2006

YOUTH TOBACCO SURVEY

ILLINOIS DEPARTMENT OF PUBLIC HEALTH

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The 2006 Illinois Youth Tobacco Survey was a success due to the collaboration and cooperation among the partners. Primary among these partners are the 2,411 middle school and high school students who contributed their time and provided thoughtful responses to the survey. The teachers and principals in each of the participating schools receive our warmest thanks for accepting the invitation to engage in this process. Their willingness to allow us into the schools enabled us to attain a high response rate, thereby achieving the threshold necessary to yield weighted data. Special thanks also go to the district and regional superintendents who recognize the value of this effort and facilitated the school recruitment process.

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EXECUTIVE SUMMARY

Tobacco use leads to the deaths of more people in the United States than do homicides, suicides, automobile accidents, AIDS, alcohol, drug abuse, and fires combined. Approximately 400,000 deaths (one out of every five) each year in the United States are a result of tobacco use. In addition to these mortality figures, the national economic burden of tobacco use is more than $50 billion in direct medical costs.1

The earlier tobacco use begins, the more likely it will develop into an addictive lifestyle pattern. Approximately 80 percent of adults who smoke began smoking before the age of 18. It is currently estimated that every day nearly 3,000 young people younger than the age of 18 become regular smokers.1 Among Illinois’ youth, approximately one in six middle school students and one in three high school students currently use some form of tobacco product.

The Illinois Youth Tobacco Survey (IYTS) was conducted during 2002, 2005 and 2006 by the Illinois Department of Public Health (IDPH). The IYTS provides Illinois with a comprehensive look at youth tobacco use in the state through assessment of tobacco-related knowledge, attitudes, and behaviors among middle and high school students. Such an assessment of youth tobacco use and knowledge is critical to improving the state’s tobacco prevention and cessation activities. The majority of the 2002 to 2006 IYTS results do not significantly differ. This suggests that youth tobacco-related knowledge, attitudes and behaviors between the two survey periods did not substantially change in either a positive or negative direction. Ongoing surveillance through the IYTS enables IDPH to monitor tobacco-related issues in the future.

This report presents the findings from the 2006 IYTS. The following are highlights from each section within this report.

Tobacco Use

Seventeen percent of middle school students and 29.0 percent of high school students currently use tobacco products.

Cigars are the most commonly used tobacco product among middle school students (10.9%), whereas cigarettes are the most commonly used tobacco product among high school students (21.7%).

Between middle school and high school, there is a significant increase in the percentage of female (5.9% and 20.8%, respectively) and black students (5.6% and 13.7%, respectively) who currently smoke cigarettes.

At the middle school level, Marlboro® cigarettes are the brand of choice (52.8%), but among high school students, Newport® is the brand of choice (38.8%).

High school students (10.0%) are approximately two times more likely to report having smoked cigarettes on school property in the past 30 days than are middle school students (5.4%).

Between sixth (7.4%) and 12th grade (22.7%), there is a three-fold increase in the rate of cigar smoking.

Smokeless tobacco products are used by 5.6 percent of middle school students and 3.7 percent of high school students.

**Access**

Over three-fourths of middle school and high school students who currently smoke obtain their cigarettes from social sources, rather than buying them directly from a store or vendor.

Approximately one-half of high school students (48.8%) who currently smoke report they were not asked to show proof of age when buying cigarettes in a store.

Approximately one-half of middle school (52.0%) and high school students (45.9%) who currently smoke report they were not refused purchase of cigarettes because of their age.

**Cessation**

About two-thirds of middle school (64.2%) and one-half of high school students (47.8%) who currently smoke cigarettes want to quit.

Among students who currently smoke, 87.0 percent in middle school and 81.9 percent in high school are confident in their ability to quit smoking cigarettes.

Approximately one-third of middle school (31.7%) and one-half of high school students (53.1%) who currently smoke have tried to quit smoking in the past 12 months.

During their last quit attempt, approximately one-half of middle school (55.4%) and high school (45.7%) students who currently smoke were unable to quit cigarettes for 30 days or more.

**Knowledge and Attitudes**

Approximately 90 percent of middle school and 80 percent of high school students who currently smoke think that people can become addicted to tobacco, just as they can become addicted to cocaine or heroin.

In both middle school and high school, approximately one in four students who currently smoke think it is safe to smoke for a year or two.

Approximately one in four middle school students and one in six high school students believe that light (low-tar) cigarettes have less risk than regular (full-flavor) cigarettes.
In both middle school and high school, there is no significant difference between current smokers (29.6% and 22.2%, respectively) and never smokers (15.7% and 15.2%, respectively) in their belief as to whether smokers have more friends.

In middle school and high school, there is no significant difference between current smokers (22.9% and 14.4%, respectively) and never smokers (12.1% and 9.6%, respectively) in their belief as to whether smoking cigarettes makes young people look cool or fit in.

In both middle school and high school, students who have never smoked (78.8% and 74.1%, respectively) are significantly more likely than those who currently smoke cigarettes (23.7% and 23.4%, respectively) to think that their friends would be upset if they smoked cigarettes.

In both middle school and high school, there is no significant difference between students who currently smoke (49.4% and 65.1%, respectively) and those who have never smoked (70.1% and 62.0%, respectively) in the percentage who have discussed the dangers of tobacco use with their parents in the past 12 months.

Regardless of their smoking status, between approximately one-fifth and one-third of middle school and high school students have been told by their doctor or dentist about the dangers of tobacco use in the past 12 months.

Slightly more than one-half of middle school and high school students report they were taught about the dangers of tobacco use during the current school year.

**Media**

Approximately two-thirds of middle school and four-fifths of high school students have been exposed to anti-tobacco advertisements in the past 30 days.

Overall, approximately four out of 10 middle school and high school students who use the Internet have seen advertisements for tobacco products on the Internet.

In middle school, there are no significant differences among white (39.6%), black (45.4%), and Hispanic students (49.9%) in their exposure to tobacco advertisements on the Internet. In high school, however, black students (57.7%) are significantly more likely than white (39.0%) and Hispanic students (42.1%) to report seeing tobacco advertisements on the Internet.

Illinois middle school students who currently use tobacco (30.3%) are significantly less likely than middle school tobacco users nationally (45.7%) to have bought or received an item with a tobacco company name or picture on it in the past 12 months. At the high school level, 34.5 percent of Illinois students who currently use tobacco bought or received an item with a tobacco company name or picture on it in the past 12 months, which is comparable to high school tobacco users nationally (34.6%).

Regardless of smoking status, more than 90 percent of middle school and high school students have seen advertisements for tobacco products or tobacco logos in gas stations or convenience stores.
Secondhand Smoke

Overall, in both middle school and high school, approximately nine out of 10 students believe secondhand smoke is harmful to them.

In middle school, white students (93.8%) are significantly more likely than black (82.8%) or Hispanic students (87.4%) to believe that secondhand smoke is harmful. At the high school level, there are no significant differences among white (95.4%), black (94.1%), and Hispanic students (87.8%) in their beliefs about the harmfulness of secondhand smoke.

