

Leading Causes of Death State of Hawai‘i, 2018-2022

Prepared by:

Hawai‘i Health Data Warehouse, University of Hawai‘i at Mānoa
Thompson School of Social Work & Public Health

December 1, 2023
Updated April 4, 2024

Suggested citation: Hawai‘i State Department of Health, Hawai‘i Health Data Warehouse. Leading Causes of Death: State of Hawai‘i, 2018-2022. [Figure title and years, if applicable]. Published December 1, 2023. Updated April 4, 2024. Accessed [insert date]. [insert URL].

Table of Contents

Section 1: Background & Methods	2
Section 2: Leading Causes of Death – Pie Charts	4
Figure 1. Percent Distribution of the 10 Leading Causes of Death: State of Hawai'i, 2022 and 2020-2022.....	4
Figure 2: Percent Distribution of the 10 Leading Causes of Death by County: State of Hawai'i, 2020-2022	5
Figure 3: Percent Distribution of the 10 Leading Causes of Death by Sex: State of Hawai'i, 2020-2022.....	6
Figure 4: Percent Distribution of the 10 Leading Causes of Death by Race/Ethnicity: State of Hawai'i, 2020-2022.....	7
Part 1: American Indian or Alaska Native, Black, Chinese and Filipino	7
Part 2: Japanese, Other Asian, Native Hawaiian, and Other Pacific Islander	8
Part 3: White and Other.....	9
Figure 5: Percent Distribution of the 10 Leading Causes of Death by Age Group State of Hawai'i, 2020-2022, part 1	10
Figure 5: Percent Distribution of the 10 Leading Causes of Death by Age Group State of Hawai'i, 2020-2022, part 2	11
Section 3: Leading Causes of Death – Matrices	12
Figure 6: Leading Causes of Death in the State of Hawai'i by Year 2018-2022	12
Figure 7: Leading Causes of Death in the State of Hawai'i by County, 2020-2022.....	13
Figure 8: Leading Causes of Death in the State of Hawai'i by Sex, 2020-2022.....	14
Figure 9: Leading Causes of Death in the State of Hawai'i by Age Group, 2020-2022	15
Figure 10: Leading Causes of Death in the State of Hawai'i by Race/Ethnicity, 2018-2022.....	16
Figure 11: Leading Causes of Death in the State of Hawai'i by Race/Ethnicity, 2020-2022, part 1	17
References	19

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.

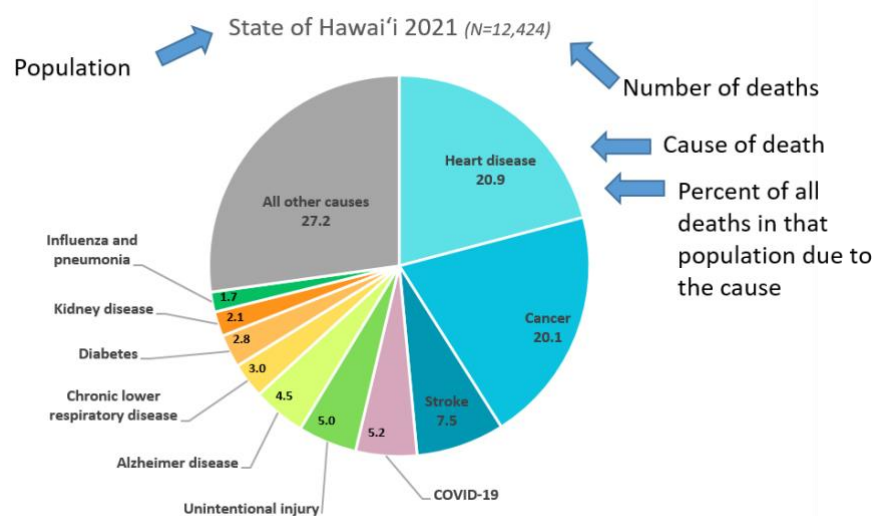
Data for this report are based on information from death certificates. Causes of death are classified by the *International Classification of Diseases, 10th Revision (ICD-10)*, and underlying cause of death is assigned by the National Center for Health Statistics (NCHS), National Vital Statistics System (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 2018-2022 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, 2022 and 2020-2022

