



TOBACCO USE AMONG LOUISIANA YOUTH

FINDINGS FROM THE LOUISIANA YOUTH TOBACCO SURVEY (LYTS)

2021

TABLE OF CONTENTS

Acknowledgements	3
Executive Summary: Youth Tobacco Use Highlights	4
Terms and Definitions	5
Introduction	6
Background	6
Methodology	6
Demographics	8
Results	<u>C</u>
Product Trends	<u>C</u>
Tobacco Use	11
Prevention and Cessation	15
Initiation and Peer Influence	17
Access	19
Perception	21
Secondhand Smoke	24
COVID-19 Pandemic Implications	26
Discussion	27
Health Impacts from Tobacco Use	27
Health Inequities in Tobacco Use	27
Recommendations for Tobacco Prevention and Cessation	28

ACKNOWLEDGEMENTS

Well-Ahead Louisiana (Well-Ahead) and The Louisiana Campaign for Tobacco-Free Living (TFL) would like to express our sincere thanks to the following staff and partners who were dedicated to the success of the **2021 Louisiana Youth Tobacco Survey (LYTS)**. We also extend sincere appreciation to the Louisiana Department of Education (LDOE) for their support in executing the survey, including all participating schools.

Authors

Adam Trahan, MPH Anna Platt, MPH Jessica Brewer, MPH

Reviewers

Dayaamayi Kurimella, MPH Erica Turner, DrPH, MPH, CHES Hillary Sutton, MAC Liana Narcisse, MA, PMP Taylor Reine, MPH

Prepared by

Taylor Voisin

Funding

This publication was made possible by the U.S. Department of Health and Human Services' Centers for Disease Control and Prevention (CDC) and the National Center for Disease Prevention and Health Promotion Cooperative Agreement (National and State Tobacco Control Program – DP20-2001). These funds are available through the interagency agreement between LDOE and Well-Ahead. Additional funding includes the Louisiana Cancer Research Center (LCRC) to support TFL. The statements made herein are solely the responsibility of the authors.

Connect Youth to Tobacco Resources

It is important equip youth with resources that educate on tobacco use and connect them to available quit support services. Unfiltered Facts, <u>unfilteredfacts.org</u>, is a website for teens to learn facts about vaping and tobacco products. The information provided empowers youth to make informed decisions around tobacco use, and provides access to tailored quit services for those ready to quit. Next Era, <u>wearenextera.org</u>, is a statewide youth movement to promote healthier, tobacco-free and nicotine-free lifestyles. Schools and organizations throughout the state host Next Era members. Next Era recruits and trains students to work on campaigns promoting a tobacco-free Louisiana.

For more information, please contact: Well-Ahead Louisiana

wellahead@la.gov

The Louisiana Campaign for Tobacco-Free Living tobaccofreeliving@lphi.org





HIGHLIGHTS FROM THE 2021 LOUISIANA YOUTH TOBACCO SURVEY

Youth nicotine use in any form is unsafe. Early use of any tobacco product-including vapes-disrupts brain development, increases the risk of long-term addiction, and can cause irreversible health effects before reaching adulthood. The tobacco industry targets youth, specifically Hispanic and Black youth, through tailored marketing tactics and introducing new products like vapes.2

Most youth first try tobacco at 12 or 13 years of age



youth initiate tobacco by vaping

Tobacco use among high schoolers is 35%, which is more than

that of middle schoolers The tobacco industry targets communities of color³



Tobacco use is highest for **Hispanic youth** followed by Non-Hispanic Black and Non-Hispanic White youth



professionals asked only vouth about tobacco use

VAPES

are the most popular tobacco product among youth followed by cigars and hookahs

More than 2 out of 3 youth **do not** consider vapes to be a tobacco product



Among youth who vape, use flavored vapes, typically containing higher levels of nicotine4

Dual use of vapes and cigarettes among high schoolers is 16%, which is than that of middle schoolers

Where youth get vapes:

friends

family

Well-Ahead Louisiana and the Louisiana Campaign for Tobacco-Free Living remain committed to combatting tobacco use among Louisiana's youth. Resources are available for youth at unfilteredfacts.com. To quit vaping, youth can text VAPEFREE to 873373. To advocate for a change, youth can visit WeAreNextEra.org. School staff and health professionals can visit wellaheadla.com/tobacco to learn how to support youth.

TERMS AND DEFINITIONS

Big Tobacco Large tobacco companies that are seen as powerful with undue influence¹

CDC Centers for Disease Control and Prevention

Cigarettes A thin cylinder of ground or shredded tobacco that is wrapped in paper, lit, and

smoked

Cigars/Cigarillos A tube of tobacco that is thicker than a cigarette, wrapped in tobacco leaf, lit, and

smoked; cigars include regular cigars, cigarillos, and little filtered cigars

Current Use Use of tobacco one or more times in the last 30 days

Ever Use Use of tobacco even just once over the course of one's lifetime

Health Inequities Unjust and avoidable differences in health outcomes that are caused by unfair

societal conditions and unjust practices

High Schoolers High School students (HS) are students in grades 9-12 at the time of the survey

Hookah A water pipe that is used to smoke specially-made tobacco that comes in different

flavors

LYTS Louisiana Youth Tobacco Survey

Middle Schoolers Middle School students (MS) are students in grades 6-8 at the time of the survey

Pipe A non-water pipe that is used to smoke tobacco

Prevalence The total number of individuals in a population who have a particular characteristic at

a specific period of time, usually expressed as a percentage of the population (incidence refers to the number of new cases that develop in a given period)

Smokeless/Chew Chew, dip, snuff or dissolvable tobacco in a variety of flavors that is not burned, but

rather absorbed in the mouth

TFL The Louisiana Campaign for Tobacco-Free Living

Vape A battery-powered cartridge that includes a heating element that vaporizes a liquid

solution that may contain a mixture of nicotine, flavors, and other chemicals that combine to make aerosol. Vapes are known by many different names: "disposables," "e-cigarettes," "e-cigarettes," "e-hookahs," "electronic nicotine delivery systems (ENDS),"

"mods," "pens," "pods," or "tank systems"

Well-Ahead Well-Ahead Louisiana

Youth Middle schoolers and high schoolers at the time of the survey

¹ Cambridge Dictionary, 2023. https://dictionary.cambridge.org/us/dictionary/english/big-tobacco

INTRODUCTION

Cigarette smoking is the leading cause of preventable death in the United States.² Tobacco prevention and cessation remain the most significant priorities shared by TFL and Well-Ahead. Each year in Louisiana, there are 1,500 new youth smokers and approximately 7,200 adults die from smoking.^{3,4} Symptoms of serious nicotine addiction may occur just days after youth try smoking, and exposure to nicotine can have lasting adverse consequences on brain development.^{5,6} Nearly 9 in 10 adults who smoke cigarettes daily first try smoking before age 18, and the majority of youth will not even consider cessation programs until they reach adulthood.^{3,7}

