NATIVE HAWAIIAN EDUCATIONAL ASSESSMENT OCTOBER 2009



Suggested Citation: Kamehameha Schools. (2009). Native Hawaiian educational asessment update 2009: A supplement to Ka Huaka'i 2005. Honolulu: Kamehameha Schools, Research & Evaluation Division.

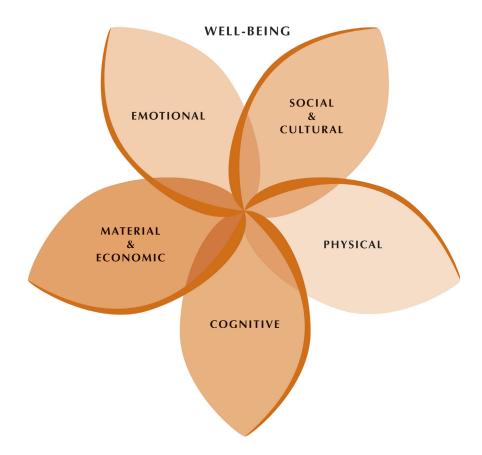
Native Hawaiian Educational Assessment Update 2009: A Supplement to Ka Huaka'i 2005

Introduction

In 2005, Kamehameha Schools released Ka Huaka'i: 2005 Native Hawaiian Educational Assessment (Ka Huaka'i 2005), a compilation of statistics and information related to Native Hawaiian education and well-being presented through a multidisciplinary lens. The publication continued the tradition of the first Native Hawaiian Educational Assessment (NHEA) in 1983 and its follow-up in 1993. Ka Huaka'i 2005 offered a new framework for understanding Native Hawaiian educational outcomes: first, by recognizing that educational well-being does not occur in a vacuum, but is instead continuously influenced by other domains of well-being; and, second, by including a strengths-based perspective rather than limiting the examination to deficits only. Ka Huaka'i 2005 provided a balanced portrait of the condition of Native Hawaiian education in the new millennium. This report seeks to update selected data points and references contained in Ka Huaka'i 2005 while also providing a gauge of progress that has been achieved in the four years since its publication.



Like Ka Huaka'i 2005, the contents of this supplement are grouped into the various domains of well-being represented in the well-being pua (flower, below) in order to present a more holistic view of Native Hawaiian educational well-being as of 2009. In sum, by understanding the challenges and strengths related to Native Hawaiian education and well-being, Ka Huaka'i 2009 optimizes the delivery of programs and services for Native Hawaiians.



Cognitive Well-Being

Cognitive well-being is operationalized through specific educational proxies that encompass learners and learning systems. These proxies include characteristics of schools, groups, and individuals, such as school readiness, instructional quality, achievement test scores, special education rates, attendance, high school completion, and educational attainment. Taken together, these provide a picture of overall cognitive development, intellectual functioning, knowledge—including indigenous knowledge—and human capital in individuals and groups.

Public Schools

Adequate Yearly Progress

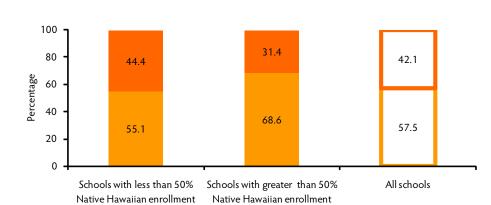


Figure 1 Adequate yearly progress status of public schools, by level of Native Hawaiian enrollment [state of Hawai'i, school year 2007-08]

Did not meet Adequate Yearly Progress (AYP) Met Adequate Yearly Progress (AYP)

Data source: Hawai'i Department of Education 2007-08

(Update to Figure 4.54 in Ka Huaka'i 2005)

 Despite improvements, schools with greater than 50 percent Native Hawaiian students achieved Adequate Yearly Progress (AYP) at a lower rate than schools with less than 50 percent Native Hawaiian Students (31 and 44 percent respectively). (Data source: Hawai'i Department of Education 2007-08)

- The percentage of schools statewide which are in good standing for NCLB status has decreased dramatically for schools with less than 50 percent Native Hawaiians (down 32 percentage points from 2002-03 levels). (Data source: Hawai'i Department of Education 2007-08) (Update to Figure 4.55 in Ka Huaka'i 2005)
- The proportion of schools with greater than 50 percent Native Hawaiian in good standing is down from 56 to 36 percentage points. (Data source: Hawai'i Department of Education 2007-08) (Update to Figure 4.55 in Ka Huaka'i 2005)

- Of all Hawai'i public schools, 31 percent are in the process of or planning for restructuring. Of schools with more than 50 percent Native Hawaiian students, 43 percent are in process or planning for restructuring. (Data source: Hawai'i Department of Education 2007-08) (Update to Figure 4.56 in Ka Huaka'i 2005)
- The proportion of schools with more than 50 percent Native Hawaiian enrollment that are in or planning for restructuring doubled since 2002-03. (Data source: Hawai'i Department of Education 2007-08) (Update to Figure 4.56 in Ka Huaka'i 2005)
- Of all Native Hawaiian public school students, 55.4 percent are enrolled at schools planning for or in the process of restructuring compared with 45.6 percent of non-Hawaiians. (Data source: Hawai'i Department of Education 2007-08) (Update to Figure 4.11 in Ka Huaka'i 2005)

Teacher Experience

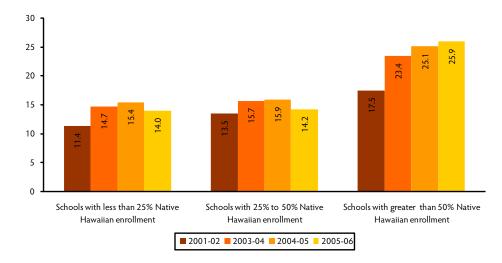


Figure 2 Teachers with emergency or provisional credentials as a percentage of all public school teachers, by level of Native Hawaiian enrollment [state of Hawai'i, school years 2001-02, 2003-04 to 2005-06]

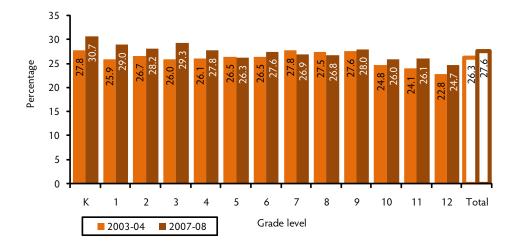
Data source: Hawai'i Department of Education 2001-02, 2003-06 (Update to Figure 4.43 in Ka Huaka'i 2005)

• Schools with greater than 50 percent Native Hawaiian enrollment have shown a steady increase to nearly 26 percent of teachers with emergency or provisional credentials while other schools seem to have stabilized at 14 percent. (Data source: Hawai'i Department of Education 2001-02, 2003-06)

Public School Students

Native Hawaiian Representation

Figure 3 Native Hawaiian students as a percentage of all public school stdents in each grade [by grade level, state of Hawai'i, school year 2003-04 and 2007-08]



Data Source: Hawai'i Department of Education 2007-08

(Update to Figure 4.5 in Ka Huaka'i 2005)

• The gradual upward trend in Native Hawaiian enrollment as a percentage of the DOE system is continuing with Native Hawaiians comprising 27.6 percent of all DOE students in the 2007-08 school year.

Not shown:

• Forecasted population growth rates show that the Native Hawaiian population will increase in size at a rate faster than most other ethnic groups in the state, which suggests that Native Hawaiian representation in the public school system will likely increase in the foreseeable future.¹

¹ See: Hsu, P., & Nielson, J. (2010). *Population update 2010: The R&E annual update series.* Honolulu: Kamehameha Schools Research & Evaluation.

