# Highlights of the 2001 Hawai'i Youth Risk Behavior Surveys 

## Summary

There were ten statistically significant differences between 1999 and 2001 on the Middle School Hawaíi Youth Risk Behavior Survey (HYRBS). The positive changes were in the areas of carrying a gun or any other weapon, having property stolen or deliberately damaged on school property, ever smoking, smoking two or more cigarettes on days smoked, and drinking alcohol within the 30 days preceding the survey. The negative changes were in students feeling too unsafe to go to school in the 30 days preceding the survey, being taught about HIV/AIDS, and exercising vigorously.

Results from the 2001 High School HYRBS as compared to the comparable national Youth Risk Behavior Surveillance System (YRBSS) show that, overall, lower percentages of Hawai'i youth reported risky behaviors than did youth nationally. Most notably, lower percentages of Hawaii $i$ high school students reported risky behaviors related to buying and using tobacco products, drinking alcohol, using drugs, carrying weapons, and engaging in sexual activity. However, Hawai'i high school students were more likely to seriously consider, make a plan for, or attempt suicide. They were also less physically active than students nationally. Hawai'i trends for the past four years were notably more positive than negative at both the middle and high school levels.

## Background of the Youth Risk Behavior Survey

The Youth Risk Behavior Survey (YRBS) was developed by the Division of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention (CDC), 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 87 CDC-developed items in the 2001 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 result in HIV infection, other sexually transmitted diseases, and unintended pregnancies; (e) dietary behaviors; and (f) physical activity; and 11 other Hawaíispecific items. The high school level YRBS has been conducted nationally since 1990 and in

Hawai'i since 1991, during the spring in odd-numbered years. However, in 2001, due to the teacher strike, the survey was conducted in fall.

A similar survey was conducted of Hawai'i middle and intermediate school students (referred to as middle school HYRBS) in odd-numbered years since 1997. The 2001 version contained 91 items, most of which mirrored items in the high school HYRBS. Eight questions regarding to whom students would go to get help with health-related problems were also included.

The results of these surveys, conducted in compliance with the requirements of the Hawaii $i$ State Department of Education's (DOE) cooperative agreement with the Division of Adolescent and School Health, CDC, and funded by the Hawai'i Department of Health's Healthy Hawaii 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 Hawaiíi public school students in grades 6-8.

## Method

A two-stage, stratified random sampling procedure was used to produce final samples of 1,495 students in public middle and intermediate school (Grades 6-8), hereafter referred to as middle school, and 1,076 students in public high school (Grades 9-12). Written parental permission was required, and all students' responses were completely anonymous. As was the case in 1997 and 1999, the data from the middle school HYRBS administered during fall 2001 were statistically weightable; thus, it is possible to make valid statewide (public schools only) comparisons among the results from the past three middle school level HYRBS administrations. The 2001 high school HYRBS data were not statistically weightable according to CDC standards, and they did not provide confidence intervals for comparative analyses.

For comparison purposes, results from the 2001 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. The Hawai'i data were also analyzed in terms of trends observed since 1997.

## Results

## Middle School Level

At the middle school level there were 10 statistically significant changes among the 56 possible comparisons for which confidence intervals were available for the 1999 and 2001 HYRBS. In 2001, a statistically significantly lower percentage of students reported the following six risky behaviors: (a) carrying a gun during the 30 days preceding the survey ( $5.0 \%$ in 2001 vs. $8.9 \%$ in 1999), (b) carrying any other weapon such as a knife or club in the 30 days preceding the survey ( $15.2 \%$ in 2001 vs. $20.1 \%$ in 1999), (c) having had property stolen or deliberately damaged on school property during the 12 months preceding the survey $(43.2 \%$ in 2001 vs. $58.2 \%$ in 1999), (d) ever smoking cigarettes (32.1\% in 2001 vs. $41.5 \%$ in 1999), (e) smoking two or more cigarettes on the days smoked during the 30 days preceding the survey ( $2.5 \%$ in 2001 vs. $5.1 \%$ in 1999), and (f) drinking alcohol in the 30 days preceding the survey ( $14.8 \%$ in 2001 vs. $19.7 \%$ in 1999). The three negative changes were the percentage of students who reported (a) feeling too unsafe to go to schools during the 30 days prior to the survey ( $7.0 \%$ in 2001 vs. $4.3 \%$ in 1999), (b) being taught about HIV/AIDS in school ( $71.7 \%$ in 2001 vs. $85.7 \%$ in 1999; however, this change was probably because the survey was administered in the first semester in 2001, whereas it had previously been administered in second semester.), and (c) exercising vigorously for 20 or more minutes on three or more of the seven days preceding the survey ( $58.5 \%$ in 2001 vs. $66.0 \%$ in 1999). The remaining statistically significant change was regarding the students who said they turn to a teacher, counselor, school health service center, or school health room first if they needed birth control information (3.9\% in 2001 vs. $8.2 \%$ in 1999).

