

Leading Causes of Death State of Hawai‘i, 2019-2021

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November 7, 2023

Suggested citation: Hawai‘i State Department of Health, Hawai‘i Health Data Warehouse. Leading Causes of Death: State of Hawai‘i, 2017-2021.
[Figure title and years, if applicable]. Published November 7, 2023. Accessed [insert date]. [insert URL].

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Section 1: Background & Methods

This report displays the leading causes of death for Hawai‘i residents ages 1 year and older. Death record information is from the Hawai‘i Department of Health, Office of Health Status Monitoring and was compiled by the Hawai‘i Health Data Warehouse.

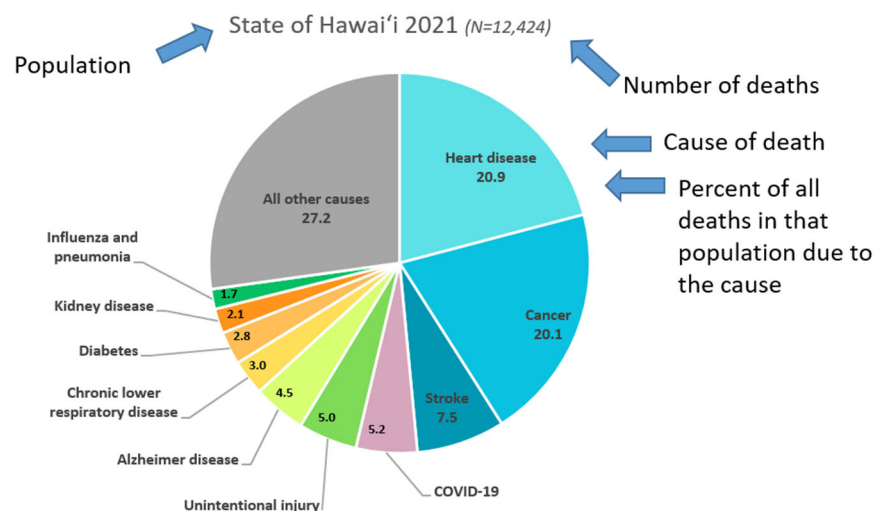
Data for this report are based on information from death certificates. Causes of death are classified by the *International Classification of Diseases, 10th Revision* (ICD-10), and underlying cause of death is assigned by the National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS) at the Centers for Disease Control and Prevention (CDC) according to international standards. Leading causes of death have been aggregated based on the underlying cause of death. Causes of death are grouped into 114 selected causes of death according to NVSS standards for decedents aged 1 year and older. These are further grouped into 51 rankable causes of death. Death counts in these 51 groupings were used to generate the leading causes of death in this report. Detailed information about the methodology can be found [here](#). Records that are missing a cause of death were excluded from the analysis. To protect confidentiality, cells with counts between 1 and 9 have been suppressed. When this happens, fewer than 10 leading causes of death will be displayed in the pie chart or matrix.

This report includes leading causes of death among Hawai‘i residents for the state by year from 2017-2021 and by county, sex, race/ethnicity, and age for 2019-2021. Causes of death for county, sex, race/ethnicity and age are presented as 3-year aggregates to ensure stability and minimize cell suppression. Residence was determined based on the census tract of the decedent. Detailed information on how residence is mapped to counties can be found [here](#). Race/ethnicity is reported according to the Hawai‘i State Department of Health reporting algorithm which includes Hawai‘i-specific race/ethnicities. More details on how decedent race/ethnicity was determined can be found [here](#).

This report contains two types of figures: pie charts and matrices.

The pie charts include the population, year, the total number of deaths within the population during the time period, and the percent of all deaths due to the top 10 causes of death. The remaining deaths are aggregated into the “All other causes” wedge. In the sample on the right, there were 12,424 deaths in the State of Hawai‘i in 2021. Heart disease was the leading cause of death accounting for 20.9% of all deaths followed by cancer (20.1%) and stroke (7.5%). The 10 leading causes of death accounted for 72.8% of all deaths (100% - 27.2% of deaths from all other causes).

The matrices display the counts for the 10 leading causes of death by population with the cause of death and count in each box. Causes with the same counts are tied for rank and shown in light grey.



The color scheme for causes of death is consistent across the Leading Cause of Death Report series and is as follows:

Pie Chart and Matrix Key			
Color	Cause of death (based on ICD-10)	Short title	ICD-10 codes
	Alzheimer's Disease	Alzheimer disease	G30
	Malignant Neoplasms	Cancer	C00-C97
	Chronic Lower Respiratory Diseases	Chronic lower respiratory disease	J40-J47
	COVID-19	COVID-19	U071
	Diabetes Mellitus	Diabetes	E10-E14
	Diseases of the Heart	Heart disease	I00-I09,I11,I13,I20-I51
	Assault (Homicide)	Homicide	*U01-*U02,X85-Y09,Y87.1
	Essential Hypertension and Hypertensive Renal Disease	Hypertension	I10,I12,I15
	Influenza and Pneumonia	Influenza and pneumonia	J09-J18
	Nephritis, Nephrotic Syndrome, and Nephrosis	Kidney disease	N00-N07,N17-N19,N25-N27
	Chronic Liver Disease and Cirrhosis	Liver	K70,K73-K74
	Parkinson's Disease	Parkinson disease	G20-G21
	Pregnancy, Childbirth and the Puerperium	Pregnancy, childbirth and puerperium	O00-099
	Septicemia	Septicemia	A40-A41
	Cerebrovascular Diseases	Stroke	I60-I69
	Intentional Self-Harm (Suicide)	Suicide	*U03,X60-X84,Y87.0
	Accidents (Unintentional Injuries)	Unintentional injury	V01-X59,Y85-Y86
	All Other Causes (sum of the other causes)	All other causes	Varies -- sum of all other deaths
	Used to denote ranks that are tied. <i>Causes of death are listed alphabetically in the event of a tie.</i>		

Section 2: Leading Causes of Death – Pie Charts

Figure 1. Percent Distribution of the 10 Leading Causes of Death: State of Hawai'i, 2021 and 2019-2021

