

What is Healthy Housing?

Healthy housing is determined by indoor air quality and ventilation, pest infestations, residential crowding, unstable structures, heating, plumbing and/or electrical deficiencies, and environmental exposures, including lead, radon and arsenic.ⁱ Complications of hazardous housing can impair our physical and mental health, as well as social wellbeing and safety, especially for those who experience housing insecurity.



Healthy Housing Challenges

Environmental Exposures

- Research has consistently found an association between arsenic exposure and cardiac disease.^{ii,iii,iv,v} Additional associations exist between arsenic water concentrations and depression;^{vi} and lower verbal IQ and poorer long-term memory in children.^{vii}
- Each year, more than 100 Maine children are poisoned by lead, predominately from dust and lead-based paints.ⁱ This exposure can increase their risk of brain and hearing damage, cognitive dysfunction, behavioral problems, and learning disabilities.^{viii}
- Carbon monoxide exposure contributed to 107 emergency department visits in 2016 in Maine.^{ix}
- Radon problems have been found in all parts of Maine. At least 25% of homes tested in any part of the state have radon problems.^x

Shelter Housing

- Housing instability is associated with higher health care use and hospital visits.xi
- As of January 2019, Maine had an estimated 2,106 experiencing homelessness on any given day. Of that total, 283 were family households, 116 were veterans, 125 were unaccompanied young adults (aged 18-24), and 226 were individuals experiencing chronic homelessness.^{xii}
- Public school data (2017-2018 school year) show that an estimated 2,443 public school students experienced homelessness over the course of the year. Of that total, 74 students were unsheltered, 596 were in shelters, 295 were in hotels/motels, and 1,478 were doubled up.^{xi}

Take Action

- Problems like mold and secondhand smoke exposure can worsen existing health conditions. Share <u>CDC's workplace</u>, home and school guidance.
- <u>CDC's Protect Your Home page</u> is designed to help people prepare their homes for an outbreak it's still helpful now, even during the pandemic.
- The National Center for Healthy Housing's <u>Fact Sheets</u>, <u>Checklists and Guides page</u> offers ways to keep your home safe, costs of home upkeep, and seasonal maintenance checklists.
- Work with non-profit and city partners to create a local healthy housing ordinance.
- Support efforts to provide funding for testing and mitigation of environmental risks, including radon, arsenic and lead, from homes and other institutions.
- Ask U.S. policymakers to fund monitoring and enforcement programs to uphold existing housing codes to prevent poor living conditions. Create accountability systems to provide support to remedy life-threatening living conditions immediately.
- Check out the many "Opportunities for Action" in the American Public Health Association's <u>Environmental Health Playbook's Healthy Housing chapter</u>, including supporting smoke-free multi-unit housing and partnering with the health care sector to address housing as a key social determinant of health.

Maine Resources

- <u>Maine CDC Division of Environmental and Community Health Healthy Homes Program</u>: This index has resources and information about a wide range of home-related health issues.
- <u>MaineHousingSearch.com</u>: A free house listing source funded by MaineHousing and the Maine Department of Health and Human Services, with support from Smoke-Free Housing Coalition of Maine and the Maine Department of Environmental Protection. It provides search criteria on fair housing, smoke-free housing, lead hazards, and rental assistance.
- <u>211 Get Connected. Get Answers</u>: A 24/7 hotline partnership between the United Way and Maine's Department of Health and Human Services. The hotline provides resources on basic needs, education, housing, jobs, food, family, and substance abuse.
- Maine Department of Health and Human Services Housing/Homeless Resources
- <u>Maine Indoor Air Quality Council</u>: An interdisciplinary, non-profit, non-partisan collaborative, formed to create healthy, productive, and environmentally sustainable indoor environments through education, communications, and advocacy.

ⁱAmerican Public Health Association. 2020. Environmental health playbook. <u>http://www.nphw.org/nphw-2020/-/media/files/pdf/topics/environment/playbook_healthy_housing.ashx</u>.

ⁱⁱWu MM, Kuo TL, Hwang YH, Chen CJ. Dose-response relation between arsenic concentration in well water and mortality from cancers and vascular diseases. *Am J Epidemiol*.1989;130:1123–1132.

ⁱⁱⁱEngel RR, Hopenhayn-Rich C, Receveur O, et al. Vascular effects of chronic arsenic exposure: A review. *Epidemiol Rev*. 1994;16:184–209.

^{iv}Hertz-Picciotto I, Arrighi HM, Hu SW. Does arsenic exposure increase the risk for circulatory disease? *Am J Epidemiol*. 2000;151:174–181. ^vAgency for Toxic Substances and Disease Registry. *Toxicological Profile for Arsenic*. Atlanta, GA: US Dept of Health and Human Services, Public Health Service: 2000.

vⁱZierold KM, Knobeloch L, and Anderson H. Prevalence of chronic diseases in adults exposed to arsenic-contaminated drinking water. *Am J Public Health*. 2004;94:1936-1937.

^{vii}Calderon J, Navarro ME, Jimenez-Capdeville ME, et al. Exposure to arsenic and lead and neuropsychological development in Mexican children. *Environ Res*.2001;85:69–76.

^{viii}Maine Department of Environmental Protection. Healthy Rental Housing. <u>https://www.maine.gov/dep/waste/lead/healthy-rental-housing.html</u>. ^{ix}National Center for Healthy Housing. Maine, 2019 Healthy Housing Fact Sheet. <u>https://nchh.org/resource-library/fact-sheet_state-healthy-housing_me.pdf</u>.

^xMaine CDC. 2020 Radon "questions and misconceptions" section. <u>https://www.maine.gov/dhhs/mecdc/environmental-health/rad/radon/radonfaq.htm</u>.

xiTaylor, L. 2018. Housing and health: An overview of the literature. Health Affairs Health Policy Brief.

xiiUnited States Interagency Council on Homelessness. n.d. Maine homelessness statistics. <u>https://www.usich.gov/homelessness-statistics/me</u>.