2022

INDEPENDENT EVALUATION REPORT
NEW YORK TOBACCO CONTROL PROGRAM

RTI INTERNATIONAL

Prepared for the New York State Department of Health

January 2024

January 2024

2022 Independent Evaluation Report of the New York Tobacco Control Program

Prepared for

New York State Department of Health
Corning Tower, Room 1055
Albany, NY 12237-0676

Prepared by

RTI International
3040 E. Cornwallis Road
Research Triangle Park, NC 27709

Table of Contents

Executive Summary **1**
Introduction **1**
The New York Tobacco Control Program **2**
Program Funding 3
Health Communication 5
Smoking Cessation Media Campaigns 6
"It's Not Just" Media Campaign 8
Health Communication Discussion 8
Health Systems Interventions 9
Health Systems Grantee Interventions 10
Promotion of Low-cost Evidence-based Tobacco Dependence Treatments 14
New York State Smokers' Quitline 14
Health Systems Discussion 15
Statewide and Community Interventions 16
Retail Environment Initiative 17
Tobacco-Free Outdoors Initiative 20
Smoke-free Multi-unit Housing Policies 20
Smoke-Free Movies 21
Secondhand Smoke Exposure 21
Community and Statewide Interventions Discussion 23
Key Evaluation Questions **24**
Adult Tobacco Use Measures 24
Discussion of Adult Tobacco Use 31
Youth Tobacco Use Measures 31
What Proportion of New York Youth and Adults use Flavored Tobacco Products? 35
To What Extent Do New York Youth and Adults Co-use Tobacco and Cannabis? 40
Discussion **42**
Progress in Changing Tobacco Use 42
Programmatic Recommendations 43
References **46**

Executive Summary

Tobacco-related illnesses are responsible for more than 22,000 premature deaths in New York every year, and the health, social, and economic effects of tobacco use are far-reaching. The New York State Department of Health administers the New York Tobacco Control Program (NY TCP or Program) to reduce tobacco use initiation, increase cessation from tobacco use, eliminate secondhand smoke exposure, and reduce tobacco-related disparities.

New York has implemented a range of evidence-based tobacco control policies to raise the price of tobacco products, decrease secondhand smoke exposure, reduce accessibility and promotion of tobacco products, restrict sales of tobacco products particularly appealing to youth, change social norms, and advance health equity. The Program's comprehensive approach complements these policies with interventions including antitobacco media campaigns, cessation-focused health systems change, and state and community interventions.

Although reductions in smoking prevalence among youth and adults in New York have lessened the state's financial and public health burdens, there is yet more work to be done. The prevalence of cigarette smoking remains disproportionately high among New Yorkers with frequent mental distress, with household income below $25,000, with less than a high school formal education, and with a disability. The NY TCP is also addressing high rates of youth vaping product use, persistent struggles with nicotine addiction among adults who smoke who want to quit, and ongoing changes in the tobacco product landscape. The Program has taken steps to focus on health equity by exploring existing disparities in key outcomes, partnering with agencies and groups who work with population groups disproportionately affected by tobacco use, engaging with community members, and focusing media on adults with high rates of smoking and highlighting the tobacco industry's targeting of historically disadvantaged communities.

This independent evaluation report provides a review of NY TCP's activities for calendar year 2021 and its progress. The report summarizes the Program's context, describes the programmatic approach, and assesses progress toward tobacco control outcomes.

Key Evaluation Findings

- NY TCP funding falls short of the Centers for Disease Control and Prevention's (CDC's) recommended level for the state, even as New York faces persistent health and economic effects from tobacco use. For FY 2022–2023, the state appropriated $39.1 million for NY TCP, which is 19% of CDC's recommended funding level for the state ($203 million). The Program's low funding level in recent years constrains NY TCP's ability to make progress toward its goals and objectives.
- In 2021, 12.0% of New York adults reported current cigarette smoking, similar to the national estimate of 11.5% and approaching the New York State Department of Health 2019-2024 Prevention Agenda target level of 11.0%.

- In 2021, 23.3% of New York adults reported use of any tobacco product; cigarette smoking was the most common, followed by cigars, vaping products, and hookah.
- Cigarette smoking prevalence rates are not evenly distributed across the population. Cigarette smoking prevalence is associated with frequent mental distress, household income, educational attainment, and living with a disability.
    - Cigarette smoking prevalence among those who experience frequent mental distress has decreased from 26.0% in 2016 to 19.6% in 2021 (attaining the Program’s 2024 Prevention Agenda objective of 20.0% early), although it remains higher than among those who do not experience frequent mental distress (10.7%). Similarly, cigarette smoking among adults living with a disability decreased from 20.1% in 2016 to 17.4% in 2021, although this is still higher than among those without a disability (10.1%).
    - Cigarette smoking has not changed in recent years among New York adults with an annual household income below $25,000 (19.8% in 2016 and 20.4% in 2021) or those with less than a high school formal education (19.2% in 2016 and in 2021).
- Nearly half of adults who smoke cigarettes reported having made a quit attempt in the past 12 months (46.7% in 2021), similar to the national estimate of past-year quit attempts (45.2%).
- Almost half of New York adults who smoke cigarettes and visited a health care provider in the past 12 months reported that their provider assisted them with a quit attempt (48.9%) in 2021, while provider assistance for adults who smoke cigarettes in the United States overall was 40.6%.
    - Rates of provider assistance were at least as high among some of the groups with the highest rates of cigarette smoking, including adults who experience frequent mental distress, who have an annual household income below $25,000, who have lower educational attainment, or who have a disability, compared with those not in these priority groups.
- Cigar use was 7.2% among New York adults in 2021, similar to the national cigar use prevalence estimate (8.1%).
- Vaping among New York adults was 6.7% overall in 2021, similar to the national estimate of 7.3%. New York young adults aged 18–24 more commonly reported vaping (19.2%) than did adults aged 25 and older (5.0%).
- In 2020, 25.6% of youth reported use of any tobacco product, and vaping was overwhelmingly more common than other types of tobacco product use.
- New York youth reported vaping more commonly than other tobacco product use. In 2020, 22.5% of New York high school students and 19.6% of high school students nationally reported current vaping. Middle school student vaping prevalence was 6.8% in New York and 4.7% nationally in 2020.
- Cigarette smoking rates among New York high school students have declined dramatically over the past 10 years. In 2020, only 2.4% of New York high school students reported past 30-day use of cigarettes. National high school student cigarette smoking prevalence was 4.6% in 2020. Among middle school students, current cigarette smoking was 1.0% in New York and 1.6% nationally.

- In 2020, 3.7% of high school students in New York reported current cigar use, close to the national rate of 5.0%. Among New York middle school students, only 1.2% reported current cigar use, similar to middle schoolers nationally (1.5%).
  - Although New York high school student use of cigars was similar to cigarette smoking prevalence, use of blunts (cigars with cannabis or marijuana) was 15.5% among New York high school students and 4.3% among New York middle school students.

Measures of NY TCP Reach and Impact

- NY TCP aired a cessation-focused media campaign in late 2020 and early 2021, and 63.6% of New Yorkers who smoke reported awareness of the campaign in February 2021. However, funding limits meant that campaigns were only on the air for half of the year.
  - A grantee-led media campaign launched in spring 2021 focused on the tobacco industry's targeted marketing of menthol cigarettes to Black and African American communities, and 36% of respondents surveyed several weeks after the campaign's launch were aware of the campaign.
- Approximately 20% of New Yorkers who smoke and are enrolled in Medicaid were estimated to have used Medicaid benefits for smoking cessation.
- NY TCP-funded community grantees reported that three local communities passed tobacco control policies focused on the retail environment in 2021, bringing the number of local retail policies adopted in recent years to 26. This translates to 70% of the population of the state being covered by at least one local tobacco retail policy.

