OFFICE OF HAWAIIAN AFFAIRS

Native Hawaiian Health Fact Sheet 2019

VOLUME 4

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Native Hawaiian Health Status

INTRODUCTION

OVERVIEW

While there is ongoing deliberation as to when the first Native Hawaiians arrived at the shores of the Hawaiian Islands, as well as, the number of Native Hawaiians on the islands at the time of European contact, it is known that the Native Hawaiian people have endured numerous devastating hardships and catastrophic events that have shaped and reshaped Native Hawaiian society and culture. Much has changed over the past two centuries since western culture placed its mark on Hawai‘i and its native people.

Today, Native Hawaiians are perhaps the single racial group with the highest health risk in the State of Hawai‘i. This risk stems from high economic and cultural stress, lifestyle and risk behaviors, and late or lack of access to health care. Accordingly, it is not surprising to find among Native Hawaiians a high incidence of diseases and ailments, early disability, and premature death.

An overall strategy to improve the well-being of Native Hawaiians should focus on two key elements: 1) a systematic identification of health risk factors early in their lives and 2) timely, appropriate and readily accessible health care. Health statistics perform a vital role in this strategy by 1) identifying high-risk segments of the Native Hawaiian population, 2) ascertaining underlying relationships between risk factors and diseases, 3) identifying barriers precluding access to health care, and 4) assessing the adequacy of available health care services.

HEALTH INDICATORS

This report seeks to review a few of the health statistics of Hawai‘i’s native people to identify health status and issues. The report is structured on the “life course model” approach, which provides a deep and layered understanding of how health develops over a lifetime and across generations by combining a focus on health parity and social determinants with an understanding of how they interact. The five sections include:

1) Infants (hānau)
2) Children (keiki)
3) Adolescents (‘ōpio)
4) Adults (mākua)
5) Elders (kūpuna)

Through this approach, one can acquire an understanding of how health issues progress from one generation to the next, health issues within each peer group, and address these issues before they progress to the next cohort.

METHODOLOGY

The data utilized in this report were compiled from sources published by various state and federal agencies. When working with statistical data, it is important to distinguish between "population" data sets and "sample" data sets. A list of data sources and terms, with brief descriptions included at the end of the report.

Population-Based Data

Some of the data reported are “population based,” meaning the entire population of a specified group (or the entire listing of possible values). For example: How many Native Hawaiian infants were born in the State of Hawai‘i in 2016? The “population” in this example is all infants born in the State of Hawai‘i in 2016, of which Native Hawaiian infants are a proportion. This type of population-based data is possible because all births in Hawai‘i are recorded on birth certificates maintained and reported by the State Department of Health. Some agencies are mandated to document all occurrences of specified events; hence, population-based data exist. The data can be limited by completeness and accuracy, but provisions are utilized to minimize their impact.

However, not all events or issues can be fully documented due to a pressing need, fiscal restraints, population size, time requirements, and resource limitations. In these cases, where population-based efforts cannot be managed, sampling is often conducted.

Sample-Based Data

A sample data set contains a part, or a subset, of a population. The size of a sample is always less than the size of the population from which it is taken. The sample can be used as an estimate of the population, assuming responsible sampling protocols are followed.

To generalize or extrapolate the findings of the sample to the entire population, the sample must be a random sample and be sufficiently large. By its very nature, drawing 100 random samples from the same population, no two samples will be identical; consequently, any conclusions drawn should not be identical, though they should be similar. This uncertainty between a sample and a population can be measured by a means called confidence intervals.

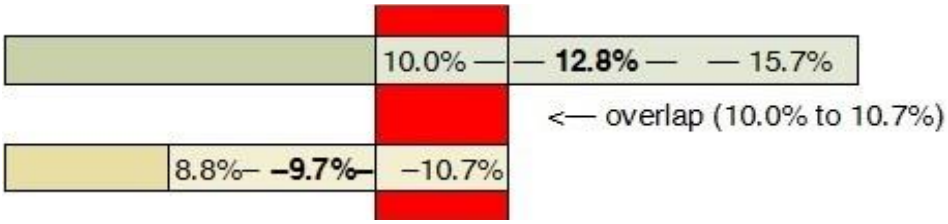
Confidence Intervals

Confidence intervals (CI)/Margins of Error (MOE) are derived from sample statistics. Confidence intervals/ margins of error provide a range of values within which one can have confidence that a value of an unknown population parameter one is seeking is located. Confidence intervals are calculated to provide users different levels of confidence that one can have in their sample. There are many confidence levels for intervals. A common confidence level is the “95% confidence interval.” For example: What percent of Native Hawaiian adults were obese in 2016? A calculation of a 95% confidence interval could be 38.0-46.8. The confidence interval indicates that you can be 95% confident that the percent for the entire adult Native Hawaiian population falls within the range of 38.0% to 46.8%.

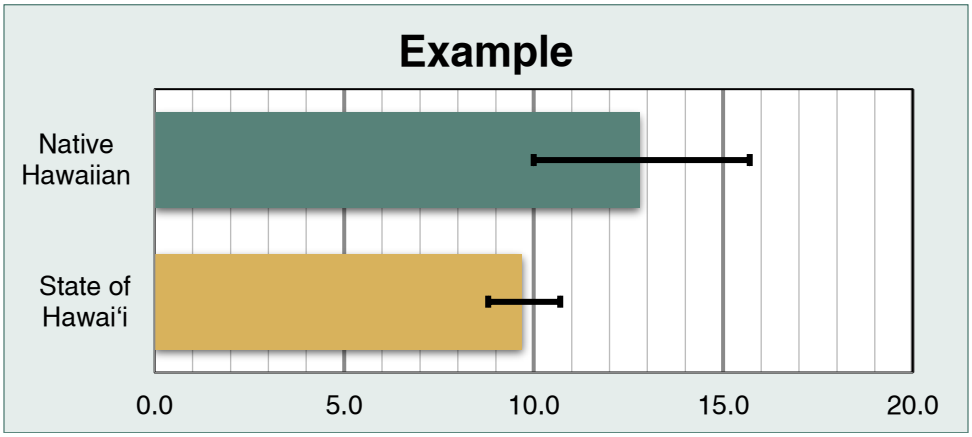
Keep in mind that 95% confidence indicates that about one time in 20 you are likely to get it wrong. You would not know whether this time is the one time in 20. If this is not acceptable, you can increase the confidence level, to have a greater chance of catching the true population value within it. However, greater confidence comes at a cost. Confidence intervals depend on sample size and often an increased sample size means more time, effort, and resources.

Statistical Significance

Determining if there is a difference between two measures or if there has been a change in a measure over time can be problematic at times when utilizing survey data. When confidence intervals do not overlap there is a statistically significant difference between the two measures. When confidence intervals overlap, there may be a statistically significant difference, but tests like the t-test or p-values are needed. For example: Is there a difference between Native Hawaiian and State of Hawai'i adults with diabetes? In 2014, 12.8% of Native Hawaiian adults reported having diabetes, while 9.7% of adults in the State reported having diabetes. It appears that there is a difference, 12.8% compared to 9.7%. But, these numbers are based on survey data. The CI for Native Hawaiian adults is 10.0-15.7, while the state is 8.8-10.7. The two ranges overlap, indicating that there is a possibility that the values are in the overlapping area, if that is the case, there is no difference. However, there is a possibility that the values are not in the overlapping area.



In published reports, graphs with confidence intervals are presented in many ways; below is one example.



Confidence intervals could be shown as bars with little or no labeling to assist interpreting the results.

Another example involving a trend: Was there an increase in the percent of Native Hawaiian adults who reported having diabetes in 2011 and 2014? In 2011, 9.8% of Native Hawaiian adults reported having diabetes. In 2014, 12.8% reported having diabetes. It appears that there was an increase from 9.8% to 12.8%. Again, looking at the CI, in 2011 it was 7.4-12.1, in 2014 it was 10.0-15.7. Because the two ranges overlap, one cannot state for certain that there was a statistical difference. Additional statistical tests are available to further analyze the measures.

Increasing the sample size will alter the confidence intervals. There is a greater chance of identifying the true population value within it. Perhaps there will be a reportable difference at a higher confidence level.

Depending on the reporting standards being used and the degree of accuracy desired, there are those who will overlook the confidence intervals and report changes based on the reported measures. In such cases caution must be taken when considering findings and conclusions.

Icons

The final two columns in the data tables summarize the data related to the health measure. The "Native Hawaiians and State" compares the Native Hawaiian measure relative to the measure for the State of Hawai'i. It indicates if the Native Hawaiian measure is higher, lower, or at parity relative to the State. It is not a gauge noting that Native Hawaiians are better or worse than the State. Not all lower measures are negative and not all higher measures are positive, it depends on the issue being measured. Moreover, since much of the data presented is based on survey data, there is a statistical margin of error (MOE) associated with each measure. Though a measure may appear higher or lower, due to the MOE the measures may be statistically equal. Measures can be different yet statistically similar or different and statistically different. In the latter case, the measures are noted to have a difference that is "statistically significant."