The four-year trend of results from the middle school level HYRBS for which comparisons were possible ( $n=35$ ) were positive for 14 items and negative for 6 items. A trend was considered to be positive if there was improvement (not necessarily statistically significant) across all four years. Likewise, a trend was considered to be negative if the results got worse each year. Areas where Hawai'i middle school students have continued to report lower percentages of risky behaviors were for (a) wearing a seat belt when riding in a car, (b) during the 30 days preceding the survey, carrying a weapon other than a gun and carrying a weapon on school property, (c) being in a physical fight and fighting on school property during the 12 months preceding the survey, (d) getting care from a health professional after a suicide attempt, (e) ever smoking
cigarettes, and in the 30 days preceding the survey, smoking cigarettes, smoking two or more cigarettes on days smoked, smoking on school property, and using chewing tobacco or snuff, (f) in the 30 days preceding the survey, drinking alcohol and having five or more drinks on one or more occasion, and (g) using marijuana in the 30 days preceding the survey. Higher percentages of risky behaviors continued to be reported for (a) riding with a driver who had been drinking alcohol in the 30 days preceding the survey, (b) being injured in a physical fight and needing medical attention in the 12 months preceding the survey, (c) talking about HIV/AIDS with parents or other adult family members, (d) drinking alcohol or using drugs the last time they or their partner had sexual intercourse, and (e) eating fruits and green salad the day prior to the survey.

See Table 1 for the results of all 2001 items and comparable 1997 and 1999 middle school results and trends. Notably, the percentages of middle school students who had ever smoked a cigarette and who had smoked a cigarette in the 30 days preceding the survey have statistically significantly decreased from 1997 to 1999 and again in 2001.

Statistically Significant Differences (1999 vs. 2001) Among Various Middle School Subgroups For each item, confidence intervals were computed for 23 age-grade-gender subgroups (e.g., males age 12 years or 6 th-grade females). Of the 1,104 ( 48 risk items $\times 23$ subgroup analyses per item) possible 1999-2001 risky behavior subgroup comparisons at the middle school level, there were statistically significant differences on $47 ; 32$ ( $68 \%$ ) were in the positive direction and $15(32 \%)$ were in the negative direction. There were 16 subgroup differences where students reported that they would be less likely to turn to a teacher, counselor, school health service center, or school health room first if they had a problem or concern (see Table 2 for details).

## High School Level

For 17 of 60 comparable items, the Hawai'i trend was positive from 1997 to 2001, and Hawai'i results were better than the national results. The areas were (a) seat belt use when riding in a car driven by someone else, (b) weapon carrying and carrying on school property in the 30 days preceding the survey, (c) physical fighting and fighting on school property in the 12 months preceding the survey, (d) lifetime, 30-day prior to survey cigarette use, and use on school property, (e) purchase of cigarettes at a store or gas station in the 30 days preceding the survey, (f) chewing tobacco or snuff use on school property in the 30 days preceding the survey, (g) lifetime use of marijuana and inhalants, (h) sexual intercourse before age 13, (i) exercise to
loose weight or control weight gain in the 30 days preceding the survey, and (j) enrolled students active in P.E. class for 20 or more minutes.

For 3 of 60 comparable items the Hawai'i trend worsened, and the Hawai'i 2001 results were worse than the national results: (a) sexually active (in the three months preceding the survey) high school students who used birth control pills, (b) students who exercised moderately for 30 or more minutes on five or more of the seven days preceding the survey, and (c) students who reported being taught about HIV/AIDS in school. However, results for 2001 were probably affected by the timing of the survey administration; the survey was administered in the first semester in 2001, whereas it had previously been administered in second semester.

Although the Hawai'i trend from 1997 to 2001 was positive, $36 \%$ of students reported being offered, sold, or given an illegal drug on school property in the 12 months preceding the survey compared to a national average of $28.5 \%$. Other areas where the Hawai'i trend was positive but the percentage exhibiting risky behaviors higher than the national level are as follows: in the 12 months preceding the survey, the percentage of motorcycle riders who rarely or never wore helmets and students who made a suicide plan, and in the 30 days preceding the survey, the percentage of students who have used marijuana on school property.

The four-year trends of results of 64 items from the high school level HYRBS for which comparisons were possible were positive for 28 items and negative for 5 . See Table 3 for details of the 2001 high school HYRBS results and comparable Hawai'i 1997 and 1999 and U.S. 2001 results.

Table 1. 1997-2001 Middle School Hawai'i Youth Risk Behavior Survey Results, 2001 vs. 1999 Statistically Significant Differences, and Trends

