

HOUSING HAZARDS AND HEALTH STAKEHOLDER BRIEF SERIES

Brief 1 of 3

Gaining Community Health Allies for Healthy Homes Programs

Introduction

THIS IS THE FIRST in a series of three briefs about building stakeholder engagement in healthy housing efforts. This series is intended to share lessons learned from municipal-level healthy housing efforts. This brief focuses on ways to engage local health stakeholders, including public health departments, health systems, health-focused community groups, and insurers. The second brief discusses partnerships with other community interests (Aligning Housing Quality with Diverse Community Interests). The third brief (Building Governmental Support for Healthy Housing) focuses on ways to engage policy makers and key staff in relevant agencies to support innovative housing quality practices. It also addresses strategies for promoting collaboration with other agencies and levels of government in support of these efforts.

Overview

THIS BRIEF DISCUSSES:

Identification of potential health-related stakeholders who may become partners in housing quality initiatives and assess how to engage them.

Strategies for harnessing data from the health sector to help make the case for housing policy changes.

Opportunities for diverse health interest to promote, develop, and evaluate policies and programs to support healthy housing.

KEY TAKEAWAYS:

- Housing is a key factor affecting community health: There are many reasons for cities to promote housing quality, including neighborhood stability, addressing racial disparities, economic development, and housing values. The impact of housing hazards on health – particularly for communities of color affected by racially discriminatory policies and for vulnerable populations – is another compelling reason to improve housing quality. Assuring that all residents can access housing that supports their health advances many other community goals.
- 2. Engaging health interests can build wider support for housing quality improvements: Health is a value that cuts across political, social, and cultural lines. Health stakeholders can be particularly persuasive allies in promoting housing quality improvements and are often respected community voices because of their institutional, financial, and social standing in the community.
- 3. Leveraging public health and health care data can help "make the case" for improving housing quality: Many health-related organizations collect, analyze, and research data on health that can be linked to housing conditions (e.g. location of asthma patients, rates of lead poisoning, identifying individuals who make frequent trips to emergency rooms, etc.). Leveraging this type of information can connect housing quality to health in specific neighborhoods and for particular subpopulations such as residents of color. Health data can inform housing interventions that improve the health of vulnerable individuals and ultimately reduce costly chronic diseases.

The Case for Healthy Housing

Factors like housing, education, employment, and environmental quality all contribute to people's health and well-being. These factors vary between communities and contribute to wide differences in life expectancy, even between adjacent neighborhoods within the same city. Poor health is often concentrated in zip codes that lack access to quality housing, schools, jobs, and safe environments. Municipalities, in collaboration with key partners, can play an important role tackling racial disparities and improving health equity by addressing these factors.

Cities play an essential role in promoting access to quality and affordable housing through policies, programs, and practices.^{1 2 3 4} Failing to provide safe housing for residents often creates health costs for the whole community. Deferred maintenance can further undermine the city-level tax base and erode the financial stability of a community. Therefore, efforts to address housing affordability and quality need to be carefully coordinated.



Housing, Health, and the Covid Pandemic

The COVID-19 pandemic has exacerbated exposure to existing housing hazards, adding a new sense of urgency for housing programs across the country. When people are expected to "shelter at home," they are that much more exposed to environmental hazards in their houses including mold, pests, and lead hazards. These hazards are most common in the homes of lower-income families, and are most dangerous to children and those with preexisting conditions like asthma or Chronic Obstructive Pulmonary Disease (COPD). Job losses and economic hardships may lead to more crowding in homes, which additionally burdens marginal housing situations and increases potential for transmission of the virus. At the same time, landlords' ability to make repairs and conduct maintenance – as well as municipal code inspectors' ability to check on conditions - is hampered by restrictions on entering homes. Some municipalities are developing innovative approaches, such as remote or virtual inspections, to address these problems. The economic impacts of the pandemic affect many property owners' financial ability to make repairs, renters' ability to afford decent housing, and municipalities' budgets for housing grants, inspections and enforcement. These effects are likely to outlast the pandemic itself. These combined effects highlight the health consequences of housing quality, the disproportionate impact of housing quality on vulnerable populations, and the need for creative, cost-effective, and targeted policies to address them