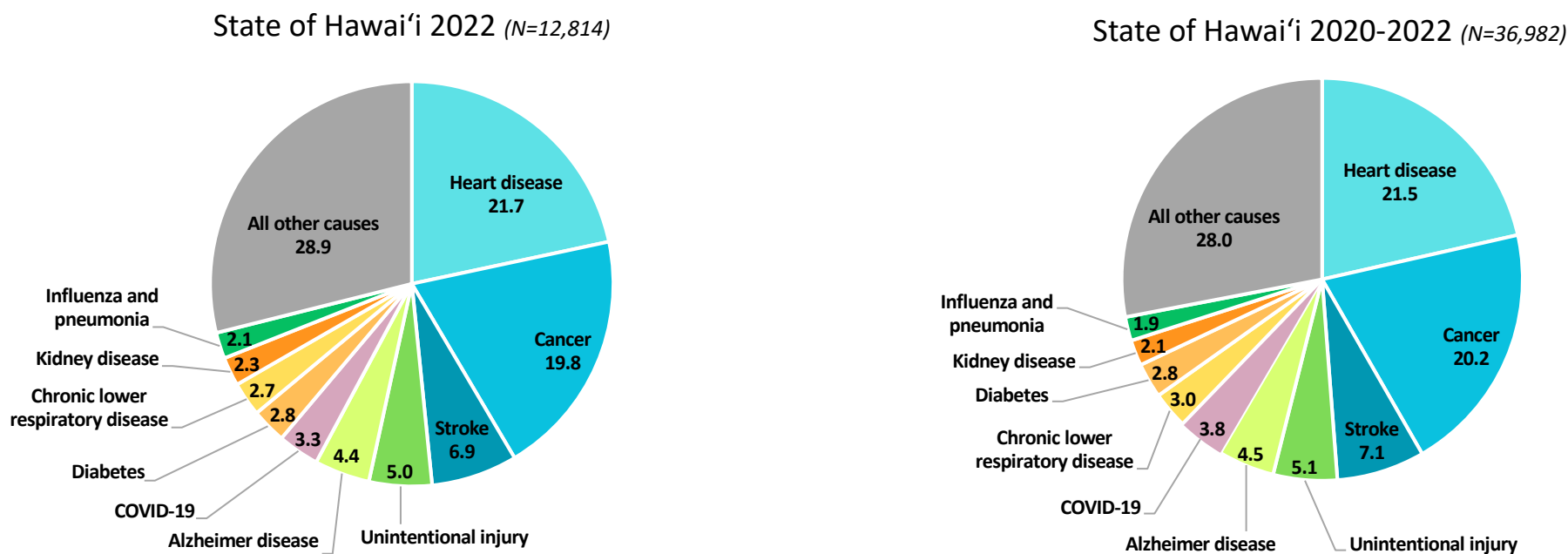
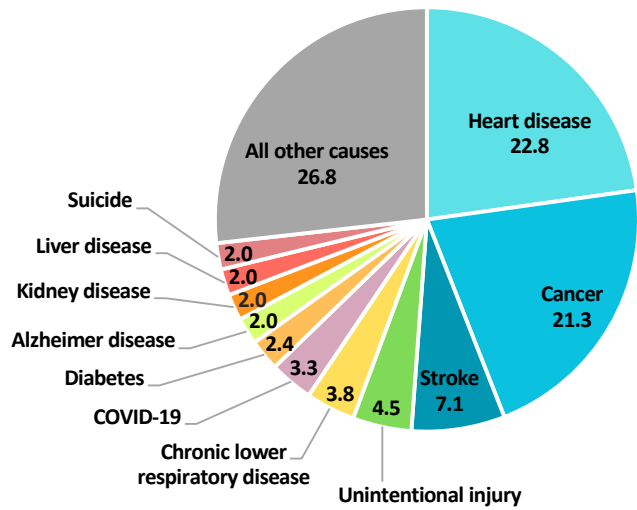
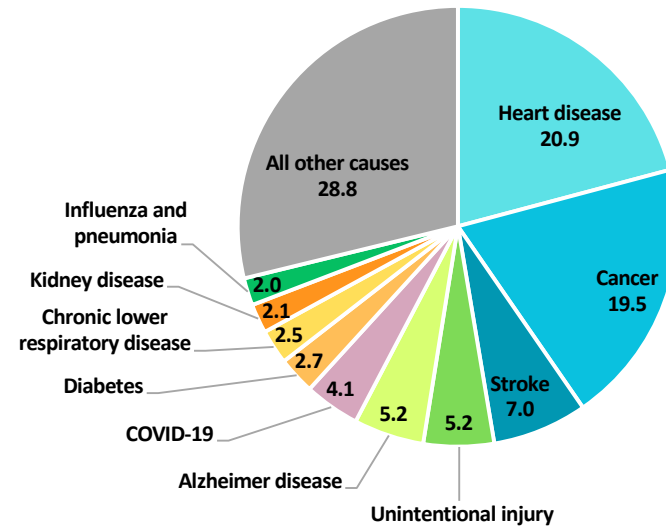


Figure 2: Percent Distribution of the 10 Leading Causes of Death by County: State of Hawai'i, 2020-2022

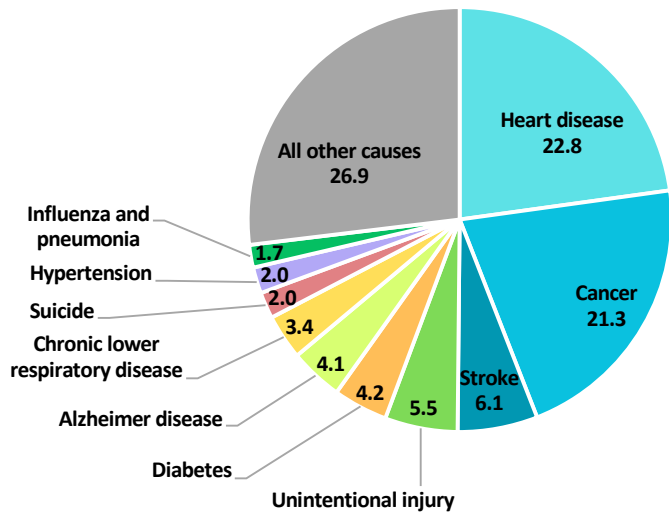
Hawai'i County (N=5,943)