Higher	The measure for Native Hawaiians is higher than the measure for the State of Hawai'i	▲
Parity	The measure for Native Hawaiians is equal or similar to the measure for the State of Hawai'i	▶
Lower	The measure for Native Hawaiians is lower than the measure for the State of Hawai'i	▼
Unknown/ Not Applicable/ Insufficient Data	There may be no measure specific for Native Hawaiians	◆
Statistical Significance	There is a statistically significant difference between the measure for Native Hawaiians and the State of Hawai'i	*

The final column assesses the Native Hawaiian data over time to determine if there is a trend and if the trend is increasing, decreasing, stable, or variable. As with the "Native Hawaiians and State" column, trends may appear to be increasing or decreasing, but due to the MOE, trends may not be what they seem to be. Generally, health-related matters change very slowly, and statistically significant changes may not appear for a long period.

Increasing trend	The trend for Native Hawaiians is increasing	↗
Stable trend	The trend for Native Hawaiians is stable, minimal change	➡
Variable trend	The trend for Native Hawaiians is variable, changing over time	↕
Decreasing trend	The trend for Native Hawaiians is decreasing	↘
Unknown/ Not Applicable/ Insufficient Data	There may be no trend specific for Native Hawaiians or there may be insufficient data to identify a trend	◆
Not Reportable	The estimate has been suppressed because 1) The relative standard error is greater than 50% or when the relative standard error cannot be determined. Consider aggregating years to decrease the relative standard error and improve the reliability of the estimate, 2) the observed number of events is very small and not appropriate for publication, or 3) it could be used to calculate the number in a cell that has been suppressed.	NR

Data Year	Health Measure	Native Hawaiian	State of Hawai'i	Native Hawaiians and State	Recent Native Hawaiian Trend
	Maternal Characteristics				
2017 VS	**30.1 percent** of Native Hawaiian women received initial prenatal care later than the first trimester or not at all	30.1%	29.7%	▶	↗
2017 VS	**64.7 percent** of Native Hawaiian women received initial prenatal care during their first trimester	64.7%	65.9%	▼	◆
2011 PRAMS	**83.5 percent** of Native Hawaiian women received prenatal care as early as they wanted	83.5% (CI 78.5-87.6)	84.7% (CI 82.1-87.0)	▼	↗
2014 PRAMS	**62.5 percent** of Native Hawaiian women received early and adequate prenatal care	62.5% (CI 55.3-69.3)	65.5% (CI 61.7-69.1)	▼	↘
2017 VS	**8.0 percent** of Native Hawaiian mothers were 15 to 19 years of age at the time of delivery.	8.0%	4.1%	▲	↘
2015 PRAMS	**30.5 percent** of Native Hawaiian women were obese (BMI>=30) before pregnancy	30.5% (CI 24.4-37.5)	19.4% (CI 16.5-22.6)	▲	↗
2014 PRAMS	**29.4 percent** of Native Hawaiian women gained recommended amount of weight during pregnancy	29.4% (CI 18.0-44.0)	27.4% (CI 20.9-35.0)	▲	◆
2015 PRAMS	**NR percent** of Native Hawaiian women reported having diabetes	Not Reportable	2.3% (CI 1.4-3.7)	◆	◆
2015 PRAMS	**11.8 percent** of Native Hawaiian women had gestational diabetes	11.8% (CI 8.0-17.0)	14.4% (CI 11.9-17.3)	▼	↕

2015 PRAMS	**NR percent** of Native Hawaiian women had high blood pressure before pregnancy	Not Reportable	4.5% (CI 3.2-6.3)		
2015 PRAMS	**47.9 percent** of Native Hawaiian women experienced 2 or more stressors during pregnancy	47.9% (CI 41.0-54.9)	39.9% (CI 36.3-43.7)		
2015 PRAMS	**NR percent** of Native Hawaiian women experienced physical abuse by husband or partner during the 12 months before pregnancy	Not Reportable	2.8% (CI 1.7-4.4)		
2015 PRAMS	**NR percent** of Native Hawaiian women experienced physical abuse by husband or partner during pregnancy	Not Reportable	2.2% (CI 1.3-3.7)		
2015 PRAMS	**16.0 percent** of Native Hawaiian women reported that they smoked three months before pregnancy	16.0% (CI 12.0-21.1)	12.0% (CI 9.8-14.5)		
2015 PRAMS	**7.4 percent** of Native Hawaiian women reported that they smoked during the last three months of pregnancy	7.4% (CI 4.8-11.4)	4.9% (CI 3.5-6.7)		
2015 PRAMS	**11.8 percent** of Native Hawaiian women reported that they smoked in the postpartum period (3-6 months after birth)	11.8% (CI 8.2-16.7)	6.3% (CI 4.8-8.3)		
2015 PRAMS	**50.9 percent** of Native Hawaiian women reported drinking alcohol in the 3 months before pregnancy	50.9% (CI 43.9-57.8)	54.5% (CI 50.7-58.3)		
2015 PRAMS	**22.0 percent** of Native Hawaiian women reported binge drinking 3 months before pregnancy (having four or more drinks on one occasion)	22.0% (CI 16.6-28.6)	19.2% (CI 16.3-22.4)		
2015 PRAMS	**7.2 percent** of Native Hawaiian women drank alcohol during the last three months of pregnancy	7.2% (CI 4.3-11.9)	8.7% (CI 6.8-11.0)		
2015 PRAMS	**5.8 percent** of Native Hawaiian women reported illicit drug use 1 month before pregnancy	5.8% (CI 3.4-9.7)	5.4% (CI 4.0-7.4)		
2011 PRAMS	**5.3 percent** of Native Hawaiian women reported illicit drug use during pregnancy	5.3% (CI 3.3-8.3)	3.4% (CI 2.5-4.6)		
2011 PRAMS	**15.9 percent** of Native Hawaiian women had unwanted pregnancies	15.9% (CI 11.9-21.0)	11.7% (CI 9.7-14.1)		
2015 PRAMS	**10.5 percent** of Native Hawaiian women reported postpartum depression	10.5% (CI 7.1-15.2)	9.0% (CI 7.1-11.3)		
2008 PRAMS	**11.2 percent** of Native Hawaiian women reported maternal morbidities requiring more than one night in the hospital	11.2% (CI 8.4-14.8)	9.3% (CI 8.0-10.9)		

	Birth Outcomes				
2012 VS	Native Hawaiian live births to pregnancy ratio (**1 live birth per 1.09 pregnancies**)	1:1.09 (birth: pregnancy)	1:1.18 (birth: pregnancy)		
2017 VS	**36.0 percent** of all infants born in the State of Hawai'i were Native Hawaiian	36.0% (Native Hawaiian)	64.0% (Non-Hawaiian)		
2015 PRAMS	**7.8 percent** of Native Hawaiian infants were placed in the intensive care unit (ICU) after birth	7.8% (CI5.2-11.5)	8.1% (CI 6.5-9.9)		
2017 VS	**84.4 percent** of Native Hawaiian mothers with infants born with a normal birth weight (2,500 - 3,999 grams)	84.4%	84.3%		
2017 VS	**7.0 percent** of Native Hawaiian mothers with infants born with a low birth weight (1,500–2,499 grams)	7.0%	7.3%		
2017 VS	**1.2 percent** of Native Hawaiian mothers with infants born with a very low birth weight (<1,500 grams)	1.3%	1.2%		
2017 VS	**7.0 percent** of Native Hawaiian mothers with infants born with a high birth weight (4,000+ grams)	7.0%	7.0%		
2017 VS	**1.7 percent** of Native Hawaiian mothers with infants born early preterm (<=31 weeks)	1.7%	1.6%		
2017 VS	**9.9 percent** of Native Hawaiian mothers with infants born preterm (32-36 weeks gestation)	9.9%	8.9%		
2017 VS	**88.2 percent** of Native Hawaiian mothers with infants born term (37-41 weeks gestation)	88.2%	89.0%		
2017 VS	**0.1 percent** of Native Hawaiian mothers with infants born late/post term (42+ weeks gestation)	0.1%	0.4%		
	Infant Beginnings				
2011 PRAMS	**NR percent** of Native Hawaiian babies received 1-week postnatal check ups	Not Reportable	94.6% (CI 92.4-96.2)		

2017 NIS	**71.9 percent** of 19 to 35 month infants in Hawai'i received a full schedule of age appropriate immunizations against Diphtheria, Tetanus, Pertussis, Poliovirus, Measles, Mumps, Rubella, Haemophilus influenza type b, Hepatitis B, and Varicella (chicken pox) (4:3:1:3:3:1 series)	No Data	71.9% (CI 64.7-78.1)	◆	◆
2015 PRAMS	**70.2 percent** of Native Hawaiian infants were breastfed for 9 or more weeks	70.2% (CI 63.2-76.3)	80.1% (CI 76.9-83.0)	▼	↗
2015 PRAMS	**73.1 percent** of Native Hawaiian infants sleeping on their backs	73.1% (CI 66.2-79.0)	81.5% (CI 78.4-84.3)	▼	↗
	Infant Mortality				
2015 VS	Resident Native Hawaiian infant mortality rate (aged <365 days) (**7.0 infant deaths per 1,000 live births**)	7.0	5.7	▲	↗
2015 VS	Resident Native Hawaiian neonatal mortality rate (less than 28 days) (**4.0 infant deaths per 1,000 live births**)	4.0	3.6	▲	↗
2015 VS	Resident Native Hawaiian postneonatal mortality rate (aged 28 to 364 days) (**3.1 postneonatal deaths per 1,000 live births**)	3.1	2.1	▲	↗
2012 VS	Native Hawaiian fetal mortality rate (**17.0 fetal deaths per 1,000 live births**)	17.0	31.6	▼	↘
2012 VS	Native Hawaiian abortion rate (**78.8 abortions per 1,000 live births**)	78.8	147.1	▼	↘
	Social Determinants of Health				
2017 VS	**63.0 percent** of resident Native Hawaiian mothers in Hawai'i were not married at the time they delivered	63.0%	38.8%	▲	↗
2015 VS	**26.2 percent** of resident Native Hawaiian mothers had less than a high school education	26.2%	17.5%	▲	↘
2011 PRAMS	**57.1 percent** of Native Hawaiian women received medical insurance through Medicaid/QUEST for their delivery	57.1% (CI 51.1-62.9)	36.8% (CI 33.7-40.0)	▲*	↗
2014 PRAMS	**55.9 percent** of Native Hawaiian women received medical insurance through Medicaid/QUEST for their prenatal care	55.9% (CI 48.7-62.9)	35.1% (CI 31.5-38.8)	▲*	↗
2015 PRAMS	**56.5 percent** of Native Hawaiian women participated in WIC during pregnancy	56.5% (CI 49.5-63.2)	39.8% (CI 36.2-43.5)	▲	↘