Approximately one-half of middle school students and over one-third of high school students live with someone who smokes cigarettes.

Rates of recent exposure to secondhand smoke in a car among middle school current smokers (45.7%) and never smokers (39.7%) are comparable, but at the high school level, current smokers (77.8%) are significantly more likely than their peers who have never smoked (24.5%) to have recently ridden in a car with someone who was smoking cigarettes.
Definitions

Comparable: Two estimates are considered comparable if the difference between the two is neither statistically nor practically significant.

Confidence Interval: The confidence interval around a specific statistic (in this case, the percentage) represents the range of values within which the “true population” can be expected to be located, with 95 percent certainty, at a .05 level of precision. The width of the confidence interval depends on the sample size, the variation of data values, and other factors. The calculation of confidence intervals is based on the assumption that the variable is normally distributed in the population. For example, if a given percentage is 17.2 percent and the confidence interval is ±6.9, it is 95 percent certain that the true population percentage will fall between 10.3 percent and 24.1 percent. Overall, the narrower (or tighter) the confidence interval, the greater the certainty that the statistic represents the true population.

Current Smoker: Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days.

Frequent Smoker: Students were considered to be frequent cigarette smokers if they reported smoking cigarettes on 20 or more of the past 30 days.

NOTE: The proportion of frequent smokers is not mutually exclusive from the proportion of current smokers; rather, it is a subset of students who have used cigarettes within the past 30 day on 20 or more of those days.

Never Smoker: Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

Statistically Significant: Statistical significance refers to the assurance that the differences between two estimates can be regarded as representing the “true population” with a definable level of certainty that the differences were not the result of chance. Typically, statistical significance is stated in terms of the 95 percent certainty, at a .05 level of precision. Throughout the report, when data are said to be significantly different, there is no overlap in the confidence intervals of the percentages being compared.
INTRODUCTION

Tobacco use is the leading preventable cause of disease, disability and death in Illinois and affects the everyday lives of smokers and non-smokers throughout the state. During 1997-2001, an average of 16 percent of all deaths per year in Illinois were attributable to smoking. This means an average of 16,939 Illinois residents died each year from smoking-attributable causes, including cancer, heart disease and respiratory diseases.

Tobacco use carries a huge economic burden. During 2001, cigarette smoking is estimated to have cost Illinois $4.2 billion in costs due to lost productivity. During 2001, Illinois’ estimated Medicaid expenditures for smoking-related causes totaled nearly $1.4 billion. Illinois’ share of the smoking-related Medicaid costs was approximately half, or almost $690 million.

According to results contained in this 2006 IYTS report, 29.0 percent of the state’s high school students and 17.0 percent of middle school students used some form of tobacco in the past 30 days. When tobacco use is initiated at a young age the more likely the individual is to continue using tobacco throughout his or her lifetime. This habit brings with it the increased risk for tobacco-related disease, disability and death. It is estimated that one out of every three smokers will die from tobacco-related diseases.

As the state’s lead tobacco prevention and control agency, the Illinois Department of Public Health administers the Illinois Tobacco-Free Communities (ITFC) program. This comprehensive program, funded primarily through the Master Settlement Agreement, focuses on four goals: prevent initiation of tobacco use among young people, eliminate exposure to secondhand smoke, promote cessation among adults and youth, and identify and eliminate tobacco-related disparities among specific population groups.

The 2006 IYTS provides Illinois with a comprehensive look at youth tobacco use in the state and an assessment of tobacco-related knowledge, attitudes and behaviors among middle school and high school students. The Youth Tobacco Surveillance and Evaluation system, which includes international, national and state school-based surveys of middle school and high school students, was developed by the U.S. Centers for Disease Control and Prevention. It was created to assist states in developing and maintaining comprehensive tobacco prevention and control programs. The IYTS, administered in spring 2002, 2005 and 2006 provides assessment of youth tobacco use and knowledge that is critical to improving the state’s tobacco prevention and cessation activities. This report summarizes data from the 2006 IYTS.
Illinois Youth and National Youth

To compare the prevalence of tobacco use among Illinois youth to that of youth across the United States, tobacco use data from the 2006 Illinois Youth Tobacco Survey has been compared to data from the 2004 National Youth Tobacco Survey.²

- 8.8 percent of Illinois middle school students and 21.7 percent of Illinois high school students currently smoke cigarettes, rates which are comparable to the national averages (8.4% and 21.7%, respectively).

- 17.0 percent of Illinois middle school students and 29.0 percent of Illinois high school students currently use one or more forms of tobacco, rates which are comparable to the national averages (11.9% and 27.4%, respectively).

- Illinois middle school and high school students’ rates of cigar, bidis, pipe, and smokeless tobacco use are not significantly different from the national middle school and high school rates for the same products.

Use of Tobacco Products

Students were asked about their use of different forms of tobacco including cigarettes, cigars, bidis, pipes, and smokeless tobacco during the past 30 days. Students were considered to be current tobacco users if they reported using any of these products at least once within the past 30 days.

- 17.0 percent of middle school students and 29.0 percent of high school students in Illinois currently use one or more tobacco products.

- As grade increases, so does the overall rate of current tobacco use, with nearly a three-fold increase between sixth (13.2%) and 12th grade (35.2%).

- In both middle school and high school, there is no significant difference between males (21.3% and 32.6%, respectively) and females (12.5% and 25.3%, respectively) in the rates at which they use tobacco products.

- In middle school and high school, there are no significant differences in the rates of tobacco use among white (17.5% and 29.9%, respectively), black (16.4% and 26.9%, respectively), and Hispanic students (17.8% and 31.6%, respectively).

- Between middle school and high school, there is no significant change in the rates of tobacco use among male students (21.3% and 32.6%, respectively), but there is a significant increase in tobacco use among female students (12.5% and 25.3%, respectively).

- Between middle school and high school, there is no significant change in the rates of tobacco use among white (17.5% and 29.9%, respectively), black (16.4% and 26.9%, respectively), and Hispanic students (17.8% and 31.6%, respectively).
Cigarette Smoking

“During the past 30 days, on how many days did you smoke cigarettes?”

Students were asked about their use of cigarettes during the past 30 days. Students were considered to be current cigarette smokers if they reported smoking cigarettes at least once within the past 30 days.

- 8.8 percent of middle school students and 21.7 percent of high school students in Illinois currently smoke cigarettes.

- As grade increases, so does the rate of cigarette smoking, with more than a 10-fold increase between grades six (2.5%) and 12 (30.8%). There is a significant increase in cigarette smoking between grades six (2.5%) and seven (8.3%) and between grades 11 (18.1%) and 12 (30.8%).

- In both middle school and high school, there is no significant difference between male (11.5% and 22.6%, respectively) and female students (5.9% and 20.8%, respectively) with respect to their rates of cigarette smoking.

- At the middle school and high school level, there are no significant differences among white (9.9% and 24.4%, respectively), black (5.6% and 13.7%, respectively), and Hispanic students (10.0% and 22.4%, respectively) with respect to their rates of cigarette smoking.

