

**Results of the 2009 Hawai'i State
Youth Risk Behavior Surveys (YRBS)
and Cross-Year Comparisons**

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Note: This report of the 2009 Hawai‘i High School and Middle School Youth Risk Behavior Surveys was published in 2013 due to the unanticipated requirement to administer the 2011 Hawai‘i High School Youth Risk Behavior Survey in fall 2010 for the Communities Putting Prevention to Work grant. Time that would have been spent preparing the report in 2010 was instead used to fulfill the requirement.

Results of the 2009 Hawai'i State Youth Risk Behavior Surveys (YRBS) and Cross-Year Comparisons

Background

The Youth Risk Behavior Survey (YRBS) is one component of the Hawai'i School Health Survey administered in odd-numbered years to public school students in grades 6–12. The YRBS is part of the Youth Risk Behavior Surveillance System (YRBSS) developed by the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC) in collaboration with representatives from state and local departments of education and health, other federal agencies, and national education and health organizations. The YRBSS, established in 1991, monitors six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and adults, including

- behaviors that contribute to unintentional injuries and violence,
- sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases (STDs), including human immunodeficiency virus (HIV) infection,
- tobacco use,
- alcohol and other drug use,
- unhealthy dietary behaviors, and
- physical inactivity.¹

The YRBSS also measures self-reported height and weight to allow calculation of body mass index (BMI) for assessment of whether students are overweight or obese and monitors asthma. More information about the YRBSS can be obtained from <http://www.cdc.gov/yrbss>.

The YRBSS, which includes a national school-based survey conducted by the CDC and state, tribal, and local surveys conducted by state, territorial, and local education and health agencies, and tribal governments has been conducted primarily during the spring in odd-numbered years since 1991. In 2009, 47 states, 4 territories, 2 tribal governments, and 23 large urban school districts participated in the high school YRBS.

The CDC does not conduct a national middle school survey. Fifteen states, 3 territories, 2 tribal governments, and 13 large urban school districts participated in the middle school YRBS.

¹ <http://www.cdc.gov/healthyyouth/yrbs/index.htm>

There were 72 CDC-developed questions (hereafter referred to as core items) in the 2009 Hawai‘i High School YRBS (hereafter referred to as high school HYRBS). In addition, there were 24 Hawai‘i-specific questions covering local variations on the same topics and other health-related topics of local interest such as access to mentor-like relationships.

In Hawai‘i, the high school HYRBS was conducted during the spring in odd-numbered years from 1991 to 1999 and in 2007 and 2009 and during the fall from 2001 through 2005. The change in survey administration periods between spring and fall was due to local situations.

A similar survey of Hawai‘i middle and intermediate school students (hereafter referred to as middle school HYRBS) was conducted in odd-numbered years since 1997 in conjunction with the high school version. In 2009, it contained 75 questions: 35 CDC-developed questions and 40 Hawai‘i-specific questions covering local variations on the same topics and other health-related topics of local interest such as access to mentor-like relationships.

The results of these surveys, conducted in compliance with the requirements of the Hawai‘i State Department of Education’s cooperative agreement with the Division of Adolescent and School Health, CDC, and largely funded by the Hawai‘i Department of Health’s Healthy Hawai‘i Initiative, will be used to

1. identify focus areas for curriculum development and teacher training,
2. identify focus areas for prevention and treatment efforts and resources,
3. identify health-risk behaviors of Hawai‘i public school students in grades 6–12 and assess their trends,
4. measure progress toward achieving national health objectives for Healthy People and other program and policy indicators,
5. support health-related legislation, and
6. seek funding and other support for new initiatives.

This document is a comprehensive reporting of the 2009 high school HYRBS and 2009 middle school HYRBS state results. It does not include the results by age, grade, race/ethnicity, or sex. Because of the vast amount of data, it is difficult to cover everything of possible interest in one easy-to-follow report. We have chosen to report all of the state results in one document. More detailed breakdowns of the data are available through the Hawai‘i Health Data Warehouse (HHDW) at <http://www.hhdw.org> and the CDC’s Youth Online website at <http://www.cdc.gov/healthyyouth/yrbs/index.htm>. The CDC website provides data for CDC core items for the years

when weighted results² were obtained (i.e., all years except 1991, 2001, and 2003 for the high school level and 2005 for the middle school level when we chose to use the high school core items). The HHDW website contains results for core and Hawai‘i-added items and reports by Hawai‘i-specific race/ethnicity. This website can be found at <http://www.hhdw.org/cms/index.php?page=yrbss-reports>. The Hawai‘i School Health Survey committee³ plans to issue topical briefs utilizing further analyses of the YRBS data in the future.

Methods

A two-stage, stratified random sampling procedure was used to produce final samples of 1,611 students in 26 Hawai‘i public middle and intermediate schools (grades 6–8) and 1,511 students in 25 Hawai‘i public high schools (grades 9–12). The response rates were 60% and 63%, respectively. Survey procedures were designed to protect the privacy of students through anonymous and voluntary participation. School-level personnel proctored the self-administered questionnaire. Written parental permission was required.

The data from the middle school and high school HYRBS were statistically weighted; thus, according to the CDC, it is possible to make valid statewide (public schools only) comparisons across years, and the results are representative of all public middle school students in grades 6–8 and public high school students in grades 9–12. Table 1 compares the 2009 public high school HYRBS results to the 2007 results and to the 2009 national YRBS results.

For the 2009 national survey, a three-stage cluster sample design was used to produce the representative sample of 16,410 students in grades 9–12 who attended regular public and private schools in the 50 states and the District of Columbia. See <http://www.cdc.gov/mmwr/pdf/ss/ss5905.pdf> for details. The University of Hawai‘i (UH) Curriculum Research & Development Group (CRDG) conducted *t*-test analyses at $p < .05$ to determine whether there were statistically

² Weighted results mean that the overall response rate was at least 60%. The overall response rate is calculated by multiplying the school response rate times the student response rate. Weighted results are representative of all students attending public schools in each jurisdiction, grades 6–8 for the middle school HYRBS and grades 9–12 for the high school HYRBS. With weighted data, it is possible to say, for example, “X% of students in state Y never or rarely wore a seat belt when riding in a car driven by someone else.” <http://www.cdc.gov/healthyyouth/yrbs/history-states.htm>.

³ Committee members are from the Hawai‘i Departments of Education and Health and the University of Hawai‘i.

significant differences on items between 2007 and 2009 for the Hawai‘i-specific items as the CDC did for the core items.

Table 2 presents the results of a trend analysis of the core items conducted by the CDC, which notes whether Hawai‘i high school students’ reported behavior increased, decreased, or stayed the same between the time when weighted results were first obtained without a break and 2009. Results are included for all years where weighted data were obtained.

The 2009 public middle school HYRBS results compared to the 2007 results are presented in Table 3. As with the high school level, the UH CRDG conducted *t*-test analyses at $p < .05$ to determine if there were statistically significant differences between 2007 and 2009 for the Hawai‘i-specific items as the CDC did for the core items.

Table 4 presents the results of a trend analysis of core items conducted by the CDC, which similarly to that for the high school level, denotes whether Hawai‘i middle school students’ reported behavior increased, decreased, or stayed the same between the time when weighted results were first obtained without a break and 2009. Results are included for all years where weighted data were obtained.

Limitations

The findings in this report are subject to at least three limitations.

1. These data apply to youth who attend public school, who received parental permission to participate, and who were present on the day that the teacher chose to administer the survey (a few teachers did make-ups), and, therefore, may not be representative of all persons in this age group.
2. The extent of underreporting or overreporting of behaviors cannot be determined. However, they are not likely to change drastically from year to year allowing for valid longitudinal comparison. Furthermore, Brener et al. (2002) found that the 1999 Youth Risk Behavior Survey questionnaire demonstrated good test-retest reliability.
3. Brener, McManus, Galuska, Lowry, and Wechsler (2003) studied the reliability and validity of self-reported height and weight among high school students and found that students tend to overreport their height and under-estimate their weight. BMI is calculated on the basis of self-reported height and weight, and, therefore, tends to underestimate the prevalence of obesity and overweight.

