Local Health Department Engagement in Community Physical Activity Policy

Karin V. Goins, MPH,[1] Jiali Ye, PhD,[2] Carolyn J. Leep, MS, MPH,[2] Nathalie Robin, MPH,[2] Stephenie C. Lemon, PhD[1]

Introduction: This study assessed correlates of self-reported local health department (LHD) participation in community policy/advocacy activities that support physical activity.

Methods: In 2014, cross-sectional data from the nationally representative 2013 National Profile of Local Health Departments study administered by the National Association of County and City Health Officials were analyzed. Outcomes were participation in policy/advocacy activities related to urban design/land use, active transportation, and access to recreational facilities. Independent variables included structural characteristics, performance improvement efforts, and collaboration. Multivariate logistic regression models were computed.

Results: Representatives of 490 LHDs participated (79% response rate). Respondents reported similar participation in urban design/land use (25%); active transportation (16%); and recreational facility access (23%) policy/advocacy. LHDs with populations of $\geq$500,000 were more likely to report urban design/land use (p=0.004) as well as active transportation policy/advocacy participation (p=0.007) compared with those with populations of $\leq$50,000. LHDs with a community health improvement plan were more likely to participate in urban design/land use policy/advocacy (p=0.001). LHDs who regularly use the Community Guide were more likely to report policy/advocacy activity on active transportation (p=0.007) and expanding access to recreation facilities (p=0.009). LHDs engaged in a land use partnership were more likely to report urban design/land use ($p<0.001$) and active transportation (p=0.001) policy/advocacy participation.

Conclusions: Participation in community physical activity policy/advocacy among LHDs was low in this study and varied by LHD characteristics. Intervention opportunities include assisting smaller LHDs and promoting performance improvement efforts and evidence-based practice resources.
(Am J Prev Med 2016;50(1):57–68)

Introduction

The burden of disease and associated human and economic costs attributable to physical inactivity in the U.S. and worldwide are high.[1] Evidence has accumulated that particular environmental conditions and characteristics correlate with walking and bicycling, including for active transportation.[2] Although observational designs of most of the research allow only limited causal inference,[3,4] the Guide to Community Preventive Services (Community Guide) found sufficient evidence to recommend community- and street-scale policy-based approaches for increasing physical activity as well as creation of or enhanced access to places for physical activity combined with informational outreach activities.[5]

Public health authorities recommend strategies in the realms of land use and urban design, transportation, and recreation access for communities to become more walk- and bicycle-friendly.[6,7] These areas are not part of traditional public health training or responsibilities, however, typically falling under disciplines such as planning and public works. There is little information to guide local health departments (LHDs) in collaborating with them.[8] As the front line of public health, LHDs have an important role to play in identifying and

From the [1]Preventive and Behavioral Medicine, University of Massachusetts Medical School, Worcester, Massachusetts; and [2]National Association of County and City Health Officials, Washington, District of Columbia

Address correspondence to: Stephenie C. Lemon, PhD, UMass Worcester Prevention Research Center, Division of Preventive and Behavioral Medicine, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester MA 01655. E-mail: stephenie.lemon@umassmed.edu.

0749-3797/$36.00
http://dx.doi.org/10.1016/j.amepre.2015.06.033

addressing pressing public health problems, including policy processes resulting in built environments that discourage physical activity.[9,10] Policy development is a core public health function along with assessment and assurance.[11] Greater LHD involvement could increase the adoption and implementation of policies needed for physical activity benchmarks to be met,[12] but there are critical practice gaps. Knowledge of LHD leaders regarding policy development and implementation appears low.[13,14] Recent research shows that compared with other municipal officials, local public health officials report lower participation in development, adoption, and implementation of policy related to land use, transportation, and parks and recreation access, as well as greater barriers to consideration of physical activity in community design decision making.[15,16]

LHD characteristics and activities have been shown to affect delivery of essential public health services,[17] engagement in performance improvement efforts,[18] partnership involvement,[19] ties to other LHDs that could facilitate implementation of evidence-based programming,[20] and public health performance.[21] Better understanding of LHD characteristics associated with community physical activity policy participation offers an important first step to developing interventions to increase policy implementation.

