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# Good Health Depends on Decent Housing

## The Health and Housing Connection





A program of the Hawai'i Appleaseed Center for Law & Economic Justice  
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Poor health and income constraints are connected in a number of ways, but the effects of inadequate and insecure housing on health and wellbeing are especially notable.

Part One in a three-part series of *Good Health Depends on Decent Housing* policy briefs shows how chronic stress from insecure housing and living in a low-income neighborhood produces cumulative effects that result in mental and physical health problems. It also outlines health and socioeconomic disparities in Hawai'i, and makes it clear that by under-investing in human needs—such as housing—we pay a large price for healthcare.

## **PART ONE. THE HEALTH AND HOUSING CONNECTION**

*An often overlooked but significant aspect of Hawai'i's lack of affordable housing is its effect on health and the cost of care. Conditions associated with housing instability include obesity, chronic physical ailments, and debilitating anxiety and depression. Housing in poor repair can result in injuries and exposure to disease-bearing pests and pollutants.*

*The burden of this ill-health is surely felt most by the people who experience it, but the whole community is affected. In addition, the cost of care is largely paid for through taxpayer-supported Medicaid.*

## CONNECTION

**POOR HEALTH** and income constraints are associated in a number of ways, but the effects of inadequate and insecure housing on health and wellbeing are especially noteworthy. Studies indicate that the chronic stress from insecure housing and living in a low-income neighborhood produces cumulative effects that result in poor mental and physical health. Aspects of neighborhoods and housing that can directly affect health include:<sup>1</sup>

- **Under-investment in infrastructure and upkeep** in low-income neighborhoods makes them more stressful and unhealthy for the people who live in them. Residents are more likely to perceive that neighborhoods that are in poor physical condition and have few sidewalks, parks and trees are unsafe and lacking in social cohesion.
- Low-income neighborhoods are also **less likely to have grocery stores and farmers' markets** offering access to healthy food choices. They are more likely to have convenience stores and similar shops that offer less nutritious options at higher prices instead.
- **Pollutants such as lead, asbestos and vehicle emissions** cause irreversible health problems in low-income neighborhoods that are more likely than others to be close to highways, manufacturing facilities, refineries, and other producers of toxic byproducts.
- **Pests, such as rats, mice, cockroaches, fleas, bed bugs and mosquitoes** are common to poorly-maintained housing and are implicated in infections and a variety of intestinal, respiratory and other ailments.
- Poorly-maintained housing may also have **broken appliances like refrigerators, malfunctioning plumbing, and faulty electrical wiring** that can lead to health hazards. Low-income tenants are unlikely to have disposable income for repairs or replacement, and landlords may not invest in improvements for a variety of reasons.

**Chronic conditions.** Elevated levels of cholesterol, inflammation and triglycerides are all more common among residents of low-income neighborhoods. These indicators are likely associated with the greater incidence of chronic health conditions found in the same neighborhoods, including asthma, obesity, hypertension, coronary heart disease, arthritis, cardiovascular disease, diabetes, stroke, respiratory infections, cancer and metabolic syndrome.<sup>2</sup>

**Chronic stress.** The cost of housing is typically the biggest burden for any household budget so the shortage of secure, affordable housing is likely to result in chronic economic stress, as well as overcrowding—a stressor all by itself. Hawai'i's housing costs, as well as some cultural factors, make it the state with the nation's highest rate of overcrowded housing, which is defined as housing units with more than one person per bedroom. The comparative figures are shown in **Table 1.**<sup>3</sup>

**Families and children.** In cost-burdened households with children, housing instability—not being able to make timely rent payments, facing eviction, having to move frequently—adversely affects children's health and wellbeing. This is due to both heightened stress and being unable to afford fresh and nutritious food, clothing, healthcare, transportation and other needs as families struggle to stretch what's left after paying the rent. Being behind on rent in the last 12 months is associated with increased odds of poorer health

