



VOLUME 2

Family Lifestyle Choices

INTRODUCTION



OFFICE OF HAWAIIAN AFFAIRS

The Office of Hawaiian Affairs (OHA) was established during the 1978 Constitutional Convention, Hawai'i State Constitution (Article XII). Chapter 10 of the Hawai'i Revised Statutes (HRS) defines OHA's roles and responsibilities: to support the betterment of the conditions of Native Hawaiians; to be the public agency responsible for the performance, development, and coordination of programs relating to Native Hawaiians; to assess policies and practices; and to conduct advocacy.

In 2009, OHA's Board of Trustees adopted a new Strategic Plan focusing on six strategic priorities: *mo'omeheu* (culture), *'āina* (land & water), *ea* (governance), *ho'okahua waiwai* (economic self-sufficiency), *ho'ona'auao* (education), and *mauli ola* (health).

For *mauli ola*, one of the strategic results focuses on improving family lifestyle choices for Native Hawaiians. Specifically, for Native Hawaiian families to become actively engaged in health programs and supportive family development practices by increasing the number of Native Hawaiian mothers receiving prenatal care in the first trimester and decreasing the number of Native Hawaiians in Hawai'i Department of Health substance abuse treatment. This fact sheet reports on currently available data for maternal and child health and substance abuse.

OVERVIEW OF NATIVE HAWAIIAN HEALTH

There was a time in Hawai'i's past when Native Hawaiians had a holistic view of *mauli ola* (health) incorporating *mana* (sacred life force), *pono* (harmony, balance), and *lōkahi* (unity) for physical, mental, spiritual, and emotional well-being. A strong oral tradition facilitated the passing of knowledge from one generation to the next. The *mauka* to *makai* (mountain to ocean) *ahupua'a* (land division) provided an active and thriving subsistence living. Traditional cultural and medical art forms promoted care and healing. The *kapu* (sacred restrictions) system provided a framework of rules regulating behavior and conduct, and *'ohana* (family) values nurtured wellness and illness prevention.^{2, 3}

Then the Native Hawaiians experienced changes in political power, the loss of many ancient customs and practices, the introduction of diseases, and the decline of *mauli ola* in the eighteenth and nineteenth centuries. Unhealthy lifestyles, risk factors, and chronic diseases that compromise the quality and longevity of life for the Native Hawaiian population are the hallmark of *mauli ola* in contemporary times.

Ka lā i ka Mauliola.

The sun at the source of life.

Mauli-ola (Breath-of-life) is the god of health.

(Pukui, 1983, #1422)

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WORKS CITED

Mai ka piko o ke po'o a ka poli o ka wāwae, a la'a ma nā kihi 'eha o ke kino.

From the crown of the head to the soles of the feet, and the four corners of the body.

An expression used in the prayers of healing. The four corners are the shoulders and hips; between them are the vital organs of the body.

(Pukui, 1983, #2066)



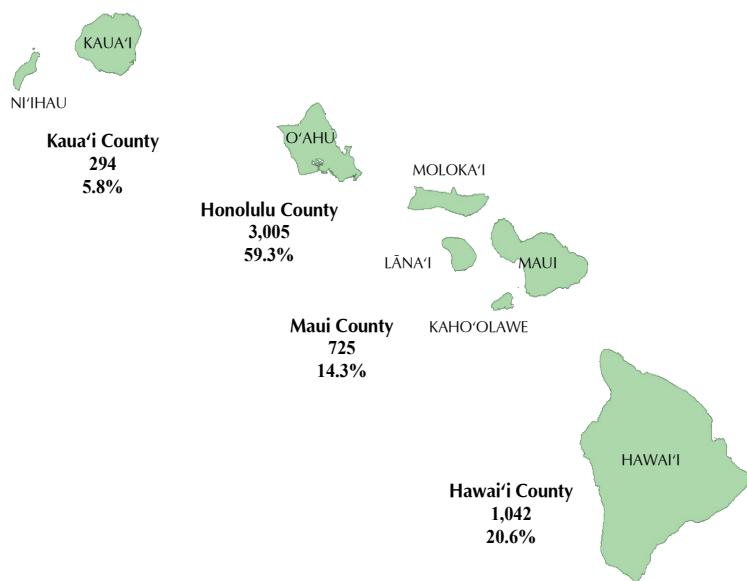
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MATERNAL AND CHILD HEALTH STATUS

The *kāhuna ho'ohāpai keiki* and the *kāhuna ho'ohānau keiki*, the ancient practitioners of pregnancy and birthing, were involved in maternal and child health from the time before conception through the development of the infant into childhood. The period of *ho'okauhua* (gestation) was regarded as an important time for the women, their families, and the community. Traditional practices aimed to fortify the health of the mind, body, and spirit of the mother and infant. Rituals calling on *'aumākua* (ancestral gods) were observed. Forms of care may have included *ho'oponopono* (mediation), *lā'au lapa'au* (medicinal healing), *lomilomi* (massage), and *'ai pono* (appropriate diet). This section reports on currently available data for prenatal care, maternal health, and births.⁴⁻⁶

In 2013, of the 18,927 live births by resident mothers in Hawai'i, 5,066 (26.6%) births were by Native Hawaiian mothers. This was the highest of all race/ethnicities in the State. The data are depicted by County in **Figure 1** and by age group in **Figure 2**.⁷

Figure 1. Number of Live Resident Native Hawaiian Births in Hawai'i by County: 2013



Figures 1 and 2 Source. Hawaii Health Data Warehouse, Hawai'i Department of Health, Vital Statistics, 2013.

