

# Teens and Tobacco in Minnesota, 2014 Update

## *Executive Summary*

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**Minnesota Department of Health  
Center for Health Equity  
Center for Health Statistics**

November, 2014





# TEENS AND TOBACCO IN MINNESOTA, 2014 UPDATE: EXECUTIVE SUMMARY

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## **ACKNOWLEDGMENTS**

We express our thanks to the thousands of students who completed the Minnesota Youth Tobacco Survey in 2014 and in previous years for their willingness to answer questions about their experiences with tobacco use. We are equally indebted to the principals, teachers and staff who worked to make sure the survey went smoothly at 70 schools around the state. ICF Macro, Inc. and its team of local survey administrators made all the arrangements with schools and administered the survey in the selected classrooms. Our colleagues in the Office on Smoking and Health at the Centers for Disease Control and Prevention (CDC) provided the core survey questions, drew the school samples, scanned the survey booklets, and prepared the initial data file.

Financial support for the 2014 Minnesota Youth Tobacco Survey was provided by the Centers for Disease Control and Prevention as part of grant 5U58DP001974-05.

Finally, we would like to thank the many dedicated people throughout the state who support the well-being of our young people by encouraging them to reject tobacco use and other threats to health and growth. We hope this information will help all of us better understand the trends and characteristics of teen tobacco use in Minnesota.

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# EXECUTIVE SUMMARY

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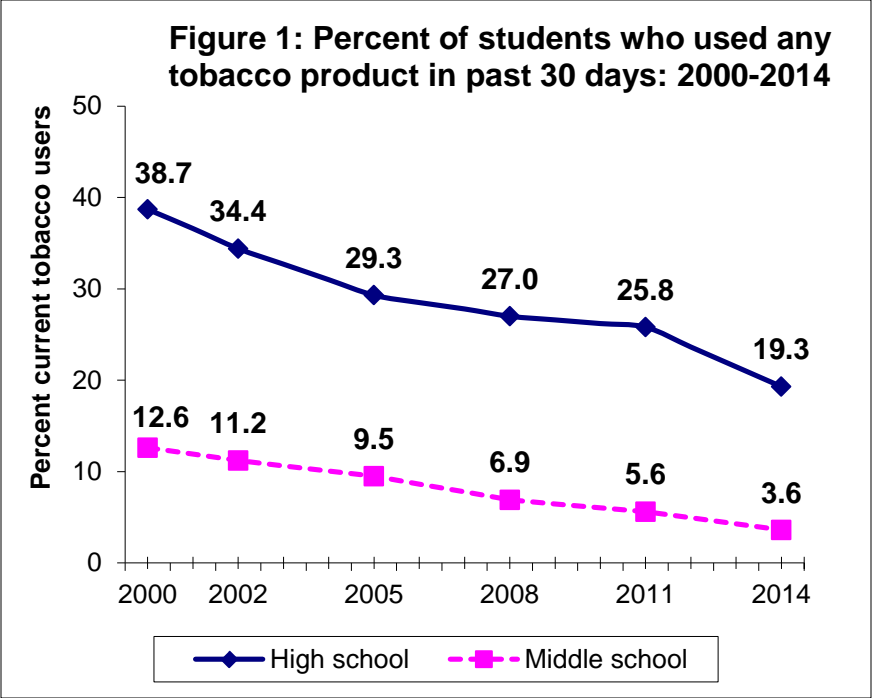
The damage caused by tobacco use – premature death, illness, and disability – begins early in life, with 80 percent of adult smokers having their first cigarette before the age of 18.<sup>1</sup> Preventing young people from becoming addicted is one of the core strategies for reducing the harm caused by tobacco. Since 2000, the Minnesota Department of Health has been conducting the Minnesota Youth Tobacco Survey (MYTS) to provide comprehensive information needed to understand tobacco use among young people and to design and evaluate prevention efforts. The sixth MYTS was conducted in 2014, and previous surveys took place in 2000, 2002, 2005, 2008, and 2011.

The 2014 survey included many questions about new products, especially electronic cigarettes, as well as conventional tobacco products. Public schools and classrooms across the state were selected at random and invited to participate. Overall, 4,243 students in grades 6 through 12 took the survey.

