

2001 Michigan Youth Risk Behavior Survey

Summary



August 2002

Michigan State Board of Education

Kathleen N. Straus, *President* Sharon L. Gire, *Vice President* Michael David Warren, Jr., *Secretary* Eileen Lappin Weiser, *Treasurer* Marianne Yared McGuire, *NASBE Delegate* John C. Austin Herbert S. Moyer Sharon A. Wise

Ex-Officio Members

John Engler Governor

Thomas D. Watkins, Jr. Superintendent of Public Instruction

Michigan Department of Education Statement of Assurance of Compliance With Federal Law

The Michigan Department of Education complies with all Federal laws and regulations prohibiting discrimination, and with all requirements and regulations of the U.S. Department of Education.

Acknowledgements

This survey would not have been possible without the support and effort of many individuals concerned about the health and well-being of Michigan youth. The Michigan Department of Education is deeply indebted to the school system superintendents and administrators, school principals, classroom teachers, parents, and most importantly, the students who participated in the 2001 Michigan Youth Risk Behavior Survey (YRBS).

The project was a collaborative effort of many individuals and agencies. Sincere appreciation is expressed to these groups:

- Centers for Disease Control and Prevention, Division of Adolescent and School Health for ongoing support and technical assistance and a special thank you to Steve Kinchen for additional data analysis;
- Comprehensive School Health Coordinators for helping to facilitate district participation;
- The many individuals who provided critical informational resources and feedback during the report-writing process;
- University students and teachers for onsite survey implementation; and
- WESTAT, Inc. for sampling and data analysis.

Special thanks go to the following individuals:

- Laurie Bechhofer and Kimberly Kovalchick, Michigan Department of Education, Learning Support Unit for facilitating school participation, coordinating survey administration, and overseeing data interpretation and report writing;
- Karma Common Butler, Michigan Department of Community Health, School Health Unit for coordinating survey administration and reviewing survey results and reports;
- Lori Block, John Frisch, Paula Nettleton, and staff, Central Michigan University, Educational Materials Center for original format and illustrations; and
- Wendy L. Sellers for meticulously researching and writing the YRBS reports.

The state YRBS initiative would not be possible without the ongoing commitment, support, and oversight of several Michigan leaders:

- William Bushaw, Chief Academic Officer, Michigan Department of Education;
- Sue C. Carnell, Director, Office of School Excellence, Michigan Department of Education;
- Elizabeth C. Haller, Acting Supervisor, Learning Support Unit, Michigan Department of Education;
- Don Sweeney, Manager, School Health Unit, Michigan Department of Community Health; and
- Craig Yaldoo, Director, Office of Drug Control Policy, Michigan Department of Community Health.



In the News



Michigan Youth Are Taking Fewer Risks— Health Education Is Making a Difference!

The Michigan Department of Community Health and the Michigan Department of Education announce the percentage of young people engaging in many of the serious risk behaviors is statistically down from 1997 and 1999, according to results from the 2001 Michigan Youth Risk Behavior Survey (YRBS).

Significantly fewer teens are smoking, drinking, carrying weapons, initiating sex at an early age, and getting pregnant. Other positive trends include improved seatbelt and bike helmet use. No trends in the reverse direction were noted.

"These results clearly indicate that prevention education in our schools works because we have seen a sustained reduction in these behaviors in young people over time," said Michigan Superintendent of Public Instruction, Tom Watkins. "We are very encouraged by these results and view them as an important step toward improving academic achievement and reducing absenteeism."

"We are extremely pleased to see these positive results," said James K. Haveman, Jr., Director of the Michigan Department of Community Health. "The fact that more and more high school students are making the effort to be healthy and avoid violence and risky behaviors is great news for the citizens of Michigan."

These results are very heartening and support Michigan's school health education efforts to help curb these risk behaviors. During the past five years, Michigan has developed and disseminated middle school and high school curricula that address smoking, alcohol use, violence, HIV, nutrition, and physical activity.

Michigan is the only state in the country with a state-developed model curriculum in health education for elementary, middle, and high school students. The *Michigan Model for Comprehensive School Health Education*[®] addresses these vital health issues in successive grades, and provides students with essential knowledge and prevention skills to avoid risky behaviors and improve health. More than 90 percent of Michigan districts use the *Michigan Model for Comprehensive Health Education*[®].

