

**Hawaiian Students Compared With Non-Hawaiian Students on the 1997, 1999, and 2001
Hawai'i Youth Risk Behavior Surveys**

Susan M. Saka

Vicki Bunao

Curriculum Research & Development Group

University of Hawai'i at Mānoa

December 2005

**Hawaiian Students Compared With Non-Hawaiian Students
on the 1997, 1999, and 2001 Hawai'i Youth Risk Behavior Surveys**

Background of the Youth Risk Behavior Survey

- The Youth Risk Behavior Survey (YRBS) was developed by the Division of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention (CDC). The Adolescent Survey Committee added questions of local interest.
- Although the CDC supports the administration of the middle school YRBS, they do not conduct a national middle school YRBS.
- Purpose of YRBS is to monitor priority health-risk behaviors that contribute to the leading causes of mortality, morbidity, and social problems among youth and adults in the United States: (a) unintentional and intentional injuries, (b) tobacco use, (c) alcohol and other drug use, (d) sexual behavior, (e) dietary behavior, and (f) physical activity.
- Written parental permission was required, and all students' responses were completely anonymous.

Method

- A two-stage stratified random sampling procedure was used to produce state-level samples except for the 2001 high school administration where district-level samples were used (however, results are reported at the state level). See demographics table for number and percent of public school students who provided usable results. For 1997, two schools were part of CDC's U.S. sample. They did not include the Hawaii-added items, including the question to indicate if a student was Hawaiian.
- Because of sampling limitations, only unweighted analyses are available except for the state-level middle school sample.
- The 1997 and 1999 surveys were administered in the spring, while the 2001 surveys were administered in the fall. This difference may affect the results of certain items such as the percentage that reported being taught about HIV/AIDS in school, usually a 2nd semester topic for most health teachers. However, all surveys were administered at least 30 days after school started, a common reporting period for several items.
- The number of items in each of the surveys was as follows:

	Number of Items		
Survey Type	2001	1999	1997
<i>Middle</i>	91	90	87
<i>High</i>	98	92	84

- For reporting purposes, the 2001 survey items were used as the base (the 2001 survey item number follows the “Q”). CDC conducted additional analyses for selected items. The notation “M” instead of “Q” designates these results. The first six questions collected demographic information.
- Students were allowed to select the race/ethnicity that described themselves. Multiple selections were allowed, and the data labeled as “Hawaiian” in the tables represent all students who selected “Hawaiian/Part Hawaiian” as one of their responses.
- The five-year trend of results is reported in the following section. A trend was considered to be positive if there was improvement (not necessarily statistically significant) across all five years (surveys conducted in 1997, 1999, and 2001). Likewise, a trend was considered to be negative if the results got worse each year.

Results

Comparison of Hawaiian and Non-Hawaiian High School Students

- On most items, a larger percentage of Hawaiian students than non-Hawaiian students or students in the U.S. survey said they practiced high-risk behaviors (76.2%, 77 of 101 state level and 59.1%, 52 out of 88 national level items where it was obvious if the behavior was more or less risky) in the 2001 administration.
- Differences of 10% or larger (in all cases Hawaiian students reported more risky behaviors than non-Hawaiians students) were shown for 11.9% of the items (10 out of 101 items): (a) riding a motorcycle without wearing a helmet during the past 12 months, (b) purchasing cigarettes in a store or gas station without being asked to show proof of age during the past 30 days (current smokers less than 18 years of age), (c) ever drinking alcohol, (d) having their first drink of alcohol before age 13, (e) having at least one drink of alcohol during the past 30 days, (f) having five or more drinks of alcohol in a row during the past 30 days, (g) ever using marijuana, (h) trying marijuana before age 13, (i) using marijuana during the past 30 days, and (j) ever having sexual intercourse.
- Differences of 1% or less between Hawaiian and non-Hawaiian students’ responses were reported for 20.8% of the behaviors (21 out of 101): (a) during the past 30 days, carrying a weapon, carrying a weapon on school property, and not going to school because they felt unsafe at school or on their way to or from school; (b) during the past 12 months, making a plan to attempt suicide; (c) during the past 30 days, buying their cigarettes in a store or gas station, using chewing tobacco or snuff, using on school property, and smoking cigars, cigarillos or little cigars; (d) ever using a needle to inject any illegal drug; (e) during the past seven days, drinking 100% fruit juices, and eating carrots; (f) during the past seven days, eating five or more servings of fruits and vegetables per day and drinking three or more glasses of milk per day; (g) participating in physical activities that did not make them sweat or breathe hard for at least 30 minutes on 5 or more of the past 7 days; (h) participating in no vigorous or moderate physical activity during the past seven days; (i) attending physical education classes daily; (j) being taught about AIDS or HIV infection in school; and (i) feeling they tried to work out problems by talking about

them, could do most things if they tried, stood up for themselves without putting others down, and had goals and plans for the future.