| Health risk behavior | $\begin{aligned} & \hline \text { '97 } \\ & \% \end{aligned}$ | $\begin{aligned} & \text { '99 } \\ & \% \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline \text { '01 vs. } \\ \hline \text { '99 } \\ \hline \end{array}$ | $\begin{aligned} & \hline \text { '01 } \\ & \% \end{aligned}$ | Trend |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Injury |  |  |  |  |  |
| Rarely or never wore seat belts when riding in a car | 13.0 | 12.2 |  | 10.7 | $+^{\text {a }}$ |
| Bicycle riders who rarely or never wore a helmet when riding a bicycle | 65.5 | 65.0 |  | 66.0 |  |
| Rarely or never wore a helmet when rollerblading or skateboarding | $N A^{\text {b }}$ | 54.2 | NA | NA |  |
| Rarely or never wore a helmet when rollerblading, skateboarding, or riding a scooter | NA | NA | NA | 61.3 |  |
| Rode with driver who had been drinking alcohol, past 30 days | 26.7 | 27.2 |  | 27.4 | $-^{\text {c }}$ |
| Carried a gun, past 30 days | 7.5 | 8.9 | + | 5.0 |  |
| Carried any other weapon such as a knife or club, past 30 days | 20.5 | 20.1 | + | 15.2 | + |
| Carried a weapon on school property, past 30 days | 7.8 | 6.0 |  | 4.7 | + |
| Had property stolen or deliberately damaged on school property, past 12 months | 51.2 | 58.2 | + | 43.2 |  |
| Felt unsafe at school or on way to or from school, past 30 days | 37.0 | 41.8 |  | 37.7 |  |
| Felt too unsafe to go to school, past 30 days | 6.0 | 4.3 | - | 7.0 |  |
| In physical fight, past 12 months | 42.5 | 39.0 |  | 36.5 | + |
| In physical fight on school property, past 12 months | 23.0 | 20.3 |  | 17.1 | + |
| Injured in a physical fight and required medical attention, past 12 months | 2.8 | 4.4 |  | 4.5 | - |
| Been hit, slapped, or physically hurt on purpose by boyfriend or girlfriend, past 12 months | NA | 7.1 |  | 5.3 |  |
| Ever forced to have sexual intercourse | NA | 6.0 | NA | NA |  |
| Ever physically forced to have sexual intercourse | NA | NA | NA | 5.7 |  |
| Ever seriously thought about killing themselves | 28.8 | 30.0 |  | 26.6 |  |
| Ever made a plan to kill themselves | 16.7 | 14.8 |  | 15.6 |  |
| Ever tried to kill themselves | 12.3 | 11.1 |  | 11.2 |  |
| Got care from a counselor, doctor, or other health care professional when they tried to kill themselves | 4.4 | 4.6 |  | 5.2 | + |
| Tobacco use |  |  |  |  |  |
| Ever tried cigarette smoking | 49.9 | 41.5 | + | 32.1 | + |
| First smoked whole cigarette before age 9 | NA | 4.3 | NA | NA |  |
| First smoked whole cigarette before age 11 | NA | NA | NA | 9.2 |  |
| Smoked cigarettes, past 30 days | 20.1 | 12.3 |  | 9.1 | + |
| Smoked cigarettes on 20 or more of past 30 days | NA | NA | NA | 1.2 |  |
| Smoked $\geq 2$ cigarettes on days smoked, past 30 days | 9.2 | 5.1 | + | 2.5 | + |
| Smoked $\geq 10$ cigarettes on days smoked, past 30 days | NA | NA | NA | 0.2 |  |
| Not asked to show proof of age when buying cigarettes in a store, past 30 days | NA | NA | NA | 2.1 |  |
| Smoked cigarettes on school property, past 30 days | 7.1 | 4.9 |  | 2.7 | + |
| Ever tried to quit smoking cigarettes | 28.0 | 20.9 | NA | NA |  |

${ }^{a}+$ : Hawaiii '01 result was statistically significantly better than Hawaii' ' 99 result.
${ }^{\mathrm{b}} \mathrm{NA}$ : Not Available.
c-: Hawai'i '01 result was statistically significantly worse than Hawai'' '99 result.
(table continues)
Table 1. (continued)

| Health risk behavior | $\begin{aligned} & \hline \text { '97 } \\ & \% \end{aligned}$ | $\begin{aligned} & \hline \text { '99 } \\ & \% \end{aligned}$ | $\begin{array}{\|c\|} \hline \text { '01 vs. } \\ \hline \text { '99 } \\ \hline \end{array}$ | $\begin{aligned} & \hline \mathbf{o 1} \\ & \% \end{aligned}$ | Trend |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alcohol and other drug use |  |  |  |  |  |
| First tried alcohol before age 9 | NA | 16.1 | NA | NA |  |
| First tried alcohol before age 11 | NA | NA | NA | 19.9 |  |
| Drank alcohol, past 30 days | 23.7 | 19.7 | + | 14.8 | + |
| Had 5 or more drinks of alcohol in a row, past 30 days | 8.7 | 8.0 |  | 6.5 | + |
| First tried marijuana before age 9 | NA | 2.0 | NA | NA |  |
| First tried marijuana before age 11 | NA | NA | NA | 5.2 |  |
| Used marijuana, past 30 days | 12.1 | 9.1 |  | 7.9 | + |
| Used marijuana on school property, past 30 days | 3.3 | 3.4 |  | 2.7 |  |
| First tried cocaine before age 9 | NA | 0.4 | NA | NA |  |
| First tried cocaine before age 11 | NA | NA | NA | 1.5 |  |
| Ever used any form of cocaine | NA | 2.3 |  | 2.4 |  |
| Ever sniffed glue or inhaled intoxicating substances to get high | NA | 18.4 |  | 15.7 |  |
| Ever used illegal steroids | NA | 2.6 |  | 2.7 |  |
| Ever used LSD, PCP, ecstasy, or mushrooms | NA | 4.1 | NA | NA |  |
| Ever used LSD, PCP, or mushrooms | NA | NA | NA | 3.7 |  |
| Ever used ecstasy | NA | NA | NA | 4.1 |  |
| Ever used methamphetamines | NA | 3.2 |  | 2.8 |  |
| Ever used sedatives or downers without a doctor's prescription | NA | 4.3 |  | 2.4 |  |
| Ever injected illegal drug | NA | 1.8 |  | 2.7 |  |
| Were offered, sold, or given an illegal drug on school property, past 12 months | 20.1 | 24.9 |  | 18.8 |  |
| Sexual behavior |  |  |  |  |  |
| Were taught about HIV/AIDS in school | 84.1 | 85.7 | - | 71.7 |  |
| Talked about HIV/AIDS with parents or other adult family members | 50.4 | 49.3 |  | 44.6 | - |
| Had sexual intercourse before age 11 | NA | NA | NA | 4.2 |  |
| Had sexual intercourse before age 13 | 8.3 | 8.3 | NA | NA |  |
| Ever had sexual intercourse | NA | 14.1 | NA | NA |  |
| Ever had sexual intercourse with $\geq 4$ people | NA | NA | NA | 2.5 |  |
| They or their partner drank alcohol or used drugs, last intercourse | 2.2 | 2.6 |  | 2.8 | - |
| No method was used to prevent pregnancy, last intercourse | NA | 4.3 | NA | NA |  |
| Used birth control pills to prevent pregnancy, last intercourse | NA | NA | NA | 0.9 |  |
| Dietary behavior |  |  |  |  |  |
| At risk for becoming overweight ( $\geq$ 85th percentile but < 95th | NA | NA | NA | 197 |  |