"Michigan has been sustaining health education, and as a result, these statistics have continued to decline," Watkins said. "The bottom line, when analyzing these results, is that healthy students have a greater capacity to learn and are ultimately more successful in school and life."



The Youth Risk Behavior Survey: Michigan 2001

The 2001 Youth Risk Behavior Survey (YRBS) is conducted every other year in Michigan and assesses a broad range of health practices among a cross-section of the state's high school students. Michigan is one of only a handful of states with high enough response rates on three consecutive YRBS survey administrations (1997, 1999, and 2001) to have scientific trend data. The 2001 results have indicated a number of significant improvements in risk behaviors since 1997. Nevertheless, many secondary students in Michigan continue to act in ways that compromise their health and well-being.

What Is the Youth Risk Behavior Survey?

The Centers for Disease Control and Prevention (CDC) developed the Youth Risk Behavior Survey (YRBS) to track the extent of health-risk behaviors among the nation's youth. These behaviors that contribute to the leading causes of injury and death among youth and adults are often established during adolescence. The national version of the survey, launched in 1990, has been implemented every other year since 1991. A majority of the states and several large cities also conduct a YRBS, based on the national survey.

Who Were the Student Respondents?

The 2001 survey was administered to high school students in a representative sample of schools, and data were weighted so that survey results can be generalized to all high school students in Michigan. Through a scientific process, school buildings and students were selected, and the survey was administered during spring of 2001. Of the randomly selected sample, 43 public high schools (88%) participated and 3,630 students (83%) completed the survey. Parents were notified in advance and given the option to exclude their children.

Survey respondents reflect the demographics of all Michigan students in grades nine through twelve. Half were male and half were female. The largest number of students was in ninth grade, with each successive class decreasing in size. Ninth graders represented 30 percent of the sample; tenth graders, 26 percent; eleventh graders, 23 percent; and twelfth graders, 21 percent. White students made up 80 percent of the respondents; black students, 15 percent; Hispanic or Latino students, 1 percent; students of all other races, 3 percent; and students of multiple races, 2 percent.¹

What Questions Were Asked?

The 2001 Michigan survey included 99 questions covering the behaviors related to the leading causes of mortality and morbidity among both youth and adults. The CDC has grouped the behaviors into six general health risk areas:

- 1. Unintentional injury and violence;
- 2. Tobacco use;
- 3. Alcohol and other drug use;
- 4. Sexual behaviors that contribute to unintended pregnancy or disease;
- 5. Dietary behaviors; and
- 6. Physical inactivity.

Michigan added 12 questions to the 87-item national survey. Most of the additional questions were first added in 1999 and address the illegal use of specific drugs. Two of the new questions added to the Michigan survey in 2001 assessed club drug use.

The CDC made several minor changes to the 2001 national survey which is used as the basis for the 2001 Michigan survey. Specifically, some items were deleted, and the wording on other questions was modified. While new or altered questions cannot be analyzed for trends this year, they do provide valuable information and may be analyzed for trends in future years.

What Are the Limitations of the YRBS Findings?

These survey results may not represent all high school-aged youth because those who dropped out of school or attended alternative education programs were not included in the sample. Studies of alternative education students² and dropouts have reflected a significantly higher incidence of risk behaviors. This survey does accurately reflect the behaviors among the youth who attend public high schools in the state.