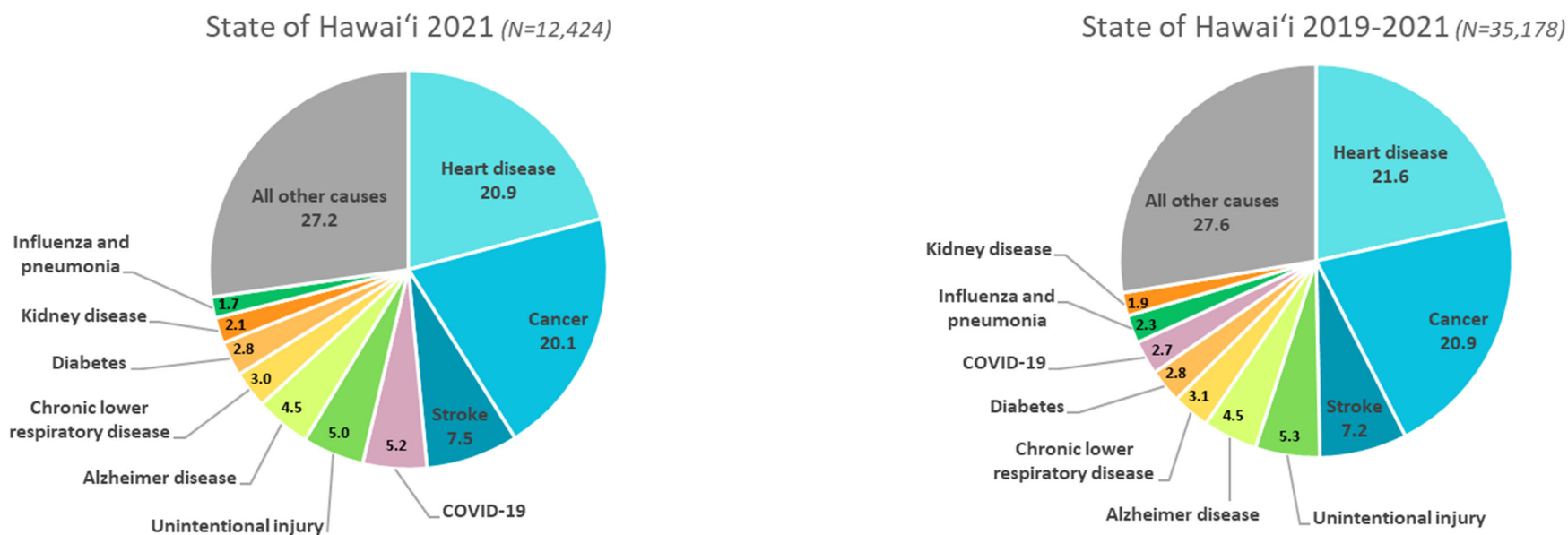


Figure 2: Percent Distribution of the 10 Leading Causes of Death by County: State of Hawai'i, 2019-2021

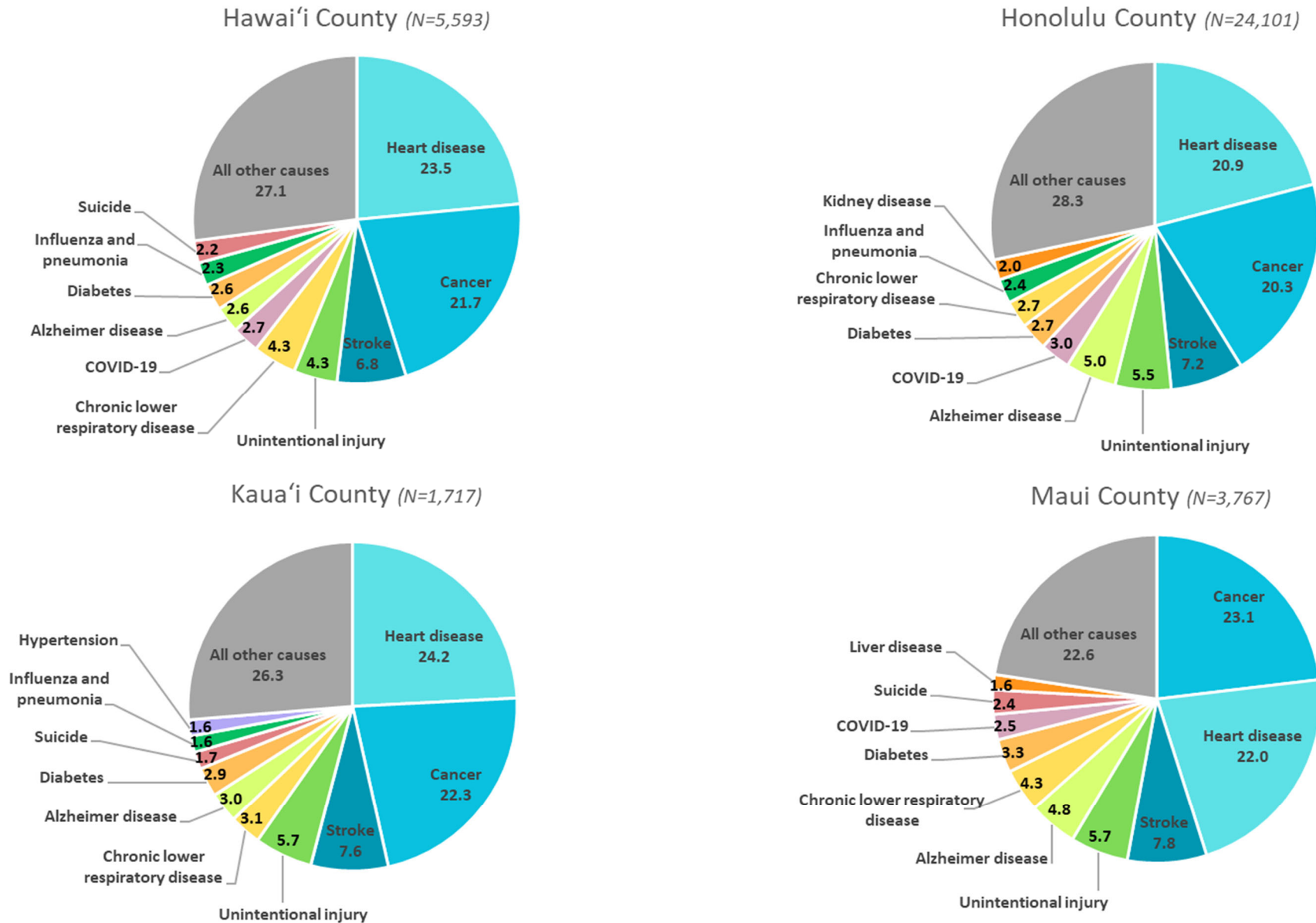


Figure 3: Percent Distribution of the 10 Leading Causes of Death by Sex: State of Hawai'i, 2019-2021

