

# Health Impact Assessment and Housing

Opportunities for the public health sector



## **Overview**

Many of the nation's most pressing public health problems, such as asthma, depression, diabetes, and obesity, are influenced by the places where people live, work, and play. Policy decisions that affect housing quality, affordability, and location as well as neighborhood characteristics can influence whether these places are supportive of or detrimental to community health and well-being and can play important roles in reducing or even preventing disease. Unfortunately, public health professionals often are not part of the development decision-making process, which can result in a missed opportunity to ensure that health is effectively considered.





Public health and housing professionals know that the health impacts of housing decisions can last decades, affecting residents over their lifetimes and across generations. Health impact assessments (HIAs) provide an opportunity for these sectors to build strong partnerships dedicated to the shared goal of ensuring that housing projects, policies, and programs promote the best possible health and quality of life for residents. HIAs help identify the potential health effects of policy, program, and project proposals, including those related to housing; offer practical options for maximizing health benefits and minimizing health risks; and leverage the resources, strengths, and expertise of each sector.

This brief provides public health professionals with information about major housing programs and policies, identifies key decision-makers, and discusses how public health professionals can effectively integrate health into housing decisions.

# Connecting housing policy with health

Research has consistently demonstrated the link between housing and health. For example, a lack of affordable housing limits people's ability to acquire and maintain adequate shelter and meet other basic needs. Financial constraints can force families to choose between paying for rent, utilities, food, or medical care. The design and quality of housing can affect health outcomes such as asthma, cardiovascular disease, cancer, and injury, while the location and the social, economic, and built environments of the surrounding neighborhood can have implications for health through access to supportive resources, opportunities, and social networks and relationships.<sup>2</sup>

Housing programs and policies that target low-income families offer unique opportunities to use HIAs to integrate health considerations into the decision-making process with particularly high potential impact, because housing-related health issues disproportionately affect this population. Additionally, stakeholder engagement informs all steps of the process, so HIAs can help ensure that the perspectives and experiences of low-income households are taken into account in housing program and policy decisions.

# Public housing, housing choice vouchers, and project-based rental assistance

These three federally funded programs are regulated by the U.S. Department of Housing and Urban Development (HUD) but are generally administered locally through public housing authorities (PHAs). These programs predominantly serve the nation's lowest-income households, those earning 30 percent or less of area median income (AMI).

#### **Public housing**

Public housing, the oldest form of subsidized housing in the U.S., caps household rents at 30 percent of income. More than half of the households living in public housing are headed by seniors or people with disabilities. HUD provides local housing authorities with operating and capital funds to manage and maintain public housing. Operating funds cover the gap between rents and maintenance costs, and capital funds pay for capital improvements and renovations. Both funding streams are consistently inadequate, making it difficult for local authorities to maintain high-quality housing and undertake necessary repairs and renovations.

Figure 1

# Housing Quality, Affordability, Location, and Surrounding Social and Community Attributes Are Important to Health

Links between housing and health



# **%** Housing quality

Housing that is safe, dry, clean, maintained, adequately ventilated, and free from pests and contaminants, such as lead, radon, and carbon monoxide, can reduce the incidence of negative health outcomes such as injuries, asthma, cancer, neurotoxicity, cardiovascular disease, and poor mental health.

# \$ Housing affordability

Affordable housing enables people to pay for other basic needs such as utilities, food, and medical care, which can reduce the incidence of negative health outcomes such as malnutrition, diabetes, anxiety, and depression.

### **Housing community**

Neighborhoods free from segregation and concentrated poverty, and in which residents have close and supporting relationships with one another, can improve physical and mental health by reducing stress and exposure to violence and crime as well as improving school performance and civic engagement.

# **Q** Housing location

Easy access to public transportation, parks and recreation, quality schools, good jobs, healthy foods, and medical care can help reduce the incidence of chronic disease, injury, respiratory disease, mortality, and poor mental health.

Source: Adapted from Human Impact Partners, 29th Street/San Pedro Street Area Health Impact Assessment (2009), accessed Jan.22, 2016, http://www.humanimpact.org/downloads/san-pedro-st-area-hia-full-report

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#### What Is a Health Impact Assessment?