Overall Programmatic Recommendations

- Increase funding to at least 50% of CDC's recommended funding level for the state (which would result in Program funding of $101.5 million), to give the Program a greater opportunity to succeed at achieving its NYSDOH 2019–2024 Prevention Agenda objectives. The FY 2022-2023 state appropriation to NY TCP was $39.1 million.
  - Revenue from the vaping product sales tax could be channeled to NY TCP to support education, intervention, and evaluation. High rates of vaping among New York youth require NY TCP to use its limited resources for a broad range of tobacco control activities, as the tobacco product landscape continues to become more complex.
  - With additional funding, NY TCP could increase cessation messaging and implement a youth vaping prevention campaign, conduct additional education supporting new policies to reduce youth exposure and access to tobacco products, implement stronger compliance monitoring for recent retail environment policies, enhance opportunities to promote cessation, and assess the effectiveness of interventions more comprehensively.
- Continue to refine the Program's approach to advance health equity and reach people who smoke with disproportionately high rates of smoking, especially adults

who have an annual household income below $25,000, those who have lower educational attainment, those who experience frequent mental distress, and those living with a disability.

- Develop a strategic plan for addressing tobacco and cannabis co-use, in collaboration with the New York Office of Cannabis Management.

Introduction

Addressing tobacco use in New York remains a public health priority. Tobacco-related illnesses are responsible for more than 22,000 premature deaths in New York every year, and the health, social, and economic effects of tobacco use are far-reaching (Mann et al., 2020; Office the Surgeon General, 2020). The New York State Department of Health implements the New York Tobacco Control Program (NY TCP) to reduce tobacco use initiation, increase cessation from tobacco use, eliminate secondhand smoke exposure, and reduce tobacco-related disparities. The NY TCP's comprehensive programmatic approach is founded on the Centers for Disease Control and Prevention's Best Practice recommendations and works to build on the state's successes.

Although smoking prevalence among youth and adults in New York has declined and thereby lessened the state's financial and public health burdens, there is more work to be done. The prevalence of cigarette smoking is disproportionately high among New Yorkers with frequent mental distress, with an annual household income below $25,000, with lower educational attainment, and with a disability. Other challenges facing the NY TCP include high rates of youth vaping, persistent struggles with nicotine addiction among adults who smoke who want to quit, and changes in the tobacco product landscape including new products like nicotine pouches and tobacco industry use of synthetic nicotine. In addition, tobacco industry targeting of menthol cigarette marketing to the African American community has led to higher rates of menthol cigarette use among African American adults who smoke than White adults who smoke.

New York has implemented many evidence-based tobacco control policies. New York has a comprehensive smoke-free air law that prohibits cigarette smoking and vaping product use in workplaces, restaurants, and bars; this law has been extended to combustible cannabis products as well. The state's cigarette excise tax is $4.35, which is more than twice the average of U.S. states, and New York City also adds a local excise tax for cigarettes and minimum prices for tobacco products. In addition, the state put in place a 20% sales tax on the retail price of vaping products. In 2020, New York prohibited the sale of flavored vaping products, barred the sale of tobacco products in pharmacies, banned tobacco product discounts and promotions, and restricted outdoor advertising of tobacco products by stores near schools. The Program's comprehensive approach complements these statewide policies with a range of interventions including anti-tobacco media campaigns, cessation-focused health systems change, and state and community interventions.

This independent evaluation report addresses the core tobacco control evaluation questions of how key tobacco-related outcome indicators changed over time and how New York's outcomes compare to those in the United States. In addition, we share highlights from some specific studies and analyses conducted as part of the independent evaluation that address topics of relevance to NY TCP. For example, we report on trends in sales of flavored vaping products following the state's sales restriction, as well as the proportion of New York youth and adults who use flavored tobacco products and on the extent to which New York youth and adults

co-use tobacco and cannabis. This Independent Evaluation Report, prepared for NY TCP in spring 2022, reflects funding levels approved for fiscal year (FY) 2021–2022 and describes activities and outcomes primarily from the 2021 calendar year.

The New York Tobacco Control Program

NY TCP has four overarching goals: preventing the initiation of tobacco use by youth and young adults, promoting cessation from tobacco use, eliminating exposure to secondhand smoke, and reducing tobacco-related health disparities. NY TCP built its programmatic approach on CDC Best Practices, evidence in the field of tobacco control, and surveillance and evaluation data regarding tobacco use in the state. The Program works to change social norms, promoting an environment across New York in which tobacco use becomes less acceptable, less desirable, and less accessible (CDC, 2014; Frieden, 2010; NCI, 1991; CDC, 2000). NY TCP set tobacco-related objectives as part of the NYSDOH's 2019–2024 Prevention Agenda, a plan developed by the state to improve the health and well-being among all New Yorkers (NYSDOH, 2019). These tobacco-related objectives focus on decreasing youth and adult tobacco use statewide with targeted reductions among populations disproportionately affected by tobacco use, as well as increased use of evidence-based cessation treatments and reduced exposure to secondhand smoke (overview in Table 1, and a full list of tobacco objectives and measurable targets in Appendix A).

Table 1. 2019–2024 NYSDOH Prevention Agenda Tobacco Objective Areas

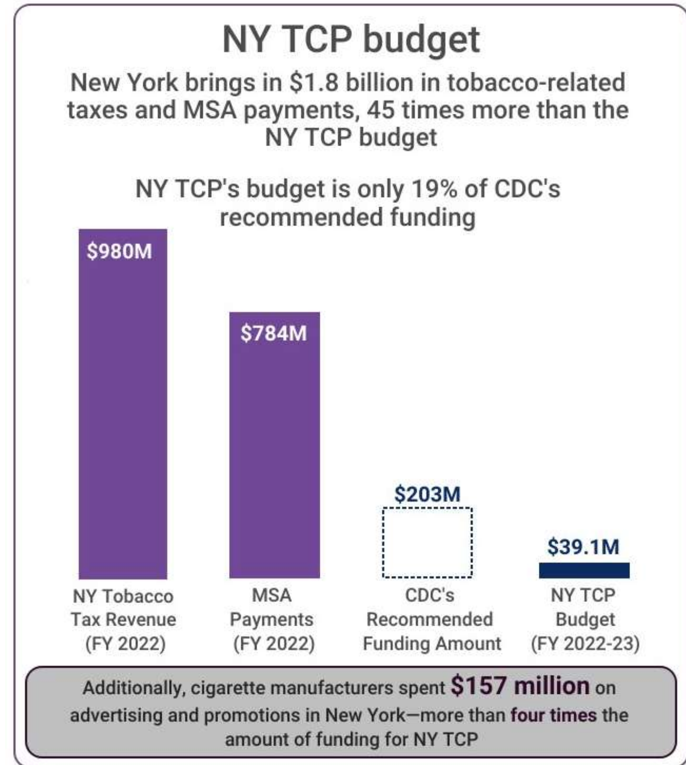
Tobacco-related Objectives' Areas of Focus	
• Decreasing tobacco use prevalence among high school students • Decreasing tobacco use prevalence among young adults • Decreasing cigarette smoking prevalence among adults, overall and for populations with historically higher smoking rates • Decreasing secondhand smoke exposure among adults and youth	• Increasing use of evidence-based treatments, including health care provider assistance and utilization of Medicaid cessation benefits • Increasing policies restricting tobacco products in the retail environment and prohibiting smoking in multi-unit housing

Note: See Appendix A for a full list of objectives and targets.

NY TCP's comprehensive programmatic approach involves conducting mass-reach health communication interventions, promoting health systems change to support cessation, and implementing state and community interventions that engage a range of grantees and partners. The Program works to understand tobacco-related disparities and identify opportunities to promote health equity in their programmatic approach. In the following sections, we describe the Program's funding and provide highlights from the programmatic efforts in the areas of health communications, cessation-related systems change, and state and community interventions.