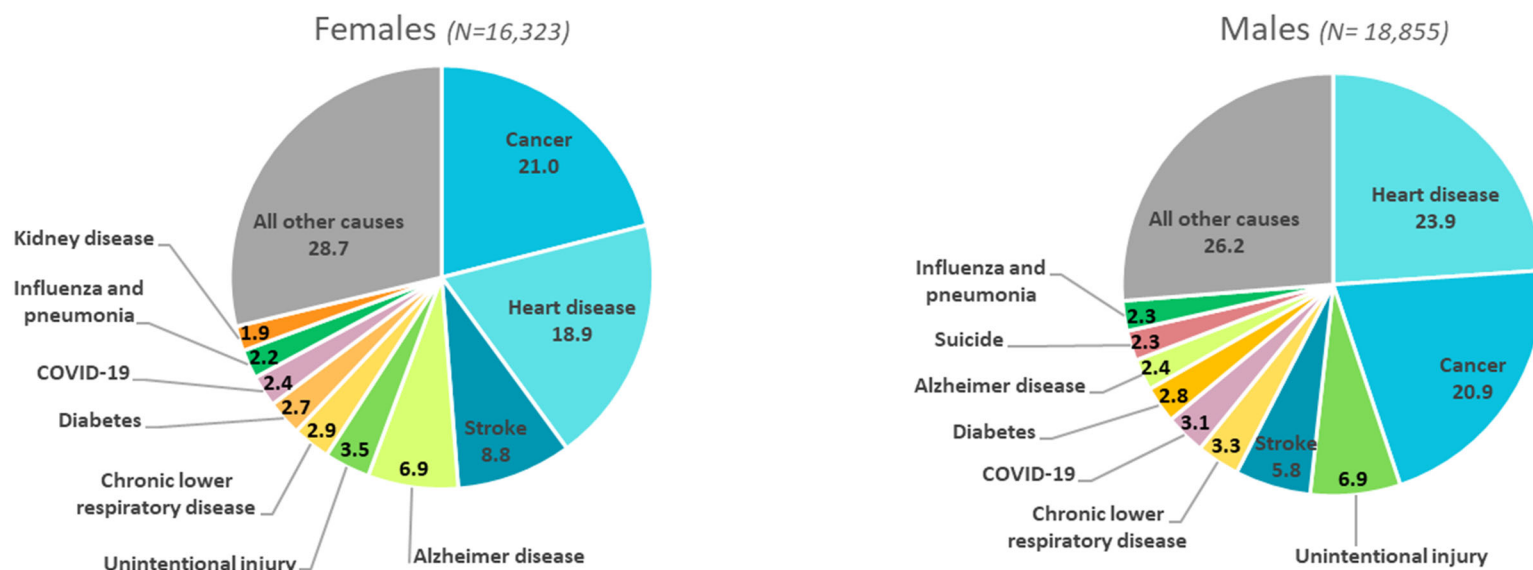
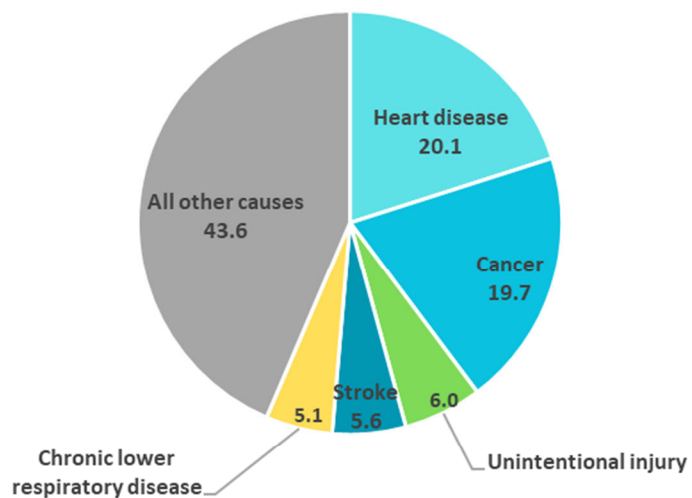


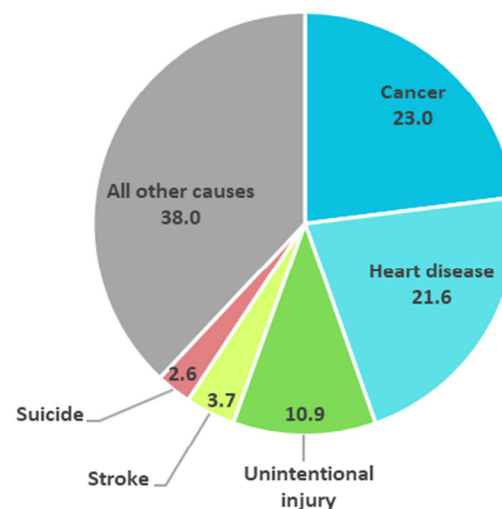
Figure 4: Percent Distribution of the 10 Leading Causes of Death by Race/Ethnicity: State of Hawai'i, 2019-2021