- Between middle school and high school, there is no significant change in the rates of current cigarette smoking among male students (11.5% and 22.6%, respectively), but there is a significant increase in current cigarette smoking among female students (5.9% and 20.8%, respectively).

- Between middle school and high school, there is no significant change in current cigarette smoking among white (9.9% and 24.4%, respectively) and Hispanic students (10.0% and 22.4%, respectively). Among black students, however, there is a significant increase in cigarette smoking between middle school (5.6%) and high school (13.7%).
Cigar Smoking

“During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?”

Students were asked about their use of cigars, cigarillos, or little cigars during the past 30 days. Students were considered to be current cigar smokers if they had reported smoking a cigar at least once within the past 30 days.

• 10.9 percent of middle school students and 15.2 percent of high school students in Illinois currently smoke cigars.

• Between sixth (7.4%) and 12th grade (22.7%), there is a three-fold increase in the rate of cigar smoking, with a significant increase between 10th (10.6%) and 12th grade (22.7%).

• At the middle school level, there is no significant difference between male (14.4%) and female students (7.2%) in their rates of cigar smoking. At the high school level, however, rates of cigar smoking are significantly higher among male students (20.4%) than female students (10.1%).

• In both middle school and high school, there are no significant differences among white (12.5% and 13.9%, respectively), black (8.8% and 18.9%, respectively), and Hispanic students (8.9% and 18.5%, respectively) in their rates of cigar smoking.

• Between middle school and high school, there is no significant change in the rates of cigar smoking among male students (14.4% and 20.4%, respectively) or female students (7.2% and 10.1%, respectively).

• Between middle school and high school, there is no significant change in the rates of cigar smoking among white (12.5% and 13.9%, respectively), black (8.8% and 18.9%, respectively), and Hispanic students (8.9% and 18.5%, respectively).
Smokeless Tobacco Use

“During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?”

Students were asked about their use of chewing tobacco, snuff or dip (such as Redman®, Levi Garrett®, Beechnut®, Skoal®, Skoal Bandits®, or Copenhagen®) during the past 30 days. Students were considered to be current smokeless tobacco users if they had used smokeless tobacco on at least one of the past 30 days.

- 5.6 percent of middle school students and 3.7 percent of high school students in Illinois currently use smokeless tobacco.
- Between grades six and 12, there is no significant change in the rates of smokeless tobacco use.
- At the middle school level, there is no significant difference between male (6.3%) and female students (4.8%) in their rates of smokeless tobacco use. At the high school level, however, male students (6.8%) are significantly more likely than female students (0.6%) to currently use smokeless tobacco.
- Among middle school students, rates of smokeless tobacco use among white (7.7%), black (1.3%), and Hispanic students (4.4%) are comparable. Among high school students, however, white students (5.0%) are significantly more likely to use smokeless tobacco than black students (0.1%).
- Between middle school and high school, there is no significant change in the rates of smokeless tobacco use among male students (6.3% and 6.8%, respectively) or female students (4.8% and 0.6%, respectively).
- Between middle school and high school, there is no significant change in the rates of current smokeless tobacco use among white (7.7% and 5.0%, respectively), black (1.3% and 0.1%, respectively), and Hispanic students (4.4% and 2.0%).
Pipe Smoking

“During the past 30 days, on how many days did you smoke tobacco in a pipe?”

Students were asked about smoking tobacco in a pipe during the past 30 days. Students were considered to be current pipe tobacco users if they reported smoking a pipe at least once within the past 30 days.

- 3.6 percent of middle school students and 3.1 percent of high school students in Illinois currently smoke pipes.
- Between grades six and 12, there is no significant change in the rates of current pipe smoking.
- In both middle school and high school, there is no significant difference between male (2.8% and 4.3%, respectively) and female students (4.4% and 1.9%, respectively) in their rates of pipe smoking.
- In both middle school and high school, there are no significant differences among white (4.0% and 2.0%, respectively), black (3.1% and 2.4%, respectively), and Hispanic students (3.2% and 8.3%, respectively) in their rates of pipe smoking.
- Between middle school and high school, there is no significant change in the rates of pipe smoking among male students (2.8% and 4.3%, respectively) or female students (4.4% and 1.9%, respectively).
- Between middle school and high school, there is no significant change in the rates of pipe smoking among white (4.0% and 2.0%, respectively), black (3.1% and 2.4%, respectively), and Hispanic students (3.2% and 8.3%, respectively).
Age of Initiation

“How old were you when you smoked a whole cigarette for the first time?”

Students were asked how old they were when they smoked a whole cigarette for the first time. Two indicators of early use were assessed: the proportion of students who have ever smoked who smoked a whole cigarette before age 11, and the age at which high school students who have ever smoked reported smoking their first whole cigarette.

- 25.4 percent of Illinois middle school students and 12.2 percent of Illinois high school students report smoking a whole cigarette for the first time before the age of 11. This is comparable to the U.S. rates. 25.9 percent of U.S. middle school students and 14.1 percent of U.S. high school students who report smoking a whole cigarette for the first time before age 11.

- 40.5 percent of male high school students and 53.4 percent of female high school students report smoking their first whole cigarette in early adolescence (11 to 14 years of age). The greatest proportion of male high school students (31.5%) report smoking their first whole cigarette between the ages of 15 and 16, whereas the greatest proportion of female high school students (39.5%) report smoking their first whole cigarette between the ages of 13 and 14.

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3 For the 2006 definition of the “age of initiation” variable, students who have never smoked are not included in the denominator.

Frequent Cigarette Smoking

“During the past 30 days, on how many days did you smoke cigarettes?”

To determine how frequently students smoke cigarettes, they were asked about their frequency of smoking in the past 30 days. Students were considered to be frequent cigarette smokers if they reported smoking cigarettes on 20 or more of the past 30 days.

- Rates of frequent cigarette smoking increase steadily between grades six and 12, with significant increases between grades eight (1.3%) and 10 (8.2%) and between grades nine (3.4%) and 12 (10.8%).

- 0.8 percent of middle school students and 7.1 percent of high school students in Illinois smoke cigarettes frequently (on 20 or more of the past 30 days).

- In both middle school and high school, there is no significant difference between male (1.1% and 7.4%, respectively) and female students (0.5% and 6.9%, respectively) in their rates of frequent cigarette smoking.

- In middle school, there are no significant differences among white (1.0%), black (0.6%), and Hispanic students (0.2%) in their rates of frequent cigarette smoking. At the high school level, however, white students (9.1%) are significantly more likely than black (3.5%) or Hispanic students (3.3%) to be frequent cigarette smokers.

- Between middle school and high school, there is a significant increase in the rates of frequent cigarette smoking among male students (1.1% and 7.4%, respectively) and female students (0.5% and 6.9%, respectively).

- Between middle school and high school, there is a significant increase in frequent cigarette smoking among white (1.0% and 9.1%, respectively) and Hispanic students (0.2% and 3.3%, respectively).
Daily Cigarette Smoking

“Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?”

Another measure used to assess frequency of cigarette smoking is “ever daily” cigarette smoking. Students were considered to have ever smoked daily if they reported smoking at least one cigarette per day for 30 days at some point in their lives.

