



## **Results on School Policies and Programs**

### **Overview of Key Findings**

**2008**

*A Study Supported by the Robert Wood Johnson Foundation*

**YOUTH, EDUCATION, AND SOCIETY**  
**RESULTS ON SCHOOL POLICIES AND PROGRAMS**

**Overview of Key Findings, 2008**

**by**

**Lloyd D. Johnston  
Patrick M. O'Malley  
Jerald G. Bachman  
John E. Schulenberg**

**The University of Michigan  
Institute for Social Research**

**A Study Supported by the Robert Wood Johnson Foundation**

**2009**

## **Acknowledgments**

Funding for the Youth, Education, and Society (YES) project is provided by the Robert Wood Johnson Foundation. It is part of a larger research initiative of the Foundation, entitled Bridging the Gap.

Several staff members on the YES project provided valuable assistance in the preparation of this report: Jonathon Brenner carried out the analyses, assisted with the writing, and oversaw the production; Ginny Laetz assisted with the writing.

## Contents

<b>Acknowledgments .....</b>	<b>ii</b>
<b>Executive Summary .....</b>	<b>v</b>
What School Factors Are Associated With Fewer ATOD Problems?.....	v
How Common Is School Drug Testing of Students?.....	v
Physical Education in Schools: What Are Schools Doing?.....	v
What Are the Most Common Nutritional Policies and Practices in Schools?.....	v
<b>Project Description .....</b>	<b>1</b>
The Purpose of the Project.....	1
A Description of the Questionnaire .....	1
A Description of Participating Schools.....	1
<b>Alcohol, Tobacco, and Other Drug Use: Challenges in Today’s Schools .....</b>	<b>2</b>
<b>Ratings of School Problems .....</b>	<b>2</b>
Comparison of Public and Private Schools.....	3
Comparison of Middle Schools and High Schools .....	3
<b>Meeting the Challenge of ATOD Use in Schools .....</b>	<b>4</b>
Barriers to Implementing Substance Abuse Prevention Programs .....	4
School Factors Related to ATOD Problems .....	4
1. School Services.....	4
2. Professional Care Providers.....	5
3. Racial Composition .....	5
4. Staff Smoking .....	5
5. School Uniforms .....	5
6. Parental Involvement .....	5
<b>Resources Available to Address ATOD Problems .....</b>	<b>6</b>
Counseling Staff and Services .....	6
School Programs and Services.....	7
Tobacco Cessation Services .....	7
ATOD Prevention Programs.....	7
<b>School Drug-Testing Policies and Procedures .....</b>	<b>8</b>
<b>ATOD Summary.....</b>	<b>8</b>
<b>Student Participation in Physical Education .....</b>	<b>10</b>
Promoting Physical Activity and Fitness.....	10
Physical Education Summary .....	10
<b>Food and Nutrition Policies and Programs in Schools.....</b>	<b>11</b>
School Meal Planning.....	11
School Lunch Options.....	11
Vending Machines, Snack Bars/Carts, School Store .....	12
Food Vending Provided by a Company .....	12

Food and Beverage Vending Decisions and Profits..... 13

Exclusive Beverage Contracts ..... 15

Efforts to Improve Student Nutrition ..... 16

School Wellness Policies ..... 17

Effectiveness of School Wellness Policies ..... 18

**Food and Nutrition Summary ..... 18**

**Conclusions..... 19**

## Executive Summary

Today's school administrators face multiple challenges, from raising accountability and achievement standards to creating safe, drug-free learning environments and, more recently, to attending to the growing problem of obesity among youth. This report provides key findings from the Youth, Education, and Society (YES) study of school policies concerning physical education (PE) and nutrition as well as alcohol, tobacco, and other drug (ATOD) prevention programs and school activities. The following are some of the highlights from the 2008 nationwide survey:

### What School Factors Are Associated With Fewer ATOD Problems?

According to our Analyses of the Data from the School Administrators Surveyed . . .

- Less staff smoking, and more parental involvement are associated with fewer reported ATOD problems.
- Schools in which African-American students are in the majority showed lower than average ATOD use.

### How Common Is School Drug Testing of Students?

According to School Administrators Surveyed . . .

- In 2008, one in four schools (23%) conducted some type of drug testing of students.
- Suspicion or cause was the most common reason for drug testing, followed by athletic team membership.

### Physical Education in Schools: What Are Schools Doing?

According to School Administrators Surveyed . . .

- The majority of schools (61%) require PE for the surveyed grade (8, 10, or 12), but the percentage of schools that require PE varied considerably depending on grade level, with PE much less likely to be required in higher grades.
- Nearly half of the schools reported that they give physical fitness tests to the students in their surveyed grade.

### What Are the Most Common Nutritional Policies and Practices in Schools?

According to School Administrators Surveyed . . .

- Most schools (80%) participate in the USDA reimbursable National School Lunch Program, but only about one third (35%) participate in the USDA-sponsored Team Nutrition program.
- High schools are more likely to have vending machines and school stores than middle schools, and middle schools are more likely than high schools to restrict access to soft drink vending machines.



## Project Description

### The Purpose of the Project

The School Policies and Programs Questionnaire was administered in a national sample of schools in order to collect information about how school policies and prevention programs affect young people's behavior and attitudes regarding alcohol, tobacco, and other drug (ATOD) use. Questions about school activities and policies regarding physical education (PE) and nutrition were added in 2003 and 2004, respectively. Ultimately, the goal of this project is to determine which policies and programs are most effective in reducing students' obesity levels and ATOD use and to inform policymakers and school administrators of the results.

### A Description of the Questionnaire

The School Policies and Programs Questionnaire was mailed in the spring and summer of 2008. The project has collected information on ATOD since 1998, PE since 2003, and nutrition since 2004. The information presented in this report reflects responses to the 2008 survey. On some occasions, comparisons over the 11-year period are drawn for the ATOD data. The questionnaire asked about the following:

- General characteristics of the school, teaching staff, and students
- Resources available to students in the school and local community
- PE programs
- School nutrition policies and programs
- School policies regarding alcohol, tobacco, and other drug use
- Types of ATOD prevention programs taught in the school (and/or its feeder schools)

### A Description of Participating Schools

A total of 168 secondary schools across the nation participated in the YES study in 2008, reflecting a response rate of 83%. The schools selected to be surveyed came from a national sample of schools cycling out of the Monitoring the Future (MTF) student survey after two years of participation (i.e., in 2007 and 2008). At each grade (8, 10, and 12), an independent sample of schools was invited to participate in the MTF study. They were drawn originally with probability proportionate to estimated school size. The 2008 YES survey of school administrators contained:

- 139 public and 29 private schools
- 61 junior high/middle schools and 107 high schools
- 34 schools from the Northeast region, 46 schools from the Midwest, 54 schools from the South, and 34 schools from the West

The primary respondents to the questionnaire were school principals (73%), followed by counselors, teachers, and other school administrators. In most cases, however, the primary respondents at schools relied on additional school staff to help gather information to complete the questionnaire.