The tobacco product landscape continues to evolve and includes a variety of tobacco products, such as cigarettes, cigars/cigarillos, hookah, pipes, smokeless tobacco, and vapes.⁸ Although much progress has been made with youth over the last decade by reducing the prevalence of smoking cigarettes, the introduction of vapes by Big Tobacco has thwarted these efforts.⁵

Background

The CDC developed the Youth Tobacco Survey (YTS) to provide states with a data collection system to gather tobacco initiation and prevalence trends among youth. The LYTS guides the statewide tobacco cessation and prevention initiatives of Well-Ahead and TFL, such as Unfiltered Facts and Next Era. The LYTS questions are reviewed and updated as needed by Well-Ahead and TFL to ensure information is accurately gathered regarding the quantity and frequency of use for all tobacco products, as well as knowledge, perceptions, and attitudes associated with tobacco consumption. The LYTS was conducted in 2008, 2009, and every two years thereafter until the current report on 2021 data.

Methodology

The LYTS collects responses to tobacco-related questions from middle schoolers and high schoolers. Across the 64 Louisiana parishes, 40 public middle schools and 40 public high schools are randomly sampled. This cross-sectional, two-stage cluster sample design ensures a representative sample of students. The first stage consists of randomly selecting schools within the specified grade range using probabilities proportional to size (PPS). Thus, larger schools are sampled with greater probabilities of selection than the smaller schools to ensure every student in the state has the same probability of selection. The second stage consists of randomly selecting classrooms within the selected schools, and all youth in these selected classes are eligible to participate. The self-administered questionnaire is anonymous.

Among the sampled 40 middle schools and 40 high schools, a total of 20 middle schools and 16 high schools chose to participate in the 2021 LYTS. School response rates for the 2021 LYTS were lower than anticipated due to a shorter fielding period in the Fall (late August to mid-December) compared to previous years' fielding

² Centers for Disease Control and Prevention (CDC), 2021.

https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm

³ CDC Office on Smoking and Health (OSH), 2014 Surgeon General's Report: The Health Consequences of Smoking—50 Years of Progress, 2014. https://www.ncbi.nlm.nih.gov/books/NBK179276/

⁴ Substance Abuse and Mental Health Services Administrations, 2018 National Survey of Drug Use and Health (NSDUH): Detailed Tables, 2019. https://www.samsha.gov/data/report/2019-nsduh-detailed-tables

⁵ CDC OSH, 2012 Surgeon General's Report: Preventing Tobacco Use Among Youth and Young Adults, 2021 https://www.cdc.gov/tobacco/sgr/2012/index.htm

⁶ DiFranza JR, Rigotti NA, McNeill AD, et al., *Initial Symptoms of Nicotine Dependence in Adolescents*, 2000. https://tobaccocontrol.bmj.com/content/9/3/313

⁷ CDC, Youth and Tobacco Use, 2022. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm

⁸ CDC ODH, 2016 Surgeon General's Report: E-cigarette Use Among Youth and Young Adults, 2019. https://www.cdc.gov/tobacco/sgr/e-cigarettes/index.htm

period in the Spring (late January to mid-May). The 2021 response rates were further impacted by virtual learning days and school staffing shortages caused by COVID-19 and Hurricane Ida. Although the school response rate and overall response rate were lower than previous years, there did not appear to be an effect on the percentage of youth willing to participate from the selected schools.

LYTS data are weighted to adjust for limitations such as unequal probabilities of selection, nonresponse bias, and disproportionate selection of demographic groups. A nonresponse bias analysis was conducted and survey weights were adjusted accordingly to account for the lower response rates among certain groups. Among the selected schools, schools with lower per-student expenditure responded at a higher rate (p = 0.0174). Similarly, schools with below-average affluence responded at a higher rate compared to those with average or above-average affluence level (p=0.0469). Both the student expenditure variable (schools' percentage of youth from low-income families) and an affluence variable (schools' socioeconomic status rank) were the only statistically significant predictors of nonresponse found, and were used to create nonresponse adjustments in the weighting process. The school-level weights were adjusted among responding schools to account for the number of nonresponding schools. These weights were further adjusted to marginal population totals (dimensions) using an iterative raking procedure. To account for missing responses from participants, hot-deck imputation was applied during the weighting process. These aforementioned methods address bias by reducing the potential for systematic under-representation of survey estimates.

For analysis and reporting purposes, the categorization of race and ethnicity was designed to account for intersectionality of populations while also considering small sample sizes. Race and ethnicity were combined into (4) groups: (1) Hispanic, (2) non-Hispanic Black, (3) non-Hispanic White, and (4) additional non-Hispanic groups. The Hispanic ethnicity represents those who responded "yes" to Hispanic regardless of race. Additional non-Hispanic groups are composed of the following (5) races with a sample size each <50: (1) American Indian or Alaskan Native; (2) Asian; (3) Native Hawaiian or other Pacific Islander; (4) Multiracial; and (5) non-Hispanic with a missing response for race.

In addition to addressing limitations through weight adjustments and demographic grouping, the LYTS data analysis utilized tests of significance to determine reliability of data. The following (4) parameters were set to indicate statistical significance: (1) sample size n >50; (2) confidence intervals (Cls) did not overlap; (3) coefficient of variation (CV) <30%; and (4) p-value <0.05. Analysis containing a p-value >0.09 or a sample size <50 was excluded from this report. Only statistically significant or moderately significant (reliable) data is included in this report. If the aforementioned parameters were not met, the limitation of moderate significance is notated in the result section, such as an overlapping CI, CV >30%, or a p-value between 0.05 and 0.09.

DEMOGRAPHICS

Demographic Breakdown of Students Who Participated in the 2021 Louisiana Youth Tobacco Survey				
	Middle School		High School	
	Unweighted Frequency	Weighted %	Unweighted Frequency	Weighted %
Total	1,199	100%	624	100%
Gender				
Male	564	47%	314	48%
Female	594	50%	279	48%
Other	33	3%	30	4%
No Response	8		1	
Race/Ethnicity				
Non-Hispanic White	480	43%	260	44%
Non-Hispanic Black	420	40%	201	41%
Hispanic	149	9%	100	7%
Additional non-Hispanic groups American Indian/Alaskan Native Asian Native Hawaiian/Pacific Islander Multiracial Non-Hispanic Only	137 49 17 8 44 19	8% 2.4% 0.8% 0.4% 1.9% 1.6%	60 16 12 5 17	7% 1.6% 1.3% 0.5% 1.7% 1.7%
No Response	13		3	
Grade				
6	527	32%		
7	334	34%		
8	310	34%		
9	-		165	28%
10	-		251	25%
11			91	24%
12			20	2%
Other	9		4	
No Response	19		4	

LYTS, 2021

RESULTS

Product Trends

Public health efforts, such as media campaigns, policy support, and community-level education, have led to decreased tobacco use among Louisiana youth over time. Despite declines in cigarette use, the tobacco industry has hooked youth on nicotine through vaping.⁹ Current use of tobacco products was analyzed during LYTS Report Years 2017, 2019, and 2021.