School Type

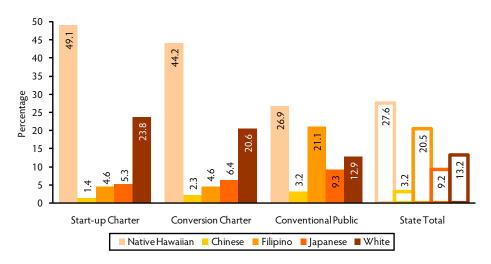


Figure 4 Racial/ethnic distribution of public school students, by type of school [by race/ethnicity, state of Hawai'i, school year 2007-08]

Data source: Hawai'i Department of Education 2007-08

(Update to Figure 4.83 in Ka Huaka'i 2005)

- Native Hawaiians constitute the majority of all students among major ethnic groups in public schools at both the statewide level (all schools 27.6 percent) and for each school type: conventional public school (26.9), conversion charter (44.2) and start-up charter (49.1)
- Start-up charter schools in 2007-08 enrolled Native Hawaiian students at nearly twice the rate of conventional public schools (49.1 percent versus 26.9 percent) which is consistent with 2003-04 data. (Data Source: Hawai'i Department of Education 2007-08) (Update to Figure 4.83 in Ka Huaka'i 2005)

- The racial/ethnic distribution at start-up charters, conventional public schools and on the state level remained stable from 2003-04 to 2007-08. (Data Source: Hawai'i Department of Education 2007-08)
- Through 2007-08, the percentage of students in conversion charters who are Native Hawaiian more than quadrupled from 2003-04 with the ongoing conversion of Kualapu'u and Kamaile to charter schools. (Data Source: Hawai'i Department of Education 2007-08) (Update to Figure 4.83 in Ka Huaka'i 2005)

Special Education

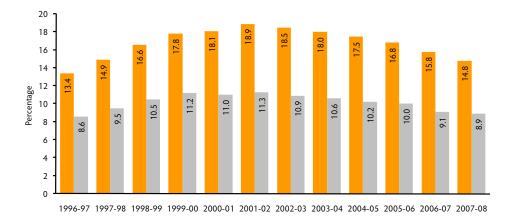


Figure 5 Trends in special education students as a percentage of all public school students [by Hawaiian ethnicity, state of Hawai'i, school years 1996-97 to 2007-08]

Data source: Hawai'i Department of Education 1996-2008 (Update to Figure 4.75 in Ka Huaka'i 2005)

• Since the 2001-02 school year, there has been a slow, but consistent decline in the percentage of special education students both for Native Hawaiians and non-Hawaiians. (Data Source: Hawai'i Department of Education 2003-07)

Native Hawaiian Non-Hawaiian

• The percentage of special education students among Native Hawaiian students has exceeded the percentage among non-Hawaiian students by 4.8 to 7.6 percentage points each year since the 1996-97 school year pointing to a significant and persistent over-representation of Native Hawaiians among students identified as needing special educational services. (Data Source: Hawai'i Department of Education 2003-07)

Not shown:

• Between 1980 and 2008, Native Hawaiians as a percentage of all public school students grew from 20 to 26 percent of the total enrollment while Native Hawaiian special education students as a percentage of all special education students grew from 32 to 38 percent demonstrating a slight decrease in the overrepresentation of Native Hawaiians in special education over the last quarter-century. (Data Source: Hawai'i Department of Education) (Update to Figure 4.77 in Ka Huaka'i 2005)

Attendance

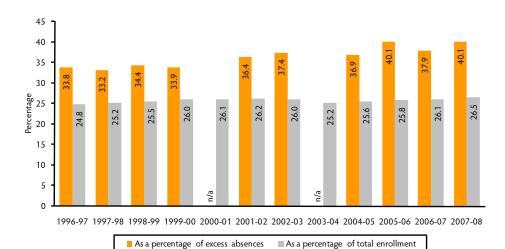


Figure 6 Trends in Native Hawaiians as a percentage of all students with excessive absences and of all public secondary school students [state of Hawai'i, selected years]

Data sources: Hawai'i Department of Education 1996-97 to 2007-08

(Update to Figure 4.79 in Ka Huaka'i 2005)

Notes: Excessive absence data are not available for school year 2000-01 or 2003-04.

Percentages of students with excessive absences for both Native Hawaiians and non-Hawaiians were likely influenced by a change in policy prior to the 2006-07 school year which stated that any student with 10 or more unexcused absences would receive an "F" for the semester.

• Native Hawaiians make up a little over a quarter of the public secondary school enrollment but more than a third of all students with excessive absences; this disparity has increased over the last decade. (Data Source: Hawai'i Department of Education 1996-97 to 2007-08)

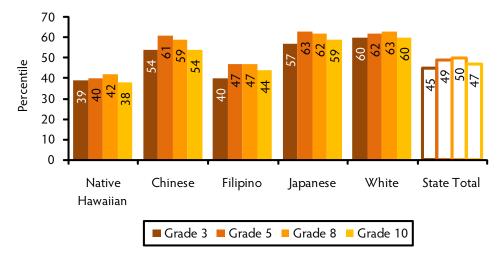
Not shown:

 Since the 2001-02 school year, the gap in percentage of students with excessive absences between Native Hawaiians and non-Hawaiians has narrowed from 6.8 percentage points to 4.7. (Data source: Hawai'i Department of Education 1996-97 to 2007-08) (Update to Figure 4.78 in Ka Huaka'i 2005)

Student Outcomes

Achievement Tests: Reading

Figure 7 Percentile rank of average reading score among public school students, by race/ethnicity [Terra Nova HCPS III, by grade level, state of Hawai'i, school year 2007-08]



Data source: Hawai'i Department of Education 2007-08.

(Update to Figure 4.61 in Ka Huaka'i 2005)

• Native Hawaiian reading scores lagged behind total public school averages by 6 to 9 percentage points across all grades tested. (Data Source: Hawai'i Department of Education 2007-08)

- Native Hawaiian 5th, 8th and 10th grade students continue to earn above average scores in reading achievement at less than half the rate of non-Hawaiian students. (Data Source: Hawai'i Department of Education 2003-06) (Update to Figure 4.62 in Ka Huaka'i 2005)
- Native Hawaiian achievement in HSA reading declines with successive grade levels: the percentage of Native Hawaiians scoring above average for reading achievement in Grade 10 is approximately one ninth of the percentage of Native Hawaiians scoring above average in Grade 3. (Data Source: Hawai'i Department of Education 2003-06) (Update to Figure 4.62 in Ka Huaka'i 2005)

Achievement Tests: Math

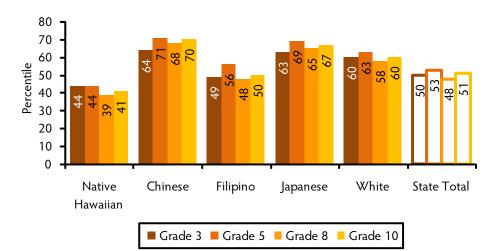


Figure 8 Percentile rank of average math score among public school students, by race/ethnicity [Terra Nova HCPS III, by grade level, state of Hawai'i, school year 2007-08]

Data source: Hawai'i Department of Education 2007-08

(Update to Figure 4.68 in Ka Huaka'i 2005)