Data Year	Health Measure	Native Hawaiian	State of Hawai'i	Native Hawaiians and State	Recent Native Hawaiian Trend
	Reported Keiki Health Conditions				
2005 YRBS	**18.0 percent** of Native Hawaiian public middle school children reported being overweight (>=85 percentile and <95 percentile BMI for age and sex)	18.0% (CI 13.6-23.4)	13.7% (CI 10.9-17.2)	▲	◆
2005 YRBS	**13.2 percent** of Native Hawaiian public middle school children reported being obese (>=95 BMI for age and sex)	13.2% (CI 8.3-20.4)	12.4% (CI 10.3-15.0)	▲	◆
2005 YRBS	**31.2 percent** of Native Hawaiian public middle school children reported being overweight or obese (>85 percentile BMI for age and sex)	31.2% (CI 23.0-40.8)	26.2% (CI 21.7-31.1)	▲	◆
2009 YRBS	**34.8 percent** of Native Hawaiian public middle school students have ever had asthma	34.8% (CI 26.7-43.9)	26.3% (CI23.1-29.7)	▲	◆
2009 YRBS	**21.1 percent** of Native Hawaiian public middle school children currently have asthma	21.1% (CI 14.5-29.7)	14.7% (CI 12.1-17.8)	▲	◆
2012 HHS	**35.8 percent** of Native Hawaiian children 0 to 14 years of age reported having asthma	35.8%	22.0%	▲	↘
2015 BRFSS	**30.7% percent** of Native Hawaiian adults told that their child had asthma	30.7% (CI 23.3-39.3)	16.8% (CI 14.4-19.6)	▲*	↗

	Modifiable Keiki Risk Behaviors				
2017 YRBS	**32.5 percent** of Native Hawaiian public middle school children were physically active for a total of 60 minutes or more per day on all of the past 7 days	32.5% (CI 30.1-34.9)	27.0% (CI 25.0-29.2)		
2017 YRBS	**14.6 percent** of Native Hawaiian public middle school students do not have breakfast any day of the week	14.6% (CI 13.0-16.4)	11.6% (CI 10.0-13.4)		
2017 YTS	**4.9 percent** of Native Hawaiian public middle school students who smoked cigarettes on 1 or more days of the past 30 days	4.9% (CI 2.8-8.4)	3.1% (CI 2.1-4.6)		
2017 YTS	**10.4 percent** of Native Hawaiian public middle school students first tried cigarette smoking before age 13	10.4% (CI 8.6-12.5)	8.3% (CI 7.2-9.5)		
2017 YRBS	**9.2 percent** of Native Hawaiian public middle school students engaged in binge drinking within the past 30 days	9.2% (CI 7.6-11.2)	5.4% (CI 4.3-6.8)		
2017 YRBS	**31.9 percent** of Native Hawaiian public middle school students have ever drunk alcohol	31.9% (CI 29.3-34.6)	23.5% (CI 21.2-25.9)		
2017 YRBS	**25.6 percent** of Native Hawaiian public middle school students had their first drink before age 13	25.6% (CI 23.5-27.9)	18.6% (CI 16.8-20.4)		
2017 YRBS	**15.4 percent** of Native Hawaiian public middle school students have consumed alcohol within the past 30 days	15.4% (CI 13.0-18.3)	11.6% (CI 10.0-13.5)		
2017 YRBS	**3.3 percent** of Native Hawaiian public middle school students have ever used any form of cocaine, including powder, crack, or freebase	3.3% (CI 2.6-4.2)	3.3% (CI 2.6-4.1)		
2017 YRBS	**1.6 percent** of Native Hawaiian public middle school students have ever used ecstasy (also called MDMA)	1.6% (CI 1.1-2.5)	1.5% (CI 1.1-2.0)		
2017 YRBS	**6.4 percent** of Native Hawaiian public middle school students have ever sniffed glue, breathed the contents of spray cans, or inhaled any paints or sprays to get high	6.4% (CI 4.9-8.4)	6.5% (CI 5.3-7.9)		
2017 YRBS	**2.0 percent** of Native Hawaiian public middle school students have used methamphetamines (also called speed, crystal, crank, or ice)	2.0% (CI 1.2-3.2)	2.1% (CI 1.6-2.8)		
2017 YRBS	**9.1 percent** of Native Hawaiian public middle school students have taken a prescription drug (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription	9.1% (CI 7.5-11.0)	6.8% (CI 5.7-8.0)		

2017 YRBS	**81.0 percent** of Native Hawaiian public middle school students have never used any illicit drugs (marijuana, crack, other forms of cocaine, heroin, or use of other opiates, stimulants, barbiturates, or tranquilizers not under a doctor's orders)	81.0% (CI 77.7-83.9)	86.6% (CI 84.6-88.3)		
2017 YRBS	**21.7 percent** of Native Hawaiian public middle school students have consumed alcohol or marijuana within the past 30 days	21.7% (CI 18.7-25.0)	15.4% (CI 13.3-17.9)		
2017 YRBS	**14.1 percent** of Native Hawaiian public middle school students ever tried to kill themselves	14.1% (CI 12.5-16.0)	12.4% (CI 10.9-14.0)		
2017 YRBS	**20.1 percent** of Native Hawaiian public middle school students ever made a plan about how they would kill themselves	20.1% (CI 18.0-22.4)	16.3% (CI 15.0-17.8)		
2017 YRBS	**27.9 percent** of Native Hawaiian public middle school students ever seriously thought about killing themselves	27.9% (CI 26.3-29.7)	23.1% (CI 21.4-24.8)		
	Keiki Mortality				
2015 VS	**41.5 percent** of deaths of resident children 0-4 years of age were Native Hawaiian	49 deaths	118 deaths		
	Social Determinants of Health				
2017 ACS	**21.4 percent** of Native Hawaiian families with related children under 5 years live in poverty	21.4% (MOE ± 10.0)	14.1% (MOE ± 3.3)		
2017 ACS	**40.2 percent** of Native Hawaiian families with female householder, no husband present with related children under 5 years only live in poverty	40.2% (MOE ± 25.4)	51.5% (MOE ± 10.2)		
2017 DHS	**44.5 percent** of those in foster care were Native Hawaiian	44.5% (Native Hawaiian)	55.5% (Non-Hawaiian)		
2015 CAN	**45.9 percent** of victims of child abuse and neglect were Native Hawaiian	45.9% (Native Hawaiian)	54.1% (Non-Hawaiian)		
2017 YTS	**19.1 percent** of Native Hawaiian public middle school students receive no spending money per week	19.1% (CI 14.3-24.9)	18.6% (CI 15.8-21.8)		
2017 ACS	**7.9 percent** of Native Hawaiians are enrolled in nursery school, preschool	7.9% (MOE ± 1.6)	7.2% (MOE ± 0.8)		
2017 ACS	**5.4 percent** of Native Hawaiians are enrolled in kindergarten	5.4% (MOE ± 1.1)	5.2% (MOE ± 0.6)		

2017 ACS	**49.0 percent** of Native Hawaiians are enrolled in elementary school (grades 1-8)	49.0% (MOE ± 2.4)	40.1% (MOE ± 1.1)		
2017 YRBS	**65.3 percent** of Native Hawaiian public middle school students would describe their grades in school in the past 12 months as mostly A's and B's	65.3% (CI 62.6-68.0)	68.3% (CI 64.5-71.9)		
2017 YRBS	**50.0 percent** of Native Hawaiian public middle school students reported that they will definitely complete high school	50.0% (CI 46.6-53.4)	53.1% (CI 50.2-56.0)		
2009 YRBS	**27.1 percent** of Native Hawaiian public middle school students reported that they will definitely complete a post high school program such as a vocational training program, military service, community college or 4-year college	27.1% (CI 17.7-36.5)	29.4% (CI 24.6-34.3)		

HEALTHY ADOLESCENTS (ʻŌpio)

