

**Addendum to the 2021 Community Health  
Needs Assessment**

**Additional Tracking of Secondary Data**

**February 1, 2022**

## TABLE OF CONTENTS

SOCIAL JUSTICE	3
TRANSPORTATION STRESS	4
HEALTHY LIVING	6
PLACE	6
HEALTHY KŪPUNA	8
ACCESS TO HEALTHCARE	11
DOWNSTREAM HEALTH EFFECTS	13

## SOCIAL JUSTICE

### Immigration and Language

In comparison to the nation, Hawai'i's ethnically diverse community is largely made up of Asians and Pacific Islanders. According to the U.S. Census - American Community Survey, 18.5% of Hawai'i residents were foreign born compared to 13.6% in the U.S.

Limited English proficiency in local households is much higher than it is nationwide. The limited ability to speak, understand, read and write in English limits a person's access to specialized healthcare and social services. This proved true with effective outreach plans to situate community health workers into these target communities that needed the most aid. It was also resourceful in providing invaluable communication of information and access to healthcare regarding COVID-19.

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	DIFFICULTY WITH ENGLISH	8.5%	12.4%	6.3%	10.5%	14.2%	9.0%
2015-19		8.4%	11.9%	7.7%	10.6%	13.2%	8.7%
Percentage of people who speak English less than "very well" <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i> <i>(Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019</i>							

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	FOREIGN BORN	13.4%	18.1%	11.3%	18.6%	19.4%	16.6%
2015-19		13.6%	18.5%	12.7%	18.7%	19.7%	16.8%
Percentage of people who were born outside of the United States <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i> <i>(Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019</i>							

### Physical and Cognitive Difficulties

CHNA		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	ANY DISABILITY	12.6%	11.2%	13.3%	10.5%	11.0%	10.1%
2015-19		12.6%	11.2%	14.6%	9.6%	10.9%	9.7%
Percentage of the population that are limited in any activities because of physical, mental, or emotional problems <i>(Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017</i> <i>(Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019</i>							

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	COGNITIVE DIFFICULTY	5.1%	4.5%	5.8%	3.9%	4.4%	3.8%
2015-19		5.1%	4.4%	6.3%	3.4%	4.2%	3.5%
Percentage of the population having serious difficulty concentrating, remembering, or making decisions (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	VISION DIFFICULTY	2.3%	1.8%	2.7%	1.7%	1.6%	1.8%
2015-19		2.3%	1.8%	2.8%	1.6%	1.7%	1.6%
Percentage of the population that are blind or have serious difficulty seeing even when wearing glasses (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	HEARING DIFFICULTY	3.6%	3.7%	4.9%	3.8%	3.4%	3.8%
2015-19		3.6%	3.7%	5.4%	3.5%	3.4%	3.6%
Percentage of the population that are deaf or have some serious difficulty hearing (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

## Gender

Residents who identified themselves as either lesbian, gay, bisexual, or transgender, had increased to 6.6% from 4.8% in 2019. Whether this is due to an actual difference in the composition of the population --- or a reflection of an increasing acceptance and greater comfort in reporting it --- is unclear.

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2016	LGBTQ	N/A	4.8%	4.6%	3.4%	5.2%	4.0%
2019		N/A	6.6%	7.4%	7.8%	6.1%	7.4%
Percentage of adults who do not identify as heterosexual (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFS, 2017 (Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFS, 2021							

## **TRANSPORTATION STRESS**

### Commute Time

A dramatically higher percentage of O'ahu workers than U.S. workers overall spent 45 minutes or more in commute time (21.3% and 17.6%, respectively).

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	MEAN TRAVEL TIME TO WORK	26.4	27.4	25.3	21.2	29.1	22.4
2015-19		26.9	27.5	26.1	21.3	29.1	22.1
Average daily travel time to work in minutes for workers 16 years of age and older. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

2013-17	45 MIN OR MORE COMMUTE	17.0%	19.4%	17.3%	12.0%	21.4%	13.4%
2015-19		17.6%	19.2%	17.7%	11.0%	21.3%	13.2%
Percentage of workers 16 years of age and older whose average travel time to work is 45 minutes or more. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

More than four out of ten (41.4%) Hawai'i residents drove alone during a commute longer than 30 minutes, with O'ahu residents most likely to do so.