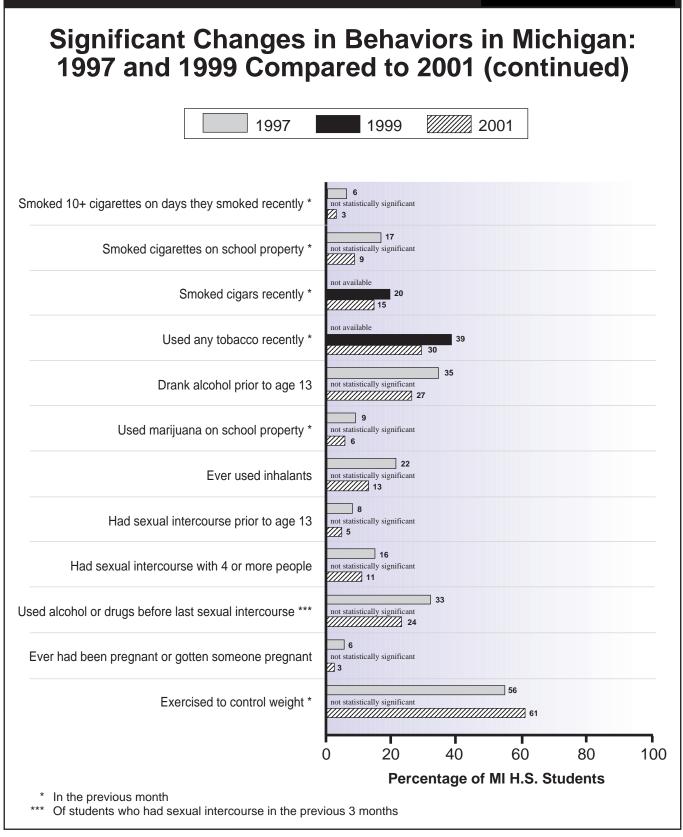
¹ To correct for any difference between the YRBS sample and the overall Michigan high school population, data were statistically weighted by the CDC. The weighted results accurately reflect the gender, grade, and race/ethnicity distribution of public high school students in Michigan. Percentages may not add up to 100 due to rounding.



What Are the Significant Changes in Behaviors?

Of the behaviors that could be compared for Michigan students between 1997 and 2001, many showed improvement. These are illustrated in the two-page figure below.

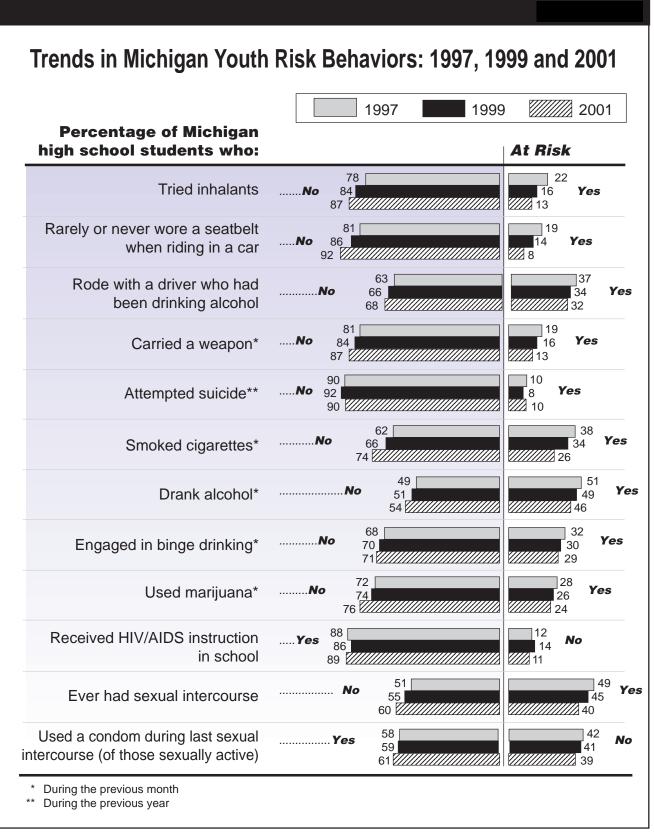
	in Behaviors in Michigan: Compared to 2001
1997	1999 2001
Rarely or never wore a bicycle helmet when riding a bike **	95 not statistically significant 89
Rarely or never wore a seat belt as a passenger	19 14 8
Carried a weapon *	19 not statistically significant
Carried a gun *	not statistically significant
Carried a weapon on school property *	8 8 222 5
Considered attempting suicide **	24 not statistically significant 18
Planned suicide **	19 not statistically significant 15
Ever tried cigarettes	75 72 64
Smoked cigarettes recently *	//////////////////////////////////////
Smoked cigarettes frequently *	13
Smoked 2+ cigarettes on days they smoked recently *	27 not statistically significant ////////////////////////////////////
	0 20 40 60 80 100
 * In the previous month ³ ** In the previous year 	Percentage of MI H.S. Students
	(continued)
<i>Previous month</i> means the 30 days preceding the survey.	



