



# How does housing impact health?

Social determinants of health are factors that encompass how people are born, grow, live, work and age and that affect their health outcomes. The social determinants of health include aspects that range from socioeconomic status to the neighborhood and physical environment and are recognized by multiple health care and other organizations as necessary for improving overall health and reducing health disparities. The U.S. Centers for Disease Control and Prevention, or CDC, identified housing as an important social determinant of health, highlighting the link between where people live and their health. The CDC recognized that people with low incomes and communities of color tend to reside in places with more health risks – greater exposure to health hazards within the home and the community, such as lead, mold and toxic pollutants – and face housing cost burdens that encourage housing instability, which can jeopardize the ability to meet their basic needs. Identifying the home as a potential health hazard, the U.S. Department of Housing and Urban Development, or HUD, defined eight Healthy Homes principles necessary to maintain a healthy home: keep it dry, clean, safe, well-ventilated, pest- and contaminant-free, well-maintained, and thermally controlled. People with low incomes, however, must often choose between a healthy home that meets at least this basic standard and one that they can afford.

## This evidence brief:

- Summarizes research on key factors to improving health through housing in populations with low incomes.
- Highlights the key barriers that Black and Hispanic/Latino populations confront in improving health.
- Illustrates how the work of Habitat for Humanity contributes to positive health outcomes.

# Health benefits of improved housing for households with low incomes

Poor housing conditions and the lack of affordable housing are associated with negative health outcomes. Households with a housing cost burden – those spending more than 30% of their income on housing – often face difficult spending decisions and sacrifice purchasing food and health care to afford housing. In fact, severely cost-burdened households – those spending more than 50% of their income on housing – devote 57% less of their total expenditures to health care than non-cost-burdened households at similar income levels.<sup>1</sup> Children of cost-burdened households reported poorer health than children in households without high housing costs.<sup>2</sup>

Homeowners with low incomes tend to own older homes or homes in relatively poor condition and in communities that have more environmental pollutants and lack access to healthy foods.<sup>3-5</sup> Substandard housing conditions contribute to adverse respiratory outcomes and lead poisoning and increase the risk of injury, especially among children and the elderly. Approximately 21% of childhood asthma cases are due to exposure to indoor moisture and mold in homes, and children of households with low incomes suffer from asthma at twice the

rate of households with high incomes.<sup>6</sup> To combat the negative health effects of unaffordable and inadequate housing, households with low incomes require stable and affordable housing, housing free of physical hazards, and neighborhoods with health-promoting amenities.