- Between grades seven (2.7%) and 10 (13.8%), there is a significant increase in the percentage of students who report having smoked cigarettes daily at some point in their lives.

- 5.4 percent of middle school students and 12.2 percent of high school students in Illinois report they have been daily cigarette smokers at some point in their lifetimes.

- In both middle school and high school, there is no significant difference in the percentage of male (7.0% and 13.8%, respectively) and female students (3.6% and 10.6%, respectively) who have ever smoked daily.

- In middle school and high school, there are no significant differences in the rates of daily smoking among white (5.7% and 14.9%, respectively), black (3.5% and 6.4%, respectively), and Hispanic students (5.2% and 8.7%, respectively).

- Between middle school and high school, there is no significant change in the rates of daily smoking among male students (7.0% and 13.8%, respectively), but there is a significant increase in daily smoking among female students (3.6% and 10.6%, respectively).

- Between middle school and high school, there is no significant change in rates of daily smoking among white (5.7% and 14.9%, respectively), black (3.5% and 6.4%, respectively), and Hispanic students (5.2% and 8.7%, respectively).
Cigarette Preferences

“During the past 30 days, what brand of cigarettes did you usually smoke? (Choose only one answer)”

Students who are current smokers (had smoked a cigarette on at least one of the past 30 days) were asked which brand of cigarettes they usually smoked in the past 30 days (i.e., no usual brand; Camel®; Marlboro®; Newport®; Virginia Slims®; GPC®, Basic®, or Doral®; or some other brand).

- At the middle school level, Marlboro® cigarettes are the brand of choice (52.8%), but among high school students, Newport® is the brand of choice (38.8%).

- In middle school, significantly more students smoke Marlboro® cigarettes (52.8%) than Camel® cigarettes (2.4%), other brands of cigarettes (3.9%), or no usual brand of cigarettes (9.3%).

- In high school, significantly more students smoke Newport® cigarettes (38.8%) than Camel® cigarettes (7.7%), other brands of cigarettes (9.7%), or no usual brand of cigarettes (10.8%).

- In middle school and high school, there are no significant differences in the percentage of male (65.0% and 25.1%, respectively) and female students (26.9% and 41.5%, respectively) or white (67.8% and 38.1%, respectively) and Hispanic students (38.6% and 26.7%, respectively) who smoke Marlboro® cigarettes.
Usual Source & Place of Purchase

“During the past 30 days, how did you usually get our own cigarettes?”

“During the past 30 days, where did you buy the last pack of cigarettes you bought? (Choose only one answer)”

Students were asked about their usual source of cigarettes in the past 30 days. Students also were asked about where they purchased their last pack of cigarettes within the past 30 days.

- Over three-fourths of middle school (85.0%) and high school (78.5%) students who currently smoke obtain their cigarettes from social sources\(^5\), rather than buying them directly from a store or vendor.

- The most common ways to obtain cigarettes among middle school students who smoke are to be given them by an adult (39.7%) and to “bum” them from someone else (21.5%).

- High school students who smoke most commonly obtain cigarettes by “bumming” them from someone else (31.3%) or by giving money to someone else to buy them (29.7%).

- High school students (9.8%) are significantly more likely than middle school students (0.7%) to obtain cigarettes by purchasing them from a store.

- Middle school students (49.0%) are significantly more likely than high school students (24.3%) to purchase their cigarettes from some other place.

- Gas stations and convenience stores are the most common places of purchase for middle school (26.7% and 11.7%, respectively) and high school students who currently smoke (40.1% and 28.5%, respectively).

\(^5\) Social sources include giving money to other people to purchase cigarettes, “bumming” them from someone else, being given cigarettes by an adult, or taking them from a store or family member.
ID Request & Sale Refusal to Minors

“When you bought or tried to buy cigarettes in a store during the past 30 days, were you ever asked to show proof of age?”

“During the past 30 days, did anyone ever refuse to sell you cigarettes because of your age?”

In the state of Illinois, it is illegal to sell cigarettes to any persons younger than the age of 18. Students who tried to purchase cigarettes in a store within the past 30 days were asked if they ever had to show proof of age. Students also were asked if, during the past 30 days, anyone refused to sell them cigarettes because of their age. The results are for students who were less than 18 years old and who tried to buy cigarettes at a store within the past 30 days.

- Nearly one-half (48.8%) of Illinois high school students reported they have not been asked to show ID when purchasing cigarettes in a store during the past 30 days, which is comparable to data from high school students nationwide (63.4%)\(^6\).

- Slightly more than one-half (52.0%) of Illinois middle school students reported they were not refused purchase of cigarettes because of their age, which is comparable to the national average for middle school students (68.5%).

- Nearly one-half (45.9%) of Illinois high school students reported they were not refused purchase of cigarettes because of their age, which is comparable to data from high school students nationwide (61.2%).

Ease of Access

“Do you think it would be easy or hard for you to get cigarettes if you wanted some?”

“If you wanted to BUY cigarettes, do you think it would be easy or hard for you to find a store in your community that would sell you cigarettes?”

Students were asked questions about their perceptions regarding the ease of obtaining cigarettes in their communities. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days.

- Middle school students (54.9%) are significantly more likely than high school students (18.9%) to perceive it to be difficult to obtain cigarettes.

- Among current smokers, there is no significant difference between middle school (26.4%) and high school students (12.5%) in their perception that it is difficult to obtain cigarettes. Among students who have never smoked, however, middle school students (65.3%) are significantly more likely than high school students (27.9%) to believe that it would be difficult to obtain cigarettes.

- Middle school students who have never smoked (65.3%) are significantly more likely than those who are current smokers (26.4%) to believe that it would be difficult to obtain cigarettes. There is no significant difference between high school students who have never smoked (27.9%) and those who are current smokers (12.5%) in their belief that it would be difficult to obtain cigarettes.

- Overall, middle school students (68.4%) are significantly more likely than high school students (42.3%) to believe it would be difficult to buy cigarettes from a store in their community.

- In both middle school and high school, there is no significant difference between current smokers (49.4% and 49.7%, respectively) and those who have never smoked (77.3% and 49.7%, respectively) in their belief that it would be difficult to buy cigarettes in their community.
Cigarette Smoking on School Property

“During the past 30 days, on how many days did you smoke cigarettes on school property?”

Students were asked about smoking cigarettes on school property. Students were considered to have currently smoked cigarettes on school property if they had reported smoking a cigarette on school grounds at least once within the past 30 days.

- Cigarette use on school property peaks in grades eight (11.3%) and 11 (12.2%).

- 5.4 percent of middle school students and 10.0 percent of high school students reported smoking cigarettes on school property in the past 30 days.

- In both middle school and high school, there is no significant difference between male (8.6% and 13.4%) and female students (1.9% and 6.6%, respectively) in their use of cigarettes on school property in the 30 days preceding the survey.

- In both middle school and high school, there are no significant differences among white (7.0% and 9.6%, respectively), black (3.4% and 11.9%, respectively), and Hispanic students (3.4% and 9.9%, respectively) in their use of cigarettes on school property in the past 30 days.

