# Highlights and Results of the 2005 Hawai‘i Youth Risk Behavior Surveys 

Susan M. Saka

Leela Kumaran

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Program Research and Evaluation Office
Curriculum Research \& Development Group
College of Education
University of Hawai'i at Mānoa

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## Background

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), in collaboration with over 800 representatives from state and local health and education departments and other federal agencies, 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. There were 78 CDC-developed items in the 2005 Hawai‘i high school YRBS (referred to as high school HYRBS) covering (a) behaviors that result in unintentional and intentional injuries; (b) tobacco use; (c) alcohol and other drug use; (d) sexual behavior that results in HIV infection, other sexually transmitted diseases, and unintended pregnancies; (e) dietary behaviors; (f) physical activity; and (g) 19 other Hawai‘ i -specific items covering the above topics and health education classes that students had taken. The high school level YRBS has been conducted nationally during the spring in odd-numbered years since 1991 and in Hawai'i during the spring in oddnumbered years from 1991-1999 and during the fall since 2001.

A similar survey was conducted of Hawai‘i middle and intermediate school students (hereafter referred to as middle school HYRBS) in odd-numbered years since 1997. The middle school surveys were conducted concurrently with the high school surveys. The 2005 version contained 89 items, most of which mirrored items in the high school HYRBS.

The results of these surveys, conducted in compliance with the requirements of the Hawai‘i State Department of Education's (DOE) 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 (a) identify focus areas for curriculum development and teacher training, (b) identify focus areas for prevention and treatment efforts and resources, and (c) identify risk behaviors of Hawai‘i public school students in Grades 6-12.

## Method

A two-stage, stratified random sampling procedure was used to produce final samples of 1,693 students in 23 public middle and intermediate schools (Grades 6-8), and 1,662 students in 23 public high schools (Grades $9-12$ ). The response rates were $62 \%$ and $60 \%$, respectively. Survey procedures were designed to protect the privacy of students through anonymous and voluntary participation. Written parental permission was required.

The data from the middle school and high school HYRBS administered during fall 2005 were statistically weighted; thus, according to CDC, it is possible to make valid statewide (public middle schools and public high schools only) comparisons among the results, and the results are representative of all public middle school students in Grades 6-8 and public high school students in Grades 9-12, respectively. For this report a 10-year period is one of the main foci; results of the 1995, 1999, and 2005 high school HYRBS administrations are compared, in addition to the trend across these 10 years (see Table 1). Table 2 presents the results for items that were not part of the 1995 or 1999 surveys, and Table 3 presents the results for Hawai‘i-specific items added in the 2005 high school HYRBS. The middle school HYRBS was not administered in 1995. Thus, only the 1999 and 2005 results are presented in Table 4.

For comparison purposes, results from the 2005 U.S. Youth Risk Behavior Surveillance System (YRBSS) are also provided. A three-stage cluster sample design was used to produce this nationally representative sample of students in Grades 9-12. There are no comparable national results for the middle school level.

CDC recommended a statistical analysis that first creates $95 \%$ confidence intervals around the results on individual items for different groups. If the confidence intervals for the same item do not overlap, then the differences are regarded as statistically significant. It is important to note that such an analysis is a stringent one that generally produces a small number of statistically significant changes from year to year. Beginning in 2005, CDC changed the method by which statistically significant differences are calculated for the high school level. The method used for the middle school level will be changed in 2007. We have continued to use the original method to maintain consistency between the high school and middle school analyses. Statistically significant differences as determined by the new method are available on CDC's Web site: http://apps.nccd.cdc.gov/yrbss/.

## Results

Results from the 2005 High School Hawai‘i Youth Risk Behavior Survey (HYRBS) show that, overall, lower percentages of Hawai'i youth reported risky behaviors in 2005 than they did in 1995 and 1999. However, Hawai‘i's students were statistically significantly better than U.S. students for 14 and worse for 14 of the 71 items for which comparisons could be made from the 2005 survey administrations.

