



Housing Must Be Healthy To Be Truly Affordable

Don Ryan
Executive Director
Alliance for Healthy Homes

Brian Gumm
Writer/Researcher

Affordable housing programs may sometimes overlook the fact that housing condition has a significant impact on occupants' health. Watching out for health impacts in the way housing is constructed, cared for, and renovated is a smart investment not only in protecting health but also in improving the efficiency, comfort, durability—and ultimately the affordability—of our housing stock.

Problems that stem from unhealthy housing conditions harm individuals and increase health care costs. These problems can include lead poisoning from deteriorated paint; asthma attacks triggered by exposure to allergens, mold, and pests; chronic and acute effects from carbon monoxide; cancer from radon and other carcinogens; and a variety of symptoms from the indoor use of pesticides.

Any home can hurt its occupants' health, but properties in substandard condition normally pose greater risks, imposing significant health costs on families with the least resources. The health impacts of housing also have direct consequences for the economic well being of the larger community. When housing makes occupants sick, children miss school and adults miss work. Asthma alone is responsible for millions of lost workdays and school days every year, making employees and students far less productive. Other problems, such as lead poisoning, cause permanent cognitive deficiencies that can severely limit a child's school performance and future earning potential. Unhealthy housing directly threatens the economic viability of the entire community.

Historically, health hazards in housing have captured attention in fits and starts, with solutions typically viewed as stand-alone, one-time “abatement” projects to rid homes of asbestos, radon, and lead paint hazards. To be sure, highly specialized experts are sometimes required, and dedicated projects are sometimes fully justified. But making and keeping homes healthy requires *preventing* hazards from developing in the first place.

Everyone who builds, maintains, repairs, or remodels housing can affect this system for either better or worse. In many cases, modest changes in work practices by regular trades can help to prevent or reduce health hazards through simple, low-cost, common sense strategies. Basic training in healthy homes principles and work practices can help builders, remodelers, painters, and maintenance staff be part of the solution to substandard housing conditions.

Excessive moisture is a root cause or accelerator of many problems, including paint failure, pest infestation, dust allergens, mold and mildew, and wood rot. Because newer building materials, such as gypsum board combined with poly sheeting as a vapor barrier, typically absorb and retain far more water than traditional materials, modern structures require greater initial attention to effective moisture control, drainage, and ventilation systems.

During initial design and construction, safeguards should be taken to prevent and minimize water problems: selecting materials that resist moisture; ensuring that gutters and downspouts function; grading sites to move water away from buildings; installing exhaust fans that vent to the exterior in kitchens and all bathrooms with showers to remove excess humidity and improve indoor ventilation; ensuring that flashing is tight around windows, doors, and roofs to direct

water away from wall cavities; and providing drainage planes to protect building cavities from water intrusion.

Regular property maintenance is also vital for the prevention, early detection, and correction of health hazards. The most valuable tool is a visual inspection, performed at least annually by the property owner or manager. A visual survey requires little time, money, or specialized knowledge, and can, for example, identify a roof or plumbing leak before it causes mold growth, deterioration of lead-based paint, and serious structural problems. Nipping such problems in the bud can avoid enormous costs in the future and significantly extend the life of structures.

Choices about repair and remodeling techniques also need to factor in health concerns and safeguards. For example, modest changes in paint repair practices can avoid the inadvertent spread of lead dust hazards in older housing containing lead-based paint.

Good construction and maintenance practices can eliminate pest entryways, and integrated pest management can also help reduce or eliminate the need for property owners to apply pesticides. Widespread spraying of chemicals to control insects and rodents is usually ineffective as well as costly, and can expose occupants and their children to toxic chemicals.

These tools and strategies are most effective, both in cost savings and in the results they produce, when the residential property—whether a single-family dwelling or a multifamily structure—is viewed as a system.

Minimizing the initial cost of constructing housing is important to affordability, but reducing life-cycle costs is vital to sustaining affordability. The incremental cost of energy improvements, ranging from \$500 to \$3,000, can yield savings of one-third to one-half of a household's annual utility bills. Some of these improvements also offer important health benefits: old windows that are replaced can no longer shed lead-based paint and dust; arrested moisture can't grow mold or loosen intact lead paint; and closed wall openings won't admit pests or exhaust fumes.

Healthy housing and affordable housing are complementary, not competing, goals. Enlightened construction and maintenance practices that benefit occupants' health serve to ensure structural integrity, increase energy efficiency, control moisture, and improve durability. Opportunities abound to integrate a variety of practical, cost-effective healthy homes principles, tools, and strategies to ensure that affordable housing sustains families' well being.

References

Alliance for Healthy Homes website, www.afhh.org.

Environmental Protection Agency, “Assessing Indoor Environmental Concerns During Remodeling,” www.epa.gov/iaq/homes/hip-front.html.

Matte, Thomas D. and David E. Jacobs, “Housing and Health—Current Issues and Implications for Research and Programs,” *Journal of Urban Health*, 77 (1), March 2000.

National Center for Healthy Housing, “The Relationship Between Housing and Healthy: Children at Risk Workshop Report,” June 2003, [www.centerforhealthyhousing.org/Children at Risk Workshop Report.pdf](http://www.centerforhealthyhousing.org/Children_at_Risk_Workshop_Report.pdf).