Health impact assessments help decision-makers make better choices by bringing together scientific data, health expertise, and public input to identify the potential and often overlooked public health effects, both positive and negative, of proposed laws, regulations, projects, policies, and programs. HIAs broadly consider environmental, social, and economic factors related to health and evaluate the possible impacts of a proposed project, plan, program, or policy on the health and well-being of the community. HIAs employ a variety of data sources, including qualitative and quantitative analyses and input from stakeholders, to identify health concerns related to the proposal and determine how these impacts may be distributed among the population, especially vulnerable groups such as seniors, children, and low-income families.

#### The HIA process

- **Step 1: Screening.** The HIA team and stakeholders determine whether an HIA is needed, can be accomplished in a timely manner, and would add value to the decision-making process.
- **Step 2: Scoping**. The HIA team and stakeholders identify the potential health effects that will be considered and develop a plan for completing the assessment, including specifying their respective roles and responsibilities.
- **Step 3: Assessment.** The HIA team evaluates the proposed project, program, policy, or plan and identifies its most likely health effects using a range of data sources, analytic methods, and stakeholder input to answer the research questions developed during scoping.
- **Step 4: Recommendations**. The team and stakeholders develop practical solutions that can be implemented within the political, economic, or technical limitations of the project or policy to minimize identified health risks and to maximize potential health benefits.
- **Step 5: Reporting**. This step involves dissemination of information—including the HIA's purpose, process, findings, and recommendations—to a wide range of stakeholders.
- **Step 6: Monitoring and evaluation.** The team and stakeholders evaluate the HIA according to accepted standards of practice. They also monitor and measure its impact on decision-making and health.

Source: R. Bhatia et al., Minimum Elements and Practice Standards for Health Impact Assessment, Version 3 (September 2014)

PHAs submit five-year plans to HUD that describe their missions and outline their policies, programs, long-term goals, and strategies. In addition, PHAs are required to submit annual plans to HUD that also serve as applications for capital funding.<sup>3</sup> Resident Advisory Boards review and offer feedback on the PHA plans before they are submitted to HUD.<sup>4</sup>

Recent efforts to revitalize public housing include HUD's Choice Neighborhoods and Rental Assistance Demonstration (RAD) programs. Choice Neighborhoods (and its predecessor, the HOPE VI program) funds redevelopment of distressed public housing through competitive grants to PHAs, local governments, and nonprofit and for-profit organizations, while RAD preserves public housing at risk of being lost due to disrepair.<sup>5</sup> Through a competitive process, RAD allows PHAs with severely distressed properties to convert their current rental assistance funds to long-term, project-based housing vouchers or project-based rental assistance contracts and to leverage private and other public financing to support rehabilitation and preservation of these buildings.<sup>6</sup>

#### Housing choice vouchers

Unlike public housing, the housing choice voucher program provides assistance directly to low-income households, allowing them to rent on the private market in the neighborhood of their choice. Voucher recipients pay about 30 percent of income toward rent, and PHAs pay the remainder. About 2.1 million low-income families currently receive vouchers. PHAs may use up to 20 percent of their voucher assistance funds for project-based vouchers, which are dedicated to specific housing units if owners agree to renovate or construct units or to set aside a portion of existing units for voucher recipients. Project-based vouchers (not to be confused with project-based rental assistance described below) can help households access available housing in neighborhoods with resources and opportunities, or help high-need populations such as the chronically homeless find housing in developments offering needed services, such as job training, substance abuse treatment, and other programs.<sup>7</sup>

#### Project-based rental assistance

In project-based rental assistance (PBRA) programs, HUD contracts directly with property owners who provide housing to low-income households for a set period of time in exchange for a federal subsidy. Apartments are generally reserved for households with incomes of 50 percent of the AMI or less, with some available for households earning up to 80 percent of the AMI. In most cases, tenants apply directly to participating owners and pay rents equal to 30 percent of their income; HUD pays the owner the balance. PBRA is used for a variety of housing types, including townhomes, single-family homes, and apartment communities with contracts linked to specific units, not necessarily entire buildings. Some PBRA programs serve specific populations, such as seniors, people with disabilities, or families in rural communities.<sup>8</sup>

PBRA funding is primarily used to renew existing contracts rather than establish additional PBRA units. New units may be added if a PHA converts its public housing rental assistance funds to PBRA through programs such as RAD.<sup>9</sup>