## High School Hawai'i vs. U.S. 2005

There were 28 statistically significant differences at the .05 level between Hawai‘i and U.S. students in 2005, half favoring Hawai'i and half favoring the U.S. Lower percentages of

Hawai‘i high school students as compared to students nationally reported risky behaviors related to wearing seat belts, carrying weapons in the 30 days preceding the survey, fighting (physically) and fighting on school property during the 12 months preceding the survey, smoking cigarettes in the 30 days preceding the survey and smoking on 20 or more of the 30 days; ever drinking alcohol; during the 30 days preceding the survey drinking alcohol and having five or more drinks of alcohol within a couple of hours; engaging in sexual activity-ever, with four or more people, and during the three months preceding the survey; and exercising to lose weight or keep from gaining weight in the 30 days preceding the survey. However, Hawai‘i high school students were more likely to be treated by a doctor or nurse when injured in a physical fight during the 12 months preceding the survey, being physically forced to have sexual intercourse when they did not want to, making a plan for suicide and attempting suicide in the 12 months preceding the survey, drinking on school property during the 30 days preceding the survey and being offered, sold, or given an illegal drug on school property in the 12 months preceding the survey. Lower percentages of sexually active Hawai'i students reported using a condom during last sexual intercourse, and a lower percentage of students had been taught about AIDS or HIV infection in school than did high school youth nationally. Hawai‘i students drank less milk in the seven days preceding the survey, and on five of the seven days preceding the survey were less likely to participate in physical activity that did not make them sweat or breathe hard for at least 30 minutes and were less physically active for a total of 60 minutes or more per day. Lower percentages of Hawai‘i students also reported attending physical education class one or more days during a week and daily. A higher percentage of Hawai'i high school youth were told by a doctor or nurse that they had asthma, but of these students who currently have asthma, a higher percentage than students nationally had not had an episode of asthma during the 12 months preceding the survey.

## Hawai‘i High School 1995, 1999, and 2005

The 10-year trend of results from the high school level HYRBS for which comparisons were possible $(n=49)$ were positive for 19 items, negative for 2 , and it was not clear if the trend was positive or negative for one item. A trend was considered to be positive if there was improvement (not necessarily statistically significant) across all ten years (1995, 1999, and 2005 results were examined). Likewise, a trend was considered to be negative if the results got worse
each year. The positive trends were for the following behaviors: in the 12 months preceding the survey, never or rarely wearing a bicycle helmet, in a physical fight, and fighting on school property, and seriously considering and making a plan for attempting suicide; during the 30 days preceding the survey, carrying a weapon, carrying a gun, and carrying a weapon on school property, smoking cigarettes and smoking cigarettes on 20 or more days, using marijuana on school property, and exercising to lose weight or to keep from gaining weight; before age 13, having first drink of alcohol and having sexual intercourse; ever using any form of cocaine and having sexual intercourse; using a condom during last sexual intercourse; and exercising or playing sports more than 20 minutes during an average physical education class. The two negative trends were being threatened or injured with a weapon on school property in the 12 months preceding the survey and having ever been taught about AIDS or HIV infection in school. The item for which it was not clear if the trend was positive or negative is students who were trying to lose weight.

Hawai'i high school students reported statistically significantly ( $95 \%$ confidence interval) more positive than negative behaviors ( 13 vs. 3 out of 63 comparable items for 2005 vs. 1999 and 11 vs. 3 out of 51 comparable items for 2005 vs. 1995). See Table 1 for the details.

## Middle School 1999 and 2005

There were 13 statistically significant differences between 1999 and 2005 on the Middle School HYRBS among the 32 comparable items, 10 positive and three negative. The positive changes were in the areas of students using seat belts; in the 30 days preceding the survey, carrying a weapon on school property, smoking, having at least one drink of alcohol, having five or more drinks of alcohol in a row, using marijuana, using marijuana on school property; having property stolen or deliberately damaged on school property during the 12 months preceding the survey; ever having sexual intercourse; and describing themselves as slightly or very overweight. The negative changes were students not going to school one or more day in the 30 days preceding the survey because they felt unsafe at school or on their way to or from school, being taught about AIDS or HIV infection, and talking about AIDS or HIV infection with their family.