## Alcohol, Tobacco, and Other Drug Use: Challenges in Today’s Schools

### Ratings of School Problems

We asked respondents to rate the severity of various problems in their school on a scale of 1 (“not a problem”) to 5 (“a serious problem”).

**The Percentage and Average Ratings on School Problems**

Type of Problem	Not a Problem		Somewhat of a Problem		A Serious Problem	Average Rating (1–5)
	1	2	3	4	5	
Academic underachievement	10%	30%	35%	17%	8%	<b>2.8</b>
Student disrespect of teachers	23%	43%	25%	7%	2%	<b>2.2</b>
ATOD use	32%	34%	23%	11%	0%	<b>2.1</b>
Gang activity	60%	21%	14%	3%	2%	<b>1.7</b>
School violence	52%	37%	10%	1%	0%	<b>1.6</b>
Racial tension among students	56%	31%	10%	2%	1%	<b>1.6</b>

Of the six types of problems, respondents reported that academic underachievement, student disrespect of teachers, and ATOD use by students were the most serious problems in their schools. In eight of the eleven years of the survey, the ATOD problem ranked second only to academic underachievement.

In 2008, respondents were asked to rate separately the severity of the alcohol, tobacco, and illicit drug use problems that their school faced:

- Percent of schools that reported **alcohol** use was at least somewhat of a problem: 39%
- Percent of schools that reported **tobacco** use was at least somewhat of a problem: 34%
- Percent of schools that reported **illicit drug** use was at least somewhat of a problem: 28%

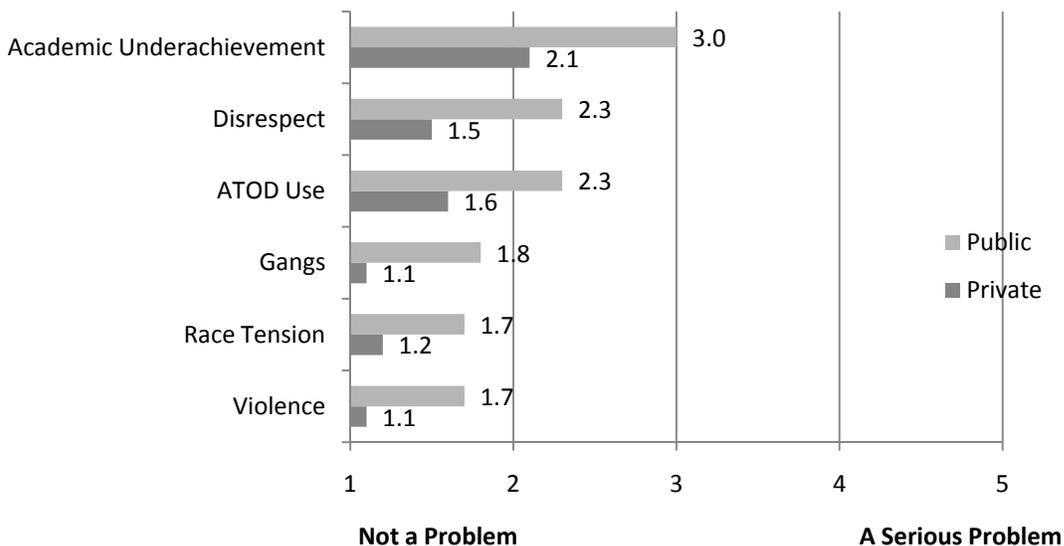
According to administrators’ ratings, alcohol use was the most serious ATOD problem in both private and public schools.

Gang activity, school violence, and racial tension among students were not considered a serious problem in most schools.

### Comparison of Public and Private Schools

In the figure below, we compare the average rating of each problem for public and private schools. Administrators in public schools reported **significantly more** challenges than administrators in private schools for most problems listed.

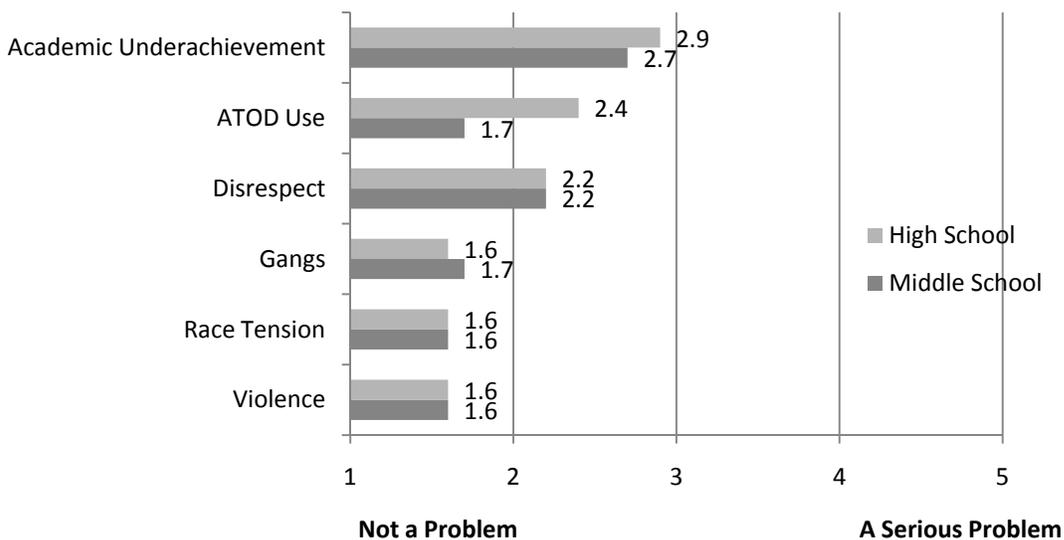
Average Rating on Various School Problems for Public and Private Schools



### Comparison of Middle Schools and High Schools

We also compared how administrators in middle schools and high schools rated each of these problems. One problem that differed **significantly** between middle and high schools was reported ATOD use—respondents from high schools rated this as a more serious problem than did respondents from middle schools.

