

2017 MYTS Toolkit

The Minnesota Youth Tobacco Survey (MYTS), conducted since 2000 by the Minnesota Department of Health, is a representative sample survey, which provides comprehensive, in depth information on the tobacco use of young people and to design and evaluate prevention efforts. The seventh MYTS was conducted in 2017 and included participation from 4,112 students from 70 public schools.

Key Findings and Themes

Youth tobacco use increased for the first time in 17 years.

- Over 26% of high school students use tobacco products – up 7% from 2014.
- This is the first increase since 2000 and is the result of rapid uptake of e-cigarette and recent increases in cigar use (11%, up 29% from 2014).

Youth e-cigarette use is at its highest point ever recorded.

- 1 in 5 (19%) of high school students use e-cigarettes, nearly a 50 percent increase since 2014.
 - Over 37% of high school students have ever tried e-cigarettes, up 33% from 2014.
- This increase is no surprise given the Tobacco Industry’s promotion of these products
 - Over 60% of high school e-cigarette users report using menthol or other flavored e-cigarettes. Flavored tobacco products appeal to youth.
 - Nearly 1 in 5 (18.4%) of high school e-cigarette users age 17 or younger reported purchasing the e-cigarettes directly from vape shops or e-cigarette stores.
 - Most students (88.4%) have seen ads promoting e-cigarettes. Over half (50.9%) had seen ads in convenience stores and other stores, 39.6% had seen ads on the internet, and 38.6% on TV.
- Recent evidence suggests that, compared to youth who have never used them, youth who have tried e-cigarettes are twice as likely to start smoking in the future.¹
- These products threaten to reverse the trajectory of our historic public health success in youth tobacco prevention.

E-cigarettes pose a serious health risk.

- Nearly all e-cigarettes contain nicotine, which can harm brain development as teens grow.
- No amount of nicotine is safe for youth.
 - Adolescence is a critical window for brain growth and development, when the brain is still “under construction”; there could be negative implications for learning, memory, and attention.
 - Evidence also suggests that nicotine primes the adolescent brain for addiction, increasing the risk of future addictions not only to tobacco, but other substances like illicit drugs.

¹ Watkins, S.L., S.A. Glantz, and B.W. Chaffee, *Association of Noncigarette Tobacco Product Use With Future Cigarette Smoking Among Youth in the Population Assessment of Tobacco and Health (PATH) Study, 2013-2015*. JAMA Pediatr, 2018.

An emerging concern: teens are using e-cigarettes for recreational marijuana.

- One-third of high school e-cigarette users report having used their vaping device for recreational marijuana.
- THC oil or wax is mostly odorless or masked by flavors and may be undetectable when vaped in schools, public places or at home.
- Similar to nicotine, recreational marijuana use is also dangerous to the adolescent brain.

The good news: youth cigarette smoking is at an all-time low.

- Less than 10 percent of high school students now smoke cigarettes – a 70 percent drop since 2000.
- A generation free from the harms of nicotine addiction and commercial tobacco use is within reach, but with the rise in e-cigarette and overall tobacco use, we must remain dedicated to this work.

We are working to reduce youth e-cigarette use.

- Through our network of community grantees and local health departments we are working to reduce youth access to tobacco. They are also working across the state to educate youth and parents on the risks of all tobacco products, including e-cigarettes.
- We issued a Nicotine Health Advisory and are actively working with healthcare providers and parents to raise awareness of the harms of nicotine and e-cigarettes.
- We recently developed a new web-based retailer education training to support enforcement of youth access laws to reduce underage sales and access to tobacco, and we will redouble our efforts to work with cities and counties to increase compliance enforcement
- We are working with other state agencies and partners such as Minnesota Department of Human Services, Public Safety, and Education to further address these findings.

Communities are taking action to reduce youth tobacco use.

- Tobacco control has many highly effective, evidence-based strategies to prevent youth initiation and reduce youth access. Local Communities are working to:
 - Increase the minimum sales age to 21.
 - Reduce youth access to e-cigarettes and other vaping devices.
 - Limit flavored and menthol tobacco sales.
 - Increase the minimum pack and price of cigars.
 - Increase compliance and enforcement efforts of youth access laws.

