

Active Living Research and Public Health Natural Partners in a New Field

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In the 20th century, public health science firmly established the importance of health-related behaviors as major causes of the epidemic of chronic disease in Western countries. Consensus about the importance of tobacco use and diet developed in the mid-20th century. For example, the landmark Surgeon General's report on smoking and health was published in 1964.¹ Consensus about the importance of physical inactivity to health took much longer to develop, despite research findings as early as the 1950s on the potential importance of physical activity.² The Surgeon General's report *Physical Activity and Health*,³ was not published until 1996. Also in 1996, the CDC established for the first time a unit (branch) focused solely on promoting physical activity for its health benefits.

By the time the field of physical activity and public health emerged, it was able to build on lessons learned about public health approaches to controlling chronic disease. Clearly a major lesson learned, particularly from tobacco control, was the importance of policy and environmental approaches in the context of a socio-ecologic approach. In the mid 1990s, CDC affirmed the importance of environmental and policy approaches,⁴ and began to support the work of the Task Force on Community Preventive Services on an evidence-based review of community-level interventions to promote physical activity. By 2001, the Task Force had identified six community-level interventions that are effective in promoting physical activity.^{5,6} State health departments also were quick to recognize the importance of policy and environmental approaches. For example, in 1997 Hawaii issued *Hearts in Hawai'i. Hawai'i Strategic Plan to Prevent Cardiovascular Disease*. The plan called for the development of policies that supported a physically active lifestyle (updates for 2007⁷).

The funding of Active Living Research (ALR) by the Robert Wood Johnson Foundation (RWJF) provided CDC with a major opportunity for collaboration on

policy and environmental approaches. CDC and ALR began working together to ensure that CDC's and ALR's research agendas were complementary and coordinated. CDC's policy work in physical activity initially focused on economic issues, such as estimating medical care expenditures due to inactivity. As ALR (and also other funders such as the NIH) began major funding of high-quality research projects on environmental determinants, CDC shifted resources toward policy research. The Physical Activity Policy Research Network involving several CDC-funded Prevention Research Centers (PAPRN; prc.slu.edu/paprn.htm) was launched in 2004.

As we look back on the progress in physical activity and public health since the 1996 Surgeon General's report,³ the collaboration between CDC and ALR has contributed to several areas of progress. As noted in the article by Ottoson et al.⁸ in this supplement to the *American Journal of Preventive Medicine*, there has been exponential growth in research publications related to environmental and policy approaches to promoting physical activity. An indicator of the impact of this research is that two additional Community Guide recommendations were issued around 2006 dealing with the importance of street-scale and community-scale design features to physical activity promotion.⁹ The Community Guide evidence-based review approach has also been applied to the physical activity intervention literature from Latin America and three additional categories of culturally specific interventions were identified.¹⁰ Further evaluation of these community interventions in the U.S. is merited. Public health is successfully collaborating with non-health sectors in efforts to promote physical activity. The importance and credibility of transdisciplinary research in physical activity is established. CDC funds state health departments to promote physical activity and healthy eating, to prevent obesity and other chronic conditions; policy and environmental interventions are required components. ALR research has contributed directly to such efforts. The evaluation by Ottoson et al.⁸ reports that about 85% of states had used the ALR website (www.activelivingresearch.org/) as a resource for developing programs.

As the purpose of ALR funding has been refined to focus on obesity and underserved children and adolescents, CDC is continuing to work with ALR. NIH, CDC, and RWJF are collaborating through the National Col-

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laboration on Childhood Obesity Research (NCCOR) effort. CDC continues to work directly with RWJF and ALR to establish research priorities and coordinate agendas.

The progress since 1996 in building a body of research, and in transferring that research into practice, is important and gratifying. But the so-called “bottom line” is whether levels of physical activity are improving in Americans. Although there are some recent trends in the right direction, levels of physical activity have not improved substantially in the past decade. As confirmed in a recent progress review, we are not making much progress in meeting *Healthy People 2010* objectives for physical activity (www.healthypeople.gov/Data/2010prog/focus22/).

To make progress on *Healthy People* objectives, we have consensus that more focus on physical activity policy is needed. But we have yet to define the scope of the policy initiatives in physical activity and public health. Some would argue that the focus should be on policy issues that are fairly specific to physical activity. For example, cities need to have a bicycle master plan, and to make a commitment to implementing it. We need policies that ensure people in diverse neighborhoods have good access to active recreation in local parks and green space. Others would argue this is working at the margins, and physical activity as a field needs to engage several major issues of our time. Bicycle master plans are fine, but are only one part of addressing factors that have led to dependence on automobiles and all too frequently to pedestrian-unfriendly environments. Promoting opportunities for active recreation is important, but needs to be part of a larger agenda of protecting the environment, “going green,” and addressing global warming. ALR has illuminated many potential areas of policy work. We need to identify promising next steps. And we need to pursue mutually beneficial efforts between disciplines and sectors.

In terms of promising next steps, physical activity needs more information on how financial incentives affect levels of physical activity. Financial incentives have played a major role in tobacco control, as the unit price of tobacco products strongly influences rates of use. Accordingly, the Community Guide strongly recommends increasing the unit price of tobacco products for reducing initiation of tobacco use for increasing cessation.¹¹ It is not often noted that while smoking cessation saves money, starting physical activity generally incurs costs (e.g., related to time, clothing, shoes, and equipment). Anecdotally, recent increases in the price of gasoline appear to increase the amount of active travel (e.g., walking, biking, or using mass transit, which usually involves some walking). CDC and RWJF have funded some research on financial incentives¹² and cost effectiveness of physical activity interventions¹³ but more needs to be done.

Making progress on increasing the levels of physical activity in Americans requires continually making the

case for the importance of physical activity, by itself, as a health issue. The commitment of the U.S. Department of Health and Human Services to issue national guidelines for physical activity in the fall of 2008 is an example of an initiative that affirms the importance of physical activity as a health issue. Certainly a comprehensive and coordinated approach is needed to promote healthy lifestyles, involving tobacco use, diet, physical activity, alcohol use, and other health-related behaviors. But the combination of physical activity and public health is a large complex area with unique issues. Specialists in this area are needed, and we need to increase capacity in public health to address physical activity.¹⁴ Accordingly, in 1995 CDC began an annual course in physical activity and public health for researchers, and later also for practitioners.¹⁵ In 2006, CDC supported the launch of a new professional society for physical activity practitioners, the National Society for Physical Activity Practitioners in Public Health (www.nspapph.org).

Making progress also requires continued commitment to policy and environmental approaches, and to research that identifies effective approaches, in the U.S. and around the world. Similar to tobacco control, changing social norms about physical activity is crucial to success, but will take time. CDC is a partner in ongoing efforts to developing a national plan for physical activity, which can help lay the blueprint for making progress. As ALR and its sister organizations continue to build the evidence for important links between policy, the built environment and health, CDC is committed to maintaining close collaboration and coordination with ALR and its growing family of policy and environmental researchers and practitioners.

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