- Between middle school and high school, there is a significant increase in the use of cigarettes on school property among female students (1.9% and 6.6%, respectively).

- Between middle school and high school, there is no significant change in the rates of smoking cigarettes on school property among white (7.0% and 9.6%, respectively), black (3.4% and 11.9%, respectively), and Hispanic students (3.4% and 9.9%, respectively).

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7 According to 105 ILCS 5/10-20.5b, tobacco use on school property by school personnel, students or other persons is prohibited.
Smokeless Tobacco Use on School Property

“During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip on school property?”

Students were asked about their use of smokeless tobacco on school property. Students were considered to have currently used smokeless tobacco on school property if they had reported using smokeless tobacco on school grounds at least once within the past 30 days.

- Smokeless tobacco use on school property peaks in grades six (6.5%) and seven (7.1%).
- 5.1 percent of middle school students and 2.7 percent of high school students reported using smokeless tobacco on school property in the past 30 days.
- In middle school, there is no significant difference between male (5.6%) and female students (4.6%) in their use of smokeless tobacco on school property. At the high school level, however, male students (4.1%) are significantly more likely than female students (1.2%) to report using smokeless tobacco on school property.
- In both middle school and high school, there are no significant differences among white (7.1% and 2.9%, respectively), black (1.0% and 1.9%, respectively), and Hispanic students (4.0% and 1.8%, respectively) in their use of smokeless tobacco on school property.
- Between middle school and high school, there is no significant change in the rates of smokeless tobacco use on school property among male (5.6% and 4.1%, respectively) and female students (4.6% and 1.2%, respectively).
- Between middle school and high school, there is no significant change in the rates of smokeless tobacco use on school property among white (7.1% and 2.9%, respectively), black (1.0% and 1.9%, respectively), and Hispanic students (4.0% and 1.8%, respectively).
Attitudes toward Cessation

“Do you want to stop smoking cigarettes?”

“Do you think you would be able to quit smoking cigarettes now if you wanted to?”

Students were asked if they want to and believe they can quit smoking cigarettes. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to be frequent smokers if they reported smoking cigarettes on 20 or more of the past 30 days.

- The rates of current smokers who want to quit are comparable across grades seven, nine, 10, and 12.

- About two-thirds of middle school (64.2%) and one-half of high school (47.8%) students who currently smoke cigarettes want to quit. –data not shown

- Among students who currently smoke, 87.0 percent in middle school and 81.9 percent in high school think they can quit smoking cigarettes now if they wanted to.

- More than two-thirds (69.9%) of high school students who smoke frequently believe they can quit smoking now if they wanted to.

- The percentage of high school frequent smokers (69.9%) who think they can quit smoking now if they wanted to is comparable to that of high school current smokers (81.9%) who believe they could do so.
Quit Attempts among Current Smokers

“Are you seriously thinking about quitting smoking?”*

“How many times during the past 12 months have you stopped smoking for one day or longer because you were trying to quit smoking?”

Students were asked about their attempts to quit smoking as well as their intentions to quit smoking. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days.

- There is no significant difference between the percentage of middle school (66.3%) and high school current smokers (69.5%) who are seriously thinking about quitting smoking.

- Approximately one-third of middle school (31.7%) and one-half of high school students (53.1%) who currently smoke have tried to quit smoking in the past 12 months. —data not shown

- There is no significant difference between middle school and high school current smokers in the number of times they have tried to quit smoking in the past 12 months.

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*For the 2006 definition of the “seriously thinking about quitting” variable, students who responded “not sure” or “I don’t smoke” are not included in the denominator.
Length of Last Quit Attempt

“When you last tried to quit, how long did you stay off cigarettes?”

Students were asked about the amount of time that they quit smoking cigarettes during the last time they tried to quit. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to be frequent smokers if they reported smoking cigarettes on 20 or more of the past 30 days.

- During their last quit attempt, approximately one-half of middle school (55.4%) and high school students (45.7%) who currently smoke were unable to quit cigarettes for 30 days or more.

- Although they currently smoke, about one in 10 middle school and high school students were able to quit smoking for one year or more.

- During their last quit attempt, 80.4 percent of high school students who smoke frequently were unable to quit cigarettes for 30 days or more.

* Data not presented for middle school frequent smokers, n < 35.
Likelihood of Starting to Smoke

“Do you think you will smoke a cigarette at any time during the next year?”

“If one of your best friends offered you a cigarette, would you smoke it?”

This is a calculated variable to analyze if students who have never smoked cigarettes are likely to begin. Students who think that they may try cigarettes within the next year and who would smoke a cigarette if offered by a best friend are likely to start smoking. Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

- The rates of never smokers’ susceptibility to starting smoking decreases significantly between grades nine (32.6%) and 12 (14.1%).
- Approximately one-quarter of middle school (25.2%) and high school students (24.9%) who have never smoked are likely to start smoking.
- In middle school and high school, there is no significant difference between male (29.0% and 25.8%, respectively) and female never smokers (21.9% and 24.1%, respectively) in their susceptibility to starting smoking.
- In both middle school and high school, there are no significant differences in the likelihood of starting smoking among white (21.4% and 22.8%, respectively), black (30.7% and 22.4%, respectively), and Hispanic never smokers (28.1% and 48.1%, respectively).
- Between middle school and high school, there is no significant change in the likelihood of starting smoking among male (29.0% and 25.8%, respectively) and female never smokers (21.9% and 24.1%, respectively).
- Between middle school and high school, there is no significant change in the likelihood of starting smoking among white (21.4% and 22.8%, respectively), black (30.7% and 22.4%, respectively), and Hispanic never smokers (28.1% and 48.1, respectively).
Health Beliefs about Tobacco Use

“People can get addicted to using tobacco just like they can get addicted to using cocaine or heroin.”

“Young people who smoke one to five cigarettes a day risk harming themselves.”

Students were asked to rate several questions to determine their perceptions about health risks associated with tobacco use. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

- In both middle school and high school, about 90 percent of all students believe tobacco is addictive.

- High school students who have never smoked (94.8%) are significantly more likely than high school students who are current smokers (80.7%) to believe that tobacco is addictive.

- In both middle school and high school, there is no significant difference between current smokers (90.0% and 92.7%, respectively) and those who have never smoked (92.0% and 95.9%, respectively) with respect to their belief that young people who smoke one to five cigarettes per day risk harming themselves.
Smoking Beliefs and Short-Term Risks

“It is safe for a person to smoke for only a year or two as long as they quit after that.”

“Do you believe that light (low-tar) cigarettes have less, the same, or more risk than regular (full-flavor) cigarettes?”

Students were asked about their beliefs regarding the risk risks related to short-term smoking and smoking light (low-tar) cigarettes. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

- In middle school, there is no significant difference between current smokers (24.1%) and never smokers (9.1%) in their beliefs about the risks associated with smoking for a year or two. In high school, however, current smokers (25.7%) are significantly more likely than never smokers (8.8%) to believe that it is safe to smoke for a year or two.