#### HIAs and federal affordable housing programs

Although the programs described above receive most of their funding from HUD, many decisions are made at state and local levels, which gives public health professionals opportunities to engage directly with housing stakeholders, including agency officials, housing authority staff, tenants, property owners, and advocates. Public

health professionals can encourage housing authorities to use HIAs when making decisions about operating and maintenance policies. For example, an HIA conducted by the San Francisco Housing Authority and the San Francisco Department of Public Health analyzed the authority's decisions about flooring materials in units. The HIA recommended that a proportion of newly developed units be built without carpeting, which can exacerbate asthma and allergies, and that the authority work to increase awareness among tenants with these health conditions about their right to request that carpet be removed from existing units.<sup>10</sup>

Public health professionals can also use HIAs to inform development decisions. The HIA for the Jack London project in West Oakland, California, was undertaken to identify potential health concerns arising from the redevelopment of a parking lot to create 55 affordable housing units for low-income seniors. The area around the proposed development had many busy streets and highways, which the HIA identified as health risks for respiratory disease, traffic-related injury, and noise-related health outcomes. The developer implemented several changes to the building design in response to the HIA, including moving the entrance to the complex into a courtyard to provide a noise buffer and promote social cohesion and installing particulate filtration and sealed bay windows to reduce indoor air pollution.<sup>11</sup>

Public housing decision-making processes offer opportunities to improve public health while navigating financing challenges that have put some units at risk of becoming uninhabitable due to deferred maintenance and lack of capital improvements. An HIA of the RAD program projected that, by converting public housing rental assistance funds to PBRA contracts, PHAs could improve housing quality and benefit residents' health by reducing lead poisoning, respiratory problems, and exposure to other hazards found in older, distressed housing.<sup>12</sup>

HIAs can also be incorporated into PHAs' five-year planning processes. An HIA in Galveston, Texas, helped inform the Galveston Housing Authority's planning process, offering recommendations for improving neighborhoods through the development of scattered-site public housing and for replacing public housing destroyed by Hurricane Ike in 2008. The Texas General Land Office ultimately required the contractors leading the redevelopment to use the HIA results when selecting housing sites throughout the city.<sup>13</sup>

# Low-income housing tax credit program

The low-income housing tax credit program (LIHTC) provides an indirect federal subsidy that developers can use to build or renovate low-income rental housing and has provided financing for more than 2 million affordable housing units. The U.S. Treasury Department oversees the LIHTC, allocating tax credits to states based on their populations, and state housing finance agencies typically administer the program. Almost all new affordable housing is built through the highly competitive LIHTC program, which offers investors a dollar-for-dollar reduction to their annual tax liability in exchange for financing to develop affordable housing. Developers use the tax credits to offset construction costs and, in exchange, must provide affordable rents to low-income households for at least 30 years.

Treasury requires states to develop annual qualified allocation plans to identify how credits will be distributed and sets certain requirements such as income, allowable construction costs, and rent levels. States have a fair amount of flexibility to add other preferences for certain types of housing, geographic locations, or even criteria, such as green building or transit-oriented development, to meet local goals.<sup>18</sup>

#### HIAs and LIHTC

The low-income housing tax credit program offers unique ways to incorporate HIAs and similar approaches into the decision-making process, such as through qualified allocation plans (QAPs)—federally mandated documents, produced by each state, that outline the process through which developers can compete for credits and the criteria used to determine which projects receive preference for credits. Because states update their plans annually, public health professionals could encourage housing finance agencies to award extra points to developers that use HIAs or other approaches and standards to incorporate health into design and development processes. The Georgia Health Policy Center recently completed an HIA of the potential health effects of the state's proposed preferences and point system to inform Georgia's 2015 qualified allocation plan.<sup>19</sup> Additionally, the 2015 version of the Enterprise Green Communities Criteria—which are integrated into the QAPs of 20 states—includes a new "Design for Health" requirement that affordable housing development teams use readily accessible community health information to guide building design and programming.<sup>20</sup>