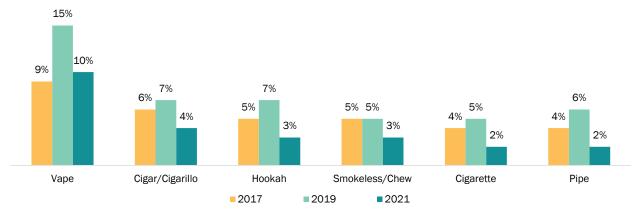
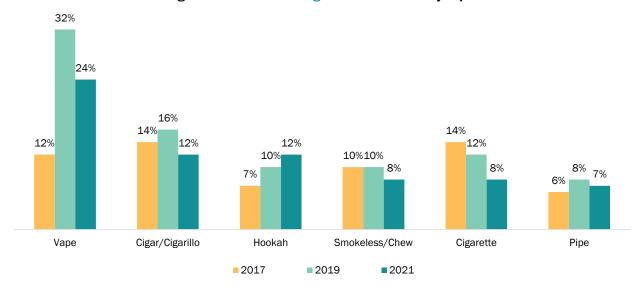


Figure 1. 1 in 10 middle schoolers currently vape.





⁹ CDC, Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults, 2022. https://www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html

Figure 3. Vaping has surpassed the use of all other tobacco products COMBINED for middle schoolers.*

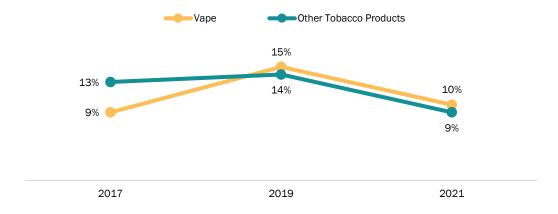


Figure 4. Vaping has surpassed the use of all other tobacco products COMBINED for high schoolers.**

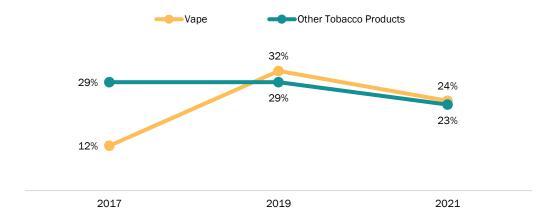
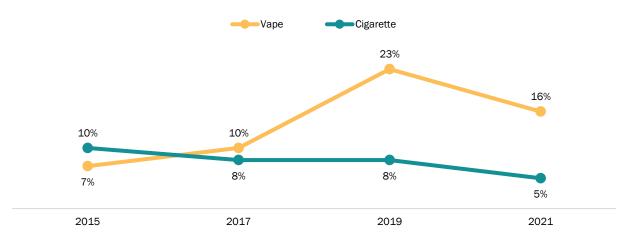


Figure 5. Current use of vapes among youth is more than 3x higher than cigarettes.



^{*}Lower reliability due to overlapping CIs: 2019 - Vape (13.3, 17.4) and Other Tobacco Products (12.1, 16.0). 2021 - Vape (8.2, 12.3) and Other Tobacco Products (6.6, 10.4).

^{**}Lower reliability due to overlapping Cls: 2019 - Vape (28.5, 34.8) and Other Tobacco (26.1, 32.4). 2021 - Vape (20.6, 28.1) and Other Tobacco (18.8, 26.5).

Tobacco Use

Multiple studies indicate that nicotine has adverse health effects on the developing brain of adolescents. Nicotine exposure has been linked with cognitive deficits, memory impairment, and restricted executive function.⁵ Current use and ever use of tobacco products among youth was analyzed for 2021.

Figure 6. More than one-third of middle schoolers and more than half of high schoolers have tried any tobacco product at least once.

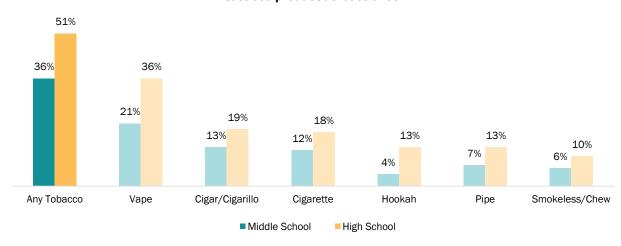
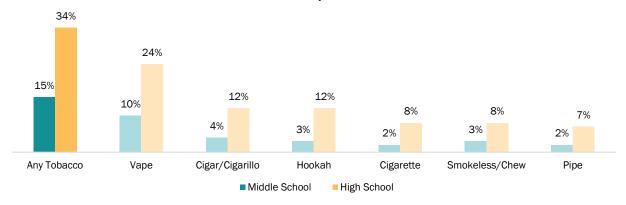
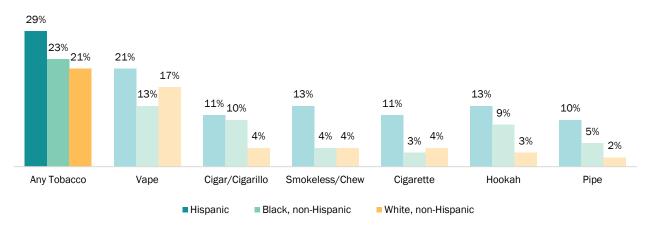


Figure 7. Current use of tobacco is more than twice as high among high schoolers than middle schoolers across all products.



Big Tobacco targets communities of color through marketing and advertising. ¹⁰ Institutionalized racism and local zoning policies result in higher densities of tobacco retailers in communities of color compared to higher income and higher educated White communities. ¹¹ The psychological/physiological consequences of institutionalized racism, limited financial resources, and barriers to healthcare access/higher education continue the vicious cycle of nicotine dependence among communities of color. ^{10,12,13} Current use of tobacco products was examined by race and ethnicity. However, there is no statistically significant data among gender.





*Lower reliability due to overlapping Cls: Any Tobacco - Hispanic (23.1, 35.8); Non-Hispanic Black (18.5, 26.5); and Non-Hispanic White (17.3, 24.2). Vape - Hispanic (15.8, 26.6); Non-Hispanic Black (10.0, 16.0); and Non-Hispanic White (13.4, 19.6). Cigar/Cigarillo - Hispanic (7.3, 15.3); Non-Hispanic Black (6.7, 12.5); and Non-Hispanic White (2.3, 6.1). Hookah - Hispanic (8.6, 17.9); Non-Hispanic Black (6.0, 12.0); and Non-Hispanic White (1.3, 4.4). Pipe - Hispanic (5.3, 13.7); Non-Hispanic Black (2.9, 6.9); and Non-Hispanic White (0.7, 3.5).