Data Year	Health Measure	Native Hawaiian	State of Hawai‘i	Native Hawaiians and State	Recent Native Hawaiian Trend
	Reported ʻŌpio Health Conditions				
2017 YRBS	**36.5 percent** of Native Hawaiian public high school students are overweight or obese (>=85 percentile BMI for age and sex)	36.5% (CI 33.2-39.9)	28.4% (CI 25.9-31.0)	▲*	↗
2017 YRBS	**18.6 percent** of Native Hawaiian public high school students are obese (>=95 percentile BMI for age and sex)	18.6% (CI 16.9-20.4)	14.2% (CI 12.7-15.8)	▲*	↗
2017 YRBS	**17.9 percent** of Native Hawaiian public high school students are overweight (>=85 percentile and <95 percentile BMI for age and sex)	17.9% (CI 15.6-20.6)	14.2% (CI 12.7-15.8)	▲	↗
2017 YRBS	**16.9 percent** of Native Hawaiian public high school students currently have asthma	16.9% (CI 14.6-19.4)	12.2% (CI 11.2-13.2)	▲*	↕
2017 YRBS	**37.8 percent** of Native Hawaiian public high school students have ever had asthma	37.8% (CI 35.1-40.5)	30.2% (CI 28.3-32.1)	▲*	↕
2012 HHS	**18.1 percent** of Native Hawaiian adolescents 15-17 years of age reported having asthma	18.1%	14.1%	▲	↘
2017 ACS	**2.9 percent** of Native Hawaiian civilian noninstitutionalized population under 18 years reported a disability	2.9% (MOE ± 0.7)	2.7% (MOE ± 0.5)	▶	↕
	Modifiable ʻŌpio Risk Behaviors				
2014 NIS	**88.6 percent** of adolescents ages 13-17 received vaccination coverage >= 2 doses of MMR (measles, mumps, and rubella) vaccine	No Data	88.6% (CI 84.3-92.9)	◆	◆

2017 YRBS	**28.8 percent** of Native Hawaiian public high school students ever felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	28.8% (CI 25.2-32.8)	29.5% (CI 27.9-31.1)		
2017 YRBS	**12.1 percent** of Native Hawaiian public high school students tried to kill themselves during the past 12 months	12.1% (CI 9.6-15.2)	10.0% (CI 8.6-11.4)		
2017 YRBS	**17.5 percent** of Native Hawaiian public high school students seriously considered attempting suicide during the past 12 months	17.5% (CI 15.4-19.8)	16.0% (CI 14.8-17.3)		
2017 YRBS	**15.7percent** of Native Hawaiian public high school students made a plan about how they would kill themselves during the past 12 months	15.7% (CI 14.1-19.2)	13.8% (CI 12.5-15.1)		
2017 YRBS	**3.5 percent** of Native Hawaiian public high school students whose suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the past 12 months	3.5% (CI 2.3-5.4)	2.4% (CI 1.9-3.1)		
2017 YRBS	**20.3 percent** of Native Hawaiian public high school students did something to purposely hurt themselves without wanting to die (such as cutting or burning themselves on purpose one or more times) during the 12 months before the survey	20.3% (CI 17.8-22.9)	19.1% (CI 17.3-21.0)		
2017 YRBS	**21.9 percent** of Native Hawaiian public high school students were physically active for a total of 60 minutes or more per day during all of the past seven days	21.9% (CI 19.1-25.0)	19.6% (CI 18.0-21.3)		
2015 YRBS	**19.4 percent** of Native Hawaiian public high school students ate fruits and vegetables five or more times per day during the past seven days	19.4% (CI 16.9-21.9)	18.7% (CI 17.3-20.2)		
2017 YRBS	**28.2 percent** of Native Hawaiian public high school students have breakfast every day of the week	28.2% (CI 24.8-31.8)	35.9% (CI 34.0-37.9)		
2017 YRBS	**8.8 percent** of Native Hawaiian public high school students most of the time or always went hungry because there was not enough food in their home (during the 30 days before the survey)	8.8% (CI 7.0-11.1)	6.7% (CI 5.8-7.7)		
2017 YTS	**8.4 percent** of Native Hawaiian public high school students who smoked cigarettes on 1 or more days of the past 30 days	8.4% (CI 4.2-16.0)	6.0% (CI 4.6-7.8)		
2017 YTS	**10.5 percent** of Native Hawaiian public high school students first tried cigarette smoking before age 13	10.5% (CI 6.0-17.5)	7.8% (CI 6.0-10.3)		
2015 YRBS	**19.2 percent** of Native Hawaiian public high school students engaged in binge drinking within the past 30 days	19.2% (CI 16.0-22.4)	13.4% (CI 12.1-14.8)		

2017 YRBS	**54.8 percent** of Native Hawaiian public high school students have ever drunk alcohol	54.8% (CI 47.9-61.5)	49.0% (CI 46.0-52.1)	▲	
2017 YRBS	**21.4 percent** of Native Hawaiian public high school students had their first drink before age 13	21.4% (CI 18.0-25.4)	16.8% (CI 14.8-18.9)	▲	
2017 YRBS	**29.6 percent** of Native Hawaiian public high school students have consumed alcohol within the past 30 days	29.6% (CI 24.9-34.8)	24.5% (CI 22.1-27.1)	▲	
2017 YRBS	**9.3 percent** of Native Hawaiian public high school students have ever used cocaine	9.3% (CI 7.3-11.8)	7.1% (CI 5.9-8.6)	▲	
2017 YRBS	**7.5 percent** of Native Hawaiian public high school students have ever used ecstasy	7.5% (CI 5.8-9.7)	6.0% (CI 5.0-7.1)	▲	
2015 YRBS	**10.2 percent** of Native Hawaiian public high school students have ever used inhalants to get high	10.2% (CI 7.8-12.5)	8.0% (CI 7.0-9.1)	▲	
2017 YRBS	**6.0 percent** of Native Hawaiian public high school students have ever used methamphetamines	6.0% (CI 4.5-8.0)	4.8% (CI 3.6-6.3)	▲	
2017 YRBS	**14.1 percent** of Native Hawaiian public high school students have taken a prescription drug (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription	14.1% (CI 12.0-16.6)	12.2% (CI 10.7-13.9)	▲	◆
2017 YRBS	**8.7 percent** of Native Hawaiian public high school students have ever used hallucinogenic drugs, such as LSD, acid, PCP, angel dust, mescaline, or mushrooms	8.7% (CI 6.9-10.9)	7.6% (CI 6.4-8.9)	▲	◆
2017 YRBS	**65.4 percent** of Native Hawaiian public high school students have never used illicit drugs (marijuana, crack, other forms of cocaine, heroin, or use of other opiates, stimulants, barbituates, or tranquilizers not under a doctor's orders	65.4% (CI 60.3-70.3)	75.4% (CI 72.4-78.2)	▼*	◆
2017 YRBS	**39.2 percent** of Native Hawaiian public high school students have consumed alcohol or marijuana within the past 30 days	39.2% (CI 34.2-44.4)	30.8% (CI 27.9-33.7)	▲	
2017 YRBS	**23.8 percent** of Native Hawaiian public high school students had sexual intercourse with one or more people during the past three months	23.8% (CI 20.6-27.5)	19.2% (CI 17.1-21.4)	▲	
2017 YRBS	**42.7 percent** of Native Hawaiian public high school students responded that they or their partner used condoms the last time they had sexual intercourse, among students who had sexual intercourse during the past 3 months	42.7% (CI 37.3-48.4)	47.4% (CI 43.0-51.8)	▼	

2017 YRBS	**62.3 percent** of Native Hawaiian public high school students used birth control pills, condoms, Depo-provera, Nuva Ring, Implanon, or any IUD, to prevent pregnancy, among students who had sexual intercourse during the past 3 months	62.3% (CI 55.0-69.0)	64.4% (CI 60.5-68.2)		
2017 YRBS	**4.4 percent** of Native Hawaiian public high school students had sexual intercourse for the first time before age 13	4.4% (CI 3.2-6.2)	3.4% (CI 2.9-4.0)		
	ʻŌpio Mortality				
2015 VS	**48.6 percent** of deaths of resident adolescents 15-19 year of age were Native Hawaiian	17 deaths	35 deaths		
	Social Determinants of Health				
2017 ACS	**30.1 percent** of Native Hawaiian children under 18 years live in family households	30.1% (MOE ± 2.3)	26.0% (MOE ± 1.0)		
2017 ACS	**18.0 percent** of Native Hawaiian children under 18 years live in a Married-couple family households	18.0% (MOE ± 1.8)	19.0% (MOE ± 0.8)		
2017 ACS	**8.9 percent** of Native Hawaiian children under 18 years live in household headed by a female householder, no husband present	8.9% (MOE ± 1.6)	4.9% (MOE ± 0.5)		
2017 ACS	**13.8 percent** of Native Hawaiian families with related children under 18 years live in poverty	13.8% (MOE ± 3.4)	10.1% (MOE ± 1.4)		
2017 ACS	**28.7 percent** of Native Hawaiian families with female householder, no husband present with related children under 18 years live in poverty	28.7% (MOE ± 7.8)	29.7% (MOE ± 4.4)		
2009 YRBS	**61.2 percent** of Native Hawaiian public high school students reported that they will definitely complete high school	61.2% (CI 53.7-68.7)	72.3% (CI 69.0-75.6)		
2015 YRBS	**32.6 percent** of Native Hawaiian public high school students reported that they will definitely complete post high school program such as a vocational training program, military service, community college or 4-year college	32.6% (CI 28.6-36.9)	40.7% (CI 37.5-43.9)		
2015 YRBS	**62.1 percent** of Native Hawaiian public high school students would describe their grades in school in the past 12 months as mostly A's and B's	62.1% (CI 57.4-66.6)	71.1% (CI 68.6-73.4)		
2017 ACS	**21.1 percent** of Native Hawaiians are enrolled in high school (grades 9-12)	21.1% (MOE ± 2.0)	19.0% (MOE ± 0.7)		