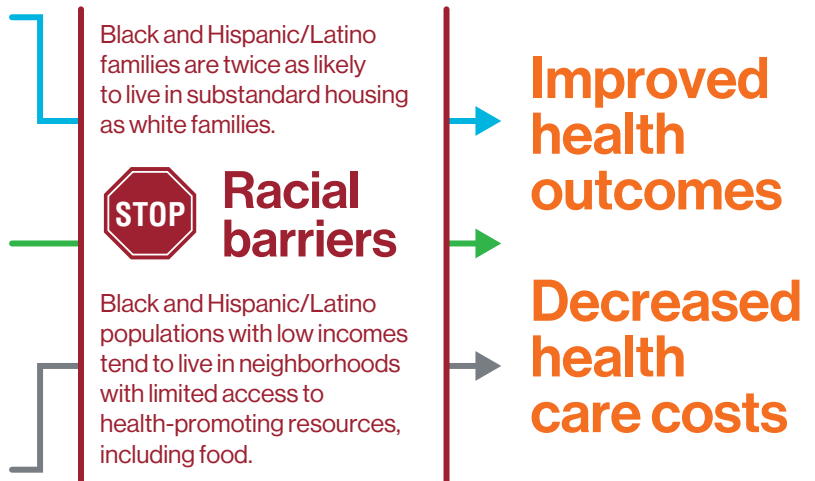
Stable and affordable housing



Housing free of physical hazards



Neighborhoods that have access to health-promoting amenities



## Key factors for health-promoting housing

### Providing access to stable and affordable housing improves health and reduces health care costs.

- Households with low incomes move at more than twice the rate of households with higher incomes, primarily because of foreclosures, evictions or a need for cheaper housing.<sup>7</sup>
- Frequent involuntary moves or increasing housing cost burdens are associated with worse self-reported health outcomes, declining mental health, higher suicide rates, a higher likelihood of postponing medical services for financial reasons, and cost-related nonadherence to health care and prescription advice.<sup>8-12</sup> In fact, children who experience multiple moves – three or more times within a year – are more likely to report moderate to severe chronic conditions than children who have never moved.<sup>13</sup>
- Among households with low incomes, moving into more affordable (and stable) housing was associated with 18% fewer emergency department visits and 20% more primary care visits, which combined equate to a 12% (\$580) decrease in Medicaid health care expenditures from the previous year.<sup>14</sup>

### Removing physical hazards and improving the safety of homes leads to better health for children and the elderly.

- Removing asthma triggers, such as pests and mold, from homes, coupled with community case management, resulted in lower health care use and improved quality of life, leading to \$3,800 reductions in three-year medical costs for children.<sup>15</sup>
- Children growing up in poor-quality housing – as measured by structural quality, clutter and cleanliness, hazards, indoor climate, and privacy/crowding – experience higher symptoms of depression, anxiety and aggression from elementary school through young adulthood when compared with children in higher-quality housing.<sup>16</sup>
- Repairs and modifications to homes, coupled with home visits by a health care provider, resulted in a 30% improvement in the ability of older adults with low incomes to perform daily activities, such as walking within the homes, bathing and dressing, eating, and

using the bathroom.<sup>17</sup> Improving home safety resulted in a 19% reduction in the rate of falling and a 12% reduction in the number of individuals who fell.<sup>18</sup> Fall-related injuries can lead to hospitalization, which on average costs \$30,000 per hospital stay – a cost that rises with a patient's age.<sup>19</sup>

### Locating homes in low-poverty neighborhoods or neighborhoods with access to healthy foods can improve physical health and healthy eating.

- Among women who moved from high- to low-poverty neighborhoods using HUD's Moving to Opportunity vouchers, the prevalence rate of extreme obesity reduced by 19% and that of diabetes dropped by 22% after 10 to 16 years of moving, compared with women who did not have access to the vouchers.<sup>20</sup>
- Supermarkets, especially large chain stores, tend to offer more affordable healthy foods than grocery stores, which tend to be smaller “mom and pop” stores. Low-income neighborhoods have half as many supermarkets but four times the number of grocery stores as compared with wealthier neighborhoods.<sup>21</sup>
- Locating a home within a one-mile radius of a supermarket can lead to a 15% increase in the likelihood of fruit and vegetable consumption, particularly for households with low incomes lacking sufficient transportation options.<sup>22</sup>

Among households with low incomes, moving into more affordable (and stable) housing was associated with 18% fewer emergency department visits and 20% more primary care visits, which combined equate to a 12% (\$580) decrease in Medicaid health care expenditures from the previous year.



# The racial health gap

Housing also contributes to existing racial and ethnic health disparities, as Black and Hispanic/Latino populations are especially vulnerable to the roles that poor housing conditions and neighborhood quality play in health outcomes. The prevalence of housing- and neighborhood-related health conditions, such as asthma, respiratory infections, lead poisoning, diabetes and obesity, remain higher among Black and Hispanic/Latino populations than among white populations. In fact, Black children are 1.5 times more likely to have asthma,

and Puerto Rican children are nearly twice as likely.<sup>23</sup> Repeated hospitalizations for asthma among children are strongly correlated with crowded housing conditions, high-minority neighborhoods and high-poverty communities, continuing legacies of discriminatory housing policies.<sup>24</sup> Homeownership confers some health advantages, but because Black homeowners are more likely to own in the same neighborhoods in which they rent, this health advantage is significantly diminished for this population.<sup>25</sup>

## Key place-based barriers to improving racial disparities in health

**Black and Hispanic/Latino populations with low incomes tend to live in the least-desirable neighborhoods, which are plagued by environmental pollutants, lack access to healthy foods and quality health care, and have fewer recreational facilities.**

