Housing and health

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History
Investments in housing and neighborhood conditions can have significant impacts on health and reduce healthcare costs. Public health practitioners have long noted the connection between housing and health. In 1842, Edwin Chadwick published his path-breaking Report on the Sanitary Conditions of the Labouring Population of Great Britain, which identified a link between poor living conditions and disease. Progressive reformers in the United States fought to improve the sanitation and ventilation of...
crowded tenements at the end of the 19th century. In the 1930s, members of Congress highlighted public health as a central justification for the federal public housing program. Yet somewhere along the way, public attention to the links between housing and health waned.

This was not for a lack of research. This brief summarizes rigorous research showing that housing and neighborhoods shape many dimensions of health, from injury to respiratory ailments, obesity, and mental health. It further outlines how local governments can improve health outcomes through housing and neighborhood investments and policies.

There are at least five aspects of housing that shape health outcomes: housing conditions, affordability, stability of tenure, neighborhood assets, and on-site services. This brief provides only a cursory review of the evidence of health impacts of housing, but the studies listed below provide a more thorough summary.

**Housing conditions**

Over the past few decades, the quality of housing in the United States has risen considerably, while the incidence of physical deficiencies has fallen. People in the United States are living in larger and less crowded homes with fewer physical deficiencies. But many households, especially poor households, continue to live in homes that are in very poor condition. Children are particularly vulnerable. The physical condition of housing affects the risk of injury, while environmental toxins in a child’s home, such as mold or lead paint, can cause diseases and disabilities. Poor housing conditions may also cause stress and drain resources as residents need to spend more time and money addressing deficiencies. The strongest evidence on health impacts concerns the presence of toxins like lead paint, the lack of adequate heating, and the absence of key safety features like window bars in apartment buildings. Research also shows an association between children’s asthma and exposure to allergens, such as dust mites, mold, and cockroaches. Finally, one recent study finds that children who move to less crowded housing experience improvements in overall physical health, according to surveys of parents.

High-quality housing is especially critical for older adults, in part because they spend more time at home than other age groups, and because they are more vulnerable to injuries and falls. Recent research shows that older adults living in accessible housing are significantly less likely to suffer injuries from falls.

The management of housing is as important as housing quality in shaping health
outcomes. Good managers can quickly address any structural problems that may jeopardize health and safety, such as leaks, darkened stairwells, or broken banisters. Managers can also set and enforce clear rules to restrict behaviors, such as smoking, that pose health risks to neighbors.

**Take Action**

**Reform housing code rules and enforcement.** Some of these improvements can be achieved through strengthening both the substance and enforcement of regulations. The 1978 federal lead paint ban led directly to well-documented improvements in both the quality of housing and children’s health. Local regulations matter, too. For example, installing relatively inexpensive window bars on apartment buildings in New York City reduced fall-related deaths among children by an estimated 47 percent. Other regulatory efforts focusing on physical deficiencies are also likely to produce health benefits that outweigh their costs, especially for homes occupied by very young children and older adults.

An example of a recent regulatory reform undertaken by the New York City Council was with regard to the provision of adequate heat in multifamily buildings. The legislation enacted in May 2017 requires owners to maintain a minimum inside temperature of 68 degrees Fahrenheit whenever the outside temperature falls below 65 degrees.

Policymakers should recognize that building and housing regulations can, in some cases, increase housing costs and even lead to evictions, with not all of them necessarily leading to health improvements. This is especially true in the case of density restrictions. Most cities in the United States impose minimum unit sizes, dictate the number of occupants who can live in a housing unit, and restrict the number of dwelling units that can be constructed on a lot. Though these regulations may reduce crowding and neighborhood density, their impact on health is unclear – especially in an era when infectious disease is controlled primarily through immunization. Meanwhile, such regulations raise costs by inflating housing unit sizes on a limited supply of land. Such increases in housing costs may leave people with fewer resources to invest in other health-enhancing goods and services.

**Incentivize good management practices.** Housing officials should consider offering or supporting training programs for housing managers to help them effectively address both building maintenance and social issues such as chronic health problems. Housing officials might also incentivize management practices that can enhance health, such as reducing exposure to pests like mice and cockroaches, which are associated with asthma attacks, or adopting rules like banning smoking. The U.S. Department of Housing and Urban Development (HUD) has encouraged managers of
subsidized housing to adopt an integrated pest management model. Additionally, HUD banned smoking in public housing nationwide in 2016, referencing a Surgeon General report on the long-term impacts of second-hand smoke on respiratory health.

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**Boston public housing: partnerships & policy advances**

The Boston Housing Authority (BHA), looking to improve respiratory health, partnered with local universities and agencies to form a collaborative known as the Healthy Public Housing Initiative (HPHI). Since 2001, the collaborative group has developed and administered a series of healthy housing initiatives focused on improving resident respiratory health and building conditions in selected Boston public housing developments.