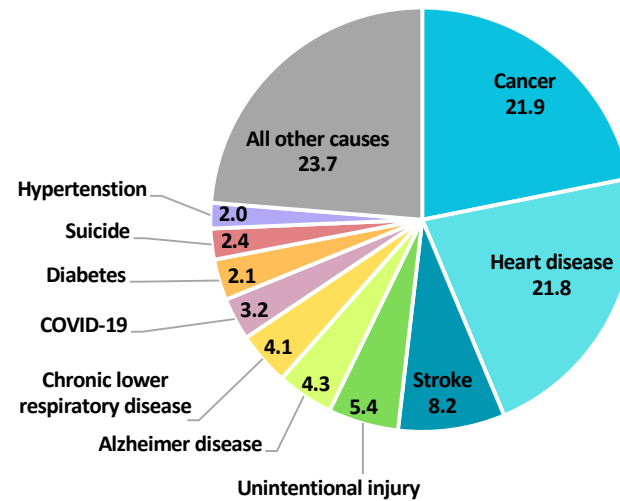
Honolulu County (N=25,465)



Kaua'i County (N=1,802)



Maui County (N=3,947)



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

Figure 3: Percent Distribution of the 10 Leading Causes of Death by Sex: State of Hawai'i, 2020-2022

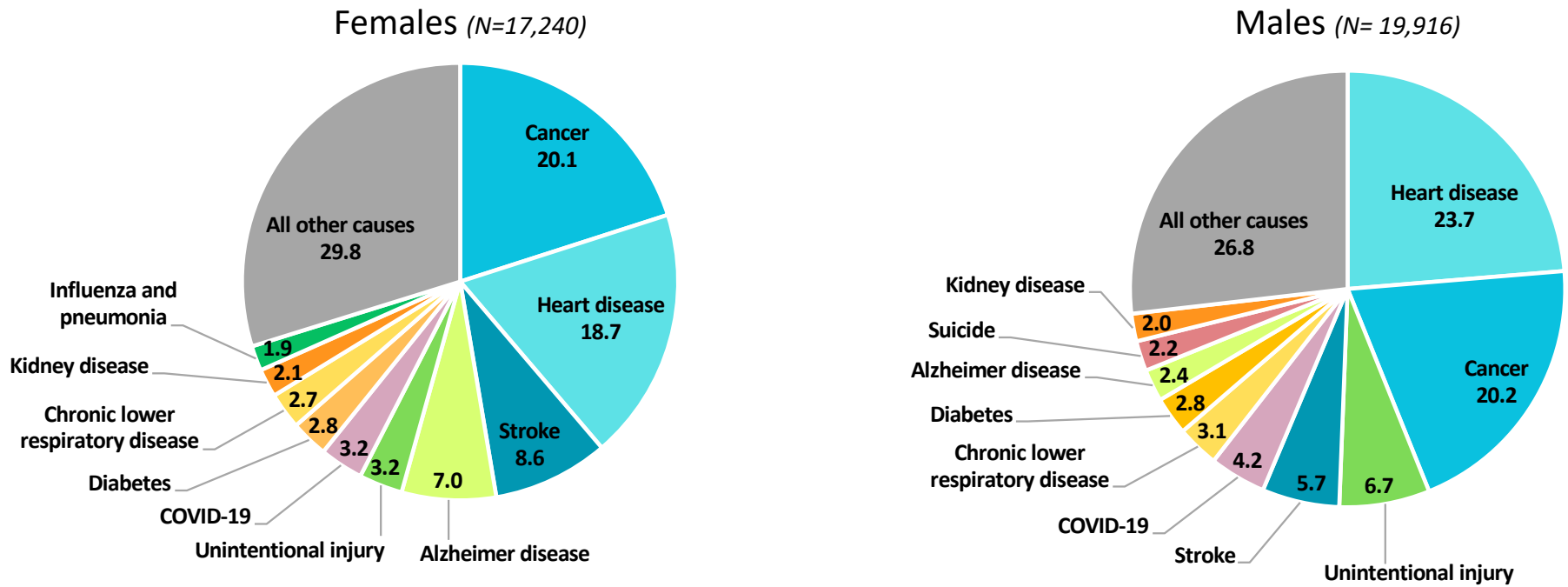
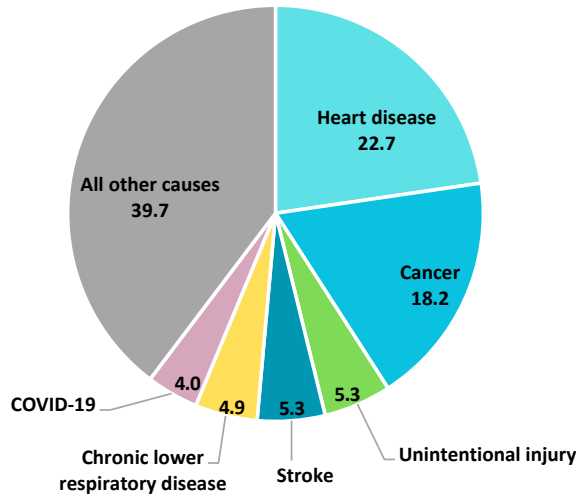


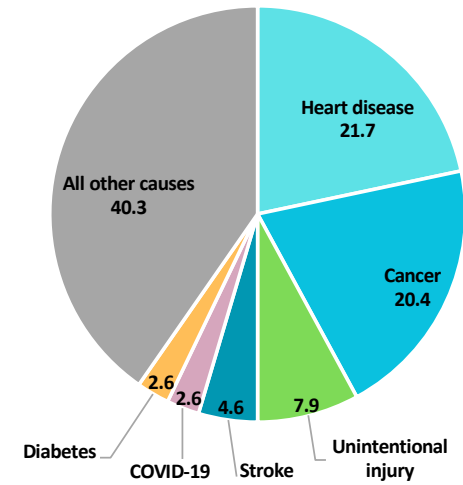
Figure 4: Percent Distribution of the 10 Leading Causes of Death by Race/Ethnicity: State of Hawai'i, 2020-2022