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2012-16	DRIVING ALONE w/LONG COMMUTE	34.7%	40.3%	34.2%	27.2%	44.3%	36.0%
2015-19		37.0%	41.4%	35.9%	27.9%	45.7%	35.2%
Proportion of commuters who drive alone to work and commute for more than 30 minutes. (Data: 2012-16). Source: Hawai'i Health Matters, County Health Rankings, 2018 (Data: 2015-19). Source: Hawai'i Health Matters, County Health Rankings, 2021							

### Motor Vehicle Deaths

In 2018, Maui County had the highest motor vehicle deaths per 100,000 occupants (11.7) when compared to the other counties, and slightly higher than nationally (11.5). Hawai'i County trailed behind Maui at 10.6.

2013-15	MOTOR VEHICLE DEATHS (per 100,000)	11.5	6.3	10.6	11.7	5.1	7.9
Age-adjusted death rate due to unintentional motor vehicle crashes including deaths to automobile occupants, motorcyclists/moped riders, pedestrians, and bicyclists who were struck by a motor vehicle (Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017							

## HEALTHY LIVING

### No physical activity

Following a national trend, Hawai'i adults were getting less physical activity over the years. Kaua'i County showed the highest percentage of adults, who got no physical activity in the previous 30 days, at 26.2%.

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2016	NO PHYSICAL ACTIVITY	23.3%	20.8%	18.8%	19.6%	21.6%	16.7%
2019		26.4%	24.4%	24.0%	22.6%	24.8%	26.2%
Percentage of adults who did not participate in any physical activity or exercise outside of work during the 30 days preceding the survey. (Data: 2016). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017</i> (Data: 2019). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021</i>							

### Insufficient sleep

Data for insufficient sleep among adults has not been updated since 2016.

About four in nine of Hawai'i residents (42.8%) had less than 7 hours of sleep per night, significantly higher than the national average (34.8%). Commute time, working part-time, family activities, stress all attribute to insufficient sleep, which ties into the overall health and well-being of a person.

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2016	INSUFFICIENT SLEEP	34.8%	42.8%	37.6%	38.8%	44.9%	40.1%
Percentage of adults who did not report getting 7 or more hours of sleep in an average 24-hour period. (Data: 2016). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017</i>							

## PLACE

When last reported in 2018, the Hawai'i was experiencing a series of natural phenomena with earthquakes and volcanic eruptions from Kilauea. The air pollution caused volcanic gases (or vog) across the island chain and created a health risk for residents with respiratory problems. Since then, air quality in Hawai'i County has improved with far fewer unsatisfactory days than was reported in 2018.

## Environmental Health and Climate Change

CHNA		US	HAWAII	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013	UNSATISFACTORY AIR QUALITY (days)	N/A	254	254	0	0	0
2020		N/A	11	11	0	0	0
Number of days per calendar year in which the Air Quality Index (AQI) value was over 100. <i>(Data: 2013). Source: Hawai'i Health Matters, Hawai'i DOH State Laboratories Division, 2014</i> <i>(Data: 2020). Source: Hawai'i Health Matters, Hawai'i DOH State Laboratories Division, 2021.</i>							

2017	CARCINOGENS RELEASED (lbs)	N/A	64,111	1,632	717	61,762	0
2019		N/A	65,964	661	698	64,605	0
Quantity (in pounds) of reported and recognized carcinogens released into the air. The quantity is based on fugitive and point source emissions of 179 recognized U.S. Occupational Safety and Health Administration carcinogens. <i>(Data: 2017). Source: Hawai'i Health Matters, U.S. Environmental Protection Agency, 2018</i> <i>(Data: 2019). Source: Hawai'i Health Matters, U.S. Environmental Protection Agency, 2021</i>							

2017	PBT RELEASED (lbs)	N/A	120,783	30,318	366	90,099	0
2019		N/A	78,033	15,823	369	61,840	0
Total net pounds of reported PBT (Persistent, Bioaccumulative, and Toxic Chemicals) released. These data only reflect releases and other waste management activities of chemicals, not whether (or to what degree) the public has been exposed to those chemicals. <i>(Data: 2017). Source: Hawai'i Health Matters, U.S. Environmental Protection Agency, 2018</i> <i>(Data: 2019). Source: Hawai'i Health Matters, U.S. Environmental Protection Agency, 2021</i>							

The dependency on vehicular modes of transportation increases air pollutant emissions containing carcinogens, which jeopardizes the health and safety of residents and puts them at risk for cancer. While neighbor islands have reduced the quantity of carcinogens released into the air, Honolulu County showed an increase from 2017, 64,605 pounds in 2019 from 61,762 pounds two years prior.