Table 1. 1995-2005 Hawai‘i Youth Risk Behavior Survey Public High School Results and Trends (1995, $n=1,244 ; 1999, n=1,248 ; 2005, n=1,662$ ) Compared to 2005 U.S. results ( $n=13,953$ )

| Health Risk Behavior | $\begin{gathered} \text { U.S. } \\ 2005 \\ \% \end{gathered}$ | $\begin{gathered} \text { HI } \\ \text { vs. } \\ \text { U.S. } \end{gathered}$ | Hawai'i |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} 2005 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{gathered} 1995 \\ \% \end{gathered}$ | 2005 vs. |  | Trend |
|  |  |  |  |  |  | 1999 | 1995 |  |
| Injury |  |  |  |  |  |  |  |  |
| Bicycle riders who never or rarely wore a bicycle helmet during the past 12 months | 83.4 |  | 85.7 | 89.5 | 96.7 |  | $+^{\text {a }}$ | + |
| Never or rarely wore a seat belt when riding in a car driven by someone else | 10.2 | + | 4.8 | 10.6 | 9.3 | + | + |  |
| Rode one or more times in a car or other vehicle driven by someone who had been drinking alcohol during the past 30 days | 28.5 |  | 33 | 38.3 | 37.6 |  |  |  |
| Drove a car or other vehicle one or more times when they had been drinking alcohol during the past 30 days | 9.9 |  | 7.9 | 14.5 | 11.7 | + |  |  |
| Carried a weapon such as a gun, knife, or club on one or more of the past 30 days | 18.5 | + | 13.3 | 13.7 | 17.5 |  | + | + |
| Carried a gun on one or more of the past 30 days | 5.4 |  | 4.1 | 4.2 | 5.8 |  |  | + |
| Carried a weapon such as a gun, knife, or club on school property on one or more of the past 30 days | 6.5 |  | 4.9 | 6.0 | 8.0 |  |  | + |
| Did not go to school on one or more of the past 30 days because they felt unsafe at school or on their way to or from school | 6.0 |  | 6.7 | 11.4 | 4.8 |  |  |  |
| Had been threatened or injured with a weapon on school property one or more times during the past 12 months | 7.9 |  | 6.8 | 6.7 | 5.3 |  |  | - ${ }^{\text {b }}$ |
| Had property stolen or deliberately damaged on school property one or more times during the past 12 months | 29.8 |  | 28.1 | $\mathrm{NA}^{\text {c }}$ | 30.0 | NA |  | NA |
| Were in a physical fight one or more times during the past 12 months | 35.9 | + | 27.0 | 30.6 | 33.4 |  | + | + |
| Were injured in a physical fight and had to be treated by a doctor or nurse one or more times during the past 12 months | 3.6 | - | 5.2 | 3.0 | 4.0 | - |  |  |
| Were in a physical fight on school property one or more times during the past 12 months | 13.6 | + | 10.0 | 11.5 | 13.4 |  |  | + |

${ }^{\text {a }}+$ : Hawai'i ' 05 result was statistically significantly better than Hawai'i '99 or '95 or U.S. 2005 result or results have improved across all three survey administrations
${ }^{\text {b }}$-: Hawai'i ' 05 result was statistically significantly worse than Hawai'i ' 99 or ' 95 result or U.S. 2005 result or results have worsened across all three survey administrations
${ }^{\text {c }}$ NA: Not Available

Table 1 (continued)