# Code enforcement and inspection programs

Local governments set code enforcement and housing inspection policies to ensure that housing is safe. Approximately 2,000 jurisdictions have adopted model building and property maintenance codes developed by the International Code Council (ICC), but many others have not. Many local governments supplement ICC codes in their housing inspection policies to address specific issues important in their communities. Building codes apply to new construction or substantial rehabilitation projects and generally regulate lighting, ventilation, occupancy, plumbing, mechanical, electrical, and fire safety systems. Property maintenance codes outline the minimum maintenance standards that existing housing units need to meet to protect resident health and safety. Housing codes also establish standards and requirements for vacant units and to guide repair or demolition of buildings that have been deemed unsafe. Code enforcement can either be reactive, such as in response to a resident complaint about substandard housing conditions, or proactive, in which rental units are periodically inspected for safety and code compliance.<sup>21</sup>

#### HIAs and code enforcement and inspection programs

Public health professionals could encourage local governments to undertake HIAs when changes are proposed to code requirements, code enforcement, or how housing inspections are triggered and conducted. For example, the Ohio Housing Finance Agency (OHFA) collaborated with the Ohio State University School of Public Health to conduct an HIA on a proposal to streamline and integrate inspection and code enforcement processes. If implemented, the changes would directly affect about 5,000 affordable housing units, and could have implications for as many as 35,000 units, across the state. Based on the HIA findings, OHFA recommended several actions to minimize potential negative health impacts related to the proposed policy, including establishing a single inspection standard for all agencies, creating training to increase the quality of the inspections and raise awareness of housing-related health issues, and developing a risk-based inspection agenda. Multiple federal, state, and local agencies require inspection of affordable housing units, and the findings from the HIA were to be used not only by OHFA, but also by the federal Rental Policy Working Group to inform final proposed language for its physical inspection regulations.<sup>22</sup>

With the growing movement toward open government—making government documents and proceedings available to the public—an HIA could also examine potential health benefits related to making code enforcement data publicly available.

#### Zoning and land use policies

Zoning policies and ordinances are used by most jurisdictions to direct residential development and other land uses and to determine the form or scale of properties. Most localities use zoning to implement their long-term land use visions, often referred to as comprehensive land use plans or general plans. Zoning categories include residential, commercial, park, industrial, and community facility uses. Zoning ordinance building requirements typically regulate height, lot coverage, density, property line setbacks, and parking ratios. Additionally, most zoning codes specify minimum housing unit and lot sizes.

A local jurisdiction's zoning policies play a direct role in the availability and affordability of housing, through explicit requirements or incentives to developers. More indirectly, zoning can be a tool to facilitate exclusion or inclusion of certain populations in a given neighborhood. Historically, regulations, such as minimum lot and home sizes and restrictions on multifamily housing, resulted in exclusion of lower-income households from some communities.<sup>23</sup> Intentionally flexible zoning codes, however, increase the housing location options available to households across the income spectrum.<sup>24</sup> In 2011, PolicyLink—a national research and action institute dedicated to advancing economic and social equity—and two local community organizations published an HIA of zoning changes proposed by the city of St. Paul, Minnesota, that were intended to support transit-oriented development along the new 11-mile Central Corridor Light Rail Line. PolicyLink and its partners looked at a variety of potential impacts but focused on two issues related to housing: whether the proposal would increase the likelihood of involuntary displacement of current residents and how it would affect the cost of housing and the availability of affordable housing in neighborhoods along the corridor.<sup>25</sup>

#### HIAs and zoning and land use policies

Numerous stakeholders are involved in the zoning process, but the local or state zoning commission generally has the final authority. Housing HIAs could be used to inform large-scale zoning changes as well as individual development proposals. For example, in 2010, the Center for Child and Community Health Research at the Johns Hopkins Bayview Medical Center published an HIA of the Transform Baltimore comprehensive zoning code rewrite. The assessment looked at an array of land use components with the goal of determining how the proposed rezoning would affect the percentage of residents that would have access to housing in pedestrian-friendly neighborhoods located near transit and essential goods and services.<sup>26</sup>

# Other housing programs and policies

The above sections include many of the major housing programs and policies that target low-income families, but HIAs may also be useful for informing other key housing decisions:

- Property management and operations. Property owners and managers establish policies and practices that
  guide the day-to-day operation of their units, such as energy use, pest control methods, and cleaning products,
  and that have implications for the health of residents.<sup>27</sup>
- Local housing and community development funding allocations. Many jurisdictions use funds from the HOME Investment Partnerships Program and the Community Development Block Grant to create affordable housing for low-income households and address community development needs.<sup>28</sup> In addition, some states and localities use mechanisms such as "tax increment financing," which allows local governments to borrow against anticipated revenue from future development to pay for infrastructure improvements that support community and economic development.<sup>29</sup>