2017 ACS	**16.6 percent** of Native Hawaiians are enrolled in college or graduate school	16.6% (MOE ± 2.3)	28.5% (MOE ± 1.1)		
2017 YTS	**26.6 percent** of Native Hawaiian public high school students receive more than $50 spending money per week	26.6% (CI 21.9-31.8)	24.8% (CI 22.0-27.8)		
2015 OYS	**69.0 percent** of admissions to the Hawai‘i Youth Correctional Facility were Native Hawaiian	69.0% (Native Hawaiian)	31.0% (Non-Hawaiian)		
2014 CIH	**30.8 percent** of juveniles arrested for Index Crime Offenses were Native Hawaiian	30.8% (Native Hawaiian)	69.2% (Non-Hawaiian)		
2014 CIH	**32.8 percent** of juveniles arrested for Part II Offenses were Native Hawaiian	32.8% (Native Hawaiian)	67.2% (Non-Hawaiian)		

HEALTHY ADULTS (Mākua)

Data Year	Health Measure	Native Hawaiian	State of Hawai'i	Native Hawaiians and State	Recent Native Hawaiian Trend
	Reported Mākua Health Conditions				
2017 BRFSS	**8.1 percent** of Native Hawaiian adults have been diagnosed with some type of cancer (Age Adjusted Rate)	8.1% (CI 6.2-10.5)	8.6% (CI 7.9-9.4)	▶	↗
2017 BRFSS	**5.6 percent** of Native Hawaiian adults have been diagnosed with of kidney disease, not including kidney stones, bladder infection or incontinence (Age Adjusted Rate)	5.6% (CI 4.1-7.6)	2.9% (CI 2.4-3.3)	▲*	↗
2017 BRFSS	**22.8 percent** of Native Hawaiians adults have been diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia (Age Adjusted Rate)	22.8% (CI 20.0-25.8)	18.8% (CI 17.7-20.0)	▲	◆
2017 BRFSS	**14.9 percent** of Native Hawaiians adults have been diagnosed with diabetes (Age Adjusted Rate)	14.9% (CI 12.5-17.6)	9.8% (CI 8.9-10.7)	▲*	↗
2017 BRFSS	**4.4 percent** of Native Hawaiians adults had a heart attack (Age Adjusted Rate)	4.4% (CI 3.3-5.9)	2.7% (CI 2.3-3.1)	▲*	↘
2017 BRFSS	**2.1 percent** of Native Hawaiians adults have been diagnosed with coronary heart disease (Age Adjusted Rate)	2.1% (CI 1.5-3.1)	2.2% (CI 1.8-2.6)	▶	↘
2017 BRFSS	**4.0 percent** of Native Hawaiians adults had a stroke (Age Adjusted Rate)	4.0% (CI 2.7-5.8)	2.6% (CI 2.2-3.1)	▲	◆
2017 BRFSS	**26.9 percent** of Native Hawaiians adults have been diagnosed with high cholesterol (Age Adjusted Rate)	26.9% (CI 23.6-30.5)	27.8% (CI 26.3-29.3)	▼	◆
2017 BRFSS	**33.1 percent** of Native Hawaiians adults have been diagnosed with high blood pressure (Age Adjusted Rate)	33.1% (CI 30.0-36.4)	27.9% (CI 26.6-29.2)	▲*	◆

2017 BRFSS	**24.9 percent** of Native Hawaiians adults have been diagnosed with asthma (Age Adjusted Rate)	24.9% (CI 21.8-28.3)	17.5% (CI 16.3-18.8)	▲*	↕
2016 BRFSS	**22.5 percent** of Native Hawaiians adults live with at least one disability (Age Adjusted Rate)	32.6% (CI 29.0-36.4)	20.3% (CI 19.1-21.6)	▲*	◆
2017 ACS	**8.6 percent** of Native Hawaiian civilian noninstitutionalized population 18 to 64 years reported a disability	8.6% (MOE ± 1.1)	7.3% (MOE ± 0.5)	▲	↕
2017 BRFSS	**24.6 percent** of Native Hawaiians have health that is fair or poor	24.6% (CI 21.5-28.0)	14.8% (CI 13.7-15.9)	▲*	↗
2013 BRFSS	**7.5 percent** of Native Hawaiians adults have experienced rape or attempted rape	7.5% (CI 4.8-10.2)	5.8% (CI 5.0-6.6)	▲	◆
2013 BRFSS	**12.6 percent** of Native Hawaiians adults have experienced physical abuse by a current or former intimate partner	12.6% (CI 9.0-16.1)	9.5% (CI 8.5-10.6)	▲	◆
2016 BRFSS	**41.8 percent** of Native Hawaiian adults aged 45 or older have been injured as a result of an accidental fall within the past 12 months	41.8% (CI 31.0-53.5)	38.3% (CI 34.7-42.0)	▲	◆
2017 BRFSS	**42.8 percent** of Native Hawaiian adults are obese (BMI>=30) (Age Adjusted Rate)	42.8% (CI 39.1-46.7)	24.4% (CI 23.0-25.9)	▲*	◆
2017 BRFSS	**32.2 percent** of Native Hawaiian adults are overweight (25<= BMI< 30) (Age Adjusted Rate)	32.2% (CI 28.7-36.0)	34.6% (CI 33.0-36.2)	▼	↘
2017 BRFSS	**75.1 percent** of Native Hawaiian adults are overweight or obese (Age Adjusted Rate)	75.1% (CI 71.5-78.3)	59.0% (CI 57.4-60.6)	▲*	→
2017 BRFSS	**14.4 percent** of Native Hawaiian adults whose mental health was not good on 14 or more days of the past 30 days (Age Adjusted Rate)	14.4% (CI 12.0-17.2)	9.7% (CI 8.8-10.7)	▲*	↗
2017 BRFSS	**21.6 percent** of Native Hawaiian adults whose mental health was not good on 6 or more days of the past 30 days (Age Adjusted Rate)	21.6% (CI 18.7-24.8)	14.9% (CI 13.7-16.1)	▲*	↗
2017 BRFSS	**16.1 percent** of Native Hawaiian adults have been diagnosed with a depressive disorder (Age Adjusted Rate)	16.1% (CI 13.5-19.1)	11.9% (CI 10.9-13.0)	▲*	↕
	Modifiable Mākua Risk Behaviors				
2016 BRFSS	**90.9 percent** of Native Hawaiian women aged 40 and older ever had a clinical breast exam	90.9% (CI 86.6-93.9)	85.9% (CI 83.6-87.9)	▲	↕

2016 BRFSS	**52.2 percent** of Native Hawaiian women aged 40 and older have had a clinical breast exam within the past year	52.2% (CI 46.3-58.1)	50.2% (CI 47.7-52.6)		
2017 BRFSS	**83.7 percent** of Native Hawaiian women age 50-74have had a mammogram within the past 2 years	83.7% (CI 77.6-88.4)	82.5% (CI 80.0-84.8)		
2016 BRFSS	**91.2 percent** of Native Hawaiian women age 21-65 ever had a pap smear	91.2% (CI 86.8-94.2)	89.7% (CI 87.7-91.4)		
2016 BRFSS	**79.4 percent** of Native Hawaiian women age 21-65 have had a pap smear within the past 3 years	79.4% (CI 73.6-84.2)	81.4% (CI 79.0-83.5)		
2017 BRFSS	**20.8 percent** of Native Hawaiians ages 50-75 had a sigmoidoscopy or a colonoscopy within the past year	20.8% (CI 16.3-26.2)	17.2% (CI 15.6-19.0)		
2017 BRFSS	**35.1 percent** of Native Hawaiians ages 50-75 never had a sigmoidoscopy or a colonoscopy	35.1% (CI 30.0-40.7)	30.2% (CI 28.1-32.3)		
2017 BRFSS	**26.1 percent** of Native Hawaiians aged 50-75 had a blood stool test within past year	26.1% (CI 21.6-31.2)	20.7% (CI 18.9-22.5)		
2016 BRFSS	**67.1 percent** of Native Hawaiian men aged 40 and older never had a prostate-specific antigen (PSA) test	67.1% (CI 59.3-74.0)	55.1% (CI 52.4-57.8)		
2016 BRFSS	**19.8 percent** of Native Hawaiian men aged 40 and older have had a PSA test within the past yeas	19.8% (CI 14.3-26.7)	28.2% (CI 25.9-30.7)		
2017 BRFSS	**36.2 percent** of Native Hawaiian adults ages 18-64 have had a flu shot or spray in the past 12 months	36.2% (CI 32.0-40.5)	38.8% (CI 36.9-40.7)		
2017 BRFSS	**21.7 percent** of Native Hawaiian adults are current smokers (Age Adjusted Rate)	21.7% (CI 18.5-25.3)	13.6% (CI 12.4-14.8)		
2017 BRFSS	**26.0 percent** of Native Hawaiian adults who are former smokers	26.0% (CI 22.8-29.4)	26.7% (CI 25.3-28.1)		
2016 BRFSS	**8.8 percent** of Native Hawaiian adult non-smokers were exposed to secondhand smoke within their home within the past week (Age Adjusted Rate)	8.8% (CI 6.3-12.1)	5.9% (CI 5.0-6.8)		
2017 BRFSS	**46.1 percent** of Native Hawaiian adults have had at least one drink of alcohol within the past 30 days (Age Adjusted Rate)	46.1% (CI 42.2-50.1)	52.8% (CI 51.1-54.4)		
2017 BRFSS	**11.0 percent** of Native Hawaiian adults are heavy drinkers of alcohol (men having >2 drinks per day, women having >1 drink per day) (Age Adjusted Rate)	11.0% (CI 8.7-13.8)	8.9% (CI 7.9-10.0)		