	U.S. Average	Hawai'i
1.01–1.5 Occupants per Bedroom	2.3%	5.5% (more than twice the U.S. rate)
1.51 Occupants per Bedroom or More	1.1%	3.6% (more than 3 times the U.S. rate)

**Table 1.** Overcrowded housing is significantly more prevalent in Hawai'i than the U.S. average, as defined by the number of occupants per bedroom in a dwelling unit.

among caregivers of very young children (ages 0–48 months), maternal depressive symptoms, child lifetime hospitalizations, and poorer child health.<sup>4</sup>

Poverty and poor housing are linked to and exacerbate toxic stress and other adverse childhood experiences (ACEs), which can result in a lifetime of poor health.<sup>5</sup> There is a strong correlation between ACEs and cancer, diabetes, and obesity as well as anxiety, depression and antisocial behaviors. Moreover, children who experience ACEs are significantly more likely to experience episodes of homelessness in adulthood.<sup>6</sup>

**Kūpuna.** Housing costs affect the health of the elderly, too. Although most seniors have access to Medicare insurance, rent cost burdens may discourage regular medical visits and filling prescriptions, perhaps because a copay may be charged for many Medicare-covered services. Good nutrition also suffers from budget constraints.

Data collected in the U.S. Census Household Pulse survey (October 2021) underscores concerns about housing and economic instability in Hawai'i.<sup>7</sup> Survey findings for Hawai'i show that many households and individuals are:

- **Not up-to-date with monthly housing costs.** 31,000 renter households and 48,000 homeowners were not caught up on rent or mortgage payments.
- **Unable to make current housing payments.** 50,000 renter households and 63,000 homeowners were not at all, or only slightly confident, that they could pay the next month's rent or mortgage.
- **Are likely to be evicted.** 10,500 households were somewhat-to-very likely to be evicted or have their homes foreclosed on in the next two months.
- **Don't have enough food to eat.** 74,000 households sometimes or often did not have enough to eat in the previous seven days, and nearly two in three of them were households with children.
- **Can't pay essential household bills.** 285,000 people found paying for usual household expenses somewhat or very difficult, 45 percent of whom reported being in households with children. Other household expenses include utilities, cell phone service, broadband access, school supplies and reliable transportation.

## CONNECTION

### Connecting Health and Socioeconomic Disparities

The burden of inadequate housing, limited income and poor health are not shared equally in Hawai'i. Poverty in particular is a well-documented contributor to chronic diseases and shorter lifespans, so it is unsurprising to see that growing income inequality is manifested in widening gaps in life expectancy and health. In the U.S.:

- **The difference in life expectancy** between the richest 1 percent and poorest 1 percent of individuals was 14.6 years for men and 10.1 years for women.<sup>8</sup>
- Adults living in poverty are **five times more likely to report being in poor or fair health** compared to their counterparts with incomes above 400 percent of poverty level.<sup>9</sup>
- Lower-income adults are more likely to have **chronic diseases that limit activity**, which further affects income-earning capacity.<sup>10</sup>
- **The rate of diabetes is twice as high** among low-income adults, and the incidence of **coronary heart disease is 50 percent higher** than for more affluent individuals.<sup>11</sup>

#### Disparities for Native Hawaiians

In Hawai'i, Native Hawaiians not only earn less money than the state average, but also face the consequences of historical trauma, continued social prejudice, systemic racism, and injustice regarding their land and culture. **Figure 1** shows the economic and housing disparities that affect Native Hawaiians.