Identifying and Assessing Local Health Stakeholders

A wide range of health stakeholders have diverse interests, capacities, and constraints in promoting housing quality. It is also important to remember that the structure, operation, and incentives of these stakeholders vary from one city to another. Here are some things to consider when preparing to engage health interests in housing quality efforts:

- Health systems: Hospitals, clinics, and private practices have varied business models and are organized differently in different cities. Not-for-profit and academic medical centers are required to provide 'community benefits' as part of their tax exempt status.⁵ An increasing number of health systems are engaging with housing efforts as part of their community benefit obligations and incentives in their payment systems that reward them for avoiding hospitalizations.
- Individual health care professionals: Health professionals are trained to provide health care when people are sick. Many recognize the role of housing in health and want to help. However, they seldom have the training, time, or capacity to address housing hazards during regular patient visits. A growing number of programs aim to support healthcare professionals' ability to identify patients facing home hazards and refer them to resources for help.⁶
- Health insurers: Private health insurers may be interested in reducing housing-related diseases, particularly those with near-term health outcomes like asthma. In some cases, insurers have funded efforts to assess and even remediate housing hazards.⁷ ⁸ However, their interests are usually focused on people they serve, not the entire population. Some of the most well-developed initiatives to support home interventions have been implemented for children with asthma⁹ enrolled in state Medicaid programs.
- Public health agencies: The structure, funding, and functions of public health agencies vary from place to place. Public health departments may be organized at the city, county, regional, or state level.¹⁰ Many public health agencies include environmental health programs staffed by educators and housing inspectors (sanitarians) who have expertise in housing hazards, particularly lead, mold, and pests. Health departments often use Community Health Assessments (CHA) to inform their Community Health Improvement Plans (CHIP).¹¹ Integrating housing into the local CHA and CHIP can support public health agencies' involvement.

- Health researchers and data analysts: Some communities are home to academic institutions with faculty involved in public health analysis and research. Local experts who can speak about particular aspects of healthy homes or simply summarize the state of knowledge in the field can be very helpful. The main constraints to engaging researchers are time, limits on individuals' expertise, dedicated funding, and restrictions on advocacy (See "I want to help, but...I can't advocate").
- Health-focused community groups: In many communities, local groups (or local branches of national groups) focus on particular diseases, conditions, or vulnerable populations. For example, many groups that focus on childhood asthma, birth outcomes, lead poisoning, or injury prevention recognize the importance of housing quality to achieving their goals.

I want to help, but... I can't advocate"

Health stakeholders often express concerns about being perceived as "advocates." In some cases, this simply refers to a concern that engaging in policy may damage their professional reputation. In other cases, health professionals are legally restricted from engaging in certain kinds of advocacy. For example, IRS rules restrict lobbying by 501(c)3 non-profit organizations. Many people are not familiar with the details of these rules, and therefore may misjudge the kinds of activities that are allowed. For instance, lobbying on specific legislation is restricted, but not about issues. Beyond these legal rules, individual institutions may limit how their employees engage in policy processes. It is important to understand experts' concerns about advocacy, make sure they are comfortable with their roles, and identify those who are able to engage more actively in policy processes. A full understanding of individuals' concerns and limitations often clarifies ways that they can share their knowledge without jeopardizing their professional standing.

For more information on federal laws related to lobbying by non-profit organizations, see: https://www.afj.org/our-work/bolder-advocacy/

With changes in how healthcare is financed (from payment for procedures to payment for outcomes), health systems have increased incentives to reduce the burden of disease among their patients (See **Health System Involvement In Housing Programs**). At the same time, it is important to note that the way health improvements are measured may not directly incentivize health systems to engage in housing hazard reduction due to limited housing-related data, lack of metrics for associated health conditions, and the patient-focused nature of health care. For example, much of childhood lead poisoning is clearly preventable through housing improvements. However, lead poisoned children seldom incur significant short term health care costs. Rather, the health costs of lead accrue over the entire lifespan. Close collaboration is necessary to identify and harness institutions' financial incentives to improve housing quality.