Ka 'ōpu'u pua i mōhala.

A flower that began to unfold.

A baby.

(Pukui, 1983, #1518)

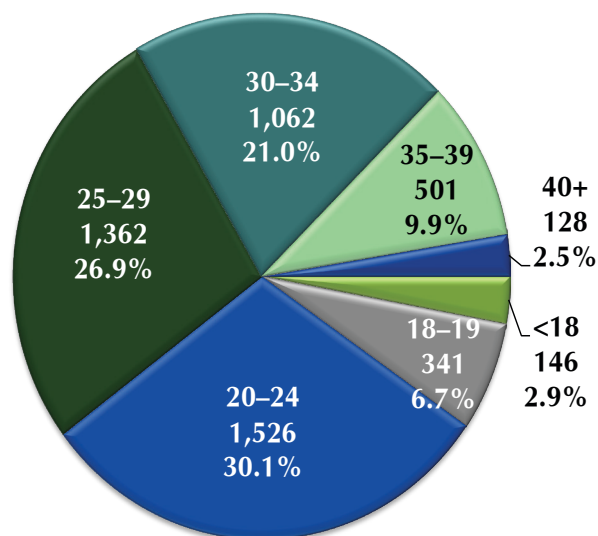
I pa'a ke kino oke keiki i ka lā'au.

**That the body of the child be
solidly built by the medicines.**

**A mother ate herbs during pregnancy and nursing
for the sake of the baby's health. The herbs were given
to the child up to the age of twenty so he would be
healthy and strong through maturity and old age.**

(Pukui, 1983, #1252)

Figure 2. Age Distribution of Resident Native Hawaiian Mothers in Hawai'i: 2013



Native Hawaiian Maternal Characteristics in Hawai'i

16.2% Were college graduates (4+ years).⁷

33.1% Were first time mothers.⁷

48.4% Were unmarried and between 15-50 years.⁸

78.0% Were between the ages of 20-34.⁷

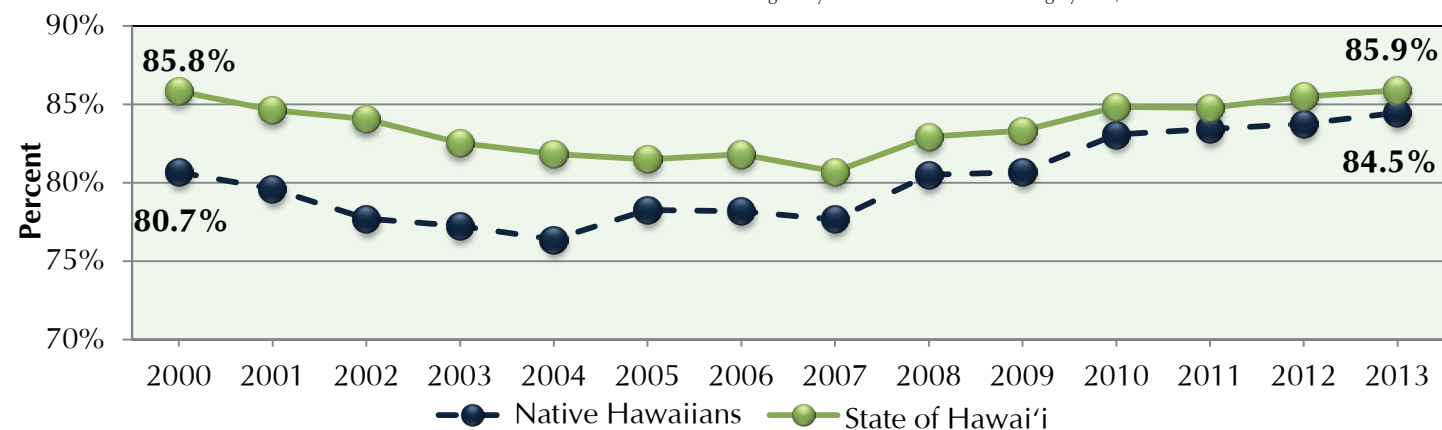
PRENATAL CARE



Pregnant women are urged to enter prenatal care as soon as possible to improve the well-being, health, and outcomes of both mothers and infants. Prenatal care is a preventive measure that includes regular checkups, prenatal tests, counseling, and education while pregnant. **Figure 3** depicts 2011 Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS) data with 95% confidence intervals (95% CI) for Native Hawaiians and the State for prenatal care, maternal behaviors, and maternal well-being indicators. Some noteworthy points include: almost 3 out of 5 Native Hawaiian mothers had unintended pregnancies and 75% of Native Hawaiian mothers had no preconception vitamin use, the highest among all race/ethnicities. There is over a 10% difference between Native Hawaiians and the State for these indicators. A smaller 5.7% difference exists between Native Hawaiians and the State for breastfeeding.⁹

Using data from the Hawai'i Department of Health, Vital Statistics, **Figure 4** shows the percent of live births of resident Native Hawaiian mothers who received prenatal care in the first trimester from 2000–2013.⁷

Figure 4. Prenatal Care Received in the First Trimester for Resident Native Hawaiian Mothers in Hawai'i: 2000–2013



Source: Hawai'i Health Data Warehouse, Hawai'i Department of Health, Vital Statistics, 2013. Note: *Unknown data category not reported. Axis begins at 70% and ends at 90%.