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

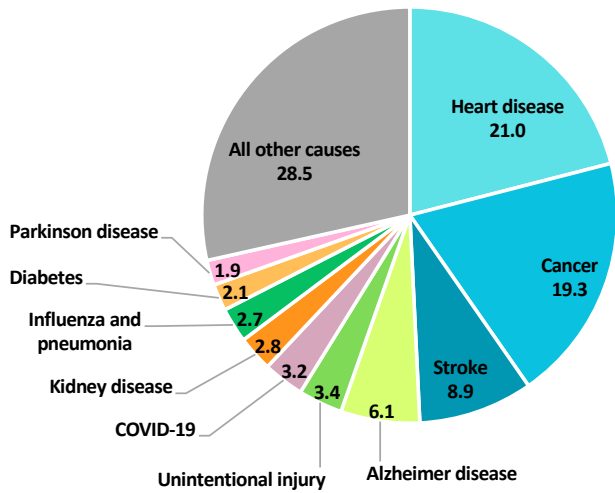
American Indian/Alaska Native (N=247)



Black (N=392)



Chinese (N=2,066)



Filipino (N=5,498)

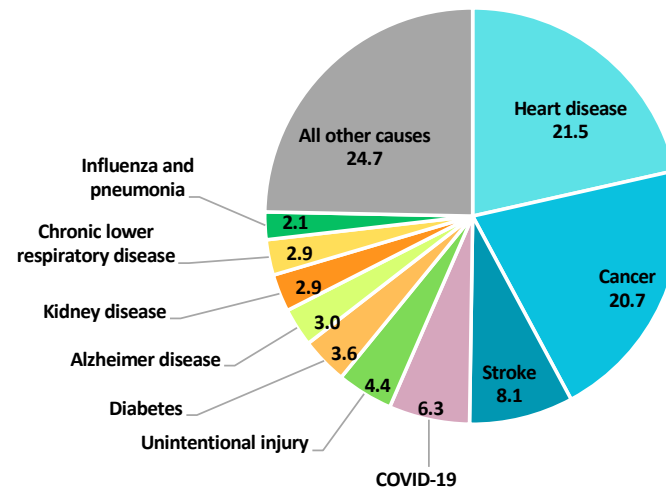
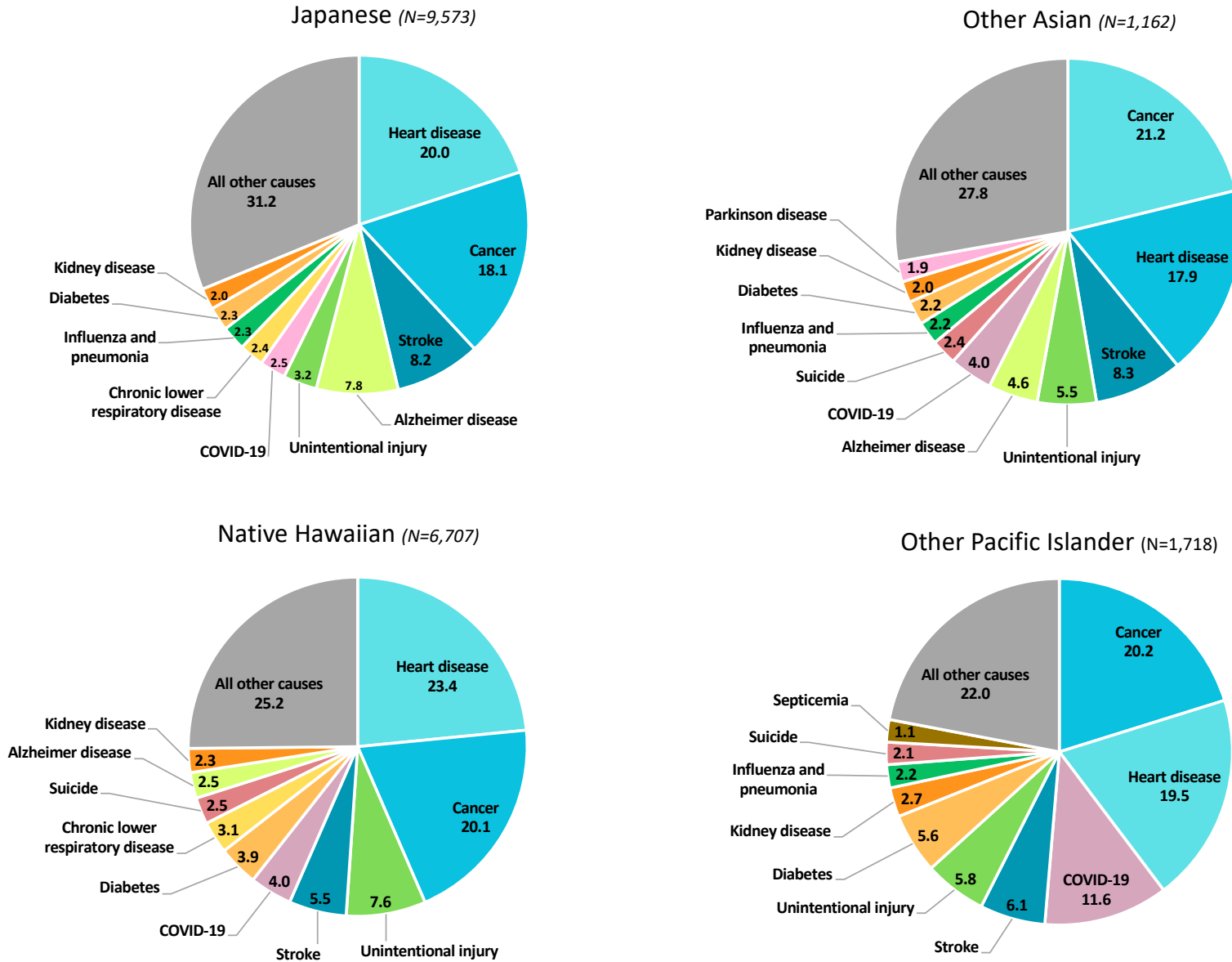