| Ate less food, fewer calories, or foods low in fat to lose weight or <br> control weight gain, past 30 days | NA | 38.6 |  | 37.3 |  |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Took diet pills, powders, or liquids without doctor's advice to lose <br> weight or control weight gain, past 30 days | NA | 5.8 |  | 5.5 |  |
| Vomited or took laxatives to lose weight or control weight gain, past 30 <br> days | 5.9 | 5.0 | NA | NA |  |
| Ever vomited or took laxatives to lose weight or control weight gain | NA | NA | NA | 7.0 |  |
| Ate fruit, yesterday | 73.1 | 71.6 |  | 66.3 | - |
| Drank 100\% fruit juice, yesterday | NA | 57.2 |  | 55.1 |  |

(table continues)
Table 1. (continued)

| Health risk behavior | $\begin{aligned} & \hline \text { '97 } \\ & \% \end{aligned}$ | $\begin{aligned} & \hline \text { '99 } \\ & \% \end{aligned}$ | '01 vs. '99 | '01 | Trend |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dietary behavior (continued) |  |  |  |  |  |
| Drank diet soda, yesterday | NA | 21.6 | NA | NA |  |
| Drank regular soda, yesterday | NA | 67.5 | NA | NA |  |
| Drank soda, yesterday | NA | NA | NA | 63.3 |  |
| Ate green salad, yesterday | 40.8 | 38.9 |  | 34.1 | - |
| Ate cooked vegetables, yesterday | 56.8 | 54.5 |  | 48.4 |  |
| Physical activity |  |  |  |  |  |
| Exercised vigorously for $\geq 20$ minutes on $\geq 3$ of the past 7 days | NA | 66.0 | - | 58.5 |  |
| Played on sports team(s) | 49.6 | 51.1 | NA | NA |  |
| Participated in other physical activities besides sports teams such as dance, gymnastics, or swimming | 35.2 | 40.1 | NA | NA |  |
| Participated in any organized physical activity such as sports teams, dance, gymnastics, or swimming | NA | NA | NA | 54.9 |  |
| Beliefs about school and self |  |  |  |  |  |
| Got mostly D's and F's in school | NA | NA | NA | 6.6 |  |
| Take care of themselves--no adult present--on most afternoons after school | NA | 11.5 |  | 9.0 |  |
| Feel that students in their school respect and care about them | NA | NA | NA | 52.5 |  |
| Feel there is a teacher or other adult at their school who really cares about them | NA | NA | NA | 55.7 |  |
| Feel they know at least one other adult besides their parent/ guardian whom thev can ao to for help if thev have an important life question | NA | NA | NA | 75.4 |  |
| Feel they know where to go for help with a problem | NA | NA | NA | 79.7 |  |
| Feel they try to work out problems by talking about them | NA | NA | NA | 60.8 |  |
| Feel they can do most things if they try | NA | NA | NA | 86.3 |  |
| Feel they can work with someone who has different opinions than theirs | NA | NA | NA | 70.5 |  |
| Feel they stand up for themselves without putting others down | NA | NA | NA | 60.5 |  |
| Feel they have goals and plans for the future | NA | NA | NA | 82.4 |  |
| Feel they are good at making decisions and following through on them | NA | NA | NA | 65.8 |  |
| Feel they can resist negative peer pressure and dangerous situation | NA | NA | NA | 69.7 |  |
|  |  |  |  |  |  |


| Vould turn to a teacher/counselor/school health service center/school <br> health room first if they were pregnant or had gotten someone <br> nrennant | NA | 7.7 |  | 4.4 |
| :--- | ---: | ---: | ---: | ---: |
| Would turn to a teacher/counselor/school health service center/school <br> health room first if thev were feeling anarv or out of control | NA | 5.6 |  | 5.5 |
| Would turn to a teacher/counselor/school health service center/school <br> health room first if thev were being sexuallv or phvsicallv abused | NA | 10.1 |  | 8.6 |
| Would turn to a teacher/counselor/school health service center/school <br> health room first if thev had an alcohol or drua use problem | NA | 11.3 |  | 7.9 |
| Vould turn to a teacher/counselor/school health servIce center/school <br> health room first if they had a relationship problem with <br> bovfriend/airlfriend | NA | 4.9 |  | 2.9 |

${ }^{\mathrm{d}}+/$-: It is not clear if this is a positive or negative change.