Average Rating on Various School Problems for High Schools and Middle Schools



## Meeting the Challenge of ATOD Use in Schools

### Barriers to Implementing Substance Abuse Prevention Programs

In the 2008 questionnaire, we asked respondents about potential barriers to implementing ATOD prevention programs in their schools. The table below shows the percentages of respondents that identified the following as important barriers to implementing prevention curricula:

Important Barrier	Percent of Schools
Competing demands for teaching other subject areas	65%
Lack of time for teacher training	47%
Lack of money/resources for teacher training	44%
Lack of money/resources for purchasing instructional materials	39%
Substance use prevention not a high priority for teachers	22%
Lack of adequate instructional materials	20%
Substance use prevention not a high priority for school or district administrators	18%
Inability to identify an effective program	17%
Resistance from parents for teaching substance use prevention	5%

Respondents reported that competing demands and lack of time and resources are the most important barriers to teaching drug use prevention in schools today. These results hold true across public, private, middle, and high schools.

### School Factors Related to ATOD Problems

We asked respondents about many school resources and practices, and we examined whether any of these resources and practices are **related** to the school ATOD problems. Note that the relationships are associations, which do not prove causation. When looking at all 11 years of survey data, we found the following associations:

#### 1. School Services

Initially, we found a positive relationship between reported ATOD problems and the total number of counseling and prevention services available. (The full list of school services is illustrated in the figure on page 6.) Schools that reported **more ATOD problems** offered **more counseling and prevention services**. The services in some schools may have exposed existing problems or may have been established in reaction to drug use or other student problems. However, in a recent paper, we found little consistent evidence (after controlling for various school and student-body characteristics) that counseling and prevention service availability or use was associated with substance abuse among students.<sup>1</sup>

<sup>1</sup> Terry-McElrath, Y. M., Johnston, L. D., O'Malley, P. M., & Yamaguchi, R. (2005). Substance abuse counseling services in secondary schools: A national study of schools and students, 1999-2003. *Journal of School Health*.

## 2. Professional Care Providers

Respondents were asked to indicate which professional care providers were employed in their school. (The full list of care providers is illustrated in the figure on page 6.) The ratio of professional, full-time care providers to students is related to the severity of the ATOD problem in schools, although it is a very weak relationship. The **more care providers**, the **higher** the reported ATOD problem in schools, suggesting that more care providers are made available in schools with the most pressing need.

## 3. Racial Composition

There is a strong relationship between racial composition and reported ATOD problems in all types of schools. Schools that had **more African-American students** were **much less** likely to report problems with student ATOD use than schools with primarily White students. This relationship is consistent with findings from the Monitoring the Future study that African-American students have far lower rates of smoking, drinking, and drug use on average than White students.<sup>2</sup>

We also found that **poorer race relations** are strongly correlated with **higher** reported ATOD problems in all types of schools.

## 4. Staff Smoking

We asked respondents if there was a location in their school or on school grounds where staff members are permitted to smoke, and what percentage of staff smoke regularly. When all 11 years of data were combined, we found that private schools are more likely than public schools to allow staff smoking at school. In private schools where staff members were permitted to smoke on school property, respondents were more likely to report student ATOD problems than in private schools where staff members were not permitted to smoke. There were no differences in public schools.

When asked what percent of staff smoked regularly, public schools that had a **higher percentage of staff smokers** also reported **greater** tobacco use problems among students. So, it appears that smoking by faculty and staff may have a modeling effect on students with regard to smoking.

## 5. School Uniforms

Respondents were asked if students in the school were required to wear specific school uniforms. In 2008, one in four schools (23%) required school uniforms (11% of public schools and 79% of private schools). We found that these schools reported a significantly lower ATOD problem than schools that did not require students to wear uniforms. However, this finding was no longer significant after controlling for whether they were middle schools and/or private schools. Hence, the effect of school uniforms on ATOD problems is most likely due to the characteristics of the schools that require uniforms rather than the use of uniforms per se.

## 6. Parental Involvement

We found that **greater parental involvement** in schools was significantly related to **lower** reported tobacco and illicit drug use problems among students across all 11 years of our study. This relationship was particularly significant for middle schools and public schools.

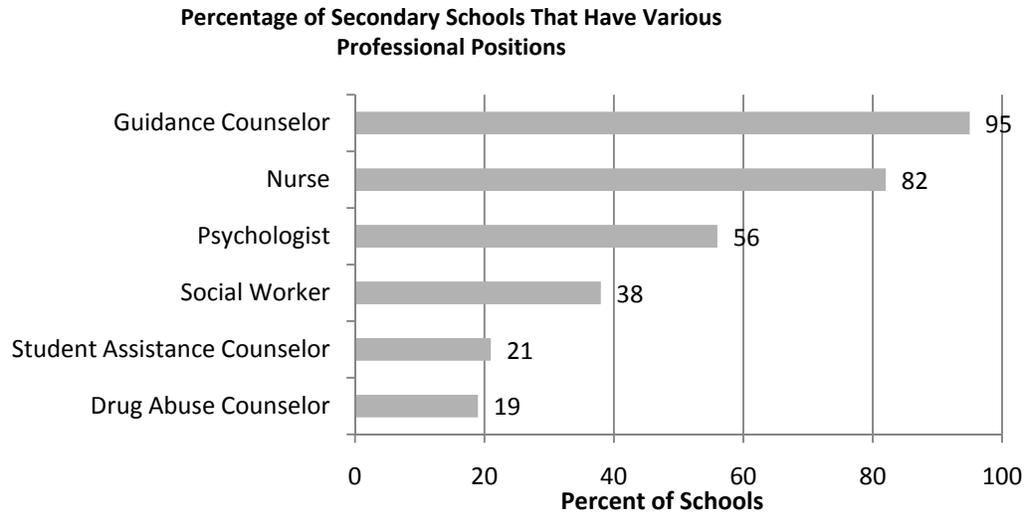
---

<sup>2</sup> Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2008). *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2007* (NIH Publication No. 08-6418). Bethesda, MD: National Institute on Drug Abuse.