Results

Results from the 2009 Hawai'i Youth Risk Behavior Surveys show that many middle and high school students are engaged in behaviors that increase their susceptibility to the leading causes of death among persons aged 10–24 years in the United States. There was a statistically significant decrease in students who reported that they had ever been taught in school about AIDS or HIV infection since the item was first asked—1993 for the high school level and 1997 for the middle school level. There was a statistically significant decrease for the high school level from 87.1% in 2007 to 80.9% in 2009, and although the long term trend was a decrease for the middle school level, it increased from 56.1% in 2007 to 61.3% in 2009. There was also a statistically significant increase in students who reported that they had been trying to lose weight since the item was first asked—1993 for the high school level and 1997 for the middle school level. In contrast, students who reported watching television 3 or more hours per day on an average school day decreased since the item was first asked—1999 for the high school level and 2003 for the middle school level.

Hawai'i High School, 2009 vs. 2007

Of the 92 behaviors for which a comparison was made (the behaviors from the high school HYRBS questionnaire and supplemental variables calculated from those questions), there were 16 that were statistically significantly different at the $p < .05$ level for Hawai'i high school students between 2009 and 2007.

Hawai'i high school students were more likely in 2009 than they were in 2007 to have

- been in a physical fight on school property during the 12 months before the survey (10.2% vs. 7.0%);
- been hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend during the 12 months before the survey (13.0% vs. 9.5%);
- been hurt by having mean things said to them (things that hurt their feelings) on the Internet or email during the 12 months before the survey (31.8% vs. 23.8%);
- ever had at least one drink of alcohol during their life (68.6% vs. 58.7%);
- drunk alcohol other than a few sips for the first time before age 13 years (28.6% vs. 21.0%);
- had at least one drink of alcohol (37.8% vs. 29.1%) or had five or more drinks of alcohol in a row within a couple of hours (22.4% vs. 14.9%) during the 30 days before the survey;

- usually obtained the alcohol they drank by someone giving it to them during the 30 days before the survey (47.2% vs. 32.4%);
- ever used marijuana during their life (40.2% vs. 29.9%);
- used marijuana during the 30 days before the survey (22.1% vs. 15.7%);
- ever used ecstasy during their life (8.2% vs. 4.6%);
- taken over-the-counter drugs to get high during the 30 days before the survey (8.1% vs. 4.6%);
- had sexual intercourse with four or more persons during their life (11.1% vs. 6.1%);
and
- ever had oral sex (40.4% vs. 33.3%).

Hawai‘i high school students were less likely in 2009 than they were in 2007 to have ever been taught in school about AIDS or HIV infection (80.9% vs. 87.1%) and were more likely in 2009 than they were in 2007 to have eaten other vegetables (i.e., other than green salad, potatoes, or carrots) one or more times during the 7 days before the survey (83.6% vs. 77.6%). See Table 1 for the 2009 high school HYRBS results for all items and the related 2007 HYRBS and 2009 national YRBS results. As explained in the methods section, the national results are representative of public and private school students in grades 9–12 in the 50 states and the District of Columbia (hereafter referred to as U.S.).

Hawai‘i High School vs. U.S. High School, 2009

Of the 71 behaviors for which a comparison could be made (the behaviors from the high school HYRBS and national YRBS questionnaires and supplemental variables calculated from those questions) there were 33 that were statistically significantly different at the $p < .05$ level for Hawai‘i high school students in comparison to U.S. students.

For all four suicide-related items, Hawai‘i students were more likely than U.S. students to have reported the behavior: seriously considered attempting suicide (18.9% vs. 13.8%); made a plan about how they would attempt suicide (16.0% vs. 10.9%); attempted suicide (12.8% vs. 6.3%); and attempted suicide that resulted in an injury, poisoning, or an overdose (4.5% vs. 1.9%) during the 12 months before the survey. They were also more likely to have

- ridden with a driver who had been drinking alcohol during the 30 days before the survey (37.1% vs. 28.3%);
- not attended school because they felt they would be unsafe at school or on their way to or from school during the 30 days before the survey (7.9% vs. 5.0%);

- been hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend during the 12 months before the survey (13.0% vs. 9.8%);
- ever been physically forced to have sexual intercourse when they did not want to (10.3% vs. 7.4%);
- drunk alcohol for the first time before age 13 years (28.6% vs. 21.1%);
- drunk alcohol on school property during the 30 days before the survey (7.9% vs. 4.5%);
- tried marijuana for the first time before age 13 years (11.9% vs. 7.5%);
- been offered, sold, or given an illegal drug on school property during the 12 months before the survey (36.1% vs. 22.7%);
- vomited or taken laxatives to lose weight or to keep from gaining weight during the 30 days before the survey (7.1% vs. 4.0%); and
- ever been told by a doctor or nurse that they had asthma (28.3% vs. 22.0%).

Also, more Hawai'i high school students than U.S. students reported that they had exercised to lose weight or to keep from gaining weight during the 30 days before the survey (67.4% vs. 61.5%) and were trying to lose weight (50.2% vs. 44.4%).

For the tobacco-use items for which the CDC published a comparison, Hawai'i students were less likely than U.S. students to engage in the risky behavior for three tobacco-related items:

- smoked cigarettes on at least 1 day (15.2% vs. 19.5%) or 20 or more days (4.8% vs. 7.3%) during the 30 days before the survey, and
- used chewing tobacco, snuff, or dip on at least 1 day during the 30 days before the survey (4.9% vs. 8.9%).

Also, of the students who reported smoking cigarettes during the 30 days before the survey, Hawai'i students were more likely to have tried to quit smoking cigarettes during the 12 months before the survey than were U.S. students (67.4% vs. 50.8%).

Hawai'i high school students were less likely than U.S. students to have

- used a condom during last sexual intercourse (47.7% vs. 61.1%) or used birth control pills before last sexual intercourse (14.5% vs. 19.8%), among students who were currently sexually active (had sexual intercourse during the 3 months before the survey);
- attended physical education (PE) classes on 1 or more days in an average week (43.8% vs. 56.4%) or daily (11.4% vs. 33.3%);
- ever been taught in school about AIDS or HIV infection (80.9% vs. 87.0%);

- drunk 100% fruit juices (73.5% vs. 80.6%) or eaten potatoes excluding french fries, fried potatoes, or potato chips (60.1% vs. 68.8%) one or more times during the 7 days before the survey;
- eaten fruits and vegetables five or more times per day during the 7 days before the survey (17.2% vs. 22.3%);
- eaten fruit or drunk 100% fruit juices two or more times per day during the 7 days before the survey (24.4% vs. 33.9%); and
- drunk three or more glasses per day of milk during the 7 days before the survey (7.2% vs. 14.5%).

But more Hawai‘i students reported that, during the 7 days before the survey, they ate green salad (68.2% vs. 63.4%) or ate carrots (52.3% vs. 48.2%) one or more times. Also, they were less likely during the 7 days before the survey to have drunk a can, bottle, or glass of soda or pop one or more times per day (20.8% vs. 29.2%). See Table 1 for the 2009 high school HYRBS results for all items and the related 2007 HYRBS and 2009 national YRBS results.