Health System Involvement in Housing Programs

Health care systems' efforts to promote safe and affordable housing have expanded under the Affordable Care Act, which requires not-for-profit hospitals (including academic medical institutions) to provide "community benefits." Some community benefits programs focus on housing, mostly with a focus on affordability, stability, and preventing homelessness (e.g. "Housing First").¹² These efforts may also be financed through health insurance providers. A few examples that relate to housing quality include:

Medical-Legal Partnership (MLP): A growing number of hospitals host "Medical-Legal Partnerships," which employ lawyers and other staff to identify patients' needs that may have a legal component. Much of their work relates to housing, including applying for housing assistance, connecting with code enforcement, and preventing shutoff of electric and water utilities.¹³

Health insurance reimbursements: Health insurers increasingly recognize the role of home interventions in preventing and managing health conditions.¹⁴ Some insurers are able to reimburse costs for homebased education, assessment, and in some cases physical interventions, particularly for asthma and lead poisoning prevention. The most significant initiatives have been implemented through Medicaid, but private health insurers have also been involved. For example, since around 2002, Kansas City Children's Mercy Hospital has allowed doctors to "prescribe" a home assessment for children when they believe home hazards could compromise their health.

Social impact bonds – pay for success: Health systems or insurers may partner with housing groups to finance construction of high-quality, affordable housing or improvement of housing conditions in existing housing in order to meet pre-determined health outcomes, such as reductions in asthma rates.¹⁵

Given their diversity of interests, capacity, and constraints, different strategies are needed to engage various health stakeholders. Housing hazards may or may not already be a priority for health stakeholders. At a high level, health stakeholders are likely to support efforts to reduce housing hazards, simply based on their professional commitment to promoting health. However, some health leaders may share the common concern that policies designed to improve housing quality will increase the cost of housing, contributing to homelessness, stress, and financial strain among their patients. Sharing national data about healthy housing with local health stakeholders can help them appreciate how housing relates to their goals, and can encourage them to prioritize providing relevant local data and other resources in support of healthy housing efforts.



CITY CASE STUDY: ROCHESTER, NY Health Partners Inform, Promote, and Evaluate Rochester's Lead Law

The City of Rochester, New York passed a groundbreaking lead law in 2005. A wide range of health partners informed the community-based Coalition to Prevent Lead Poisoning (CPLP), helped build community support to pass the law, and remained active in the law's implementation. These included:

CPLP signaled their commitment to base policy recommendations on the best available science by establishing a Science Committee, asking health care professionals to contribute to "FAQs" on the state of the medical research, and promoting the health department's Needs Assessment that detailed the extent of the problem in Rochester.

Pediatricians told stories about their lead-poisoned patients to City Council, reporters, and community leaders. One doctor shared his sense of helplessness watching a child's blood lead levels climb, and having no tools to prevent further poisoning because he couldn't address lead hazards in the child's home. This helped frame lead as "health problem with a housing solution."

A resolution passed alongside Rochester's lead law required the city to obtain annual data from the county health department on where lead poisoned children lived. This information was used to regularly update the ordinance's "high risk area." Along with annual reports on city inspection outcomes, this data informed several revisions to the original law.

University of Rochester researchers, non-governmental organizations, and local government staff partnered on a series of studies to evaluate the impacts of the lead law. The resulting publications informed national policy, shared the model with other cities, and provided documentation of the law's success.

Every year since the lead law passed, the county health department, city, and CPLP have held a joint press conference to release the past year's lead poisoning numbers. This annual celebration of success and documentation of additional work needed helps sustain public support for the law.