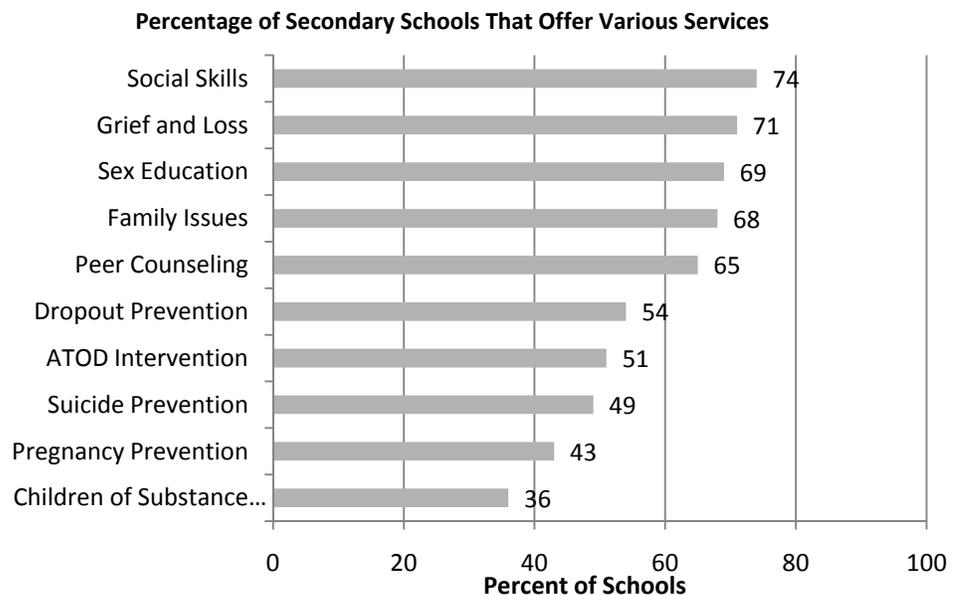
## Resources Available to Address ATOD Problems

### Counseling Staff and Services

The questionnaire included an item asking which **health care providers** and **other professionals** were available to students. While only 19% of schools said they had a drug abuse counselor, 51% of schools reported offering counseling to students who are substance abusers. Where there was no drug abuse counselor, this type of counseling was carried out by the school guidance counselor, other staff members, or outside counseling services.



We also asked whether specific **counseling and prevention services** were offered to students. The majority of schools offered each of the services listed, with the exceptions of suicide prevention, pregnancy prevention, and counseling for the children of substance abusers.



## School Programs and Services

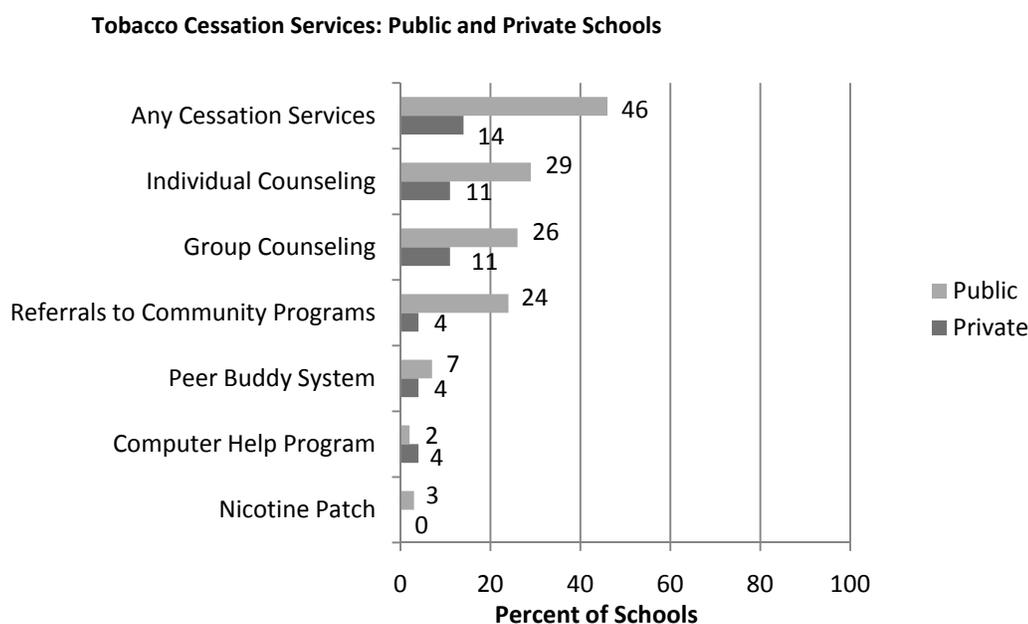
We found that schools in our sample have a variety of ways to deal with their ATOD problems. Responses include the following:

- Personalized ATOD intervention counseling services offered in the school and referrals to services outside the school
- School-sponsored extracurricular activities and groups to divert students from drug use
- Community-sponsored groups and activities
- Commercially and locally developed prevention programs taught in the classroom on a regular basis to all or most students

Some of these measures and their relation to other school issues are described next.

## Tobacco Cessation Services

We asked respondents about the specific types of tobacco cessation services available to students. Although the majority of schools surveyed in 2008 offered no services, public schools were more likely to offer some kind of tobacco cessation service to their students than private schools. The graph below illustrates the percentage of schools that offered each service.



## ATOD Prevention Programs

Commercially and locally developed prevention programs were taught in the classroom on a regular basis to all or most students. Many schools used locally- or state-developed curriculum materials in teaching ATOD prevention to their students rather than packaged, commercially sold programs.

- Most schools (70%) taught ATOD prevention programs in health education classes.

- The majority of schools (52%) also taught ATOD prevention programs in regular classes other than health education.
- About one third of schools (29%) reported teaching additional ATOD prevention programs aside from those taught in regular classes.

D.A.R.E. was the most popular commercial ATOD prevention program taught in schools. Less than half of 2008 schools (42%) reported that their students were taught the D.A.R.E. program, but that percentage has been on the decline since 2002 when the majority of schools (62%) reported that their students were taught D.A.R.E.

## School Drug-Testing Policies and Procedures

Drug testing of students is still not a common practice in schools across the country. In 2008, only 23% (39 schools) of the surveyed secondary schools said that they did *any* type of student drug testing. The table below shows the percentage of schools that tested particular student groups. (Some schools tested more than one group of students.) Testing students based on suspicion or cause was the most common reason for drug testing, followed by testing students on an athletic team.

Groups Tested	Percent of Schools
Students based on suspicion or cause	14%
Students on an athletic team	10%
Students in other extracurricular activities	7%
Students who volunteered for testing	7%
Students randomly selected from among all students	4%
Students on school probation	2%
All students	1%

In 2008, twenty-one schools (13%) reported using **at least one method** for carrying out **random** drug tests on student athletes, students in extracurricular activities, student drivers, or a sample of all students. Most of the schools used urine tests (18 schools), one used a hair test, and one used an oral swab. Three schools (2%) reported testing student athletes for anabolic steroids.

## ATOD Summary

While academic underachievement is the most highly rated problem facing schools, administrators in our study still identified ATOD prevention as an important issue. Respondents also indicated that there are critical barriers to implementing effective ATOD prevention programs in schools, most importantly competing demands and lack of time and resources. These results hold true across public, private, middle, and high schools.

School factors correlated with more ATOD problems include more school services and professional care providers, staff smoking, and poorer race relations. Factors correlated with fewer ATOD problems include greater parental involvement, and greater percentages of African-American students. Obviously, these relationships may not all reflect a causal association.