| Health Risk Behavior | $\begin{gathered} \hline \text { U.S. } \\ \text { 2005 } \\ \% \end{gathered}$ | $\begin{gathered} \hline \text { HI } \\ \text { vs. } \\ \text { U.S. } \end{gathered}$ | Hawai'i |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} 2005 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{array}{\|c\|} \hline 1995 \\ \% \end{array}$ | 2005 vs. |  | Trend |
|  |  |  |  |  |  | 1999 | 1995 |  |
| Injury cont. |  |  |  |  |  |  |  |  |
| Felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months | 28.5 |  | 31.8 | 31.8 | NA |  | NA | NA |
| Seriously considered attempting suicide during the past 12 months | 16.9 |  | 19.8 | 23.3 | 25.5 |  | + | + |
| Made a plan about how they would attempt suicide during the past 12 months | 13.0 | - | 17.2 | 18.5 | 20.3 |  |  | + |
| Actually attempted suicide one or more times during the past 12 months | 8.4 | - | 12.9 | 10.1 | 12.7 |  |  |  |
| Made suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the past 12 months | 2.3 |  | 3.7 | 3.7 | 4.0 |  |  |  |
| Tobacco use |  |  |  |  |  |  |  |  |
| Smoked cigarettes on one or more of the past 30 days | 23.0 | + | 16.4 | 27.9 | 32.4 | + | + | + |
| Smoked cigarettes on 20 or more of the past 30 days | 9.4 | + | 4.8 | 13.1 | 16.9 | + | + | + |
| Alcohol \& other drug use |  |  |  |  |  |  |  |  |
| Had at least one drink of alcohol on one or more days during their life | 74.3 | + | 64.8 | 76.4 | 75.8 | + | + |  |
| Had their first drink of alcohol other than a few sips before age 13 | 25.6 |  | 27.3 | 33.6 | 33.9 |  |  | + |
| Had at least one drink of alcohol on one or more of the past 30 days | 43.3 | + | 34.8 | 44.6 | 40.9 | + |  |  |
| Had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days | 25.5 | + | 18.8 | 26.8 | 24.0 | + |  |  |
| Had at least one drink of alcohol on school property on one or more of the past 30 days | 4.3 | - | 8.8 | 7.7 | 5.7 |  | - |  |
| Used marijuana one or more times during their life | 38.4 |  | 34.6 | 44.6 | 42.4 | + |  |  |
| Tried marijuana for the first time before age 13 | 8.7 |  | 12.5 | 14.8 | 14.1 |  |  |  |
| Used marijuana one or more times during the past 30 days | 20.2 |  | 17.2 | 24.7 | 23.8 | + |  |  |
| Used marijuana on school property one or more times during the past 30 days | 4.5 |  | 7.2 | 9.3 | 11.3 |  |  | + |
| Used any form of cocaine, including powder, crack, or freebase one or more times during their life | 7.6 |  | 6.5 | 7.8 | 7.9 |  |  | + |

(table continues)

Table 1 (continued)

| Health Risk Behavior | $\begin{gathered} \hline \text { U.S. } \\ 2005 \\ \% \end{gathered}$ | $\begin{gathered} \hline \text { HI } \\ \text { vs. } \\ \text { U.S. } \end{gathered}$ | Hawai'i |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} 2005 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{gathered} 1995 \\ \% \end{gathered}$ | 2005 vs. |  | Trend |
|  |  |  |  |  |  | 1999 | 1995 |  |

## Alcohol \& other drug use cont.

| Used any form of cocaine, including powder, <br> crack, or freebase one or more times during <br> the past 30 days | 3.4 |  | 3.0 | 3.3 | 3.0 |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sniffed glue, breathed the contents of aerosol <br> spray cans, or inhaled any paints or sprays to <br> get high one or more times during their life | 12.4 |  | 13.0 | 12.9 | 15.2 |  |  |  |
| Used heroin one or more times during their life | 2.4 |  | 2.5 | 2.3 | NA |  | NA | NA |
| Used methamphetamines one or more times <br> during their life | 6.2 |  | 4.3 | 7.7 | NA | + | NA | NA |
| Took steroid pills or shots without a doctor's <br> prescription one or more times during their life | 4.0 |  | 2.9 | 2.5 | 2.6 |  |  |  |
| Used a needle to inject any illegal drug into <br> their body one or more times during their life | 2.1 |  | 2.2 | 1.6 | 1.7 |  |  |  |
| Were offered, sold, or given an illegal drug on <br> school property by someone during the past <br> 12 months | 25.4 | - | 32.7 | 36.3 | 36.0 |  |  |  |
| Sexual behavior |  |  |  |  |  |  |  |  |

Sexual behavior

| Had sexual intercourse | 46.8 | + | 35.7 | 41.0 | 43.8 | + | + | + |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Had sexual intercourse for the first time <br> before age 13 | 6.2 |  | 5.1 | 6.8 | 7.1 |  |  | + |
| Had sexual intercourse with four or more <br> people during their life | 14.3 | + | 9.0 | 12.2 | 11.0 |  |  |  |
| Had sexual intercourse with one or more <br> people during the past three months | 33.9 | + | 24.1 | 28.5 | 28.9 | + |  | + |
| Of students who had sexual intercourse <br> during the past three months, drank alcohol or <br> used drugs before last sexual intercourse | 23.3 |  | 22.8 | 26.8 | 21.4 |  |  |  |
| Of students who had sexual intercourse <br> during the past three months, used a condom <br> during last sexual intercourse | 62.8 | - | 47.6 | 47.1 | 40.9 |  |  | + |
| Of students who had sexual intercourse <br> during the past three months, used birth <br> control pills during last sexual intercourse | 17.6 |  | 12.7 | 18.1 | 17.4 |  |  |  |
| Had ever been taught about AIDS or HIV <br> infection in school | 87.9 | - | 83.2 | 90.6 | 91.6 | - | - | - |
| Had ever talked about AIDS or HIV infection <br> with their parents or other adults in their <br> family | NA |  | 41.7 | NA | 54.2 | NA | - | NA |