• **HUD programs for specific groups.** Several HUD programs target housing and supportive services to vulnerable populations. For example, the Section 202 Supportive Housing for the Elderly program makes interest-free capital advances to support the construction, rehabilitation, and acquisition of buildings that will offer supportive housing for very low-income senior families.<sup>30</sup> HUD also has programs focused on people with disabilities, those living with HIV and/or AIDS, and others.<sup>31</sup>

Public health professionals can work with partners in the housing field to identify decision points where HIA might be particularly useful for protecting and promoting health.

# **Integrating HIA into housing decisions**

Policymakers' and organizations' interest in and use of HIAs to inform housing decisions have grown in recent years. For example, between 2012 and 2014, 17 housing HIAs were completed or underway, up from just one completed between 2002 and 2004. Further, a review conducted by the National Center for Healthy Housing (NCHH), in consultation with the Health Impact Project and the National Housing Conference, identified a total of 40 HIAs conducted between 2002 and 2013 that examined housing-related decisions. (See *A Systematic Review of Health Impact Assessments on Housing Decisions and Guidance for Future Practice* for more information.<sup>32</sup>)

Many of the HIAs in the NCHH review focused on specific housing features, such as home energy delivery systems, or on individual housing programs and policies, such as rental vouchers, affordable housing inspection programs, and local building codes and enforcement. Others addressed housing as part of broader community development proposals, focusing on policies and programs related to the built environment, such as how housing connects to transportation planning or neighborhood redevelopment. For example, the Georgia Institute of Technology's Center for Quality Growth and Regional Development and the Centers for Disease Control and Prevention collaborated on an HIA of the planning process for the Atlanta Beltline—a 22-mile span of freight railway targeted for redevelopment into transit, trails, and parks—and examined the potential impact of the project on property values and available housing choices and quality as well as the health effects that could arise from changes in these conditions. The recommendations included requiring a range of diverse housing types—in terms of cost, size, and ownership vs. rental—establishing policies that would avoid displacing current residents, and implementing programs to support improvements to substandard housing in the community. An article in the American Journal of Preventive Medicine noted that the Atlanta BeltLine HIA was one of the first "to tie specific assessment findings to specific recommendations and to identifiable impacts from those recommendations." <sup>33</sup>

For the most part, those leading housing HIAs have had public health backgrounds and have come from a variety of agencies, such as state and local public health departments, nonprofit organizations, and academic institutions. However, the primary decision-makers have almost always been housing or planning officials. More recently, housing officials have sponsored and led their own HIAs. As noted earlier, the Ohio Housing Finance Agency co-authored its assessment with an academic institution.<sup>34</sup>

As with all policy assessments, having the decision-maker lead the study has both advantages and disadvantages. Being close to the topic can bring valuable knowledge, familiarity with key stakeholders and partners, and insights into the proposals and the underlying context, but public health professionals need to be integral collaborators, offering perspectives on health impacts beyond the housing professional's expertise. The decision of who should lead an HIA will be based on many factors, including capacity and the ability to access the most pertinent data.