The local health department analyzed data on the number of children with elevated blood lead levels over time in comparison to other upstate New York counties. Results showed a 2.4 times faster decline in lead poisoning in Rochester, offering the most conclusive evidence available that the local lead law was working.¹⁶

For more information, see: <u>https://cityofrochester.gov/lead</u>, <u>https://theleadcoalition.org/</u> https://pubmed.ncbi.nlm.nih.gov/24512864/ It is important to understand existing partnerships, relationships, competition, capacities and constraints as a foundation for a comprehensive health stakeholder engagement strategy. Ideally, health systems can come together to spur housing investments across service areas that can benefit residents' health and the health systems' bottom line across the city/region.

CITY CASE STUDY: MINNEAPOLIS, MN Mapping Lead in Minneapolis

The Minneapolis, MN health department has received multiple Lead Hazard Control grants from HUD over the past 20 years. Because the lead grant program was housed in the health department, they were able to target grants to the homes of children with elevated blood lead level. To help the public appreciate the impact of lead on their community, the health department mapped the number of kids who had elevated blood lead levels (EBL) at block level over time.

As City of Minneapolis Health Department Environmental Services Manager Lisa Smestad said, "people could do the math of how many kids on their block were poisoned and think, 'I KNOW those kids!' You could see the wheels spinning as they realized 'oh, that is how we have been affected.' The health department has also partnered closely with the housing department, for example by conducting joint inspections to share their expertise on lead.

Collecting, Analyzing, and Sharing Health Data

One of the most powerful resources that health stakeholders can contribute to healthy housing efforts is information about the community's health. Health stakeholders often have information that can clarify the extent, location, distribution, and costs of the health consequences of housing hazards. These include individual, community, and health system costs, short and long term costs, and both direct and indirect costs. Health stakeholders may be able to share data, conduct analyses, and communicate this information in a credible, clear, persuasive way that can garner additional support.

SOURCES AND TYPES OF HEALTH INFORMATION

Health data can help identify needs, design solutions, and evaluate interventions. It is often helpful to partner with health institutions to use their information in ways that both protect privacy and inform the policy process (see **HIPAA and privacy concerns).** A good starting point is to work together to identify what data may be relevant to housing policy debates. Some of the key health outcomes that have been closely tied to housing hazards include:

LEAD POISONING: Childhood lead poisoning can often be traced directly to housing conditions (deteriorated paint, dust, and bare soil in pre-1978 housing).^{17 18 19} Overall, housing may account for nearly three-quarters of childhood lead poisoning, even higher for children living in poorly-maintained older housing.^{20 21} Lead poisoning cases are usually tracked by local or state health departments, which in most states are responsible for visiting lead poisoned children's homes to identify and mandate repair of lead hazards. Therefore, health departments usually have data on rates of lead poisoned children and where they live. It is important to remember that this data only includes children tested for lead; if testing rates are low, this data may significantly underestimate the number of affected children. Nonetheless, it is generally helpful in identifying the highest lead-risk neighborhoods.²²

ASTHMA: Experts estimate that of a third of asthma may be related to home-based triggers²³ ²⁴ ²⁵ ²⁶ including secondhand smoke, pests, pets, and mold. Home visits and inspections can often link specific housing hazards to an individual asthmatic's disease. Analysis of emergency department data may identify neighborhoods – or even buildings - with the highest rates of people with uncontrolled asthma and where housing quality may be contributing to higher rates.

BIRTH OUTCOMES: Birth outcomes including pre-term birth, low birthweights, and infant mortality are linked to a wide range of housing-related factors, including overcrowding (which may lead to co-sleeping), stress, and mold.²⁷ ²⁸ ²⁹ Some birth outcome data (like birthweight) are usually available as part of the birth records maintained by the state health department. Geographic analysis of birth outcomes is often used as an overall indicator or neighborhood conditions that can affect health, including housing.³⁰ ³¹ Low birthweight and pre-term birth, in turn, are associated with many long-term health problems.

CHRONIC DISEASE: Obesity, high blood-pressure, diabetes, and other chronic diseases are not known to be directly caused by housing hazards. However, poor quality housing may make these conditions worse. For examples, individuals with diabetes may be at higher risk than are healthy people from living in non-air conditioned homes during heat waves.³² People with heart or lung disease are more susceptible to poor indoor air quality.^{33 34} Knowing where people with higher rates of chronic disease live can help prioritize where to target housing quality improvement programs.