Figure 4: Percent Distribution of the 10 Leading Causes of Death by Race/Ethnicity: State of Hawai'i, 2020-2022
Part 2: Japanese, Other Asian, Native Hawaiian, and Other Pacific Islander



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

Figure 4: Percent Distribution of the 10 Leading Causes of Death by Race/Ethnicity: State of Hawai'i, 2020-2022
Part 3: White and Other

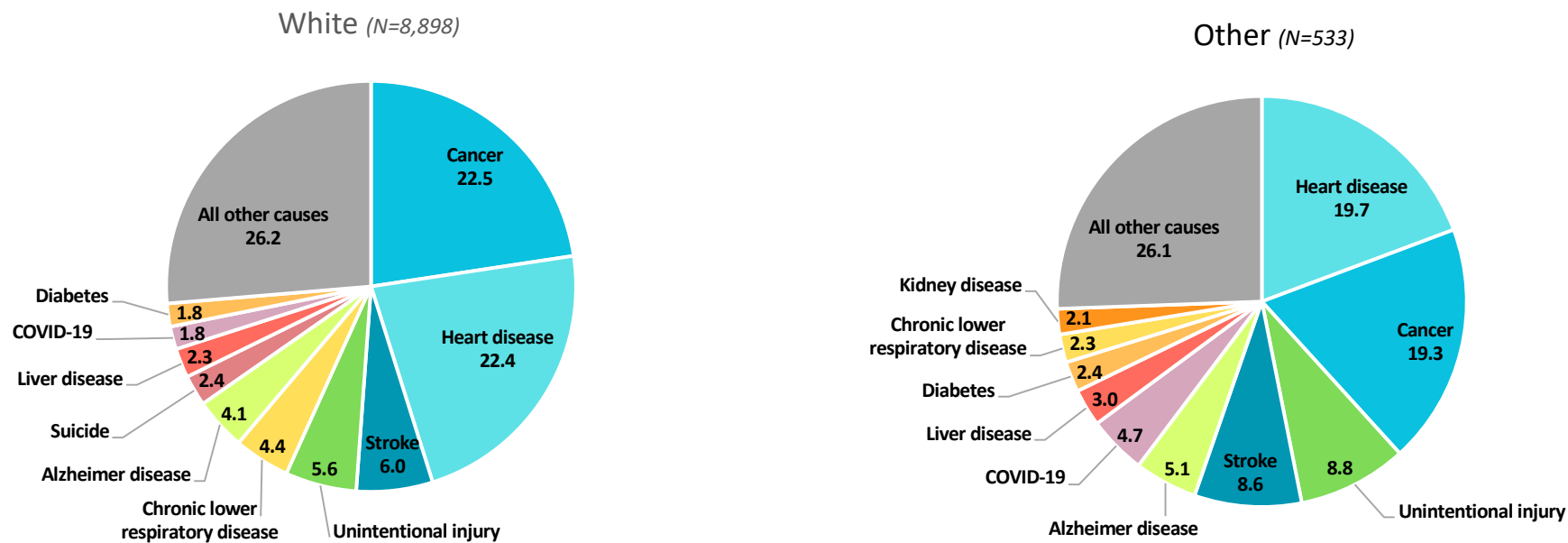
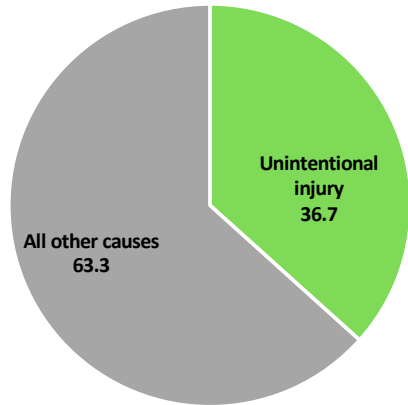
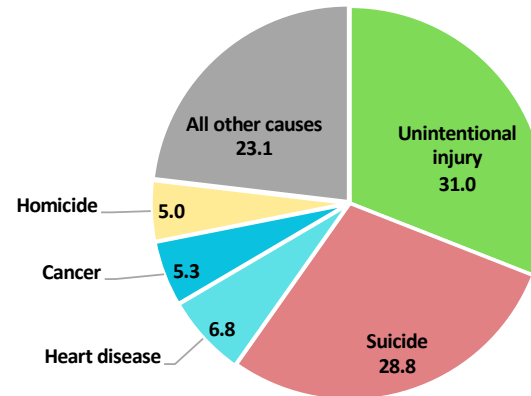