It should be noted that Kaua'i County had no air pollution (carcinogens and PBT (Persistent, Bioaccumulative, and Toxic Chemicals) recorded in recent years.

### Public transportation/Bicycling/Walking

Despite the fact there is an increase of transportation modes available, there has been little change in getting residents out of their vehicles and opting to commute by public transportation, walking, or bicycling.

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	COMMUTE BY PUBLIC TRANS OR WALK	7.8%	11.2%	3.4%	5.2%	14.0%	3.7%
2015-19		7.7%	10.7%	3.5%	4.8%	13.6%	2.5%
Percentage of total trips to work made by walking or public transit. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	COMMUTE BY BICYCLE	0.6%	1.0%	0.4%	0.8%	1.2%	0.5%
2015-19		0.5%	0.8%	0.3%	0.4%	0.9%	0.3%
Percentage of total trips to work made by bicycling. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

## HEALTHY KŪPUNA

According to the state Department of Business, Economic Development and Tourism, the number of Hawai'i residents aged 65 and older is expected to be about 29% of Hawai'i's population by 2040. Currently, this age group makes up for 19.6% of Hawai'i's population.

In Hawai'i, it was common to grow up in a multi-generational household, where the kupuna shared their wealth of knowledge and experiences with younger generations. Taking care and keeping our kŭpuna healthy and safe is a significant part of Asian and Hawaiian cultures. According to the U.S. census, grandparents and grandchildren living under the same roof was more than twice as high in Honolulu (11.5%) and Maui Counties (11.6%) than in the nation (5.1%).

Many grandparents, on fixed incomes, were also responsible for providing basic needs for their grandchild(ren). 1.6% of our kŭpuna reported that they provided care for a grandchild(ren), compared to 1.2% nationally.

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	65+ LIVING w/ GRANDCHILD	5.1%	11.3%	7.9%	11.8%	12.1%	10.0%
2015-19		5.1%	10.8%	7.8%	11.6%	11.5%	10.1%
Percentage of residents 65 years or older with grandchild(ren) in their household (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							



2013-17	65+ RESPONSIBLE FOR GRANDCHILD	1.2%	1.8%	2.6%	1.7%	1.6%	0.9%
2015-19		1.2%	1.6%	2.4%	1.4%	1.4%	1.5%
Percentage of residents 65 years or older who are responsible for grandchild(ren) (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

The island’s high cost of living for housing rent, food, taxes, medical insurance, prescriptions is making it difficult for our kūpuna to retire at age 65. Hawai‘i leads the nation in residents 65 years or older who are still employed. About 21.2% of Hawai‘i’s seniors reported they are still working, compared with 17.4% in the U.S. overall

2013-17	65+ EMPLOYED	16.8%	20.1%	19.1%	22.7%	19.7%	21.7%
2015-19		17.4%	21.2%	20.4%	22.2%	21.2%	21.8%
Percentage of residents 65 years or older who in the labor force and employed (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

2013-17	65+ WHO ARE VETERANS	19.4%	20.0%	22.5%	17.7%	20.0%	17.7%
2015-19		17.9%	18.9%	21.1%	16.3%	18.9%	17.7%
Percentage of residents 65 years or older who are veterans (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

According to the American Community Survey - U.S. Census, out of the 66,293 Hawai‘i seniors, 13,089 fell below the poverty level. This means that about 8.1% of our kupuna still live below the federal poverty level. Hawaii County (9.8%) had the highest level of kupuna living in poverty, which is higher than the national figure.

### Kūpuna Access to Care

		US	HAWAI‘I	Hawai‘i County	Maui County	C&C of Honolulu	Kaua‘i County
2013-17	65+ BELOW POVERTY	9.3%	8.0%	9.4%	8.4%	7.7%	7.9%
2015-19		9.3%	8.1%	9.8%	8.1%	7.8%	6.4%
Percentage of residents 65 years or older who are below 100% FPL (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

As our elders live longer, the quality of life and living in place are issues to be addressed. Caregiving responsibilities will fall on their adult children or relatives. Oftentimes they have become their parent’s healthcare aide, financial planner, cook, cleaner and transporter overnight.