Part 1: American Indian or Alaska Native, Black, Chinese and Filipino

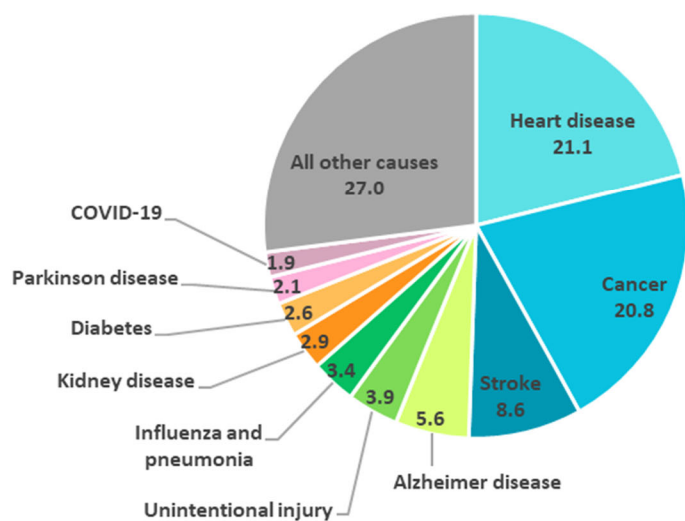
American Indian/Alaska Native (N=235)



Black (N=381)



Chinese (N=2,004)



Filipino (N=5,147)

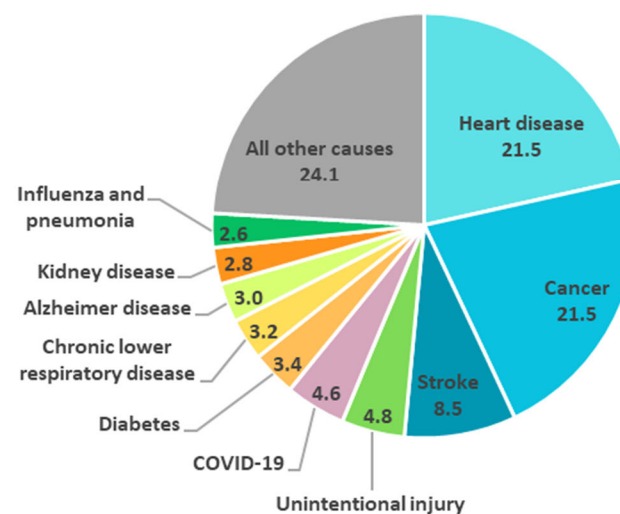


Figure 4: Percent Distribution of the 10 Leading Causes of Death by Race/Ethnicity: State of Hawai'i, 2019-2021
Part 2: Japanese, Native Hawaiian, Other, and Other Asian

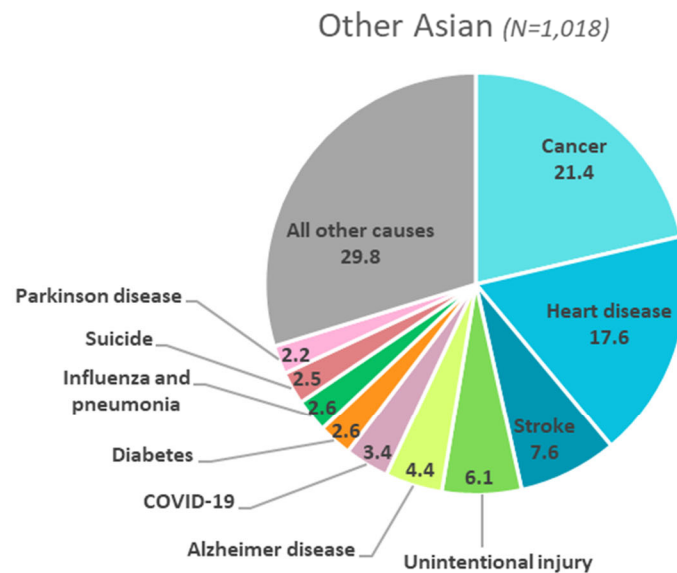
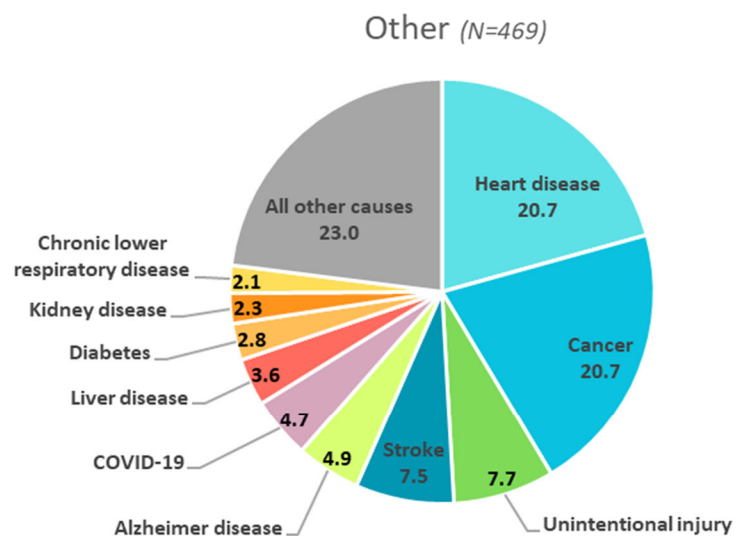
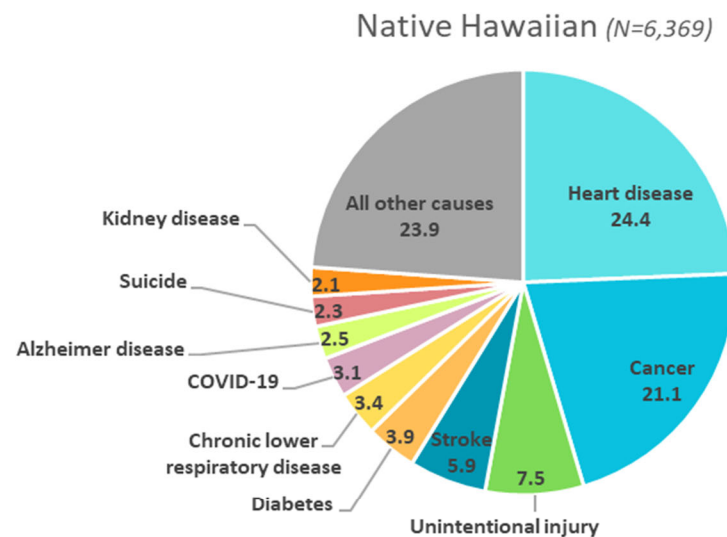
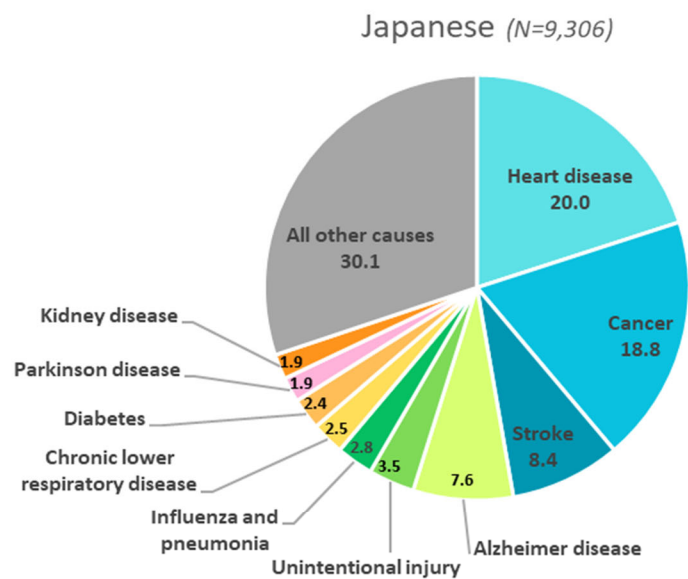