- Overall, approximately one in four middle school students (24.4%) and one in six high school students (17.1%) believe that light (low-tar) cigarettes have less risk than regular (full-flavor) cigarettes.

- In both middle school and high school, there is no significant difference between male (23.8% and 20.2%, respectively) and female students (25.1% and 14.0%, respectively) in their beliefs that low-tar cigarettes are less harmful than regular cigarettes.

- In both middle school and high school, there are no significant differences among white (21.6% and 16.2%, respectively), black (33.7% and 18.1%, respectively), and Hispanic students (25.3% and 17.7%, respectively) in their beliefs that low-tar cigarettes are less harmful than regular cigarettes.
Social Beliefs about Smoking

“People who smoke have more friends.”

“Smoking cigarettes makes young people look cool or fit in.”

Students were asked to rate a series of statements about the perceived social benefits of smoking. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

- In both middle school and high school, there is no significant difference between current smokers (29.6% and 22.2%, respectively) and never smokers (15.7% and 15.2%, respectively) in their belief as to whether smokers have more friends.

- In both middle school and high school, there is no significant difference between current smokers (22.9% and 14.4%, respectively) and never smokers (12.1% and 9.6%, respectively) in their belief as to whether smoking cigarettes makes young people look cool or fit in.
Smoking among Peers

“Out of every 10 students your age, how many do you think smoke cigarettes once a month or more?”

“Do you think your friends would be upset if you smoked?”

Students were asked to estimate the number of students their age who smoke cigarettes. They also were asked about their friends’ feelings about smoking. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

- Nearly one-half of middle school students (45.2%) think that fewer than three out of 10 of their peers smoke cigarettes once a month or more; whereas just one-fifth of high school students (21.4%) believe the same.

- Middle school students (18.8%) are significantly more likely than high school students (5.3%) to think that none of their peers smoke cigarettes once a month or more.

- In both middle school and high school, students who have never smoked cigarettes (78.8% and 74.1%) are significantly more likely than those who currently smoke cigarettes (23.7% and 23.4%) to think that their friends would be upset if they smoked cigarettes.
Tobacco Use Discussions with Adults

“In the past 12 months, how often have your parents or guardians discussed the dangers of tobacco use with you?”

“In the past 12 months, has a doctor or dentist, or someone in their office, talked to you about the dangers of tobacco use?”

Students were asked if they had received warnings from their parents about the dangers of tobacco use within the past 12 months. They also were asked whether they discussed the dangers of tobacco use with a doctor, dentist, or someone else in their office within the past 12 months. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

- Among middle school students, there is no significant difference between students who currently smoke (49.4%) and those who have never smoked (70.1%) in the percentage who have discussed the dangers of tobacco use with their parents in the past 12 months.

- Among high school students, there is no significant difference between students who currently smoke (65.1%) and those who have never smoked (62.0%) in the percentage who have discussed the dangers of tobacco use with their parents in the past 12 months.

- Regardless of their smoking status, between approximately one-fifth and one-third of middle school and high school students have been told by their doctor or dentist about the dangers of tobacco use in the past 12 months.
School Education

“During this school year, were you taught in any of your classes about the dangers of tobacco use?”

Students were asked about the education they received during the current school year regarding the dangers of tobacco use.

- As grade increases, the percentage of students who report they were taught about the dangers of tobacco use in school decreases; dropping from nearly two-thirds of students in sixth grade to approximately one-third in 12th grade.

- Between 10th (71.7%) and 12th grade (32.2%), there is a significant decline in the percentage of students who were taught about the dangers of tobacco use in school.

- Slightly more than one-half of middle school (57.0%) and high school students (55.8%) report they were taught about the dangers of tobacco use during the current school year.

- In both middle school and high school, there is no significant difference between male (53.8% and 53.4%, respectively) and female students (60.4% and 58.1%, respectively) with regard to their school education about the dangers of tobacco use.

- In both middle school and high school, there are no significant differences among white (59.7% and 57.0%, respectively), black (58.4% and 61.1%, respectively), and Hispanic students (48.7% and 42.9%, respectively) in the percentage who were taught about the dangers of tobacco use during the current school year.

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For the 2006 report, data are presented for students who were taught about the dangers of tobacco use, rather than just the dangers of cigarette and smokeless tobacco use.
Tobacco Influences in the Media

“During the past 30 days, about how often have you seen or heard commercials on TV, the Internet, or on the radio about the dangers of cigarette smoking?”

Students were asked about their exposure to anti-tobacco messages in the media in the past 30 days.

- Illinois middle school and high school students (65.9% and 79.3%, respectively) are significantly less likely to have seen or heard anti-tobacco advertisements in the past 30 days than middle and high school students nationally (84.7% and 89.9%, respectively).

- In middle school, female students (74.1%) are significantly more likely than male students (58.3%) to have been exposed to anti-tobacco advertisements in the past 30 days. At the high school level, however, there is no significant difference between male (76.5%) and female students (82.0%) in the rates of exposure to anti-tobacco messages in the media.

- In middle school, there are no significant differences among white (67.4%), black (58.9%), and Hispanic students (69.3%) in the rates of exposure to anti-tobacco messages. In high school, white students (82.9%) are significantly more likely than Hispanic students (70.6%) to have seen or heard anti-tobacco advertisements.

- Between middle school and high school, there is a significant increase in students’ exposure to anti-tobacco messages in the media among males (58.3% and 76.5%, respectively), white students (67.4% and 82.9%, respectively), black students (58.9% and 75.9%, respectively), and students overall (65.9% and 79.3%, respectively).
Tobacco Ads on the Internet

“When you are using the Internet, how often do you see ads for tobacco products?”

To assess exposure to tobacco advertisements on the Internet, students were asked how often they see ads for tobacco products when they use the Internet. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

- Among students who have never smoked cigarettes, the percent who have seen advertisements for tobacco on the Internet stays fairly stable as grade increases, from 43.4 percent in sixth grade to 34.8 percent in 12th grade.

- Middle school students who currently smoke (74.8%) are significantly more likely than middle school students who have never smoked (34.9%) to see advertisements for tobacco products on the Internet. –data not shown

- Rates of exposure to tobacco advertisements on the Internet are comparable for high school current smokers (49.8%) and high school students who have never smoked (38.9%). –data not shown

- Overall, approximately four out of 10 middle school and high school students who use the Internet have seen ads for tobacco products on the Internet.

- In middle school and high school, there is no significant difference between male (42.4% and 41.3%, respectively) and female students (42.4% and 44.6%, respectively) with respect to exposure to tobacco advertisements on the Internet.

- In middle school, there are no significant differences among white (39.6%), black (45.4%), and Hispanic students (49.9%) in their exposure to tobacco advertisements on the Internet.

- In high school, black students (57.7%) are significantly more likely than white (39.0%) and Hispanic students (42.1%) to report seeing tobacco advertisements on the Internet.
**Tobacco Advertising**

“During the past 12 months, did you buy or receive anything that has a tobacco company name or picture on it?”