Many of these caregivers are still in the workforce and with a family of their own. Suddenly, they find themselves taking care of two households - stressed and physically and emotionally drained. Furthermore, they are often financially strained and dealing with their own family and health problems.

### Aging at Home

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	65+ LIVING ALONE	42.9%	33.9%	35.9%	34.8%	33.4%	32.5%
2015-19		42.8%	34.5%	37.7%	33.2%	34.1%	32.2%
Percentage of residents 65 years or older who is a householder living alone (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	65+ WIDOWED	24.9%	24.5%	21.3%	21.9%	25.6%	24.8%
2015-19		23.7%	23.4%	20.2%	19.2%	24.9%	23.0%
Percentage of residents 65 years or older who are widowed (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

First generation elders over the age of 65 who spoke English as a second language accounted for more than double the national rate.

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2013-17	65+ LIMITED ENGLISH	8.7%	18.1%	8.2%	15.0%	21.2%	13.0%
2015-19		8.7%	17.5%	9.0%	13.6%	20.6%	12.2%
Percentage of residents 65 years or older who speak English less than "very well" (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

While more than half of our kūpuna population have been vaccinated for influenza and pneumonia, it is still slightly below the national figure of 64.0% and 73.1%, respectively. Meanwhile, as of this report date, those receiving a vaccination against COVID-19 has proved quite successful across the state.

2016	65+ FLU VACCINE	58.2%	56.9%	50.0%	56.0%	59.9%	53.4%
2019		64.0%	58.8%	53.1%	48.4%	62.7%	58.1%
<p>Percentage of adults aged 65 years and older who received an influenza vaccination in the past year.  <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018</i>  <i>(Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021</i></p>							

2016	65+ PNEUMONIA VACCINE	73.4%	67.6%	56.7%	63.1%	72.8%	64.0%
2019		73.1%	66.3%	64.4%	53.3%	70.6%	56.0%
<p>Percentage of adults aged 65 years and older who have ever received a pneumococcal (pneumonia) vaccine.  <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018</i>  <i>(Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021</i></p>							

2021	65+ COVID VACCINE	N/A	95%	97%	88%	95%	97%
<p>Percentage of residents 65 years or older who have received a COVID vaccine.  <i>(Data 2021) <a href="https://health.hawaii.gov/coronavirusdisease2019/current-situation-in-hawaii/#vaccine">https://health.hawaii.gov/coronavirusdisease2019/current-situation-in-hawaii/#vaccine</a>.</i></p>							

## ACCESS TO HEALTHCARE

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2016	ROUTINE CHECK UP IN THE PAST YEAR	70.8%	72.0%	67.9%	65.1%	74.4%	66.1%
2019		77.6%	80.6%	77.3%	76.0%	82.0%	81.2%
<p>Percentage of adults who have had a routine medical checkup in the past 12 months.  <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018</i>  <i>(Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021</i></p>							

2016	DIABETICS w/DIABETES EDUCATION	N/A	56.0%	53.2%	55.7%	57.4%	51.4%
<p>Percentage of persons aged 18 years and older with diabetes who report they have taken a course or class in diabetes self-management. Persons with pre-diabetes, borderline diabetes, and women with gestational diabetes are excluded.  <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018</i></p>							

2016	ADULTS w/USUAL SOURCE OF HEALTHCARE	78.2%	84.7%	82.2%	78.5%	86.8%	83.4%
2019		77.0%	83.6%	81.5%	78.1%	85.4%	87.0%
Percentage of adults that report having one or more persons they think of as their personal doctor or health care provider. <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018</i> <i>(Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021</i>							

2015	PRIMARY CARE PHYSICIANS (per 100,000)	N/A	87	74	94	90	72
2020		N/A	89	77	86	93	72
Number of primary care physicians including non-federal, practicing physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics per 100,000 residents <i>(Data: 2015). Source: County Health Rankings, Area Health Resource File, 2018</i> <i>(Data: 2020). Source: County Health Rankings, Area Health Resource File, 2021</i>							

2017	NON-PHYSICIAN PCP (per100,000)	81	53	38	43	58	43
2020		88	64	51	56	70	47
Non-physician primary care provider rate per 100,000 population. Primary care providers who are not physicians include nurse practitioners (NPs), physician assistants (PAs), and clinical nurse specialists. <i>(Data: 2017). Source: Hawai'i Health Matters, County Health Rankings, 2018</i> <i>(Data: 2020). Source: Hawai'i Health Matters, County Health Rankings, 2021. National figure from 2018.</i>							