Figure 4: Percent Distribution of the 10 Leading Causes of Death by Race/Ethnicity: State of Hawai'i, 2019-2021
Part 3: Other Pacific Islander and White

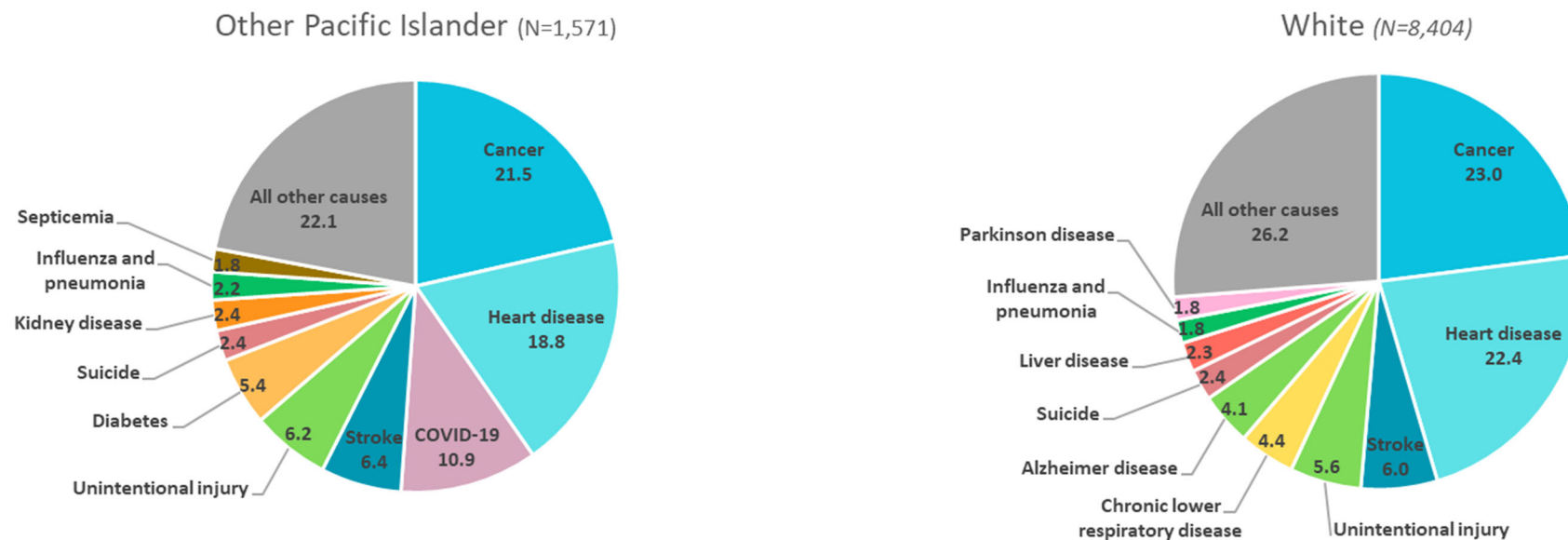


Figure 5: Percent Distribution of the 10 Leading Causes of Death by Age Group State of Hawai'i, 2019-2021
Part 1: Ages 1-9, 10-24, 25-44 and 45-64 years