2017 BRFSS	**26.1 percent** of Native Hawaiian adults are binge drinkers of alcohol (men having five or more drinks on one occasion and women having four or more drinks on one occasion) (Age Adjusted Rate)	26.1% (CI 22.8-29.7)	20.8% (CI 19.4-22.2)		
2017 BRFSS	**26.8 percent** of Native Hawaiian adults are heavy or binge drinkers (men having >2 drinks per day, women having >1 drink per day) (Age Adjusted Rate)	26.8% (CI 23.5-30.4)	22.2% (CI 20.8-23.7)		
2016 BRFSS	**7.0 percent** of Native Hawaiian adults drink and drive (Age Adjusted Rate)	7.0% (CI 4.5-10.7)	5.4% (CI 4.5-6.6)		
2016 BRFSS	**5.8 percent** of Native Hawaiian adults ages18-64 participate in high HIV risk situations	5.8% (CI 3.7-9.0)	6.4% (C.I 5.5-7.6)		
2016 BRFSS	**63.5 percent** of Native Hawaiian adults have visited a dentist in the past year (Age Adjusted Rate)	63.5% (CI 59.6-67.2)	72.1% (CI 70.5-73.6)		
2015 BRFSS	**20.6 percent** of Native Hawaiian adults consume fruits and vegetables a total of 5 or more times per day	20.6% (CI 17.0-24.7)	19.8% (CI 18.4-21.2)		
2017 BRFSS	**72.4 percent** of Native Hawaiian adults participated in leisure time physical exercise during the past month (Age Adjusted Rate)	72.4% (CI 68.7-75.9)	76.5% (CI 74.9-78.0)		
	Mākua Mortality				
2015 VS	**36.9 percent** of deaths of resident adults 20-29 years of age were Native Hawaiian	52 deaths	141 deaths		
2015 VS	**31.0 percent** of deaths of resident adults 30-39 years of age were Native Hawaiian	54 deaths	174 deaths		
2015 VS	**27.9 percent** of deaths of resident adults 40-49 years of age were Native Hawaiian	100 deaths	358 deaths		
2015 VS	**27.7 percent** of deaths of resident adults 50-59 years of age were Native Hawaiian	271 deaths	977 deaths		

	Social Determinants of Health				
2014 BRFSS	**84.0 percent** of Native Hawaiian adults have an ongoing source of primary health care	84.0% (CI 80.2-87.8)	84.7% (CI 83.4-85.9)		
2017 BRFSS	**93.4 percent** of Native Hawaiian adults (18-64) have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare (Age Adjusted Rate)	92.6% (CI 90.2-94.5)	92.2% (CI 91.0-93.2)		
2017 BRFSS	**62.6 percent** of Native Hawaiian adults have a person they think of as their personal doctor or health care provider	62.6% (58.8-66.3)	64.1% (62.6-65.6)		
2017 BRFSS	**11.7 percent** of Native Hawaiian adults needed to see a doctor but could not because of the cost within the past 12 months (Age Adjusted Rate)	11.7% (CI 9.3-14.6)	8.4% (CI 7.5-9.4)		
2017 ACS	**10.9 percent** of Native Hawaiians ages 18-64 years live in poverty	10.9% (MOE ± 1.7)	8.9% (MOE ± 0.6)		
2017 ACS	Native Hawaiians unemployment rate in the civilian labor force (**5.1 percent**)	5.1% (MOE ± 0.9)	4.2% (MOE ± 0.4)		
2017 ACS	Native Hawaiian female unemployment rate in the civilian labor force (**4.8 percent**)	4.8% (MOE ± 1.3)	4.2% (MOE ± 0.6)		
2017 ACS	**92.8 percent** of Native Hawaiians aged 25 years and over are a high school graduate or higher	92.8% (MOE ± 1.0)	92.3% (MOE ± 0.5)		
2017 ACS	**17.0 percent** of Native Hawaiians aged 25 years and over have a bachelor's degree or higher	17.0% (MOE ± 1.7)	32.9% (MOE ± 0.8)		
2017 ACS	**20.4 percent** of Native Hawaiian households are headed by a female householder, no husband present	20.4% (MOE ± 2.2)	12.8% (MOE ± 0.8)		
2017 ACS	**7.1 percent** of Native Hawaiians served on active duty in the US Armed Forces	7.1% (MOE ± 0.8)	9.8% (MOE ± 0.4)		
2014 CIH	**31.1 percent** of adults arrested for Index Offenses were Native Hawaiian	31.1% (Native Hawaiian)	68.9% (Non-Hawaiian)		
2014 CIH	**26.9 percent** of adults arrested for Part II Offenses were Native Hawaiian	26.9% (Native Hawaiian)	73.1% (Non-Hawaiian)		

2017 DHS	**28.2 percent** of Native Hawaiian adults (18-64) received cash benefits for food, clothing, shelter, and other essentials from the General Assistance program	28.2% (Native Hawaiian)	71.8% (Non-Hawaiian)		
2017 DHS	**31.0 percent** of Native Hawaiian households were provided crucial food and nutritional support from the Supplemental Nutrition Assistance Program (SNAP) [formerly known as Food Stamps]	31.0% (Native Hawaiian)	69.0% (Non-Hawaiian)		
2017 DHS	**35.5 percent** of Native Hawaiian received benefits from the Temporary Assistance for Needy Families (TANF) / Temporary Assistance for Other Needy Families (TAONF) programs.	35.5% (Native Hawaiian)	64.5% (Non-Hawaiian)		

Data Year	Health Measure	Native Hawaiian	State of Hawai'i	Native Hawaiians and State	Recent Native Hawaiian Trend
	Reported Kūpuna Health Conditions				
2016 BRFSS	**NR percent** of Native Hawaiian adult men aged 40 and older told had prostate cancer	Not Reportable	4.5% (CI 3.0-6.6)	◆	◆
2017 ACS	**33.4 percent** of Native Hawaiian civilian noninstitutionalized population 65 years and over with a reported disability	33.4% (MOE ± 4.4)	32.6% (MOE ± 1.3)	▶	↕
	Modifiable Kūpuna Risk Behaviors				
2017 BRFSS	**83.7 percent** of Native Hawaiian women age 50-74have had a mammogram within the past 2 years	83.7% (CI 77.6-88.4)	82.5% (CI 80.0-84.8)	▶	→
2017 BRFSS	**20.8 percent** of Native Hawaiians ages 50-75 had a sigmoidoscopy or a colonoscopy within the past year	20.8% (CI 16.3-26.2)	17.2% (CI 15.6-19.0)	▲	↗
2017 BRFSS	**75.5 percent** of Native Hawaiian adults aged 50-75 have had a colorectal screening	75.5% (CI 70.3-80.0)	76.3% (CI 74.2-78.3)	▶	↗
2017 BRFSS	**53.6 percent** of Native Hawaiian adults aged 65 and older have had a flu shot or spray in the past 12 months	53.6% (CI 44.5-62.5)	59.6% (CI 56.6-62.6)	▼	↘
2017 BRFSS	**60.7 percent** of Native Hawaiian adults aged 65 and older have ever had a pneumonia shot	60.7% (CI 50.9-69.7)	69.9% (CI 66.9-72.8)	▼	↗

2017 BRFSS	**NR percent** of Native Hawaiian men aged 65 and older who have had a flu shot within the past 12 months. Adults aged 65+ who have ever had a pneumonia vaccination. Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams? How long has it been since you had your last sigmoidoscopy or colonoscopy? How long has it been since you had your last blood stool test using a home kit	Not Reportable	51.7% (CI 45.0-58.3)		
2017 BRFSS	**NR percent** of Native Hawaiian adult women 65 and over who have had a flu shot within the past 12 months. Adults aged 65+ who have ever had a pneumonia vaccination. Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams? How long has it been since you had your last sigmoidoscopy or colonoscopy? How long has it been since you had your last blood stool test using a home kit? Have you ever had a mammogram? How long has it been since you had your last mammogram?	Not Reportable	49.1% (CI 42.8-55.4)		
	Kūpuna Mortality				
2015 VS	**13.1 percent** of deaths of resident adults 65 years and over were Native Hawaiian	1,077 deaths	8,205 deaths		
	Social Determinants of Health				
2017 ACS	**11.2 percent** of Native Hawaiians 65 years and over live in poverty	11.2% (MOE ± 3.0)	9.3% (MOE ± 0.9)		
2017 ACS	**33.5 percent** of Native Hawaiians have Social Security income	33.5% (MOE ± 2.7)	36.4% (MOE ± 0.8)		
2017 ACS	**20.8 percent** of Native Hawaiians have retirement income	20.8% (MOE ± 2.4)	23.8% (MOE ± 0.8)		
2017 ACS	**9.1 percent** of Native Hawaiians living with grandchild/grandchildren	9.1% (MOE ± 1.5)	6.4% (MOE ± 0.5)		
2017 ACS	**25.8 percent** of Native Hawaiians living with grandchild/grandchildren are responsible for grandchild/grandchildren	25.8% (MOE ± 6.8)	17.9% (MOE ± 2.7)		
2017 DHS	**3.4 percent** of Native Hawaiians (65+) received benefits for food, clothing, shelter, and other essentials from the Aid to the Aged, Blind, and Disabled program.	3.4% (Native Hawaiian)	96.6% (Non-Hawaiian)		

