney (anitac@qx.net) is Chairperson, Lexington Tweens' Nutrition and Fitness Coalition, Lexington, Kentucky, USA. An earlier version of this paper was presented at the 5th Winter Meeting of the International Consortium for Interdisciplinary Education about Health and the Environment, Cologne Germany, December 3-4, 2011.