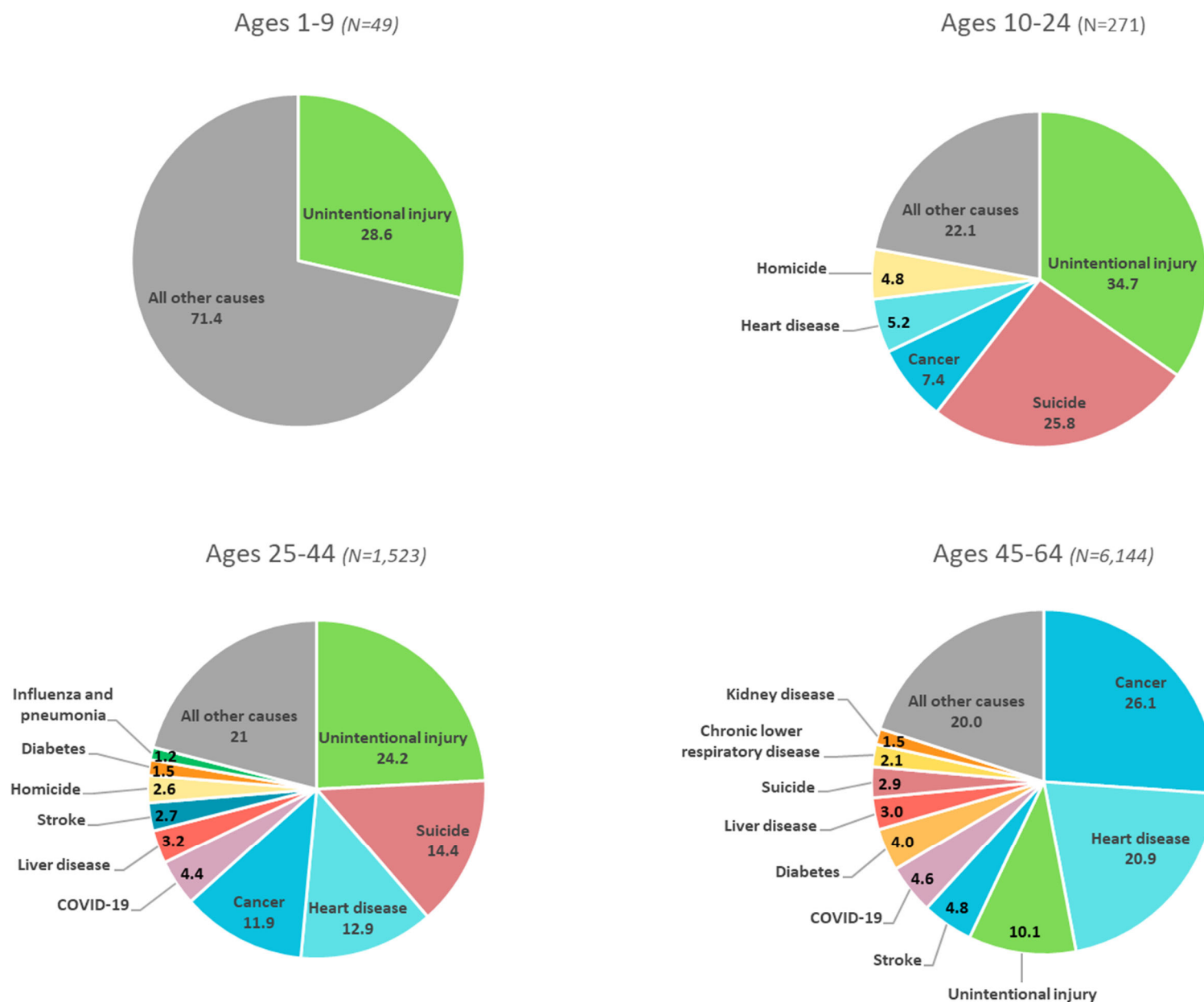
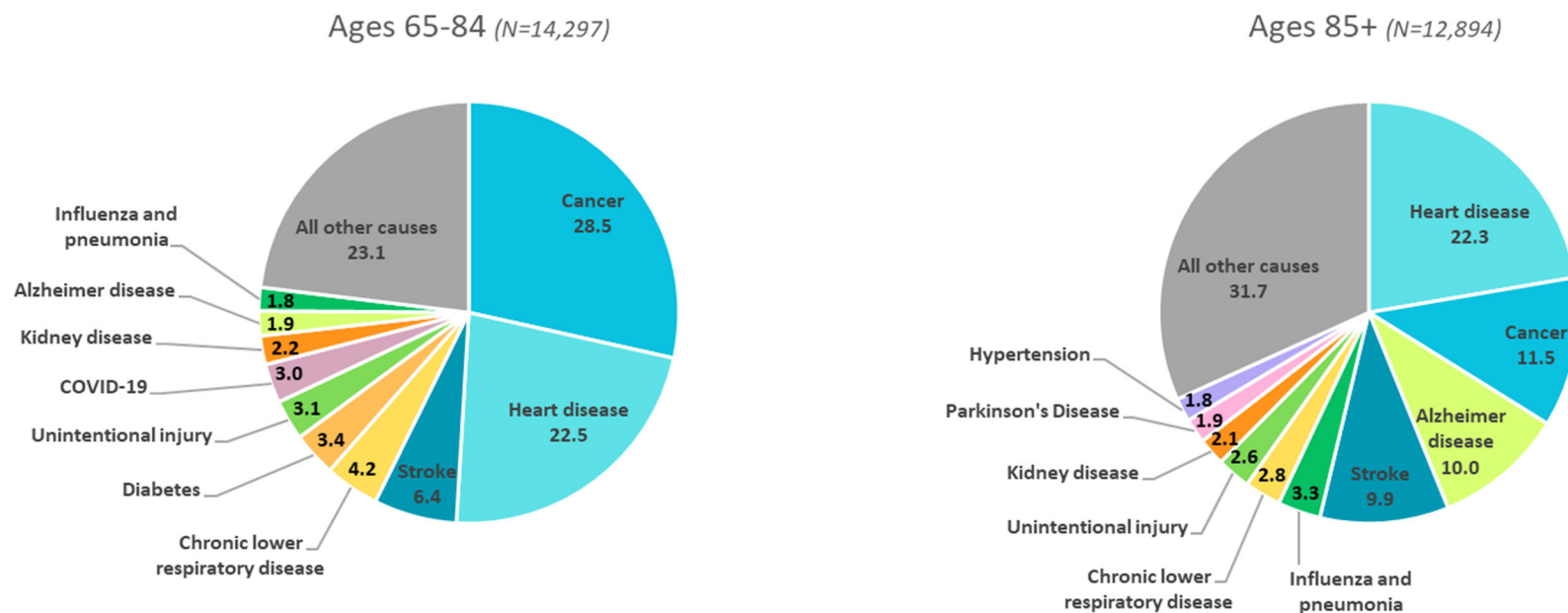


Figure 5: Percent Distribution of the 10 Leading Causes of Death by Age Group State of Hawai'i, 2019-2021
Part 2: Ages 65-84 and 85+ years