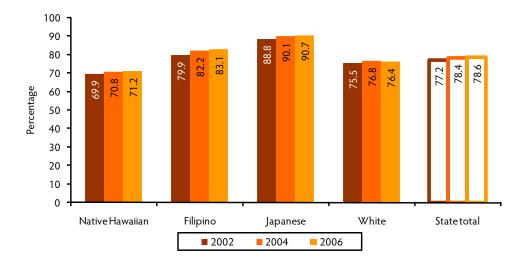
• Of all major ethnic groups in the state, Native Hawaiian students continue to score the lowest in mathematics. In each grade level tested, the average mathematics score of Native Hawaiian students lagged behind total state averages by 6 to 10 percentile points. (Data Source: Hawai'i Department of Education 2003-06)

- The percentage of Native Hawaiians scoring above average for math achievement in Grade 10 is nearly one quarter of the percentage of Native Hawaiians scoring above average in Grade 3. (Data Source: Hawai'i Department of Education 2003-06) (Update to Figure 4.69 in Ka Huaka'i 2005)
- The percentage of Native Hawaiians scoring below average for math achievement in Grade 10 is more than double the percentage of Native Hawaiians scoring below average in Grade 3. (Data Source: Hawai'i Department of Education 2003-06) (Update to Figure 4.69 in Ka Huaka'i 2005)
- At the high-school level, non-Hawaiian students earned above average scores at nearly three times the rate of Native Hawaiian students. (Data Source: Hawai'i Department of Education 2003-06) (Update to Figure 4.69 in Ka Huaka'i 2005)

- The proportion of NHOPI 4th grade students who were proficient in mathematics and reading was about half that of non-NHOPI 4th graders in Hawai'i and nationwide in 2003, 2005, and 2007. The proportion of NHOPI 8th grade students who are proficient is one third that of non-NHOPI 8th graders in Hawai'i and nationwide. (Source: National Center for Education Statistics 2007) (Update to Figure B13 in Ka Huaka'i 2005)
- The percentage of Native Hawaiian and Other Pacific Islander (NHOPI) 8th graders at or above proficiency for both mathematics and reading on the National Assessment of Educational Proficiency (NAEP) was at least 10 percentage points below the state of Hawai'i averages and at least 20 percentage points below U.S. averages for 8th graders in 2003, 2005, and 2007. (Source: National Center for Education Statistics 2007) (Update to Figure B13 in Ka Huaka'i 2005)

Graduation Rates

Figure 9 Trends in students who achieved timely high school graduation as a percentage of all public high school students [three-year averages, students expected to graduate within four years of entering high school, by race/ethnicity, state of Hawai'i, 2001 to 2007]



Data source: Hawai'i Department of Education 2001 to 2007.

(Update to Figure 4.82 in Ka Huaka'i 2005)

- Overall, Native Hawaiians have the lowest timely graduation rates of all major ethnic groups in Hawai'i public schools. Approximately 70 percent of Native Hawaiians graduate in four years compared with 78 percent statewide. (Data source: Hawai'i Department of Education 2001 to 2007)
- Native Hawaiian timely graduation rates have increased since 2002 at approximately the same rate as the state overall. (Data source: Hawai'i Department of Education 2001 to 2007)

Not shown:

• For students entering Grade 9 between 1999 and 2003, timely high school graduation improved for all groups except for Native Hawaiian students in the subsidized meals program. For this group, timely graduation decreased by 3.6 percent. (Data Source: Hawai'i Department of Education 2003-07) (Update to Figure 4.29 in Ka Huaka'i 2005)

Post-High Education

Figure 10 Trends in Native Hawaiians as a percentage of total University of Hawai'i enrollments [by school level, University of Hawai'i System, 2006 and 2007]



Data source: University of Hawai'i, 2006 to 2007

(Update to Figure 2.66 in Ka Huaka'i 2005)

- Native Hawaiian students are over-represented in the community colleges and under-represented at 4-year campuses and graduate schools. (Source: University of Hawai'i 2006 to 2007)
- Native Hawaiian enrollment as a percentage of the total University of Hawai'i system has shown steady growth from 1992 to 2007, from 11.0 percent to 18.7 percent: an increase of nearly 70 percent over a 15-year period. (Source: University of Hawai'i 2006 to 2007)

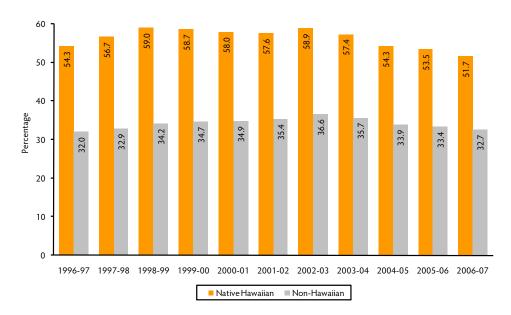
Material and Economic Well-Being

Material and economic well-being refers to access to monetary and material resources such as housing, land, employment, occupation, income, and other dimensions of socioeconomic status. In the Native Hawaiian context, 'āina mole refers to land as both a resource and an ancestral foundation.

For the purposes of this update, material and economic well-being is limited to analyses of educational outcomes based upon participation in public school subsidized lunch programs.

Subsidized School Lunch Program Enrollment

Figure 11 Trends of children participating in the subsidized school meals program as a percentage of all public school students [by Native Hawaiian, state of Hawai'i, 1996-1997 to 2006-2007]



Data source: Hawai'i Department of Education 1996-1997 to 2006-2007.

(Update to Figure 4.23 in Ka Huaka'i 2005)

- In recent years, Native Hawaiian participation in the subsidized meals program has decreased from a recent high of 58.9 percent in school year 2002-03 to 51.7 percent in school year 2006-07.
- The school year 2006-07 had the lowest percentages of Native Hawaiians participating in the subsidized meal program than in the previous 10 years.
- Over the last decade, more than half of all Native Hawaiians in the public school system participated in the subsidized meal program, and continues to greatly exceed the percentage of non-Native Hawaiian participants in the program.
- Across all types of public schools, Native Hawaiians continued to have higher percentages, by at least 13 percentage points, of participation rates in the subsidized meals program than their non-Hawaiian counterparts. (Data Source: Hawai'i Department of Education 2006-07) (Update to Figure 4.84 in Ka Huaka'i 2005)

• For the school years 1999 to 2007, the percentage of non-participants in the subsidized meal program who achieved timely high school graduation continued to exceed that of participants by at least 15 percent. (Data Source: Hawai'i Department of Education 2003-07) (Update to Figure 4.29 in Ka Huaka'i 2005)

Subsidized Meal Programs and Reading Achievement

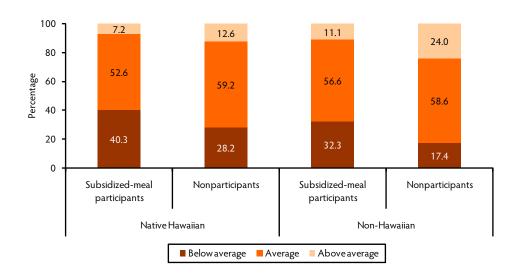


Figure 12 Distribution of reading achievement levels among public school students, by participation in the subsidized school meals program in SY 2005-2006. [SAT-9, distribution across performance levels, students tested in grades 3, 5, 8, and 10, state of Hawai'i, school year 2005-06]