Sources: 1997, 1999 and 2001 Michigan Youth Risk Behavior Surveys



What Are the Michigan Trends?



Sources: 1997, 1999 and 2001 Michigan Youth Risk Behavior Surveys

Overview of the Summary

The discussion of the Michigan findings is organized into the CDC's six categories of risk behaviors. Overall findings are presented for most questions. Differences among males and females, grade levels, and racial/ethnic groups are only highlighted if they are statistically "significant," that is, unlikely to have occurred by chance or error.⁴ Among racial/ethnic groups, only white, black, and Hispanic students could be compared because of the overall sample size and the relatively small percentages of Michigan high school students identifying themselves as another race/ethnicity.⁵

Unintentional Injury and Violence

Vehicle Safety: Males were more likely than females to report behaviors that lead to injuries from motorcycle and automobile crashes. Older students were more likely to drive after drinking alcohol.

- Seat Belt Use: One in ten students (8%) rarely or never wore a seat belt as a passenger in a car. Twice as many males (11%) as females (6%), and black students (13%) as white students (7%) reported this behavior.
- **Bike Helmet Use:** Nine tenths of students who rode bicycles (89%) rarely or never wore a helmet in the previous year, regardless of age or sex.
- Motorcycle Helmet Use: One quarter of students who rode a motorcycle (23%) rarely or never wore a helmet in the previous year. Twice as many males (26%) as females (14%) reported this behavior.
- Under the Influence: One third of students (32%) rode in a vehicle in the previous month with a driver who had been drinking alcohol. Thirteen percent of students drove a vehicle during the previous month when they had been drinking. Twelfth graders (24%) were four times as likely as ninth graders (6%) to do so.

Depression and Suicide: Females were more likely than males to feel depressed, consider suicide, and plan suicide. Younger students and black students were more likely to attempt suicide.

- **Depression:** One quarter of students (27%) reported feeling so sad and hopeless almost every day for two weeks or more in a row within the previous year that they stopped doing some usual activities. Females (33%) were more likely than males (22%) to have felt depressed.
- Suicidal Thoughts and Plans: One in five students (18%) had seriously considered suicide in the previous year. Hispanic students (27%) were more likely than black students (15%), and females (23%) were more likely than males (13%) to have considered suicide. One in seven students (15%) had made a plan to commit suicide during the previous year, with more females (18%) than males (11%) making a plan.
- Suicide Attempts: One in ten students (10%) attempted suicide in the previous year. Ninth (13%) and tenth (12%) graders were more likely to have attempted suicide than eleventh (7%) or twelfth (7%) graders, and black students (16%) were more likely than white students (9%) to have done so.

⁵ Specific survey results for students identifying as American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, multiple—Hispanic, or multiple—Non-Hispanic, could not be included due to small sample sizes that yield relatively imprecise results with large margins of error.



⁴ Differences were considered statistically significant if p<.05.

Violence: The majority of students have not experienced violence, such as fights and threats with weapons, especially on school property. However, males were more likely to experience most forms of violence than females. Younger students and black and Hispanic students were more likely to be involved in incidents involving weapons and fights than were older students or white students.

- Weapons: Thirteen percent of students carried a weapon during the previous month. One in five males (19%) and one in twenty females (5%) reported this behavior. Fewer twelfth graders (9%) than ninth graders (14%) carried weapons. One in twenty students (5%) carried a gun in the previous month. Males (8%) were eight times more likely than females (1%), ninth graders (6%) were twice as likely as twelfth graders (3%), and black students (7%) were twice as likely as white students (5%) carried a weapon on school property, with males (7%) being four times as likely as females (2%) to report this behavior.
- Fights: One third of all high school students (34%) were in a physical fight in the previous year, with one third of those (11%) occurring on school property. More males (42%) than females (25%) fought, with twice as many males (16%) as females (7%) fighting on school property. Few students (4%) required medical treatment after being in a fight.
- Sense of Safety: Seven percent of all students reported missing school in the previous month due to feeling unsafe. Fewer white students (5%) than black (17%) and Hispanic (18%) students had missed school for this reason. One tenth of students (9%) had been threatened or injured with a weapon on school property during the previous year. More males (11%) than females (7%), black students (13%) than white students (8%), and ninth and tenth graders (11% each) than twelfth graders (4%) had been threatened.