Hawai‘i High School Trends

The CDC conducted a trend analysis of weighted data for the core questions from the 2009 high school HYRBS questionnaire and supplemental variables calculated from those questions. Hawai‘i-specific questions were not included. “Logistic regression analysis is used to test for change over all the years of available data. The regression models control for changes in distributions by sex, race/ethnicity, and grade in the population and simultaneously assess linear and quadratic time effects” (Centers for Disease Control and Prevention, 2012). Table 2 contains the items for which the CDC conducted the linear trend analysis. It includes the prevalence estimates for all years that weighted data were obtained and the direction of the change. Of the results from the high school HYRBS for which trends were calculated ($n = 69$), students in 2009 were statistically significantly less likely to have

- rarely or never worn a bicycle helmet, among students who reported riding a bicycle, during the 12 months before the survey (96.8% in 1993 and 88.5% in 2009);
- carried a weapon on school property during the 30 days before the survey (7.9% in 1993 and 4.7% in 2009);
- been in a physical fight (37.0% in 1993 and 29.5% in 2009) or fought on school property (14.0% in 1993 and 10.2% in 2009) during the 12 months before the survey;
- seriously considered attempting suicide (27.8% in 1993 and 18.9% in 2009) or made a plan about how they would attempt suicide (21.4% in 1993 and 16.0% in 2009) during the 12 months before the survey;

- smoked cigarettes on at least 1 day (28.2% in 1993 and 15.2% in 2009) or 20 or more days (13.3% in 1993 and 4.8% in 2009) during the 30 days before the survey;
- had at least one drink of alcohol during their life (72.8% in 1993 and 68.6% in 2009);
- drunk alcohol other than a few sips for the first time before age 13 years (33.8% in 1993 and 28.6% in 2009);
- had at least one drink of alcohol (38.4% in 1993 and 37.8% in 2009) or had five or more drinks of alcohol in a row within a couple of hours (22.7% in 1993 and 22.4% in 2009) during the 30 days before the survey;
- ever used any form of cocaine (8.2% in 1993 and 6.0% in 2009) or methamphetamines (7.7% in 1999 and 3.9% in 2009) during their life;
- described themselves as slightly or very overweight (40.8% in 1993 and 30.3% in 2009); and
- watched television 3 or more hours per day on an average school day (44.7% in 1999 and 30.1% in 2009).

They were also less likely to have

- eaten fruits and vegetables five or more times per day (21.1% in 1999 and 17.2% in 2009), eaten green salad (72.1% in 1999 and 68.2% in 2009), eaten carrots (59.7% in 1999 and 52.3% in 2009), or eaten other vegetables (i.e., other than green salad, potatoes, or carrots) (85.9% in 1999 and 83.6% in 2009) during the 7 days before the survey;
- drunk three or more glasses per day of milk during the 7 days before the survey (15.4% in 1999 and 7.2% in 2009);
- attended physical education (PE) classes daily in an average week (19.2% in 1993 and 11.4% in 2009); and
- ever been taught in school about AIDS or HIV infection (90.3% in 1993 and 80.9% in 2009).

They were more likely to have

- been hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend during the 12 months before the survey (9.5% in 2007 and 13.0% in 2009);
- usually obtained the alcohol they drank by someone giving it to them during the 30 days before the survey (32.4% in 2007 and 47.2% in 2009);
- used marijuana on school property during the 30 days before the survey (7.9% in 1993 and 8.3% in 2009);
- ever taken steroid pills or shots without a doctor's prescription during their life (2.2% in 1993 and 3.8% in 2009);
- drunk alcohol or used drugs before last sexual intercourse, among students who were currently sexually active (18.0% in 1993 and 30.2% in 2009);

- been obese (10.5% in 1999 and 14.5% in 2009); and
- vomited or taken laxatives to lose weight or to keep from gaining weight during the 30 days before the survey (5.2% in 1995 and 7.1% in 2009).

The trend analysis also showed that more Hawai‘i high school students exercised to lose weight or to keep from gaining weight during the 30 days before the survey (53.9% in 1995 and 67.4% in 2009) and were trying to lose weight (44.4% in 1993 and 50.2% in 2009). See Table 2 for the trend results.

Hawai‘i Middle School, 2009 vs. 2007

Of the 68 behaviors for which a comparison was made (the behaviors from the middle school HYRBS questionnaire and supplemental variables calculated from those questions), there were 14 that were statistically significantly different at the $p < .05$ level for Hawai‘i middle school students between 2009 and 2007.

Hawai‘i middle school students were more likely in 2009 than they were in 2007 to have

- rarely or never worn a bicycle helmet, among students who had ridden a bicycle (81.2% vs. 75.2%);
- ever ridden with a driver who had been high on marijuana or other illegal drugs (13.9% vs. 9.9%);
- had their property such as their clothing or books stolen or deliberately damaged on school property during the 12 months before the survey (34.8% vs. 28.7%);
- had a boyfriend or girlfriend during the 12 months before the survey (51.7% vs. 43.9%)
- had someone try to hurt them by hitting, punching, or kicking them while on school property during the 12 months before the survey (39.6% vs. 32.6%);
- been hurt by having mean things said to them (things that hurt their feelings) while on school property during the 12 months before the survey (58.0% vs. 52.5%);
- been harassed because someone thought they were gay, lesbian, or bisexual during the 12 months before the survey (14.6% vs. 10.3%);
- been offered, sold, or given an illegal drug on school property during the 12 months before the survey (10.4% vs. 5.6%);
- ever had sexual intercourse (12.5% vs. 8.7%); and
- played video or computer games or used a computer for something that was not school work for 3 or more hours per day on an average school day (30.7% vs. 25.2%).

Also, Hawai'i middle school students were more likely in 2009 than in 2007 to have

- engaged in physical activity for at least 60 minutes per day that increased their heart rate and made them breathe hard some of the time during all 7 of the 7 days before the survey (26.0% vs. 19.7%),
- attended physical education (PE) classes on 1 or more days in an average week (69.9% vs. 51.9%),
- ever been taught in school about AIDS or HIV infection (61.3% vs. 56.1%), and
- had an adult outside of school besides their parents who they could talk to about things that were important to them (69.0% vs. 62.4%).

Table 3 provides the 2009 middle school HYRBS results for all items and the related 2007 results. The CDC does not conduct a national middle school YRBS, but results of the CDC core items from the 14 other states, 1 territory, and 10 large urban school districts that conducted a 2009 middle school YRBS and obtained weighted data are available at <http://apps.nccd.cdc.gov/youthonline/App/Default.aspx>.

Hawai'i Middle School Trends

Table 4 contains the items for which the CDC conducted the linear trend analysis. (See the Hawai'i High School Trends section on page 8 for a detailed explanation.) It includes the prevalence estimates for all years that weighted data were obtained and the direction of the change. Of the results from the middle school HYRBS for which trends were calculated ($n = 30$), students in 2009 were statistically significantly less likely to have

- watched television 3 or more hours per day on an average school day (43.3% in 2003 and 39.8% in 2009) and
- ever been taught in school about AIDS or HIV infection (84.1% in 1997 and 61.3% in 2009).

They were more likely to have

- rarely or never worn a bicycle helmet, among students who had ridden a bicycle (75.2% in 2007 and 81.2% in 2009),
- ever had sexual intercourse (9.8% in 2003 and 12.5% in 2009),
- tried to lose weight (44.5% in 1997 and 51.4% in 2009), and
- attended physical education (PE) classes on 1 or more days in an average week (51.9% in 2007 and 69.9% in 2009).

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Table 1. 2007 and 2009 Hawai‘i Youth Risk Behavior Survey Public High School Results (2007 *n* = 1,191 and 2009 *n* = 1,511) and 2009 U.S. Results (*n* = 16,410)

Health Risk Behavior	Hawai‘i			U.S. 2009 %	HI vs. U.S.
	2007 %	2009 %	2009 vs. 2007		
Unintentional Injuries and Violence					
Rarely or never wore a bicycle helmet (among students who had ridden a bicycle during the 12 months before the survey)	86.1	88.5	— ^a	84.7	—
Rode with a driver who had been drinking alcohol one or more times (in a car or other vehicle during the 30 days before the survey)	33.9	37.1	—	28.3	* ^b
Drove when drinking alcohol one or more times (a car or other vehicle during the 30 days before the survey)	8.0	12.2	—	9.7	—
Drove when they had been under the influence of marijuana or another drug (a car or other vehicle during the 30 days before the survey)	11.3	14.5	—	NA ^c	NA
Carried a weapon on at least 1 day (for example, a gun, knife, or club during the 30 days before the survey)	14.8	15.9	—	17.5	—
Carried a weapon on school property on at least 1 day (for example, a gun, knife, or club during the 30 days before the survey)	3.7	4.7	—	5.6	—
Did not go to school because they felt unsafe at school or on their way to or from school on at least 1 day (during the 30 days before the survey)	7.8	7.9	—	5.0	*
Threatened or injured with a weapon on school property one or more times (for example, a gun, knife, or club during the 12 months before the survey)	6.4	7.7	—	7.7	—
Had their property such as their car, clothing, or books stolen or deliberately damaged on school property one or more times (during the 12 months before the survey)	28.3	30.2	—	NA	NA

^a No statistically significant difference ($p < .05$)

^b There was a statistically significant difference ($p < .05$) between the 2009 and 2007 Hawai‘i or 2009 Hawai‘i and 2009 U.S. survey administrations

^c Not available

(table continues)

Table 1. 2007 & 2009 Hawai'i YRBS Public High School Results & 2009 U.S. Results cont.