Data Highlights

Any Tobacco Use

- **26.4%** of high school students used any tobacco product in the past 30 days, up 7% from 2014

E-Cigarette Use

- **19.2%** of high school students used or tried e-cigarettes in the past 30 days, up 49% from 2014
- **37.7%** of high school students have ever tried e-cigarettes, up 33% from 2014.
- **63.6%** of students who currently use e-cigarettes reported using menthol or other flavored e-cigarettes in the past 30 days
- **21.5%** of current e-cigarette users have never tried any conventional tobacco product.
- Recent evidence suggests that, compared to youth who have never used them, youth who have tried e-cigarettes are twice as likely to start smoking in the future.¹

E-cigarettes and Recreational Marijuana Use

- **34.7%** of high school students and **15.8%** of middle school students who currently use e-cigarettes have used an e-cigarette for recreational marijuana, THC or hash oil, or THC wax at least once in their lifetime.

E-cigarette Advertising

- **88.4%** of students had seen ads promoting e-cigarettes in the past 30 days, down slightly from 90.1 percent in 2014.
 - **50.9%** had seen ads in convenience stores and other stores in the past 30 days, up from 47.5 percent in 2014.
 - **39.6%** of students had seen ads on the internet, **38.6%** on TV, **18.6%** in magazines, **14.5%** on billboards, and **6.8%** had heard ads on the radio
 - **29.9%** of high school students who encountered ads in 5 or more locations in the past 30 days were current e-cigarette users

Cigarette Use

- **9.6%** of high school students smoked cigarettes in past 30 days, down 9% from 2014.

Cigar and Cigarillo Use

- **10.6%** of high school students used cigars or cigarillos in the past 30 days, up 29% from 2014.

Menthol Cigarette Use

- **34.1%** of smokers usually smoke menthol cigarettes, down 22% from 2014.

- Adolescent smokers are more likely to smoke menthol cigarettes than are adult smokers.
 - 25.1% of adult smokers usually smoke menthol cigarettes. (MATS 2014)

Youth Access

- **62.4%** of high school and **57.4%** of middle school e-cigarette users got their e-cigarettes from friends.
- **32.2%** of underage high school students who use e-cigarettes got or bought their e-cigarettes from retail outlets. The most common retail outlet reported was vape shops (**18.4%**).
- **19.0%** of underage high school students who are current smokers bought their own cigarettes.

Secondhand Smoke

- **46.2%** of non-smokers had been exposed to secondhand smoke in the past 7 days.

Questions

E-cigarettes

Aren't e-cigarettes the reason that cigarette use has dropped?

We can't know for sure from this survey, but we do know that many youth who reported using e-cigarettes are not substituting – they are using both e-cigarettes and conventional tobacco products. (57.3 percent of high school students who used an e-cigarette in the past 30 days also used conventional tobacco products in the past 30 days.)

We also know there are a number of highly effective evidence-based strategies for reducing tobacco use, such as:

- Raising the price of tobacco products. In July of 2013, excise taxes increased on tobacco products.
- Restricting use indoors. Minnesota has a comprehensive clean indoor air law that prohibits smoking in indoor public places, such as restaurants and workplaces.
- Limiting the sale and promotion of tobacco products.

These public health measures likely played an important role in reducing cigarette use.

Why are more kids using e-cigarettes?

There are likely a number of reasons why youth are using e-cigarettes. However, we know that:

- Unlike conventional cigarettes, e-cigarette advertising is allowed on TV. According to the survey results nearly 40 percent high school students have seen e-cigarette advertising on TV in the past 30 days
- Unlike conventional cigarettes, e-cigarettes are allowed to be sold in fruit and candy flavors. Flavored tobacco products appeal to youth.
- Unlike conventional cigarettes, e-cigarette use is permitted in many indoor places, such as restaurants and workplaces.

Are kids just using e-cigarettes instead of conventional cigarettes?

This new data shows that many kids are using both e-cigarettes and conventional tobacco products. 57.3 percent of high school students who used an e-cigarette in the past 30 days also used conventional tobacco products in the past 30 days.

Regardless, nicotine is highly addictive and harmful to the developing adolescent brain. Children should not be using it, or exposed to it, in any form.

Isn't it a good thing that more students are using e-cigarettes than conventional cigarettes, as e-cigarettes are presumably safer?

Youth should not be using any form of nicotine, which is in most e-cigarettes. Nicotine is highly addictive and known to harm adolescent brain development.

We don't need e-cigarettes to protect youth from smoking; we have evidence based strategies that we know work, such as:

- Raising the price of tobacco products.
- Restricting use indoors.
- Restricting the sale and promotion of tobacco products.

Additionally, most youth initiate use before the age of 18. It's unlikely they're using e-cigarettes for quitting. This is an impressionable age for youth to initiate the use of tobacco products. We see in adults, that a majority of users dual use. Most youth who reported using, are using both e-cigarettes and conventional tobacco products.

Why is nicotine harmful to the adolescent brain?