(table continues)

| Health Risk Behavior | $\begin{gathered} \text { U.S. } \\ 2005 \\ \% \end{gathered}$ | $\begin{gathered} \hline \text { HI } \\ \text { vs. } \\ \text { U.S. } \end{gathered}$ | Hawai'i |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} 2005 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{array}{\|c\|} \hline 1995 \\ \% \end{array}$ | 2005 vs. |  | Trend |
|  |  |  |  |  |  | 1999 | 1995 |  |
| Dietary behaviors |  |  |  |  |  |  |  |  |
| Were overweight (i.e., at or above the 95th percentile for body mass index, by age and sex) | 13.1 |  | 13.5 | 9.0 | NA |  | NA | NA |
| Were at risk for becoming overweight (i.e., at or above the 85 th percentile but below the 95 th percentile for body mass index, by age and sex) | 15.7 |  | 14.2 | 16.3 | NA |  | NA | NA |
| Described themselves as slightly or very overweight | 31.5 |  | 29.6 | 33.5 | 31.1 |  |  |  |
| Were trying to lose weight | 45.6 |  | 47.9 | 47.1 | 43.2 |  |  | +/- ${ }^{\text {d }}$ |
| Exercised to lose weight or to keep from gaining weight during the past 30 days | 60.0 | + | 65.6 | 62.7 | 53.9 |  | + | + |
| Ate less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight during the past 30 days | 40.7 |  | 39.8 | 40.3 | NA |  | NA | NA |
| Went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days | 12.3 |  | 12.1 | 11.8 | NA |  | NA | NA |
| Took diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight during the past 30 days | 6.3 |  | 5.3 | 7.2 | NA |  | NA | NA |
| Vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days | 4.5 |  | 6.0 | 4.7 | 5.2 |  |  |  |
| Ate five or more servings per day of fruits and vegetables during the past seven days | 20.1 |  | 19.1 | 21.1 | NA |  | NA | NA |
| Drank three or more glasses per day of milk during the past seven days | 16.2 | - | 8.7 | 15.4 | NA | - | NA | NA |
| Physical activity |  |  |  |  |  |  |  |  |
| Exercised or participated in physical activities for at least 20 minutes that made them sweat and breathe hard on three or more of the past seven days | 64.1 |  | 61.1 | 64.0 | 61.2 |  |  |  |
| Participated in physical activity that did not make them sweat or breathe hard for 30 minutes or more on five or more of the past seven days | 26.5 | - | 20.9 | 20.3 | NA |  | NA | NA |

(table continues)

Table 1 (continued)

| Health Risk Behavior | $\begin{gathered} \hline \text { U.S. } \\ 2005 \\ \% \end{gathered}$ | $\begin{gathered} \hline \text { HI } \\ \text { vs. } \\ \text { U.S. } \end{gathered}$ | Hawai'i |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2005 | 1999 | 1995 | 2005 vs. |  | Trend |
|  |  |  | \% | \% | \% | 1999 | 1995 |  |
| Participated in at least 20 minutes of vigorous physical activity on three or more of the past seven days and/or at least 30 minutes of moderate physical activity on five or more of the past seven days | 68.7 |  | 64.9 | 67.3 | NA |  | NA | NA |
| Participated in no vigorous or moderate physical activity during the past seven days | 9.6 |  | 9.0 | 6.6 | NA |  | NA | NA |
| Watched three or more hours per day of TV on an average school day | 37.2 |  | 36.9 | 44.6 | NA | + | NA | NA |
| Attended physical education (PE) class one or more days during an average school week | 54.2 | - | 38.1 | 41.9 | 41.6 |  |  |  |
| Attended physical education (PE) class daily | 33.0 | - | 12.1 | 8.9 | 17.5 |  |  |  |
| Of students enrolled in physical education (PE) classes, those who exercised or played sports more than 20 minutes during an average physical education class | 84.0 |  | 86.3 | 83.8 | 78.3 |  | + | + |

