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Communities putting prevention to work: Local evaluation of community-based strategies designed to make healthy living easier^{☆,☆☆}

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Abstract

This introduction is an overview of the articles presented in this supplement that describe implementation and evaluation activities conducted as part of the Centers for Disease Control and Prevention's (CDC's) Communities Putting Prevention to Work (CPPW) initiative. CPPW was one of the largest federal investments ever to combat chronic diseases in the United States. CPPW supported high-impact, jurisdiction-wide policy, systems, and environmental changes to improve health by increasing access to physical activity and healthy foods, and by decreasing tobacco use and exposure to secondhand smoke. The articles included in this supplement describe implementation and evaluation efforts of strategies implemented as part of CPPW by local awardees. This supplement is intended to guide the evidence base for public health interventions on the basis of jurisdiction-wide policy and environmental-level improvements and to encourage rigorous evaluation of the public health interventions.

Keywords

Chronic disease; Obesity; Tobacco use; Second hand smoke exposure; Physical activity; Public health; Evaluation

Introduction

Cancer, cardiovascular disease, and diabetes affect more than half of working adults in the United States (Gulley et al., 2011; Institute of Medicine, 2010). Two of the primary underlying causes of these and other chronic diseases in the United States are linked to behavioral and subsequent health risk factors (e.g., obesity and tobacco use that often begin in childhood) (Mokdad et al., 2004). In fact, approximately 18% of those aged 12–19 years

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in the United States are obese (Ogden & Carroll, 2010), and approximately 19% of high school students are current smokers (Centers for Disease Control and Prevention [CDC], 2013).

In 2010, the US Department of Health and Human Services funded the Communities Putting Prevention to Work (CPPW) project through CDC to accelerate community- and state-level policy, systems, and environmental (PSE) improvements that ultimately could reduce the US economic burden of chronic disease by making healthy living easier (Bunnell et al., 2012). The CPPW project addressed disparities in chronic diseases among racial and ethnic subpopulations, socioeconomic groups, and geographic settings. CDC awarded more than \$400 million to 50 communities for a 2-year intervention period. In addition, evaluation was supported to examine the effectiveness of PSE improvements and to expand the evidence base.

About the supplement

In this supplement, we expand on the work of Bunnell and colleagues, who in 2012 reported on outcomes after the first 12 months of the CPPW program by showcasing actual CPPW community-based, data-informed strategies implemented to make healthy living easier. The articles in the supplement describe PSE improvement strategies that address obesity, tobacco use, and physical activity. Together, these articles review the importance of PSE interventions to improve population health, address health disparities, and provide concrete examples of innovative public health approaches implemented by using multisectoral partnerships at the local level. In addition, the articles highlight the importance and challenges associated with evaluating PSE-driven interventions.

Describing local implementation and evaluation efforts, the articles in this issue illustrate real-world applications of CDC's Program Evaluation Framework in the context of a complex national program (CDC, 1999). For example, Robles et al. (in this issue) describe the use of data collection and analysis for program planning. Battista and colleagues used an evaluation process for program improvement in rural child care settings (2014, this issue). Articles about traditional evaluations of interventions include analyses of joint-use agreements (Burbage et al., in this issue), trail use (Clark et al., in this issue), student consumption of school meals after nutrition standards changed (Gase et al., in this issue), and an educational media campaign about sugar content in beverages (Boles et al., in this issue). Finally, dissemination of findings is described in a paper by Blue Bird Jernigan et al. (in this issue), with emphasis on a workshop for Native American authors.

Nine articles describe local evaluations of strategies to improve community support for healthy living. Burbage et al. (in this issue) show how the Los Angeles County CPPW program facilitated the development and implementation of 18 physical activity joint-use agreements. The authors describe how the joint-use agreements assisted school districts with reaching more than 600,000 people a year with increased access to physical activity. Battista et al. (in this issue) report on a systems approach to create changes in nutrition and physical activity recommendations and standards that lead to improved access to healthy food options in 29 child care centers among low-income communities in rural North Carolina. Clark et al.