According to the National Cancer Institute: "In adolescence, your brain is still 'under construction'—as a result, it responds differently to the effects of nicotine than the adult brain. Nicotine is the drug in cigarettes (and other forms of tobacco) that produces addiction. Like heroin and cocaine, nicotine acts on the brain's 'reward pathways' to create feelings of satisfaction and pleasure. The developing brain is highly sensitive to the addictive properties of nicotine. Many teens show signs of addiction even at low levels of tobacco use. Exposure to nicotine during adolescence may alter brain development, rewiring the brain for addiction."²

Does this match national trends?

National surveys have detected rapid growth in the use of e-cigarettes over the past 8-10 years, but the most recent national data suggests that e-cigarette use peaked in 2015, with 16% of high school students reporting use in the past 30 days, followed by a significant decrease in 2016 when 11.3% reported current use. While national data are not yet available for 2017, our findings suggest that Minnesota youth are using e-cigarettes at a higher rate than are youth across the country.

How do these results compare to other Midwest states?

North Dakota reported an increase in high school student use of e-cigarettes in the past 30 days from 6.0 percent in 2013 to 19.1 percent in 2015. Wisconsin reported that 13.3% of high school students were current e-cigarette users in 2016. South Dakota reported that 17.3% of high school students were current e-cigarette users in 2016.

Where does Minnesota rank nationally?

There is not yet consistent data from other states to show where Minnesota ranks nationally.

What's being done to keep e-cigarettes out of the hands of kids?

Minnesota has four state laws that include regulations for electronic nicotine delivery systems such as e-cigarettes. These laws address use, sale, youth access and taxation.

- **Use** – The Minnesota Clean Indoor Air Act (Minn. Stat. §144.411-.417) prohibits the use of electronic nicotine devices (ENDs) inside government buildings, family daycares (during hours of

² U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute. Smoke-free Teens: Health Effects. Accessed on November 6, 2014 at <http://teen.smokefree.gov/yourHealthEffects.aspx#.VFu27PnF-pl>

operation), health care facilities, as well as a number of facilities that are licensed by the Minnesota Department of Human Services or MDH.

- **Sale** – The municipal licensing regulations (Minn. Stat. ch. 461) requires a local license to sell ENDS, prohibits their sale at kiosks or other temporary business locations, generally prohibits their sale through vending machines or other “self-service” means, requires the liquid used in ENDS to be sold in child-resistant packaging, and requires annual compliance checks and mandatory administrative fines and suspensions for noncompliance.
- **Youth Access** – Minnesota’s criminal code (Minn. Stat. §609.685) provides criminal penalties for individuals who furnish or sell ENDS to a minor, as well as fines for minors who possess, use, purchase, or attempt to purchase ENDS.
- **Taxation** – In Minnesota, ENDS that contain nicotine derived from tobacco are considered tobacco products and subject to the state tobacco tax (MN Revenue Memo, Minn. Stat. ch. 297F).

If it’s illegal to sell tobacco products to kids, shouldn’t we just focus our efforts on retailer compliance?

Retailer compliance is one component in reducing youth access to tobacco products. Minnesota has strong youth access laws, which include licensing of tobacco retailers and annual compliance checks. Local cities and counties are responsible for ensuring this municipal law is enforced. It’s good to strengthen these laws in any way possible; we should do all we can to keep these products out of kids’ hands.

What should be done moving forward?

We need to work towards policies that keep youth from being exposed to nicotine and using tobacco.

- **States and local communities can continue to increase the price of tobacco products.** In July 2013, Minnesota’s landmark tobacco excise tax increased the price of cigarettes by \$1.60 per pack. Increasing in the price of tobacco is an effective, evidence-based strategy for reducing youth tobacco use;³ Youth are sensitive to price increases.⁴ A study on the role of policy in reducing Minnesota’s smoking rates between 1993 and 2011 indicates that 43% of the reduction in smoking is a result of price increases of tobacco.⁵
- **States and local communities can restrict the use of all tobacco products indoors.** MDH supports efforts to restrict the use of e-cigarettes indoors. Implementing smoke-free indoor air policies are effective in reducing exposure to secondhand smoke and lead to less smoking.⁶ E-cigarette use is currently allowed in many indoor spaces, such as restaurants and workplaces.
- **State and local communities can continue to limit youth access to tobacco products.** Restricting youth access to tobacco products is a recommended strategy for preventing tobacco use among

³ U.S. Department of Health and Human Services. The Health Consequences of Smoking - 50 Years of Progress. A Report of the Surgeon General, 2014.

⁴ U.S. Department of Health and Human Services. Preventing Tobacco Use Among Youth and Young Adults. A Report of the Surgeon General, 2012.