- Hawaiian students reported less risky behaviors for 15 of 64 behaviors where a trend analysis was possible (results available for each of the three survey administrations): (a) during the past 12 months, motorcycle and bicycle riders never or rarely wearing a helmet; (b) never or rarely wearing a seat belt when riding in a car driven by someone else; (c) riding in a vehicle driven by someone who had been drinking alcohol during the past 30 days; (d) carrying a weapon on school property during the past 30 days; (e) during the past 12 months, being in a physical fight and a fight on school property; (f) during the past 12 months, seriously considered attempting suicide and making a plan about how they would attempt suicide; (g) during the past 30 days, smoking cigarettes, smoking two or more cigarettes per day on days they smoked, buying cigarettes in a store or gas station, and smoking cigarettes on school property; (h) ever using marijuana; and (i) ever sniffing glue or inhalants. Non-Hawaiian students' trends improved for 22 items.
- Hawaiian students' reported more risky behaviors over the course of the surveys (trend) for four items: (a) taking steroid pills or shots without a doctor's prescription, (b) using a needle to inject any illegal drug, (c) attending physical education class daily, and (d) being taught about AIDS or HIV infection in school. Non-Hawaiian students' trends worsened for five items.
- The percentage of Hawaiian and non-Hawaiian students reporting they were trying to lose weight increased. However, it is not possible to determine if this is a good or bad trend without knowing if it was advisable for these students to be losing weight.

Comparison of Hawaiian and Non-Hawaiian Middle School Students

- On most items, larger percentages of Hawaiian students than non-Hawaiian students said they practiced high-risk behaviors (71%, 58 out of 82 items). Differences of 10% or larger were shown for (a) bicycle riders who never or rarely wore a helmet, (b) riding in a vehicle driven by someone who had been drinking alcohol during the past 30 days, (c) ever smoking cigarettes, (d) using marijuana during the past 30 days, (e) sexually active students drinking alcohol or using drugs before last sexual intercourse, and (f) eating cooked vegetables yesterday. Also, 10% more Hawaiian than non-Hawaiian students reported they were trying to lose weight.
- Differences of 1% or less were shown for 18% of the items (15 out of 82): (a) carrying weapons on school property during the past 30 days; (b) ever being physically forced to have sexual intercourse; (c) during the past 30 days, using chewing tobacco or snuff, smoking cigars, cigarillos, or little cigars, and smoking 10 cigarettes per day on days smoked; (d) trying cocaine before age 11; (e) inhaling paints, sprays, or glue to get high during the past 30 days; (f) ever injecting an illegal drug; (g) ever talking about AIDS or HIV infection with a family member; (h) having sexual intercourse before age 11; (i) describing themselves as slightly or very overweight; (j) taking diet pills, powders or liquids without a doctor's advice to lose weight or keep from gaining weight during the past 30 days; (k) exercising or participating in physical activities for at least 20 minutes that made them sweat and breathe hard for 3 or more of the past 7 days; (l) feeling they

tried to work out problems by talking about them; and (m) feeling they stood up for themselves without putting others down.

- Hawaiian students reported engaging in less risky behaviors for 15 of 44 items (34%) where a trend analysis was possible: (a) during the past 30 days, riding in a vehicle driven by someone who had been drinking alcohol, carrying a gun, and carrying a weapon on school property; (b) physical fighting in the past 12 months; (c) for all seven of the cigarette smoking-related items; (d) the three alcohol-related items; and (e) using marijuana during the past 30 days. Non-Hawaiian students reported less risky trends for 52% of the behaviors (23 out of 44).
- The trend worsened for 14% of the items (6 of 44) for Hawaiian students: (a) during the past 30 days, not going to school because they felt unsafe at school or on their way to or from school; (b) having ever seriously thought about killing themselves; (c) trying cocaine before age 11; (d) ever talking about AIDS or HIV infection with family members; (e) sexually active students drinking alcohol or using drugs before last sexual intercourse, and (f) eating fruit yesterday. There was only a 1–2% change in items a–d, but there was more than 10% change between 1997 and 2001 for items e and f. The trend for non-Hawaiian students worsened for five of the items.