Figure 3. 2011 PRAMS Indicators (95% CI)

Indicator	Native Hawaiians	State of Hawai'i
Prenatal Care		
Getting Prenatal Care Early as Wanted	83.7% (CI 78.8–87.6)	84.7% (CI 82.2–86.9)
Maternal Behaviors		
Unintended Pregnancy	57.7% (CI 51.9–63.3)	45.2% (CI 42.0–48.5)
No Preconception Vitamin Use	74.7% (CI 69.4–79.4)	57.7% (CI 54.5–60.9)
Maternal Well-Being		
Stressors 12 Months Before Pregnancy	70.2% (CI 64.7–75.1)	63.0% (CI 59.8–66.0)
Physical Abuse During Pregnancy	2.5% (CI 1.3–4.9)	2.0% (CI 1.3–3.1)
Breastfeeding	72.5% (CI 67.0–77.4)	78.2% (CI 75.4–80.8)

Source: Hawai'i Health Data Warehouse, Hawai'i Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System, 2011.

Prenatal Care Benefits ⁹

- Opportunity to educate and engage mothers in promoting healthy behaviors like preconception vitamin use and breastfeeding
- Enhance a woman's ability to cope with the stress of pregnancy
- Provide social and emotional support
- Identify and manage maternal diseases
- Increase awareness of the potential negative effects of unhealthy behaviors
- Reduce the risk for birth complications
- Potentially reduce health care costs

Barriers to Prenatal Care Benefits ^{9, 10} (among women who did not enter prenatal care)

- Financial hardship
- Inability to get an appointment or at a desirable time
- Lack of health insurance
- Lack of transportation
- Inability to take off from work or school
- No childcare for other children
- Wanting to keep pregnancy a secret from others
- Busy schedule
- Unintended pregnancy
- Didn't want prenatal care
- Didn't know of pregnancy

MATERNAL HEALTH



MATERNAL DISEASES AND WEIGHT STATUS

Women with maternal diseases need to seek timely prenatal care to minimize pregnancy complications. For example, pregnant women with hypertension may have adverse outcomes including preeclampsia, preterm delivery, cesarean delivery, intrauterine growth retardation, fetal death, maternal stroke, maternal heart or kidney failure, and death.^{11, 12}

Women over 35 years of age are especially encouraged to get prenatal care as they are considered to have high-risk pregnancies due to increased risk of developing gestational diabetes and hypertension.^{11–13}

Being overweight or obese prior to becoming pregnant puts women at greater risk for pregnancy complications and post-pregnancy morbidity. Women with a higher preconception body weight, preexisting and gestational diabetes, or hypertension are more likely to have preterm delivery, cesarean delivery, low birth weight babies, postpartum depression, and increased utilization of health care services. Women who are obese are also more likely than non-obese women to bear children with congenital heart defects.^{14, 15} **Figure 5** depicts 2011 PRAMS data with 95% CI for Native Hawaiians and the State for some maternal diseases.⁹

SUBSTANCE ABUSE

Prenatal care also informs women of the potential negative effects on themselves and the fetus if pregnant women engage in unhealthy behaviors like drinking, smoking, or using illicit drugs. By abstaining from these substances during pregnancy, women can prevent these adverse outcomes from occurring. **Figure 6** depicts 2011 PRAMS data with 95% CI for Native Hawaiians and the State for substance abuse indicators.⁹

Figure 5. 2011 PRAMS Indicators (95% CI)

Indicator	Native Hawaiians	State of Hawai'i
Maternal Diseases		
Diabetes Prevalence	0.8% (CI 0.4–1.4)	2.1% (CI 1.4–3.3)
Preconception- Overweight	24.3% (CI 19.6–29.8)	27.0% (CI 24.1–30.1)
Preconception- Obese	20.2% (CI 16.0–25.3)	13.9% (CI 11.8–16.3)

Source. Hawai'i Health Data Warehouse, Hawai'i Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System, 2011.

24.0% of resident Native Hawaiian mothers had cesarean births in 2012 as compared to 25.7% of the State. There has been a 10.2% increase in Native Hawaiian cesarean births since 2000.⁷

Figure 6. 2011 PRAMS Indicators (95% CI)

Indicator	Native Hawaiians	State of Hawai'i
Substance Abuse		
Drinking During Third Trimester of Pregnancy	3.6% (CI 2.1–6.1)	6.9% (CI 5.4–8.7)
Smoking During Third Trimester of Pregnancy	8.5% (CI 6.1–11.7)	5.0% (CI 3.9–6.4)
Illicit Drug Use During Pregnancy	5.2% (CI 3.3–8.1)	3.4% (CI 2.5–4.6)

Source. Hawai'i Health Data Warehouse, Hawai'i Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System, 2011.