Most schools use locally or state-developed curriculum materials in teaching ATOD prevention to their students rather than packaged, commercially sold programs. In some cases, elements of various commercial programs are combined with locally developed programs. Usually ATOD prevention is taught in health education classes. Nearly half of the schools in 2008 reported their students were taught D.A.R.E., but, as previously mentioned, that percentage has been on the decline since 2002.

In this year's survey, 23% of the schools conducted some type of drug testing. While some schools test more than one group of students, school administrators reported that suspicion or cause was the most common reason for drug testing, followed by athletic team membership. Very few schools (2%) reported testing for anabolic steroids.

## Student Participation in Physical Education

In 2008, school administrators were asked about student participation in physical education (PE) classes at the survey target grade level in their school—8th, 10th, or 12th grade. School administrators were asked whether their school required PE, what percentage of students took PE, how many days per week the students had PE class, the normal length of PE classes, and what percentage of boys and girls were involved in interscholastic/varsity sports or intramural sports/physical activity clubs. Below are the average or proportional responses for each of the questions on PE **for the total sample of schools:**

- Percent of schools that required PE: 61%
- Average percent of students who took PE: 67%
- Average number of days of PE class per week: 4 days
- Normal length of PE class: 55 minutes
- Average percent of boys in interscholastic/varsity sports: 39%
- Average percent of girls in interscholastic/varsity sports: 35%
- Average percent of boys in intramural sports or physical activity clubs: 18%
- Average percent of girls in intramural sports or physical activity clubs: 16%

Overall, 61% of the schools required PE for the target grade, but the percentage decreased sharply at higher grade levels.

### Promoting Physical Activity and Fitness

In 2008, nearly half (46%) of schools reported that significant activities were underway to promote physical activity among students. These efforts were often part of a comprehensive school wellness policy that was being implemented to promote a lifetime of good health.

Nearly half (48%) of sample schools reported that they gave **physical fitness tests** to students in their sample grade. One in four schools (28%) currently measures students' **body mass index (BMI)**. A majority of schools that gave fitness tests and measured BMI provided the results to parents or guardians.

Middle schools were more likely to report significant activities underway in their schools to promote physical activity, to require PE, and to give physical fitness tests than were high schools in the study. Middle schools were also more likely to provide the results of the BMI tests to parents or guardians.

### Physical Education Summary

A large percent of schools (61%) require PE for the target grade; this percentage decreases sharply at higher grade levels. Nearly half of the sample schools reported that they gave physical fitness tests, and one in four reported that they measured students' BMI. And, nearly half (46%) of sample schools reported that significant activities were underway to promote physical activity among students.

## Food and Nutrition Policies and Programs in Schools

In 2008, school administrators were asked a number of questions about school food and nutrition programs in their school. Food service managers were the primary respondents for this section of the questionnaire. The following are some of the interesting findings to emerge:

### School Meal Planning

The vast majority of schools (99%) reported offering lunch to students, while somewhat fewer (80%) offered breakfast. At lunch time, à la carte items were available in eight of ten schools (78%); high schools were only slightly more likely to offer à la carte items than middle schools.

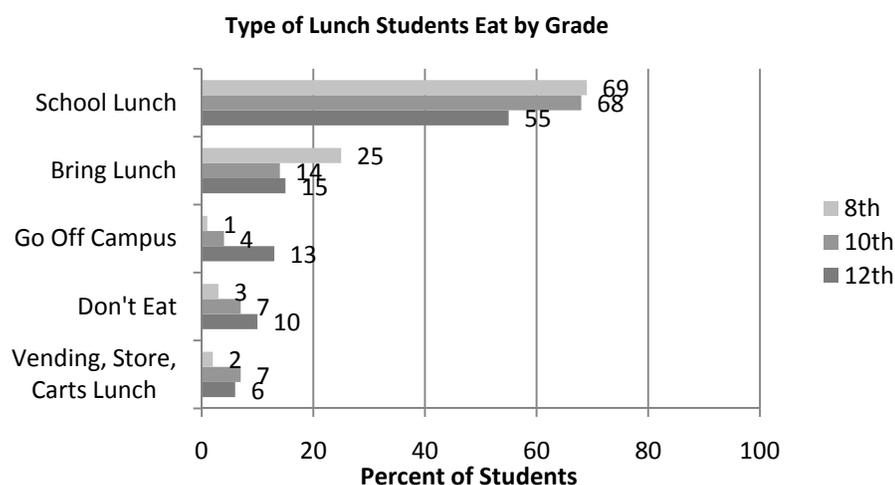
Most schools (80%) participated in the USDA reimbursable National School Lunch Program, but only one third (35%) participated in the USDA-sponsored Team Nutrition program. Most schools reported that food service menu decisions were made at the district level, while 32% reported that their school was involved in the decision making, and 16% reported that external contractors were involved.

### School Lunch Options

School administrators were asked what percentage of students in their target grade—8th, 10th, or 12th—ate lunch offered by the school, brought their lunch, went off campus to buy lunch, did not eat, or ate food from vending machines, a school store, or snack bars/carts. Here are the average responses for all schools in the sample:

- Percent of students who ate the school lunch (including à la carte): 65%
- Percent of students who brought their own lunch: 19%
- Percent of students who do not eat lunch: 6%
- Percent of students who went off campus to buy lunch: 5%
- Percent of students who buy lunch from vending machines, store, or snack bar/carts: 4%

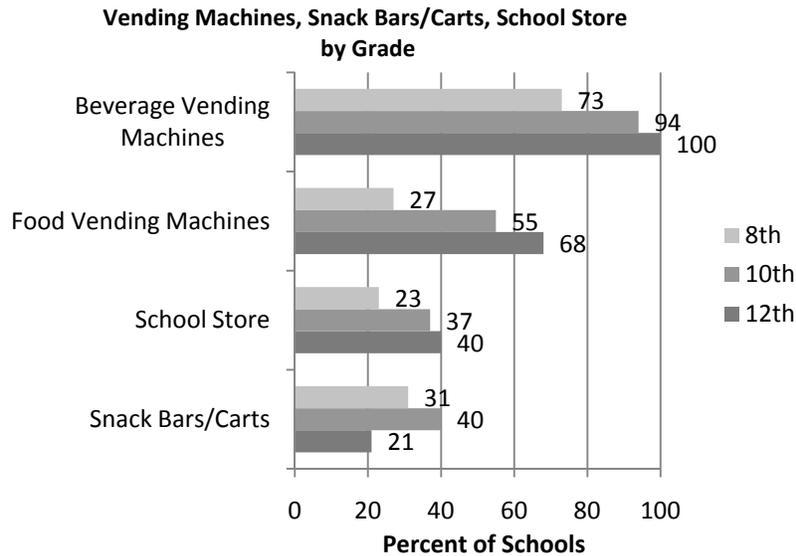
High school students were more likely than middle school students to go off campus to buy lunch, or to choose some other option such as not eating, or eating only from vending machines, a school store, or snack bars/carts.