“When you go to a convenience store or gas station, how often do you see ads for cigarettes and other tobacco products or items that have tobacco company names or pictures on them?”

Students were asked if they have received or bought items with tobacco company names or logos, as well as their exposure to such items in convenience stores and gas stations. Students were considered to be current tobacco users if they reported using any tobacco products at least once within the past 30 days. Students were considered to be never tobacco users if they reported never having used any tobacco product. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

- Illinois middle school students who currently use tobacco (30.3%) are significantly less likely than middle school tobacco users nationally (45.7%) to have bought or received an item with a tobacco company name or picture on it in the past 12 months. At the high school level, 34.5 percent of Illinois students who currently use tobacco bought or received an item with a tobacco company name or picture on it in the past 12 months, which is comparable to high school tobacco users nationally (34.6%).

- 7.6 percent of Illinois middle school never tobacco users and 12.0 percent of Illinois high school never tobacco users bought or received an item with a tobacco company name or picture on it in the past 12 months, which is comparable to the rates of middle school (8.5%) and high school (10.4%) never tobacco users nationally.

- 91.3 percent of middle school students and 96.7 percent of high school students, regardless of their smoking status, see ads for tobacco products or tobacco logos when they are in gas stations or convenience stores.

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10 For the 2006 report, data are presented for current tobacco users and never tobacco users, rather than current smokers and never smokers.

11 For the 2006 definition of this variable, students who indicated they see ads for tobacco products or tobacco logos “a lot” or “sometimes” are included in the numerator and students who indicated they do not go to gas stations or convenience stores are excluded from the denominator.

Secondhand Smoke

“Do you think the smoke from other people’s cigarettes is harmful to you?”

Students were asked if they think secondhand smoke is harmful. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

- Overall, in both middle school and high school, approximately nine out of 10 students believe secondhand smoke is harmful to them.

- In both middle school and high school, there is no significant difference between male (88.9% and 93.1%, respectively) and female students (91.3% and 94.8%, respectively) in their beliefs about the harmfulness of secondhand smoke.

- In middle school, white students (93.8%) are significantly more likely than black (82.8%) or Hispanic students (87.4%) to believe that secondhand smoke is harmful.

- There are no significant differences among white (95.4%), black (94.1%), and Hispanic high school students (87.8%) in their beliefs about the harmfulness of secondhand smoke.

- In middle school, there is no significant difference between students who currently smoke (83.4%) and those who have never smoked (92.2%) with regards to their beliefs about the harmfulness of secondhand smoke.

- In high school, however, students who have never smoked (97.7%) are significantly more likely than students who currently smoke (91.7%) to believe that secondhand smoke is harmful.
Exposure to Secondhand Smoke in the Home

“Does anyone who lives with you now smoke cigarettes?”

To assess how many students are being exposed to cigarette smoke at home, students were asked if they live with someone who smokes cigarettes. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

- The percentage of students who currently smoke and live with someone who smokes fluctuates between slightly more than one-half in grade seven (56.9%) to approximately one-third in grade 12 (34.8%). The percentage of students who have never smoked who live with someone who smokes also fluctuates across grades, between just less than one-half in grade six (41.7%) to about one-quarter in grade 12 (26.5%).

- Overall, 47.4 percent of middle school students and 36.4 percent of high school students live with someone who smokes cigarettes.

- In middle school, students who currently smoke (70.1%) are significantly more likely than students who have never smoked (41.5%) to live with someone who smokes cigarettes. In high school, however, there is no significant difference between students who currently smoke (45.8%) and students who have never smoked (28.8%) in their likelihood to live with someone who smokes.
Recent Exposure to Secondhand Smoke in a Car

“During the past seven days, on how many days did you ride in a car with someone who was smoking cigarettes?”

Students were asked if they had ridden in a car with someone who was smoking cigarettes on one or more of the past seven days. Students were considered to be current smokers if they reported smoking cigarettes at least once within the past 30 days. Students were considered to have never smoked if they have never tried cigarette smoking, even one or two puffs.

- Across grades at the middle school level, the rates of current smokers’ and never smokers’ recent exposure to secondhand smoke in a car are comparable. Among the high school grades, however, current smokers are significantly more likely than students who have never smoked to report exposure to secondhand smoke in a car.

- The percentage of current smokers who report recent exposure to secondhand smoke in a car fluctuates between grades seven and nine, but then stabilizes. Among students who have never smoked, rates of exposure to secondhand smoke exhibit a general downward trend as grade increases.

- Approximately one-half of middle school current smokers (45.7%) and over three-quarters of high school current smokers (77.8%) have recently ridden in a car with someone who was smoking cigarettes. Rates of recent exposure to secondhand smoke in a car among middle school current smokers (45.7%) and never smokers (39.7%) are comparable, but at the high school level, current smokers (77.8%) are significantly more likely than their peers who have never smoked (24.5%) to have recently ridden in a car with someone who was smoking cigarettes.
METHODOLOGY

The purpose of the Illinois Youth Tobacco Survey (IYTS) was to gather attitude, usage, and exposure information regarding tobacco products statewide. To accomplish this, the IYTS used a paper-and-pencil questionnaire administered following CDC’s methodology for the Youth Tobacco Survey (YTS).

Questionnaire Development

The questionnaire was developed by the Illinois Department of Public Health, in collaboration with the CDC Office on Smoking and Health. The IYTS included a core set of YTS questions developed by CDC, first implemented by a small number of states as early as 1998, and now adopted by the overwhelming majority of states in conducting their own YTS. The questionnaire covered eight topics: tobacco use (bidis, cigarettes, cigars, kreteks, pipes, and smokeless tobacco), exposure to secondhand smoke, smoking cessation, school curriculum, minors’ ability to purchase or obtain tobacco products, knowledge and attitudes about tobacco, familiarity with pro-tobacco and anti-tobacco media messages, and demographics. The questionnaire contained 80 items.

Sampling

Sample Design

Separate high school and middle school samples were selected, with an objective of having 95 percent confidence limits of approximately ±five percent around key smoking variables. The sampling frame consisted of all public schools containing students enrolled in grades nine through 12 for the high schools and six through eight for the middle schools. A two-stage cluster sample design was used to produce a representative sample of high school students in grades nine through 12 and middle school students in grades six through eight. The sampling program PC-Sample was used to draw both the high school and middle school sample.

Sampling Procedures

School Level – The first-stage sampling frame consisted of all public schools containing any of the grades six through eight for the middle schools and nine through 12 for the high schools. Schools were selected with probability proportional to school enrollment size (PPS).

Class Level – The second sampling stage consisted of systematic equal probability sampling (with a random start) of classes from each middle school and high school that participated in the survey. All second period classes or all sections of a required course in the selected schools were included in the sampling frame.
Student Level – All students in a selected class were eligible to participate in the survey. Students who were absent the day of the survey also were given the opportunity to take it at a later date.

Data Collection

Recruitment of Sampled Districts and Schools

District and school recruitment began in March 2006. Prior to beginning district and school recruitment, letters were sent to the regional tobacco coordinators representing those districts to obtain additional names of supportive contacts, document helpful background information, and ask if the regional contacts would be willing to make pre-contact calls to encourage participation.