Adverse Effects of Alcohol Consumption, Smoking, and Illicit Drug Use for Mother and Fetus^{16–18}

Alcohol Consumption	Smoking	Illicit Drug Use
<ul style="list-style-type: none"> Physical problems Fetal Alcohol Spectrum Disorders (FASD) Behavioral difficulties Learning difficulties 	<ul style="list-style-type: none"> Increased likelihood of miscarriage Reduced fertility Problems with the placenta Preterm births Low birth weights Birth defects (cleft lip/palate) Longer hospital stays Infant mortality from second-hand smoke 	<ul style="list-style-type: none"> Preterm births Low birth weights Birth defects Developmental delays Mental retardation

BIRTHS



LOW BIRTH WEIGHT AND PRETERM

The birth weight of a baby is measured immediately after birth. A weight less than 2,500 grams (5.5 pounds) is considered low. Hospital rates for low birth weight (LBW) are given for Native Hawaiians, the State, and Native Hawaiians by County.¹⁹

“Preterm” refers to babies born before 37 weeks gestational age and is the leading factor of death among newborn babies. Medical costs from hospitalizations for preterm babies are much higher than for healthy newborns. These babies are more likely to experience health issues such as low birth weight, intellectual disabilities, cerebral palsy, respiratory ailments, visual impairment, hearing loss, and feeding difficulties. Some risk factors beyond the mother’s control can increase the risk for having a baby with a low birth weight. Some uncontrollable risk factors include: carrying multiple babies, uterine or cervical problems, infections, and in some instances diabetes or hypertension. On the other hand, other risk factors are modifiable behaviors within the mother’s control. Controllable risk factors include avoiding alcohol consumption, cigarette smoking, and illicit drug use.^{20, 21}

7.5%

of resident Native Hawaiian mothers gave birth to babies weighing less than 2,500 grams compared to 8.1% of the State.⁷

10.1%

of resident Native Hawaiian mothers gave birth to PRETERM (< 37 weeks) babies as compared to 9.9% of the State.⁷

2011 Low Birth Weight Hospitalization Rates per 100,000

Low Birth Weight

Native Hawaiians:
5.4 (CI 4.6–6.3)

Native Hawaiians in:

- **Hawai'i County**
3.0 (CI 1.8–4.1)
- **Honolulu County**
7.0 (CI 5.6–8.5)
- **Kaua'i County**
8.0 (CI 3.3–12.7)
- **Maui County**
4.9 (CI 2.7–7.0)

State:
6.0 (CI 5.6–6.3)

*Unadjusted hospitalization rates per 100,000 with 95% confidence intervals (CI) for Native Hawaiians and available county data for Native Hawaiians and the State.¹⁹

DEATHS

Fetal deaths occur when the fetus shows no signs of life at any time during the pregnancy. They are also referred to as stillbirths, miscarriages, or spontaneous abortions.

Infant deaths are deaths of live-born infants within the first year of life. Deaths occurring less than 28 days after birth are neonatal deaths. Post neonatal deaths occur between 28 and 364 days. The leading causes of death among infants are birth defects, preterm delivery, low birth weight, and maternal complications during pregnancy.^{7, 21}

For Native Hawaiians in 2012, there were 544 Intentional Termination of Pregnancy (ITOP)/Abortions, 87 fetal deaths, and 37 infant deaths of which 27 were neonatal (0–27 days) and 10 were post neonatal (28–364 days).⁷

2012 Fetal/Infant Mortality Rates⁷

**NATIVE
HAWAIIANS**

STATE

78.8

ITOP/Abortion Rate
(per 1,000 live births)

146.8



17.0

Fetal Mortality Rate
(<364 days, per 1,000 live births and fetal deaths)

31.6



5.4

Infant Mortality Rate
(per 1,000 live births)

4.8



MATERNAL AND CHILD HEALTH STATUS SUMMARY

- Over one quarter (26.8%) of babies born in 2012 were Native Hawaiians.
- Four out of five (84.5%) Native Hawaiian mothers received prenatal care in the first trimester.
- One out of five (20.2%) Native Hawaiian mothers had preconception obesity.

SUBSTANCE ABUSE STATUS

Awa (Piper methysticum G. Forster), or better known throughout the Pacific as kava, is a canoe plant that was introduced by Polynesians to Hawai'i. *Kāhuna* (experts) administered 'awa for ceremonial and medicinal purposes. Native Hawaiians understood sickness to be an imbalance between the gods Kū and Hina. *Mōhai* (offerings) of 'awa to the gods helped restore balance. Ingesting 'awa was a method of acquiring *mana* (spiritual power) to promote healing. It was used to treat *hīa'ā* (insomnia), severe headaches, sore muscles, lung infections, difficulty passing urine, kidney disorders, chills, fungal disease, menstrual irregularities, and displacement in the womb. 'Awa was drunk by *ali'i* (chiefs) and commoners in a variety of social settings similar to alcohol's use today. It is an intoxicant and a narcotic that affects the brain and parts of the central nervous system, inducing the user into a relaxed physical and mental state.^{22–25}

Like the communicable disease epidemics in the eighteenth century in Hawai'i, the introduction of foreign intoxicating substances had negative effects on the physical, mental, and spiritual health of the population. The damaging effects of substance abuse such as alcohol, tobacco, and illicit drugs persist today.