Health Risk Behavior	Hawai'i			U.S. 2009 %	HI vs. U.S.
	2007 %	2009 %	2009 vs. 2007		
Unintentional Injuries and Violence cont.					
In a physical fight one or more times (during the 12 months before the survey)	28.6	29.5	—	31.5	—
In a physical fight on school property one or more times (during the 12 months before the survey)	7.0	10.2	*	11.1	—
Injured in a physical fight one or more times (injuries had to be treated by a doctor or nurse during the 12 months before the survey)	3.3	3.6	—	3.8	—
Had a boyfriend or girlfriend (during the 12 months before the survey)	61.1	65.3	—	NA	NA
Hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend (during the 12 months before the survey)	9.5	13.0	*	9.8	*
Ever physically forced to have sexual intercourse (when they did not want to)	7.8	10.3	—	7.4	*
Hurt by someone hitting, punching, or kicking them while on school property (during the 12 months before the survey)	20.4	22.6	—	NA	NA
Hurt by having mean things said to them (things that hurt their feelings) on the Internet or email (during the 12 months before the survey)	23.8	31.8	*	NA	NA
Harassed because someone thought they were gay, lesbian, or bisexual (during the 12 months before the survey)	13.3	13.9	—	NA	NA
Strongly agreed or agreed that harassment and bullying by other students is a problem at their school	54.8	51.2	—	NA	NA
Felt so sad or hopeless (almost every day for 2 or more weeks in a row that they stopped doing some usual activities during the 12 months before the survey)	31.8	30.6	—	26.1	—
Seriously considered attempting suicide (during the 12 months before the survey)	18.5	18.9	—	13.8	*

(table continues)

Table 1. 2007 & 2009 Hawai'i YRBS Public High School Results & 2009 U.S. Results cont.

Health Risk Behavior	Hawai'i			U.S. 2009 %	HI vs. U.S.
	2007 %	2009 %	2009 vs. 2007		
Unintentional Injuries and Violence cont.					
Made a plan about how they would attempt suicide (during the 12 months before the survey)	17.0	16.0	—	10.9	*
Attempted suicide one or more times (during the 12 months before the survey)	12.0	12.8	—	6.3	*
Suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the 12 months before the survey)	3.0	4.5	—	1.9	*
Tobacco Use					
Smoked cigarettes on at least 1 day (during the 30 days before the survey)	12.8	15.2	—	19.5	*
Smoked cigarettes on 20 or more days (during the 30 days before the survey)	4.5	4.8	—	7.3	*
Tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey)	58.1	67.4	—	50.8	*
Used chewing tobacco, snuff, or dip on at least 1 day (during the 30 days before the survey)	NA	4.9	NA	8.9	*
Alcohol and Other Drug Use					
Ever had at least one drink of alcohol on at least 1 day (during their life)	58.7	68.6	*	72.5	—
Drank alcohol for the first time before age 13 years (other than a few sips)	21.0	28.6	*	21.1	*
Had at least one drink of alcohol on at least 1 day (during the 30 days before the survey)	29.1	37.8	*	41.8	—
Had five or more drinks of alcohol in a row within a couple of hours on at least 1 day (during the 30 days before the survey)	14.9	22.4	*	24.2	—
Usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol during the 30 days before the survey)	32.4	47.2	*	42.2	—

(table continues)

Table 1. 2007 & 2009 Hawai'i YRBS Public High School Results & 2009 U.S. Results cont.

Health Risk Behavior	Hawai'i			U.S. 2009 %	HI vs. U.S.
	2007 %	2009 %	2009 vs. 2007		
Alcohol and Other Drug Use cont.					
Had at least one drink of alcohol on school property on at least 1 day (during the 30 days before the survey)	6.0	7.9	—	4.5	*
Drank a usual type of alcohol (during the 30 days before the survey)	27.3	34.4	—	NA	NA
Ever used marijuana one or more times (during their life)	29.9	40.2	*	36.8	—
Tried marijuana for the first time before age 13 years	11.7	11.9	—	7.5	*
Used marijuana one or more times (during the 30 days before the survey)	15.7	22.1	*	20.8	—
Used marijuana on school property one or more times (during the 30 days before the survey)	5.7	8.3	—	4.6	—
Ever used any form of cocaine one or more times (for example, powder, crack, or freebase during their life)	5.6	6.0	—	6.4	—
Ever sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times (during their life)	11.4	10.1	—	11.7	—
Ever used methamphetamines one or more times (also called “speed,” “crystal,” “crank,” or “ice” during their life)	4.5	3.9	—	4.1	—
Ever used ecstasy one or more times (also called “MDMA” during their life)	4.6	8.2	*	6.7	—
Ever took steroid pills or shots without a doctor’s prescription one or more times (during their life)	4.3	3.8	—	3.3	—
Took over-the-counter drugs to get high one or more times (during the 30 days before the survey)	4.6	8.1	*	NA	NA
Took a prescription drug without a doctor’s prescription one or more times (such as OxyContin, Percocet, Vicodin, Adderall, Ritalin, or Xanax during the 30 days before the survey)	NA	8.6	NA	NA	NA

(table continues)

Table 1. 2007 & 2009 Hawai'i YRBS Public High School Results & 2009 U.S. Results cont.

Health Risk Behavior	Hawai'i			U.S. 2009 %	HI vs. U.S.
	2007 %	2009 %	2009 vs. 2007		
Alcohol and Other Drug Use cont.					
Offered, sold, or given an illegal drug by someone on school property (during the 12 months before the survey)	36.2	36.1	—	22.7	*
Attended school under the influence of alcohol or other illegal drugs (such as marijuana or cocaine during the past 12 months)	NA	21.4	NA	NA	NA
Sexual Behaviors					
Ever had sexual intercourse	36.2	44.3	—	46.0	—
Had sexual intercourse for the first time before age 13 years	5.1	6.0	—	5.9	—
Last sexual intercourse partner was 3 or more years older	NA	12.0	NA	NA	NA
Had sexual intercourse with four or more persons (during their life)	6.1	11.1	*	13.8	—
Had sexual intercourse with at least one person (during the 3 months before the survey)	23.6	30.5	—	34.2	—
Drank alcohol or used drugs before last sexual intercourse (among students who were currently sexually active)	27.2	30.2	—	21.6	—
Used a condom during last sexual intercourse (among students who were currently sexually active)	54.2	47.7	—	61.1	*
Used birth control pills before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)	12.2	14.5	—	19.8	*
Ever had oral sex	33.3	40.4	*	NA	NA
Ever had anal sex	13.4	14.2	—	NA	NA
Were sexually attracted to both males and females	5.1	4.7	—	NA	NA

(table continues)

Table 1. 2007 & 2009 Hawai'i YRBS Public High School Results & 2009 U.S. Results cont.