The health of Native Hawaiians is clearly affected by these conditions. The prevalence of health conditions associated with housing and social and economic conditions, as reported in the Office of Hawaiian Affairs Data Book, are shown in **Figure 2**.<sup>12</sup>

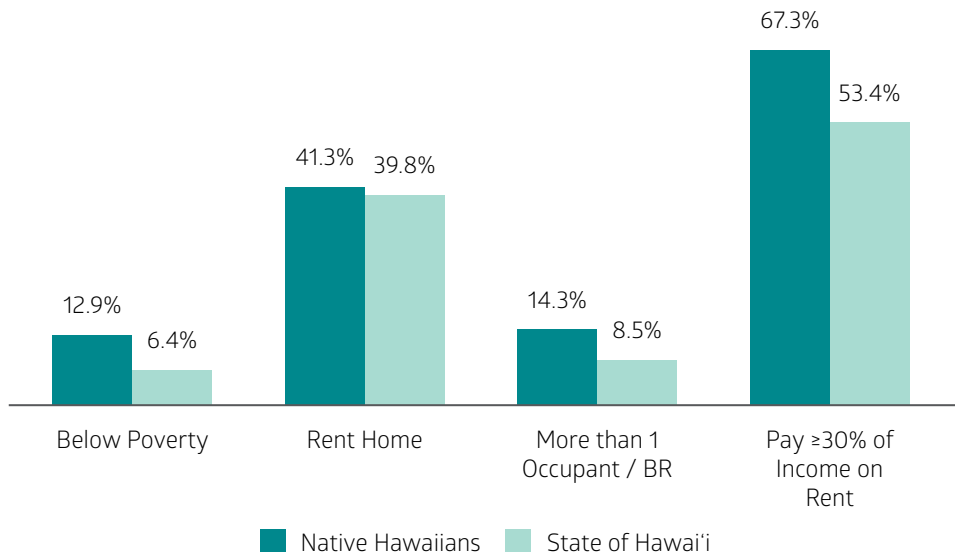
#### Avoidable Deaths

Major cardiovascular diseases, chronic lower respiratory diseases and diabetes mellitus are the first, sixth and seventh highest causes of death in Hawai'i. Together, Native Hawaiians and Pacific Islanders have significantly higher death rates than the statewide rate for these diseases, all of which are linked to housing and economic disparities.<sup>13 14</sup> **Figure 3** shows mortality rate disparities for these conditions.

#### Impact of COVID-19

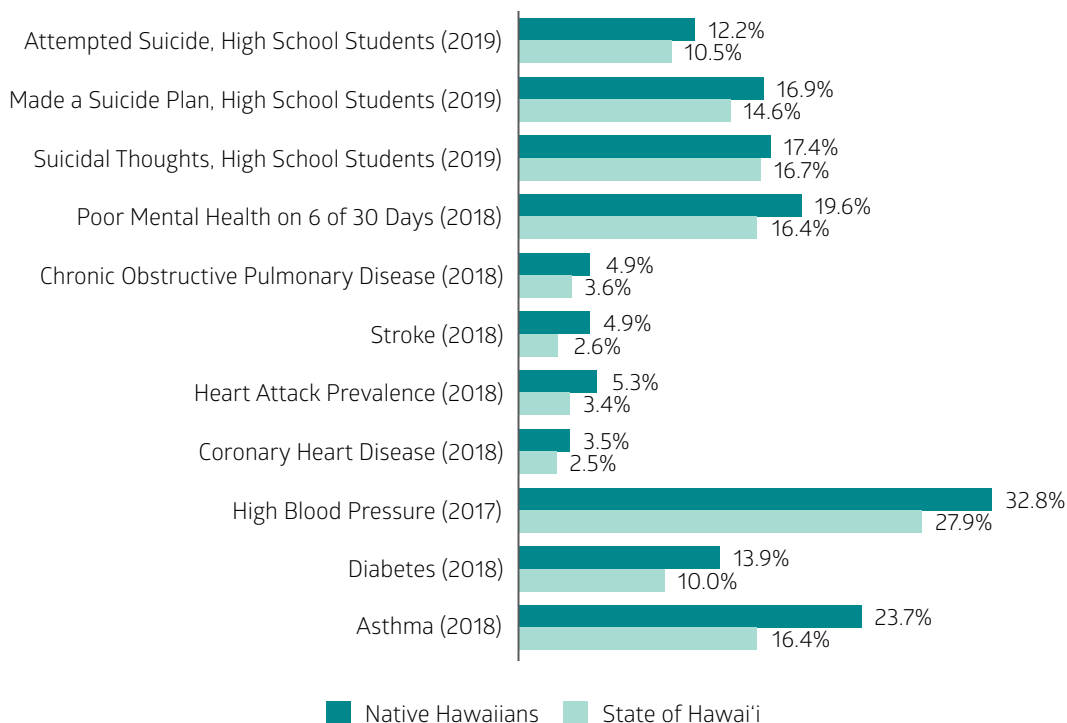
The positivity rate for COVID-19 is also related to housing and overcrowding (as well as to occupational exposure and other factors). Between March 8, 2020 and September 20, 2021, Native Hawaiians accounted for 24 percent of COVID-19 cases diagnosed in Hawai'i, despite representing just 21 percent of the overall population. The disproportionate effect of the disease has been even greater for other Pacific Islanders who represent just 4 percent of Hawai'i's population, but experienced 14 percent of all COVID-19 cases.<sup>15</sup>