Data source: Hawai'i Department of Education 2005-06

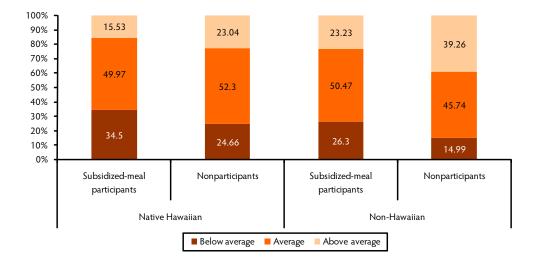
(Update to Figure 4.24 in Ka Huaka'i 2005)

- Regardless of ethnicity, students who participated in the subsidized meal program did not perform as well in reading achievement as non-participating students. (Data Source: Hawai'i Department of Education 2005-06)
- Of all Native Hawaiian students who participated in the subsidized-meal program, 40.3 percent of participants scored below average in reading achievement compared with non-Hawaiian students enrolled in the program. (Data Source: Hawai'i Department of Education 2005-06)

- For the school year 2005-06, Native Hawaiian participants in the subsidized meal program experienced an increase from 2002-03 in the percentage of reading proficiency from 21.6 percent to 24.7 percent. (Data Source: Hawai'i Department of Education 2003-06) (Update to Figure 4.25 in Ka Huaka'i 2005)
- Proficiency rates for Native Hawaiian students improved from the 2002-03 school year through the 2005-06 school year by 3.1 percentage points for subsidized meal program participants and 7.5 percentage points for non-participants versus 0.6 percentage point decrease and 3.6 percentage point increase respectively for non-Hawaiian students. (Data Source: Hawai'i Department of Education 2003.06) (Update to Figure 4.25 in Ka Huaka'i 2005)

Subsidized Meal Programs and Math Achievement

Figure 13 Distribution of mathematics achievement levels among public school students, by participation in the subsidized school meals program [SAT-9, distribution across performance levels, students tested in grades 3, 5, 8, and 10, state of Hawai'i, school year 2005-06]



Data Source: Hawai'i Department of Education 2005-06

(Update to Figure 4.26 in Ka Huaka'i 2005)

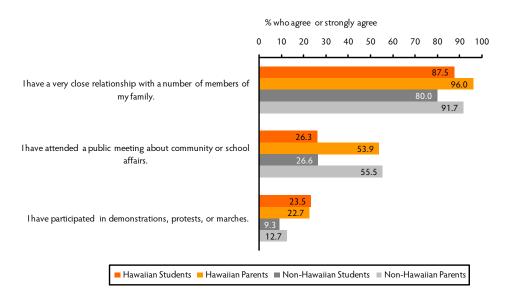
- The percentage of Native Hawaiian participants in the subsidized meals program scoring in the below average tier for math achievement decreased from the school year 2002-03 to 2005-06, 36.7 percent to 34.5 percent. (Data Source: Hawai'i Department of Education 2005-06)
- From 2002-03 to 2005-06, the percentage of non-Hawaiian participants in the subsidized meals program scoring in the above-average tier for math continues to be greater than those of Native Hawaiian students in the same program. However, the magnitude of the difference has decreased from 8.2 percent to 7.7 percent. (Data Source: Hawai'i Department of Education 2005-06)

Social & Cultural Well-Being

Social and cultural well-being includes family composition and interaction, social networks and support, community dynamics, and social behavior, including lifestyle, risk-taking, and deviance. For Native Hawaiians it also includes cultural practices, language, and traditions that form the contextual underpinnings of social functioning and lifestyle.

Sense of 'Ohana & Kuleana

Figure 14 High school students and parents who agree with selected statements as a percentage of all respondents [by ethnicity, 2006-2007]



Data: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education Study Note: No comparable figure from Ka Huaka'i 2005

- Seven out of eight Native Hawaiian students agreed that they have close family relationships compared to four out of five non-Hawaiian students.(Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Native Hawaiian parents were more likely to report having close family relationships (96.0 percent) than non-Hawaiian parents (91.7 percent). (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Both Native Hawaiian parents and non-Hawaiian parents had higher percentages of attending public meetings about community or school affairs than did their children. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Native Hawaiian students and parents reported participation in demonstrations, protests or marches at approximately twice the rate of non-Hawaiians. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

- Native Hawaiian students reported helping out around the home to show that family is important in higher percentages than non-Hawaiians. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Native Hawaiian students were 20 percent more likely to report that they know their place/role in their family, community, work, and larger society than were non-Hawaiian students. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Both Native Hawaiian students and non-Hawaiian students had higher percentages of working to protect the environment than their parents. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

School & Community Relationships

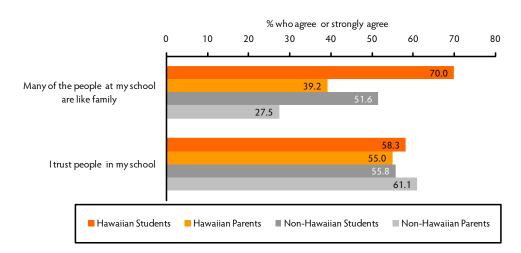


Figure 15 High school students and parents who agree with selected statements as a percentage of all respondents [by ethnicity, 2006-2007]

Data: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education Study Note: No comparable figure from Ka Huaka'i 2005

- Seventy percent of Native Hawaiian students reported feeling that many people at school were like family compared to only half (51.6 percent) for non-Hawaiian students. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Similarly, Native Hawaiian parents reported feeling that people at their children's schools were like family with a higher percentage (39.2 percent) than non-Hawaiian parents (27.5 percent). (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

- Native Hawaiian students reported a higher percentage (37.9 percent) of people in their neighborhood getting together to socialize than did non-Hawaiian students (32.3 percent). (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Close to 40 percent more Native Hawaiian students than non-Hawaiian students felt that if their neighbors saw them doing something wrong, they would tell their parents. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

Language

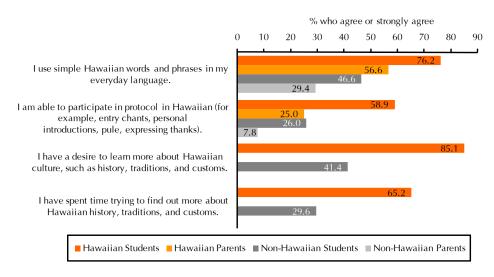


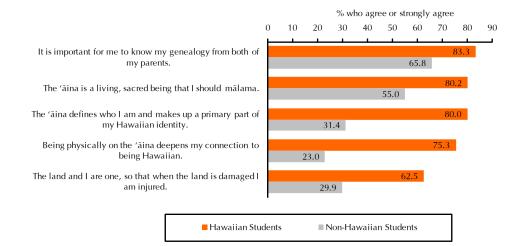
Figure 16 High school students and parents who agree with selected statements as a percentage of all respondents [by ethnicity, 2006-2007]

Data: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education Study Note: No comparable figure from Ka Huaka'i 2005

- A very high percentage of Native Hawaiian students (76.2 percent) and Native Hawaiian parents (56.6 percent) use simple Hawaiian words and phrases in their everyday language. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Over half (58.9 percent) of Native Hawaiian students reported that they are able to participate in protocol in Hawaiian compared to 25.0 percent of their parents. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

Cultural Exploration

Figure 17 High school students who agree with selected statements as a percentage of all respondents [by ethnicity, 2006-2007]



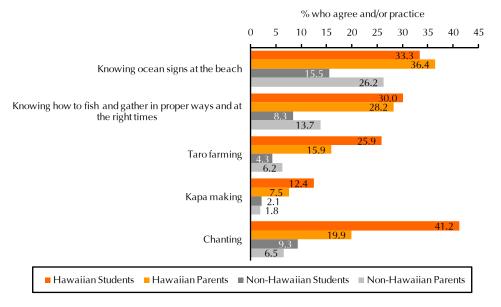
Data: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education Study Note: No comparable figure from Ka Huaka'i 2005