HIPAA and **Privacy** Concerns

The Health Insurance Portability and Accountability Act (HIPAA) of 1996 established a framework that health systems, insurers, public health agencies, and healthcare providers ("covered entities") must follow to protect individually identifiable health information. This law may limit health stakeholders' ability to share information about their patients. However, it is often possible to "deidentify" information – for example, by removing individual information, addresses, or summarizing over time – in ways that still show powerful connections between housing and health. Working closely together can help housing policy and health interests find ways to share data in ways that are both useful and HIPAA-compliant.

For more information, see: <u>www.hhs.gov/hipaa/index.html</u>

The body of healthy homes research suggests that housing interventions that are comprehensive (i.e. address multiple hazards), targeted at the riskiest housing, and aimed to protect vulnerable residents are most likely to result in significant improvements in long-term community health. ³⁵

Home Hazards and Vulnerable Populations

When resources are limited, cities may focus on addressing home hazards in the homes of the most vulnerable residents and communities. But who is most vulnerable? In addition to the physical concentration of hazards in certain neighborhoods, some areas may have higher concentrations of individuals who are more susceptible to certain home hazards.

Children: Environmental hazards in the home are a significant risk for many children. For example, young children's behaviors make them more likely to be exposed to hazards like lead, and can suffer lifelong consequences from early exposure to such hazards.

Older adults: Older adults are particularly at risk for trips and falls in their homes. In addition, they are more likely to have other health conditions like diabetes, heart disease, or respiratory disease that can be worsened by poor-quality housing.

People with pre-existing health conditions: Many chronic diseases make people more vulnerable to environmental exposures like poor indoor air quality, extreme temperature variations, and physical hazards.

Lower-income residents: Poverty is not by itself a risk factor for home hazards. However, lower-income people are more likely to live in hazardous housing, to have other health conditions that put them at greater risk, and to lack resources to cope with hazards in their homes contributing to more significant health risks over time. **Recent immigrants and refugees:** New Americans face disproportionate housing risks for a variety of reasons. Limited English proficiency and unfamiliarity with local organizations can be barriers to accessing resources. Some may be concerned about legal issues involving immigration status, etc. if an inspector enters their home or if they ask for assistance.

People of color: Black and Latinx families are more likely than white families to live in substandard housing located in neighborhoods with long legacies of disinvestment. Longstanding housing policies, housing discrimination, and structural racism have created persistent inequities in many cities. Racial disparities in housing contribute to inequities in socio-economic, educational, and public health outcomes for communities of color. Addressing both the root causes and resulting patterns of housing inequity is a crucial part of cities' antiracist and equity-promoting efforts.

ANALYSIS OF LOCAL HEALTH DATA

Stakeholders often seek to "do research" to establish a foundation for policy change. However, because the connections between housing and health are complex, it is seldom possible to conduct rigorous research that can show a definitive cause and effect relationship between local housing conditions and individuals' health outcomes in a given community on a time scale that can inform policy. Fortunately, there is a growing body of medical, housing, and policy research that shows the health benefits of housing quality improvement efforts. Analysis of local data can play an important role in showing how these well-established dynamics of cause and effect play out in local neighborhoods and populations.

Specific types of data analyses that have been helpful in several communities include:

MAPPING HEALTH OUTCOMES: Showing the rates of health outcomes associated with housing problems by neighborhood is often helpful to identify who is currently bearing the greatest burden.

DISTRIBUTION BY RACE AND INCOME: Because of the segregation and economic disparities in many cities, geographic analysis of health outcomes often follow these same patterns. Mapping and quantifying the disproportionate burden of health problems by socioeconomic status can mobilize community groups and help leaders relate these problems to other challenges faced by these same populations.

CHANGE OVER TIME: Analyzing trends in disease over time can add a sense of urgency to addressing an issue, particularly if rates are increasing in certain populations. Establishing a baseline against which to measure future progress is also important.