Table 1
HIAs Can Inform Housing Decisions at Many Levels

Key programs and policies for low-income housing and opportunities for HIA

Housing program or policy	Description	Opportunity for HIA
Public housing	The public housing program is the oldest form of federally subsidized housing, provides affordable rental housing to low-income households, and is administered locally by about 3,300 public housing authorities (PHAs) across the U.S.	HIAs could inform PHA decisions about admissions and occupancy policies, operating and maintenance policies, redevelopment of properties, and financing structures as well as federal decisions about program regulations.
Housing choice voucher program	The program provides direct financial assistance to low-income households, allowing them to rent on the private market in the neighborhood of their choice, and is administered locally by public housing authorities.	HIAs could inform local decisions about preference policies, which prioritize vouchers for certain populations and determine applicants' placement on waiting lists, as well as the federal appropriations process for and proposed reforms to the program.
Project-based rental assistance (PBRA)	In exchange for a federal subsidy, property owners contract with HUD to provide housing to low-income households for a set period of time.	HIAs could evaluate the potential health effects of proposed plans for individual properties, such as planned new PBRA developments, proposed public housing conversions under the Rental Assistance Demonstration program, or the future affordability of properties with expiring PBRA contracts as well as federal policies, programs, and funding decisions that affect PBRA.
Low-income housing tax credit program (LIHTC)	The LIHTC provides an indirect federal subsidy that developers can use to build or renovate low-income rental housing. Almost all new affordable housing in the U.S. is built through this competitive program.	HIAs could inform the design and development process for LIHTC units or assess the potential health effects of a state's qualified allocation plan.
Code enforcement and inspection policies	These policies ensure that housing is safe for habitation. Code enforcement can either be reactive, such as in response to a resident complaint about substandard housing conditions, or proactive, in which rental units are periodically inspected for safety and compliance.	HIAs could be used when changes are proposed to code requirements or enforcement or to how housing inspections are triggered and conducted.
Zoning and land use policies	Most jurisdictions use zoning policies and ordinances to direct residential development and other land uses and to determine the form or scale of properties.	HIAs could be used to inform large-scale zoning changes as well as individual development proposals.

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HIAs that are co-led by housing officials and public health professionals may prove particularly effective because each sector brings unique and complementary strengths to the process. For example, housing and community development professionals often have experience in community building and stakeholder engagement in the neighborhoods they serve, while public health professionals bring expertise and capacity in data analysis. The Page Avenue HIA team included the nonprofit organization leading the redevelopment along a major thoroughfare in Pagedale, Missouri, and an interdisciplinary group of university faculty and staff with expertise in public health, urban design, community engagement, and other fields.<sup>35</sup>

As housing practitioners become more interested in assessing the health implications of their work, public health professionals may need to design a broader array of tools to facilitate those efforts. Some housing decisions may require a streamlined assessment process while certain project-level considerations of health could become sufficiently routine that conducting HIAs may be unnecessary. For example, practitioners have used the basic principles of HIAs to develop new approaches—such as checklists, guidelines, and simplified frameworks—to ensure that health benefits are optimized during housing and community development decision-making.<sup>36</sup>

# Using HIAs to engage with housing

HIAs create unique opportunities for practitioners, stakeholders, and decision-makers to work together to consider the health impacts of proposed housing actions. Housing professionals understand housing and community development through a specific lens, while public health professionals concentrate on other angles. HIAs can also help enhance community engagement and transparency in housing decision-making by bringing together affected communities, public health and housing professionals, and decision-makers to help ensure that all perspectives and priorities are included.

Many housing agencies do not have the financial resources or public health capacity to conduct an HIA. Partnering with public health professionals as well as public health academics may also present opportunities to pool resources. Public health professionals can engage housing experts and build awareness of the benefits of HIAs in a variety of ways:

- Offer trainings. HIAs are new to many housing professionals. In addition to collaborating with them on HIAs, health professionals can provide trainings targeted to housing and community issues. They also can reach out to development intermediaries such as NeighborWorks America, which trains nearly 11,000 housing and community development professionals annually, or approach other organizations such as Enterprise Community Partners and the Local Initiatives Support Corporation for resources to support housing HIAs.<sup>37</sup>
- Provide public health data and expertise. Local, state, and federal public health professionals have critical knowledge to contribute in identifying potential health impacts of a proposed housing decision and can assist housing professionals is accessing and using agency data systems (e.g., neighborhood health indicators, utilization data from hospitals, and prevalence rates of chronic conditions). Public health professionals may also have the capacity to analyze and map these health data to assist decision-makers and support housing professionals in communicating the benefits of their work. This expertise can supplement housing professionals' own extensive data and resources to create a more complete picture of the potential effects that housing proposals may have on public health and to support the monitoring of health impacts over time.
- Offer testimony. Public health professionals can use HIA findings in expert testimony presented to local, state, or federal officials. For example, an HIA in Flagstaff, Arizona, examined the potential health effects of a local rezoning proposal intended to accommodate new student housing. The HIA found that the proposed

#### One County Uses HIA to Help Families Replace Unsafe Manufactured Housing

In Curry County, along Oregon's rugged southern coast, many families live in poverty, and 33 percent of residents live in manufactured homes that have exceeded their intended life span. Furthermore, 40 percent of the county's manufactured homes are substandard. County officials recognized that families living in older manufactured housing were suffering more frequently from injuries from falls and respiratory conditions such as asthma, but because such housing does not qualify for replacement or repair assistance provided by the U.S. Department of Housing and Urban Development and the state of Oregon, they needed to identify an alternative strategy to address these concerns. They launched a health impact assessment to inform a proposed pilot project called the Housing Stock Upgrade Initiative, which would provide lower-cost loans or other funds to make repairing or replacing a manufactured home more affordable for county residents.