- Five of six Native Hawaiian students (83 percent) reported a desire to know both parents' genealogy versus approximately two of three non-Hawaiians (65 percent). (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Four out of five Native Hawaiians (80 percent) reported agreeing that the 'āina is a living, sacred being, and that it defines them. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Twice as many Native Hawaiian students (62 percent) as non-Hawaiian students (29 percent) agreed that they are one with the land and are injured when the land is damaged. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

- With the exception of canoe paddling, which is a popular school and club sport, Native Hawaiian students and parents were fairly close in percentages related to participation in kai-based cultural practice. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- More than eight of ten Native Hawaiian students (85 percent) reported a desire to learn more about Hawaiian culture. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

'Āina Mole

Figure 18 High school students and parents who agree with selected statements or participate in selected activities as a percentage of all respondents [by ethnicity, 2006-2007]



Data: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education Study Note: No comparable figure from Ka Huakaʻi 2005

 Among the various activities and beliefs shown in Figure 18, the largest difference is seen in chanting where participation reported by Native Hawaiian students (41.2 percent) is four times higher than reported participation by non-Hawaiian students (9.3 percent). (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

- Native Hawaiian students reported participation in 'aina-based cultural practices in considerably greater percentages than their parents with the exception of lei making. The percentage of Native Hawaiian parents reporting participation in lei making exceeded students by 12 percentage points. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Native Hawaiian parents and students reported nearly equal percentages of practicing hula and playing Hawaiian music. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- The percentage of Native Hawaiian parents who participated in relational and cultural practices (feeding and entertaining guests, family and friends when they visit, preparing food for important cultural celebrations like a baby luau, greeting people in Hawaiian ways, participating in Hawaiian ways, participating in Hawaiian clubs, preparing Hawaiian food) far exceeds that of their children except for participation in Hawaiian clubs. The same was found to be true for non-Hawaiian parents and their children, indicating that these types of practices are more actively pursued by adults. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

- Native Hawaiian parents are much more likely to have an opinion or take action on more politically charged issues such as entitlements and land rights (46.2 percent) than Native Hawaiian students (37.2 percent). (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- A majority (83.6 percent) of the Native Hawaiian students feel a sense of Hawaiian identity with a lower but still strong percentage (74.1 percent) claiming to understand what it means to be Hawaiian. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

Crime

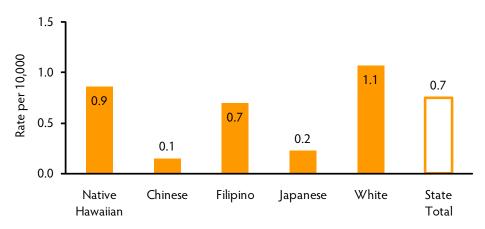


Figure 19 Rates of offenses against family and/or children [three-year average, 2004-2006, rate per 10,000]

Data: Hawai'i Department of the Attorney General, 2006; Hawai'i Department of Health, 2006

(Update to Figure 2.15 in Ka Huaka'i 2005)

Note: Previous years' data are not comparable because, as of 2004, the rate included only non-violent offenses against family and/or children.

- Rates of offenses against family and/or children were significantly lower among Chinese and Japanese compared with Native Hawaiians and Whites. (Source: Hawai'i Department of the Attorney General 2006; Hawai'i Department of Health 2006)
- The 3-year average of rates against family and/or children for Native Hawaiians was higher than the statewide rate but lower than the rate for Whites. (Source: Hawai'i Department of the Attorney General 2006; Hawai'i Department of Health 2006)

14 12 10 0.6 Rate per 10,000 8 6 4 2 0 Native Chinese White Filipino lapanese State Hawaiian Total violent crimes aggravated assult robbery drug manufacturing or sales

Figure 20 Combined juvenile and adult arrest rates for violent crimes, aggravated assault, robbery, drug manufacturing or sales [three-year averages, 2004-2006, rate per 10,000]

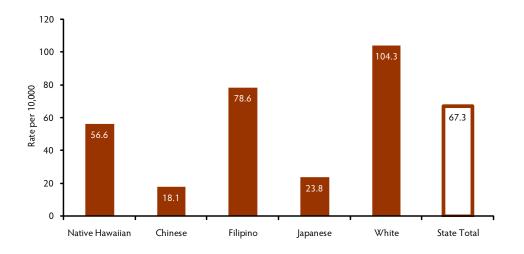
Data: Hawai'i Department of the Attorney General, 2006; Hawai'i Department of Health, 2004-06. (Update to Figure 2.26-2.29 in Ka Huaka'i 2005)

Note: These data are not comparable with previously published data owing to differences in reporting index violent crimes rather than simply Part II violent crimes.

• Native Hawaiians have the highest arrest rate for violent crimes versus other major ethnic groups in all categories except drug manufacturing or sales, in which Native Hawaiians lag behind Whites by 0.5 percentage points. (Source: Hawai'i Department of the Attorney General 2004-2006; Hawai'i Department of Health 2004-2006)

- Native Hawaiian combined juvenile and adult arrest rates for drug manufacturing or sales have decreased 20.3 percent from 2004 to 2006 while the state total rates of arrest for drug manufacturing and sales have decreased 13 percent from 2004 to 2006. (Source: Hawai'i Department of the Attorney General 2004-2006; Hawai'i Department of Health 2004-2006)
- There has been a slight decrease in combined juvenile and adult rates of arrest for aggravated assault for Native Hawaiians from 2004 to 2006 (0.3 percentage points) while the state total rate of arrest for aggravated assault has slightly increased from 2004 to 2006 (0.6 percentage points). (Source: Hawai'i Department of the Attorney General 2004-2006; Hawai'i Department of Health 2004-2006)
- Native Hawaiian combined juvenile and adult rates of arrest for robbery decreased by 39 percent from 2004 to 2006 while the state total rates of arrest for robbery have decreased by 28.2 percent from 2004 to 2006. (Source: Hawai'i Department of the Attorney General 2004-2006; Hawai'i Department of Health 2004-2006)

Figure 21 Rate of juvenile arrests for index offenses [children 0 to 17 years of age, rate per 10,000, 3- year averages, 2004-2006]



Data source: Hawai'i Department of the Attorney General 2004-2006; Hawai'i Department of Health 2004-2006

(Update to Table 4.6 in Ka Huaka'i 2005)

Note: violent crime in this table is not the same as Figure 2.26 in Ka Huaka'i 2005 – those are Index violent crimes, which include negligent manslaughter, sex offenses, and other assaults.