Table 2. Middle School Hawai'i Youth Risk Behavior Survey Statistically Significant Subgroup Differences, 2001 vs. 1999

| Health risk behavior by subgroup | $\begin{aligned} & \text { '99 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { '01 vs. } \\ \text { '99 } \end{gathered}$ | $\begin{aligned} & \text { '01 } \\ & \text { \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Injury |  |  |  |
| Carried a gun, past 30 days |  |  |  |
| Overall males | 14.8 | $+^{\text {a }}$ | 7.6 |
| Overall age 13 | 7.9 | + | 3.9 |
| Males age 13 | 14.0 | + | 5.7 |
| Overall 8th graders | 9.2 | + | 3.8 |
| Male 8th graders | 15.6 | + | 5.9 |
| Carried a weapon besides a gun, such as a knife or club, past 30 days |  |  |  |
| Overall males | 29.6 | + | 22.5 |
| Overall age 13 | 19.8 | + | 15.0 |
| Overall 8th graders | 23.0 | + | 14.3 |
| Male 8th graders | 33.3 | + | 21.3 |
| Had property stolen or deliberately damaged on school property, past 12 months |  |  |  |
| Overall males | 59.8 | + | 44.4 |
| Overall females | 56.7 | + | 42.1 |
| Overall age 12 | 59.4 | + | 44.9 |
| Females age 12 | 60.1 | + | 40.8 |
| Overall age 13 | 58.8 | + | 42.0 |
| Males age 13 | 62.0 | + | 40.3 |
| Overall 7th graders | 60.1 | + | 46.2 |
| Female 7th graders | 60.5 | + | 44.9 |
| Overall 8th grader | 56.7 | + | 41.1 |
| Male 8th graders | 58.9 | + | 41.3 |
| Female 8th graders | 54.7 | + | 41.2 |
| Felt unsafe at school or on way to or from school, past 30 days |  |  |  |
| Overall age 13 | 43.2 | + | 31.5 |
| Males age 13 | 40.1 | + | 27.7 |
| Tobacco use |  |  |  |
| Ever tried cigarette smoking |  |  |  |
| Overall females | 42.3 | + | 31.8 |
| Overall 8th graders | 50.5 | + | 38.4 |
| Smoked $\geq 2$ cigarettes on days smoked, past 30 days |  |  |  |
| Overall females | 6.7 | + | 3.3 |
| Smoked cigarettes on school property, past 30 days |  |  |  |
| Males age 13 | 5.4 | + | 0.8 |
| Used chewing tobacco or snuff, past 30 days |  |  |  |
| Males age 13 | 3.6 | + | 1.0 |
| Sexual behavior |  |  |  |
| M/ara tarinht ahnut HIT// ${ }^{\text {IICS }}$ in erhnol |  |  |  |


| Overall age 13 | 91.0 | - | 80.4 |
| :--- | :--- | :--- | :--- |
| Males age 13 | 91.4 | - | 76.5 |

${ }^{a^{a}}+$ : Hawai'i '01 result was statistically significantly better than Hawai'i '99 result.
b_: Hawaiti '01 result was statistically significantly worse than Hawai'i '99 result.
(table continues)
Table 2. (continued)

| Health risk behavior and subgroup | $\begin{aligned} & \text { '99 } \\ & \% \end{aligned}$ | '01 vs. '99 | $\begin{aligned} & \text { '01 } \\ & \% \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Sexual behavior (continued) |  |  |  |
| Were taught about HIV/AIDS in school (continued) |  |  |  |
| Overall 7th graders | 88.6 | - | 70.8 |
| Male 7th graders | 89.6 | - | 70.9 |
| Female 7th graders | 87.5 | - | 70.6 |
| Dietary behavior |  |  |  |
| Described self as slightly or very overweight |  |  |  |
| Overall age 13 | 33.6 | + | 25.2 |
| Males age 13 | 33.8 | + | 19.8 |
| Overall 8th graders | 35.6 | + | 27.6 |
| Male 8th graders | 35.5 | + | 22.1 |
| Trying to lose weight |  |  |  |
| Males age 12 | 36.3 | +/- ${ }^{\text {c }}$ | 52.9 |
| Exercised to lose weight or control weight gain, past 30 days |  |  |  |
| Male 8th graders | 65.9 | - | 54.3 |
| Took diet pills, powders, or liquids without doctor's advice to lose weight or control weight gain, past 30 days |  |  |  |
| Females age 13 | 5.9 | + | 2.5 |
| Ate fruit, yesterday |  |  |  |
| Overall 7th graders | 73.1 | - | 64.2 |
| Male 7th graders | 74.8 | - | 61.6 |
| Ate green salad, yesterday |  |  |  |
| Overall females | 39.3 | - | 31.1 |
| Ate cooked vegetables, yesterday |  |  |  |
| Overall males | 55.7 | - | 47.5 |
| Physical activity |  |  |  |
| Exercised vigorously for $\geq 20$ minutes on $\geq 3$ of the past 7 days |  |  |  |
| Overall males | 72.0 | - | 61.5 |
| Male 7th graders | 75.2 | - | 59.9 |
| Beliefs about school and self |  |  |  |
| Would turn to a teacher/counselor/school health service center/school health room first if they had a relationship problem with someone in their family |  |  |  |
| Overall 6th graders | 12.3 | +/- | 4.1 |
| Would turn to a teacher/counselor/school health service center/school health room first if they needed birth control information |  |  |  |
| Overall males | 6.8 | +/- | 2.8 |