Program Funding

CDC has published recommended funding levels for each state tobacco control program; CDC recommends that New York spend $203 million annually for its tobacco control program. For FY 2022–2023, the state appropriated $39.1 million for NY TCP. New York's tobacco control funding represents 19% of CDC's recommended funding level for the state ($203 million) and 27% of CDC's recommended minimum level ($142.8 million). New York's per capita funding for tobacco control ($1.90) was lower than the average for all other states ($2.24) based on state-level estimates for FY 2021.



New York receives Master Settlement Agreement (MSA) payments from cigarette companies as part of a settlement due to the costs of treating people with tobacco-related illnesses, and the state also gets revenue from tobacco taxes; however, the state does not necessarily use the funds for tobacco use prevention and cessation. New York State received $784 million in MSA payments and $980 million in tobacco-related taxes in FY 2022, including cigarette and other tobacco product excise taxes and vapor product sales taxes (Table 2). NY TCP's FY 2021–2022 funding represents only 2% of the combined revenue that the state receives annually from tobacco-related taxes and MSA payments.

Table 2. Annual New York State Master Settlement Agreement Payments, Tobacco Tax Revenue, and Spending on Tobacco Control and Tobacco Promotions

Revenue/Expenditure Category	Annual Revenue/Expenditure
Revenue from MSA payments (FY 2022)	$784,000,000
Revenue from tobacco excise taxes (FY 2022)	$951,000,000
Revenue from vapor product sales tax (FY 2022)	$29,000,000
Estimated cigarette advertising and promotions in New York State (FY 2020) by five major cigarette manufacturers	$156,600,000
NY Bureau of Tobacco Control budget (FY 2022–2023)	$39,113,600

CY = calendar year; FY = fiscal year; MSA = Master Settlement Agreement.

Inflation is another factor that puts NY TCP funding levels in perspective. If the 2014 CDC recommendation for New York ($203 million) was adjusted for inflation, the recommended funding for NY TCP in 2022 would be $243 million, meaning that the Program's current funding is essentially only 16% of the suggested level. The level of funding available to NY TCP provides context for interpreting trends in key outcome measures. Table 3 shows funding by program component for FY 2022–2023, as planned in early 2022. (In Appendix B we consider alignment between Program allocations by component and CDC recommendations.)

Table 3. NY TCP Funding for FY 2022–2023, by Program Component

Program Component	2022–2023 Funding
Health Communication Interventions	
Media placement	**$9,028,198**
Health Systems Interventions	**$7,927,400**
Health Systems for a Tobacco-Free New York	$3,275,000
New York State Smokers' Quitline	$4,152,400
Nicotine replacement therapy	$500,000
State and Community Interventions	**$10,617,736**
Advancing Tobacco-Free Communities	$9,275,000
Center for Public Health and Tobacco Policy	$842,736
Training/Professional development	$500,000
Enforcement	**$4,649,950**
BTC funds for enforcement	$2,475,350
CEH funds for enforcement	$2,174,600
Administration	
Tobacco control and cancer services	**$3,770,000**
Surveillance and Evaluation	
Independent evaluation	**$3,120,316**
Total	**$39,113,600**

BTC = Bureau of Tobacco Control; CEH = Center for Environmental Health

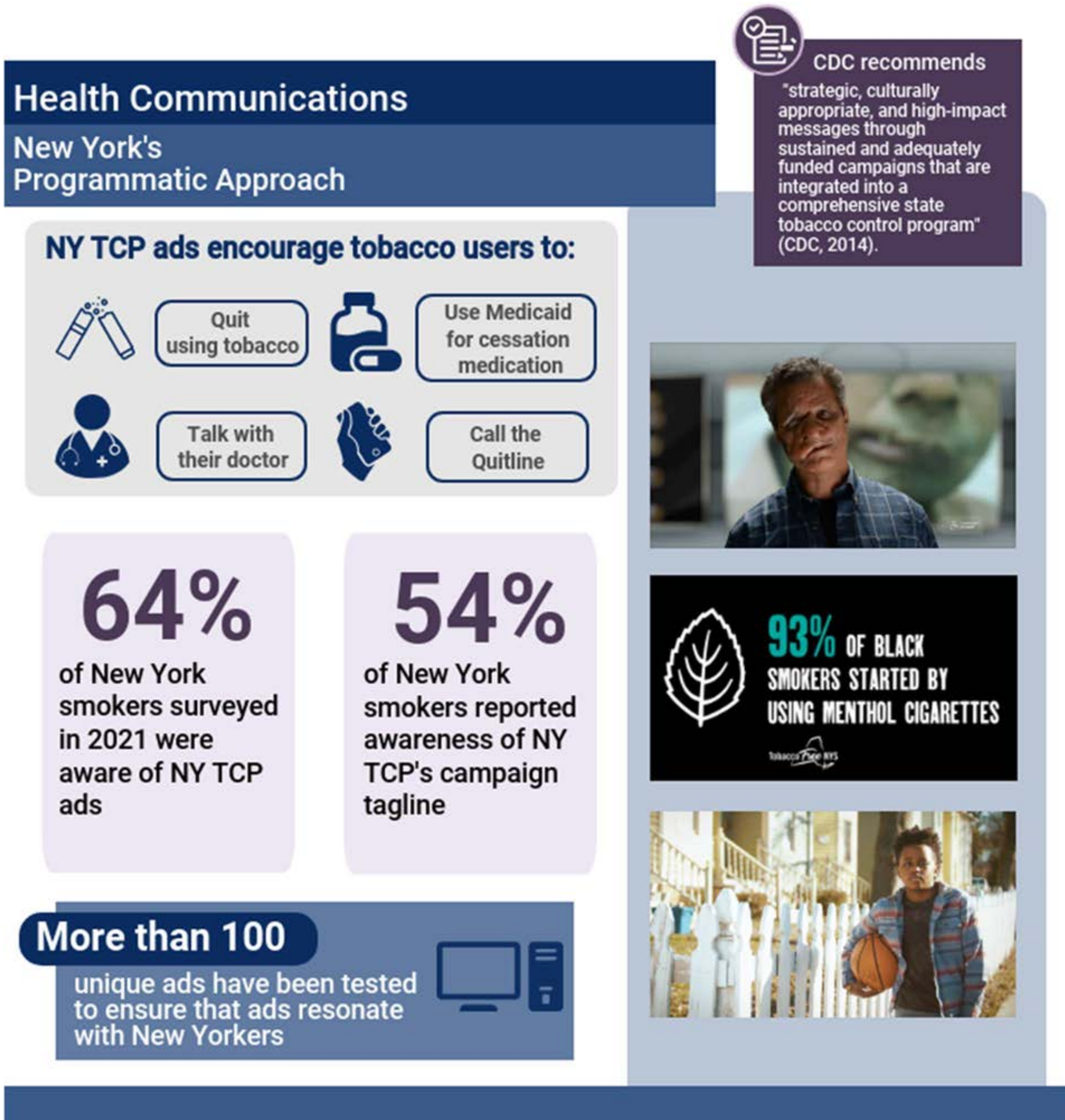
A recent study of NY TCP's return on investment found that Program spending was associated with significant savings in smoking-attributable healthcare expenditures. This analysis concluded that for every $1 of expenditure by NY TCP, smoking-attributable healthcare expenditures decreased by approximately $12 (RTI International, 2022). The average annual savings in smoking-attributable health care expenditures in New York from 2001 through 2019 was nearly $694 million, with cumulative savings of approximately $13.2 billion. Investment in NY TCP provides significant health and financial benefits for all New Yorkers.

NY TCP programmatic efforts during 2021 included health communication activities, health systems change-related efforts to promote cessation, and statewide and community interventions. The following sections offer high-level overviews of efforts and highlight measures of their reach and short-term outcomes.