Table 2. 2005 Hawai‘i Youth Risk Behavior Survey Public High School Results $(n=1,662)$ Compared to 2005 U.S. results ( $n=13,953$ )

| Health Risk Behavior | $\begin{gathered} \text { U.S. } \\ 2005 \\ \% \end{gathered}$ | HI vs. U.S. | $\begin{gathered} \text { Hawai‘i } \\ 2005 \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Were ever hit, slapped, or physically hurt, on purpose, by their boyfriend or girlfriend during the past 12 months | 9.2 |  | 8.5 |
| Were ever physically forced to have sexual intercourse when they did not want to | 7.5 | $-{ }^{\text {a }}$ | 10.3 |
| Used ecstasy one or more times during their life | 6.3 |  | 6.1 |
| Were physically active for a total of 60 minutes or more per day on five or more of the past seven days | 35.8 | - | 30.2 |
| Described their general health as fair or poor | 8.3 |  | 10.8 |
| Had ever been told by a doctor or nurse that they had asthma | 17.1 | - | 30.4 |
| Among students with current asthma, those who had an episode of asthma or an asthma attack during the past 12 months | 37.9 | $+^{\text {b }}$ | 28.6 |

${ }^{\text {a }}$-: Hawai‘i ' 05 result was statistically significantly worse than U.S. 2005 result
${ }^{\mathrm{b}}+$ : Hawai‘i ’05 result was statistically significantly better than U.S. 2005 result

Table 3. 2005 Hawai‘i Youth Risk Behavior Survey Public High School Results ( $n=1,662$ )

| Health Risk Behavior | $\begin{gathered} \text { Hawai‘i } \\ 2005 \% \end{gathered}$ |
| :---: | :---: |
| Items added to Hawai'i survey in 2005 |  |
| Someone tried to hurt them by hitting, punching, or kicking them while on school property one or more times during the past 12 months | 22.0 |
| Someone tried to hurt them by saying mean things to them (things that hurt their feelings) while on school property one or more times during the past 12 months | 43.8 |
| Were harassed one or more times because someone thought they were gay, lesbian, or bisexual during the past 12 months | 12.3 |
| First sexual intercourse partner was three or more years older | 10.9 |
| Last sexual intercourse partner was three or more years older | 9.5 |
| Are sexually attracted to both males and females | 4.1 |
| Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during the past 30 days | 6.3 |
| Smoked cigarettes to lose weight or to keep from gaining weight during the past 30 days | 5.0 |
| Drank sodas one or more times per day during the past seven days | 21.4 |
| Participated in one or more organized physical activity groups or teams during the past 12 months | 61.4 |
| Usually practiced or played with an organized physical activity group or team one or more days a week during the last school year | 62.7 |
| Health education class |  |
| Last had a class that taught health education in either the sixth, seventh, or eighth grade | 43.3 |
| Learned the core concepts of health in their health class | 60.9 |
| Learned how to access information on health in their health class | 67.5 |
| Learned self-management skills in their health class | 76.3 |
| Learned how to analyze internal and external influences in their health class | 57.0 |
| Learned interpersonal communications in their health class | 53.2 |
| Learned decision-making and goal setting in their health class | 86.1 |
| Learned advocacy skills in their health class | 41.0 |

Table 4. 1999 and 2005 Hawai‘i Youth Risk Behavior Survey Public Middle School Results (1999, $n=1,394 ; 2005, n=1,693$ )