Figure 5: Percent Distribution of the 10 Leading Causes of Death by Age Group State of Hawai'i, 2020-2022, part 1

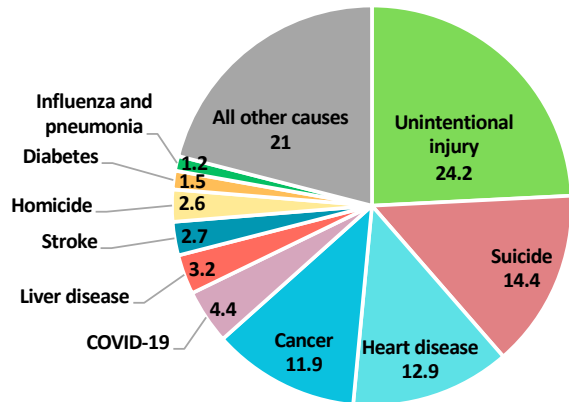
Ages 1-9 (N=60)



Ages 10-24 (N=281)



Ages 25-44 (N=1,521)



Ages 45-64 (N=6,144)

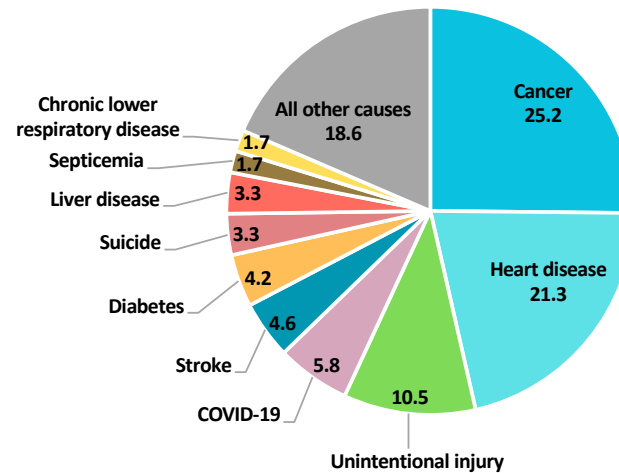
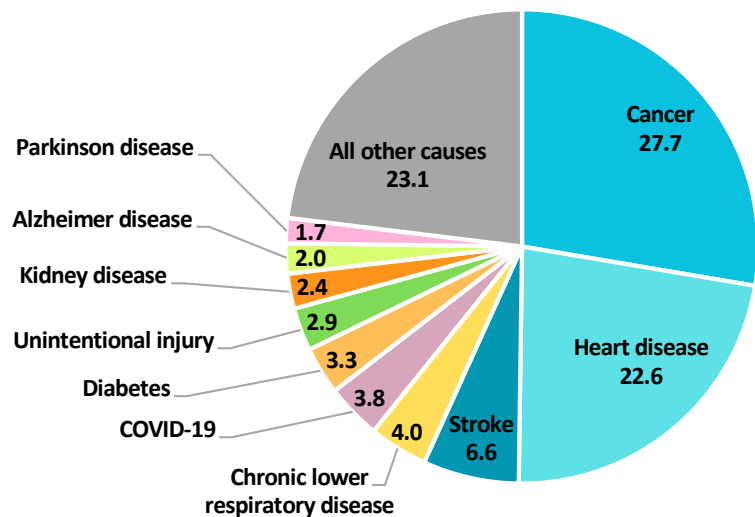
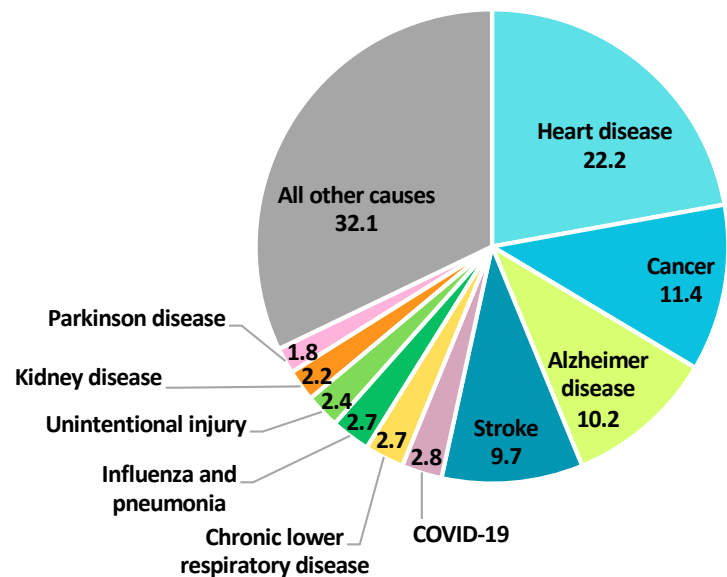


Figure 5: Percent Distribution of the 10 Leading Causes of Death by Age Group State of Hawai'i, 2020-2022, part 2

Ages 65-84 (N=15,340)



Ages 85+ (N=13,314)