| Females age 12 | 9.8 | $+/-$ | 3.7 |
| :--- | ---: | ---: | ---: |
| Overall age 13 | 9.4 | $+/-$ | 4.3 |
| Overall 7th graders | 9.4 | $+/-$ | 2.7 |
| Female 7th graders | 11.8 | $+/-$ | 3.1 |

${ }^{c}+/-:$ It is not clear if this is a positive or negative change.
(table continues)

Table 2. (continued)

| Health risk behavior | $\begin{aligned} & \text { '99 } \\ & \% \end{aligned}$ | '01 vs. '99 | $\begin{aligned} & \text { '01 } \\ & \% \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Beliefs about school and self (continued) |  |  |  |
| Would turn to a teacher/counselor/school health service center/school health room first if they were pregnant or had gotten someone pregnant |  |  |  |
| Overall 7th graders | 7.5 | +/- | 2.4 |
| Male 7th graders | 5.8 | +/- | 1.7 |
| Female 7th graders | 9.4 | +/- | 3.0 |
| Would turn to a teacher/counselor/school health service center/school health room first if they were being sexually or physically abused |  |  |  |
| Overall 6th graders | 17.4 | +/- | 6.2 |
| Would turn to a teacher/counselor/school health service center/school health room first if they had an alcohol or drug use problem |  |  |  |
| Overall age 12 | 14.4 | +/- | 7.0 |
| Overall 6th graders | 16.5 | +/- | 7.3 |
| Overall 7th graders | 13.7 | +/- | 7.1 |

Table 3. 1997-2001 Hawai'i Youth Risk Behavior Survey (Public High Schools) Results
(2001, $n=1,076 ; 1999, n=1,248 ; 1997, n=1,409$ ) Compared to 2001 U.S. Results ( $n=15,349$ )

| Health risk behavior | S. | Hawai'i public |  |  | Hawai'i Trend |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { '01 } \\ & \% \end{aligned}$ | $\begin{aligned} & \text { '01 } \\ & \% \end{aligned}$ | $\begin{gathered} 99 \\ \% \\ \hline \end{gathered}$ | $\begin{gathered} \text { '97 } \\ \% \\ \hline \end{gathered}$ |  |
| Injury |  |  |  |  |  |
| Rarely or never wore seat belts when riding in a car driven by someone else | 14.1 | 7.6 | 10.6 | 14.6 | $+^{\text {a }}$ |
| Motorcycle riders who rarely or never wore motorcycle helmet, past 12 months | 37.2 | 56.9 | 64.5 | 68.1 | + |
| Bicycle riders who rarely or never wore bicycle helmet, past 12 months | 84.7 | 85.0 | 89.5 | 93.9 | + |
| Rode with driver who had been drinking alcohol, past 30 days | 30.7 | 32.8 | 38.3 | 36.1 |  |
| Drove after drinking alcohol, past 30 days | 13.3 | 9.2 | 14.5 | 10.3 |  |
| Carried a weapon, past 30 days | 17.4 | 10.6 | 13.7 | 14.1 | + |
| Carried a gun, past 30 days | 5.7 | 2.9 | 4.2 | 4.1 |  |
| Carried a weapon on school property, past 30 days | 6.4 | 3.5 | 6.0 | 6.1 | + |
| Felt too unsafe to go to school, past 30 days | 6.6 | 6.7 | 11.4 | 5.6 |  |
| Threatened or injured with a weapon on school property, past 12 months | 8.9 | 5.9 | 6.7 | 6.3 |  |
| In physical fight, past 12 months | 33.2 | 25.9 | 30.6 | 31.7 | + |
| Injured in a physical fight and required medical attention, past 12 months | 4.0 | 3.2 | 3.0 | 3.1 |  |
| In physical fight on school property, past 12 months | 12.5 | 9.0 | 11.5 | 12.9 | + |
| Been hit, slapped, or physically hurt by boyfriend or girlfriend on purpose, past 12 months | 9.5 | 9.8 | 7.9 | $N A^{\text {b }}$ | NA |
| Ever forced to have sexual intercourse | 7.7 | 9.0 | 8.3 | NA | NA |
| Felt sad or hopeless almost every day for $\geq 2$ weeks in a row, past 12 months | 28.3 | 30.5 | 31.8 | NA | NA |
| Seriously considered attempting suicide, past 12 months | 19.0 | 20.9 | 23.3 | 26.9 | + |
| Made a suicide plan, past 12 months | 14.8 | 16.9 | 18.5 | 20.1 | + |
| Made suicide attempt, past 12 months | 8.8 | 13.4 | 10.1 | 11.5 |  |
| Made suicide attempt requiring medical attention, past 12 months | 2.6 | 3.4 | 3.7 | 4.0 | + |
| Tobacco use |  |  |  |  |  |
| Ever tried cigarette smoking | 63.9 | 55.0 | 67.2 | 67.4 | + |
| First smoked a whole cigarette before age 13 | 22.1 | 19.2 | 27.1 | 25.6 |  |
| Smoked cigarettes, past 30 days | 28.5 | 15.0 | 27.9 | 29.2 | + |
| Smoked $\geq 2$ cigarettes on days smoked, past 30 days | 19.4 | 9.2 | 18.6 | 21.4 | + |
| Smoked $>10$ cigarettes/day on days smoked, past 30 days | 4.1 | 1.3 | 2.6 | NA | NA |
| Smoked cigarettes on $\geq 20$ days, past 30 days (frequent) | 13.8 | 6.1 | 13.1 | 14.5 | + |
| Smoked cigarettes on school property, past 30 days | 9.9 | 6.7 | 12.0 | 16.0 |  |
| Smoked $\geq 1$ cigarette for 30 consecutive days (regular daily) | 20.0 | 13.2 | 19.8 | NA | NA |
| Ever tried to quit smoking cigarettes | NA | 67.3 | 37.8 | 46.0 |  |
| Got cigarettes by buying in a store or gas station, past 30 days | NA | 1.8 | 6.2 | 9.1 | + |
| Current cigarette smokers, <18 years of age who bought cigarettes at a store or aas station. past 30 davs | 19.1 | 9.1 | 14.1 | 24.9 | + |
| When buying cigarettes in a store, not asked for proof of age, past 30 days | NA | 3.4 | 7.4 | 9.7 | + |
| Current cigarette smokers, <18 years of age who were not asked to show proof of aqe when buvina ciaarettes in a store or qas station. past 30 davs | 67.2 | NA | NA | 65.0 | NA |
| Used chewing tobacco or snuff, past 30 days | 8.2 | 2.9 | 2.2 | 3.4 |  |
| Used chewing tobacco or snuff on school property, past 30 days | 5.0 | 1.3 | 1.6 | 1.9 | + |
| Smoked cigars, cigarillos, or little cigars, past 30 days | 15.2 | 6.2 | 7.8 | NA | NA |
| Smoked cigarettes or cigars or used chewing tobacco or snuff, past 30 days | 33.9 | 16.7 | 29.9 | NA | NA |