Health Communication

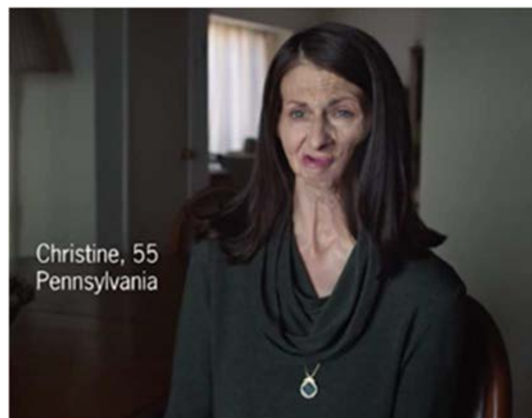
NY TCP's health communication efforts during 2021 included ongoing media campaigns encouraging people who smoke to quit; a newly-launched ATFC grantee-led media campaign to inform about and motivate people to take action around the issue of tobacco industry targeting of Black communities with menthol cigarettes; and ongoing formative research to inform the selection and placement of campaign messaging (Exhibit 1). In the sections that follow we describe NY TCP's health communication efforts in 2021.

Exhibit 1. NY TCP Programmatic Highlight: Health Communications



Smoking Cessation Media Campaigns

Exhibit 2. Example Ad from NY TCP's 2021 Smoking Cessation Campaign



NY TCP's smoking cessation media campaigns encourage New Yorkers who use tobacco to quit by talking with their health care provider and calling the New York State Smokers' Quitline. In 2021, NY TCP continued airing ads that depict the negative health consequences of smoking through emotionally evocative and graphic content. In January and February 2021, NY TCP aired two antismoking ads from CDC's *Tips from Former Smokers* campaign—Christine Smoker and Christine Loved Ones (Exhibit 2 shows an example ad from this campaign), and in September 2021 the program ran its ad, Echo. These ads included the tagline "Smoking is an addiction. Medicaid and your health care provider can help." In November and December 2021, the program ran the *Tips from Former Smokers* ads Geri: Thanksgiving, Geri: Text, and Assad & Leah: Things I've learned, along with the NY TCP-developed ad Cigarettes Are Eating You Alive: Mask, which also aired on Spanish TV and digital platforms. These ads were tagged with "Break Your Addiction to Smoking. Call 1-866-NY-QUITS (1-866-697-8487) for FREE nicotine patches and talk to your doctor for quit support." Table 4 lists the smoking cessation ads aired by NY TCP in 2021, including when they aired, the primary audience, and the message with which they were tagged.

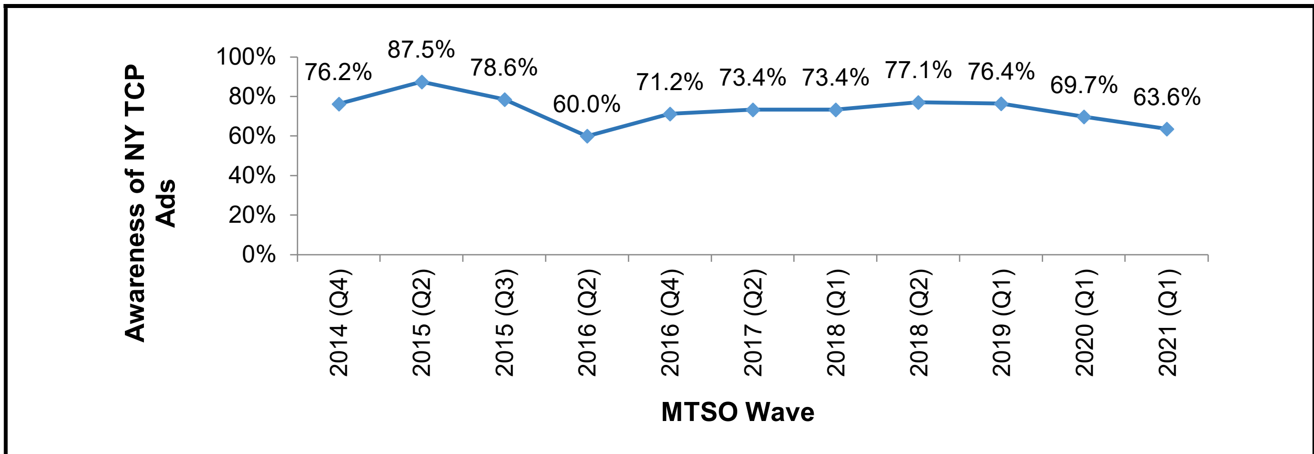
Table 4. Smoking Cessation Ads Aired by NY TCP in 2021

Ad Name (Source)	Dates	Tagging
Christine: Smoker (CDC Tips)	January to February 2021	Smoking is an addiction. Medicaid and your health care provider can help.
Christine: Loved Ones (CDC Tips)	January to February 2021	Smoking is an addiction. Medicaid and your health care provider can help.
Echo (NY TCP)	September 2021	Smoking is an addiction. Medicaid and your health care provider can help.
Geri: Thanksgiving (CDC Tips)	November to December 2021	Break Your Addiction to Smoking. Call 1-866-NY-QUITS (1-866-697-8487) for FREE nicotine patches and talk to your doctor for quit support.
Geri: Text (CDC Tips)	November to December 2021	Break Your Addiction to Smoking. Call 1-866-NY-QUITS (1-866-697-8487) for FREE nicotine patches and talk to your doctor for quit support.

Ad Name (Source)	Dates	Tagging
Assad & Leah: Things I've Learned (CDC Tips)	November to December 2021	Break Your Addiction to Smoking. Call 1-866-NY-QUITS (1-866-697-8487) for FREE nicotine patches and talk to your doctor for quit support.
Cigarettes Are Eating You Alive: Mask (NY TCP)	November to December 2021	Break Your Addiction to Smoking. Call 1-866-NY-QUITS (1-866-697-8487) for FREE nicotine patches and talk to your doctor for quit support.

The majority of smoking cessation media campaign expenditures in 2021 (65%) were for video ads aired on broadcast or cable television, with the remaining expenditures allocated to streaming video and video on demand (27%), social media (5%), and search (3%) placements. Television ads were broadcast across the state, while digital content was targeted toward people who smoke living in upstate New York and those residing in federally-subsidized housing. In a survey conducted in February 2021, nearly 64% of adults who smoke in New York reported awareness of either of the Christine ads that ran in January and February (Exhibit 3). Ad awareness estimates for 2020 and 2021 are commensurate with shifts in timing and amounts of campaign spending compared with other recent years.

Exhibit 3. Awareness of NY TCP Ads Among NY Adults Who Smoke, 2014-2021, NY MTSO



MTSO=Media Tracking Survey Online

"It's Not Just" Media Campaign

NY TCP-funded grantees addressed the disproportionate targeting of tobacco product marketing in racially and culturally diverse communities during 2021 by launching a focused media campaign. In May 2021, the *It's Not Just* media campaign raised awareness about and motivated action around the issue of tobacco product targeting in Black communities. Developed by Pinckney Hugo Group in consultation with the Center for Black Health & Equity, the campaign included digital video, print/display, and social media spots and leveraged partnership with iHeart Radio to include host-read spots with a well-known DJ (Exhibit 4 shows an example ad from this campaign). Audiences for this campaign included civically engaged adults, K–12 educators, healthcare providers, active participants of religious services, and the New York general population.

Exhibit 4. Example Ad from New York's 2021 It's Not Just Media Campaign

In a survey conducted approximately 6 weeks after campaign launch, 36% of respondents were aware of the *It's Not Just* Campaign. Awareness of the campaign was strongly correlated with civic/social engagement, suggesting that the campaign is successfully reaching highly engaged adults who may be most likely to take action. Target audiences were receptive to campaign messaging, with the majority of respondents agreeing that the video ad was clear, grabbed their attention, and was powerful and informative. Most notably, campaign awareness was associated with several key outcomes targeted by the campaign, such as having visited the website NotJustMenthol.org, and taking actions to educate others and learn more about the targeting of tobacco products in Black communities.