**Figure 1.** Housing and Economic Disparities, Native Hawaiians and State of Hawai'i, 2019



**Figure 1.** Economic and housing disparities contribute to health disparities. Native Hawaiians are more likely to live in poverty, be renters rather than homeowners, and live in more crowded conditions than others in the state. Although Native Hawaiian households pay less in median rent than the state average (\$1,405 compared with \$1,651 in 2019), two-thirds are housing cost burdened, paying 30 percent or more of their income for rent.<sup>16</sup>

**Figure 2.** Health Disparities Linked to Housing, Social, Economic Conditions, Native Hawaiians and State of Hawai'i



**Figure 2.** Economic and housing disparities for Native Hawaiians go hand in hand with health disparities. The conditions shown in Figure 2 are associated with poor housing, poverty and high stress. All rates are age-adjusted except those related to public high school students and suicide. Data reported is for the year shown in parentheses.



The cost of healthcare in the United States is the highest in the world, and in the United States, low-income families are at significantly higher risk for poor health than those that are more affluent. Above: A patient measures their blood glucose (sugar) level. // Klaus Nielsen

Figure 3. Hawai'i Age-Adjusted Mortality Rates Per 100,000, 2013–15

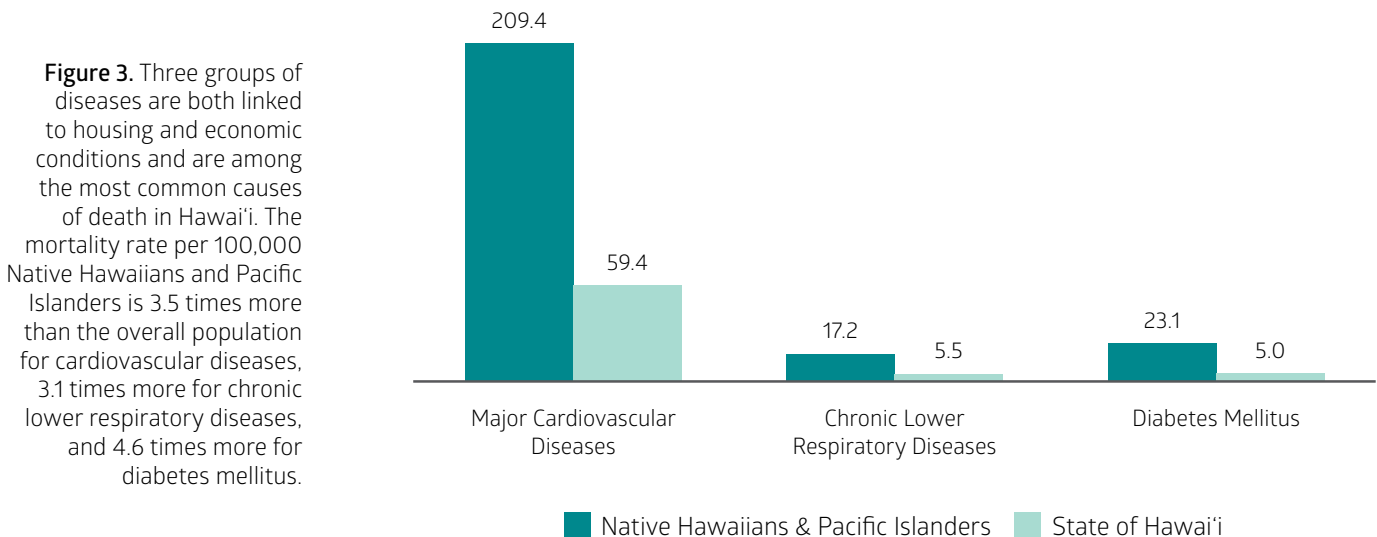


Figure 3. Three groups of diseases are both linked to housing and economic conditions and are among the most common causes of death in Hawai'i. The mortality rate per 100,000 Native Hawaiians and Pacific Islanders is 3.5 times more than the overall population for cardiovascular diseases, 3.1 times more for chronic lower respiratory diseases, and 4.6 times more for diabetes mellitus.



## Healthcare Costs

The United States spends more than any other country on healthcare, even as we fail to cover all residents. We also end up with mediocre results as measured by life expectancy and the prevalence of avoidable conditions.

Healthcare is expensive in the U.S. due, in part, to a system that values costly acute and specialty services above prevention and primary care, requires complex administrative and billing processes driven by regulations and concerns about liability and fraud, and too often fails to perform as an integrated system that offers and coordinates the right care at the right time. But poor health, which creates the need for healthcare, is driven by social and economic factors like poverty and discrimination, which the U.S. addresses inadequately, haphazardly and often grudgingly.