(in this issue) describe Nevada's innovative measure of trail use and their evaluation of the addition of trail markers and signs, finding that contrary to general recommendations, adding signs to trail sections that were evaluated did not increase trail use (Clark et al., in this issue).

CPPW's efforts to combat obesity included increasing physical activity opportunities and access to healthy foods and work site wellness programs. Cummings et al. (in this issue) show that school nutrition changes in two large school districts in the country (Los Angeles County, California and Cook County, Illinois) led to improvements in the nutrient content of school meals being served. Nearly 699,000 low-income students now have access to healthier meals in these school systems. Gase et al. (in this issue) report findings showing that despite improved standards, student selection and consumption of fruits and vegetables remained low. The authors suggest a need for additional efforts to increase demand for healthier food options (Gase et al., in this issue). Two funded communities, Los Angeles County and West Virginia, partnered together to better understand how characteristics of their local populations might guide program planning and implementation to improve the likelihood of community change. Robles et al. (in this issue) provide results of their comparison of overweight and obesity among low-income women in rural West Virginia and Los Angeles County. The authors suggest that although obesity rates in both groups were high, future interventions with each group could be tailored to the distinct populations to improve the cultural and linguistic appropriateness (Robles et al., in this issue).

Boles et al. (in this issue) share findings on a public education initiative that was effective in raising awareness about the sugar content in beverages, increasing knowledge about health problems associated with excessive sugar consumption, and prompting intentions to reduce sugary drinks among children.

An important CPPW strategy to reduce chronic disease included reducing exposure to tobacco smoke. Coxe et al. (in this issue) evaluated the effects of a tobacco retail permit system that was implemented in unincorporated Santa Clara County. They report that 11 of 36 retailers discontinued their sales of tobacco. In addition, all retailers were in compliance with laws prohibiting sales to minors.

The national CPPW program emphasized the need for a health equity focus among all community-based interventions to implement strategies to reduce health disparities in chronic disease (Frieden, 2013), and this issue includes important examples of how this was carried out in funded communities. The article by Robles et al. (in this issue) compares interventions serving low-income women in Los Angeles and West Virginia, noting similarities and differences among the groups. Battista et al. (in this issue) evaluated efforts to increase physical activity opportunities and access to healthy food for low-income North Carolina children who live in the mountains in preschool settings. In addition, CPPW served three Native American tribal communities and used a community-based participatory research model to develop training for them in scientific writing (Blue Bird Jernigan et al., in this issue).

Conclusion and recommendations

The CPPW initiative was one of the largest federal investments ever to combat chronic diseases in the United States. It supported high-impact, jurisdiction-wide policy and environmental improvements to advance health by increasing access to physical activity and healthy foods, and by decreasing tobacco use and secondhand smoke. CPPW aimed to improve health for the largest number of people possible by implementing changes in policies, systems, and environments, and by setting priorities at the community and population levels on the basis of the following principle: that individual education and tertiary health care are insufficient to prevent chronic diseases (Bunnell et al., 2012; Frieden, 2010). Together, the articles in this issue provide a glimpse into strategies that communities used to prevent chronic diseases and associated health disparities in the United States. This issue complements an ever-increasing body of literature that describes implementation and evaluations of CPPW strategies (Baronberg et al., 2013; Barragan et al., 2014; Beets et al., 2012; Brokenleg et al., 2014; Cavanaugh et al., 2013, 2014; Cole et al., 2013; Drach et al., 2012; Dunn et al., 2012; Huberty et al., 2013; Jaskiewicz et al., 2013; Jilcott Pitts et al., 2012; Johns et al., 2012; Jordan et al., 2012; Kern et al. 2014, Lafleur et al., 2013; Larson et al., 2013; Leung et al., 2013; Mandel-Ricci et al., 2013; Pitts et al., 2013a, 2013b; Robles et al., 2013; Wilson et al., 2012; Young et al., 2013). In addition, the core principles for strengthening the science of community health described in the commentary by Goodman and colleagues (in this issue) highlight the demonstrated successes of the CPPW program. Sustaining PSE changes will lay the groundwork for future successes and emerging approaches to achieve the collective goal of improving our nation's health.