Figure 7. Young 'Awa Leaves



Source. OHA Demography, 2014.

E hānai 'awa a ikaika ka makani.

Feed with 'awa so that the spirit may gain strength.

One offers 'awa and prayers to the dead so that their spirits may grow strong and be a source of help to the family.

(Pukui, 1983, #275)

Rum was the first alcohol introduced to Native Hawaiians around 1791. Domestic alcohol production using *kalo* (taro), *kī* (ti), guava, 'uala (sweet potato), and mountain apples began in the early 1800s. Likewise, the time frames for the introduction and cultivation of tobacco were similar. The illicit drug opium came with the Chinese immigrants arriving in the 1850s. Highly addictive and illegal, this profitable trade continued into the 1930s.^{26, 27}

Substance abuse refers to the harmful use of psychoactive substances such as stimulants, depressants, hallucinogens, and opioids.^{28, 29} The side effects of use vary by drug type, all of which have negative behavioral and physical health outcomes. High medical service utilization and potentially avoidable medical service costs are associated with substance abuse from increased risk of injuries, accidents, infectious diseases, or overdoses. Alcohol, tobacco, and illicit drugs impact the health, safety, and quality of life for individuals, families, and communities, with the effects being cumulative and costly.

Symptoms/Consequences of Substance Abuse^{28, 29}

- Behavioral issues
 - Loss of interest in activities
 - Forgetfulness/blackouts
 - Increased risk taking
- Family/Social issues
 - Lower grades/productivity
 - Absences from school/work/home
 - Alienation from family/friends
 - Loss of employment
 - Financial burdens
- Reproductive health issues
 - STD
 - HIV/AIDS
 - Unintended pregnancy
 - Miscarriage
 - Stillbirth
 - Preterm birth
 - Fetal disorders
 - Birth defects
 - Low birth weight
- Mental health issues
 - Addiction
 - Dependence
 - Tolerance
- Injuries
 - Motor vehicle accidents
 - Falls
 - Drowning
- Violence
 - Physical fights
 - Assault
 - Intimate partner violence
 - Crime
 - Homicide
 - Suicide
- Health consequences- disease
 - Asthma
 - Diabetes
 - Heart disease
 - Hypertension
 - Periodontal disease
 - Cancer
- Physical health issues
 - Adverse reaction from mixing substances/ medicines
 - Premature aging and death

He kino pāpālua.

A dual-formed person.

Said of a supernatural being having two or more forms, or of one who is possessed by intoxicants.

(Pukui, 1983, #694)

ALCOHOL



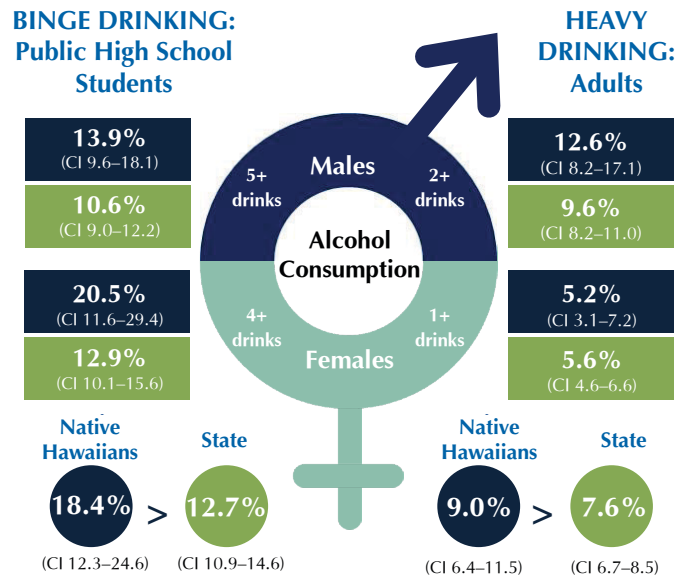
HEAVY DRINKING AND BINGE DRINKING

Heavy alcohol consumption is defined as having 2+ drinks per day for men and 1+ drinks per day for women. Binge drinking is defined as having 5+ drinks per occasion for men and 4+ drinks for women. Pregnant women and youth should abstain. Alcohol is the most commonly abused substance among youth and it takes fewer drinks to reach the adult (21+ years) legal blood alcohol concentration (BAC) level of 0.08%. While youth generally drink less frequently than adults, they are more likely to binge drink. Between genders, binge drinking among Native Hawaiian high school females is higher than their male counterparts. For adults, heavy drinking among Native Hawaiian males is higher than females.³⁰ Figure 8 shows 2013 Youth Risk Behavior Survey (YRBS) binge drinking data for youths and 2013 Hawai'i Behavioral Risk Factor Surveillance System (HBRFSS) heavy drinking data for adults.^{31, 32}

RISK FACTORS AND CONSEQUENCES

Heavy alcohol use directly affects cognitive and physical function. Drinking alcohol can heighten emotions, inhibit self-control, the ability to process information, and assess risks. These behaviors can in turn make some drinkers more likely to engage in dangerous behaviors.³⁰ Figure 9 shows the alcohol-related arrests by County for Native Hawaiian adults in 2012.³³ Figure 10 shows 2013 YRBS indicators for Native Hawaiian and State students.³¹ Both Native Hawaiian public high and middle school students reported higher alcohol use than the State.