## Investing in People

Other western countries that produce better healthcare results with lower healthcare costs devote considerably more resources to human services and housing than the United States.<sup>17</sup> **Table 2** compares social and healthcare expenditures across countries. It shows that the U.S. invests much less of its gross domestic product in social expenditures compared to the top 10 countries, all of which are part of the Organisation for Economic Co-Operation and Development (OECD). By contrast, the U.S. is number 18. Those 10 countries, in turn, spend considerably less on healthcare while simultaneously making it universally available.

	Social Expenditures as a % of GDP	Healthcare Expenditures as a % of GDP	Life Expectancy in Years	Avoidable Mortality per 100,000	Potential Years of Life Lost at age 75 per 100,000
Average, Top 10 OECD Countries for Social Expenditures	27.4% (nearly 50% more than U.S. rate)	10.2%	82.6	104.9	3,602.9
U.S. (18th in social expenditure rate)	18.7%	16.8% (nearly 66% more than OECD average)	78.9	177.0	6,593.1

**Table 2.** Compared to the U.S., countries that invest a greater share of their gross domestic product in social well-being are able to spend less on healthcare and still report better outcomes. The top 10 countries in order of their investment in social expenditures (from highest to lowest) are: France, Finland, Belgium, Denmark, Italy, Austria, Germany, Sweden, Norway and Spain. The U.S. ranks 18th in social expenditure investments.



Hawai‘i’s policy, generally, is to provide public health insurance coverage for low-income individuals and to pay the bills for uninsured sick people who go to emergency rooms or need hospital care through Med-QUEST, Hawai‘i’s Medicaid program.

Over the past five years (fiscal years 2017–2021), Med-QUEST has provided health coverage for one in four Hawai‘i residents, spending an average of \$2.3 billion per year. The federal government reimbursed two-thirds of these costs while Hawai‘i taxpayers paid for the remaining third.