¹⁰ CDC, Unfair and Unjust Practices and Conditions Harm Hispanic and Latino People and Drive Health Disparities, 2022. https://www.cdc.gov/tobacco/health-equity/hispanic-latino/unfair-and-unjust.html

¹¹ Read UM, Karamanos A, João Silva M, et al., *The influence of racism on cigarette smoking: Longitudinal study of young people in a British multiethnic cohort*, 2018. doi:10.1371/journal.pone.0190496

¹² Truth Initiative, *Tobacco Use in the Hispanic/Latino American Community*, 2020. https://truthinitiative.org/research-resources/targeted-communities/tobacco-use-hispaniclatino-american-community

¹³ Public Health Law Center, The Tobacco Industry & the Black Community, 2021.

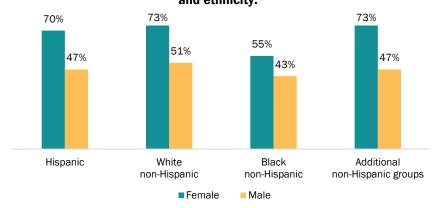
https://www.publichealthlawcenter.org/sites/default/files/resources/Tobacco-Industry-Targeting.pdf

Past studies have indicated that youth are more willing to try tobacco with flavors, and flavors such as menthol, candy, or fruit are perceived as less harmful than those with a tobacco flavor. ¹⁴ Flavors such as menthol enhance the effects of nicotine on the brain and can make tobacco products even more addictive for youth. ¹⁵ Current use of vaping with flavors was analyzed, and the results were also stratified by race, ethnicity, and gender.

Figure 9. More than half of youth use flavors when they vape.



Figure 10. Among youth who vape, females are more likely than males to use flavored vapes, across race and ethnicity.*



^{*}Lower reliability due to overlapping Cls: Hispanic - Female (54.8, 85.8) and Male (30.3, 63.3). Non-Hispanic Black - Female (44.1, 66.2) and Male (30.1, 56.4). Additional non-Hispanic Groups - Female (59.4, 86.3) and Male (28.5, 65.2). When stratifying by gender only, there are no overlapping Cls among female and male.

¹⁴ Pepper JK, Ribisl KM, Brewer NT, Adolescents' interest in trying flavored e-cigarettes, 2016. doi:10.1136/tobaccocontrol-2016-053174 ¹⁵ CDC, Menthol and Cigarettes, 2022. https://www.cdc.gov/tobacco/basic_information/menthol/index.html

Vapes are a gateway for youth tobacco use and lead to dual use of other tobacco products. Current use of vaping and other tobacco products was analyzed to determine dual use, and the results were also stratified by race, ethnicity, and gender.

Figure 11. Dual use of vapes and other tobacco products is almost 4 times higher among high schoolers than middle schoolers.

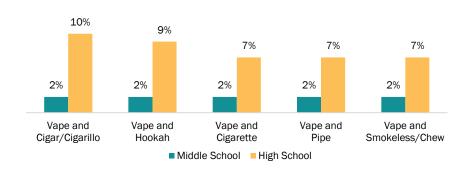


Figure 12. Hispanic youth are more likely to engage in dual use of vapes and other tobacco products than other races and ethnicities.*

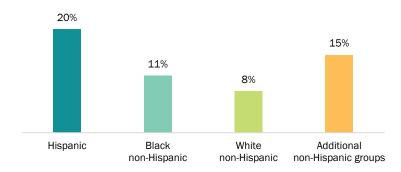
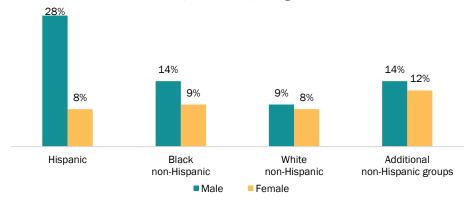


Figure 13. Males are more likely than females to vape and use other tobacco products, across race and ethnicity.** Dual use of vape and other tobacco products is at least 2x higher for Hispanic males than other races, ethnicities, and genders.***



^{*}Lower reliability due to overlapping Cls: Hispanic (13.1, 25.6); Non-Hispanic Black (7.5, 14.6); and Additional non-Hispanic Groups (7.7, 22.2).

^{**}Lower reliability due to overlapping Cls and moderately high CVs: Non-Hispanic Black - Male (8.1, 20.1) and Female (4.5, 13.7). Non-Hispanic White - Male (4.2, 12.9) and Female (3.8, 12.2). Additional non-Hispanic groups - Male (4.6, 23.1) (34% CV) and Female (1.0, 23.6) (47% CV).

^{***}Lower reliability due to slightly overlapping Cls: Hispanic Male (17.7, 38.7) and Non-Hispanic Black male (8.1, 20.1); Additional non-Hispanic groups Male (4.6, 23.1) and Additional non-Hispanic groups Female (1.0, 23.6).

Prevention and Cessation

Physician advice is associated with healthier attitudes about tobacco use among youth. ¹⁶ Of youth who visited a healthcare professional in the past 12 months, few were asked about their tobacco use or advised against using tobacco products. According to the CDC, "Healthcare itself can be a source of discrimination." Many Black Americans experience racial discrimination when going to the doctor and may avoid seeking medical care altogether because of this factor. ¹⁷ Since health professionals are not speaking with young patients about tobacco use nearly enough, many youth do not receive proper tobacco education. These effects are only exacerbated for youth who rarely or never seek out care.

Figure 14. Health professionals asked less than a third of middle and high schoolers about tobacco use.



Figure 15. Less than 1 in 3 youth from communities of color were asked about tobacco use by health professionals.



Health professionals asked only 1 in 3 Hispanic youth, 1 in 4 non-Hispanic Black youth, and 1 in 4 non-Hispanic White youth about tobacco use.