CITY CASE STUDY: GREENSBORO NC City, Community, Health Care and University Partners for Healthier Housing

The Greensboro Housing Coalition (https://www.greensborohousingcoalition. org/) has worked for many years to build community engagement in efforts to improve housing quality. GHC has partnered with researchers the University of North Carolina at Greensboro' Center for Housing and Community Studies, the Triad Healthcare Network and Cone Health to use health data to identify and remediate hazardous housing. As GHC Executive Director Josie Williams said, "Cone Health mapped the connections between asthma and housing, that was really helpful.

When City Council first saw this information, that was really enriching for them because it was presented by a health care provider. That got people's attention." Troy Powell, Manager of the Greensboro Code Compliance Division, summed up his experience: "The biggest thing that helps us be successful is communication, being data driven, and having compassion for people in the home. That has brought in the partners."

Calculating the Health Benefits of Fixing Home Hazards

Many health problems are caused or worsened by a wide range of housing conditions. For many conditions, it is hard to know how much housing contributes to overall disease or how much it would cost to prevent them. However, a growing literature suggests that investing in housing quality can yield a high return in savings from health improvements.

Lead poisoning is associated with multiple direct costs, including medical care and management, special education, and criminal justice. Many studies have estimated these costs. Economists have estimated how children's loss of IQ from lead can reduce their future earning potential over their lifetime. A recent study estimated these and other costs to be \$84 billion per year in the U.S. ³⁶ Altara has published a lead cost calculator locals can use to calculate these costs for each state, including benefit to cost ratios for addressing different sources (ValueofLeadPrevention.org).

Asthma results in measurable medical costs, most significantly when asthmatics must visit the emergency department or be admitted to the hospital. The calculated return on investment for home asthma interventions ranges to \$5.3 to \$14 per dollar spent on home-based prevention. ³⁷

Trips and falls in the home can lead to costly injuries, particularly for seniors. The CAPABLE program has found that under \$3,000 in interventions including home safety repairs in the homes of older adults saved around \$10,000 per year in Medicaid costs. ³⁸

COST ESTIMATES: Some of the health conditions associated with housing hazards – particularly asthma and other respiratory conditions – are known to contribute significantly to short-term medical costs (e.g. emergency department visits). Thus, local hospitals or public health agencies may be able to estimate real-time costs of certain hazards. Others (like lead's effects on long-term cardiovascular health, educational outcomes, or lifelong earning potential) may not be immediately evident, but can be calculated based on models developed elsewhere.

Analyses of local health data can be important at many stages of the policy process. Early on, simply identifying the rates and distribution of disease in different communities can help put housing quality on the agenda of local groups and political leaders. As decisionmakers consider alternative solutions, this information can be helpful to guide targeting of policies to efficiently, equitably, and effectively address the problem. As policies are implemented, these same kinds of analyses can help evaluate programs' successes, identify gaps, and reveal needs for additional action.

It is important for health stakeholders and decision makers to partner closely to ensure that the analyses produce useful and actionable results. For example, working together to determine whether analysis at smaller census data levels (e.g. block, block group, tract) is more useful can magnify the impact of these analyses. Analysis at a lower geographic scale may require combining data from several years to avoid health privacy concerns.

It is also important to clarify whether connecting health outcomes to housing hazards in particular homes is essential, versus characterizing overall housing quality in certain neighborhoods. The latter is usually more feasible and can be meaningful for policy interventions, but health researchers may be inclined toward determining causality on a unit-by-unit basis. These examples show why maintaining a close partnership between health data providers and municipal/community users throughout the process is essential to making sure that analyses are framed appropriately to inform decisions.

СІТҮ CASE STUDY: CINCINNATI, OH Connecting Housing Code Violations with Asthma Hospitalizations

In 2014, researchers from Cincinnati Children's Hospital Medical Center published an article in a well-respected health policy journal based on their analysis of children's health and housing conditions in local neighborhoods. ³⁹ They used computer mapping to explore whether there were associations between housing code violations and children's health.

