



Role of Environmental Health Professionals in Improving the Built Environment

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Background

Environmental health professionals (EHPs) have always played a critical role in protecting the public's health by preventing outbreaks, responding to environmental emergencies, and enforcing public health standards. Traditionally, this role has not focused on improving the built environment, which is the physical environment where people live, work, and play. The design of the built environment, however, affects physical activity and obesity, air pollution and respiratory diseases, injuries, mental health, social capital, and environmental justice (Frumkin, Frank, & Jackson, 2004). Therefore, EHPs can increase their impact on public health if they expand their role to address the built environment.

Case Studies

This issue of the *Journal of Environmental Health* presents four case studies (Roof & Glandon, 2008; Roof & Maclennan, 2008; Roof & Oleru, 2008; Roof & Sutherland, 2008) in which EHPs collaborated with internal and external partners to improve the built environment. EHPs and their colleagues successfully became involved in the land use planning process and implemented policy and community changes through strong leadership and teamwork. Each case study describes the significance of building a multidisciplinary team as a first step to becoming engaged in planning discussions. These partnerships include environmental health department staff, such as directors, health analysts, health educators, and program managers; urban planners; developers and builders; elected and appointed officials; planning commissions; planning agencies and consultants; university faculty; business owners; homeowners associations; realtor associations;

park managers; and non-profit organizations, such as nature and water conservancy groups. In addition, having bankers and others who make financial decisions present at the discussion table would likely benefit the group. One study said that "the creation of the multidisciplinary team early on in the process was key to their past and to their future success (Roof & Oleru, 2008)."

All four reports acknowledged formal and informal communications as significant factors that led to EHPs' enhanced involvement in land use planning. Several reports mentioned that the formation of partnerships increased the likelihood of planners and developers considering the health implications of their plans and, consequently, seeking the input of environmental health professionals. For example, the Puget Sound Regional Council asked the Seattle and King County Health Department to write a health issue paper about the relationship among health and growth management, economic development, and transportation; as a result, public health language was added to the county's Vision 2020 plan (Roof & Oleru, 2008).

Educating Collaborators

Another important theme in the case studies was educating planners, developers, and city officials about the links between community design and health. For example, Tri-County Health Department in Colorado educated planners about designing active community environments (Roof & Maclennan, 2008). Once planners and developers are receptive to receiving input from local health officials, they are more likely to consider incorporating public health principles into land use plans. Several health departments presented at planners' meetings, which led to EHPs at-

tending the meetings regularly and making joint presentations to policy makers. As a result, developers are beginning to recognize the benefits of and incentives for incorporating healthy design choices. In Ingham County, Michigan, some developers are adding more green space, trails, and sidewalks to increase physical activity in exchange for higher densities (Roof & Glandon, 2008).

The expanded role of EHPs during the planning review process was valuable in all four case studies. For example, Seattle and King County's environmental health division was instrumental in establishing and adopting a county-wide resolution that focused on obesity prevention through physical activity and nutrition policies as well as improved community design for pedestrians and bicyclists (Roof & Oleru, 2008). Beyond adding health language to the Vision 2020 plan, the team's efforts led to policy and community planning changes through development of a King County comprehensive plan, which used health as a rationale for creating livable communities. For a planned town center in the city of Burien, Washington, the health department implemented a pilot health impact assessment (HIA), which judges a project's potential effects on the health of a population and the distribution of those effects within the population (Dannenberg et al., 2008; European Centre for Health Policy, 1999). Results from the HIA will help to improve social connectivity, park planning, and other healthy design choices in that community.

The Tri-County Health Department's Land Use Program became involved in the review process by introducing their services to local planning departments and explicitly asking for ways to become more engaged (Roof & Maclennan, 2008). Subsequently, they evaluated

their program's effectiveness to enhance collaborations. Survey results indicated that planners wanted more detailed comments on how to design healthy communities. Accordingly, EHPs are now seen as members of the planning review team. Planners have started incorporating the health department's recommendations into development plans and integrating public health concepts into negotiations with policy makers.

Using Assessment Tools

Ingham County's regional land use and health resource team included the environmental health director, health analyst, several planning professionals, developers, and others. This diverse team was successful in changing the review criteria of development plans to incorporate an HIA tool they developed. The tool included a checklist, matrix, and geographic information system (GIS) and was useful in building relationships among team members as well as improving decision making among elected and appointed officials. An HIA pilot study documented that ease of walking can be

improved through design changes. As a result, developers are now required to have a pre-application meeting with planners to discuss the health implications of their plans and make any needed improvements.

In Ohio, Delaware County's environmental health division used the *Protocol for Assessing Community Excellence in Environmental Health* (PACE EH) tool to identify community priorities and needs (National Association of County and City Health Officials, n.d.; Roof & Sutherland, 2008). EHPs implemented several initiatives, including focus groups, surveys, telephone interviews, and other outreach efforts. Increased green spaces and walking and biking trails were identified as priorities, and a county smart growth plan was developed with regional planning officials. The plan includes zoning language that encourages smart growth and the connection of existing subdivisions with greenway trails to facilitate alternative transportation options. In addition, the plan advocates for increased conservation subdivisions that preserve farmland and open space by building on smaller, clustered lot sizes.

Opportunities

As documented by these case studies, environmental health specialists and other public health professionals can achieve improvements in the built environment by establishing partnerships with planners, developers, and others and by providing information about the health impacts of community design choices. Ongoing involvement in the local planning process and HIAs can be useful tools with which to provide such information (Dannenberg et al., 2008). Although the lack of specific authorizations, institutionalized support, and adequate resources may be seen as barriers in some jurisdictions, these case studies demonstrate that EHPs can play a substantial role in promoting community design decisions favorable to public health. 🌱

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