- Black households with low incomes live in more environmentally hazardous neighborhoods that have up to 3.3 times the average toxic concentration levels of the average all-white neighborhood. Furthermore, Black households earning up to \$60,000 live in neighborhoods that on average have higher toxic concentration levels than the average neighborhood where white households with incomes below \$10,000 live.<sup>26</sup>
- The environmental risk of being exposed to pollutants increases as the percentage of Hispanic/Latino households increases within a community.<sup>27</sup>
- Access to supermarkets increases the consumption of fruit and vegetables, particularly for Black households, where fruit and vegetable consumption increases by 32% as compared with 11% among white households. However, Black neighborhoods have only one-third to one-half the number of supermarkets of white neighborhoods of comparable socioeconomic status, but two to four times more fast food restaurants and convenience stores, which stock less healthy foods.<sup>28</sup>

- Black households residing in predominantly Black neighborhoods receive lower quality health care than white households, regardless of socioeconomic status. Hospitals in predominantly Black neighborhoods have fewer technological resources and fewer specialists, and those primarily serving Black patients have more negligent adverse events. Physicians in medical settings primarily serving Black patients also tend to be less competent.<sup>28</sup>
- Although parks are equitably distributed across poor and minority areas, parks located in predominantly Black and Hispanic/Latino neighborhoods are three times and nine times more likely, respectively, to not have recreational facilities than white neighborhoods.<sup>29</sup>

**Black households earning up to \$60,000 live in neighborhoods that on average have higher toxic concentration levels than the average neighborhood where white households with incomes below \$10,000 live.**







### Black and Hispanic/Latino populations are more likely to live in substandard housing conditions that create unhealthy environments.

- Substandard housing conditions, such as exposure to dampness, mold, toxic gases and lead hazards, increase the risk of adverse respiratory outcomes and lead poisoning.
- Black and Hispanic/Latino populations are more than twice as likely to live in substandard housing than white populations.<sup>30</sup>

### How Habitat for Humanity responds

- Habitat is committed to providing stable and affordable homes for families. Habitat ensures mortgage payments consume no more than 30% of a homeowner's income and meets this goal by offering financial packages composed of low- or zero-interest loans and forgivable loans. Habitat works with families to help sustain homeownership by providing flexible mortgage restructuring options and other financial support to homeowners when they lose income.
- Central to Habitat's mission is our work in providing safe and decent homes for families – homes that safeguard a family's health, are free from physical hazards, and are designed to be accessible. This is our minimum threshold for housing quality, and maintaining this standard – and often going above it – enables Habitat to work with families to build or improve housing that reduces negative health outcomes and supports a healthy home environment.
- Habitat's repair programs offer longtime homeowners the opportunity to affordably address acute housing maintenance problems and improve the quality of their homes. This work ranges from exterior maintenance issues to more structural problems requiring significant repairs, such as roofing repairs to address mold or bacteria growth, or HVAC system repairs that result in improved air quality and reduced respiratory syndromes.
- Habitat's work focusing on serving older populations, such as our Aging in Place and Housing Plus programs, provides home repairs and community support services to improve housing quality and keep elderly homeowners healthy and in their homes longer.
- Some affiliates conduct environmental assessments before home construction and include remediations

to mitigate any environmental hazards and ensure that the location of the home is not detrimental to the health of the homeowners.

- Neighborhood revitalization programs at Habitat affiliates help drive community-level change that can improve health outcomes, including focusing on promoting or increasing access to healthy foods and providing recreational and green spaces.
- Habitat advocates at all levels of government for programs and policies that support new construction and rehabilitation of affordable homes; increase access to affordable mortgages; optimize land use regulations for affordable homes; promote investment and homeowner and renter stability in revitalizing neighborhoods; and increase affordability in healthy, well-resourced communities. These policies help homeowners and renters reduce their housing cost burdens and free up financial resources to invest in their health and wellness.
- Habitat also advocates to expand public resources for programs that help lower-income households make needed home repairs and access healthy homes.

Habitat's Aging in Place program aims to improve the quality of life through home repairs and modifications that foster a safe, livable and lasting environment so that older adults can age in their homes and communities. An aspect of the work incorporates the evidence-based Community Aging in Place - Advancing Better Living for Elders, or CAPABLE, model developed by Johns Hopkins School of Nursing to support aging-in-place services for low-income adults. CAPABLE combines nursing and occupational therapy with home repair services and has proved to increase independent living, reduce symptoms of depression, and improve motivation, leading to reduced medical costs.