¹⁶ Hum AM, Robinson LA, Jackson AA, Ali KS, *Physician communication regarding smoking and adolescent tobacco use*, 2011. doi:10.1542/peds.2010-1195

¹⁷ CDC, Unfair and Unjust Practices and Conditions Harm African American People and Drive Health Disparities, 2022. https://www.cdc.gov/tobacco/health-equity/african-american/unfair-and-unjust.html

Youth were asked about their plans to quit tobacco use, and of those who had recently quit, what methods they used. While most youth use the "cold turkey" method, relying on willpower to quit tobacco use is not effective or sustainable. Around 95% of people who use the "cold turkey" method will fail to successfully quit for longer than 6 months. Youth are more prepared to quit with the support of adults such as trusted healthcare professionals. Teens who are screened for tobacco use and advised on the dangers of tobacco use by a physician are more likely to plan to quit smoking and have more reported quit attempts than those who are not screened or advised. He

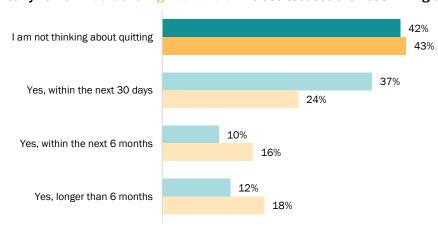
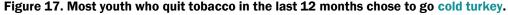
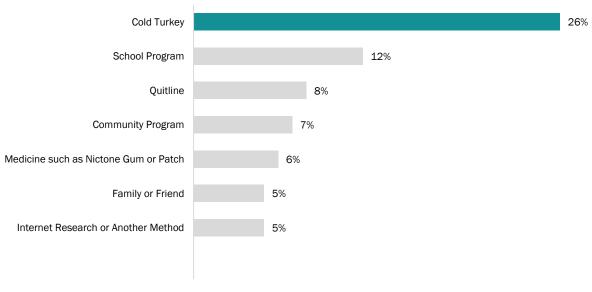


Figure 16. Nearly half of middle and high schoolers who use tobacco are not thinking about quitting.



■ Middle School

High School



¹⁸ Truth Initiative, Read This Before Trying to Quit Smoking 'Cold Turkey,' 2017. https://truthinitiative.org/research-resources/quitting-smoking-vaping/read-trying-quit-smoking-cold-turkey

Initiation and Peer Influence

Individuals who first use tobacco in adolescence are more at risk for developing respiratory illnesses, decreased physical fitness, adverse effects on lung growth, and more severe addiction to nicotine. ¹⁹ This highlights the importance of speaking with youth about the dangers of addictive tobacco products from a young age. Youth were asked at what age they first tried tobacco products and what products they tried first. Youth were also asked to report the main reasons they tried vaping.

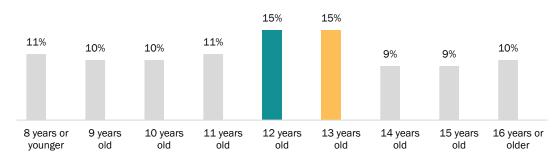
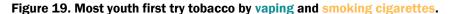
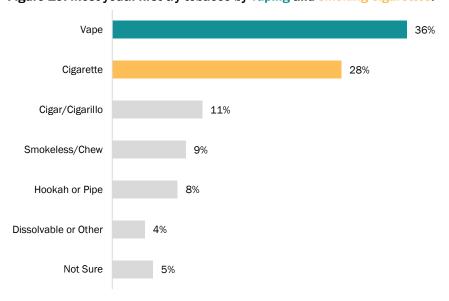


Figure 18. Most youth first try tobacco at 12 or 13 years of age.*

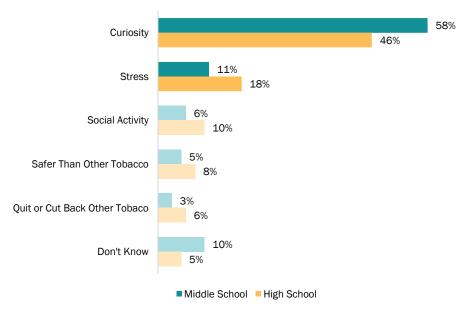




^{*}Lower reliability due to slightly overlapping Cls: 8 years or younger (9.0, 13.8); 9 years old (7.7, 12.2); 10 years old (8.0, 12.5); 11 years old (8.7, 12.8); 12 years old (12.0, 17.1); 13 years old (12.5, 17.7); and 16 years or older (7.9, 12.8).

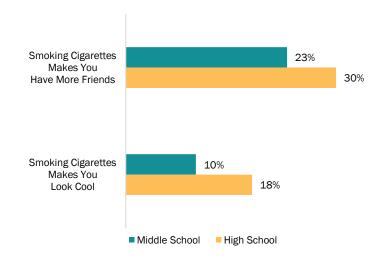
¹⁹ American Lung Association, *Tobacco Use Among Children and Teens*, 2022. https://www.lung.org/quit-smoking/smoking-facts/tobacco-use-among-children





Youth are more likely to use tobacco products if they see people their age using these products.⁷ To analyze social desirability, youth were asked if those who smoke cigarettes have more friends and if smoking cigarettes makes you look cool.

Figure 21. High schoolers believe that smoking cigarettes is more socially desirable than middle schoolers.



^{*}Lower reliability due to slightly overlapping Cls and a slightly high CV: Middle School - Stress (6.6, 15.1); Social Activity (3.2, 9.7); Safer Than Other Tobacco (2.1, 8.4); and Don't Know (5.7, 13.8). High School - Stress (12.8, 23.3); Social Activity (6.1, 13.9); Don't Know (31% CV). When middle school and high school are combined, there are no overlapping Cls among youth.

Access

Tobacco advertisements and promotion influence youth to start using tobacco products.²⁰ In Louisiana, it is now illegal for individuals under 21 to purchase tobacco products with the state's passage of T21 on August 1, 2021.²¹ However, this does not prevent the tobacco industry from advertising products to specifically reach youth. This may include posting large signage at retail outlets near schools and playgrounds to advertise tobacco products.²² Respondents were asked to report where they saw advertisements for vapes and where they obtained vapes.

Figure 22. Youth reported seeing advertisements for vapes most often at gas stations, convenience stores, or supermarkets.

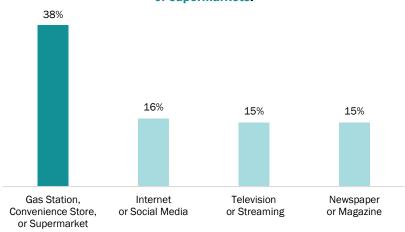
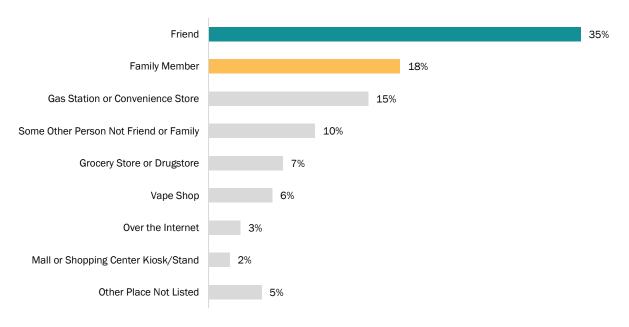


Figure 23. Most youth get vapes from friends and family members.*



^{*}Lower reliability due to overlapping Cls: Family Member (13.2, 22.5) and Gas Station or Convenience Store (10.8, 18.7).

²⁰ CDC, Tobacco Industry Marketing, 2021.