Figure 8. 2013 Alcohol Consumption for Youths and Adults



Sources: Hawai'i Health Data Warehouse, Hawai'i Department of Health, Youth Risk Behavior Survey, 2013 and Behavioral Risk Factor Surveillance System, 2013.

Figure 9. Alcohol Related Arrests for Native Hawaiian Adults in the State by County: 2012*

County	DUI	Liquor Laws	Disorderly Conduct
Total	1,356	150	202
Hawai'i	296	21	52
Honolulu	880	101	105
Kaua'i	38	2	10
Maui	142	26	35

Source: State of Hawai'i Attorney General, 2012.

Note: *Arrest figures do not reflect the number of individual people arrested. Only the most serious offense is recorded for each arrest.

Figure 10. 2013 YRBS Indicators for Public High/Middle School Students (95% CI)

Indicator	High School		Middle School	
	Native Hawaiians	State of Hawai'i	Native Hawaiians	State of Hawai'i
Drank alcohol in the past 30 days	31.8% (CI 24.8–38.8)	25.2% (CI 21.7–28.6)	13.3% (CI 10.3–16.3)	9.5% (CI 7.9–11.2)
Ever drank alcohol	61.9% (CI 58.2–65.5)	52.5% (CI 49.7–55.3)	31.0% (CI 27.8–34.2)	24.5% (CI 22.3–26.6)
Drank before age 13	25.9% (CI 22.0–29.7)	17.5% (CI 15.8–19.2)	25.5% (CI 22.9–28.1)	20.0% (CI 18.1–21.9)

Source: Hawai'i Health Data Warehouse, Hawai'i Department of Health, Youth Risk Behavior Survey, 2013.

Alcohol-Related Arrest Statistics for Native Hawaiian Juveniles in 2012:

- 8 - DUIs
- 36 - Liquor Laws
- 24 - Disorderly Conduct

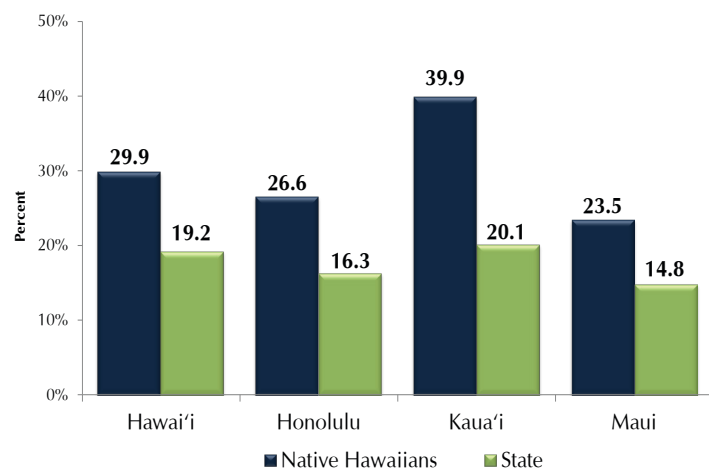
This made up **28.2%** of all juvenile arrests in Hawai'i.³³

TOBACCO

Smoking is the leading preventable cause of death in the U.S. Smoking causes more deaths each year than HIV, alcohol use, illicit drug use, motor vehicle injuries, and firearm-related incidents combined. Smoking causes about 90% of all lung cancer deaths. Current youth smokers are students who reported smoking one or more cigarettes in the past 30 days.³⁴ Current adult smokers are persons who reported smoking at least 100 cigarettes during their lifetime and who reported smoking either every day or some days.³⁵ **Figure 11** shows 2011 Youth Tobacco Survey (YTS) results for youths and HBRFSS results for adults on current cigarette smoking.^{34, 32}

Smokers are at increased risk for heart disease, stroke, respiratory ailments, diabetes, eye disease, dental problems, and arthritis.²⁹ Tobacco smoke can trigger asthma and increase blood pressure due to damaged blood vessels. **Figure 12** shows 2011 HBRFSS results on current cigarette smoking by County.³²

Figure 12. Current Cigarette Smoking for Native Hawaiians and the State by County: 2011



Source: Hawai'i Health Data Warehouse, Hawai'i Department of Health, Behavioral Risk Factor Surveillance System, 2011.