Section 3: Leading Causes of Death – Matrices

Figure 6: Leading Causes of Death in the State of Hawai'i by Year 2018-2022

Rank	2018	2019	2020	2021	2022
1	Heart disease 2,511	Heart disease 2,441	Heart disease 2,558	Heart disease 2,602	Heart disease 2,775
2	Cancer 2,358	Cancer 2,427	Cancer 2,439	Cancer 2,501	Cancer 2,540
3	Stroke 768	Stroke 789	Stroke 814	Stroke 929	Stroke 885
4	Unintentional injury 607	Unintentional injury 620	Unintentional injury 627	COVID-19 650	Unintentional injury 645
5	Influenza and pneumonia 539	Alzheimer disease 465	Alzheimer disease 557	Unintentional injury 621	Alzheimer disease 570
6	Alzheimer disease 477	Alzheimer disease 361	Chronic lower respiratory disease 365	Alzheimer disease 553	COVID-19 427
7	Chronic lower respiratory disease 390	Chronic lower respiratory disease 356	Diabetes 333	Chronic lower respiratory disease 378	Diabetes 357
8	Diabetes 312	Diabetes 298	COVID-19 319	Diabetes 347	Chronic lower respiratory disease 349
9	Kidney disease 181	Kidney disease 215	Influenza and pneumonia 232	Kidney disease 259	Kidney disease 295
10	Parkinson disease 177	Suicide 215	Kidney disease 208	Influenza and pneumonia 206	Influenza and pneumonia 269

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, 2020-2022

Rank	Hawai'i State	Hawai'i County	Honolulu County	Kaua'i County	Maui County
1	Heart Disease 7,937	Heart disease 1,354	Heart disease 5,311	Heart disease 411	Cancer 863
2	Cancer 7,480	Cancer 1,264	Cancer 4,970	Cancer 383	Heart disease 861
3	Stroke 2,628	Stroke 423	Stroke 1,773	Stroke 110	Stroke 322
4	Unintentional injury 1,901	Unintentional injury 267	Unintentional injury 1,322	Unintentional injury 100	Unintentional injury 212
5	Alzheimer disease 1,680	Chronic lower respiratory disease 224	Alzheimer disease 1,315	Diabetes 75	Alzheimer disease 171
6	COVID-19 1,396	COVID-19 198	COVID-19 1,040	Alzheimer disease 73	Chronic lower respiratory disease 161
7	Chronic lower respiratory disease 1,092	Diabetes 142	Diabetes 697	Chronic lower respiratory disease 62	COVID-19 128
8	Diabetes 1,037	Alzheimer disease 121	Chronic lower respiratory disease 645	Suicide 36	Diabetes 123
9	Kidney disease 763	Kidney disease 120	Kidney disease 546	Hypertension 36	Suicide 93
10	Influenza and pneumonia 710	Liver disease 119 Suicide 119	Influenza and pneumonia 514	Influenza and pneumonia 31	Hypertension 77

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, 2020-2022

Rank	Hawai'i State	Female	Male
1	Heart Disease 7,937	Cancer 3,514	Heart disease 4,901
2	Cancer 7,480	Heart disease 3,301	Cancer 4,097
3	Stroke 2,628	Stroke 1,505	Unintentional injury 1,531
4	Unintentional injury 1,901	Alzheimer disease 1,213	Stroke 1,163
5	Alzheimer disease 1,680	Unintentional injury 617	COVID-19 860
6	COVID-19 1,396	COVID-19 572	Chronic lower respiratory disease 634
7	Chronic lower respiratory disease 1,092	Diabetes 478	Diabetes 568
8	Diabetes 1,037	Chronic lower respiratory disease 476	Suicide 483
9	Kidney disease 763	Kidney disease 361	Alzheimer disease 482
10	Influenza and pneumonia 710	Influenza and pneumonia 323	Kidney disease 412

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, 2020-2022

Rank	Hawai'i State	1-9 Years	10-24 Years	25-44 Years	45-64 Years	65-84 Years	85+ Years
1	Heart Disease 7,937	Unintentional injury 22	Unintentional injury 87	Unintentional injury 370	Cancer 1,546	Cancer 4,242	Heart disease 2,952
2	Cancer 7,480		Suicide 81	Suicide 214	Heart disease 1,307	Heart disease 3,463	Cancer 1,513
3	Stroke 2,628		Heart disease 19	Heart disease 189	Unintentional injury 644	Stroke 1,008	Alzheimer disease 1,363
4	Unintentional injury 1,901		Cancer 15	Cancer 161	COVID-19 359	Chronic lower respiratory disease 615	Stroke 1,286
5	Alzheimer disease 1,680		Homicide 14	COVID-19 77	Stroke 282	COVID-19 579	COVID-19 370
6	COVID-19 1,396			Stroke 49	Diabetes 256	Diabetes 500	Chronic lower respiratory disease 359
7	Chronic lower respiratory disease 1,092			Liver disease 42	Suicide 201	Unintentional injury 451	Influenza and pneumonia 357
8	Diabetes 1,037			Homicide 41	Liver disease 200	Kidney disease 367	Unintentional injury 314
9	Kidney disease 763			Diabetes 33	Septicemia 105	Alzheimer disease 313	Kidney disease 287
10	Influenza and pneumonia 710			Influenza and pneumonia 18	Chronic lower respiratory disease 104	Parkinson disease 265	Diabetes 247