• Relationship Violence: One in ten students (12%) reported being hit, slapped, or physically hurt by their boyfriend or girlfriend in the previous year. This was true for students of both sexes and all grades.

Tobacco Use

Many students had tried smoking cigarettes, regardless of gender, grade, or race/ethnicity. However, older students were more likely than younger students to have ever tried smoking and to have been recent, daily, and frequent smokers. Black students were less likely to use any tobacco recently, or to smoke regularly, heavily, or daily than were students of any other race/ethnicity.

- **Cigarette Use:** Nearly two thirds of Michigan high school students (64%) had ever tried smoking cigarettes. One fifth of all students (20%) reported ever smoking cigarettes daily.
- Early Cigarette Use: One quarter of students (23%) had first smoked a whole cigarette prior to age 13.
- Recent Cigarette Use: One quarter of students (26%) reported smoking during the previous month, and 13 percent smoked frequently, on 20 or more of the previous 30 days. One fifth of all students (18%) smoked regularly, that is two or more cigarettes per day, and 3 percent smoked heavily, ten or more cigarettes per day, on the days they smoked in the previous month.
- Smoking Cessation: Two thirds of current smokers (64%) have tried to quit in the previous year.
- **Cigarette Purchases:** One in ten students (9%) reported purchasing their own cigarettes in the previous month. One quarter of the current smokers who were under age 18 (25%) bought their cigarettes at a store or gas station in the previous month; nearly three-quarters of them (71%) reported purchasing cigarettes without being asked to show proof of age.

- **Recent Cigar Use:** One in seven students (15%) reported smoking a cigar or cigarillo in the previous month, with males (21%) being nearly three times as likely as females (8%) to have smoked cigars recently.
- Smokeless Tobacco Use: One fifth of all students (20%) had ever tried chewing tobacco, dip, or snuff, including 8 percent who used smokeless tobacco in the previous month. Males (12%) were four times as likely as females (3%) to have recently used.
- Tobacco Use on School Property: Of Michigan high school students, 9 percent smoked and 4 percent used smokeless tobacco on school property in the previous month. Males (7%) were seven times more likely to use smokeless tobacco on school property than females (1%).
- Any Recent Tobacco Use: Nearly one third of students (30%) reported using any form of tobacco⁶ in the previous month, with twice as many white (32%) and Hispanic (30%) students as black students (16%) doing so.

Alcohol and Other Drug Use

Alcohol: White and Hispanic students were more likely to use alcohol than black students. Older students reported more lifetime and recent alcohol use and binge drinking than younger students. Males and females were equally likely to report alcohol use behaviors.

Alcohol Use: Three quarters of all high school students (77%) had used alcohol. Ninth graders (68%) were less likely to have used than tenth (78%), eleventh (82%), or twelfth (85%) graders. Black students (68%) reported less use than white (79%) or Hispanic (86%) students.

- Recent Alcohol Use: Nearly half of all students (46%) had used alcohol in the previous month with ninth graders (37%) reporting less recent use than twelfth (57%) graders. Black students (35%) reported less recent use than white (48%) and Hispanic (59%) students.
- Early Alcohol Use: One quarter of students (27%) had their first drink of alcohol, other than a few sips, prior to age 13.
- **Binge Drinking:** Almost one third of students (29%) reported having five or more drinks of alcohol in a row during the previous month. Twelfth graders (41%) were more likely than ninth (22%) or tenth (26%) graders, and white students (32%) more likely than black students (14%) to report this behavior.
- Alcohol at School: One in twenty students (5%) reported using alcohol on school property in the previous month.

Other Drugs: White students were more likely to have ever used inhalants,⁷ barbiturates, and club drugs⁸ than black students. Males were more likely than females to have used heroin, narcotics, steroids, and injected drugs. For cocaine and methamphetamine use, and for recent marijuana, narcotic, barbiturate and club drug use, no differences by gender, grade or racial/ethnic group were found.