${ }^{a_{+}}$: Results have improved across all three survey administrations.
${ }^{\mathrm{b}} \mathrm{NA}$ : Not Available.
(table continues)

|  | \% | \% | \% | \% | , |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alcohol and other drug use |  |  |  |  |  |
| Ever drank alcohol | 78.2 | 67.2 | 76.4 | 72.5 |  |
| First tried alcohol before age 13 | 29.1 | 26.4 | 33.6 | 31.7 |  |
| Drank alcohol, past 30 days | 47.1 | 34.2 | 44.6 | 40.3 |  |
| Had 5 or more drinks of alcohol in a row, past 30 days | 29.9 | 18.8 | 26.8 | 25.1 |  |
| Drank alcohol on school property, past 30 days | 4.9 | 4.7 | 7.7 | 8.5 | + |
| Ever used marijuana | 42.4 | 38.8 | 44.6 | 46.4 | + |
| First tried marijuana before age 13 | 10.2 | 11.8 | 14.8 | 14.4 |  |
| Used marijuana, past 30 days | 23.9 | 20.5 | 24.7 | 24.3 |  |
| Used marijuana on school property, past 30 days | 5.4 | 6.9 | 9.3 | 12.6 | + |
| Ever tried cocaine | 9.4 | 6.1 | 7.8 | 7.4 |  |
| Used cocaine, past 30 days | 4.2 | 2.4 | 3.3 | 2.8 |  |
| Ever sniffed glue or inhaled intoxicating substances | 14.7 | 11.8 | 12.9 | 15.7 | + |
| Sniffed glue or inhaled intoxicating substances, past 30 days | 4.7 | 3.2 | 3.9 | NA | NA |
| Ever used heroin | 3.1 | 2.5 | 2.3 | NA | NA |
| Ever used methamphetamines | 9.8 | 6.5 | 7.7 | NA | NA |
| Ever used illegal steroids | 5.0 | 2.8 | 2.5 | 2.1 | $-^{\text {c }}$ |
| Ever injected illegal drug | 2.3 | 2.0 | 1.6 | 0.8 | - |
| Were offered, sold, or given an illegal drug on school property, past 12 months | 28.5 | 36.0 | 36.3 | 41.4 | + |
| Sexual behavior |  |  |  |  |  |
| Were taught about HIV/AIDS in school | 89.0 | 87.0 | 90.6 | 94.3 | - |
| Ever had sexual intercourse | 45.6 | 33.6 | 41.0 | 40.3 |  |
| First sexual intercourse before age 13 | 6.6 | 4.8 | 6.8 | 7.0 | + |
| Had $\geq 4$ sexual partners during lifetime | 14.2 | 8.4 | 12.2 | 9.1 |  |
| Had sexual intercourse, past 3 months | 33.4 | 23.2 | 28.5 | 25.8 |  |
| Sexually active students (ever had sexual intercourse), no sexual intercourse, past 3 months | 26.7 | 31.0 | 30.4 | 35.7 |  |
| Never had sexual intercourse, had had sexual intercourse but not during the past 3 months, or had used a condom the last time they had sexual intercourse, past 3 months | 86.1 | 87.7 | NA | NA | NA |
| Sexually active students, past 3 months, who drank or used drugs, last intercourse | 25.6 | 21.6 | 26.8 | 22.7 |  |
| Sexually active students, past 3 months, who used condom, last intercourse | 57.9 | 45.5 | 47.1 | 41.0 |  |
| Sexually active students, past 3 months, who used birth control pills, last intercourse | 18.2 | 17.2 | 18.1 | 19.3 | - |
| Been pregnant or got someone pregnant | 4.7 | 3.5 | 5.7 | 5.7 |  |
| Dietary behavior |  |  |  |  |  |
| At risk for becoming overweight ( $\geq$ 85th percentile but < 95th percentile for body mass index, by age and sex) | 13.6 | 11.9 | 16.3 | NA | NA |
| Overweight ( $\geq$ 95th percentile for body mass index, by age and sex) | 10.5 | 12.1 | 9.0 | NA | NA |
| Described self as slightly or very overweight | 29.2 | 33.4 | 33.5 | 33.5 |  |
| Trying to lose weight | 46.0 | 47.9 | 47.1 | 45.1 | + |