Health Risk Behavior	Hawai'i			U.S. 2009 %	HI vs. U.S.
	2007 %	2009 %	2009 vs. 2007		
Weight Management and Dietary Behaviors					
Overweight (students who were \geq 85th percentile but < 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)	13.9	13.7	—	15.6	—
Obese (students who were \geq 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)	15.2	14.2	—	11.8	—
Described themselves as slightly or very overweight	32.7	30.3	—	27.7	—
Were trying to lose weight	46.3	50.2	—	44.4	*
Exercised to lose weight or to keep from gaining weight (during the 30 days before the survey)	62.6	67.4	—	61.5	*
Ate less food, fewer calories, or low-fat foods to lose weight or to keep from gaining weight (during the 30 days before the survey)	35.9	39.3	—	39.5	—
Went without eating for 24 or more hours to lose weight or to keep from gaining weight (during the 30 days before the survey)	12.2	11.8	—	10.6	—
Took diet pills, powders, or liquids to lose weight or to keep from gaining weight (without a doctor's advice during the 30 days before the survey)	8.3	5.6	—	5.0	—
Vomited or took laxatives to lose weight or to keep from gaining weight (during the 30 days before the survey)	7.9	7.1	—	4.0	*
Drank 100% fruit juices one or more times (during the 7 days before the survey)	69.8	73.5	—	80.6	*
Ate fruit one or more times (during the 7 days before the survey)	87.2	89.1	—	88.6	—
Ate green salad one or more times (during the 7 days before the survey)	64.2	68.2	—	63.4	*

(table continues)

Table 1. 2007 & 2009 Hawai'i YRBS Public High School Results & 2009 U.S. Results cont.

Health Risk Behavior	Hawai'i			U.S. 2009 %	HI vs. U.S.
	2007 %	2009 %	2009 vs. 2007		
Weight Management and Dietary Behaviors cont.					
Ate potatoes one or more times (excluding french fries, fried potatoes, or potato chips during the 7 days before the survey)	59.8	60.1	—	68.8	*
Ate carrots one or more times (during the 7 days before the survey)	53.7	52.3	—	48.2	*
Ate other vegetables one or more times (excluding green salad, potatoes, or carrots during the 7 days before the survey)	77.6	83.6	*	83.3	—
Ate fruits and vegetables five or more times per day (during the 7 days before the survey)	17.2	17.2	—	22.3	*
Ate fruit or drank 100% fruit juices two or more times per day (during the 7 days before the survey)	24.4	24.4	—	33.9	*
Ate vegetables three or more times per day (green salad, potatoes [excluding french fries, fried potatoes, or potato chips], carrots, or other vegetables during the 7 days before the survey)	14.2	14.7	—	13.8	—
Drank a can, bottle, or glass of soda or pop one or more times per day (not counting diet soda or diet pop during the 7 days before the survey)	22.6	20.8	—	29.2	*
Drank three or more glasses per day of milk (during the 7 days before the survey)	8.3	7.2	—	14.5	*
Physical Activity					
Physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	34.3	34.4	—	NA	NA
Physically active at least 60 minutes per day on all 7 days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	18.1	18.1	—	NA	NA

(table continues)

Table 1. 2007 & 2009 Hawai'i YRBS Public High School Results & 2009 U.S. Results cont.

Health Risk Behavior	Hawai'i			U.S. 2009 %	HI vs. U.S.
	2007 %	2009 %	2009 vs. 2007		
Physical Activity cont.					
Did not participate in at least 60 minutes of physical activity on any day (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	18.9	18.3	—	NA	NA
Attended physical education (PE) classes on 1 or more days in an average week (when they were in school)	38.5	43.8	—	56.4	*
Attended physical education (PE) classes 5 days in an average week (when they were in school)	7.8	11.4	—	33.3	*
Spent more than half of an average physical education (PE) class exercising or doing an activity other than standing or sitting still	24.1	29.2	—	NA	NA
Watched television 3 or more hours per day (on an average school day)	32.9	30.1	—	32.8	—
Used computers 3 or more hours per day (played video or computer games or used a computer for something that was not school work on an average school day)	31.1	27.4	—	24.9	—
Other Health Topics					
Were ever taught in school about AIDS or HIV infection	87.1	80.9	*	87.0	*
Ever told by a doctor or nurse that they had asthma	28.7	28.3	—	22.0	*
Ever told by a doctor or nurse that they had asthma and still have asthma	11.9	12.7	—	10.8	—
Ever had a doctor or nurse discuss ways to prevent pregnancy with them	39.3	42.7	—	NA	NA
Ever had a doctor or nurse discuss ways to prevent sexually transmitted diseases (STDs) and AIDS or HIV infection with them	41.8	43.0	—	NA	NA
Ever had parents or other adults in their family talk with them about what they expect them to do or not to do when it came to sex	55.9	55.4	—	NA	NA

(table continues)

Table 1. 2007 & 2009 Hawai'i YRBS Public High School Results & 2009 U.S. Results cont.

Health Risk Behavior	Hawai'i			U.S. 2009 %	HI vs. U.S.
	2007 %	2009 %	2009 vs. 2007		
Other Health Topics cont.					
Had at least one teacher or other adult in their school that they can talk to if they had a problem	NA	65.5	NA	NA	NA
Had an adult outside of school they can talk to about things that were important to them	77.4	76.5	—	NA	NA
Grades in school were mostly A's and B's (during the 12 months before the survey)	NA	57.1	NA	NA	NA
Thought they definitely will not complete high school	3.6	3.9	—	NA	NA
Thought they probably or definitely will complete a post high school program such as a vocational training program, military service, community college, or 4-year college	75.6	74.6	—	NA	NA

Table 2. 1993–2009 Hawai'i Youth Risk Behavior Survey Public High School Trends

Health Risk Behavior	1993 %	1995 %	1997 %	1999 %	2005 %	2007 %	2009 %	Linear Change^a
Unintentional Injuries and Violence								
Rarely or never wore a bicycle helmet (among students who had ridden a bicycle during the 12 months before the survey)	96.8	96.7	93.9	89.5	85.7	86.1	88.5	Decreased ^b
Rode with a driver who had been drinking alcohol one or more times (in a car or other vehicle during the 30 days before the survey)	36.3	37.6	36.1	38.3	33.0	33.9	37.1	— ^c
Drove when drinking alcohol one or more times (a car or other vehicle during the 30 days before the survey)	10.3	11.7	10.3	14.5	7.9	8.0	12.2	—
Carried a weapon on at least 1 day (for example, a gun, knife, or club during the 30 days before the survey)	18.4	17.5	14.1	13.7	13.3	14.8	15.9	—
Carried a weapon on school property on at least 1 day (for example, a gun, knife, or club during the 30 days before the survey)	7.9	8.0	6.1	6.0	4.9	3.7	4.7	Decreased
Did not go to school because they felt unsafe at school or on their way to or from school on at least 1 day (during the 30 days before the survey)	6.5	4.8	5.6	11.4	6.7	7.8	7.9	—

^a Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade

^b Statistically significant change during the entire time period

^c No statistically significant difference ($p < .05$)

(table continues)

Table 2. 1993–2009 Hawai‘i Youth Risk Behavior Survey Public High School Trends cont.

Health Risk Behavior	1993 %	1995 %	1997 %	1999 %	2005 %	2007 %	2009 %	Linear Change
Unintentional Injuries and Violence cont.								
Threatened or injured with a weapon on school property one or more times (for example, a gun, knife, or club during the 12 months before the survey)	7.4	5.3	6.3	6.7	6.8	6.4	7.7	—
In a physical fight one or more times (during the 12 months before the survey)	37.0	33.4	31.7	30.6	27.0	28.6	29.5	Decreased
In a physical fight on school property one or more times (during the 12 months before the survey)	14.0	13.4	12.9	11.5	10.0	7.0	10.2	Decreased
Injured in a physical fight one or more times (injuries had to be treated by a doctor or nurse during the 12 months before the survey)	4.3	4.0	3.1	3.0	5.2	3.3	3.6	—
Hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend (during the 12 months before the survey)	NA ^d	NA	NA	NA	NA	9.5	13.0	Increased (2007–2009)
Ever physically forced to have sexual intercourse (when they did not want to)	NA	NA	NA	NA	10.3	7.8	10.3	—
Felt so sad or hopeless (almost every day for 2 or more weeks in a row that they stopped doing some usual activities during the 12 months before the survey)	NA	NA	NA	31.8	31.8	31.8	30.6	—
Seriously considered attempting suicide (during the 12 months before the survey)	27.8	25.5	26.9	23.3	19.8	18.5	18.9	Decreased
Made a plan about how they would attempt suicide (during the 12 months before the survey)	21.4	20.3	20.1	18.5	17.2	17.0	16.0	Decreased

^d Not available

(table continues)

Table 2. 1993–2009 Hawai‘i Youth Risk Behavior Survey Public High School Trends cont.