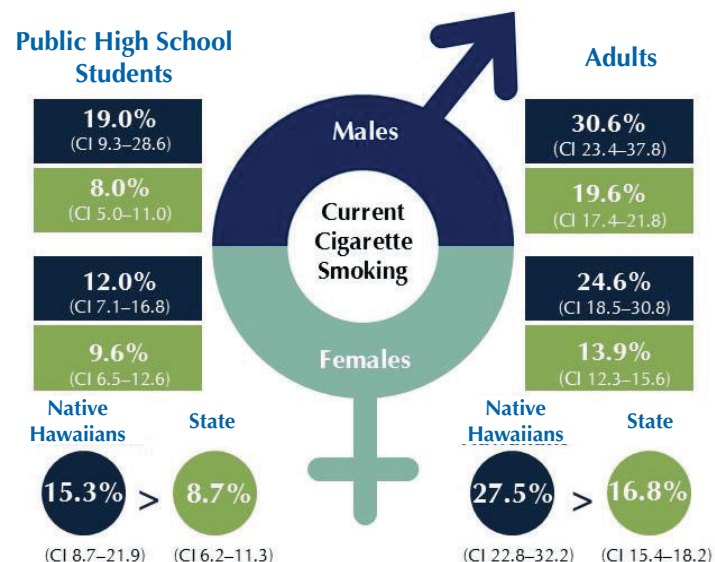
ILLICIT DRUGS

Illicit drugs include, but are not limited to, the following: marijuana, cocaine, ecstasy, inhalants, methamphetamines, hallucinogens, heroin, opioids, barbiturates, prescription drugs for non-medical purposes, and synthetic narcotics.

ADULTS

In 2012, there were 2,073 adult drug possession arrests in the State; 555 (26.8%) of those arrests were Native Hawaiian adults. **Figure 13** displays the Native Hawaiian arrests by offense types.³³

Figure 11. 2011 Current Cigarette Smoking for Youths and Adults



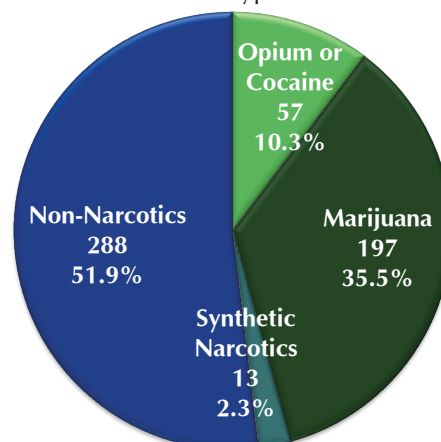
Sources: Hawai'i Health Data Warehouse, Hawai'i Department of Health, Youth Tobacco Survey, 2011 and Behavioral Risk Factor Surveillance System, 2011.

Native Hawaiian adults reported the highest current and lifetime smoking in 2013 compared to other race/ethnicities in the State.³²

E-cigarette Use (Ever) for Native Hawaiian Public School Students: 2011 vs. 2013³⁴

- High School - tripled (7.4% to 22.2%)
- Middle School - quintupled (2.4% to 11.7%)

Figure 13. Native Hawaiian Adult Drug Possession Arrests by Offense Type: 2012



Source: State of Hawai'i Attorney General, 2012.

*Arrest figures do not reflect the number of individual people arrested. Only the most serious offense is recorded for each arrest.

ILLICIT DRUGS



YOUTHS

Marijuana is the most commonly abused illicit drug among Native Hawaiian youth. In 2012, there were 504 juvenile arrests for marijuana possession in the State, 153 of those arrests (30.4%) were Native Hawaiian youth, the highest of all race/ethnicities.³³ **Figure 14** shows public high school and middle school drug use (ever) by drug type for Native Hawaiians and the State.³¹

TREATMENT

Native Hawaiian admissions for substance abuse services were 43.1% (1,719) of the State total (3,987) in 2012. This was the highest of all race/ethnicities in the State. **Figure 15** shows the 10-year trend for the total number of Native Hawaiian and State clients receiving treatment services. Native Hawaiians represented the largest race/ethnicity group of clients receiving treatment services across the ten-year period.³⁶

Figure 14. 2013 Youth Drug Use, (Ever) (95% CI)

Indicator	High School		Middle School	
	Native Hawaiians	State of Hawai'i	Native Hawaiians	State of Hawai'i
Marijuana	50.5% (CI 46.8-54.3)	34.9% (CI 30.5-39.4)	17.0% (CI 14.4-19.7)	10.1% (CI 8.8-11.3)
Cocaine	8.2% (CI 6.0-10.3)	6.5% (CI 5.1-8.0)	2.9% (CI 1.3-4.5)	2.5% (CI .8-3.3)
Ecstasy	9.8% (CI 6.5-13.1)	8.0% (CI 5.8-10.2)	2.6% (CI 1.3-3.8)	1.9% (CI 1.3-2.5)
Inhalants	11.8% (CI 8.9-14.8)	9.2% (CI 7.6-10.8)	8.1% (CI 5.8-10.4)	7.7% (CI 6.3-9.0)
Methamphetamines	4.8% (CI 2.9-6.7)	4.3% (CI 3.1-5.5)	3.5% (CI 2.4-4.6)	2.5% (CI 1.7-3.3)
Rx drug without MD Rx	16.5% (CI 13.5-19.6)	12.9% (CI 10.7-15.1)	3.7% (CI 2.2-5.3)	4.0% (CI 3.1-4.9)

Source. Hawai'i Health Data Warehouse, Hawai'i Department of Health, Youth Risk Behavior Survey, 2013.