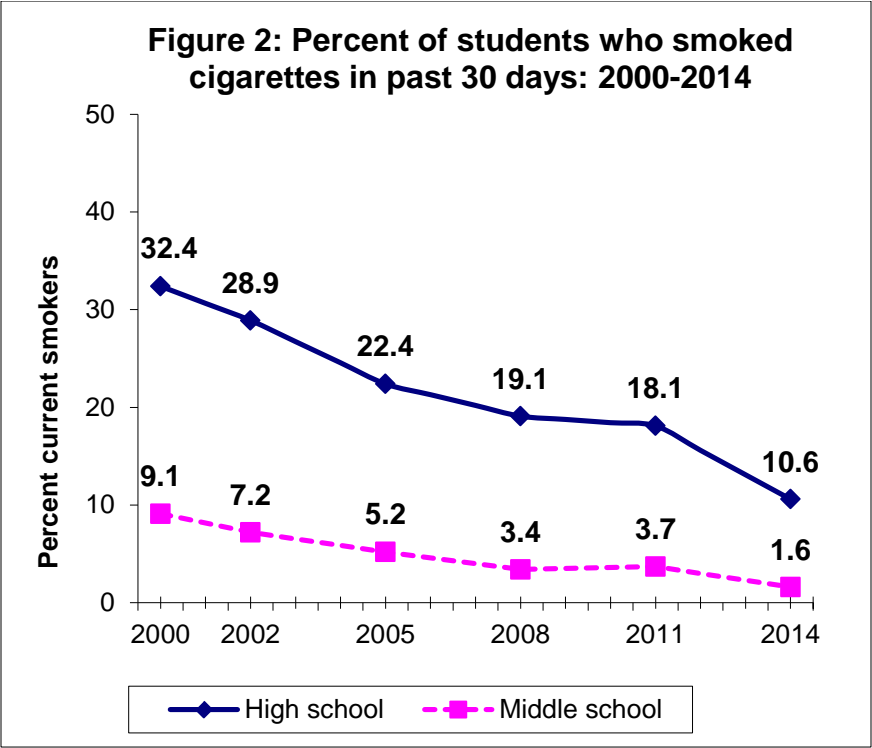
## MAJOR FINDINGS

### **TOBACCO USE DECLINED SHARPLY IN MINNESOTA BETWEEN 2011 AND 2014.**

- The percent of high school students using any of the conventional tobacco products in the past 30 days fell from 25.8 percent in 2011 to 19.3 percent in 2014, the sharpest drop ever recorded by the survey. (Conventional products are cigarettes; cigars, cigarillos and little cigars; smokeless tobacco, and pipes.)
- The percent of high school students who smoked cigarettes in the past 30 days dropped from 18.1 percent in 2011 to 10.6 percent in 2014, again the steepest decline recorded by the survey.
- The percent of high school students smoking cigars, cigarillos, or little cigars in the past 30 days fell from 13.0 percent in 2011 to 8.2 percent in 2014. This is the first time any progress in reducing the use of cigar products has been recorded by the survey. Cigar use had remained remarkably steady between 2000 and 2011.
- The percent of high school students using chewing tobacco, snuff, or dip in the past 30 days declined from 8.4 percent in 2011 to 6.2 percent in 2014.
- Tobacco use also continued to decline among middle school students. In 2014, just 3.6 percent of middle school students reported that they used any tobacco product in the past 30 days, and only 1.6 percent reported that they smoked cigarettes in the past 30 days.
- In 2014, an estimated 55,400 public school students in grades 6-12 used some form of conventional tobacco product in the past 30 days, including an estimated 29,700 who smoked cigarettes in the past 30 days.



Source: Minnesota Youth Tobacco Survey, 2000-2014.



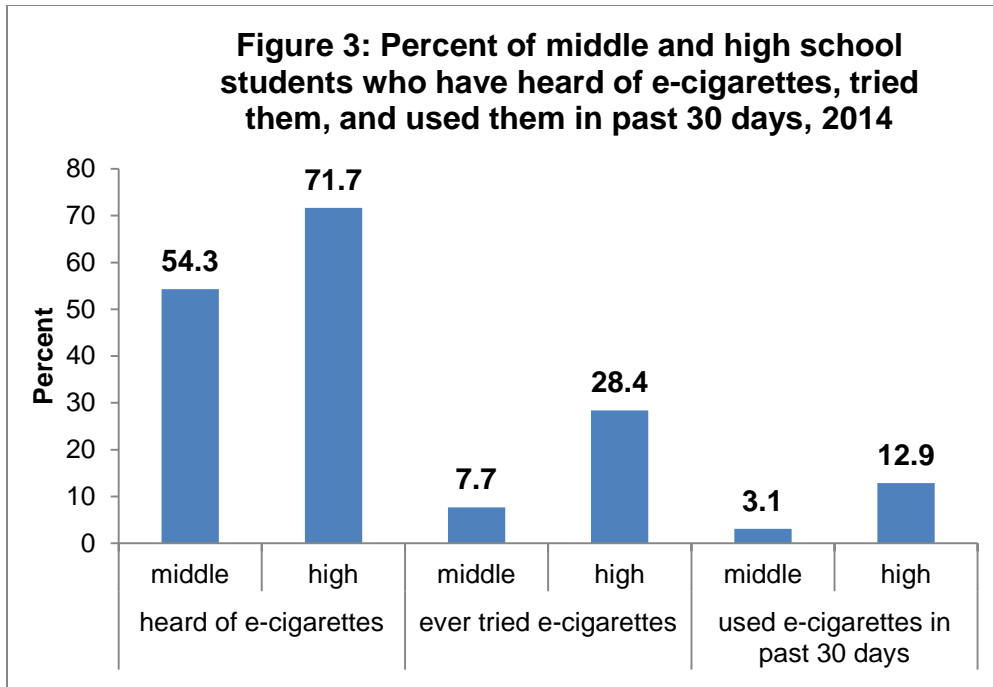
Source: Minnesota Youth Tobacco Survey, 2000-2014.