Health Communication Discussion

In 2021, NY TCP's health communication efforts focused on ongoing campaign messaging encouraging people who smoke cigarettes to quit. Cessation ad awareness among New Yorkers who smoke in 2021 was similar to previous years (awareness ranged from 60% to 80% between 2014 and 2021). The 2021 awareness level reflects a snapshot of a brief period at the beginning of the year when campaign ads were running at the end of the fall 2020–winter 2021 campaign. NY TCP aired additional campaign ads from September through December 2021 but did not air smoking cessation messaging during March through August 2021. Thus, awareness measures assessed in early 2021 do not reflect higher levels of awareness likely experienced when ad spends were higher in subsequent quarters.

NY TCP's *It's Not Just* campaign regarding menthol product targeting of Black communities resulted in moderate awareness in the first 6 weeks of campaign implementation. This level of awareness will likely increase with campaign duration and would also likely increase if additional

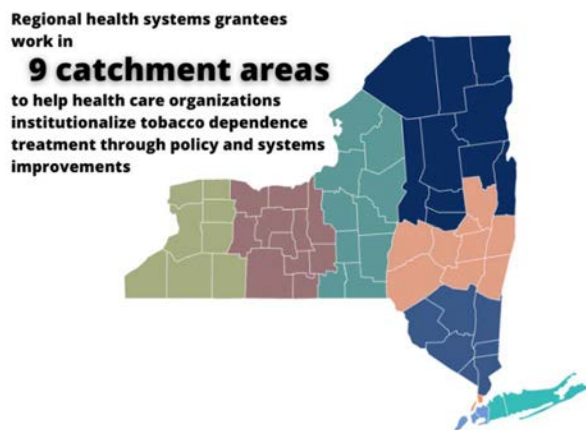
funds were available for the campaign. Most respondents reacted favorably to the campaign video ad, and positive associations between ad awareness and key beliefs and behaviors relevant to the campaign are promising. The *It's Not Just* campaign coincides with the United States Food and Drug Administration's (FDA's) recent proposed product standards to ban menthol cigarettes and flavored/menthol cigars (FDA, 2022). Findings from our evaluation suggest that media campaigns can build public support for local policies that may be implemented before federal product standards are in place.

CDC best practice guidance suggests that campaigns should aim to reach 75-80% of the target population each quarter (CDC, 2014). Although New York was close to this goal in the first quarter of 2021, the cessation campaign did not air for half of the year. To increase the reach and effectiveness of its smoking cessation health communications efforts, NY TCP should consider sustained campaign activities that continue to leverage hard-hitting graphic or emotionally resonant ads that have been perceived as highly effective by New Yorkers who smoke. To maximize the value of the Program's ad buys with the available funding level, the Program could reassess the media vendor's negotiated bonus airtime. However, the Program's relatively low funding for media campaigns and other tobacco control programmatic activities limits the ability to air media at sufficient levels to achieve CDC's recommended campaign reach.

Health Systems Interventions

To help New Yorkers who use tobacco quit, NY TCP's health systems interventions focus on increasing the provision of evidence-based treatments for tobacco dependence, which include FDA-approved cessation medications, counseling, and Quitline services (Exhibit 5). NY TCP's health systems approach includes:

- funding Health Systems for a Tobacco-Free New York (HSTFNY) grantees to facilitate adoption of policies, protocols, and workflows that institutionalize provision of evidence-based tobacco dependence treatment;
- coordinating with external initiatives and partnerships to link statewide health care reform changes with NY TCP efforts to support tobacco-related systems change, especially in settings where smoking is highest;



- promoting reduced-cost tobacco dependence treatments; and
- providing telephone-, web-, and text-based smoking cessation support.

These efforts aim to create a barrier-free environment for New Yorkers who use tobacco to access evidence-based tobacco dependence treatment, with the Program promoting changes in

organizational systems, improvements in provider interventions, and opportunities for New Yorkers who use tobacco products to receive low-cost evidence-based treatment.

Exhibit 5. NY TCP Programmatic Highlight: Health Systems Interventions

Health Systems Interventions

New York's Programmatic Approach

New York's health systems approach comprises an integrated set of components:

Center for Health Systems Improvement

Regional Grantees

Reduced-Cost Cessation Treatment

Smokers' Quitline

The New York State Medicaid Program covers all FDA-approved cessation medications and counseling.

The Quitline offers coaching and NRT.

CDC Recommendation

CDC recommendations include that "Health systems change involves institutionalizing cessation interventions in health care systems and seamlessly integrating these interventions into routine clinical care" (CDC, 2014).

HSTFNY grantees work with health care organizations on 3 systems strategies cited in the PHS Guideline:

- Systems Strategy 1
  Screening systems, including systems or policies for conducting and documenting Ask, Advise, Assess, Assist, Arrange, and Refer
- Systems Strategy 2
  Health care provider training, on-site cessation resources and provider feedback
- Systems Strategy 3
  Dedicated tobacco treatment staff

Note: Systems strategy 1 involves health care providers Asking all patients about tobacco use, Advising all tobacco users to quit, Assessing readiness to quit, Assisting with a quit attempt, Arranging for follow-up, and Referring to the Quitline or other resources.

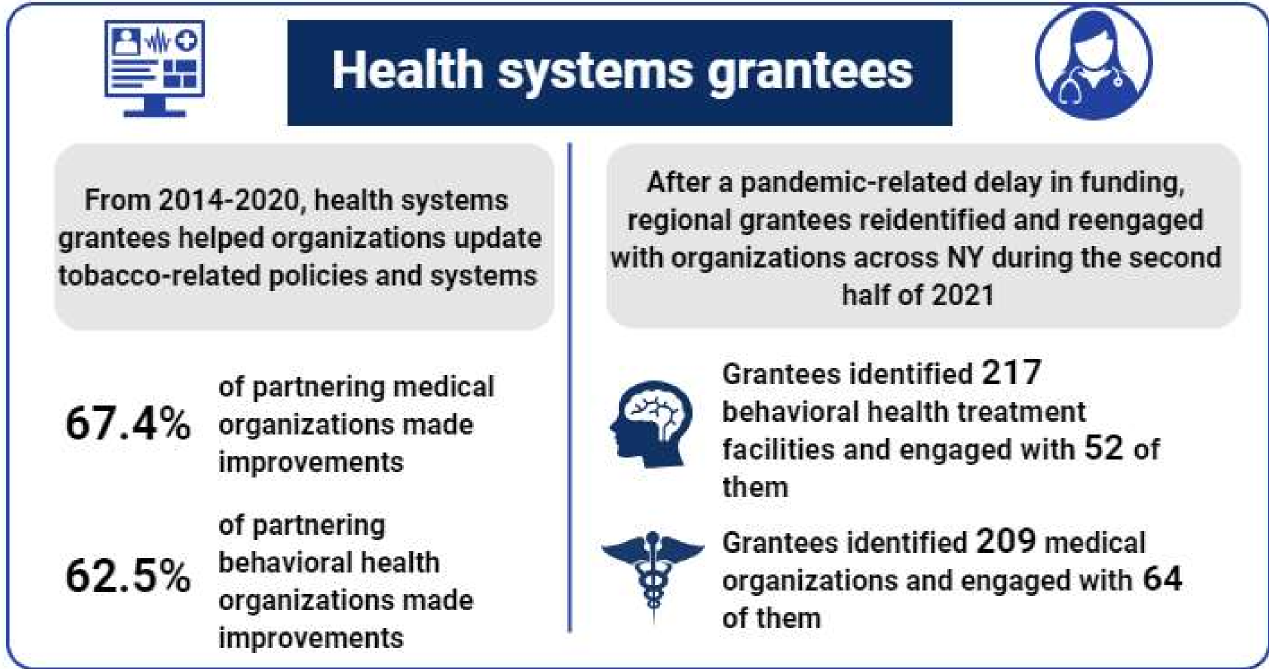
Health Systems Grantee Interventions

NY TCP funds 8 regional HSTFNY grantees in 9 catchment areas across the state and one statewide grantee, the Center for Health Systems Improvement, to facilitate adoption of tobacco-related policies and systems (see a list of grantees in Appendix C). HSTFNY grantees were not funded from mid-2020 through April 2021 due to statewide contracting delays related to the COVID-19 pandemic. HSTFNY funding resumed in May 2021.