| Health Risk Behavior | $\begin{gathered} 2005 \\ \% \end{gathered}$ | $\begin{array}{\|c} \hline 2005 \text { vs. } \\ \hline 1999 \\ \hline \end{array}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Injury |  |  |  |
| Bicycle riders who never or rarely wore a bicycle helmet during the past 12 months | 70.6 |  | $\mathrm{NA}^{\text {a }}$ |
| Most of the time or always wear a helmet when rollerblading, or riding a skateboard or scooter | 11.1 |  | NA |
| Never or rarely wore a seat belt when riding in a car driven by someone else | 6.0 | + ${ }^{\text {b }}$ | 12.2 |
| Rode one or more times in a car or other vehicle driven by someone who had been drinking alcohol during the past 30 days | 28.8 |  | 27.2 |
| Carried a weapon such as a gun, knife, or club on one or more of the past 30 days | 16.1 |  | NA |
| Carried a weapon such as a gun, knife, or club on school property on one or more of the past 30 days | 2.8 | + | 6.0 |
| Did not go to school on one or more of the past 30 days because they felt unsafe at school or on their way to or from school | 6.9 | - ${ }^{\text {c }}$ | 4.3 |
| Had property stolen or deliberately damaged on school property one or more times during the past 12 months | 36.4 | + | 58.2 |
| Were in a physical fight one or more times during the past 12 months | 37.8 |  | 39.0 |
| Were injured in a physical fight and had to be treated by a doctor or nurse one or more times during the past 12 months | 4.2 |  | 4.4 |
| Were in a physical fight on school property one or more times during the past 12 months | 15.9 |  | 20.3 |
| Were ever hit, slapped, or physically hurt by boyfriend or girlfriend on purpose during the past 12 months | 5.7 |  | 7.1 |
| Were ever physically forced to have sexual intercourse when they did not want to | 7.1 |  | 6.0 |
| Someone tried to hurt them by hitting, punching, or kicking them while on school property one or more times during the past 12 months | 37.8 |  | NA |
| Someone tried to hurt them by saying mean things to them (things that hurt their feelings) while on school property one or more times during the past 12 months | 58.1 |  | NA |
| Were harassed one or more times because someone thought they were gay, lesbian, or bisexual during the past 12 months | 14.7 |  | NA |
| Felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months | 25.8 |  | NA |
| Seriously considered attempting suicide during the past 12 months | 14.3 |  | NA |
| Made a plan about how they would attempt suicide during the past 12 months | 13.2 |  | NA |
| Actually attempted suicide one or more times during the past 12 months | 10.5 |  | NA |
| Made suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the past 12 months | 3.1 |  | NA |
| ${ }^{\text {a }}$ NA: Not available <br> ${ }^{\mathrm{b}}+$ : Hawai'i ' 05 result was statistically significantly better than Hawai'i '99 result <br> c -: Hawai'i '05 result was statistically significantly worse than Hawai'i '99 result |  |  |  |

## Table 4 (continued)

| Health Risk Behavior | $\begin{gathered} 2005 \\ \% \end{gathered}$ | $\begin{gathered} \hline 205 \text { vs. } \\ 1999 \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Tobacco use |  |  |  |
| Smoked cigarettes on one or more of the past 30 days | 7.2 | + | 12.3 |
| Smoked cigarettes on 20 or more of the past 30 days | 1.2 |  | NA |
| Alcohol \& other drug use |  |  |  |
| Had at least one drink of alcohol on one or more days during their life | 32.1 |  | NA |
| Had first drink of alcohol other than a few sips before age 11 years | 16.9 |  | NA |
| Had at least one drink of alcohol on one or more of the past 30 days | 12.3 | + | 19.7 |
| Had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days | 4.1 | + | 8.0 |
| Had at least one drink of alcohol on school property on one or more of the past 30 days | 1.8 |  | NA |
| Used marijuana one or more times during their life | 7.2 |  | NA |
| Tried marijuana for the first time before age 11 years | 3.0 |  | NA |
| Used marijuana one or more times during the past 30 days | 3.9 | + | 9.1 |
| Used marijuana on school property one or more times during the past 30 days | 1.4 | + | 3.4 |
| Used any form of cocaine, including powder, crack, or freebase one or more times during their life | 2.4 |  | 2.3 |
| Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during the past 30 days | 9.1 |  | NA |
| 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 | 16.1 |  | 18.4 |
| Used heroin one or more times during their life | 1.3 |  | NA |
| Used methamphetamines one or more times during their life | 1.4 |  | 3.2 |
| Used ecstasy one or more times during their life | 1.4 |  | NA |
| Took steroid pills or shots without a doctor's prescription one or more times during their life | 2.1 |  | 2.6 |
| Used a needle to inject any illegal drug into their body one or more times during their life | 1.5 |  | 1.8 |
| Were offered, sold, or given an illegal drug on school property by someone during the past 12 months | 20.4 |  | 24.9 |
| Sexual behavior |  |  |  |
| Had sexual intercourse | 9.2 | + | 14.1 |
| Had sexual intercourse for the first time before age 11 years | 4.3 |  | NA |
| Had sexual intercourse with four or more people during their life | 2.2 |  | NA |
| Had sexual intercourse with one or more people during the past three months | 3.7 |  | NA |