## Oral Healthcare

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2016	DENTISTS (per 100,000)	N/A	85	65	62	94	64
		N/A	90	66	65	101	68
Number of dentists per 100,000 residents <i>(Data: 2016). Source: County Health Rankings, Area Health Resource File 2018</i>							

2016	DENTIST VISIT	66.3%	72.7%	65.0%	66.3%	75.6%	73.0%
2018		67.6%	75.3%	66.3%	72.1%	78.1%	71.7%
Percentage of adults who have visited a dentist or dental clinic for any reason in the past year. <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018</i> <i>(Data: 2018). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2020</i>							

## Affordable

The state of Hawai'i fared better than the continental U.S. when it came to insurance coverage and the cost of seeing their doctor. Only 6% of Hawai'i adults reportedly have no healthcare insurance.

Both Hawai'i (26.4%) and Kaua'i (24.2%) Counties had a higher percentage of residents covered by only public health insurance than was true nationally. These include Medicare, Medicaid, Veterans Affairs (VA) healthcare, Children's Health Insurance Program (CHIP), and other state health plans).

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2016	NO DOCTOR VISIT DUE TO COST	12.1%	7.4%	9.9%	8.6%	6.5%	8.4%
2019		12.6%	8.2%	10.1%	10.2%	7.1%	8.7%
Percentage of adults who report not seeing a doctor in the past 12 months because of cost. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018 (Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021							

2013-17	ADULTS w/o HEALTH INSURANCE	14.8%	6.6%	9.0%	8.3%	5.6%	8.4%
2015-19		12.4%	5.5%	7.5%	6.7%	4.8%	7.3%
Percentage of adults aged 19-64 that do not have any kind of health insurance coverage. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017 (Data: 2015-19). Source: U.S. Census, American Community Survey 5-year estimates, 2019							

2013-17	PUBLIC HEALTH INSURANCE ONLY	22.3%	18.9%	30.1%	20.8%	16.2%	20.4%
2021		20.6%	17.6%	26.4%	20.1%	14.7%	24.2%
Percentage of persons who have public health insurance only. Public health coverage includes the federal programs Medicare, Medicaid, and VA Health Care (provided through the Department of Veterans Affairs); the Children's Health Insurance Program (CHIP); and individual state health plans. (Data: 2013-17). Source: U.S. Census, American Community Survey 5-year estimates, 2017							

## DOWNSTREAM HEALTH EFFECTS

### Life and Death

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2015-17	LIFE EXPECTANCY – MALES AND FEMALES	79.1	82.2	80.1	82.7	82.5	82.0
2017-19		79.2	82.3	80.6	82.9	82.5	82.0
Total number of years a female person can be expected to live if current mortality rates continue to apply. (Data: 2015-17). Source: Hawai'i Health Matters, County Health Rankings, 2019 (Data: 2017-19). Source: Hawai'i Health Matters, County Health Rankings, 2021							

2015	ALL CAUSE MORTALITY (per 100,000)	733.1	571.3	645.2	572.7	558.3	561.4
2018		733.1	551.2	595.7	513.7	550.4	535.9

Age-adjusted death rate due to all causes.

(Data: 2015). Source: *Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017*

(Data: 2018). Source: *Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2021. National figure from 2015.*

## Cancer

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2016	CANCER	---	9.4%	10.7%	12.7%	8.7%	10.8%
2019		7.3%	6.1%	5.7%	7.2%	6.2%	5.8%

Percentage of adults aged 18 and over who have ever been told by a health professional that they have any type of cancer, except skin cancer.

(Data: 2016). Source: *Hawai'i Health Matters, Hawai'i DOH BRFSS, 2018*

(Data: 2019). Source: *Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021*

2015	DEATH - CANCER (per 100,000)	158.5	131.4	140.1	139.9	128.2	126.6
2018		158.5	120.6	130.3	119.2	118.9	122.6

Age-adjusted death rate due to all forms of cancer (ICD-10 codes C00-C97).

(Data: 2015). Source: *Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017*

(Data: 2018). Source: *Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2021. National figure from 2015.*

2011-15	BREAST CANCER (per 100,000 F)	124.7	136.1	129.7	125.7	140.6	119.6
2013-17		125.9	138.9	125.4	129.9	146.0	107.2

Age-adjusted incidence rate for breast cancer in cases per 100,000 females.