### Vending Machines, Snack Bars/Carts, School Store

Vending machines selling beverages were available in seven of eight schools (87%), and vending machines selling food or snacks were available in about half (47%). About half (48%) of high schools reported selling regular soft drinks from one of these venues.

When school responses were compared by their survey target grade, we found that high schools were more likely to have vending machines and school stores than were middle schools.

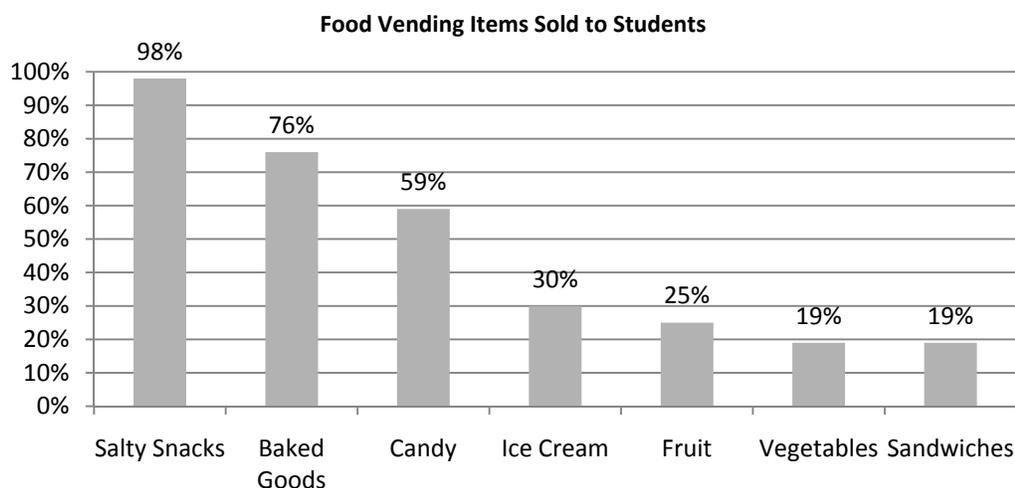


During the school day, middle schools were more likely to restrict access to their soft drink vending machines than were high schools.

### Food Vending Provided by a Company

Since 2006, fewer schools report having food vending machines for students. In 2006 the majority of schools (63%) had food vending machines, but by 2008 that percentage had declined to 47%. Among schools with food vending machines in 2008, most schools (80%) allow a vending company or soft drink bottler to sell food items in their student vending machines.

We asked the schools that allow a company to sell items in their food vending machines what specific items were offered. The following food items (in order of frequency) were offered to students: salty snack items (chips, Fritos, crackers, pretzels, etc.); sweet baked goods (cookies, cakes, etc.); candy; ice cream or frozen yogurt; fruit; vegetables; and sandwiches.



Administrators in schools that allow companies to sell food items in student vending machines were also asked who provided the specific items for sale—a soft drink bottler, a vending company, or the school itself. Overall, vending companies (rather than soft drink bottlers or the school itself) were most often responsible for providing the items that were available in food vending machines. This was especially true for the less-healthy snack items offered in food vending machines in 2008:

- When some kind of salty snack item(s) (chips, Fritos, crackers, or pretzels, etc.) was offered, 78% of schools reported that it was provided by vending companies.
- When candy was offered, 86% of schools reported that it was provided by vending companies.
- When some kind(s) of sweet baked good (cookies, cakes, or other sweet baked goods) was offered, 83% of schools reported that it was provided by vending companies.

But for more healthy items, which were not as common in student vending machines, administrators reported that the school itself was most likely providing these items for vending sale, rather than the vending companies.

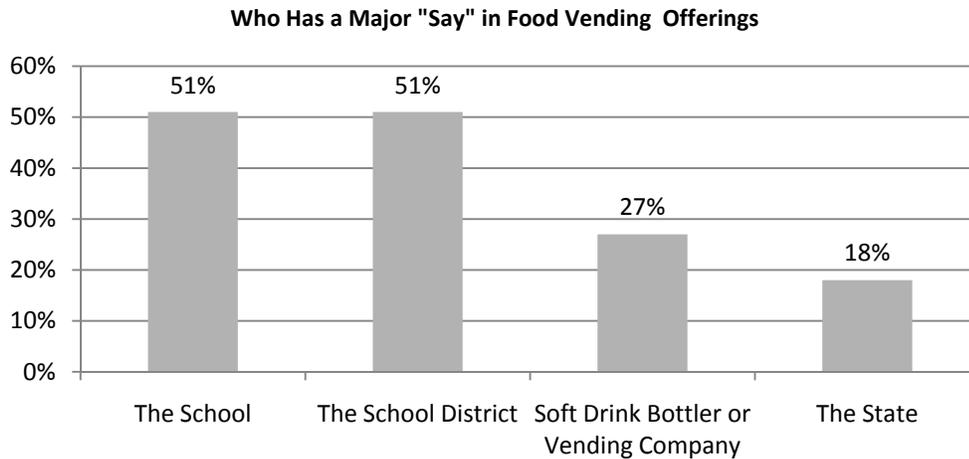
- When vegetables were offered, 92% reported that the school provided them.
- When sandwiches were offered, 92% reported that the school provided them.
- When fruits were offered, 69% reported that the school provided them.

Thus, schools seemed to be more interested in providing healthier foods in student vending machines, while vending companies provided the less-healthy snacks.

### **Food and Beverage Vending Decisions and Profits**

School administrators were also asked to report the profit their school made when a company was allowed to sell food items in student vending. In 2008, schools reported that they made on average (median) \$1,800 in profits from food vending machine sales to students. This compares to the average (median) of \$2,000 in profits that schools reported in profits from exclusive beverage contracts. (A median average is used here, because some schools reported that they made \$0 from vending and others reported as much as \$15,000 in profits from food vending sales to students). We also asked

school administrators about decisions involving what food items were offered in student vending machines. For those schools that offer food vending to students, we specifically asked who had a major “say” in what was offered in these machines. Many administrators chose more than one category:

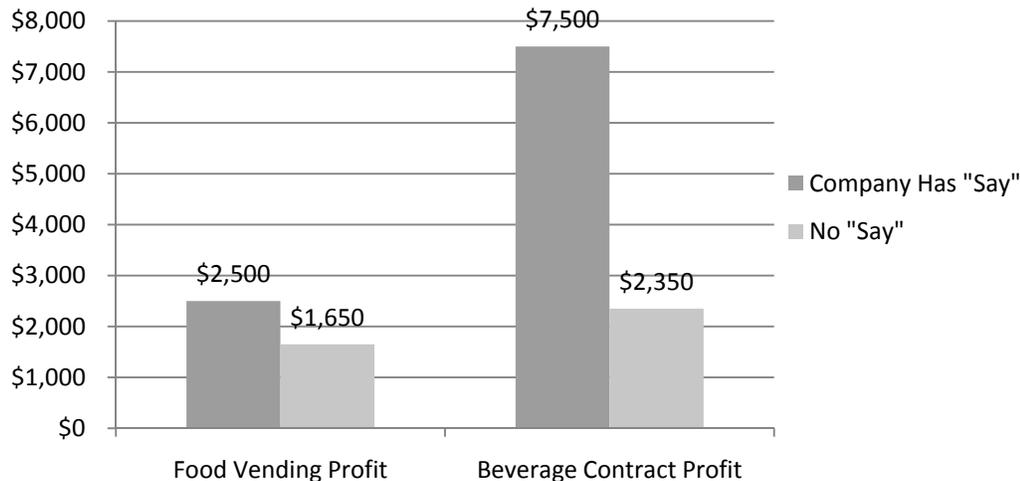


The other 8% of respondents reported some other specific answer such as a wellness committee or other group within the school or district.

The soft drink bottler or vending company (27%) was ranked behind the school itself and the district (51% each) in having a major say about the food items offered in vending machines. Administrators were also asked a similar question about who had a major say in deciding what beverages were offered in student vending machines. In the case of beverages, only 18% of administrators reported that the soft drink bottler or other vending company had a major say in deciding what beverage items were offered in student vending machines at their school. This may reflect the fact that soft drink beverage vending has come under more scrutiny by parents and schools recently.

When a soft drink bottler or vending company had a major say in what items were offered in vending machines, it appears that this affected the amount of profit that the school reported for these food and beverage sales in vending machines. The figure below illustrates the median profits reported by schools that reported that a company had a major say in beverage or food vending offerings respectively compared with those schools that did not report that a company had a major say.

**Median School Profits for Food and Beverage Vending Sales When Company Has a Major "Say" in Offerings**



### Exclusive Beverage Contracts

School administrators were asked whether their school or district had an exclusive contract with a beverage supplier (such as Coca-Cola or PepsiCo, or Cadbury Schweppes) to sell soft drinks and other beverages to students. In 2008, the majority (67%) reported that their school or district had such a contract. The percentage of schools with exclusive contracts has been on the decline since 2004, when 75% of schools reported such a contract.

- In 2008, nearly half of schools (47%) reported that the exclusive contract was an agreement between the company and their school only, 29% reported a district-only contract, while 24% reported that the agreement was made with both their school and district.
- Public schools (68%) are more likely than private schools (59%) to have an exclusive contract with a beverage supplier.
- High schools (69%) are more likely than middle schools (62%) to have an exclusive contract with a beverage supplier.

Administrators were also asked specifics about the terms and incentives of these beverage contracts that encouraged schools and districts to sell more beverages. In 2008 these terms and incentives were common:

- 83% reported that their school or district received a specified percentage of beverage sales receipts
- 44% reported that their school or district received incentives, such as cash awards or donations of equipment, supplies, or other donations, once total beverage sales receipts exceed a specified amount
- 20% of schools allowed the beverage supplier to advertise (beyond the vending machine itself) in their school building, school grounds, or school buses

How effective were these terms and incentives in increasing sales of beverages to students and increasing school profits? In 2008, on average schools reported \$2,000 (median) annual profit from these soft drink contracts, which ranged from \$0 reported profit to as much as \$38,000. In 2008, the contract terms and incentives designed to increase sales did seem to work:

- Schools that received cash and equipment incentives when beverage sales exceeded a specified amount reported an average \$5,000 (median) from beverage sales, compared to \$1,000 for schools without these incentives.
- Schools that received a specified percentage of the beverage sales receipts reported an average \$3,000 (median) from beverage sales, compared to \$850 for schools without this incentive.
- Schools that allowed the beverage supplier to advertise (beyond the vending machine itself) in their school reported an average \$6,250 (median) from beverage sales, compared to \$2,000 for schools without advertising.

The advantage in beverage sales and profits due to these terms and incentives has been a consistent finding across all four years of data from this study, although the overall reported school profits due to beverage contracts has declined since 2004. In 2004, schools reported an average of \$6,000 (median) in profit from exclusive beverage contracts, but that profit had declined to \$2,000 in 2008.

### **Efforts to Improve Student Nutrition**

With rising concerns about student nutrition and obesity, many schools in recent years have attempted to make changes in their school lunch program and policies regarding food sales. School administrators were asked if any significant activities were currently underway at their school or district to promote healthier eating and drinking practices among students. Nearly half (45%) of schools reported efforts currently underway to improve student nutrition and health on campus.

- Most (79%) reported the establishment of a school wellness policy or program in their school or district to promote a lifetime of good health.
- Schools also reported that changes were being made to their nutrition guidelines. As a result, more nutritious foods such as fruits and vegetables were being offered to students at lunch and in vending machines, while less nutritious foods such as soft drinks, candy, and fried foods were being eliminated, or restrictions were being placed on their availability.
- Schools also reported added nutrition and wellness education through PE, health class, or after-school classes.
- A few schools mentioned that healthy eating promotions and nutrition teams or clubs were being started on campus.