 $[\]underline{\text{https://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/marketing/index.htm}$

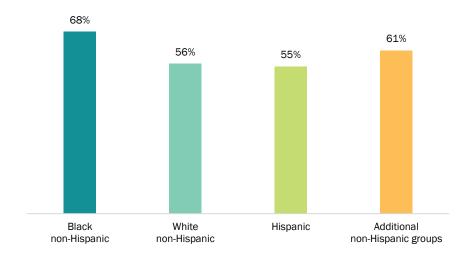
²¹ Louisiana State Legislature, Louisiana Law RS 14:91.8, 2022. https://legis.la.gov/legis/Law.aspx?d=78717

²² Campaign for Tobacco-Free Kids, Boonn A., *Tobacco Company Marketing to Kids*, 2023. https://www.tobaccofreekids.org/assets/factsheets/0008.pdf

Figure 24. At least half of middle and high schoolers believe that it is hard to get tobacco products.



Figure 25. Non-Hispanic Black youth believe it is harder to get tobacco than other races and ethnicities.*



^{*}Lower reliability due to overlapping Cls: Non-Hispanic Black (64.1, 72.7) and Additional non-Hispanic groups (52.9, 69.4).

Perception

Youth's perceptions of the harm of tobacco products are closely linked to their tobacco use. Youth who do not consider tobacco products, including vapes, to be harmful are more likely to start using such products.²³ While most youth who responded to LYTS feel that tobacco products are harmful, they do not consider vapes to be a tobacco product. Contrary to these beliefs, vapes are a type of tobacco product and contain nicotine, the addictive drug found in cigarettes and other tobacco products.⁹

Figure 26. Most middle and high schoolers strongly agree with the statement, "All tobacco products are dangerous."

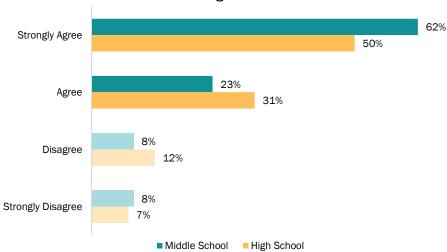
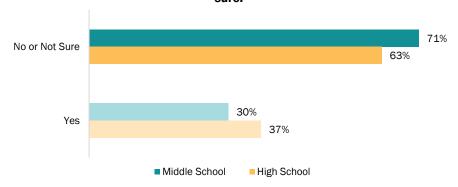
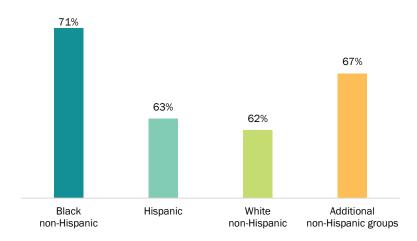


Figure 27. Almost 2 in 3 middle and high schoolers believe vapes are NOT a tobacco product or were not sure.



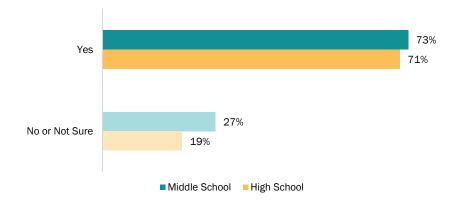
²³ Parker MA, Villanti AC, Quisenberry AJ, et al., *Tobacco Product Harm Perceptions and New Use*, 2018. doi:10.1542/peds.2018-1505

Figure 28. Non-Hispanic Black youth are more likely to believe that vapes are NOT a tobacco product or were not sure compared to youth of other races and ethnicities.*



Most youth who responded to the LYTS feel that vapes are harmful to their health. However, they believe that vapes are less harmful than cigarettes. Big tobacco often advertises vapes as less harmful than other forms of tobacco, including cigarettes.²⁰ This strategy has contributed to youth initiation of vaping.^{20,24} To address these misleading tactics, more education and funding around the dangers of vapes and vaping are needed.

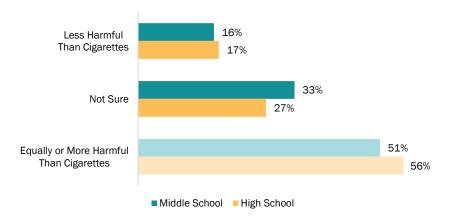
Figure 29. Most middle and high schoolers believe that vaping is harmful to their health.



^{*}Lower reliability due to overlapping Cls: Non-Hispanic Black (66.7, 76); Hispanic (55.9, 69.4); White (57.6, 66.3); Additional non-Hispanic Groups (58.6, 76.2).

²⁴ Struik LL, Dow-Fleisner S, Belliveau M, Thompson D, Janke R., *Tactics for Drawing Youth to Vaping: Content Analysis of Electronic Cigarette Advertisements*, 2020. doi: 10.2196/18943

Figure 30. Nearly half of middle and high schoolers believe vapes are less harmful than cigarettes or are not sure.



Tobacco companies spend billions of dollars each year on advertising, which is shown to influence youth to start using tobacco products.²⁰ Youths' belief of the tobacco industry's influence was analyzed by race and ethnicity plus gender.

Figure 31. Over half of middle and high schoolers believe that tobacco companies try to get young people hooked on tobacco products.

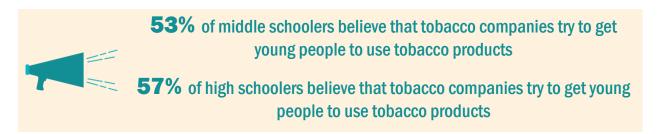
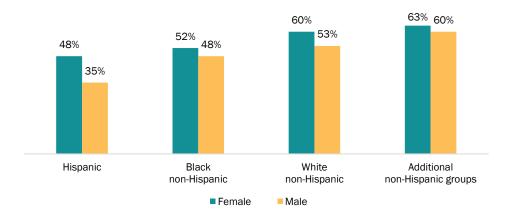


Figure 32. Across race and ethnicity, male youth are less likely than female youth to believe that tobacco companies try to get young people hooked on tobacco products.*

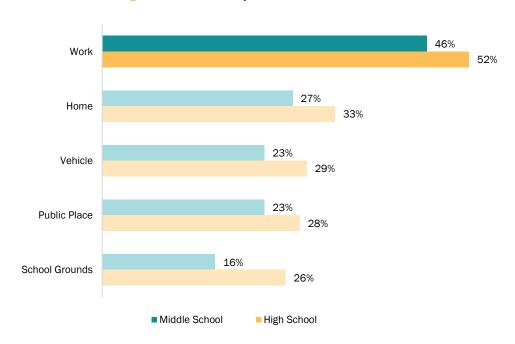


^{*}Lower reliability due to overlapping Cls: Hispanic - Male (25.8, 44.9) and Female (40.5, 55.4). Non-Hispanic Black - Male (40.5, 55.4) and Female (45.8, 58.2). Non-Hispanic White - Male (47.0, 59.2) and Female (54.7, 65.9). Additional non-Hispanic groups - male (49.1, 71.6) and Female (50.4, 76.4).