Using data from the 2013 National Profile of LHDs (Profile) administered by the National Association of County and City Health Officials,[22] this study assessed associations of LHD structural characteristics, performance improvement efforts, and collaborations and their participation in community physical activity policy, specifically in the realms of land use, active transportation, and access to recreation facilities. Based on study findings, areas for improvement and increased policy participation of LHDs were identified.

Methods

Study Sample

Data from the 2013 Profile survey were analyzed in 2014. The National Association of County and City Health Officials has conducted seven Profile studies to document current LHD infrastructure and practice (1989–1990, 1992–1993, 1996–1997, 2005, 2008, 2010, 2013). This analysis was based on organizational surveys, so the National Association of County and City Health Officials deemed it exempt from full IRB approval. All 2,532 LHDs across the country received by mail a core questionnaire, covering broad topics such as leadership, jurisdiction, financing, programs and services, and policy and advocacy activities, and 2,000 (79%) completed it. Randomly selected, nationally representative samples received supplemental questions grouped into two modules. Module 1, administered to 624 LHDs and completed by 490 (79% response), included items on accreditation, use of core competencies, cross-jurisdictional sharing, and partnership and collaboration. This analysis included LHDs that responded to both the core questionnaire and Module 1.

Measures

Respondents first selected specific areas where their LHD had been actively involved in policy/advocacy activities in the past 2 years from a checklist of 18 areas, one of which was obesity/chronic disease. Checking the obesity/chronic disease response brought respondents to eight specific items, of which three pertained to physical activity and were examined as outcomes in this study: *community level urban design and land use policies to encourage physical activity*, *active transportation options*, and *expanding access to recreational facilities*. Each was coded as yes/no.

Structural characteristics associated with better public health system performance expressed in the 10 Essential Public Health Services[17,21,23–25] were selected. Population size served was categorized as $<50{,}000$ residents, 50,000–499,999 residents, and $\geq 500{,}000$ residents. Geographic jurisdiction type was classified as county, city, multicounty, and other and governance type as local, state, and shared local/state. Local Board of Health was categorized as yes/no. Full-time equivalent (FTE) level served as a proxy financial variable; reliability issues and missing data rendered assessment of state and federal revenues in the 2013 Profile data infeasible, and FTE data were better quality than and correlate strongly with total per capita expenditures ($r = 0.75$, $p < 0.001$). FTE per 100,000 population served was categorized in quartiles (≤ 27.92, $27.93 - \leq 45.94$, $45.95 - \leq 73.49$, > 73.49). Geographic region was defined as Northeast, Midwest, South, and West, and was adjusted for in analysis.

Public health system performance has been shown to be positively associated with health outcomes.[26] The Public Health Accreditation Board (PHAB) voluntary accreditation program[27] for LHDs assesses progress in addressing the 10 Essential Public Health Services.[23] PHAB status was categorized as (1) applied, submitted statement of intent, plan to apply, state will apply on behalf; (2) undecided; or (3) decided not to apply. PHAB prerequisites include completion of a Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP). CHA "identifies key health needs and issues through systematic, comprehensive data collection and analysis."[28] CHIP is a "long-term, systematic effort to address public health problems based on the results of community health assessment activities and the community health improvement process."[28] Completion of each in the past 5 years (yes/no) was assessed. PHAB standards require LHDs to establish workforce development plans using adopted core competencies.[29] Use of these core competencies was characterized as reporting yes to any of the four competencies (writing position statements, conducting staff performance evaluations, assessing staff training needs, developing staff training plans) versus not using any. The Community Guide[30] presents evidence-based recommendations based on systematic reviews. Use of the Community Guide over the past 12 months compared LHDs who used it consistently or in some programmatic areas with those who did not use it or reported *do not know*.

Greater LHD capacity is associated with collaboration between LHDs[31] as well as with the community via partnerships.[19] Any cross-jurisdictional sharing was assessed (yes/no). Participants described their LHD's work in the past year with other