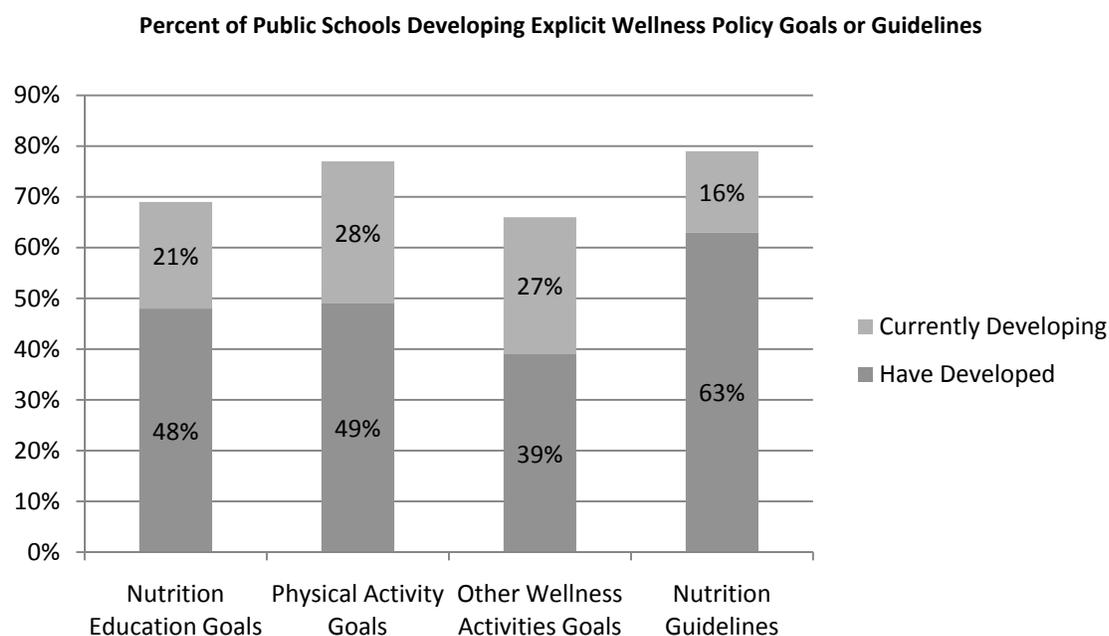
Based on responses to other questions in the survey, these efforts appear to be making important changes to the foods offered in schools nationwide. Compared to data from 2004–2006, data from recent years of the survey have confirmed that schools are offering fewer unhealthy items in vending machines, school stores, snack bars/carts, and as à la carte lunch options.

## School Wellness Policies

In the National School Lunch Act of 2004, the U.S. Congress established a new requirement that school districts with a federally-funded school meals program develop and implement wellness policies that address nutrition and physical activity by the start of the 2006–2007 school year.

- In 2006, 78% of public schools reported that a wellness policy had been established that addresses student nutrition and physical activity.
- By 2008, 85% of public schools reported that a school wellness policy had been established.
- Public middle schools (88%) were slightly more likely than high schools (84%) to report that they have established a wellness policy by 2008.
- About half of private schools (52%) had established a wellness policy by 2008, although all of those private schools that participated in a federally-funded meals program reportedly had established a wellness policy.

Schools were also asked whether **explicit goals and guidelines** had been developed as part of the policy to promote student wellness through nutrition education, physical activity, or other school-based activities. In 2008, most public schools had developed or were developing these goals and guidelines:



School administrators were also asked to identify those who their school district or school involved in the development of their school wellness policy. The table below shows the percentages of public school respondents that identified each of the following policy participants:

School Wellness Policy Participants	Percent of Schools
School food personnel	71%
School administrators	70%
Teachers	66%
Parents	56%
School board members	50%
Students	46%
Other members of the public	23%
Other school personnel (mostly health-related staff)	18%

### Effectiveness of School Wellness Policies

Earlier in the questionnaire, school administrators were asked about their opinion on efforts at their school and district to promote healthy nutrition and physical activity among students. In schools that had an established school wellness policy, administrators were significantly more likely to report that their school and school district were making a serious effort to promote healthy eating and drinking habits and to promote increased physical activity among students.

Most administrators reported that students in their survey target grade had received formal classroom instruction on nutrition and dietary behavior (80%) and physical activity, exercise, and health-related fitness (88%). Also, we noted that in schools that had an established wellness policy, administrators reported a significantly higher percentage of students receiving formal instruction in these areas. So it appears that established school wellness policies are having a positive influence on school environment and efforts to promote student wellness.

### Food and Nutrition Summary

Most schools participate in the USDA reimbursable National School Lunch Program, but only about one third participate in the USDA-sponsored Team Nutrition program. Almost two thirds of students in 8th, 10th, and 12th grades eat a school lunch, while about one in five bring their own lunch. Although many schools report that they are attempting to improve the nutritional quality of foods offered to students, soft drinks and snack foods with a higher fat or calorie content are still widely available in vending machines and school stores, particularly in high schools. Nearly half of schools reported significant efforts currently underway to improve student nutrition and health on campus.

## Conclusions

As part of the No Child Left Behind Act of 2001, schools are required to meet the challenge of creating a safe, drug-free learning environment for all students. School administrators in our study identified alcohol, tobacco, and other drug (ATOD) use as an important issue, behind student disrespect of teachers and academic underachievement—the most frequently mentioned problem facing schools. Respondents also indicated that there are substantial barriers to implementing effective ATOD prevention programs in schools, with competing demands and lack of time and resources identified as the most important obstacles. These results hold true across public, private, middle, and high schools. School factors that are correlated with more ATOD problems include having more school services and professional care providers, staff smoking, and poorer race relations. Factors associated with fewer ATOD problems include greater parental involvement and greater percentages of African-American students. It is important to keep in mind that these relationships may not all reflect a causal association.

Given that providing a safe, drug-free environment is a priority in today's schools, administrators have multiple ways to deal with ATOD problems. Most schools use locally or state-developed curriculum materials in teaching ATOD prevention to their students rather than packaged, commercially sold programs. In some cases, elements of various commercial programs are combined with locally developed programs. ATOD prevention is usually taught in health education classes. In this year's survey, 23% of the schools conducted some type of drug testing. While some schools test more than one group of students, most testing of students is based on suspicion or cause, followed by athletic team membership. How effective drug testing is in curtailing student drug use remains an unanswered question.

In addition to concerns about students' academic achievement and ATOD use, school administrators and other school personnel are also examining school policies and practices that may contribute to reducing obesity among youth. With rising concerns about student nutrition and obesity, many schools in recent years have attempted to make changes in their school lunch program and in policies regarding food sales in their schools. PE is required more often by middle schools than high schools.

Many school administrators reported that their schools are making efforts to improve student nutrition and health on campus, often as part of a school or district wellness policy. The most common activity is making changes to the types of foods available to students at lunch and in vending machines by offering more nutritious foods, such as fruits and vegetables. Other activities include removing or restricting access to soft drinks and candy. Also, many schools reported that changes are being made to their health programs to emphasize healthier eating, the risks of obesity, and the need for more physical activity. Schools also reported changes to PE programs and added physical fitness activities before, during, and after school. Finally, some schools mentioned that healthy eating promotions and clubs are being started on campus.

The YES study intends to continue to track many of these policies and practices in American secondary schools, and to conduct analyses aimed at determining their effects. We hope to provide school leaders with better information and guidance that will allow them to serve their students more effectively in preventing substance abuse, reducing overweight, and improving their health generally. Tobacco use and obesity are the two leading causes of preventable death and disease in this country, and schools have an important role to play in helping to combat these problems.



**Survey Research Center  
Institute for Social Research  
University of Michigan  
P.O. Box 1248  
Ann Arbor, MI 48106-1248**