Once these contacts were made, tailored letters of invitation were sent out to the school districts. These letters were followed by phone calls directly to the superintendent to answer questions and obtain permission to contact the school. School packets were included with the district invitation packet and the superintendents were asked to forward these on to the principal after their approval was received. The recruitment process sometimes included the completion of special research proposals, attendance at board meetings and principal meetings, and other clearance procedures.

As soon as notification was received that a school packet had been sent to the principal, the principal was called, a contact person was assigned, classes selected, and a date for data collection was scheduled.

Classroom-level Data Collection

The IYTS was administered between April 10 and May 26, 2006, by four specially trained field staff. The data collectors were recruited from a variety of sources including local and state retired teacher’s associations, local universities, and job fairs. They completed an intensive training that included lectures, simulations, group role-plays, and discussions. Detailed arrangements and survey schedules were set prior to each school visit.

Weighting

A weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response. The weight used for estimation is given by:

\[ W = W_1 \times W_2 \times f_1 \times f_2 \times f_3 \times f_4 \]

\[ W_1 = \text{the inverse of the probability of selecting the school} \]

\[ W_2 = \text{the inverse of the probability of selecting the classroom within the school} \]
f1 = a school-level non-response adjustment factor calculated by school size category (small, medium, large)

f2 = a class adjustment factor calculated by school

f3 = a student-level non-response adjustment factor calculated by class

f4 = a post stratification adjustment factor calculated by gender and grade

The weighted results can be used to make important inferences concerning tobacco use risk behaviors of all regular public school students in grades six through 12 in the state of Illinois.

Table 1 outlines the IYTS response rates.

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<td>%</td>
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SUDAAN was used to compute 95 percent confidence intervals, which were used to determine the differences between subgroups at the p < 0.05. Difference between prevalence estimates were considered statistically significant if the 95 percent confidence intervals did not overlap.
Table 2. Demographic characteristics of respondents

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<tr>
<td>7th</td>
<td>595</td>
<td>36.7%</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>8th</td>
<td>382</td>
<td>35.7%</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>9th</td>
<td>---</td>
<td>---</td>
<td>333</td>
<td>28.9%</td>
</tr>
<tr>
<td>10th</td>
<td>---</td>
<td>---</td>
<td>321</td>
<td>26.7%</td>
</tr>
<tr>
<td>11th</td>
<td>---</td>
<td>---</td>
<td>206</td>
<td>22.5%</td>
</tr>
<tr>
<td>12th</td>
<td>---</td>
<td>---</td>
<td>291</td>
<td>21.9%</td>
</tr>
</tbody>
</table>

[^13]: Figures represent the unweighted sample size and weighted percent.
### TABLE 1. Prevalence of current* tobacco use among middle school and high school students, by gender, race/ethnicity, grade, and tobacco product

<table>
<thead>
<tr>
<th>Category</th>
<th>Any ** Tobacco Use</th>
<th>Cigarette Use</th>
<th>Cigar Use</th>
<th>Pipe Use</th>
<th>Smokeless Tobacco Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n**</td>
<td>%</td>
<td>CI</td>
<td>n**</td>
<td>%</td>
</tr>
<tr>
<td><strong>Middle School</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>210,681</td>
<td>12.5</td>
<td>±7.2</td>
<td>194,144</td>
<td>5.9</td>
</tr>
<tr>
<td>Male</td>
<td>224,285</td>
<td>21.3</td>
<td>±10.3</td>
<td>209,521</td>
<td>11.5</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>251,065</td>
<td>17.5</td>
<td>±12.1</td>
<td>233,525</td>
<td>9.9</td>
</tr>
<tr>
<td>Black</td>
<td>89,488</td>
<td>16.4</td>
<td>±5.3</td>
<td>85,073</td>
<td>5.6</td>
</tr>
<tr>
<td>Hispanic</td>
<td>78,243</td>
<td>17.8</td>
<td>±8.5</td>
<td>70,594</td>
<td>10.0</td>
</tr>
<tr>
<td>Other</td>
<td>14,002</td>
<td>11.4</td>
<td>±10.5</td>
<td>12,304</td>
<td>5.2</td>
</tr>
<tr>
<td><strong>Grade</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6th</td>
<td>118,900</td>
<td>13.2</td>
<td>±10.3</td>
<td>111,253</td>
<td>2.5</td>
</tr>
<tr>
<td>7th</td>
<td>157,731</td>
<td>17.6</td>
<td>±10.9</td>
<td>150,200</td>
<td>8.3</td>
</tr>
<tr>
<td>8th</td>
<td>153,360</td>
<td>19.6</td>
<td>±14.4</td>
<td>138,981</td>
<td>14.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>435,343</td>
<td>17.0</td>
<td>±7.0</td>
<td>404,041</td>
<td>8.8</td>
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<tr>
<td><strong>High School</strong></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>291,061</td>
<td>25.3</td>
<td>±5.3</td>
<td>286,932</td>
<td>20.8</td>
</tr>
<tr>
<td>Male</td>
<td>296,870</td>
<td>32.6</td>
<td>±7.7</td>
<td>281,452</td>
<td>22.6</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>373,196</td>
<td>29.9</td>
<td>±8.2</td>
<td>367,999</td>
<td>24.4</td>
</tr>
<tr>
<td>Black</td>
<td>108,176</td>
<td>26.9</td>
<td>±13.6</td>
<td>99,200</td>
<td>13.7</td>
</tr>
<tr>
<td>Hispanic</td>
<td>82,726</td>
<td>31.6</td>
<td>±9.2</td>
<td>78,518</td>
<td>22.4</td>
</tr>
<tr>
<td>Other</td>
<td>22,940</td>
<td>15.7</td>
<td>±7.9</td>
<td>21,774</td>
<td>11.3</td>
</tr>
<tr>
<td><strong>Grade</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th</td>
<td>166,363</td>
<td>23.2</td>
<td>±7.6</td>
<td>162,860</td>
<td>17.2</td>
</tr>
<tr>
<td>10th</td>
<td>153,553</td>
<td>25.5</td>
<td>±8.1</td>
<td>150,344</td>
<td>19.0</td>
</tr>
<tr>
<td>11th</td>
<td>129,769</td>
<td>31.9</td>
<td>±8.8</td>
<td>121,453</td>
<td>18.1</td>
</tr>
<tr>
<td>12th</td>
<td>125,837</td>
<td>35.2</td>
<td>±4.2</td>
<td>123,249</td>
<td>30.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>587,931</td>
<td>29.0</td>
<td>±6.0</td>
<td>568,384</td>
<td>21.7</td>
</tr>
</tbody>
</table>

* Used tobacco on ≥ 1 of the 30 days preceding the survey
** Composite variable: includes use of cigarettes or cigars or smokeless tobacco or pipes or bidis or kreteks on ≥ 1 of the 30 days preceding the survey

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**DETAILED TABLE 2006 ILLINOIS YOUTH TOBACCO SURVEY**

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