SOURCES

American Community Survey (ACS)	The American Community Survey (ACS) is an on-going nation-wide statistical survey, sent to approximately 295,000 addresses monthly. The survey-based data collects information on ancestry, educational attainment, income, language proficiency, migration, disability, employment, and housing characteristics. These data are used by many public, private, and nonprofit stakeholders to allocate funding, track shifting demographics, and learn about local communities. All published American Community Survey (ACS) margins of error are based on a 90-percent confidence level. (US Bureau of the Census)
Behavioral Risk Factor Survey System (BRFSS)/ Hawai‘i Behavioral Risk Factor Survey System (HBRFSS)	Behavioral Risk Factor Surveillance System (BRFSS) is an on-going nation-wide phone surveillance system. The survey-based surveillance system tracks health risks in the US as a way of improving the general population’s health. (US Centers for Disease Control and Prevention). The Hawai‘i Behavioral Risk Factor Survey System (HBRFSS) is the implementation of the BRFSS in the State of Hawai‘i. (Hawai‘i State Department of Health)
Centers for Disease Control and Prevention (CDC)	The Centers for Disease Control and Prevention (CDC) is the leading public health institute of the US. Its main function is to protect public health and safety through the control and prevention of disease, injury, and disability. The CDC focuses national attention on developing and applying disease control and prevention. Unless noted, all published CDC reports are based on a 95-percent confidence level. (US Department of Health and Human Services)
Child Abuse and Neglect (CAN)	The annual *Child Abuse and Neglect* (CAN) reports provide population-based data on the reported and confirmed cases of child abuse (physical, sexual, psychological), neglect (including medical), and threatened harm in the State of Hawai‘i and its counties. (Hawai‘i State, Department of Human Service)
Crime in Hawai‘i (CIH)	The annual *Crime in Hawai‘i Uniform Crime Reports* provide comprehensive population-based data and analysis to the Attorney General and other criminal justice agencies, legislators, crime prevention and community mobilization groups, academic and research institutions, service providers, news media, and the general public. (Hawai‘i State Department of the Attorney General)
Hawai‘i Health Data Warehouse (HHDW)	The Hawai‘i Health Data Warehouse (HHDW) administers the design, creation, and management of a centralized data warehouse, standardizes the collection and management of Hawai‘i’s health data. The HHDW is the primary portal for the Hawai‘i Behavioral Risk Factor Survey System (HBRFSS), Hawai‘i Health Survey (HHS), Hawai‘i Pregnancy Risk Assessment Monitoring System (HPRAMS), Vital Statistics (VS), Youth Risk Behavioral Survey (YRBS), Youth Tobacco Survey (YTS), and others. (Hawai‘i State Department of Health)
Hawai‘i Heath Survey (HHS)	The Hawai‘i Health Survey (HHS) is an on-going statewide household survey of health and socio-demographic conditions. The survey-based surveillance system provides demographic information for observing population changes. It provides state and sub-area estimates of gender, age, income, race, education, household size, insurance status, health status, morbidity, and food security. (Hawai‘i State Department of Health)

Hawai‘i School Health Survey (HSHS)	The bi-annual Hawai‘i School Health Survey (HSHS) is a joint effort between the Hawaii Departments of Health and Education to monitor the health status and needs of public school students in grades 6 through 12 (middle school, high school). The HSHS coordinates the Youth Risk Behavioral Survey (YRBS) and Youth Tobacco Survey (YTS) under one umbrella to minimize disruption in the schools and maximize the health information collected. (Hawai‘i State Department of Health, Department of Education)
Office of Health Status Monitoring (OHSM)	The Office of Health Status Monitoring is responsible for the compilation of vital statistics (VS) births and deaths in the State of Hawai‘i. The office is also responsible for the implementation for the Hawai‘i Behavioral Risk Factor Survey System (HBRFSS) and Hawai‘i Heath Survey (HHS). (Hawai‘i State Department of Health)
National Immunization Surveys (NIS)	The National Immunization Surveys (NIS) are a group of telephone surveys sponsored and conducted by the National Center for Immunization and Respiratory Diseases (NCIRD). The NIS uses a dual frame survey design. They interview parents or guardians. If the parent or guardian provides consent and contact information, a mailed questionnaire is sent to the children’s vaccination providers. (US Centers for Disease Control and Prevention)
Office of Youth Services (OYS)	The Office of Youth Services (OYS) provides programs and services for Hawai‘i’s at-risk youth, to prevent delinquency, reduce recidivism, and maximize opportunities. The OYS operates the Hawai‘i Youth Correctional Facility (HYCF), a facility to provide care and custody of at-risk youth committed to the State by the Family Courts. (Hawai‘i State Department of Human Services)
Pregnancy Risk Assessment Monitoring System (PRAMS)/ Hawai‘i Pregnancy Risk Assessment Monitoring System (HPRAMS)	The Pregnancy Risk Assessment Monitoring System (PRAMS) is an on-going population-based surveillance system designed to identify and monitor maternal experiences, attitudes, and behaviors from preconception, throughout pregnancy and into the interconception periods. (US Centers for Disease Control and Prevention). The Hawai‘i Pregnancy Risk Assessment Monitoring System (HPRAMS) is the implementation of PRAMS in Hawai‘i. (Hawai‘i State Department of Health)
United States Census Bureau (USCB)	The US Census Bureau is the leading agency responsible for producing data about the American people and economy. The Census Bureau's primary mission is conducting the US Census every ten years, which allocates congressional seats to the states based on their population. In addition to the decennial census, the Census Bureau continually conducts dozens of other censuses and surveys, including the American Community Survey (ACS), the US Economic Census (EC), and the Current Population Survey (CPS). The Bureau's various censuses and surveys help allocate federal funds and help states, local communities, and businesses make informed decisions. (US Department of Commerce)
Vital Statistics (VS)	The collection of vital statistics data including births, deaths, and marriages is coordinated by the Office of Health Status Monitoring (OHSM) in the State of Hawai‘i. (Hawai‘i State Department of Health)
Youth Risk Behavioral Survey (YRBS)	A national school-based survey conducted by the CDC in conjunction with the State of Hawai‘i Department of Health. The bi-annual YRBS monitors health conditions and risk behaviors among public middle and high school students, grades 6 through 12. (Hawai‘i State Department of Health, Department of Education)
Youth Tobacco Survey (YTS)	Also known as NYTS (National Youth Tobacco Survey), the bi-annual NYTS was designed to provide data on long, intermediate, and short-term indicators key to the design, implementation, and evaluation of comprehensive tobacco prevention and control programs. (Hawai‘i State Department of Health, Department of Education)

TERMS

Age-adjustment	An age-adjusted rate is a form of a rate that controls for age effects, allowing better comparability of rates across geographic areas. Age-adjustment may also be used to control for age effects when comparing across several years of data, as the age distribution of the population changes over time.
Birth Weight	Birth weight is the body weight of a baby at its birth. • Normal birth weight is 2500–4200 g (5lbs, 8oz – 9lbs 4oz) • Low birth weight (LBW) is less than 2500 g (5lbs, 8oz) • Very low birth weight (VLBW) is less than 1500 g (3lbs, 5oz) • Extremely low birth weight (ELBW) is less than 1000 g (2lbs 3oz)
Body Mass Index (BMI)	Body mass index (BMI) is a ratio of body weight (kg) to height (m^2) expressed in units of kg/m^2. If weight is in pounds (lbs.) and height in inches (in), multiply the ratio by 703. • Underweight if BMI is less than 18.5 • Normal weight if BMI is 18.5 to <25 • Overweight if BMI is 25.0 to <30 • Obese if BMI is 30.0 or higher
Child Abuse or Neglect	The acts or omissions of any person who, or legal entity which, is in any manner or degree related to the child, is residing with the child, or is otherwise responsible for the child's care, that have resulted in the physical or psychological health or welfare of the child, who is under the age of eighteen, to be harmed, or to be subject to any reasonably foreseeable, substantial risk of being harmed. (Section 350-1, Hawai‘i Revised Statutes)
Civilian Labor Force	Consists of people classified as employed or unemployed, excluded from the employed are people whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations; also excluded are all institutionalized people and people on active duty in the US Armed Forces. (US Bureau of the Census)
Confidence Interval (CI)	A range of values for a measure, e.g., a rate, constructed so that this range has a specified probability (95%) of including the true value of the measure. The specified probability is called the confidence level, and the end points of the confidence interval are called the confidence limits. Unless noted, all published CDC reports are based on a 95-percent confidence level.
Crime Index	The ten Part I Offenses reported in the Uniform Crime Reporting (UCR) Program to represent the status of crime in the US: murder and non-negligent manslaughter (the latter term is not used in Hawai‘i), rape, robbery, aggravated assault, burglary, larceny-theft, motor-vehicle theft, arson, human trafficking: commercial sex acts, and human trafficking: involuntary servitude. (Hawai‘i State, Department of the Attorney General) (US Federal Bureau of Investigation)
Disability Status	Disability is defined as the product of interactions among individuals’ bodies; their physical, emotional, and mental health; and the physical and social environment in which they live, work, or play. Disability exists where this interaction results in limitations of activities and restrictions to full participation at school, at work, at home, or in the community. (US Bureau of the Census)