Secondhand Smoke

Secondhand smoke causes disease and death among people who do not smoke, and any level of secondhand smoke can cause harm.²⁵ Youth reported that work was the most likely place that they experienced secondhand smoke. Although the Louisiana Smokefree Air Act prohibited smoking in most workplaces in 2007, exceptions included casinos, bars, hotels, nursing homes, and veterans' homes.²⁶ State law prohibits youth from working inside casinos, but there are exceptions where youth ages 16 years or older can be exposed to secondhand smoke in bars, hotels, or workplaces with designated smoke-break areas. Youths' exposure to secondhand smoke in their workplaces shows the need for comprehensive statewide smoke-free legislation and increased enforcement to prohibit smoking in all Louisiana workplaces.

Figure 33. Although smoke-free laws ban smoking in most workplaces, work is the most likely place where middle and high schoolers are exposed to secondhand smoke.

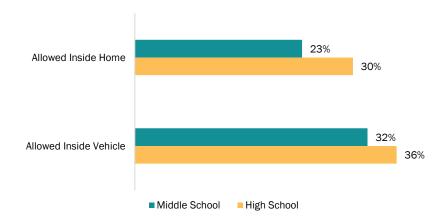


²⁵ CDC, Secondhand Smoke, 2022. https://www.cdc.gov/tobacco/secondhand-smoke/index.html

²⁶ Smoke-Free Louisiana, 2021. https://www.smoke-freelouisiana.org/

Another primary place that youth experience secondhand smoke is in their homes.²⁷ Even if a family does not smoke, youth can be exposed to secondhand smoke that travels through vents, doors, and windows. This affects low-income youth more than affluent youth because they are more likely to live in apartment complexes or multi-unit buildings rather than single-family homes.^{27,28}

Figure 34. Nearly one-third of middle and high schoolers report that their families allow smoking inside their home or family vehicles.



 ²⁷ CDC, Trends and Disparities in Secondhand Smoke, 2022. https://www.cdc.gov/tobacco/secondhand-smoke/disparities.html
 28 CDC, People with Low Socioeconomic Status Need More Protection from Secondhand Smoke Exposure, 2023. https://www.cdc.gov/tobacco/health-equity/low-ses/secondhand-smoke.html

COVID-19 Pandemic Implications

Many studies reported that there was a national decrease in youth tobacco use during the COVID-19 pandemic, since stay-at-home orders limited youth from accessing tobacco from friends or stores. 29,30 However, nearly one-third of Louisiana youth reported they used tobacco more during the COVID-19 pandemic. It is important to understand tobacco use in the midst of the ongoing COVID-19 pandemic because smoking tobacco increases the risk for severe COVID-19 infection.31 Youth's perceptions of the relationship between tobacco use and COVID-19 were also analyzed.

Figure 35. Nearly one-third of middle and high schoolers reported they used tobacco more during the COVID-19 pandemic.*

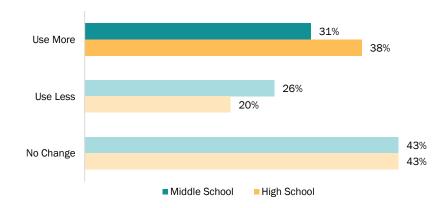
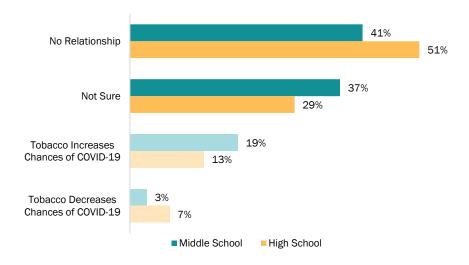


Figure 36. Most middle and high schoolers believe there was no relationship or were not sure of the relationship between tobacco use and getting COVID-19.**



^{*}Lower reliability due to overlapping Cls: Middle School - Use More (23.1, 38.6); Use Less (19.3, 32.8); and No Change (34.6, 51.5). High School - Use More (29.3, 45.8) and No Change (33.9, 51.0). When middle school and high school are combined, there are no overlapping CIs among youth. **Lower reliability due to overlapping Cls: Middle School - No Relationship (37.6, 44.1) and Not Sure (33.7, 40.1).

When middle school and high school are combined, there are no overlapping Cls among youth.

²⁹ American Journal of Public Health, Kreslake JM, Simard BJ, O'Connor KM, Patel M, Vallone DM, Hair EC., E-Cigarette Use Among Youths and Young Adults During the COVID-19 Pandemic: United States, 2020. doi:10.2105/ajph.2021.306210

³⁰ Denlinger-Apte R, Suerken CK, Ross JC, et al., Decreases in smoking and vaping during COVID-19 stay-at-home orders among a cohort of young adults in the United States, 2022. doi:10.1016/j.ypmed.2022.106992

³¹ Ahmed N, Magsood A, Abduljabbar T, Vohra F., Tobacco Smoking a Potential Risk Factor in Transmission of COVID-19 Infection, 2020. doi:10.12669/pjms.36.COVID19-S4.2739

DISCUSSION

Health Impacts from Tobacco Use

Tobacco use among Louisiana youth remains a public health concern. The LYTS demonstrates that the prevalence of addictive tobacco products like cigarettes, cigars, smokeless, and vapes among youth remains considerably higher than national averages. Although significant progress has been made by reducing youth cigarette smoking, nicotine addiction still poses a serious health risk for our state's youth. Nicotine addiction interrupts brain development during adolescence, and vaping can act as a gateway to smoking later in life.⁵ The LYTS indicates that first use of any tobacco product is most likely to begin at 12 or 13 years of age with vaping, and can lead to dual use of other tobacco products, mainly cigarettes. Youth are more likely to use tobacco products if they see people their age using these products.⁷ Youth's perceptions of tobacco product harm are closely linked to their tobacco use. Youth who do not consider tobacco products, including vapes, to be harmful are more likely to start using such products.