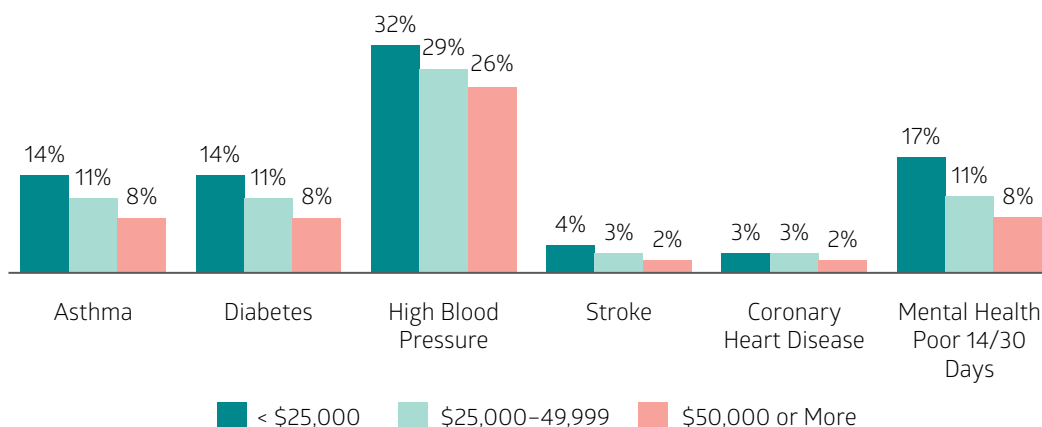
In 2018, Med-QUEST spent an average of \$6,436 per person.<sup>18</sup> This contrasts with per capita spending for private employer-sponsored insurance in Hawai‘i, which was \$3,299 in 2016.<sup>19</sup> Med-QUEST’s per capita spending is higher because the agency serves as Hawai‘i’s healthcare safety-net, providing coverage for people who are more likely to be in poor health, have costly medical conditions, or suffer from physical and mental disabilities.

It is impossible to develop a firm figure for the price paid for healthcare attributable only to poor housing. However, indications of the disproportionate burden and cost might be glimpsed in the estimated incidence of six conditions associated with poor housing and lower-income households—asthma, diabetes, high blood pressure, stroke, heart disease and poor mental health—and the average expenditure rates for each condition in the United States, as shown in **Table 3**. The distribution of these conditions by income is shown in **Figure 4**.

Age-Adjusted Prevalence of Chronic Conditions by Household Income from Hawai'i Behavioral Risk-Factor Surveillance System Reports (BRFSS)	Asthma	Diabetes	High Blood Pressure	Stroke	Coronary Heart Disease	Poor Mental Health in 14 of Past 30 Days
<b>Households &lt;\$25,000</b> Estimated number of individuals and percent of all such conditions in income group	29,400 13.9%	30,300 13.7%	69,500 32.4%	9,200 4.2%	7,400 3.2%	33,300 16.5%
<b>Households &lt;\$25-\$49,999</b> Estimated number of individuals and percent of all such conditions in income group	21,700 10.6%	26,300 10.8%	67,300 29.0%	7,700 2.8%	7,400 2.6%	22,300 10.9%
<b>Households \$50,000 or More</b> Estimated number of individuals and percentage of all such conditions in income group	42,600 7.9%	50,100 7.9%	156,000 26.4%	12,000 2.0%	12,900 2.1%	41,700 8.1%
Mean Expenditure Per Person with Similarly-Categorized Condition in the U.S. (2018)	COPD, Asthma, Other Respiratory <b>\$2,136</b>	Diabetes Mellitus <b>\$4,823</b>	Hypertension <b>\$717</b>	Cerebrovascular Disease <b>\$8,749</b>	Heart Disease <b>\$4,938</b>	Mental Disorders <b>\$2,432</b>

**Table 3.** Estimates above averaged available data on disease incidence by income levels for Hawai'i households over three years, 2017–2019.<sup>20</sup> Rates of each condition are consistently highest among households with the lowest incomes, improving as annual incomes increase. Disease prevalence information is paired with mean expenditures per person for the same or similarly-defined conditions for the United States in 2018.<sup>21</sup>

**Figure 4.** Prevalence of Housing-Linked Conditions by Income



**Figure 4.** For all housing-linked conditions, households with incomes below \$25,000 per year have higher prevalence rates—as much as double—compared with households having incomes of \$50,000 or more.

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