${ }^{\text {c }}$-: Results have worsened across all three survey administrations.
(table continues)

Table 3. (continued)

| Exercised to lose weight or control weight gain, past 30 days | 59.9 | 64.5 | 62.7 | 59.0 | +/- ${ }^{\text {d }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ate less food, fewer calories, or foods low in fat to lose weight or control weight gain, past 30 davs | 43.8 | 38.4 | 40.3 | NA | NA |
| Went $\geq 24$ hours without eating to lose weight or control weight gain, past 30 days | 13.5 | 13.1 | 11.8 | NA | NA |
| Took diet pills, powders, or liquids without doctor's advice to lose weight or control weight gain, past 30 davs | 9.2 | 7.2 | 7.2 | NA | NA |
| Vomited or took laxatives to lose weight or control weight gain, past 30 days | 5.4 | 4.3 | 4.7 | 4.4 |  |
| Ate $\geq 5$ servings of fruits and vegetables/day during the past 7 days | 21.4 | 16.4 | 21.1 | NA | NA |
| Drank $\geq 3$ glasses of milk/day during the past 7 days | 16.4 | 12.0 | 15.4 | NA | NA |
| Physical activity |  |  |  |  |  |
| Exercised vigorously $\geq 20$ minutes on $\geq 3$ of past 7 days | 64.6 | 55.8 | 64.0 | 60.8 |  |
| Exercised moderately $\geq 30$ minutes on $\geq 5$ of past 7 days | 25.5 | 19.2 | 20.3 | 26.6 | - |
| Did strengthening exercises on $\geq 3$ of past 7 days | 53.4 | 47.2 | 51.1 | 47.8 |  |
| Did not participate in vigorous physical activity for $\geq 20$ minutes on $\geq 3$ of past 7 days and in moderate physical activity for $\geq 30$ minutes on $\geq 5$ of past 7 days | 31.2 | 40.7 | NA | NA | NA |
| Did not participated in either vigorous physical activity for $\geq 20$ minutes or moderate physical activity for $\geq 30$ minutes on any of the past 7 days | 9.5 | 12.0 | NA | NA | NA |
| Watched TV $\geq 3$ hours, average school day | 38.3 | 42.2 | NA | NA | NA |
| Enrolled in PE class | 51.7 | 41.5 | 41.9 | 40.4 |  |
| Attended PE class daily | 32.2 | 10.1 | 8.9 | 11.6 |  |
| Enrolled students active in PE class for $\geq 20$ minutes | 83.4 | 86.6 | 83.8 | 79.7 | + |
| Played on sports teams, past 12 months | 55.2 | 49.3 | 54.6 | NA | NA |
| Beliefs about school and self |  |  |  |  |  |
| Feel that students in their school respect and care about them | NA | 61.5 | NA | NA | NA |
| Feel there is a teacher or other adult at their school who really cares about them | NA | 58.1 | NA | NA | NA |
| Feel they know at least one other adult besides their parent/ guardian whom they can go to for help if they have an important life question | NA | 78.4 | NA | NA | NA |
| Feel they know where to go for help with a problem | NA | 79.5 | NA | NA | NA |
| Feel they try to work out problems by talking about them | NA | 72.0 | NA | NA | NA |
| Feel they can do most things if they try | NA | 88.2 | NA | NA | NA |
| Feel they can work with someone who has different opinions than theirs | NA | 72.0 | NA | NA | NA |
| Feel they stand up for themselves without putting others down | NA | 67.2 | NA | NA | NA |
| Feel they have goals and plans for the future | NA | 86.8 | NA | NA | NA |
| Feel they are good at making decisions and following through on them | NA | 68.6 | NA | NA | NA |
| Feel they can resist negative peer pressure and dangerous situation | NA | 77.5 | NA | NA | NA |

[^0]
[^0]:    ${ }^{\mathrm{d}}+$ /-: It is not clear if this is a positive or negative change