Health Risk Behavior	1993 %	1995 %	1997 %	1999 %	2005 %	2007 %	2009 %	Linear Change
Unintentional Injuries and Violence cont.								
Attempted suicide one or more times (during the 12 months before the survey)	12.6	12.7	11.5	10.1	12.9	12.0	12.8	—
Suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the 12 months before the survey)	3.8	4.0	4.0	3.7	3.7	3.0	4.5	—
Tobacco Use								
Smoked cigarettes on at least 1 day (during the 30 days before the survey)	28.2	32.4	29.2	27.9	16.4	12.8	15.2	Decreased
Smoked cigarettes on 20 or more days (during the 30 days before the survey)	13.3	16.9	14.5	13.1	4.8	4.5	4.8	Decreased
Tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey)	NA	NA	NA	NA	NA	58.1	67.4	—
Alcohol and Other Drug Use								
Ever had at least one drink of alcohol on at least 1 day (during their life)	72.8	75.8	72.5	76.4	64.8	58.7	68.6	Decreased
Drank alcohol for the first time before age 13 years (other than a few sips)	33.8	33.9	31.7	33.6	27.3	21.0	28.6	Decreased
Had at least one drink of alcohol on at least 1 day (during the 30 days before the survey)	38.4	40.9	40.3	44.6	34.8	29.1	37.8	Decreased

(table continues)

Table 2. 1993–2009 Hawai'i Youth Risk Behavior Survey Public High School Trends cont.

Health Risk Behavior	1993 %	1995 %	1997 %	1999 %	2005 %	2007 %	2009 %	Linear Change
Alcohol and Other Drug Use cont.								
Had five or more drinks of alcohol in a row within a couple of hours on at least 1 day (during the 30 days before the survey)	22.7	24.0	25.1	26.8	18.8	14.9	22.4	Decreased
Usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol during the 30 days before the survey)	NA	NA	NA	NA	NA	32.4	47.2	Increased (2007–2009)
Had at least one drink of alcohol on school property on at least 1 day (during the 30 days before the survey)	6.4	5.7	8.5	7.7	8.8	6.0	7.9	—
Ever used marijuana one or more times (during their life)	33.6	42.4	46.4	44.6	34.6	29.9	40.2	—
Tried marijuana for the first time before age 13 years	10.7	14.1	14.4	14.8	12.5	11.7	11.9	—
Used marijuana one or more times (during the 30 days before the survey)	16.7	23.8	24.3	24.7	17.2	15.7	22.1	—
Used marijuana on school property one or more times (during the 30 days before the survey)	7.9	11.3	12.6	9.3	7.2	5.7	8.3	Increased
Ever used any form of cocaine one or more times (for example, powder, crack, or freebase during their life)	8.2	7.9	7.4	7.8	6.5	5.6	6.0	Decreased
Ever sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times (during their life)	NA	15.2	15.7	12.9	13.0	11.4	10.1	NA ^e

^e Analysis was not run because question was not asked in 2003

(table continues)

Table 2. 1993–2009 Hawai‘i Youth Risk Behavior Survey Public High School Trends cont.

Health Risk Behavior	1993 %	1995 %	1997 %	1999 %	2005 %	2007 %	2009 %	Linear Change
Alcohol and Other Drug Use cont.								
Ever used methamphetamines one or more times (also called “speed,” “crystal,” “crank,” or “ice” during their life)	NA	NA	NA	7.7	4.3	4.5	3.9	Decreased (1999–2009)
Ever used ecstasy one or more times (also called “MDMA” during their life)	NA	NA	NA	NA	6.1	4.6	8.2	—
Ever took steroid pills or shots without a doctor’s prescription one or more times (during their life)	2.2	2.6	2.1	2.5	2.9	4.3	3.8	Increased
Offered, sold, or given an illegal drug by someone on school property (during the 12 months before the survey)	26.4	36.0	41.4	36.3	32.7	36.2	36.1	—
Sexual Behaviors								
Ever had sexual intercourse	44.3	43.8	40.3	41.0	35.7	36.2	44.3	—
Had sexual intercourse for the first time before age 13 years	7.3	7.1	7.0	6.8	5.1	5.1	6.0	—
Had sexual intercourse with four or more persons (during their life)	11.4	11.0	9.1	12.2	9.0	6.1	11.1	—
Had sexual intercourse with at least one person (during the 3 months before the survey)	28.7	28.9	25.8	28.5	24.1	23.6	30.5	—
Drank alcohol or used drugs before last sexual intercourse (among students who were currently sexually active)	18.0	21.4	22.7	26.8	22.8	27.2	30.2	Increased

(table continues)

Table 2. 1993–2009 Hawai'i Youth Risk Behavior Survey Public High School Trends cont.

Health Risk Behavior	1993 %	1995 %	1997 %	1999 %	2005 %	2007 %	2009 %	Linear Change
Sexual Behaviors cont.								
Used a condom during last sexual intercourse (among students who were currently sexually active)	50.6	40.9	41.0	47.1	47.6	54.2	47.7	—
Used birth control pills before last sexual intercourse (to prevent pregnancy, among students who were currently sexually active)	13.9	17.4	19.3	18.1	12.7	12.2	14.5	—
Weight Management and Dietary Behaviors								
Overweight (students who were ≥ 85th percentile but < 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)	NA	NA	NA	14.0	13.7	13.9	13.7	—
Obese (students who were ≥ 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)	NA	NA	NA	10.2	13.1	15.2	14.2	Increased (1999–2009)
Described themselves as slightly or very overweight	40.8	31.1	33.5	33.5	29.6	32.7	30.3	Decreased
Were trying to lose weight	44.4	43.2	45.1	47.1	47.9	46.3	50.2	Increased
Exercised to lose weight or to keep from gaining weight (during the 30 days before the survey)	NA	53.9	59.0	62.7	65.6	62.6	67.4	Increased (1995–2009)
Ate less food, fewer calories, or low-fat foods to lose weight or to keep from gaining weight (during the 30 days before the survey)	NA	NA	NA	40.3	39.8	35.9	39.3	—

(table continues)

Table 2. 1993–2009 Hawai‘i Youth Risk Behavior Survey Public High School Trends cont.

Health Risk Behavior	1993 %	1995 %	1997 %	1999 %	2005 %	2007 %	2009 %	Linear Change
Weight Management and Dietary Behaviors cont.								
Went without eating for 24 or more hours to lose weight or to keep from gaining weight (during the 30 days before the survey)	NA	NA	NA	11.8	12.1	12.2	11.8	—
Took diet pills, powders, or liquids to lose weight or to keep from gaining weight (without a doctor’s advice during the 30 days before the survey)	NA	NA	NA	7.2	5.3	8.3	5.6	—
Vomited or took laxatives to lose weight or to keep from gaining weight (during the 30 days before the survey)	NA	5.2	4.4	4.7	6.0	7.9	7.1	Increased (1995–2009)
Drank 100% fruit juices one or more times (during the 7 days before the survey)	NA	NA	NA	71.1	72.9	69.8	73.5	—
Ate fruit one or more times (during the 7 days before the survey)	NA	NA	NA	88.8	85.7	87.2	89.1	—
Ate green salad one or more times (during the 7 days before the survey)	NA	NA	NA	72.1	69.0	64.2	68.2	Decreased (1999–2009)
Ate potatoes one or more times (excluding french fries, fried potatoes, or potato chips during the 7 days before the survey)	NA	NA	NA	59.2	58.1	59.8	60.1	—
Ate carrots one or more times (during the 7 days before the survey)	NA	NA	NA	59.7	56.9	53.7	52.3	Decreased (1999–2009)
Ate other vegetables one or more times (excluding green salad, potatoes, or carrots during the 7 days before the survey)	NA	NA	NA	85.9	82.2	77.6	83.6	Decreased (1999–2009)

(table continues)

Table 2. 1993–2009 Hawai‘i Youth Risk Behavior Survey Public High School Trends cont.