*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 Race/Ethnicity, 2020-2022

Rank	Hawai'i State	American Indian/ Alaska Native	Black	Chinese	Filipino	Japanese	Other Asian	Native Hawaiian	Other Pacific Islander	White	Other
1	Heart disease 7,937	Heart disease 56	Heart disease 85	Heart disease 434	Heart disease 1,181	Heart disease 1,911	Cancer 246	Heart disease 1,572	Cancer 347	Cancer 2,003	Heart disease 105
2	Cancer 7,480	Cancer 45	Cancer 80	Cancer 399	Cancer 1,136	Cancer 1,734	Heart disease 208	Cancer 1,345	Heart disease 335	Heart disease 1,946	Cancer 103
3	Stroke 2,628	Stroke 13	Unintentional injury 31	Stroke 184	Stroke 445	Stroke 787	Stroke 96	Unintentional injury 509	COVID-19 200	Stroke 546	Unintentional injury 47
4	Unintentional injury 1,901	Unintentional injury 13	Stroke 18	Alzheimer disease 127	COVID-19 346	Alzheimer disease 746	Unintentional injury 64	Stroke 368	Stroke 105	Unintentional injury 488	Stroke 46
5	Alzheimer disease 1,680	Alzheimer disease 12	COVID-19 10	Unintentional injury 71	Unintentional injury 240	Unintentional injury 309	Alzheimer disease 54	COVID-19 271	Unintentional injury 100	Chronic lower respiratory disease 35	Alzheimer disease 27
6	COVID-19 1,396	Chronic lower respiratory disease 12	Diabetes 10	COVID-19 66	Diabetes 200	COVID-19 237	COVID-19 47	Diabetes 259	Diabetes 97	Alzheimer disease 354	COVID-19 25
7	Chronic lower respiratory disease 1,092	COVID-19 10		Kidney disease 57	Alzheimer disease 164	Chronic lower respiratory disease 227	Suicide 28	Chronic lower respiratory disease 207	Kidney disease 47	Suicide 203	Diabetes 19
8	Diabetes 1,037			Influenza and pneumonia 56	Kidney disease 160	Influenza and pneumonia 222	Influenza and pneumonia 25	Suicide 170	Influenza and pneumonia 37	Liver disease 198	Liver disease 16
9	Kidney disease 763			Diabetes 43	Chronic lower respiratory disease 152	Diabetes 218	Kidney disease 23	Alzheimer disease 165	Suicide 36	COVID-19 177	Chronic lower respiratory disease 12
10	Influenza and pneumonia 710			Parkinson disease 40	Influenza and pneumonia 117	Kidney disease 196	Diabetes 20	Kidney disease 154	Septicemia 36	Diabetes 158	Kidney disease 11

*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, 2020-2022, part 1

Rank	Hawai'i State	American Indian/ Alaska Native	Black	Chinese	Filipino	Japanese
1	Heart disease 7,937	Heart disease 56	Heart disease 85	Heart disease 434	Heart disease 1,181	Heart disease 1,911
2	Cancer 7,480	Cancer 45	Cancer 80	Cancer 399	Cancer 1,136	Cancer 1,734
3	Stroke 2,628	Stroke 13	Unintentional injury 31	Stroke 184	Stroke 445	Stroke 787
4	Unintentional injury 1,901	Unintentional injury 13	Stroke 18	Alzheimer disease 127	COVID-19 346	Alzheimer disease 746
5	Alzheimer disease 1,680	Alzheimer disease 12	COVID-19 10	Unintentional injury 71	Unintentional injury 240	Unintentional injury 309
6	COVID-19 1,396	Chronic lower respiratory disease 12	Diabetes 10	COVID-19 66	Diabetes 200	COVID-19 237
7	Chronic lower respiratory disease 1,092	COVID-19 10		Kidney disease 57	Alzheimer disease 164	Chronic lower respiratory disease 227
8	Diabetes 1,037			Influenza and pneumonia 56	Kidney disease 160	Influenza and pneumonia 222
9	Kidney disease 763			Diabetes 43	Chronic lower respiratory disease 152	Diabetes 218
10	Influenza and pneumonia 710			Parkinson disease 40	Influenza and pneumonia 117	Kidney disease 196

*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, 2020-2022, part 2

Rank	Hawai'i State	Other Asian	Native Hawaiian	Other Pacific Islander	White	Other
1	Heart disease 7,937	Cancer 246	Heart disease 1,572	Cancer 347	Cancer 2,003	Heart disease 105
2	Cancer 7,480	Heart disease 208	Cancer 1,345	Heart disease 335	Heart disease 1,946	Cancer 103
3	Stroke 2,628	Stroke 96	Unintentional injury 509	COVID-19 200	Stroke 546	Unintentional injury 47
4	Unintentional injury 1,901	Unintentional injury 64	Stroke 368	Stroke 105	Unintentional injury 488	Stroke 46
5	Alzheimer disease 1,680	Alzheimer disease 54	COVID-19 271	Unintentional injury 100	Chronic lower respiratory disease 35	Alzheimer disease 27
6	COVID-19 1,396	COVID-19 47	Diabetes 259	Diabetes 97	Alzheimer disease 354	COVID-19 25
7	Chronic lower respiratory disease 1,092	Suicide 28	Chronic lower respiratory disease 207	Kidney disease 47	Suicide 203	Diabetes 19
8	Diabetes 1,037	Influenza and pneumonia 25	Suicide 170	Influenza and pneumonia 37	Liver disease 198	Liver disease 16
9	Kidney disease 763	Kidney disease 23	Alzheimer disease 165	Suicide 36	COVID-19 177	Chronic lower respiratory disease 12
10	Influenza and pneumonia 710	Diabetes 20	Kidney disease 154	Septicemia 36	Diabetes 158	Kidney disease 11

*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>