- Native Hawaiian juvenile arrests for index offenses (56.6) are below overall state rates for these types of offenses (67.3). (Source: Hawai'i Department of the Attorney General 2004-2006; Hawai'i Department of Health 2004-2006)
- The rate of juvenile arrests among Native Hawaiians is down to 56.6 (per 10,000), less than one third of the rate in 2003. (Source: Hawai'i Department of the Attorney General 2004-2006; Hawai'i Department of Health 2004-2006)

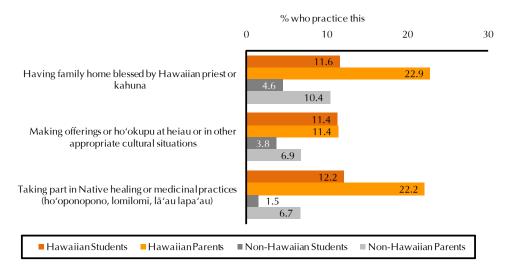
- In 2006, Native Hawaiians accounted for four of every ten inmates of the state's incarcerated population. (Source: Hawai'i Department of Public Safety 2008) (Update to Figure 2.30 in Ka Huaka'i 2005)
- Native Hawaiians as a percentage of all Hawai'i state prison inmates rose 1.3 percentage points for males and dropped 1.2 percentage points for females. (Source: Hawai'i Department of Public Safety 2008) (Update to Figure 2.30 in Ka Huaka'i 2005)
- Arrest rates for Native Hawaiians for all Part II offenses are down 67 percent in total from rates in 2003. (Source: Hawai'i Department of the Attorney General 2004-2006; Hawai'i Department of Health 2004-2006) (Update to Figure 4.7 in Ka Huaka'i 2005)
- Arrest rates for violent crime, drug manufacturing/sale, and drug possession are down 69, 75, and 65 percent respectively from 2003 levels. (Source: Hawai'i Department of the Attorney General 2004-2006; Hawai'i Department of Health 2004-2006) (Update to Figure 4.7 in Ka Huaka'i 2005)

- The arrest rate for aggravated assault for Native Hawaiians slightly decreased from 2002 to 2006 (0.3 per 10,000) while the statewide rate increased from 6.1 to 6.7 per 10,000. (Source: Hawai'i Department of the Attorney General 2004-2006; Hawai'i Department of Health 2004-2006)
- The arrest rate for robbery for Native Hawaiians decreased from 2002 to 2006 by nearly 40 percent. (Source: Hawai'i Department of the Attorney General 2004-2006; Hawai'i Department of Health 2004-2006)

Emotional Well-Being

Spirituality

Figure 22 High school students and parents who participate in selected activities as a percentage of all respondents [by ethnicity, 2006-2007]



Data: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education Study Note: No comparable figure from Ka Huaka'i 2005

- Native Hawaiian parents had significantly higher percentages than students of participation in home blessings and native healing practices: 22.9 and 22.2 percent compared to 11.6 and 12.2 percent, respectively. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Equal percentages of Native Hawaiian parents and students reported making offerings in appropriate cultural situations. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

Values - Students

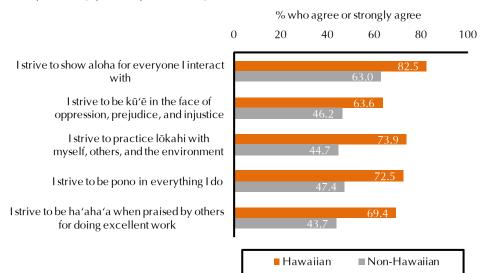


Figure 23 High school students and parents who agree with selected statements as a percentage of all respondents [by ethnicity, 2006-2007]

Data: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education Study Note: No comparable figure from Ka Huaka'i 2005

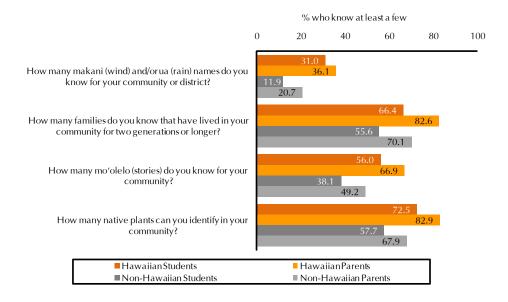
- The percentages of agreement among the various statements may be affected by the students' exposure to and understanding of the terms used. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- The highest agreement between Native Hawaiian students (82.5 percent) and non-Hawaiian students (63.0 percent) concerned expressions of aloha. The greatest gap in agreement of nearly 30 percentage points between Native Hawaiian students (73.9 percent) and non-Hawaiian students (44.7) concerned the practice of lōkahi. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

Not shown:

 A high percentage of 7-10th grade students – 24.5 percent of Native Hawaiians and 23.3 percent of non-Hawaiians – report teaching family traditions and knowledge to younger generations. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

Sense of Place

Figure 24 High school students and parents who reported knowledge of selected culturally relevant facts about their communities [by ethnicity, 2006-2007]



Data: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education Study Note: No comparable figure from Ka Huakaʻi 2005

- A higher percentage of Native Hawaiian students and parents reported knowledge of these indicators of sense of place than did non-Hawaiians. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)
- Native Hawaiian and non-Hawaiian parents had higher positive response rates for these indicators of sense of place than did the respective students.(Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

Not shown:

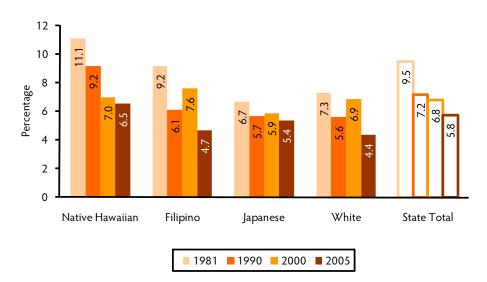
• Three-fourths of Native Hawaiian students reported applying the skills they learned in school at home. (Source: Kamehameha Schools, 2009, Hawaiian Cultural Influences in Education, data tabulations)

Health

Physical well-being is comprised of characteristics such as life expectancy, wellness, nutrition, disease incidence, health risk factors, maternal and child health, and access to health care. In Native Hawaiian perspectives, physical well-being is inseparable from other sources of well-being and relies on being in balance spiritually and in relation to the natural environment.

Infant Mortality

Figure 25 Trends in infant mortality rates [three-year averages, by race/ethnicity, state of Hawai'i, selected years]



Data source: Hawai'i Department of Health, Vital Statistics Reports 1981, 1990, 2002, 2004-2006. (Update to Figure 3.15 in Ka Huaka'i 2005)

- The infant mortality rate has decreased in the past 25 years for all ethnic groups. Improvements were more pronounced for Native Hawaiians, with a 4.6 percentage point drop between 1981 and 2005. (Data source: Hawai'i Department of Health, Vital Statistics Reports 1981, 1990, 2002, 2004-2006)
- Except for Filipinos in the year 2000, Native Hawaiians experienced the highest rates of infant mortality compared to the other major ethnic groups for every year measured. (Data source: Hawai'i Department of Health, Vital Statistics Reports 1981, 1990, 2002, 2004-2006)

Not shown:

 In 2006, more than 20 percent of Native Hawaiian pregnant women did not receive prenatal care during their first trimester, which is a critical developmental time for the fetus. (Data source: Hawai'i Department of Health, Vital Statistics Report 2001 and 2006) (Update to Figure 3.17 in Ka Huaka'i 2005)

- The percentage of Native Hawaiian mothers who received late or no prenatal care in the year 2006 was at least 5 percentage points higher than that of all other ethnic groups and double that of Chinese and Japanese women. (Data source: Hawai'i Department of Health, Vital Statistics Report 2001 and 2006) (Update to Figure 3.17 in Ka Huaka'i 2005)
- In 2006, the percentage of low-birth-weight births among Native Hawaiians was 8.2, slightly higher than the state average (8.0 percent). However, the prevalence of low-birth-weight births among Native Hawaiians remains lower than that of all other ethnic groups, except Caucasians. (Data source: Hawai'i Department of Health, Vital Statistics Report 2001 and 2006) (Update to Figure 3.20 in Ka Huaka'i 2005)

Teen Births

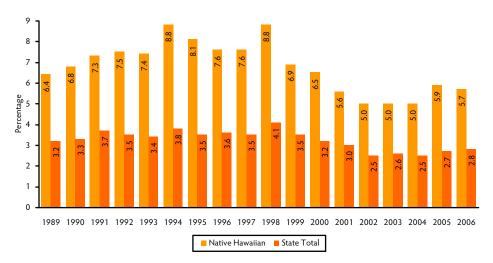


Figure 26 Trends in births to teenage mothers as a percentage of all live births [by Native Hawaiians and state total, State of Hawai'i, 1989 to 2001, 2004-06]

Data: Hawai'i Department of Health, Vital Statistics Reports: 1989-1991, 1994-1996, 1999-2001, and 2004-2006.