Although CPPW was funded for only 2 years, community-based prevention strategies were designed to have a continuous effect in lowering chronic disease rates. CPPW had the potential to reach more than 55 million people in 381 locations (Bunnell et al., 2012). The extensive reach of this large-scale effort to improve environmental influences on obesity and tobacco use should result ultimately in a substantial reduction in chronic diseases throughout the United States.

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References

- Baronberg S, Dunn L, Nonas C, Dannefer R, Sacks R. The impact of New York City's Health Bucks Program on Electronic Benefit Transfer Spending at Farmers Markets. *Prev Chronic Dis.* 2013; 10:2006–2009. <http://dx.doi.org/10.5888/pcd10.130113>.

- Barragan NC, Noller AJ, Robles B, Gase LN, Leighs MS, Bogert S, Simon PA, Kuo T. The “Sugar Pack” health marketing campaign in Los Angeles County. *Health Promot Pract.* 2014; 15(208): 2011–2012. (<http://hpp.sagepub.com/content/15/2/208>).
- Battista, RA.; Oakley, H.; Weddell, MS.; Mudd, LM.; Greene, JB.; West, ST. Improving the Physical Activity and Nutrition Environment Through Self-assessment (NAP SACC). Rural Area Child Care Centers; North Carolina: 2014. (in this issue).
- Beets MW, Huberty J, Beighle A. Physical activity of children attending afterschool programs: research- and practice-based implications. *Am J Prev Med.* 2012; 42:180–184. [PubMed: 22261215]
- Blue Bird Jernigan V, Brokenleg IS, Burkhart M, Magdalena C, Sibley C, Yepa K. The Implementation of a Participatory Manuscript Development Process With Native American Tribal Awardees as Part of the CDC Communities Putting Prevention to Work Initiative: Challenges and Opportunities. 2014 (in this issue).
- Boles M, Adams A, Gredler A, Manhas S. Ability of a Mass Media Campaign to Influence Knowledge, Attitudes, and Behaviors About Sugary Drinks and Obesity. 2014 (in this issue).
- Brokenleg, IS.; Barber, TK.; Bennett, NL.; Boyce, SP.; Blue Bird Jernigan, V. Gambling with our health: smoke-free policy would not reduce tribal casino patronage. *Am J Prev Med.* 2014. <http://dx.doi.org/10.1016/j.amepre.2014.04.006>.
- Bunnell, R.; O’Neil, D.; Soler, R.; Payne, R.; Giles, W.; Collins, J.; Bauer, U.; the Communities Putting Prevention to Work Program Group. Fifty communities putting prevention to work: accelerating chronic disease prevention through policy, systems and environmental change. *J Community Health.* 2012. <http://dx.doi.org/10.1007/s10900-012-9542-3>.
- Burbage L, Gonzalez E, Dunning L, Simon P, Kuo T. Building Mutually Beneficial Partnerships to Improve Physical Activity Opportunities Through Joint-use Efforts in Low-income Communities in Los Angeles County. 2014 (in this issue).
- Cavanaugh E, Mallya G, Brensinger C, Tierney A, Glanz K. Nutrition environments in corner stores in Philadelphia. *Prev Med.* 2013; 56:149–151. [PubMed: 23262362]
- Cavanaugh E, Green S, Mallya G, Tierney A, Brensinger C, Glanz K. Changes in food and beverage environments after an urban corner store intervention. *Prev Med.* 2014; 65:7–12. [PubMed: 24732720]
- Centers for Disease Control and Prevention. Methodology of the youth risk behavior surveillance system – 2013. *MMWR.* 2013; 62:1–23.
- Centers for Disease Control, Prevention. Framework for program evaluation in public health. *MMWR.* 1999; 48(RR-11):1–40.
- Clark S, Bungum T, Shan G, Meacham M, Coker L. The effect of a trail use intervention on urban trail use in Southern Nevada. 2014 (in this issue).
- Cole K, McNees M, Kinney K, Fisher K, Krieger JW. Increasing access to farmers markets for beneficiaries of nutrition assistance: evaluation of the Farmers Market Access Project. *Prev Chronic Dis.* 2013; 10 <http://dx.doi.org/10.5888/pcd10.130121>.
- Coxe N, Webber W, Burkhart J, Broderick B, Yaeger K, Jones L, Fenstersheib M. Use of Tobacco Retail Permitting to Reduce Youth Access and Exposure to Tobacco in Santa Clara County, California. 2014 (in this issue).
- Cummings PL, Welch SB, Mason M, Burbage L, Kwon S, Kuo T. Nutrient content of school meals before and after implementation of nutrition recommendations in five school districts across two US counties. 2014 (in this issue).
- Drach LL, Morris D, Cushing C, Romoli C, Harris RL. Promoting smoke-free environments and tobacco cessation in residential treatment facilities for mental health and substance addictions, Oregon, 2010. *Prev Chronic Dis.* 2012; 9 <http://dx.doi.org/10.5888/pcd9.110080>.
- Dunn LL, Venturanza JA, Walsh RJ, Nonas CA. An observational evaluation of Move-to-Improve, a classroom-based physical activity program, New York City schools, 2010. *Prev Chronic Dis.* 2012; 9 <http://dx.doi.org/10.5888/pcd9.120072>.
- Frieden TR. A framework for public health action: the health impact pyramid. *Am J Public Health.* 2010; 100:590–595. [PubMed: 20167880]