## USE OF ELECTRONIC CIGARETTES BY MINNESOTA YOUTH HAS GROWN RAPIDLY.

Electronic cigarettes or e-cigarettes were introduced to the U.S. market in 2007. Most e-cigarettes, like conventional tobacco products, deliver nicotine to the user. One of the major concerns about e-cigarettes is that nicotine is known to harm fetal and adolescent brain development. The 2014 Surgeon General's report states: "The evidence is suggestive that nicotine exposure during adolescence, a critical window for brain development, may have lasting adverse consequences for brain development."<sup>2</sup> Nicotine is also highly addictive. Another major concern is that e-cigarettes may introduce young people to the world of nicotine or may provide additional doses of nicotine to youth already using conventional tobacco products. The survey results suggest that there is reason for concern.

- 71.7 percent of high school students and 54.3 percent of middle school students have heard of e-cigarettes.
- 28.4 percent of high school students and 7.7 percent of middle school students have tried electronic cigarettes or e-cigarettes at least once in their lifetime.
- 12.9 percent of high school students and 3.1 percent of middle school students have tried or used an electronic cigarette at least once in the past 30 days.
- An estimated 85,900 public school students in grades 6-12 have tried e-cigarettes, and 38,400 reported using them at least once in the past 30 days.
- It is too early to know if Minnesota's results are being matched at the national level. The most recent national data finds that in 2012 just 2.8 percent of high school students used e-cigarettes in the past 30 days. However, those national results are now two years old and are not likely to provide an accurate picture of current reality in this rapidly changing field.
- Most students using e-cigarettes are also using conventional tobacco products. Three-fifths (60.1%) of high school students who used an e-cigarette at least once in the past 30 days also used conventional tobacco products such as cigarettes in the past 30 days.
- Many young people are being introduced to nicotine through electronic cigarettes. An estimated 15,300 public high school students have tried e-cigarettes even though they have never used cigarettes or any conventional tobacco product. Nearly one quarter of high school students who have tried e-cigarettes (22.4%) have never tried any conventional tobacco products.

The fact that so many youth have tried or are using e-cigarettes in 2014 represents dramatic growth in the six or seven years since these products first came on the market. However, it would be premature to equate the use of e-cigarettes with the use of conventional cigarettes and other tobacco products. When a new product like e-cigarettes is spreading so rapidly, it is possible that some of the users in the past 30 days were just trying it out and may not continue using it. The 2014 MYTS unfortunately does not provide the same detailed information about e-cigarettes as we have about conventional tobacco. We know little, for example, about how often and how regularly these students are using e-cigarettes, and we need more complete information.



Source: Minnesota Youth Tobacco Survey, 2014.

## **STUDENTS ARE EXPOSED TO HIGH LEVELS OF E-CIGARETTE ADVERTISING.**

- Most high school students (57.4%) have seen ads for e-cigarettes on TV in the past 30 days.
- Nearly half of high school students (47.5%) have seen ads in convenience stores and other stores in the past 30 days.
- In addition, 33.9 percent of high school students have seen ads on the internet, 27.3 percent have seen ads in magazines, 15.2 percent have seen ads on billboards, and 14.2 percent have heard ads on the radio.
- 16.2 percent of high school students report that they see actors using e-cigarettes “sometimes,” “most of the time,” or “always” when they watch TV or go to the movies.

## **ADDITIONAL FINDINGS**

### **Menthol cigarette use remains high among smokers.**

Menthol is an ingredient that masks the harshness and irritation that smokers, especially new or younger smokers, may feel when they inhale cigarette smoke. The tobacco industry sees adding menthol in cigarettes as a key strategy in attracting young people to smoking and helping inexperienced smokers transition into regular smokers.<sup>3</sup>

- Nearly half of high school smokers (44.3%) usually smoke menthols. In contrast, only 22.0 percent of Minnesota adult smokers usually smoke menthols.<sup>4</sup>
- The percentage of Minnesota high school smokers who prefer menthol has more than doubled since 2000.



### **Nearly one in five high school students has tried using a hookah.**

- Among the newer or nonconventional products, the next most popular after e-cigarettes is the hookah or waterpipe – 18.4 percent of high school students reported ever smoking tobacco with a hookah or waterpipe, and 5.4 percent had done so in the past 30 days.