The HIA found that replacing older housing could significantly improve residents' physical and mental health by improving the quality and safety of their indoor environments. The HIA also identified opportunities for local hiring in construction and repair and for employment of new design standards to enable aging residents to remain in their homes longer.

The HIA's recommendations have yielded promising results:

- A strong coalition of state and local organizations is implementing the pilot project.
- Almost 3,000 county residents may be eligible for financial assistance to replace their current manufactured homes.
- Builders of manufactured housing are implementing new design standards.

The HIA was conducted by Curry County, the Oregon Health Authority, Upstream Public Health, and NeighborWorks Umpqua, with support from the Healthy Community Design Initiative of the National Center for Environmental Health at the Centers for Disease Control and Prevention.\*

<sup>\*</sup> To learn more about this HIA, watch the video available at Health Impact Project, "Health Impact Assessment Helps Families Replace Unsafe Manufactured Housing," accessed June 22, 2015, http://www.pewtrusts.org/en/multimedia/video/2015/health-impact-assessment-helps-families-replace-unsafe-manufactured-housing.

development could result in displacement and increased housing costs—which could in turn present a range of physical and mental health risks—for residents in an existing mobile home park and could affect the health of other residents through changes in traffic safety and crime.<sup>38</sup> Members of the HIA team and several community partners cited the findings and recommendations from the HIA in written and oral testimony to the local planning and zoning commission.<sup>39</sup>

- Meet with political and housing decision-makers. HIA practitioners can meet with local, state, and federal officials and legislators to discuss the process, findings, and recommendations. The Aerotropolis HIA team in Atlanta scheduled meetings with stakeholders and decision-makers, including the developer, planners, and officials from the various cities that would potentially be affected by the proposed action; health and environmental officers; and airport representatives.<sup>40</sup>
- **Give public presentations.** Health professionals can present findings to housing and community development groups to illustrate the benefits of using HIAs for proposed actions. For example, findings have been presented at the New Partners for Smart Growth Conference, which brings diverse disciplines together to collaborate on smart growth issues, and local and state community development corporation conferences that address housing and economic development issues.
- **Develop policy briefs, project briefs, and case studies.** HIA practitioners have prepared briefs and presentations for various local and state committees and legislatures. The authors of the North Carolina Zoning/Design and Aesthetic Controls S.B. 731 HIA presented the findings to members of the Town of Davidson's board of commissioners. The authors of an HIA on the proposed redevelopment of the Coffelt-Lamareoux public housing property in Phoenix, Arizona, interviewed several stakeholders to get feedback on the impact of the process, which they featured in a case study. <sup>41</sup>
- Publish HIA findings in peer-reviewed housing and health journals. Publication in the peer-reviewed
  literature, as well as in reports and other venues, can help raise awareness of the utility of HIA. An article on
  the Page Avenue HIA highlighted lessons learned such as the value of flexible, organized, interdisciplinary
  teams and the importance of engaging community stakeholders and decision-makers before, during, and after
  an HIA.<sup>42</sup>
- Learn common housing terminology. Everyone is familiar with the terminology used in his or her own field but often does not understand common terms from other disciplines. For example, in public health circles, "CDC" generally refers to the Centers for Disease Control and Prevention; in housing, it often is shorthand for community development corporations, which can be prime audiences for public health professionals to talk with about HIAs. These nonprofit organizations were created to lead community change efforts and are often affordable housing developers. Public health professionals should consider reaching out to local CDCs and CDC associations at the local and state levels to build support for HIAs.
- Engage in the collection and monitoring of community indicators. Although public health professionals may be involved in this process, housing professionals may not be—or vice versa. Public health professionals involved in community indicator projects can reach out to housing and community development groups and encourage them to participate.<sup>43</sup>
- Pursue joint funding. Both housing and public health organizations are looking for innovative ways to leverage shrinking resources. Shared funding opportunities can help catalyze or solidify partnerships between the two sectors.