Figure 15. Substance Abuse Admissions for Native Hawaiians in Hawai'i: 2003–2012



Source. Kim, J., Sabino, E., Zhang, J., & Okano, S. Y., 2013.

SUBSTANCE ABUSE STATUS SUMMARY

- Native Hawaiian public high school students had the highest binge drinking of all race/ethnicities.
- Native Hawaiian adults had the highest heavy drinking of all race/ethnicities.
- Native Hawaiian adults reported the highest current and lifetime cigarette use of all race/ethnicities.
- Two out of five substance abuse treatment admissions clients were Native Hawaiian, the highest of all race/ethnicities.

TERMS



Behavioral Risk Factor Surveillance System (BRFSS): A phone survey initiated in 1984 by the Centers for Disease Control and Prevention (CDC) to monitor modifiable risk factors for chronic diseases and other leading causes of death. The Hawai'i BRFSS (HBRFSS) is part of the national BRFSS.

Binge Drinking: A pattern of alcohol consumption that brings the blood alcohol concentration (BAC) level to 0.08% or more. This pattern of drinking usually corresponds to 5 or more drinks on a single occasion for men and 4 or more drinks on a single occasion for women, generally within about 2 hours. Heavy drinking is consuming more than 2 drinks per day for men and more than 1 drink per day for women (National Institute on Alcohol Abuse and Alcoholism).

Chronic Disease: Noncommunicable disease of long duration, slow progression, and rarely cured completely.

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 (CDC).

Disorderly Conduct: Committing a breach of the peace. Includes affray; unlawful assembly; disturbing the peace; disturbing meetings; and blasphemy, obscenity, profanity, and obscene language (Hawai'i Attorney General, HI AG).

Driving Under the Influence (DUI): Driving or operating any vehicle while drunk or under the influence of intoxicants.

Drug Abuse Violations: Violations of state or local laws related to the unlawful sale, possession, use, growing, manufacturing, and making of illegal drugs (HI AG).

Ectopic Pregnancy: A pregnancy outside of the uterus that is not viable.

Fetal Alcohol Spectrum Disorders (FASD): Birth defects caused by alcohol consumption during pregnancy.

Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS): A survey project funded by the CDC in collaboration with the Hawai'i Department of Health, Office of Health Status Monitoring to identify and monitor maternal behaviors and experiences before, during, and in the first few months after a live birth in Hawai'i.

Fetal Death: 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 (§338-1, HRS).

Fetal Mortality Rate: The number of fetal deaths per 1,000 live births and fetal deaths.

Illicit Drugs: Include, but are not limited to, the following: marijuana, cocaine, ecstasy, inhalants, methamphetamines, hallucinogens, heroin, opioids, barbiturates, prescription drugs for non-medical purposes, and synthetic narcotics.

Infant Death: Death of an infant during the first 0–364 days of life. **Neonatal death** is the death of an infant during the first 0–27 days of life. **Post neonatal death** is the death of an infant during the first 28–364 days of life.

Infant Mortality Rate: The number of infant deaths per 1,000 live births.

Intentional Termination of Pregnancy (ITOP): The interruption of a pregnancy with the intention other than to produce a live-born infant.

Liquor Laws: Include unlawful manufacture, sale, transporting, furnishing, possessing intoxicating liquor; maintaining unlawful drinking places; bootlegging; operating a still; furnishing liquor to a minor; and drinking on a public conveyance. Does not include drunkenness and driving under the influence (HI AG).

Live Birth: 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 (§338-1, HRS).

Low Birth Weight (LBW): Less than 2,500 grams (5.5 pounds).

Native Hawaiian: "any individual who is a descendant of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the State of Hawai'i," (U.S. Public Law 103–150).

Non-Narcotics: Include among others: barbiturates, addicting stimulants or depressants like crystal methamphetamine (HI AG).

Prenatal Care: Medical attention given to the expectant mother and her developing baby.

Preconception Vitamins: Vitamins like folic acid that help grow and protect cells and prevent birth defects.

Preeclampsia: A condition presented by dangerous hypertension, weight gain, headache, etc. in late pregnancy that may develop into convulsive eclampsia if untreated.

Preterm: Babies born before 37 weeks gestational age.

Substance Abuse: The problematic consumption or illicit use of mind- and behavior-altering substances such as alcoholic beverages, tobacco products, and drugs, including misuse of prescription drugs.

Synthetic Narcotics: Manufactured narcotics such as Demerol and methadone (HI AG).

Unintended Pregnancy: Pregnancy that is mistimed, unplanned, or unwanted at conception.

Vital Statistics (VS): The collection of vital statistics data including births, deaths, and marriages is coordinated by the Office of Health Status Monitoring in the State of Hawai'i 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. YRBS monitors health conditions and risk behaviors among middle and high school students.

Youth Tobacco Survey (YTS): A national school-based survey conducted by the CDC in conjunction with the State of Hawai'i Department of Health. Administered with the YRBS in odd-numbered years with the purpose of preventing youth from using tobacco and helping current users quit.

Mana is our legacy. Maui ola is our destiny.

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