(Data: 2011-15). Source: *Hawai'i Health Matters, National Cancer Institute, 2018*

(Data: 2013-17). Source: *Hawai'i Health Matters, National Cancer Institute, 2020*

2013-15	DEATH - BREAST CANCER (per 100,000 F)	20.3	18.7	20.1	21.7	15.5	14.0
---------	--	------	------	------	------	------	------

Age-adjusted death rate due to breast cancer among females (ICD-10 code C50).

(Data: 2013-15). Source: *Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017*

2011-15	PROSTATE CANCER (per 100,000 M)	109.0	86.9	49.2	56.7	100.0	98.2
2013-15		104.5	88.2	59.1	61.2	99.7	92.7

Age-adjusted incidence rate for prostate cancer in cases per 100,000 males.

(Data: 2011-15). Source: *Hawai'i Health Matters, National Cancer Institute, 2018*

(Data: 2013-15). Source: *Hawai'i Health Matters, National Cancer Institute, 2020. National and State figures from 2013-17.*

2013-15	DEATH - PROSTATE CANCER (per 100,000 M)	18.8	15.4	14.4	18.5	12.9	15.5
Age-adjusted death rate due to prostate cancer among males (ICD-10 code C61). (Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017							

2011-15	LUNG CANCER (per 100,000)	60.2	46.2	44.6	44.7	47.3	39.4
2013-17		58.3	45.7	42.8	41.9	47.6	37.4
Age-adjusted incidence rate for lung and bronchus cancers in cases per 100,000 population. (Data: 2011-15). Source: Hawai'i Health Matters, National Cancer Institute, 2018 (Data: 2013-17). Source: Hawai'i Health Matters, National Cancer Institute, 2020							

2013-15	DEATH - LUNG CANCER (per 100,000)	40.5	31.3	30.1	31.7	32.0	26.9
Age-adjusted death rate due to lung cancer (ICD-10 code C34). (Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017							

## Diabetes

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2016	PREDIABETES	---	14.6%	13.7%	14.4%	15.2%	10.3%
2019		---	13.9%	12.7%	14.4%	14.5%	10.0%
Percentage of adults without diabetes who have been told by a health care professional that they had prediabetes. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017 (Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021							

2016	DIABETES	10.5%	10.5%	11.5%	11.5%	10.2%	11.7%
2019		10.8%	10.5%	11.7%	10.0%	10.2%	13.0%
Percentage of adults that have ever been diagnosed with diabetes. Women who were diagnosed with diabetes only during the course of their pregnancy were not included in this count. (Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017 (Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021							

2013-15	DEATH - DIABETES (per 100,000)	21.3	14.4	14.8	17.0	14.7	14.2
Age-adjusted death rate due to diabetes (ICD-10 codes E10-E14). (Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017							

## Heart Disease and Stroke

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2015	HIGH BLOOD PRESSURE	30.9%	32.0%	31.6%	27.1%	33.4%	32.6%
2019		32.3%	30.7%	31.8%	29.0%	30.3%	33.2%

Percentage of adults who have been told they have high blood pressure. Normal blood pressure should be less than 120/80 mm Hg for an adult. Blood pressure above this level (140/90 mm Hg or higher) is considered high (hypertension).  
*(Data: 2015). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2016*  
*(Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021*

2015	HIGH CHOLESTEROL	36.3%	36.3%	35.4%	35.8%	36.8%	36.9%
2019		33.1%	29.9%	28.5%	27.2%	30.9%	32.0%

Percentage of adults who have had their blood cholesterol checked and have been told that it was high.  
*(Data: 2015). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2016*  
*(Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021*

2016	CORONARY HEART DISEASE	4.1%	3.6%	4.7%	3.5%	3.3%	4.4%
2019		3.9%	2.7%	4.3%	2.5%	2.6%	2.0%

Percentage of adults who have ever been told by a health professional that they had coronary heart disease.  
*(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017*  
*(Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021*

2015	DEATH - CORONARY HEART DISEASE (per 100,000)	108.3	66.1	76.9	72.8	64.5	51.2
------	--	-------	------	------	------	------	------

Age-adjusted death rate due to coronary heart disease (ICD-10 codes I20-I25).  
*(Data: 2015). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017*