Educational Attainment	ACS respondents are classified according to the highest degree or the highest level of school completed. (US Bureau of the Census)
Employment Status	The series of ACS questions on employment status was designed to identify, in this sequence: (1) people who worked at any time during the reference week; (2) people on temporary layoff who were available for work; (3) people who did not work during the reference week, but who had jobs or businesses from which they were temporarily absent (excluding layoff); (4) people who did not work during the reference week, but who were looking for work during the last four weeks and were available for work during the reference week; and (5) people not in the labor force. (US Bureau of the Census)
Family Households	A family consists of a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption. (US Bureau of the Census) • Married-Couple Family – A family in which the householder and his or her spouse are listed as members of the same household • Female Householder, No Husband Present – A family with a female householder and no spouse of householder present • Male Householder, No Wife Present – A family with a male householder and no spouse of householder present
Fetal Death	Fetal death is death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, that did not, after complete separation from the mother, breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or movement of voluntary muscle. (Section 338-1, Hawai‘i Revised Statutes)
Hawaiian Home Lands (HHL)	Not to be confused with the Department of Hawaiian Home Lands (DHHL), though both are interrelated. The Department of Hawaiian Home Lands (DHHL) is a department of the State of Hawai‘i, while Hawaiian Home Lands (HHL) is a geographic term utilized by the US Census Bureau. The Census Bureau treats Native Hawaiian areas in the same manner as American Indian, Alaska Native areas, producing specialized reports and studies. “Hawaiian Home Lands (HHL) are areas held in trust for Native Hawaiians by the state of Hawaii, pursuant to the Hawaiian Homes Commission Act of 1920, as amended. The Census Bureau obtains the names and boundaries for HHLs from state officials. The names of the home lands are based on the traditional ahupua‘a names of the Crown and government lands of the Kingdom of Hawai‘i from which the lands were designated or from the local name for an area. Being lands held in trust, HHLs are treated as equivalent to off-reservation trust land areas with the American Indian Trust Land/Hawaiian Home Land Indicator coded as "T." Each HHL is assigned a national four-digit census code ranging from 5000 through 5499 based on the alphabetical sequence of each HHL name, a five-digit Federal Information Processing Series (FIPS) code in alphabetical order within the State of Hawai‘i, and an eight-digit National Standard (ANSI) code.” (US Bureau of the Census)
High Blood Pressure (HBP)	High blood pressure (HBP) is a common disease in which blood flows through blood vessels (arteries) at higher than normal pressures. • Normal: Systolic less than 120 and Diastolic less than 80 • Prehypertension: Systolic 120–139 or Diastolic 80–89 • High Blood Pressure (Stage 1): Systolic 140–159 or Diastolic 90–99 • High Blood Pressure (Stage 2): Systolic 160 or higher or Diastolic 100 or higher • Hypertensive Crisis: Systolic Higher than 180 or Diastolic Higher than 110

Household	A household includes all the people who occupy a housing unit. A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live separately from any other people in the building and which have direct access from the outside of the building or through a common hall. (US Bureau of the Census)
Householder	One person in each household designated as the householder. In most cases, this is the person or one of the people in whose name the home is owned, being bought, or rented. • A family householder is a householder living with one or more individuals related to him or her by birth, marriage, or adoption. (US Bureau of the Census)
Infant Death	A death of an infant during the first 0–364 days of life. The infant mortality rate (IMR), is the number of deaths of children under one year of age per 1000 live births. • Infant death is the death of an infant before one year of life • Neonatal death is the death of an infant during the first 0–27 days of life • Early neonatal is the death of an infant less than 7 days of life • Late neonatal is the death of an infant between 7 to 27 days of life • Post neonatal death is the death of an infant during the first 28–364 days of life • Perinatal death is the number of fetal deaths + neonatal deaths
Juvenile	Person under the age of 18. (Hawai‘i State, Department of the Attorney General)
Live Birth	Live birth is the complete expulsion or extraction from its mother of a product of conception that did, after the complete expulsion or extraction from its mother, breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or movement of voluntary muscle, whether or not the umbilical cord was cut or the placenta attached. (Section 338-1, Hawai‘i Revised Statutes)
Margin of Error (MOE)	A margin of error (MOE) is the difference between an estimate and its upper or lower confidence bounds. Confidence bounds can be created by adding the margin of error to the estimate (for the upper bound) and subtracting the margin of error from the estimate (for the lower bound). All published American Community Survey (ACS) margins of error are based on a 90-percent confidence level. (US Census Bureau, 2008).
Medicaid	Medicaid is a health care program that assists low-income families or individuals in paying for long-term medical and custodial-care costs. Medicaid is funded primarily by the federal government and operated by States. (US Department of Health and Human Services)
MedQUEST	The Med-QUEST program provides eligible low-income adults and children access to health and medical coverage through managed care plans. The QUEST program is designed to provide **Q**uality care, **U**niversal access, **E**fficient utilization, **S**tabilizing costs, and to **T**ransform the way health care is provided to recipients. (Hawai‘i State Department of Human Services)
Own Child	A never-married child under 18 years who is a son or daughter by birth, a stepchild, or an adopted child of the householder. (US Bureau of the Census)
Part I Offenses	Offenses which make up the Crime Index: murder, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson; plus, the offense of manslaughter by negligence. (Hawai‘i State, Department of the Attorney General) (US Federal Bureau of Investigation)

Part II Offenses	All criminal offenses not classified as Part I Offenses: other assault, curfew and loitering, disorderly conduct, driving under the influence, drug abuse violations, embezzlement, forgery and counterfeiting, fraud, gambling, liquor laws, offenses against the family and children, prostitution and commercialized vice, runaways, sex offenses, status offenses, suspicion, stolen property, vagrancy, vandalism, weapons offenses, etc. (Hawai'i State, Department of the Attorney General) (US Federal Bureau of Investigation)
Poverty Status	The Census Bureau uses a set of dollar value thresholds that vary by family size and composition to determine who is in poverty. (US Bureau of the Census)
Poverty Status of Households	The data on poverty status of households were derived from answers to the income questions. Since poverty is defined at the family level and not the household level, the poverty status of the household is determined by the poverty status of the householder. Households are classified as poor when the total income of the householder's family is below the appropriate poverty threshold. (US Bureau of the Census)
Prenatal Care (PNC)	Prenatal care (PNC) is preventive healthcare with the goal of providing regular check-ups that allow doctors or midwives to treat and prevent potential health problems throughout the course of the pregnancy while promoting healthy lifestyles that benefit both mother and child.
Premature Births	Normally, a pregnancy lasts about 40 weeks. A premature birth or preterm birth is when a baby is born too early, before 37 weeks of pregnancy have been completed. • Preterm birth less than 37 weeks gestation • Late preterm birth 34-36 weeks gestation • Early preterm birth 32-33 weeks gestation • Very early preterm birth less than 32 weeks gestation
Race Alone	People who responded to the question on race by indicating only one race are referred to as the race alone population, or the group who reported only one race. (US Bureau of the Census)
Race alone or in any Combination	The concept "race alone or in any combination" applies only to detailed race groups, such as American Indian and Alaska Native tribes, detailed Asian groups, and detailed Native Hawaiian and Other Pacific Islander groups. For example, Korean alone or in any combination includes people who reported a single response (e.g., Korean), people who reported Korean and another Asian group (e.g., Korean and Vietnamese), and people who reported Korean in combination with one or more other non-Asian race groups (e.g., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, or Some Other Race). (US Bureau of the Census)
Related Child	Any child under 18 years old who is related to the householder by birth, marriage, or adoption. Related children of the householder include ever-married as well as never-married children. Children, by definition, exclude persons under 18 years who maintain households or are spouses or unmarried partners of householders. (US Bureau of the Census)
Risk factor	An aspect of personal behavior or lifestyle, an environmental exposure, or an inborn or inherited characteristic that is associated with an increased occurrence of disease or other health-related event or condition.
Social Determinants of Health (SDH)	The social determinants of health are the circumstances in which people are born, grow up, live, work, and age, as well as the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics. (UN, World Health Organization)

Unemployment Rate	The unemployment rate represents the number of unemployed people as a percentage of the civilian labor force. (US Bureau of the Census)
Women, Infants, and Children (WIC)	WIC is a Federal funded program operated by States to provide supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk. (US Department of Health and Human Services) (Hawai'i State Department of Human Services)

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