⁵ Levy, David T., Raymond G. Boyle, and David B. Abrams. “The Role of Public Policies in Reducing Smoking: The Minnesota SimSmoke Tobacco Policy Model.” *Minnesota’s Investment in Applied Tobacco Control Research Findings to Inform Practice and Policy* 43, no. 5, Supplement 3 (November 2012): S179–86. doi:10.1016/j.amepre.2012.07.037.

⁶ U.S. Department of Health and Human Services, *50 Years*

youth.⁷ The U.S. Surgeon General identifies restrictions on sales, including state or local bans on entire categories of tobacco products, as a strategy for reducing use.⁸

- **The FDA should expand advertising and promotion restrictions to include all tobacco products.** Restricting advertising and promotion of tobacco products is an effective a strategy for reducing use among youth and young adults.⁹ E-cigarettes are not subject to the same restrictions as conventional cigarettes and are advertised heavily on TV, radio, the internet and in convenience stores.

Marijuana and E-cigarettes

Where are kids getting the marijuana, THC oil, or wax?

This is a new question and new data. We have not done that additional research. However, we intend to share our findings with law enforcement and work with them to learn more about where kids are getting these products.

Is the THC oil being diverted from the Medical Marijuana Program?

First off, that would be illegal and we are not aware of any incidents of that occurring. It also seems unlikely given the restrictions and costs related to medical cannabis.

What are the health effects of using marijuana in an e-cigarette? What is MDH's position on youth use?

We want to be clear that recreational marijuana presents clear risks for developing minds and is not recommended for youth. We have issued a warning that there is evidence that recreational use of marijuana during the active period of brain development through young adulthood can lead to cognitive impairment. There is also an association between recreational use of marijuana in youth and onset of psychotic mental illness such as schizophrenia.

About the Minnesota Youth Tobacco Survey

The Youth Tobacco Survey (YTS) was developed by the Centers for Disease Control and Prevention (CDC) in collaboration with U.S. states to provide trend surveillance in youth tobacco use, access, and perceptions. The Minnesota Department of Health has conducted the Minnesota Youth Tobacco Survey every 2-3 years since 2000. The school-based pencil-and-paper survey collects information on tobacco use from middle school and high school students throughout the state. Each administration, 100 schools are randomly selected to participate. The probability of selection is proportional to the number of students in grades 6-8 for the middle school sample and grades 9-12 for the high school sample. Within each selected school, classrooms are randomly selected to ensure that each student had only one chance of being selected.

⁷ Centers for Disease Control and Prevention. Best Practices for Comprehensive Tobacco Control Programs - 2014. U.S. department of Health and Human Services, Center for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

⁸ U.S. Department of Health and Human Services, *50 Years*

⁹ U.S. Department of Health and Human Services, *Preventing Tobacco Use*

In 2017, 4,112 students from 70 schools participated, resulting in an overall response rate of 62.7%. The data were adjusted for nonresponse and weighted to produce statewide prevalence estimates while accounting for the complex survey design.

Communications Tools

Pitch to Newsletters

Share this, or similar text with newsletters or announcements to partner organizations and stakeholders.

On February 15, the Minnesota Department of Health released findings from the 2017 Minnesota Youth Tobacco Survey. The new data show for the first time since 2000, overall youth tobacco use has increased in Minnesota. This increase is largely due to a rapid uptake e-cigarettes and other vaping devices. One in five high school students now use e-cigarettes, a nearly 50 percent increase since the data were last collected in 2014.

Most e-cigarettes contain nicotine, which is highly addictive and can harm brain development as teens grow; there could be negative implications for learning, memory, attention, and future addiction.

Learn more about the data the harms of e-cigarettes at www.health.mn.gov/tobacco.

Sample Letter to the Editor

Dear editor,

More than 26 percent of Minnesota high school students use tobacco products.

That finding and others in the new Minnesota Youth Tobacco Survey results should be a wake-up call to everyone who cares about our kids.

I've served as *[insert title in public health organization]* for *[insert number of years]* years and this is the first time I've seen an increase in teen tobacco products use. This increase is due to the rapid rise in e-cigarette use among young people in recent years. Now, 19 percent of Minnesota high schoolers use e-cigarettes, thanks to easy access, aggressive tobacco industry marketing and flavors that appeal to kids.

Most e-cigarettes contains nicotine, which research has shown is harmful to adolescent brain development and his highly addictive. E-cigarette aerosol – that big cloud of vapor you see when people use e-cigarettes – has been shown to contain cancer-causing chemicals such as formaldehyde and heavy metals. One in five Minnesota high schoolers is using e-cigarettes. We need to be alarmed about this.