Health Risk Behavior	1993 %	1995 %	1997 %	1999 %	2005 %	2007 %	2009 %	Linear Change
Weight Management and Dietary Behaviors cont.								
Ate fruits and vegetables five or more times per day (during the 7 days before the survey)	NA	NA	NA	21.1	19.1	17.2	17.2	Decreased (1999–2009)
Ate vegetables three or more times per day (green salad, potatoes [excluding french fries, fried potatoes, or potato chips], carrots, or other vegetables during the 7 days before the survey)	NA	NA	NA	14.9	13.4	14.2	14.7	—
Drank a can, bottle, or glass of soda or pop one or more times per day (not counting diet soda or diet pop during the 7 days before the survey)	NA	NA	NA	NA	NA	22.6	20.8	—
Drank three or more glasses per day of milk (during the 7 days before the survey)	NA	NA	NA	15.4	8.7	8.3	7.2	Decreased (1999–2009)
Physical Activity								
Physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	NA	NA	NA	NA	30.2	34.3	34.4	—
Attended physical education (PE) classes on 1 or more days in an average week (when they were in school)	42.5	41.6	40.4	41.9	38.1	38.5	43.8	—
Attended physical education (PE) classes 5 days in an average week (when they were in school)	19.2	17.5	11.6	8.9	12.1	7.8	11.4	Decreased

(table continues)

Table 2. 1993–2009 Hawai‘i Youth Risk Behavior Survey Public High School Trends cont.

Health Risk Behavior	1993 %	1995 %	1997 %	1999 %	2005 %	2007 %	2009 %	Linear Change
Physical Activity cont.								
Watched television 3 or more hours per day (on an average school day)	NA	NA	NA	44.7	36.9	32.9	30.1	Decreased (1999–2009)
Used computers 3 or more hours per day (played video or computer games or used a computer for something that was not school work on an average school day)	NA	NA	NA	NA	NA	31.1	27.4	—
Other Health Behaviors								
Were ever taught in school about AIDS or HIV infection	90.3	91.6	94.3	90.6	83.2	87.1	80.9	Decreased
Ever told by a doctor or nurse that they had asthma	NA	NA	NA	NA	30.4	28.7	28.3	—
Ever told by a doctor or nurse that they had asthma and still have asthma	NA	NA	NA	NA	NA	11.9	12.7	—

Table 3. 2007 and 2009 Hawai'i Youth Risk Behavior Survey Public Middle School Results
(2007 *n* = 1,231 and 2009 *n* = 1,611)

Health Risk Behavior	2007 %	2009 %	2009 vs. 2007
Unintentional Injuries and Violence			
Rarely or never wore a bicycle helmet (among students who had ridden a bicycle)	75.2	81.2	* ^a
Rarely or never wore a helmet (among students who used rollerblades or rode a skateboard)	79.2	81.5	— ^b
Ever rode with a driver who had been drinking alcohol (in a car or other vehicle)	33.2	36.6	—
Ever rode with a driver who had been high on marijuana or other illegal drugs (in a car or other vehicle)	9.9	13.9	*
Carried a weapon on school property (for example, a gun, knife, or club during the 12 months before the survey)	4.9	6.1	—
Did not go to school because they felt unsafe at school or on their way to or from school (during the 12 months before the survey)	7.1	9.2	—
Threatened or injured with a weapon on school property (for example, a gun, knife, or club during the 12 months before the survey)	5.9	6.9	—
Had their property such as their clothing or books stolen or deliberately damaged on school property (during the 12 months before the survey)	28.7	34.8	*
In a physical fight on school property (during the 12 months before the survey)	17.2	20.7	—
Had a boyfriend or girlfriend (during the 12 months before the survey)	43.9	51.7	*
Hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend (during the 12 months before the survey)	5.2	4.0	—

^a There was a statistically significant difference ($p < .05$) between the 2009 and 2007 survey administrations

^b No statistically significant difference ($p < .05$)

(table continues)

Table 3. 2007 and 2009 Hawai‘i YRBS Public Middle School Results cont.

Health Risk Behavior	2007 %	2009 %	2009 vs. 2007
Unintentional Injuries and Violence cont.			
Ever physically forced to have sexual intercourse (when they did not want to)	4.5	5.1	—
Hurt by someone hitting, punching, or kicking them while on school property (during the 12 months before the survey)	32.6	39.6	*
Hurt by having mean things said to them (things that hurt their feelings) while on school property (during the 12 months before the survey)	52.5	58.0	*
Hurt by having mean things said to them or about them (things that hurt their feelings) on the Internet or email (during the 12 months before the survey)	19.9	18.4	—
Harassed because someone thought they were gay, lesbian, or bisexual (during the 12 months before the survey)	10.3	14.6	*
Strongly agreed or agreed that harassment and bullying by other students is a problem at their school	67.8	63.3	—
Felt so sad or hopeless (almost every day for 2 or more weeks in a row that they stopped doing some usual activities during the 12 months before the survey)	26.1	28.3	—
Seriously thought about killing themselves (during the 12 months before the survey)	17.5	20.1	—
Made a plan about how they would kill themselves (during the 12 months before the survey)	9.9	12.2	—
Tried to kill themselves (during the 12 months before the survey)	6.5	6.6	—
Tried to kill themselves and attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the 12 months before the survey)	26.8	36.9	—
Tobacco Use			
Smoked cigarettes on at least 1 day (during the 30 days before the survey)	8.9	8.2	—
Smoked cigarettes on 20 or more days (during the 30 days before the survey)	1.2	1.5	—

(table continues)

Table 3. 2007 and 2009 Hawai‘i YRBS Public Middle School Results cont.

Health Risk Behavior	2007 %	2009 %	2009 vs. 2007
Tobacco Use cont.			
Used chewing tobacco, snuff, or dip on at least 1 day (during the 30 days before the survey)	NA ^c	4.6	NA
Alcohol and Other Drug Use			
Ever drank alcohol (other than a few sips)	30.6	35.1	—
Drank alcohol for the first time before age 11 years (other than a few sips)	16.9	16.7	—
Had at least one drink of alcohol (during the 30 days before the survey)	14.5	15.3	—
Had at least one drink of alcohol on school property (during the 30 days before the survey)	2.7	3.4	—
Ever used marijuana	11.2	13.7	—
Tried marijuana for the first time before age 11 years	4.4	4.3	—
Used marijuana (during the 30 days before the survey)	6.4	7.5	—
Used marijuana on school property (during the 30 days before the survey)	2.1	2.0	—
Ever used any form of cocaine (for example, powder, crack, or freebase)	1.5	1.7	—
Ever sniffed glue, breathed the contents of spray cans, or inhaled any paints or sprays to get high	8.6	9.8	—
Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high (during the 30 days before the survey)	5.1	4.3	—
Ever used methamphetamines (also called “speed,” “crystal,” “crank,” or “ice”)	1.5	1.7	—
Ever used ecstasy (also called “MDMA”)	1.7	1.8	—
Ever took steroid pills or shots without a doctor’s prescription	2.1	1.7	—

^cNot available

(table continues)

Table 3. 2007 and 2009 Hawai‘i YRBS Public Middle School Results cont.