(Update to Figure 4.17 in Ka Huaka'i 2005)

- The percentage of Native Hawaiian births to teenage mothers has decreased in the last several years, from a high of 8.8 percent in 1994 and 1998 to 5.7 percent in 2006. (Data source: Hawai'i Department of Health, Vital Statistics Reports 1989-1991, 1994-1996, 1999-2001, and 2004-2006)
- Although Native Hawaiians had a higher percentage of births to teenage mothers when compared to the state average, the gap in rates decreased from 3.2 percentage points in 1989 to 2.9 percentage points in 2006. (Data source: Hawai'i Department of Health, Vital Statistics Reports 1989-1991, 1994-1996, 1999-2001, and 2004-2006)

- Except for a drop in 2003, the percentage of Native Hawaiian high school students who have had sexual intercourse has been fairly stable since 1999 at just over 9 percent. (Data source: Hawai'i Department of Health, YRBS 1997-2007)
- In 2007, Native Hawaiian high school students were two and half times as likely to become sexually active before the age of thirteen than were non-Hawaiian students. (Data source: Hawai'i Department of Health, YRBS 1997-2007)

Youth Risk Behaviors

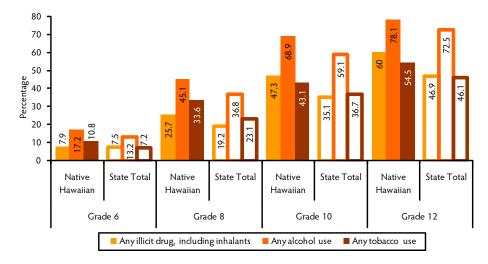


Figure 27 Students who report alcohol, tobacco, and other drug use as a percentage of all students [public and private school students in Grades 6 to 12, by Native Hawaiian and state total, 2004]

Data source: Storm 2004

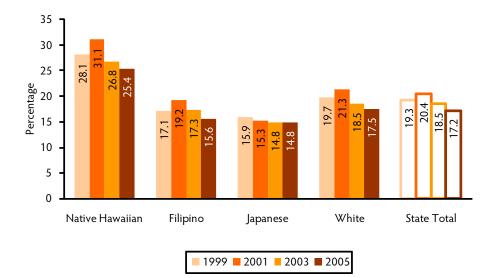
(Update to Table 4.4 in Ka Huaka'i 2005)

- Usage among Native Hawaiian students is higher than state totals at each grade level for illicit drugs, any alcohol use, and any tobacco use. (Data source: Storm 2004)
- By 12th grade, 60 percent of Native Hawaiian students reported using an illicit drug (including inhalants) compared with almost 47 percent for the state total. (Data source: Storm 2004)

- From 2003 through 2007, Native Hawaiian students reported increasing percentages of engagement for all high-risk behaviors except "had 4 or more sexual partners". (Data source: Hawai'i Department of Health, YRBS 2003-2007)
- In 2007, Native Hawaiian students in the state of Hawai'i reported higher percentages of engaging in high-risk behaviors than both non-Hawaiian students in the state of Hawai'i and all public high school students across the U.S. for all behaviors listed. (Data source: Hawai'i Department of Health, YRBS 2003-2007)
- In 2007, 21.2 percent of Native Hawaiian public high school students reported having made a suicide attempt compared with 7.6 percent of non-Hawaiian and 6.9 percent of U.S. public high school students. (Data source: Hawai'i Department of Health, YRBS 2003-2007)

Adult Risk Behaviors

Figure 28 Trends in individuals who smoke as a percentage of all adults [three year averages, adults 18 years and older, by race/ethnicity, state of Hawai'i, selected years]



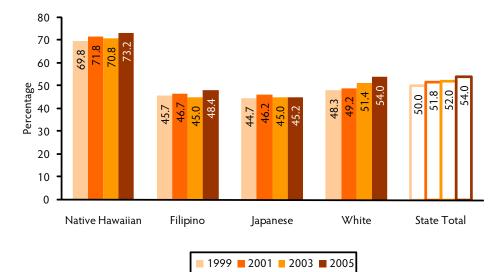
Data source: Hawai'i Department of Health, BRFSS 1998-2006 (Update to Figure 2.46 in Ka Huaka'i 2005)

- Since 1999, Native Hawaiian adults have reported smoking rates approximately 8-10 percentage points higher than state totals. (Data source: Hawai'i Department of Health, BRFSS 1998-2006)
- Since its peak in 2001, the smoking rate among Native Hawaiian adults has declined by 5.7 percentage points versus 3.2 percentage points for the state overall. (Data source: Hawai'i Department of Health, BRFSS 1998-2006)

- The proportion of Native Hawaiian public high school students who reported recently smoking cigarettes has gone from one in three in 1999 to one in twenty in 2007. (Data Source: Hawai'i Department of Health, YRBS 1999-2007) (Update to Figure 4.33 in Ka Huaka'i 2005)
- In 2005, the percentage of public school students who reported recently smoking cigarettes was higher in middle school than high school for both Native Hawaiian and non-Hawaiian students. (Data Source: Hawai'i Department of Health, YRBS 1999-2007) (Update to Figure 4.33 in Ka Huaka'i 2005)

Chronic Illness: Obesity

Figure 29 Trends in individuals who are overweight or obese* as a percentage of all adults [three year averages, adults 18 years and older, by race/ethnicity, state of Hawai'i, select years]



Data source: Hawai'i Department of Health, BRFSS 1998-2006

(Update to Figure 2.45 in Ka Huaka'i 2005)

Note: Data for the Chinese population are not available

*Overweight is defined as a body mass index of 25 to 29.9; obese equates to a body mass index of 30 or higher.

- Native Hawaiians are more likely to be overweight or obese when compared to other ethnic groups. Between 1999 and 2005, the prevalence of overweight and obesity among Native Hawaiians was consistently (approximately) 19 percentage points higher than state totals. (Data source: Hawai'i Department of Health, BRFSS 1998-2006)
- In 2005, 73.2 percent of Native Hawaiian adults were overweight or obese. By comparison, the statewide prevalence of overweight and obesity was 54 percent. (Data source: Hawai'i Department of Health, BRFSS 1998-2006)
- The proportion of adults in all ethnic groups who were overweight or obese increased between 1999 and 2005. Native Hawaiians experienced an increase of 3.4 percentage points during this period. (Data source: Hawai'i Department of Health, BRFSS 1998-2006)

Not shown:

 In 2003, 37.5 percent of Native Hawaiian middle school students were either overweight or at risk of becoming overweight versus 33.6 percent of non-Hawaiians. In 2005, the percentage dropped to 31.9 percent for Native Hawaiians and 24.6 percent for non-Hawaiians. (Data source: Hawai'i Department of Health, YRBS 2003-07) (Update to Figure 4.9 in Ka Huaka'i 2005) • In 2003, 35.1 percent of Native Hawaiian high school students were overweight or at risk of becoming overweight versus 24.7 percent for non-Hawaiians. In 2007, percentages have risen to 37.4 percent for Native Hawaiians and 25.7 percent for non-Hawaiians. (Data source: Hawai'i Department of Health, YRBS 2003-07) (Update to Figure 4.9 in Ka Huaka'i 2005)