Big Tobacco has used several strategies to specifically target youth, including marketing of candy/fruit flavored products, celebrity endorsements, product placement in TV/movies/magazines, in-store promotions, price discounts, and creating misleading health claims.³² Big Tobacco often advertises vapes as less harmful than other forms of tobacco, including cigarettes. This strategy has contributed to youth initiation of vaping and fueled the youth vaping epidemic. Tobacco companies spend billions of dollars each year on advertising, which is shown to influence youth to start using tobacco products. Individuals who first use tobacco in adolescence are more at risk for developing respiratory illnesses, decreased physical fitness, adverse effects on lung growth, and more severe addiction to nicotine.¹⁹ Although the health implications of vaping are not fully understood, vapes act as a gateway to other tobacco products, particularly cigarettes.⁷ Approximately 307,400 of Louisiana's youth in 2022 will become cigarette smokers, and 98,000 of these youth will die from smoking in their lifetime.^{3,4}

Health Inequities in Tobacco Use

Across racial and ethnic groups, there are varying levels of tobacco use, as well as tobacco-related disease, disability, and death.³³ These disparities are driven by health inequities, which are unjust and avoidable differences in health outcomes that are caused by unfair social conditions as well as discriminatory practices and conditions.^{11,33} The LYTS shows that tobacco use is highest among Hispanic youth, followed by non-Hispanic Black youth, then non-Hispanic White youth. Communities of color experience institutionalized racism and local zoning policies that result in higher densities of places that sell and advertise tobacco compared to neighborhoods that are predominately White and wealthy. The tobacco industry also uses predatory marketing and advertising, including promotion of flavors, to target communities of color.¹¹ Furthermore, the psychological and physiological consequences of racism, limited financial resources, and barriers to health access and higher education can increase tobacco use and make preventing and treating tobacco-related health problems harder for communities of color.^{5,33}

Though not measured in the LYTS, other population groups are also likely to experience tobacco-related health disparities, including LGBTQ+ youth and youth with behavioral health conditions. Nationally, LGBTQ+ youth report using tobacco products at two to four times the rate of straight, cisgender youth.³⁴ The tobacco industry

³² American Lung Association, 10 Really Bad Things the Tobacco Industry Has Done to Entice Kids to Start Smoking, 2023. https://www.lung.org/research/sotc/by-the-numbers/10-bad-things-to-entice-kids

³³ CDC, Health Disparities Related to Commercial Tobacco and Advancing Health Equity, 2022. https://www.cdc.gov/tobacco/health-equity/index.htm

³⁴ Truth Initiative, Tobacco Use in LGBT Communities, 2021. https://truthinitiative.org/research-resources/targeted-communities/tobacco-use-lgbt-communities

has targeted the LGBTQ+ community with marketing and advertising since the 1990s, including advertising in LGBTQ+ press publications, sponsoring Pride parades, and donating to organizations serving LGBTQ+ people. Additionally, LGBTQ+ people experience discriminatory practices and policies that can cause negative physical and mental health outcomes, including increased likelihood to use tobacco and have tobacco-related health problems. Similarly, youth with behavioral health conditions experience tobacco-related health inequities and report using tobacco, particularly vapes, as a way to cope with stress, anxiety, and depression. National data show that people with certain behavioral health conditions, including depression, anxiety, and substance use disorders, are more likely to use tobacco than people without these conditions. The tobacco industry has targeted people with behavioral health conditions by giving away cigarettes to psychiatric facilities, promoting tobacco use as a form of self-medication, and marketing tobacco as a form of stress relief. These disparities are of particular concern, given that the existing mental health crisis among American youth has worsened during the COVID-19 pandemic. Depression and anxiety symptoms in youth have doubled compared to before the pandemic, which may lead to a corresponding increase in tobacco use among youth.

Recommendations for Tobacco Prevention and Cessation

CDC's best practices suggest that healthcare providers should ask youth about their tobacco use, advise against it, and refer them to cessation resources. Healthcare providers are vital to preventing youth tobacco initiation and supporting cessation, yet in Louisiana only one in five middle schoolers and one in three high schoolers are asked by health professionals about tobacco use. Youth who are screened for and advised about tobacco by health professionals tend to have healthier attitudes about tobacco use. This includes more accurate knowledge about the dangers of tobacco use, more plans to quit if they currently smoke, and more quit attempts. Most youth in Louisiana use the "cold turkey" method to quit tobacco products. However, willpower alone is not an effective cessation method and 95% of those who go "cold turkey" will fail after 6 months. Youth need access to evidence-based cessation resources and healthcare providers, educators, and parents should be prepared for these conversations.

CDC's best practices also suggest that policy change is fundamental to educating and protecting youth. A "win" for youth tobacco education through policy change happened with the enactment of House Bill 368, which requires Louisiana elementary and secondary schools to have curriculum on the health risks of vaping.

In 2017, Louisiana passed state level comprehensive tobacco-free legislation (Act 351) covering all K-12 schools. The legislation removed designated smoking areas, expanded the definition of "school property" to include vehicles and school grounds, and modified the definition of "smoking" to include e-cigarettes. This legislation covers students, faculty, staff, and family members who may be disproportionately exposed to secondhand smoke and affected by tobacco use.

Additionally, in 2007 when the Louisiana Smokefree Air Act took effect, many employees were protected from secondhand smoke; however, this law exempted bars, casinos, hotel rooms, nursing homes, veterans' homes and more. These workplaces often have the highest rates of secondhand smoke.²⁶ Half of working youth in Louisiana breathed secondhand smoke in their workplace which highlights the need for a comprehensive statewide smoke-free law to protect all places of employment.

With the passage of T21 on August 1, 2021, Louisiana raised the minimum legal sales age of tobacco products from 18 to 21.²¹ Nonetheless, 15% of youth reported they purchased vapes from gas stations and convenience stores. However, this law was only in effect for several months prior to YTS survey collection, potentially not long enough to properly evaluate its impact. Louisiana youth would benefit from additional youth

³⁵ CDC, Unfair and Unjust Practices Harm LGBTQ+ People and Drive Health Disparities, 2023. https://www.cdc.gov/tobacco/health-equity/lgbtq/unfair-and-unjust.html

³⁶ Truth Initiative, Colliding Crises: Youth Mental Health and Nicotine Use, 2021. https://truthinitiative.org/research-resources/emerging-tobacco-products/colliding-crises-youth-mental-health-and-nicotine-use

³⁷ CDC, People with Behavioral Health Conditions Experience a Health Burden from Commercial Tobacco, 2023. https://www.cdc.gov/tobacco/health-equity/behavioral-health/health-burden.html

³⁸ Louisiana State Legislature, Louisiana Law Act No. 351, 2017. https://www.legis.la.gov/legis/ViewDocument.aspx?d=1052215

tobacco access laws including limiting the sale of flavored tobacco products and vapes, raising the tax on tobacco products, or limiting the number of tobacco retailers found near schools. However, Louisiana preempts local governments from enacting stricter youth access laws than those found at the state level, preventing communities from passing stricter policies to protect their youth. Removing preemptive language from the state's youth access law would allow communities to respond to the needs of youth living in those communities.

Tobacco prevention efforts such as policy changes are consistently undermined by Big Tobacco's exploitation of health inequities among youth. A statewide comprehensive smoke-free policy and stricter youth access laws are evidence-based and can prevent Louisiana youth from initiating tobacco and suffering detrimental lifelong health effects. Additionally, all healthcare providers should engage youth about the dangers of tobacco and provide the appropriate intervention. These recommendations can help to ensure that all youth are educated and protected from the health risks associated with tobacco exposure.

This report is a collaborative effort of Well-Ahead Louisiana and the Louisiana Campaign for Tobacco-Free Living.