| Health Risk Behavior | $\begin{gathered} 2005 \\ \% \end{gathered}$ | $\begin{gathered} \hline 2005 \text { vs. } \\ 1999 \\ \hline \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Dietary behaviors |  |  |  |
| Were overweight (i.e., at or above the 95 th percentile for body mass index, by age and sex) | 12.4 |  | NA |
| Were at risk for becoming overweight (i.e., at or above the 85 th percentile but below the 95 th percentile for body mass index, by age and sex) | 13.7 |  | NA |
| Described themselves as slightly or very overweight | 26.2 | + | 32.9 |
| Were trying to lose weight | 48.0 |  | 46.7 |
| Exercised to lose weight or to keep from gaining weight during the past 30 days | 67.0 |  | 64.5 |
| Ate less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight during the past 30 days | 39.8 |  | 38.6 |
| Went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days | 11.2 |  | NA |
| Took diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight during the past 30 days | 4.0 |  | 5.8 |
| Vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days | 4.2 |  | 5.0 |
| Smoked cigarettes to lose weight or to keep from gaining weight during the past 30 days | 3.3 |  | NA |
| Drank sodas one or more times per day during the past seven days | 23.1 |  | NA |
| Ate five or more servings per day of fruits and vegetables during the past seven days | 22.9 |  | NA |
| Drank three or more glasses per day of milk during the past seven days | 15.2 |  | NA |
| Physical activity |  |  |  |
| Exercised or participated in physical activities for at least 20 minutes that made them sweat and breathe hard on three or more of the past seven days | 64.9 |  | 66.0 |
| Participated in physical activity that did not make them sweat or breathe hard for 30 minutes or more on five or more of the past seven days | 19.3 |  | NA |
| Had not participated in at least 20 minutes of vigorous physical activity on three or more of the past seven days and/or at least 30 minutes of moderate physical activity on five or more of the past seven days | 32.5 |  | NA |
| Participated in no vigorous or moderate physical activity during the past seven days | 8.1 |  | NA |
| Were physically active for a total of 60 minutes or more per day on five or more of the past seven days | 29.0 |  | NA |
| Watched three or more hours per day of TV on an average school day | 39.8 |  | NA |
| Attended physical education (PE) class one or more days during an average school week | 60.8 |  | 65.4 |
| Attended physical education (PE) class daily | 15.0 |  | NA |
| Of students enrolled in physical education (PE) classes, those who exercised or played sports more than 20 minutes during an average physical education class | 80.6 |  | NA |


| Health Risk Behavior | $\begin{gathered} 2005 \\ \% \end{gathered}$ | $\begin{array}{\|c} \hline 2005 \text { vs. } \\ 1999 \end{array}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Physical activity cont. |  |  |  |
| Participated in one or more organized physical activity groups or teams during the past 12 months | 62.3 |  | NA |
| Usually practiced or played with an organized physical activity group or team one or more days a week during the last school year | 64.7 |  | NA |
| General health and asthma |  |  |  |
| Had ever been taught about AIDS or HIV infection in school | 61.6 | - | 85.7 |
| Had ever talked about AIDS or HIV infection with their parents or other adults in their family | 33.4 | - | 49.3 |
| Described their general health as fair or poor | 9.8 |  | NA |
| Had ever been told by a doctor or nurse that they had asthma | 27.0 |  | NA |
| Among students with current asthma, those who had an episode of asthma or an asthma attack during the past 12 months | 32.0 |  | NA |
| Health education class |  |  |  |
| Last had a class that taught health education in the fifth grade | 20.7 |  | NA |
| Learned the core concepts of health in their health class | 40.9 |  | NA |
| Learned how to access information on health in their health class | 48.2 |  | NA |
| Learned self-management skills in their health class | 58.9 |  | NA |
| Learned how to analyze internal and external influences in their health class | 39.0 |  | NA |
| Learned interpersonal communications in their health class | 39.7 |  | NA |
| Learned decision-making and goal setting in their health class | 78.7 |  | NA |
| Learned advocacy skills in their health class | 29.2 |  | NA |