• Marijuana: Nearly half of Michigan high school students (44%) had tried marijuana, and one quarter (24%) had used it in the previous month. One tenth (12%) reported first use prior to age 13 with males (14%) being more likely than females (9%) to initiate early use.

⁸ *Club drugs* include ecstasy, GHB, ketamine, rohypnol, nitrous oxide, or LSD.



⁶ Any form of tobacco includes cigarettes, cigars, cigarillos, little cigars, chewing tobacco, snuff, and dip.

⁷ Inhalant use was described as sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high.

- Inhalants: Thirteen percent of students had reported trying an inhalant at least once, with white students (14%) being twice as likely as black students (7%) to do so. While 4 percent of students had reported use in the previous month, ninth graders (5%) were five times as likely as twelfth graders (1%) to have reported recent use.
- **Club Drugs:** One in seven students (15%) had tried club drugs. Twice as many white students (16%) as black students (7%), and twelfth graders (22%) as ninth (11%) and tenth (12%) graders reported use. Nearly one in ten students (8%) had used club drugs in the previous month.
- Other Drug Use: Seventeen percent of students had tried barbiturates; 11 percent narcotics; 8 percent cocaine; 8 percent methamphetamines; 4 percent steroids; 3 percent heroin; and 2 percent injected illegal drugs at least once during their lives. Within the previous month, 10 percent of students had used barbiturates; 5 percent narcotics; 4 percent cocaine; 3 percent steroids; and 2 percent heroin.
- Illegal Drugs at School: One third of students (36%) reported being offered, sold, or given an illegal drug on school property during the previous year. One in twenty (6%) had used marijuana on school property in the previous month. These behaviors were consistent regardless of gender, grade, or race/ethnicity.

Sexual Behaviors

Older students and black students were more likely to have had sexual intercourse ever, recent sexual intercourse, and multiple partners. More females had been forced to have sex, had first intercourse with someone three or more years older, and had sex recently. Black students reported more pregnancy and early initiation of sex, and were less likely to have learned about HIV infection and AIDS in school.

- Education at Home and School: Two thirds of students (69%) reported having talked with parents or other adult family members about expected sexual behavior, but fewer males (65%) than females (74%) had these discussions. Nine-tenths of all students (89%) had reported learning about HIV infection and AIDS in school.
- **Abstinence:** Six of ten high school students (60%) have never had sexual intercourse.
- Sexual Intercourse: Forty percent of all students have ever had sex. Of these, 26 percent had been abstinent the previous three months. The percentage of students who have had sexual intercourse increases across grade levels: ninth graders (26%), tenth graders (37%), eleventh graders (44%), and twelfth graders (59%). More black students (58%) than white students (37%) had sexual intercourse.
- **Recent Sexual Intercourse:** Seventy-five percent of the students who had ever had sexual intercourse reported having sex in the previous three months.

- Risk Reduction: Of those who reported having sexual intercourse within the previous three months, 61 percent used a condom at last intercourse and 22 percent used birth control pills. More males (67%) than females (56%) had used condoms. More white students (25%) than black students (7%), and more twelfth (30%) and eleventh (25%) graders than tenth (15%) and ninth graders (11%) had used birth control pills.
- Early Initiation: One in twenty high school students (5%) first had sexual intercourse prior to age 13. Black students (15%) were three times as likely as white students (3%) to report early initiation.
- **Multiple Partners:** One in ten students (11%) reported having had sex with four or more people in their lifetime. Black students (21%) were more likely than white students (9%), and twelfth graders (16%) were more likely than ninth (7%), tenth (10%) or eleventh (10%) graders to have had multiple partners.
- Older Partner: One quarter of those who have had sexual intercourse (25%) reported that their first partner was three or more years older. Females (35%) were more likely than males (14%) to have had this experience.
- Sex While Under the Influence: One quarter of all students (24%) have had sex while under the influence of alcohol or other drugs during the previous three months. This is consistent for all grades, races, and genders.
- Forced Sex: One in ten high school students (10%) had been physically forced to have sexual intercourse. This was reported by nearly twice as many females (12%) as males (7%).
- **Pregnancy:** Three percent of all students reported they had been pregnant or gotten someone pregnant. Hispanic (10%) and black (7%) students reported pregnancy more often than white students (2%).