### **Initiation of conventional tobacco use has continued to decline.**

- The percentage of middle school students who have ever tried any form of conventional tobacco fell from 15.0 percent in 2011 to 12.1 percent in 2014. The percentage of high school students who have ever tried tobacco fell from 46.2 percent in 2011 to 40.2 percent in 2014.

### **The mix of conventional tobacco products used by students is changing.**

As the number of adolescent tobacco users continues to shrink, the mix of products used by these students has become more fluid, moving away from cigarettes and towards other products.

- Among high school students who used tobacco in the past 30 days, the percentage who smoked cigarettes during that time fell from 68.8 percent in 2011 to 54.3 percent in 2014.
- Cigars, cigarillos and little cigars, and smokeless tobacco have increased their share of the market among high school tobacco users.

### **The home and peer environment greatly affects the odds of becoming a tobacco user.**

- Students who are current tobacco users (in past 30 days) are twice as likely as non-users to live with another person who smokes cigarettes or uses other tobacco products.
- High school students who are current cigarette smokers are seven times as likely as non-smokers to have at least two smokers among their four closest friends.
- The percentage of middle school students living with someone who smokes cigarettes fell from 34.2 to 28.8 percent between 2011 and 2014, and the percentage of high school students living with someone who smokes cigarettes fell from 36.0 to 29.7 percent.

### **Some students are still able to buy tobacco direct in stores.**

- 14.6 percent of high school current cigarette smokers under 18 were able to purchase cigarettes directly in a store during the previous 30 days. In addition, 17.2 percent of current smokeless tobacco users were able to purchase their products directly in a store.

### **Many students are still exposed to secondhand smoke**

- Among students who do not smoke any tobacco, 41.7 percent in middle school and 47.8 percent in high school reported exposure to secondhand smoke in the past 7 days.
- 20.6 percent of middle school non-smokers and 19.9 percent of high school non-smokers reported repeated exposure (on 3 or more of the past 7 days). The most common location of repeated exposure was at home.

## Smoke-free rules in homes and vehicles are widespread, and students support these rules.

- 84.5 percent of high school students report that smoking is never allowed inside their homes, and 76.1 percent say that smoking is never allowed in their family vehicles.
- Among high school students, the percentage with rules prohibiting smoking inside the home rose from 79.7 percent in 2011 to 84.5 percent in 2014.
- Nine out of ten middle school students believe that smoking should never be allowed inside the home (91.1%) or in their family vehicles (89.6%).

## Tobacco use is high among students from certain race-ethnic, economic, and demographic groups.

While the Youth Tobacco Survey is not designed to provide reliable data on tobacco disparities, the Minnesota Student Survey offers a wealth of data that can describe disparities regarding tobacco use.

- Of all 11<sup>th</sup> grade students who took the 2013 Minnesota Student Survey, 18.9 percent had used tobacco – cigarettes, cigars, or smokeless tobacco – during the past 30 days.
- Among 11<sup>th</sup> graders, American Indian students had the highest rate (29.2%) of any racial-ethnic group.
- Bisexual students and gay/lesbian students in 11<sup>th</sup> grade reported exceptionally high tobacco use rates, 37.1 percent and 29.2 percent respectively.
- Students in 11<sup>th</sup> grade from low-income households (as identified by receiving free or reduced-price school lunch) reported tobacco use rates that were above average (20.5%).
- Students experiencing serious economic distress, such as having to skip meals or being homeless at some time in the past year, had very high rates of tobacco use (34.5 percent and 38.7 percent respectively).

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<sup>1</sup> Clearway Minnesota and Minnesota Department of Health; *Tobacco Use in Minnesota: 2010 Update*, pages 2-25 to 2-27. Minneapolis, MN: February 2011. Available at [Web page for Minnesota Adult Tobacco Survey](#).

<sup>2</sup> U.S. Department of Health and Human Services. *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta: Centers for Disease Control and Prevention, 2014, p. 126.

<sup>3</sup> Kreslake JM, Wayne GF, Alpert HR, Koh HK, and Connolly GN. Tobacco Industry Control of Menthol in Cigarettes and Targeting of Adolescents and Young Adults. *American Journal of Public Health*. September 2008; 98(9): 1685-1692; Klausner K. Menthol cigarettes and smoking initiation: a tobacco industry perspective. *Tobacco Control* 2011;20(Supplement 2):iii12—iii19. Doi:10.1136/tc.2010.041954.

<sup>4</sup> Clearway Minnesota and Minnesota Department of Health; *Tobacco Use in Minnesota: 2010 Update*, pages 2-34 to 2-35. Minneapolis, MN: February 2011. Available at [Web page for Minnesota Adult Tobacco Survey](#).

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