Health Risk Behavior	2007 %	2009 %	2009 vs. 2007
Alcohol and Other Drug Use cont.			
Ever took prescription drugs without a doctor’s prescription (such as OxyContin, Percocet, Vicodin, Adderall, Ritalin, or Xanax)	NA	5.1	NA
Offered, sold, or given an illegal drug by someone on school property (during the 12 months before the survey)	5.6	10.4	*
Attended school under the influence of alcohol or other illegal drugs, such as marijuana or cocaine (during the 12 months before the survey)	NA	6.4	NA
Sexual Behaviors			
Ever had sexual intercourse	8.7	12.5	*
Had sexual intercourse for the first time before age 11 years	1.9	3.3	—
Ever had sexual intercourse with three or more persons	2.8	4.2	—
Used a condom during last sexual intercourse (among students who ever had sexual intercourse)	NA	66.7	NA
Weight Management and Dietary Behaviors			
Described themselves as slightly or very overweight	31.4	27.1	—
Were trying to lose weight	51.1	51.4	—
Ever exercised to lose weight or to keep from gaining weight	73.6	70.2	—
Ever ate less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight	47.7	45.2	—
Ever went without eating for 24 or more hours (also called fasting) to lose weight or to keep from gaining weight	15.5	14.9	—
Ever took diet pills, powders, or liquids to lose weight or to keep from gaining weight (without a doctor’s advice)	4.0	4.8	—
Ever vomited or took laxatives to lose weight or to keep from gaining weight	5.3	5.5	—

(table continues)

Table 3. 2007 and 2009 Hawai‘i YRBS Public Middle School Results cont.

Health Risk Behavior	2007 %	2009 %	2009 vs. 2007
Physical Activity			
Physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	40.4	44.8	—
Physically active at least 60 minutes per day on all 7 days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	19.7	26.0	*
Did not participate in at least 60 minutes of physical activity on any day (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	13.6	16.3	—
Attended physical education (PE) classes on 1 or more days in an average week (when they were in school)	51.9	69.9	*
Attended physical education (PE) classes 5 days in an average week (when they were in school)	14.7	19.0	—
Spent more than half of an average physical education (PE) class exercising or doing an activity other than standing or sitting still	58.3	63.0	—
Watched television 3 or more hours per day (on an average school day)	39.5	39.8	—
Used computers 3 or more hours per day (played video or computer games or used a computer for something that was not school work on an average school day)	25.2	30.7	*
Played on at least one sports team (run by their school or community groups during the 12 months before the survey)	57.0	59.3	—
Other Health Topics			
Were ever taught in school about AIDS or HIV infection	56.1	61.3	*
Ever told by a doctor or nurse that they had asthma	23.7	26.3	—
Ever told by a doctor or nurse that they had asthma and still have asthma	13.2	14.7	—

(table continues)

Table 3. 2007 and 2009 Hawai‘i YRBS Public Middle School Results cont.

Health Risk Behavior	2007 %	2009 %	2009 vs. 2007
Other Health Topics cont.			
Went to a dentist for their teeth (during the 12 months before the survey)	75.9	78.0	—
Ever had a doctor or nurse discuss ways to prevent pregnancy with them	14.8	18.2	—
Ever had a doctor or nurse discuss ways to prevent sexually transmitted diseases (STDs) with them	15.9	20.5	—
Ever had parents or other adults in their family talk with them about what they expect them to do or not to do when it came to sex	37.9	42.9	—
Had at least one teacher or other adult in their school that they could talk to if they had a problem	NA	69.8	NA
Had an adult outside of school besides their parents that they could talk to about things that were important to them	62.4	69.0	*
Grades in school were mostly A’s and B’s (during the 12 months before the survey)	NA	61.3	NA
Thought they definitely will not complete high school	3.4	2.4	—
Thought they probably or definitely will complete a post high school program such as a vocational training program, military service, community college, or 4-year college	65.8	68.0	—

Table 4. 1997–2009 Hawai'i Youth Risk Behavior Survey Public Middle School Trends

Health Risk Behavior	1997 %	1999 %	2001 %	2003 %	2007 %	2009 %	Linear Change^a
Unintentional Injuries and Violence							
Rarely or never wore a bicycle helmet (among students who had ridden a bicycle)	NA ^b	NA	NA	NA	75.2	81.2	Increased ^c (2007–2009)
Rarely or never wore a helmet (among students who used rollerblades or rode a skateboard)	NA	NA	NA	NA	79.2	81.5	— ^d
Ever rode with a driver who had been drinking alcohol (in a car or other vehicle)	NA	NA	NA	NA	33.2	36.6	—
Tobacco Use							
Smoked cigarettes on at least 1 day (during the 30 days before the survey)	NA	12.3	9.1	7.0	8.9	8.2	—
Smoked cigarettes on 20 or more days (during the 30 days before the survey)	NA	2.0	1.2	1.5	1.2	1.5	—
Alcohol and Other Drug Use							
Ever drank alcohol (other than a few sips)	NA	NA	NA	NA	30.6	35.1	—
Drank alcohol for the first time before age 11 years (other than a few sips)	NA	NA	NA	NA	16.9	16.7	—
Ever used marijuana	NA	NA	NA	NA	11.2	13.7	—
Tried marijuana for the first time before age 11 years	NA	NA	NA	NA	4.4	4.3	—

^a Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade

^b Not available

^c Statistically significant change during the entire time period

^d No statistically significant difference ($p < .05$)

(table continues)

Table 4. 1997–2009 Hawai'i YRBS Public Middle School Trends cont.

Health Risk Behavior	1997 %	1999 %	2001 %	2003 %	2007 %	2009 %	Linear Change
Alcohol and Other Drug Use cont.							
Ever used any form of cocaine (for example, powder, crack, or freebase)	NA	NA	NA	NA	1.5	1.7	—
Ever sniffed glue, breathed the contents of spray cans, or inhaled any paints or sprays to get high	NA	NA	NA	NA	8.6	9.8	—
Ever took steroid pills or shots without a doctor's prescription	NA	NA	NA	NA	2.1	1.7	—
Sexual Behaviors							
Ever had sexual intercourse	NA	NA	NA	9.8	8.7	12.5	Increased (2003–2009)
Had sexual intercourse for the first time before age 11 years	NA	NA	NA	NA	1.9	3.3	—
Ever had sexual intercourse with three or more persons	NA	NA	NA	NA	2.8	4.2	—
Weight Management and Dietary Behaviors							
Described themselves as slightly or very overweight	31.1	32.9	26.0	27.1	31.4	27.1	—
Were trying to lose weight	44.5	46.7	49.3	48.5	51.1	51.4	Increased
Ever exercised to lose weight or to keep from gaining weight	NA	NA	NA	NA	73.6	70.2	—
Ever ate less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight	NA	NA	NA	NA	47.7	45.2	—
Ever went without eating for 24 or more hours (also called fasting) to lose weight or to keep from gaining weight	NA	NA	NA	NA	15.5	14.9	—

(table continues)

Table 4. 1997–2009 Hawai‘i YRBS Public Middle School Trends cont.

Health Risk Behavior	1997 %	1999 %	2001 %	2003 %	2007 %	2009 %	Linear Change
Weight Management and Dietary Behaviors cont.							
Ever took diet pills, powders, or liquids to lose weight or to keep from gaining weight (without a doctor’s advice)	NA	NA	NA	NA	4.0	4.8	—
Ever vomited or took laxatives to lose weight or to keep from gaining weight	NA	NA	NA	NA	5.3	5.5	—
Physical Activity							
Physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	NA	NA	NA	NA	40.4	44.8	—
Attended physical education (PE) classes on 1 or more days in an average week (when they were in school)	NA	NA	NA	NA	51.9	69.9	Increased (2007–2009)
Attended physical education (PE) classes 5 days in an average week (when they were in school)	NA	NA	NA	NA	14.7	19.0	—
Watched television 3 or more hours per day (on an average school day)	NA	NA	NA	43.3	39.5	39.8	Decreased (2003–2009)
Played on at least one sports teams (run by their school or community groups during the 12 months before the survey)	NA	NA	NA	NA	57.0	59.3	—

(table continues)

Table 4. 1997–2009 Hawai‘i YRBS Public Middle School Trends cont.

Health Risk Behavior	1997 %	1999 %	2001 %	2003 %	2007 %	2009 %	Linear Change
Physical Activity cont.							
Were ever taught in school about AIDS or HIV infection	84.1	85.7	71.7	58.1	56.1	61.3	Decreased
Ever told by a doctor or nurse that they had asthma	NA	NA	NA	NA	23.7	26.3	—
Ever told by a doctor or nurse that they have asthma and still have asthma	NA	NA	NA	NA	13.2	14.7	—