- Frieden, TR. Surveillance Summaries. Vol. 62. Washington, DC: 2013. CDC health disparities and inequalities report — United States, 2013. Foreword. Morbidity and Mortality Weekly Report; p. 1-2.2002
- Gase LN, McCarthy WJ, Robles B, Kuo T. Student Receptivity to New School Meal Offerings: Assessing Fruit and Vegetable Waste Among Middle School Students in the Los Angeles Unified School District. 2014 (in this issue).
- Gulley SP, Rasch EK, Chan L. If we build it, who will come? Working-age adults with chronic health care needs and the medical home. *Med Care*. 2011; 49:149–155. [PubMed: 21206295]
- Huberty J, Beets M, Beighle A. Effects of a policy-level intervention on children's pedometer-determined physical activity: preliminary findings from Movin' Afterschool. *J Public Health Manag Pract*. 2013; 19:525–528. <http://dx.doi.org/10.1097/PHH.0b013e31829465fa>. [PubMed: 23676476]
- Institute of Medicine. Promoting Health. National Academy Press; Washington, DC: 2010.
- Jaskiewicz L, Dombrowski RD, Drummond H, Barnett GM, Mason M, Welter C. Partnering with community institutions to increase access to healthful foods across municipalities. *Prev Chronic Dis*. 2013; 10 <http://dx.doi.org/10.5888/pcd10.130011>.
- Jilcott Pitts SB, Whetstone LM, Wilkerson JR, Smith TW, Ammerman AS. A community-driven approach to identifying “winnable” policies using the Centers for Disease Control and Prevention's Common Community Measures for Obesity Prevention. *Prev Chronic Dis*. 2012; 9 <http://dx.doi.org/10.5888/pcd9.110195>.
- Johns M, Coady MH, Chan CA, Farley SM, Kansagra SM. Evaluating New York City's smoke-free parks and beaches law: a critical multiplst approach to assessing behavioral impact. *Am J Community Psychol*. 2012; 51:254–263. [PubMed: 22638901]
- Jordan A, Piotrowski J, Bleakley A, Mallya G. Developing media interventions to reduce household sugar-sweetened beverage consumption. *Ann Am Acad Pol Soc Sci*. 2012; 640:118–135.
- Kern E, Chan NL, Fleming DW, Krieger JW. Declines in student obesity prevalence associated with a prevention initiative – King County, Washington, 2012. *MMWR*. 2014; 63(07):155–157. [PubMed: 24553199]
- Lafleur M, Gonzalez E, Schwarte L, Banthia R, Kuo T, Verderber J, Simon P. Increasing physical activity in under-resourced communities through school-based, joint-use agreements, Los Angeles County, 2010–2012. *Prev Chronic Dis*. 2013; 10 <http://dx.doi.org/10.5888/pcd10.12027>.