In 2021, HSTFNY regional grantees identified 426 health care organizations across the state to engage with (209 medical and 217 behavioral health treatment facilities) (Exhibit 6). Grantees focus on supporting organizations that serve populations with higher rates of tobacco use, including community health centers and behavioral health treatment centers. During the first year of the grantees' new funding cycle, they reengaged with organizations they have partnered with in the past and assessed tobacco-related policies, practices, and workflows.

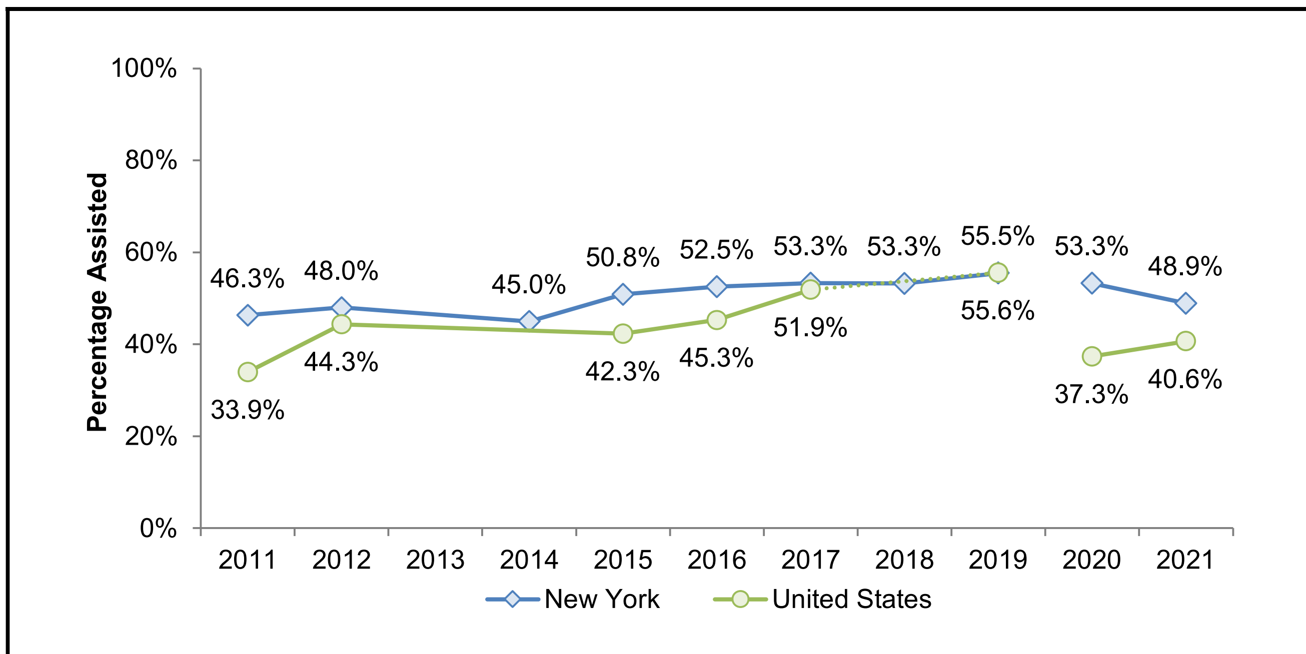
Between May and December 2021, grantees reengaged with 64 medical organizations (30.6% of the 209 organizations they identified) and 52 behavioral health treatment facilities (24.0% of those identified).

Exhibit 6. Health Systems Grantee Reports of Systems Changes (2014-2020) and Partnering with Organizations (2021)



New York's health systems efforts employ multiple strategies to promote provider identification of tobacco use and provision of tobacco interventions, including policies and reminder systems within organizations and prompts in electronic health records. Brief advice to quit smoking by a health care provider significantly increases the odds that a person who smokes will quit (Fiore et al., 2008; Nonnemaker et al., 2011). The 2019–2024 NYSDOH Prevention Agenda set an objective of increasing provider assistance with quitting from 53.3% in 2017 to 60.1% by the end of 2024. Provider assistance with quitting is measured by reports from people who smoke that their provider suggested setting a quit date; provision of quit-smoking materials; and/or discussion of cessation medications, quitlines, or cessation classes. Assistance with a quit attempt has been fairly stable over the past 10 years in New York. Approximately half (48.9%) of New York adults who smoke who saw a provider in the past 12 months reported that they received provider assistance with quitting smoking in 2021 (Exhibit 7)—statistically similar to the national prevalence of 40.6%.

Exhibit 7. Percentage of Adults who Smoke Who Report That Their Health Care Provider Assisted Them with Smoking Cessation in the Past 12 Months, New York Adult Tobacco Survey, 2011–2021, and National Adult Tobacco Survey, 2011–2021