They found that children hospitalized for asthma were 1.84 times twice as likely to be re-hospitalized or to return to the emergency department within 12 months if they live in census tracts with the highest rates of housing code violations versus those with the lowest housing violations.

The researchers suggested that such analyses connecting data about housing and health outcomes could help target both housing and medical interventions to the populations that need them most. More recently, the research team identified a cluster of hospitalizations of children with asthma who lived in a certain housing complex that was in deep disrepair. The researchers notified the city and Legal Aid, who then worked together to address hazards including mold and pests in those buildings.

Leveraging Health Interests for Policy Change

Health stakeholders can be credible, persuasive and unifying voices when they share their knowledge with political leaders and the public. On an ongoing basis, they can be key partners in tracking progress of policy or programmatic changes. As well, engaging health stakeholders may encourage them to take a more direct role in housing improvements, helping to grow and sustain municipal efforts.

SHARING KNOWLEDGE ABOUT HOUSING AND HEALTH

Many health stakeholders welcome opportunities to share what they know to help improve the conditions in which their patients live. Other individuals may need coaching on how to communicate effectively within the political arena, and yet others may decline to do so because they have real or perceived restrictions on engaging in advocacy (See **'I Want to Help, But I Can't Advocate**''). Here are several examples of ways health stakeholders can share their knowledge:

TELLING STORIES: individual stories can be very impactful. Individual health care providers can share de-identified stories about patients whose health problems are clearly connected to housing conditions. Or, they may rely on their accumulated experience seeing multiple patients over time with similar situations. Roles for health stakeholders may include writing editorials, engaging with the media, or speaking directly with key decision-makers.

PRESENTING ANALYSES OF LOCAL DATA: Applied research on local housing-health relationships may be published in highly regarded academic journals, which can promote awareness and boost credibility, but may not be accessible to decision makers and the public. Health stakeholders may help produce press releases, web pages, "Frequently Asked Questions" (FAQs), and reports/working papers that are more locally impactful.

SUMMARIZING WHAT IS KNOWN - MEDICAL LITERATURE, PROFESSIONAL

KNOWLEDGE, AND STATE OF THE EVIDENCE: Especially in cases where local data connecting housing and health are not available, health stakeholders can often make valuable contributions by summarizing experts' current understanding based on research done elsewhere. It is important to remember that health care professionals' reputations – both within their institutions and the public – depend on being objective about what is scientifically well-established and what is still unknown. Engaging health experts as credible local voices for the "state of the evidence" can be useful to making a strong case. Working together to define appropriate roles over time is key to sustaining their engagement.

EVALUATING HEALTHY HOUSING EFFORTS: Health stakeholders can play important ongoing roles after policies are implemented. The same approaches used to analyze current health outcomes can be applied to evaluating the impacts of policy changes. For example, regularly tracked data like the number and location of children with elevated blood lead levels or visits to the emergency department for asthma can be analyzed over time to see if these trends are changing. Similarly, sharing stories with the media about how individual patients were helped by new programs can contribute to sustaining support. It is important to consider the long-run potential for partnerships with health stakeholders in policy evaluation, for example by seeking commitments to fund long-term evaluation, building data collection and sharing requirements into policies, and setting up advisory councils to sustain their input over time.

SUSTAINING SUPPORT: As noted above, there are more and more examples of health systems contributing directly to housing improvements (See **Health System Involvement In Housing Programs**). Partnering with health stakeholders may increase their interest in housing quality. This may eventually lead to direct support for housing improvement, for example by institutionalizing referrals, data sharing, or providing financial support.

Conclusions

A primary goal of efforts to address housing hazards is to improve residents' health, particularly for vulnerable populations who live in lower-income neighborhoods. Because health is such an important community value, highlighting health outcomes and garnering the support of health stakeholders can be very helpful.

ABOUT THIS PROJECT: With generous support from The JPB Foundation, the National League of Cities (NLC) is working to advance city-level approaches and practices surrounding the health impacts of poor housing quality. The goal of this project is to support city leaders to implement effective policies, practices and programs and to engage local partners to ensure access to safe, stable housing for all residents.

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