- Larson C, Haushalter A, Buck T, Campbell D, Henderson T, Schlundt D. Development of a community-sensitive strategy to increase availability of fresh fruits and vegetables in Nashville's urban food deserts. *Prev Chronic Dis*. 2013; 10 <http://dx.doi.org/10.5888/pcd10.130008>.
- Leung R, Mallya G, Dean LT, Rizvi A, Dignam L, Schwarz DF. Instituting a smoke-free policy for city recreation centers and playgrounds, Philadelphia, Pennsylvania. *Prev Chronic Dis*. 2013; 10 <http://dx.doi.org/10.5888/pcd10.120294>.
- Mandel-Ricci J, Breshnahan M, Sacks R, Farley SM. Training mental health professionals to treat tobacco dependence. *Psychiatr Serv*. 2013; 64:497. [PubMed: 23632583]
- Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000. *J Am Med Assoc*. 2004; 291:1238–1245.
- Ogden, CL.; Carroll, MD. Prevalence of obesity among children and adolescents: United States, trends 1963–1965 through 2007–2008. *Natl Cent Health Stat*. 2010. (http://www.cdc.gov/nchs/data/hestat/obesity_child_07_08/obesity_child_07_08.htm).
- Pitts SB, Bringolf KR, Lawton KK, McGuirt JT, Wall-Bassett E, Morgan J, Laska MN, Sharkey JR. Formative evaluation for a healthy corner store initiative in Pitt County, North Carolina: assessing the rural food environment, part 1. *Prev Chronic Dis*. 2013a; 10 <http://dx.doi.org/10.5888/pcd10.120318>.
- Pitts SB, Bringolf KR, Lloyd CL, McGuirt JT, Lawton KK, Morgan J. Formative evaluation for a healthy corner store initiative in Pitt County, North Carolina: engaging stakeholders for a healthy corner store initiative: part 2. *Prev Chronic Dis*. 2013b; 10 <http://dx.doi.org/10.5888/pcd10.120319>.

- Robles B, Wood M, Kimmons J, Kuo T. Comparison of nutrition standards and other recommended procurement practices for improving institutional food offerings in Los Angeles County, 2010–2012. *Adv Nutr*. 2013; 4:191–202. [PubMed: 23493535]
- Robles B, Frost S, Moore L, Harris CV, Bradlyn AS, Kuo T. Overweight and Obesity Among Low-income Women in Rural West Virginia and Urban Los Angeles County. 2014 (in this issue).
- Wilson T, Shamo F, Boynton K, Kiley J. The impact of Michigan’s Dr Ron Davis smoke-free air law on levels of cotinine, tobacco-specific lung carcinogen and severity of self-reported respiratory symptoms among non-smoking bar employees. *Tob Control*. 2012; 21:593–595. [PubMed: 22705599]
- Young CR, Aquilante JL, Solomon S, Colby L, Kawinzi MA, Uy N, Mallya G. Improving fruit and vegetable consumption among low-income customers at farmers markets: Philly Food Bucks, Philadelphia, Pennsylvania, 2011. *Prev Chronic Dis*. 2013; 10 <http://dx.doi.org/10.5888/pcd10.120356>.