## References

1. Joint Center for Housing Studies. *The State of the Nation's Housing 2020*. Harvard University; 2020. Accessed Jan. 22, 2020. [https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard\\_JCHS\\_The\\_State\\_of\\_the\\_Nations\\_Housing\\_2020\\_Report\\_Revised\\_120720.pdf](https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_The_State_of_the_Nations_Housing_2020_Report_Revised_120720.pdf)
2. Lipman, B.J. "Something's Gotta Give: Working Families and the Cost of Housing." *Center for Housing Policy*. 2005;5(2). <https://www.issuelab.org/resources/671/671.pdf>
3. Boehm, T.P., and Schlottmann, A. "Housing Tenure, Expenditure, and Satisfaction Across Hispanic, African-American, and White Households: Evidence from the American Housing Survey." *Cityscape*. 2008;10(2):95-158.
4. Herbert, C.E., and Belsky, E.S. "Initial Housing Choices Made by Low-Income and Minority Homebuyers." *Cityscape*. 2008;10(2):61-94.
5. Khullar, D., and Chokshi, D.A. "Health, Income, & Poverty: Where We Are & What Could Help." *Health Affairs Health Policy Brief*. Published online Oct. 4, 2018. doi:10.1377/hpb20180817.901935
6. Table 4-1 Current Asthma Prevalence Percents by Age, United States: National Health Interview Survey, 2018. 2018 National Health Interview Survey (NHIS) Data. Published Dec. 2, 2019. Accessed Jan. 21, 2021. <https://www.cdc.gov/asthma/nhis/2018/table4-1.htm>
7. *Geographical Mobility: 2017 to 2018*. U.S. Census Bureau; 2018. <https://www.census.gov/data/tables/2018/demo/geographic-mobility/cps-2018.html>
8. Meltzer, R., and Schwartz, A. "Housing Affordability and Health: Evidence From New York City." *Housing Policy Debate* 2016;26(1):80-104. doi:10.1080/10511482.2015.1020321
9. Pollack, C.E.; Griffin, B.A.; and Lynch, J. "Housing Affordability and Health Among Homeowners and Renters." *American Journal of Preventive Medicine*. 2010;39(6):515-521. doi:<https://doi.org/10.1016/j.amepre.2010.08.002>
10. Sandel, M.; Sheward, R.; Ettinger de Cuba, S.; et al. "Unstable Housing and Caregiver and Child Health in Renter Families." *Pediatrics*. Published online Feb. 1, 2018: e20172199. doi:10.1542/peds.2017-2199
11. Fowler, K.A.; Gladden, R.M.; Vagi, K.J.; Barnes, J.; and Frazier, L. "Increase in Suicides Associated with Home Eviction and Foreclosure During the US Housing Crisis: Findings from 16 National Violent Death Reporting System States, 2005-2010." *American Journal of Public Health*. 2015;105(2):311-316. doi:10.2105/AJPH.2014.301945
12. Currie, J., and Tekin, E. "Is There a Link Between Foreclosure and Health?" *American Economic Journal: Economic Policy*. 2015;7(1):63-94.
13. Busacker, A., and Kasehagen, L. "Association of Residential Mobility with Child Health: An Analysis of the 2007 National Survey of Children's Health." *Maternal and Child Health Journal*. 2012;16(1):78-87. doi:10.1007/s10995-012-0997-8
14. Weller, M.; Vartanian, K.; Saul, A.; and Gladstone, C. *Health in Housing: Exploring the Intersection Between Housing and Health Care*. Enterprise Community Partners; 2016. <https://www.enterprisecommunity.org/download?fid=5703&nid=4247>
15. Bhaumik, U.; Norris, K.; Charron, G.; et al. "A Cost Analysis for a Community-Based Case Management Intervention Program for Pediatric Asthma." *Journal of Asthma*. 2013;50(3):310-317. doi:10.3109/02770903.2013.765447
16. Rollings, K.A.; Wells, N.M.; Evans, G.W.; Bednarz, A.; and Yang, Y. "Housing and Neighborhood Physical Quality: Children's Mental Health and Motivation." *Journal of Environmental Psychology*. 2017;50:17-23. doi:10.1016/j.jenvp.2017.01.004