#### Conclusion

Although public health professionals may not be able to get involved in every housing policy change, they can help ensure that health is considered in those decisions by building stronger relationships with professionals in the housing sector. Collaborating on housing HIAs and supporting efforts by the housing community to improve construction and design of buildings and neighborhoods will maximize positive health impacts and minimize the negative ones that are so prevalent in communities across the country.

Like public health agencies, housing and community development organizations face significant resource constraints and are subject to a complex array of federal, state, and local laws and regulations. HIAs can help them navigate these challenges by building support for well-planned projects, allaying community concerns, and streamlining the way health concerns are integrated and addressed. Through the use of HIA, the two sectors can build collaborations that leverage their unique assets toward their shared goal of improving community health and quality of life.

#### Selected Resources

**National Low Income Advocates Guide**. The National Low Income Housing Coalition provides a description of major federal housing programs along with their annual funding allocation (http://nlihc.org/library/guides).

**QAP Analysis: Green Building Criteria in LIHTC Programs**. Global Green produces a biannual analysis of the environmental building criteria included in state qualified annual plans. See http://static1.squarespace.com/static/5548ed90e4b0b0a763d0e704/t/55520ec5e4b0b1995caa0f9c/1431441093899/2013QAP\_FINAL.pdf.

Planning for Healthy Places With Health Impact Assessments. The American Planning Association and the National Association of County and City Health Officials offer an online guide to HIA along with training at http://advance.captus.com/planning/hia2/home.aspx.

**Georgia Tech Built Environment and Public Health Clearinghouse**. The Georgia Institute of Technology catalogues a range of in-person, one- to five-day HIA training courses. Visit http://bephc.gatech.edu/hia/professional/inperson.

**Enterprise Green Communities**. The 2015 Green Communities Criteria strengthen and expand the organization's guidelines for consideration of health. They draw upon the principles of HIA and integrative design to outline ways that architects, designers, and developers can consider the connections between their work and public health (http://www.enterprisecommunity.com/criteria).

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**EPA Smart Location Database**. This database summarizes approximately 100 different indicators associated with the built environment and location efficiency that can help inform quantitative analyses in HIAs. Indicators include density of development, diversity of land use, street network design, and accessibility to destinations as well as various demographic and employment statistics. Most attributes are available for all U.S. census block groups (http://www2.epa.gov/smartgrowth/smart-location-mapping).

**Health Impact Project**. A collaboration between the Robert Wood Johnson Foundation and The Pew Charitable Trusts, this project is designed to promote and support the use of HIAs as a decision-making tool. The project maintains an interactive map and database of completed and ongoing HIAs in the U.S. as well as other resources at http://www.healthimpactproject.org.

**Human Impact Partners.** This nonprofit organization offers an array of tools and resources for new HIA practitioners at http://www.humanimpact.org.

**NeighborWorks America**. This organization offers health-related resources, including videos, training resources, and data tools, to support the community development field in creating healthy homes and neighborhoods. Visit http://www.neighborworks.org/Community/Health.

**UCLA Health Impact Assessment Clearinghouse**. Created by UCLA's HIA Project, with funding from the Robert Wood Johnson Foundation, the clearinghouse has a database of U.S. HIAs, including a summary of each assessment and links to background information on the health topics addressed and methods used. Visit http://www.hiaguide.org.

**San Francisco Indicator Project**. The project is a system of indicators for livable, equitable, and prosperous cities. The site provides a list of case studies, including projects that adapted the indicators or the associated Healthy Development Checklist for use in their HIAs. Visit http://www.sfindicatorproject.org.

**Society of Practitioners of Health Impact Assessment (SOPHIA)**. SOPHIA is a membership network of HIA practitioners that provides HIA resources and reports, journal articles, other publications, and links to HIA courses and workshops on its website: http://hiasociety.org.

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# For further information, please visit:

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**The Health Impact Project,** a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts, is a national initiative designed to promote and support the use of HIAs as a decision-making tool. The project works with government agencies and policymakers to help them implement HIAs; partners with foundations to fund HIAs; provides training and technical assistance; conducts research and policy analysis to support the field; and convenes the National HIA Meeting. The project also partners with foundations to guide and support regional HIA initiatives and collaborates with government agencies and nonprofits around the United States to find practical ways to build health into decisions.