Dietary Behaviors and Weight Control

Females and white students were more likely to perceive themselves as being overweight,⁹ but they were less likely to actually be overweight than males and black students. Females were also more likely to exercise, diet, fast, vomit, and take diet pills or laxatives to control weight.

- Weight–Perception Versus Reality: One third of Michigan high school students (31%) described themselves as slightly or very overweight. Females (37%) were more likely than males (25%), and Hispanic students (45%) were more likely than black (27%) or white (31%) students to use these descriptors. Based on self-reported height and weight information, 11 percent of students were actually overweight, with more males (14%) than females (8%) and more black students (17%) than white students (10%) being overweight. Another 13 percent of students are at risk of overweight.¹⁰
- Weight Loss: Almost half of the students (46%) reported trying to lose weight. Twice as many females (62%) as males (30%) reported this behavior.
- Weight Control: Three out of five students (61%) reported exercising within the previous month for weight control. More females (71%) than males (52%) used this strategy. More than two in five students (43%) reported dieting, with females (57%) more than twice as likely to use this method as males (28%).
- Unhealthy Weight Control: During the previous month, 14 percent of students fasted at least 24 hours to control weight; 10 percent used diet pills, powders, or liquids without a doctor's advice; and 8 percent vomited or used laxatives.

⁹ Overweight is defined by the CDC as a Body Mass Index (BMI) greater than or equal to 95 percent. BMI was calculated using the height and weight questions answered by each respondent.

¹⁰ At risk of overweight is defined by the CDC as a Body Mass Index (BMI) greater than or equal to 85 percent and less than 95 percent.

- **Five Servings a Day:** One in five students (21%) reported eating five or more servings of fruits and vegetables each day during the previous week.¹¹
- Milk Consumption: One in five students (20%) reported drinking three or more glasses of milk each day during the previous week, with twice as many males (27%) as females (14%) and white students (22%) as black students (10%) drinking milk.

Physical Inactivity

Female and black students were less likely than their male and white counterparts to participate in moderate¹² or vigorous¹³ physical activities and muscle toning exercises. Older students were less likely to attend physical education classes weekly or daily.

- Vigorous Activity: Two thirds of Michigan high school students (65%) participated in vigorous physical activities, lasting at least 20 minutes, on three or more of the past seven days. More males (72%) than females (57%) and more white students (68%) than black students (48%) reported this activity.
- Lack of Physical Activity: One third of all students (31%) did not get the recommended amount of moderate and vigorous physical activity in the previous week. This lack of physical activity was reported by more females (37%) than males (25%), and more black students (46%) than white students (28%). One in ten students (10%) did not get any physical activity, including twice as many black students (19%) as white students (8%).
- **Physical Education:** Forty-four percent of students attended physical education (PE) class at least once a week. More males (50%)

than females (38%) and more ninth graders (67%) than tenth (40%), eleventh (27%), or twelfth (35%) graders attended class. Only 29 percent of students attended PE class five days a week. More ninth graders (46%) than tenth (25%), eleventh (18%), or twelfth (24%) graders attended class daily. Of the students who attended PE class, four of five (83%) reported exercising or playing sports more than 20 minutes during an average class.

- **Sports Teams:** Two out of five students (39%) reported not participating in any team sports during the previous year. White students (63%) were more likely to have played on a team than black students (48%).
- Watching Television¹⁴: One third of students (31%) reported watching television three or more hours on an average school day. Ninth (35%) and tenth (36%) graders were more likely than twelfth graders (22%) to watch television. Black (57%) and Hispanic (47%) students were approximately twice as likely as white students (26%) to report this amount of television viewing.

Annual Check-Up or Physical Exam One third of students (34%) reported not having an annual check-up or physical exam within the previous year. Thirteen percent reported having had a check-up between 12 and 24 months ago; 7 percent, more than two years ago; and 5 percent, never.

¹⁴ Research has shown that those who habitually watch television are less likely to be physically active.