HPHI’s first initiative sought to implement an integrated pest management (IPM) intervention in 44 pest-infested apartments occupied by 57 asthmatic children. Elements of an IPM intervention include, but are not limited to, educating and assisting residents with the IPM process, actively treating and preventing infestations, sealing of holes and cracks, and regular deep cleaning with high-grade products. A pre- and post-study was conducted that included monthly standardized interviews with residents over the course of a year to capture data on the change in asthma symptoms, caretaker quality of life, doctors’ visits, and hospitalizations for asthma. The study found that residents of the 44 homes reported reduced allergen loads after IPM was implemented. Over the same period, asthmatic children in those homes displayed fewer asthma symptoms. The researchers concluded that resident participation was integral to the successful implementation of IPM.

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**Affordability**

Research shows that severely cost-burdened renters spend less each month on food and healthcare than do other renters with similar incomes that are not cost-burdened. Additionally, low-income households that face higher heating costs, typically because of colder than expected weather, spend less on food. Compounding the consequences of a lack of attention to physical well-being, the stresses associated with living in unaffordable housing could undermine mental health. More generally, other research shows that higher incomes improve children’s health, holding other factors constant. It
follows that affordable housing may improve health outcomes by increasing disposable income and freeing up resources for nutritious food, health care, and other critical expenditures that improve health.

**Take Action**

**Support place-based subsidized housing or tenant-based housing subsidies.** Subsidized housing can improve health, most directly through enhancing affordability and security. Recent experimental research suggests that rental subsidies improve the quality of homes that families occupy while allowing them to reduce their housing costs, therefore lowering their chance of becoming homeless and increasing the money they have to spend on other needs. All of these impacts are likely, in turn, to enhance health. Other briefs on LocalHousingSolutions.org provide examples of promising strategies.

**Work to preserve naturally occurring affordable stock.** In addition to building new and preserving existing subsidized housing, policymakers should also consider efforts to preserve the stock of unsubsidized affordable housing. Such “market affordable” homes are a critical part of the affordable housing stock in most cities, but the affordability of such homes is vulnerable in localities experiencing rising property values and rapidly rising rents. Other briefs on LocalHousingSolutions.org provide examples of promising strategies to preserve the affordability of this housing.

**Stability**

Stable housing can shield residents from excessive residential mobility. Unplanned moves can tear people away from important social supports. Stable housing also protects people from stress that can undermine both physical and mental health. A number of studies suggest that moving homes is associated with behavioral development in children and adolescents. Further, frequent moves make it more difficult for individuals to maintain a stable relationship with a healthcare provider, which can be especially critical for older adults and those with chronic health conditions.

**Take Action**

**Develop programs that are aimed at stabilizing families.** Local rental subsidy programs that provide emergency cash assistance and/or provide access to free legal assistance may be effective in keeping families and individuals in their homes, especially families with school-age children. In addition, localities should encourage coordination between social service providers and shelter operators to assist families and individuals who have become homeless with their search for permanent housing.
Neighborhood characteristics

Neighborhood characteristics, both physical and social, affect health. Well-designed and maintained crosswalks, sidewalks, and playgrounds allow adults and children to walk comfortably in their neighborhoods and play safely outdoors. The presence or absence of grocery stores, fast food outlets, and healthcare facilities may reduce the risk of obesity and encourage the use of preventive healthcare. Social characteristics, including public safety, can enhance both physical wellbeing and mental health. Nationwide, two of the five leading causes of death among children over one year old, injuries and homicide, are closely connected to the safety of a child’s home and neighborhood.

The strongest evidence of the impact of neighborhoods on health comes from the Moving to Opportunity demonstration program. Researchers found that the provision of a voucher and support to help families move to a low-poverty neighborhood led to significant reductions in the prevalence of obesity and diabetes among mothers. Residence in low-poverty neighborhoods also led to significant improvements in mental health and subjective well-being, at least among adults and girls (boys seemed to struggle from the transition to a new neighborhood). Additionally, although the precise mechanisms are unclear, a growing body of research shows that exposure to neighborhood violence significantly undermines children’s overall cognitive functioning and ability to focus.

Take Action

Use housing development as a tool for revitalizing neighborhoods. The new construction of affordable rental housing can be used as a tool for spurring revitalization of historically disinvested neighborhoods, especially if coordinated with other types of investments. One recent study found that the construction of new Low Income Housing Tax Credit (LIHTC) developments in low-income neighborhoods resulted in lower crime rates and increases in property values.

