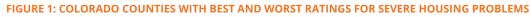


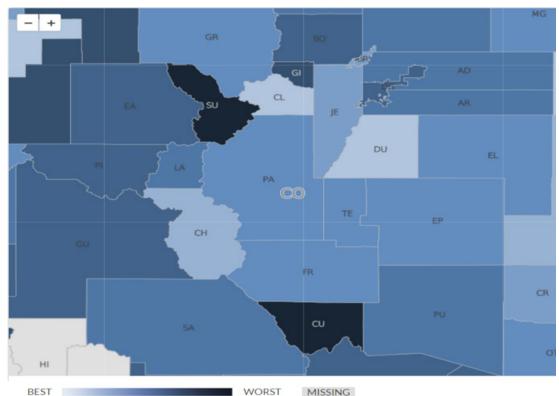
Housing Quality and Health

The close connection between stable housing and health has been well known for more than a century. Florence Nightingale, the founder of modern nursing, once wrote "The connection between health and the dwelling of the population is one of the most important that exists." Today, there is renewed interest in understanding the complex connections between housing factors, neighborhood factors, and other social factors with poor health outcomes, and the unequal disease burden poor and minority communities tend to shoulder — mainly through growing rates of chronic diseases such as asthma, obesity, and diabetes. This paper looks at the role that "place" has in health and the link between the quality of housing, location, and surrounding community with the physical and mental health outcomes of community residents.

The State of Housing Quality in Colorado

Overall, some 17 percent of Colorado housing is believed to have "severe" problems, including that it: lacks complete kitchen facilities; lacks complete plumbing; is overcrowded; and/or is cost burdened (HUD defines cost-burdened families as those who spend more than 30 percent of their income for housing or those who pay more than 50 percent of their income for rent).^{1,2}





Source: 2017, County Health Rankings & Roadmaps, http://www.countyhealthrankings.org/

^{1 &}quot;2017, County Health Rankings & Roadmaps program", Robert Wood Johnson Foundation and the University of Wisconsin, 2017, http:// www.countyhealthrankings.org/app/colorado/2017/measure/factors/136/policies

HUD, https://www.huduser.gov



The Impacts of Housing Quality on Health

The links between poor quality housing and children's health issues include:34

- + Poor indoor air quality is linked to asthma and other breathing diseases.
- + Poor heating and ventilation is linked to physical injuries related to exposure to temperature extremes, and acute and chronic illnesses related to exposure to air pollutants.
- + Lead exposure is linked to learning and behavior problems, as well as high blood pressure.
- Homes with rodents and pests are linked to rashes, bites, vector-borne diseases, and asthma.

- + Physical dangers, including exposed heating sources, wiring, and unprotected windows are linked to physical injury and mental and/or physical harm from break-ins.
- + A lot of noise is linked to stress, anxiety, and impacts on cognitive function.
- + Lack of light, specifically daylight, is linked to a poor sense of well-being, learning, and motivation; physical injuries caused by falls; and feelings of lonliness, worry, and fear. Exposure to light at night is also linked to cancer as it lowers the amount of melatonin, a hormone our bodies create to help us sleep.

Community and neighborhood "cultures" also affect the health of adults and children through a number of means, many of which are a result of the surrounding built environment. Key features of unhealthy neighborhoods include: neighborhood segregation, lack of social inclusion and capital, little political participation, and concentrated poverty.⁵

ORGANIZATION	PROGRAM	DESCRIPTION
Corporation for Supportive Housing (CSH)	Dimensions of Quality Supportive Housing (DOQ)	CSH developed a set of resources, the DOQ, that they use to work with tenants, providers, funders, and stakeholders to achieve five core supportive housing outcomes: tenants stay housed, tenants are satisfied, tenants have connections, tenants improve health, and tenants increase income/employment.
Seattle and King County Public Health Department	CHW-based Healthy Homes Program	Uses community health workers that use an environmental checklist to assess a variety of health hazards (e.g second-hand smoke, pest infestations, mold, etc.) five times a year to homes and then assist by providing education, creating action plans for landlords, and assisting with minor repairs.
LiveWell Colorado	Building Healthy Places Colorado Initiative	To integrate best practices in sustainable design and development in Colorado, this initiative focuses on publishing research and best practices, provides technical assistance to local leaders on increasing physical activity through the built environment, and puts on a variety of monthly events to provide education to communities.
Urban Land Institute	Building Healthy Places Colorado Initiative	To integrate best practices in sustainable design and development in Colorado, this initiative focuses on publishing research and best practices, provides technical assistance to local leaders on increasing physical activity through the built environment, and puts on a variety of monthly events to provide education to communities.
Division of Housing at the Colorado Department of Local Affairs	Affordable Housing Guide for Local Officials	A toolkit for local officials to use as a guide for designing and developing affordable housing that addresses such components as funding, working with local governments, land use policies, and "how-tos" for creating successful neighborhoods.

³ Breysse, et.al., "The Relationship between Housing and Health: Children at Risk, the National Center for Healthy Housing, two-day workshop", Annapolis, Maryland. 2002

¹ James Krieger, MD, MPH, and Donna L. Higgins, PhD, "Housing and Health: Time Again for Public Health Action", American Journal of Public Health 92 (2002)

⁵ Breysse, et.al., "The Relationship between Housing and Health", 2002