¹¹ Previous week means the seven days preceding the survey.

¹² *Moderate physical activities* are defined as participation in activities that do not make the participant sweat and breathe hard. The recommended amount is at least 30 minutes of activity on five or more days a week.

¹³ *Vigorous physical activities* are defined as exercise or participation in physical activities that make the participant sweat and breathe hard. The recommended amount is at least 20 minutes of activity on three or more days a week.

Summary & Recommendations

The findings for the 2001 Michigan YRBS reveal positive trends in the health behaviors of our youth. Statistically significant improvements can be seen in many behaviors, such as smoking, safety, and sexual risk-taking. Although numerous positive changes have occurred, it was also clear that large percentages of Michigan high school students continue to engage in risky behaviors. Although the trends are positive, too many young people in the state continue to engage in risky behaviors. Overall, these practices of Michigan students are consistent with those of their national counterparts. The analysis of trends and patterns found in these behaviors can guide the use of limited resources for prevention and intervention programs. School- and community-based programs play a critical role in the promotion of healthy behaviors and alternatives for youth. The YRBS data and the larger body of research regarding effective programming point to the following recommendations:

Michigan should continue and expand ageappropriate and research-based prevention, including health education. Trends continue to move in a positive direction; this overall finding suggests that current initiatives should be reinforced and expanded. Studies indicate that students need information plus the necessary skills to make healthy choices. Risk behaviors compromise the health of students and their capacity to be successful learners.

Health education and prevention programs must start early and be comprehensive. Large numbers of Michigan high school students initiate risk behaviors early. Early prevention and health education programs–during the elementary and middle school years–can help prevent early experimentation. Many unhealthy behaviors, such as smoking, are difficult to change once initiated.

Prevention and health education should continue throughout the high school years. Often, programs stop at ninth or tenth grade, just when risky behaviors begin to escalate. Many risk behaviors, such as smoking, binge drinking, initiation of sex, and physical inactivity, are more prevalent among twelfth graders than ninth graders. Interventions are also needed for ninth graders as they transition into high school, as data indicates that they are more likely to fight, experience depression, and plan and attempt suicide than older students. Parents and community members have critical roles in promoting healthy behaviors among children and youth. Parents and other significant adults are role models and can encourage students to practice healthy behaviors. Relatively large numbers of students do not get enough physical activity and spend their leisure time watching television. Supervised activities with caring adults during non-school hours provide healthy alternatives for students and opportunities to enhance their physical, mental, and emotional well-being.

Frevention efforts should focus on the specific needs of students by grade, gender, and race/ethnicity to achieve maximum impact. Research has demonstrated that effective programs are tailored to the specific needs of participants, and include content and approaches that are developmentally and culturally appropriate. Almost all of the behaviors measured on the YRBS show differences by grade, gender, and race/ethnicity that should be considered by program planners.

Schools should implement programs and enforce policies to eliminate violent behavior and tobacco, alcohol, and other drug use on school property. State and local policies support safe and drug-free schools. Strategies should also focus on offering in-school prevention and intervention programs that help reduce these behaviors. For example, as a result of prevention programs, the percentage of students who have ever tried smoking has dropped significantly. The majority of those who do smoke have expressed a desire to quit; school-sponsored tobacco cessation programs can support these students as they try to reduce or stop smoking.

State and local health and education agencies should use available data to take action. Whenever possible, communities should use existing data, such as the Michigan YRBS, and direct limited resources into programming. Most youth risk behaviors do not vary significantly from community to community. Therefore, schools and communities do not always need to conduct additional surveys in order to develop and implement action plans.

Requests for Information:



Michigan Department of Education Office of School Excellence Learning Support Unit P.O. Box 30008 Lansing, MI 48909

(517) 241-4284 http://www.michigan.gov/mde

"Show me how this helps teachers teach and children learn." MICHIGAN DEPARTMENT OF EDUCATION DECISION MAKING YARDSTICK 2001



This publication was developed under cooperative agreement No. U87/CCU509017-10 with the U. S. Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health, Atlanta, GA, 30333. Its contents are solely the responsibility of the Michigan Department of Education and do not necessarily reflect the official views of the U.S. Centers for Disease Control and Prevention.