2013-15	DEATH - CONGESTIVE HEART FAILURE (per 100,000)	19.9	14.4	13.7	10.0	14.3	12.3
---------	--	------	------	------	------	------	------

Age-adjusted death rate due to congestive heart failure (ICD-10 code I50).  
*(Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017*

2016	STROKE	3.0%	3.0%	3.1%	1.7%	3.2%	3.7%
2019		3.2%	3.0%	4.1%	3.2%	2.7%	2.8%

Percentage of adults who have ever been told by a health professional that they had a stroke  
*(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017*  
*(Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021*



2013-15	DEATH - STROKE (per 100,000)	37.6	37.4	43.7	28.9	34.0	38.1
2018		37.6	36.5	33.8	30.3	38.1	34.8
Age-adjusted death rate due to stroke (ICD-10 codes I60-I69). (Data: 2013-15). Source: <i>Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017</i> (Data: 2018). Source: <i>Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2021. National figure from 2015.</i>							

### Other Factors and Ailments

		US	HAWAI'I	Hawai'i County	Maui County	C&C of Honolulu	Kaua'i County
2016	ARTHRITIS	25.5%	21.9%	25.1%	25.7%	20.8%	23.7%
2019		25.8%	20.8%	23.0%	22.3%	20.3%	25.0%
Percentage of adults aged 18 years and older who have ever been told by a doctor that they had arthritis. (Data: 2016). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017</i> (Data: 2019). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021</i>							

2016	ASTHMA	9.1%	10.7%	12.7%	11.0%	10.6%	8.9%
2019		9.7%	9.6%	10.1%	8.4%	9.8%	11.0%
Percentage of adults who have been told by a health care provider that they currently have asthma. (Data: 2016). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017</i> (Data: 2019). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021</i>							

2016	COPD (45+yrs old)	6.2%	6.0%	7.4%	6.1%	5.8%	5.1%
2019		6.5%	5.6%	7.9%	5.0%	5.2%	5.4%
Percentage of adults aged 45 years and older who have ever been told by a health care professional that they had chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis. (Data: 2016). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017</i> (Data: 2019). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021. National figure from 2013.</i>							

2015	DEATH - COPD (45+yrs old) (per 100,000)	115.1	50.0	68.7	65.4	43.1	49.0
Death rate due to chronic obstructive pulmonary disease (ICD-10 codes J40-J44, and excludes asthma) among persons aged 45 years and older. (Data: 2015). Source: <i>Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017</i>							

2016	OBESITY	30.1%	23.8%	26.9%	24.3%	23.3%	24.0%
2019		32.4%	25.0%	26.3%	24.8%	24.9%	24.7%
Percentage of adults aged 18 years and older who are obese according to the Body Mass Index (BMI). A BMI $\geq 30$ is considered obese. (Data: 2016). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017</i> (Data: 2019). Source: <i>Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021</i>							

2016	KIDNEY	2.8%	3.7%	3.2%	3.0%	4.1%	4.1%
------	--------	------	------	------	------	------	------

2019	DISEASE	2.9%	2.9%	2.6%	2.3%	3.1%	3.2%
Percentage of adults who have ever been told by a health care professional that they had kidney disease (not including kidney stones, bladder infection, or incontinence). <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017</i> <i>(Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021</i>							

2016	SMOKING	17.0%	13.1%	16.3%	15.2%	11.9%	15.1%
2019		16.0%	12.3%	15.5%	14.6%	11.3%	11.5%
Percentage of adults aged 18 years and over who have smoked at least 100 cigarettes in their life and who report smoking some days or every day. <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017</i> <i>(Data: 2019). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2021</i>							

2013-15	DEATH - CIRRHOSIS (per 100,000)	10.8	8.0	10.4	11.2	5.8	5.9
Age-adjusted death rate due to cirrhosis (ICD-10 codes K70, K73-K74). <i>(Data: 2013-15). Source: Hawai'i Health Matters, Hawai'i DOH, Vital Statistics, 2017</i>							

2016	ONE OR MORE TOOTH EXTRACTIONS	43.4%	41.5%	50.9%	44.5%	39.0%	45.8%
Percentage of adults who have had at least one permanent tooth extracted due to tooth caries or periodontal disease. <i>(Data: 2016). Source: Hawai'i Health Matters, Hawai'i DOH BRFSS, 2017</i>							