Section 3: Leading Causes of Death – Matrices

Figure 6: Leading Causes of Death in the State of Hawai'i by Year 2017-2021

Rank	2017	2018	2019	2020	2021
1	Heart disease 2,516	Heart disease 2,511	Heart disease 2,441	Heart disease 2,558	Heart disease 2,602
2	Cancer 2,398	Cancer 2,358	Cancer 2,427	Cancer 2,439	Cancer 2,501
3	Stroke 753	Stroke 768	Stroke 789	Stroke 814	Stroke 929
4	Influenza and pneumonia 628	Unintentional injury 607	Unintentional injury 620	Unintentional injury 627	COVID-19 650
5	Unintentional injury 559	Influenza and pneumonia 539	Alzheimer disease 465	Alzheimer disease 557	Unintentional injury 621
6	Alzheimer disease 463	Alzheimer disease 477	Influenza and pneumonia 361	Chronic lower respiratory disease 365	Alzheimer disease 553
7	Chronic lower respiratory disease 371	Chronic lower respiratory disease 390	Chronic lower respiratory disease 356	Diabetes 333	Chronic lower respiratory disease 378
8	Diabetes 294	Diabetes 312	Diabetes 298	COVID-19 319	Diabetes 347
9	Suicide 219	Kidney disease 181	Kidney disease 215	Influenza and pneumonia 232	Kidney disease 259
10	Kidney disease 202	Parkinson disease 177	Suicide 215	Kidney disease 208	Influenza and pneumonia 206

Report Source: The Hawai'i Health Data Warehouse

Data Source: Hawai'i State Department of Health, Office of Health Status Monitoring

Figure 7: Leading Causes of Death in the State of Hawai'i by County, 2019-2021

Rank	Hawai'i State	Hawai'i County	Honolulu County	Kaua'i County	Maui County
1	Heart disease 7,601	Heart disease 1,315	Heart disease 5,041	Heart disease 415	Cancer 871
2	Cancer 7,367	Cancer 1,215	Cancer 4,898	Cancer 383	Heart disease 830
3	Stroke 2,534	Stroke 379	Stroke 1,730	Stroke 130	Stroke 293
4	Unintentional injury 1,868	Chronic lower respiratory disease 239	Unintentional injury 1,315	Unintentional injury 89	Unintentional injury 216
5	Alzheimer disease 1,575		Alzheimer disease 1,198	Chronic lower respiratory disease 54	Alzheimer disease 180
6	Chronic lower respiratory disease 1,099	COVID-19 150	COVID-19 710	Alzheimer disease 52	Chronic lower respiratory disease 161
7	Diabetes 978	Alzheimer disease 145	Diabetes 659	Diabetes 50	Diabetes 124
8	COVID-19 968		Chronic lower respiratory disease 645	Suicide 30	COVID-19 93
9	Influenza and pneumonia 799	Influenza and pneumonia 127	Influenza and pneumonia 589	Hypertension 27	Suicide 89
10	Kidney disease 682	Suicide 123	Kidney disease 493		Liver disease 58

Report Source: The Hawai'i Health Data Warehouse

Data Source: Hawai'i State Department of Health, Office of Health Status Monitoring

Figure 8: Leading Causes of Death in the State of Hawai'i by Sex, 2019-2021

Rank	Hawai'i State	Female	Male
1	Heart disease 7,601	Cancer 3,426	Heart disease 4,508
2	Cancer 7,367	Heart disease 3,093	Cancer 3,941
3	Stroke 2,534	Stroke 1,440	Unintentional injury 1,300
4	Unintentional injury 1,868	Alzheimer disease 1,125	Stroke 1,092
5	Alzheimer disease 1,575	Unintentional injury 568	Chronic lower respiratory disease 631
6	Chronic lower respiratory disease 1,099	Chronic lower respiratory disease 468	COVID-19 580
7	Diabetes 978	Diabetes 443	Diabetes 535
8	COVID-19 968	COVID-19 388	Alzheimer disease 450
9	Influenza and pneumonia 799	Influenza and pneumonia 363	Suicide 438
10	Kidney disease 682	Kidney disease 316	Influenza and pneumonia 435

Report Source: The Hawai'i Health Data Warehouse

Data Source: Hawai'i State Department of Health, Office of Health Status Monitoring

Figure 9: Leading Causes of Death in the State of Hawai'i by Age Group, 2019-2021

Rank	Hawai'i State	1-9 Years	10-24 Years	25-44 Years	45-64 Years	65-84 Years	85+ Years
1	Heart disease 7,601	Unintentional injury 14	Unintentional injury 94	Unintentional injury 369	Cancer 1,602	Cancer 4,077	Heart disease 2,878
2	Cancer 7,367		Suicide 70	Suicide 219	Heart disease 1,286	Heart disease 3,223	Cancer 1,484
3	Stroke 2,534		Cancer 20	Heart disease 197	Unintentional injury 623	Stroke 914	Alzheimer disease 1,290
4	Unintentional injury 1,868		Heart disease 14	Cancer 181	Stroke 295	Chronic lower respiratory disease 598	Stroke 1,278
5	Alzheimer disease 1,575		Homicide 13	COVID-19 67	COVID-19 282	Diabetes 479	Influenza and pneumonia 431
6	Chronic lower respiratory disease 1,099			Liver disease 49	Diabetes 243	Unintentional injury 438	Chronic lower respiratory disease 358
7	Diabetes 978			Stroke 41	Liver disease 160	COVID-19 422	Unintentional injury 330
8	COVID-19 968			Homicide 39	Suicide 181	Kidney disease 310	Kidney disease 269
9	Influenza and pneumonia 799			Diabetes 23	Chronic lower respiratory disease 128	Alzheimer disease 277	Parkinson disease 250
10	Kidney disease 682			Influenza and pneumonia 18	Kidney disease 90	Influenza and pneumonia 262	Hypertension 234

*Dark grey cells represent data that has been suppressed due to size restrictions.