We must take steps now to reverse this trend of increased tobacco products use by teens. We need to have a comprehensive plan to combat this very real threat to the health of our young people.

[insert your name, title, and organization]

Social Media Content

Sample Facebook post

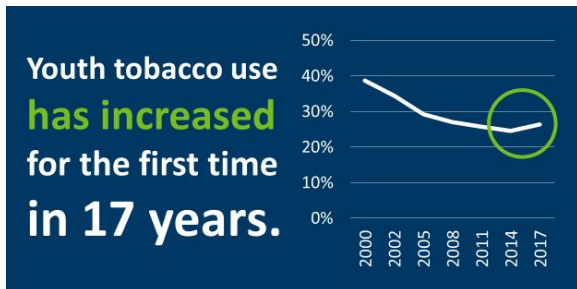
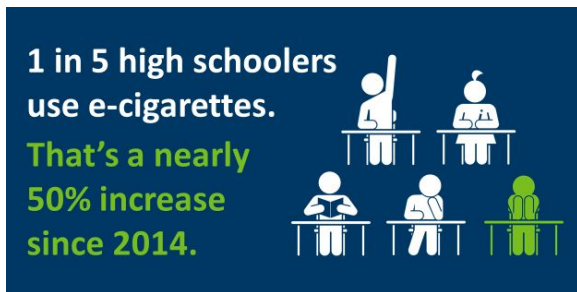
New data show overall Minnesota youth tobacco use has increased for the first time in 17 years. This is largely due to a rapid uptake e-cigarettes and other vaping devices. One in five high school students use

e-cigarettes, a nearly 50 percent increase since 2014! Most e-cigarettes contain nicotine, which is highly addictive and can harm brain development as teens grow. Learn more at health.mn.gov/tobacco.

Sample Tweet

New data: MN teen tobacco use rose for first time in 17 years. More kids are using e-cigs, vapes, etc. 1 in 5 high schoolers vape, up nearly 50% since 2014! Most e-cigs contain nicotine, which is very addictive and can harm brain development. Learn more: health.mn.gov/tobacco

Sample Graphics



Resources

- [2017 MYTS Press Release](#)
- [2017 MYTS Infographic](#)
- [2017 MYTS Report](#)
- [MDH Tobacco](#)

E-cigarettes and Nicotine

- [E-cigarettes and Other Vaping Products](#) (MDH)
- [Electronic Nicotine Delivery Systems: Key Facts \(PDF\)](#) (CDC)
- [Fact Sheet: E-Cigarette Use Among Youth and Young Adults - A Report of the Surgeon General \(PDF\)](#) (CDC)
- [Health Advisory: Nicotine Risks for Children, Teens, and Pregnant Women \(PDF\)](#) (MDH)
- [Health Care Provider Conversation Card \(PDF\)](#) (CDC)
- [Health Risks of Nicotine for Youth](#) (MDH)
- [Infographic: Nicotine - More Harmful than You Think \(PDF\)](#) (MDH)
- [Is it safe to use electronic cigarettes while pregnant?](#) (ALA)
- [Know the Risks: E-cigarettes and Young People](#) (CDC)
- [Talk with Your Teen About E-cigarettes: A Tip Sheet for Parents \(PDF\)](#) (CDC)

Marijuana

- [What you need to know about marijuana use and teens](#) (CDC)
- [Marijuana fast facts and fact sheets](#) (CDC)

Menthol and Flavors

- [Menthol-Flavored Tobacco Products](#) (MDH)
- [Menthol Toolkit](#) (Public Health Law Center)

Tobacco 21

- [Tobacco 21: Health Impacts of Raising the Minimum Tobacco Sale Age](#) (MDH)
- [Raising the Minimum Legal Sale Age for Tobacco to 21: The Estimated Effect for Minnesota \(PDF\)](#)
- [Report Brief: Health Implications of Raising the Minimum Age for Purchasing Tobacco Products \(PDF\)](#) (Institute of Medicine)
- [Increasing the Sale Age for Tobacco Products to 21](#) (Campaign for Tobacco-Free Kids)
- [Three out of 4 American adults favor making 21 the minimum age of sale for tobacco products](#) (CDC)
- [Tobacco 21](#) (Minnesotans for a Smoke-Free Generation)
- [Tobacco 21: Tips and Tools \(PDF\)](#) (Public Health Law Center)
- [Violations and Penalties \(PDF\)](#) (Public Health Law Center)

Other

- [Stop Sales to Minors](#) – Training for retailers to prevent tobacco sales to minors