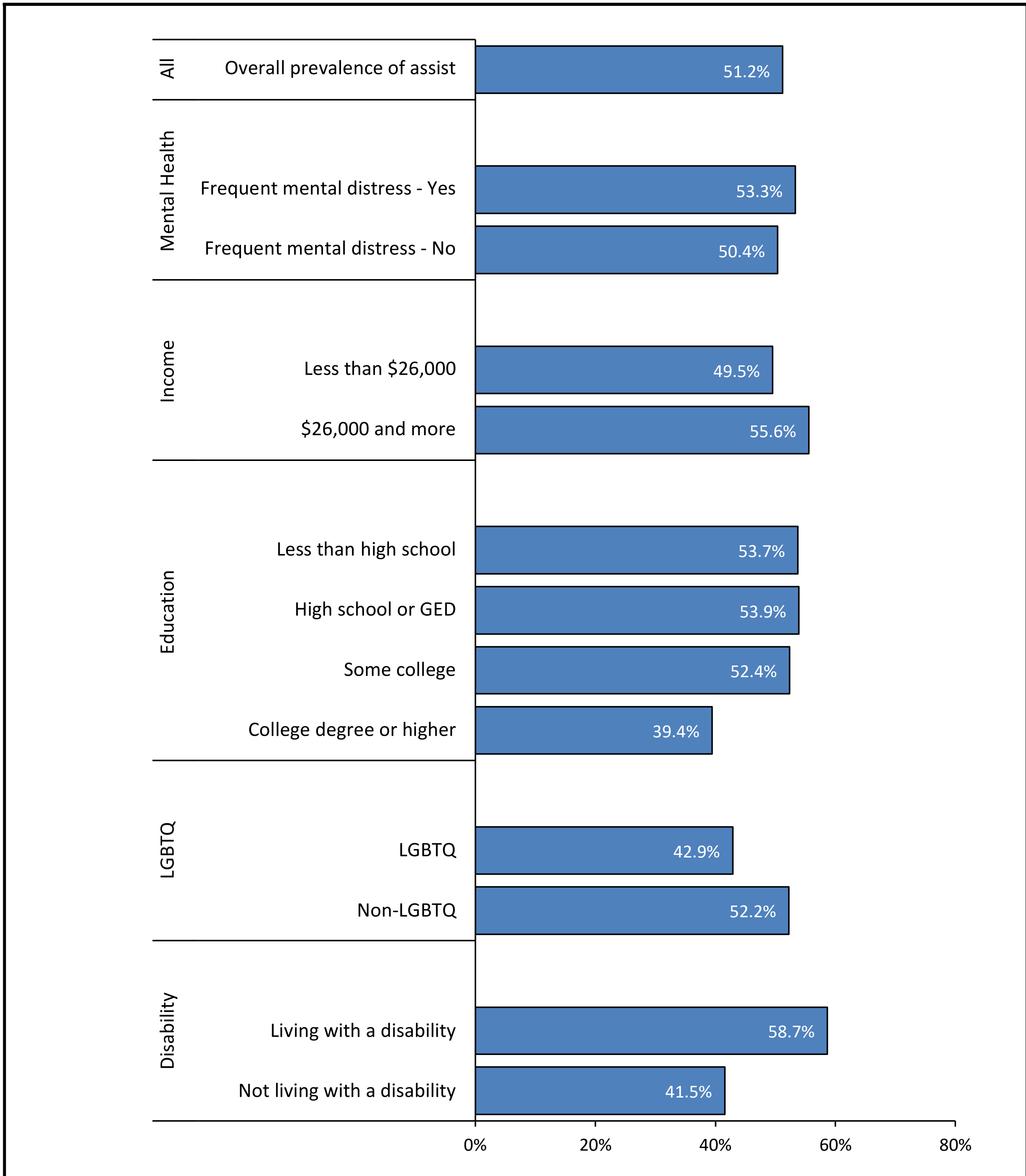


Note: There is a statistically significant upward trend in the percentage of people who smoke who reported that their health care provider assisted them with smoking cessation in the past 12 months in New York State and the United States from 2011 to 2021.

NY TCP recognizes that advancing health equity is an important part of improving public health and decreasing tobacco-related health disparities and inequities. Objectives in the 2019–2024 NYSDOH Prevention Agenda articulate aims to decrease the prevalence of cigarette smoking among communities disproportionately affected by tobacco use. These priority communities appear to be receiving provider assistance with a quit attempt at least as often or more than the general population, including adults living in households with income less than $26,000, less than a high school education, living with frequent mental distress or living with a disability, or who self-identify as LGTBQ[1] (Exhibit 8). Although the Program is working to increase provider assistance for all New Yorkers who smoke cigarettes, the fact that providers are assisting people who smoke with these demographic characteristics as often as the general population is a positive finding.

[1] The acronym LGBTQ includes those who identify as lesbian, gay, transgender, bisexual, and/or queer.

Exhibit 8. Percentage of Adults Who Smoke Reporting That Their Health Care Provider Assisted Them with Smoking Cessation in the Past 12 Months (Among People Who Smoke Visited a Provider in the Past Year), New York Adult Tobacco Survey, 2020–2021 pooled

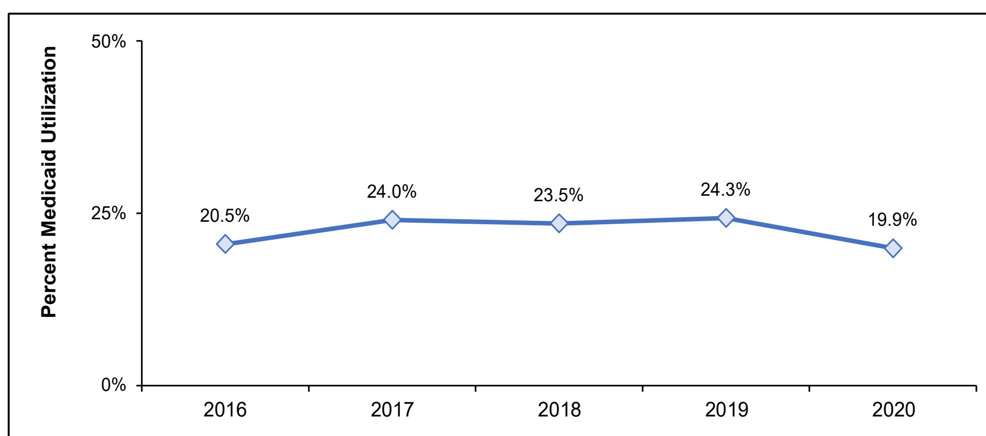


Note: Provider assistance significantly differs by education (HS and some college prevalence is greater than prevalence among College +) and disability (living with a disability prevalence is greater than among those not living with a disability). LGBTQ status was undetermined for 6.0% of 2020-2021 NY ATS respondents.

Promotion of Low-cost Evidence-based Tobacco Dependence Treatments

New York has comprehensive Medicaid coverage of cessation treatments. The NY TCP promotes the use of these Medicaid benefits for tobacco dependence counseling and medications, aiming to increase awareness of these benefits among Medicaid enrollees and health care providers. The 2019–2024 NYSDOH Prevention Agenda includes an objective focused on increasing use of smoking cessation benefits for people enrolled in Medicaid who smoke from 20.5% in 2016 to 26.2% by 2024. The benefit utilization rate was approximately 24% for three years and was 19.9% in 2020 (Exhibit 9). Smoking cessation benefit use in 2020 may have been affected by the pandemic.

Exhibit 9. Utilization of Smoking Cessation Benefits Among People Who Smoke and Are Enrolled in Medicaid, 2016–2020



Data Source: NYSDOH Office of Quality and Patient Safety, Medicaid Program, data as of January 2022: New York State Prevention Agenda Dashboard (ny.gov)

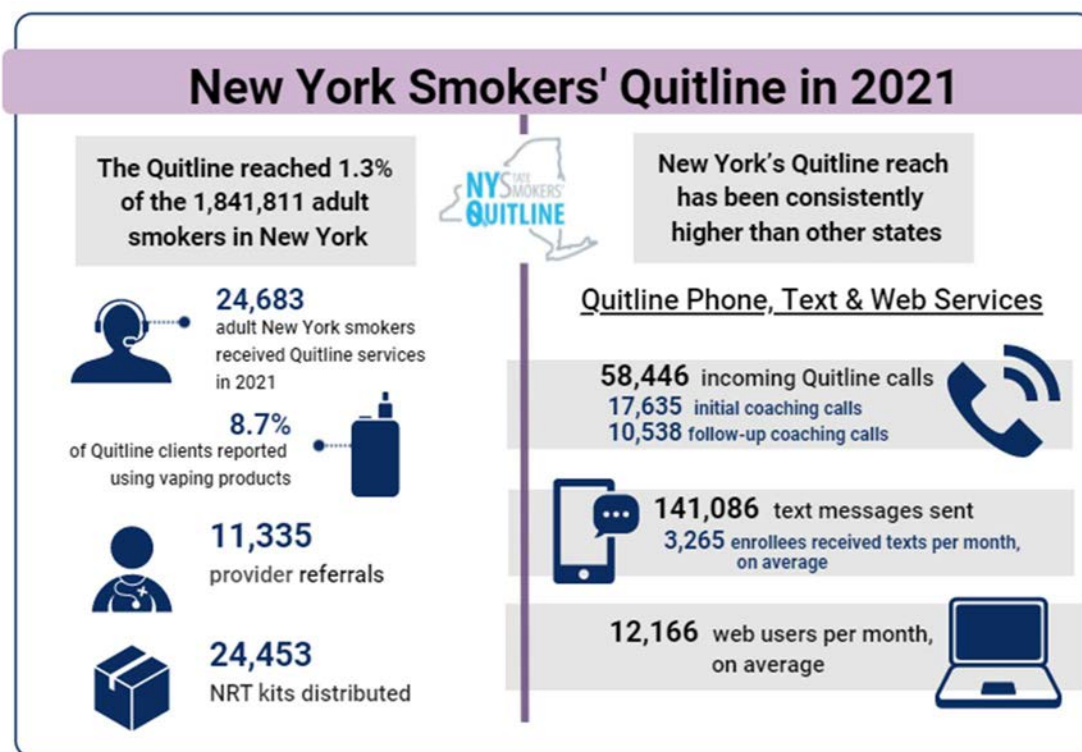
New York State Smokers' Quitline

NY TCP funds the New York State Smokers' Quitline, which provides an evidence-based service that provides quit coaching and support services to New Yorkers who use tobacco by telephone, as well as offering free NRT for eligible New Yorkers (Exhibit 10). In 2021, the Quitline received 58,446 calls and the Quitsite had an average of 12,166 web users per month (see Exhibit 10). The proportion of adults who smoke who received an evidence-based service from the Quitline each year, known as Quitline reach, has consistently been higher in New York than most other states (Mann et al., 2018). New York's Quitline reach was 1.3% in 2021, remaining at the same level as 2020. The number of calls and provider referrals decreased from 2020 to 2021, but the number of web users increased in 2021.