Support healthy housing initiatives in low-income neighborhoods. Policymakers and housing officials should look beyond improving the housing structures themselves, as there is very strong evidence that neighborhood context affects health outcomes. There are a range of healthy housing initiatives being administered in cities, towns, and counties across the country aimed at addressing a lack of access to fresh food, open space, and public transportation in low-income neighborhoods. For example, New York City’s Community Parks Initiative is a city-wide program designed to improve parks and open space infrastructure in neighborhoods with high levels of
Complementary on-site services
While physical conditions may matter to health, on-site services and activities that keep residents active and healthy may also make a difference. Such services are especially critical for older adults and others with chronic healthcare needs. There is strong evidence that providing supportive housing to homeless adults with mental illness can significantly reduce healthcare expenditures. Some emerging work also suggests that community health workers and the provision of housing-based health services to individuals with chronic conditions can improve health outcomes.

Take Action
Encourage the partnering of housing developers, community development corporations (CDCs), and healthcare providers to create community programming that promote healthy lifestyles. Housing managers should consider encouraging healthy living to residents through on-site programming, and connect residents to healthcare programs being offered by local CDCs and hospitals. Foundation Communities is an affordable housing developer in Austin, Texas, that provides access to healthcare services on-site to residents through partnerships with local health organizations. They are using community health workers to help residents connect to health-related resources, and track outcomes in an effort to measure the impact of this initiative.

Support the development of shared-networks between social service and healthcare providers. In Houston, a group of local service providers including Houston Area Community Services (HACS), Healthcare for the Homeless, SEARCH Homeless Services, New Hope Housing, Inc., and the Houston Housing Authority have implemented a new service delivery model known as Integrated Care for the Chronically Homeless. This integrated care network provides housing as well as wraparound social services and supports for chronically homeless individuals who experience frequent hospitalizations and visits to emergency rooms. This collaboration was initiated by the City of Houston and the Coalition for the Homeless of Houston/Harris County.

Cost effectiveness
Improving housing costs money, of course, but in many cases the costs associated with improved quality may be offset by the value of consequent health benefits.
Benefits are most likely to outweigh costs for strategies that fix obvious housing deficiencies, like a lack of smoke detectors or window bars. Other research shows that placing homeless adults with mental illness in supportive housing generates substantial savings in emergency care.

One challenge is that while the housing sector bears the costs of such improvements, the healthcare sector will often reap most of the savings. This imbalance is often called the “wrong pocket problem.” Policymakers should break down barriers across sectors and invest in housing improvements that will generate significant health benefits and cost savings.

**Partnerships**

The housing sector cannot improve neighborhoods on its own. Housing policymakers and practitioners should work closely with city officials and organizations in other areas to make improvements to streets, parks, and public spaces that enhance their usability and safety. Many of the above examples highlight successful partnerships between housing officials, other government agencies, and service providers.

**Links to research summaries:**

- “Housing and Health: New Opportunities for Dialogue and Action”, Jeffrey Lubell, Rebecca Morley, Marice Ashe, Jeff Levi, National Center for Healthy Housing, the Center for Housing Policy, ChangeLab Solutions, and Trust for America’s Health
- “The Impacts of Affordable Housing on Health: A Research Summary”, Center for Housing Policy, April 2015
- “The Positive Impacts of Affordable Housing on Health: A Research Summary”, Enterprise Community Partners
“Effects of improved home heating on asthma in community dwelling children: randomised controlled trial”, British Medical Journal

“Association of Childhood Blood Lead Levels With Cognitive Function and Socioeconomic Status at Age 38 Years and With IQ Change and Socioeconomic Mobility Between Childhood and Adulthood”, Journal of American Medical Association, 2017; 317 (12):1244-1251.


Legal Levers For Health Equity In Housing: Report Series, Center for Public Health Law Research, Beasley School of Law, Temple University, 2019

Recognizing and Incentivizing Mixed-Income Communities Designed for Health, Sara Karerat and Lisa Creighton, Center for Active Design

Links to promising initiatives:

- Nationwide Children’s Hospital (NCH), Healthy Neighborhoods Healthy Family community development initiative
- MacArthur Foundation and Urban Institute, How Housing Matters, Housing & Health
- Center for Active Design, Healthy Housing Index
- Enterprise Community Partners, Health & Housing
- New York State’s Medicaid Redesign Team, Medicaid Redesign Team Supportive Housing Initiative
- Housing with Services in Portland, Oregon
- National League of Cities Partnership for Quality Affordable Housing and Supportive Health Services

Links to resource library (CoP Partners):

- National Housing Conference, Investing in Affordable Housing to Promote Community Health
- National Council of La Raza, Latino Kids Data Explorer

See also:
Policy objective: Improving the health of children and adults
Allocating resources to address housing needs among various household types, including older adults and families with children
Explore