Figure 10: Leading Causes of Death in the State of Hawai'i by All Race/Ethnicities, 2019-2021

Rank	Hawai'i State	American Indian/ Alaska Native	Black	Chinese	Filipino	Japanese	Native Hawaiian	Other	Other Asian	Other Pacific Islander	White
1	Heart disease 7,601	Heart disease 47	Cancer 84	Heart disease 423	Cancer 1,098	Heart disease 1,864	Heart disease 1,864	Cancer 97	Cancer 218	Cancer 337	Cancer 1,934
2	Cancer 7,367	Cancer 46	Heart disease 79	Cancer 416	Heart disease 1,098	Cancer 1,747	Cancer 1,344	Heart disease 97	Heart disease 179	Heart disease 296	Heart disease 1,883
3	Stroke 2,534	Unintentional injury 14	Unintentional injury 40	Stroke 173	Stroke 435	Stroke 784	Unintentional injury 475	Unintentional injury 36	Stroke 77	COVID-19 172	Stroke 503
4	Unintentional injury 1,868	Stroke 13	Stroke 14	Alzheimer disease 112	Unintentional injury 245	Alzheimer disease 710	Stroke 374	Stroke 35	Unintentional injury 62	Stroke 100	Unintentional injury 471
5	Alzheimer disease 1,575	Chronic lower respiratory disease 12	Suicide 10	Unintentional injury 78	COVID-19 236	Unintentional injury 325	Diabetes 246	Alzheimer disease 23	Alzheimer disease 45	Unintentional injury 98	Chronic lower respiratory disease 366
6	Chronic lower respiratory disease 1,099			Influenza and pneumonia 69	Diabetes 176	Influenza and pneumonia 262	Chronic lower respiratory disease 214	COVID-19 22	COVID-19 35	Diabetes 85	Alzheimer disease 342
7	Diabetes 978			Kidney disease 50	Chronic lower respiratory disease 166	Chronic lower respiratory disease 23	COVID-19 199	Liver disease 330	Diabetes 26	Kidney disease 37	Suicide 205
8	COVID-19 968			Diabetes 53	Alzheimer disease 152	Diabetes 220	Alzheimer disease 159	Diabetes 13	Influenza and pneumonia 26	Suicide 37	Liver disease 190
9	Influenza and pneumonia 799			Parkinson disease 43	Kidney disease 145	Parkinson disease 180	Suicide 148	Kidney disease 11	Suicide 25	Influenza and pneumonia 34	Influenza and pneumonia 154
10	Kidney disease 682			COVID-19 38	Influenza and pneumonia 135	Kidney disease 175	Kidney disease 137	Chronic lower respiratory disease 10	Parkinson disease 22	Septicemia 28	Parkinson disease 153

*Dark grey cells represent data that has been suppressed due to size restrictions.

Figure 11: Leading Causes of Death in the State of Hawai'i by Race/Ethnicity, 2019-2021

Part 1: Hawai'i State, American Indian/Alaska Native, Black, Chinese, Filipino and Japanese

Rank	Hawai'i State	American Indian/ Alaska Native	Black	Chinese	Filipino	Japanese
1	Heart disease 7,601	Heart disease 47	Cancer 84	Heart disease 423	Cancer 1,098	Heart disease 1,864
2	Cancer 7,367	Cancer 46	Heart disease 79	Cancer 416	Heart disease 1,098	Cancer 1,747
3	Stroke 2,534	Unintentional injury 14	Unintentional injury 40	Stroke 173	Stroke 435	Stroke 784
4	Unintentional injury 1,868	Stroke 13	Stroke 14	Alzheimer disease 112	Unintentional injury 245	Alzheimer disease 710
5	Alzheimer disease 1,575	Chronic lower respiratory disease 12	Suicide 10	Unintentional injury 78	COVID-19 236	Unintentional injury 325
6	Chronic lower respiratory disease 1,099			Influenza and pneumonia 69	Diabetes 176	Influenza and pneumonia 262
7	Diabetes 978			Kidney disease 50	Chronic lower respiratory disease 166	Chronic lower respiratory disease 23
8	COVID-19 968			Diabetes 53	Alzheimer disease 152	Diabetes 220
9	Influenza and pneumonia 799			Parkinson disease 43	Kidney disease 145	Parkinson disease 180
10	Kidney disease 682			COVID-19 38	Influenza and pneumonia 135	Kidney disease 175

*Dark grey cells represent data that has been suppressed due to size restrictions.

Figure 11: Leading Causes of Death in the State of Hawai'i by Race/Ethnicity, 2019-2021
Part 2: Hawai'i State, Native Hawaiian, Other, Other Asian, Other Pacific Islander and White

Rank	Hawai'i State	Native Hawaiian	Other	Other Asian	Other Pacific Islander	White
1	Heart disease 7,601	Heart disease 1,864	Cancer 97	Cancer 218	Cancer 337	Cancer 1,934
2	Cancer 7,367	Cancer 1,344	Heart disease 97	Heart disease 179	Heart disease 296	Heart disease 1,883
3	Stroke 2,534	Unintentional injury 475	Unintentional injury 36	Stroke 77	COVID-19 172	Stroke 503
4	Unintentional injury 1,868	Stroke 374	Stroke 35	Unintentional injury 62	Stroke 100	Unintentional injury 471
5	Alzheimer disease 1,575	Diabetes 246	Alzheimer disease 23	Alzheimer disease 45	Unintentional injury 98	Chronic lower respiratory disease 366
6	Chronic lower respiratory disease 1,099	Chronic lower respiratory disease 214	COVID-19 22	COVID-19 35	Diabetes 85	Alzheimer disease 342
7	Diabetes 978	COVID-19 199	Liver disease 330	Diabetes 26	Kidney disease 37	Suicide 205
8	COVID-19 968	Alzheimer disease 159	Diabetes 13	Influenza and pneumonia 26	Suicide 37	Liver disease 190
9	Influenza and pneumonia 799	Suicide 148	Kidney disease 11	Suicide 25	Influenza and pneumonia 34	Influenza and pneumonia 154
10	Kidney disease 682	Kidney disease 137	Chronic lower respiratory disease 10	Parkinson disease 22	Septicemia 28	Parkinson disease 153

*Dark grey cells represent data that has been suppressed due to size restrictions.

References

Hawai'i Health Data Warehouse. *2023 Race/Ethnicity Documentation*. Published March 2023. Accessed October 23, 2023.

<https://hhdw.org/wp-content/uploads/2023/03/Race-Ethnicity-Documentation-2023-3.30.23.pdf>

Hawai'i Health Data Warehouse. *2023 Geography Documentation*. Published March 2023. Accessed October 23, 2023.

<https://hhdw.org/wp-content/uploads/2023/03/Geography-Documentation-3.30.23.pdf>

Heron, M. Deaths: Leading causes for 2019. *National Vital Statistics Reports*. 2021. 70(9):1-113. Published July 26, 2021. Accessed August 15, 2023. <https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-09-508.pdf>