Chronic Illness: Asthma

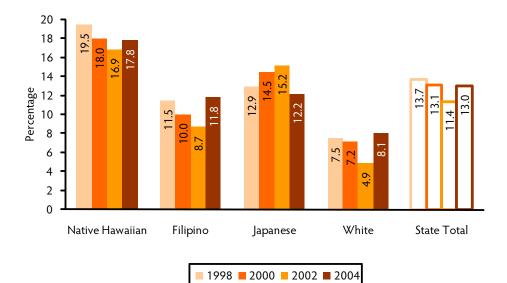


Figure 30 Trends in children with asthma as a percentage of all children [three-year averages, children younger than 18, by race/ethnicity, state of Hawai'i, selected years]

Data source: Hawai'i Department of Health, Hawai'i Health Survey 1997 to 2005.

(Update to Figure 4.30 in Ka Huaka'i 2005)

Note: Because the sample of Chinese adolescents ages fifteen to seventeen was too small for statistical reliability, the Chinese rates presented do not include this age group.

- The prevalence of asthma among children decreased steadily for all ethnic groups, except Japanese, between 1998 and 2002. In 2004, the prevalence of asthma increased for all ethnic groups, again with the exception of Japanese, when compared to rates in 2002. (Data source: Hawai'i Department of Health, Hawai'i Health Survey 1997 to 2005)
- Native Hawaiian children have the highest prevalence of asthma when compared to other ethnic groups. In 2004, 17.8 percent of Native Hawaiian children were diagnosed with asthma, nearly 5 percentage points higher than the state average (13.0 percent). (Data source: Hawai'i Department of Health, Hawai'i Health Survey 1997 to 2005)

- Native Hawaiian adults have the highest age-adjusted heart disease mortality rate (135 per 100,000) when compared to all other ethnic groups. Filipinos follow closely with an age-adjusted heart disease mortality rate of 128 per 100,000. (Data source: Hawai'i Department of Health, 2007)
- The age-adjusted heart disease mortality rate for Native Hawaiians in 2005 was more than twice the rate for Chinese, Japanese, and White adults, and 67 percent higher than the statewide rate. (Data source: Hawai'i Department of Health, 2007)

- The prevalence of diabetes among Native Hawaiian adults is higher than that of all other ethnic groups. In 2005, 12.1 percent of Native Hawaiians had diabetes compared to the state average of 7.4 percent. (Data source: Hawai'i Department of Health, BRFSS 2002-2006)
- Between 2003 and 2005, the prevalence of diabetes increased for all ethnic groups except for Japanese. (Data source: Hawai'i Department of Health, BRFSS 2002-2006)

Health Care Security

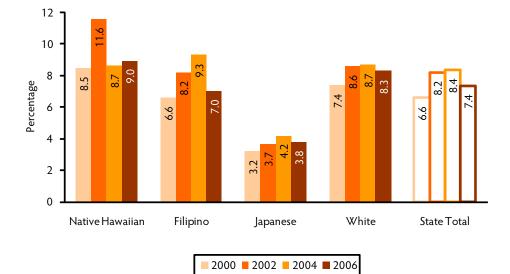


Figure 31 Trends in individuals without health insurance as a percentage of all adults [three-year averages, adults 18 years and older, by race/ethnicity, state of Hawai'i, selected years]

Data source: Hawai'i Department of Health, BRFSS 1997-2007

(Update to Figure 2.54 in Ka Huaka'i 2005)

- In recent years the prevalence of uninsured adults has decreased for all ethnic groups except for Native Hawaiians, for whom a slight increase is observed (+0.3 percentage points in 2006 when compared to 2004). (Data source: Hawai'i Department of Health, BRFSS 1997-2007)
- Native Hawaiians have the highest prevalence of uninsured adults in the state of Hawai'i. In 2006, 9 percent of Native Hawaiians reported having no medical insurance coverage, compared with a 7.4 percent statewide average. (Data source: Hawai'i Department of Health, BRFSS 1997-2007)

- Native Hawaiians were more likely to have deferred a needed visit to the doctor because of the associated costs for all the years studied. In 2006, 9.6 percent of Native Hawaiian adults missed a needed doctor visit because of the cost, compared to 6.7 percent statewide. (Data source: Hawai'i Department of Health, BRFSS 1997-2007) (Update to Figure 2.57 in Ka Huaka'i 2005)
- The percentage of Native Hawaiians skipping a needed doctor visit because of the high cost increased in 2006 when compared to previous years. (Data source: Hawai'i Department of Health, BRFSS 1997-2007) (Update to Figure 2.57 in Ka Huaka'i 2005)

Health Care Usage

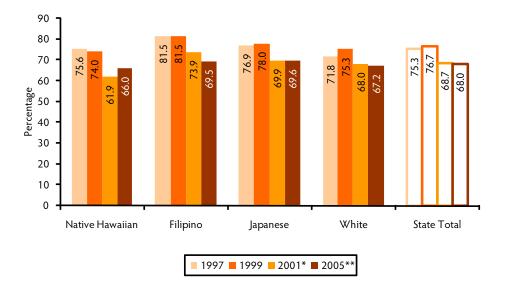


Figure 32 Trends in individuals who report annual health checkups as a percentage of all adults [three-year averages, adults 18 years and older, by race/ethnicity, state of Hawai'i, selected years]

Data source: Hawai'i Department of Health, BRFSS 1996-2000, 2002, and 2005-2006

(Update to Figure 2.56 in Ka Huaka'i 2005)

*In 2001, estimates are based on two-year averages of 2000 and 2002 data owing to unavailable data in 2001.

**Average of 2005 and 2006; no data available for 2003 and 2004

- Between 1997 and 2005, Native Hawaiian adults typically had the lowest health checkup rates of the state's major ethnic groups. (Data source: Hawai'i Department of Health, BRFSS 1996-2000, 2002, and 2005-2006)
- The prevalence of annual checkups is decreasing for all ethnic groups except for Native Hawaiians. The rate of annual checkups increased for Native Hawaiians, from 61.9 percent, by 4.1 percentage points in 2005 when compared to 2001, but is still lower than the rates for 1997 and 1999. (Data source: Hawai'i Department of Health, BRFSS 1996-2000, 2002, and 2005-2006)

Next Steps:

Slated for 2012, the next full Native Hawaiian Educational Assessment (Ka Huaka'i 2012) will update the data published here and in the Ka Huaka'i 2005, while also providing stakeholders with new and refined measures and information that can better inform program and policy decision-making.

For more information, email KS' Research and Evaluation Division at spire@ksbe.edu.

Acknowledgements:

All content contributed by Research & Evaluation Division staff (past and present):

Pia Chaparro Pete Hsu 'Umi Jensen RaeDeen Karasuda Wendy Kekahio Summer Keli'ipio Brandon Ledward Nolan Malone Shawna Medeiros Marco Morawec Jacqueline Ng-Osorio Jared Nielson Bill Speck Brennan Takayama Debbie Tang Katherine Tibbetts Roz Vares Liana Vossen

Special acknowledgement to project leaders:

Summer Keli'ipio RaeDeen Karasuda Jared Nielson