17. Szanton, S.L.; Xue, Q.-L.; Leff, B.; et al. "Effect of a Biobehavioral Environmental Approach on Disability Among Low-Income Older Adults: A Randomized Clinical Trial." *JAMA Internal Medicine*. 2019;179(2):204-211. doi:10.1001/jamainternmed.2018.6026
18. Karlsson, M.K.; Magnusson, H.; von Schewelov, T.; and Rosengren, B.E. "Prevention of Falls in the Elderly – A Review." *Osteoporosis International*. 2013;24(3):747-762. doi:10.1007/s00198-012-2256-7
19. Seegert, L. "Study Documents the High Cost of Falling for Older Adults." *Association of Health Care Journalists*. Published online May 9, 2018. <https://healthjournalism.org/blog/2018/05/study-documents-the-high-cost-of-falling-for-older-adults/>
20. Ludwig, J.; Sanbonmatsu, L.; Genetian, L.; et al. "Neighborhoods, Obesity, and Diabetes – A Randomized Social Experiment." *New England Journal of Medicine*. 2011;365(16):1509-1519. doi:10.1056/NEJMsa1103216
21. Moore, L.V.; Diez Roux, A.V. "Associations of Neighborhood Characteristics with the Location and Type of Food Stores." *American Journal of Public Health*. 2006;96(2):325-331. doi:10.2105/AJPH.2004.058040
22. Robinson, P.L.; Dominguez, F.; Teklehaimanot, S.; Lee, M.; Brown, A.; and Goodchild, M. "Does Distance Decay Modelling of Supermarket Accessibility Predict Fruit and Vegetable Intake by Individuals in a Large Metropolitan Area?" *Journal of Health Care for the Poor and Underserved*. 2013;24(1 Suppl):172-185. doi:10.1353/hpu.2013.0049
23. *Asthma Disparities in America: A Roadmap to Reducing Burden in Racial and Ethnic Minorities*. Asthma and Allergy Foundation of America; 2020. <https://www.aafa.org/media/2743/asthma-disparities-in-america-burden-on-racial-ethnic-minorities.pdf>
24. Liu, S.Y., and Pearlman, D.N. "Hospital Readmissions for Childhood Asthma: The Role of Individual and Neighborhood Factors." *Public Health Reports*. 2009;124(1):65-78. doi:10.1177/003335490912400110
25. Friedman, S.; Tsao, H.-S.; and Chen, C. "Housing Tenure and Residential Segregation in Metropolitan America." *Demography*. 2013;50(4):1477-1498. doi:10.1007/s13524-012-0184-y
26. Downey, L., and Hawkins, B. "Race, Income, and Environmental Inequality in the United States." *Sociological Perspectives*. 2008;51(4):759-781. doi:10.1525/sop.2008.51.4.759
27. Kim, Y., and Chun, Y. "Revisiting Environmental Inequity in Southern California: Does Environmental Risk Increase in Ethnically Homogeneous or Mixed Communities?" *Urban Studies*. 2019;56(9):1748-1767. doi:10.1177/0042098018803227
28. Landrine, H., and Corral, I. "Separate and Unequal: Residential Segregation and Black Health Disparities." *Ethnicity & Disease*. 2009;19. <https://www.ethndis.org/priorarchives/ethn-19-02-179.pdf>
29. Moore, L.V.; Diez Roux, A.V.; Evenson, K.R.; McGinn, A.P.; and Brines, S.J. "Availability of Recreational Resources in Minority and Low Socioeconomic Status Areas." *American Journal of Preventive Medicine*. 2008;34(1):16-22. doi:10.1016/j.amepre.2007.09.021
30. Jacobs, D.E. "Environmental Health Disparities in Housing." *American Journal of Public Health*. 2011;101 Suppl 1(Suppl 1):S115-S122. doi:10.2105/AJPH.2010.300058.

# everyone

needs a place to call home

A Habitat for Humanity U.S. Research and Measurement Team evidence brief



285 Peachtree Center Ave. NE, Suite 2700, Atlanta, GA 30303-1220 USA  
322 W. Lamar St., Americus, GA 31709-3543 USA  
(800) 422-4828 fax (229) 928-8811 [publicinfo@habitat.org](mailto:publicinfo@habitat.org) [habitat.org](http://habitat.org)