To reach the largest number of people who smoke and have the greatest population impact, NY TCP aligns Quitline efforts with the health systems initiative. Quitline coaches encourage Quitline callers to talk with their health care providers about quitting and to take advantage of the cessation-related benefits available to them through their insurance. The Quitline also uses

a text messaging program to encourage clients to talk with their doctor and access available cessation benefits through their health plans.

Exhibit 10. New York State Smokers' Quitline Statistics for 2021



Health Systems Discussion

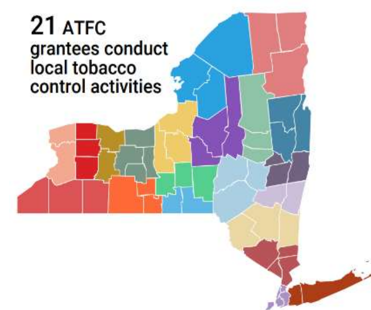
Following pandemic-related delays in the processing of their contracts, HSTFNY grantees were refunded in May 2021 and began reengaging with partnering organizations after the 18-month hiatus. Although they were only funded for part of 2021, limiting potential impact of their health systems work, HSTFNY grantees reconnected with approximately one-third of the organizations identified as targets within their catchment area. NY TCP's ongoing systems change efforts in medical health and behavioral health care organizations are aligned with the evidence that smoking prevalence continues to be higher among New Yorkers living with an annual household income below $25,000 and those experiencing frequent mental distress.

NY TCP's health systems change efforts complement the Program's cessation media campaigns that encourage New Yorkers who use tobacco to quit and the provider-targeted media campaigns that prompt medical and behavioral health care providers to treat nicotine addiction with counseling and evidence-based tobacco dependence treatments. Although no provider media aired in 2021, previous campaigns have shown promise and additional campaigns are planned.

There is room for improvement in the prevalence of New York adults who smoke reporting that health care providers are assisting them with a quit attempt and in the Medicaid benefit

utilization rate. Provider assistance with a quit attempt has been fairly stable over the past 10 years in New York and approximately half of New York adults who smoke saw a provider in the past 12 months reported that they received provider assistance with quitting smoking. Provider assistance with quitting during 2021 in New York was similar to provider assistance in the country overall. New York adults who smoke reporting provider assistance with quitting are similar for the groups with higher smoking prevalence rates as for the general population, indicating that New York providers are reaching priority populations. Medicaid cessation benefit utilization remains low at about 20% and has not increased over time. The Program would benefit from continuing to partner with the New York State Medicaid Program to promote the benefit to members and health care providers serving Medicaid-enrolled patients.

Statewide and Community Interventions



NY TCP implements a coordinated statewide community-based intervention strategy focused on local-level policies with the goal of promoting a tobacco-free norm across the state. As part of these efforts, NY TCP funds 21 Advancing Tobacco-Free Communities (ATFC) grantees to conduct local tobacco control activities throughout all 62 counties in the state (listed in Appendix D). The Program directs the grantees to concentrate on evidence-based policy initiatives and strategies that are recommended by CDC (CDC, 2014) and considered essential to continued declines in tobacco use (IOM, 2007). The four key initiatives that are the focus of ATFC grantees are: retail environment (reducing exposure to tobacco marketing and products), tobacco-free outdoors, smoke-free multi-unit housing, and smoke-free movies (Exhibit 11). NY TCP ATFC grantees promote these initiatives by building public, organizational, and political support through a coordinated set of strategies: community education, community mobilization, government policy maker education, and advocacy with organizational decision makers. During 2021, grantees resumed attending in-person events which had been paused in 2020 due to the pandemic. Grantees adapted to the challenge of pursuing tobacco control engagement and interventions in the midst of the pandemic by continuing to hold virtual meetings with policy makers, community members, and youth.

Across these initiatives, a commitment to health equity serves as a foundation for NY TCP statewide and community intervention efforts. For example, in the smoke-free multi-unit housing initiative, grantees focus on policies that protect the health of residents in multi-unit housing and prioritize affordable housing. In the retail environment initiative, grantees promote policies that aim to counteract the harmful impact of targeted tobacco industry marketing has had on the Black and African American community and other racially and culturally diverse populations. Grantees partner with community organizations that represent the interests of groups disproportionately affected by tobacco use and mobilize these groups and community members to work toward policy change.

Exhibit 11. NY TCP Programmatic Highlight: Statewide and Community Interventions

Retail Environment Initiative

NY TCP grantees continued to educate decision makers and the public about the need to reduce the influence of retail tobacco product marketing, which is associated with youth tobacco product use. In addition, menthol cigarettes have been disproportionately marketed to historically marginalized populations including Black and LGBTQ communities. A majority of New York adults surveyed during 2021 support key retail environment tobacco control policies, and this support is higher than support among adults in the United States (Table 5).

Table 5. Support Among Adults for Tobacco Control Policies, New York Adult Tobacco Survey and National Adult Tobacco Survey, 2021

	Adults in Support of Policy, %	
Type of Policy	**New York**	**United States**
Limiting the number of tobacco retailers	57.3%	49.1%
Banning the sale of menthol cigarettes	54.1%	46.2%
Banning the sale of flavored tobacco products other than menthol cigarettes	55.7%	46.3%

Note: In 2021, adults in New York were more likely than US adults to support policies limiting the number of tobacco retailers, banning the sale of menthol cigarettes, and banning the sale of flavored tobacco products other than menthol cigarettes ($p < 0.05$).

The 2019-2024 NYSDOH Prevention Agenda includes an objective that 30 municipalities will adopt retail environment policies by the end of 2024. During 2021, one county and two municipalities adopted retail environment policies, bringing the total to 26 local communities with local retail policies. These 26 communities represent approximately 70% of the state's population. The newest policies introduced restrictions on tobacco retailer locations, including requiring that stores are at least 1,000 feet away from schools and playgrounds; the new policies were adopted by Nassau County, the Town of Hempstead (within Nassau County), and the Town of Irondequoit (located in Monroe County).

Source: Countertobacco.org

Some retail environment policies restrict the sale of flavored tobacco products. With New York City's flavored tobacco policy, 44% of the state's population is covered by a policy that prohibits the sale of flavored cigars, smokeless tobacco, and hookah products (although menthol tobacco products are allowed to be sold). There are a range of statewide retail environment tobacco control policies in place. As a result, 100% of the state's population is covered by policies that restrict flavored vaping product sales, prohibit the sale of tobacco products in pharmacies, prohibit tobacco product discounts and promotions, prohibit outdoor tobacco advertising near schools, and require that all tobacco and vaping product retailers be registered.

The panel on the following page provides a summary of an analysis to explore the effect of the state's flavored vaping product sales restriction on retail sales of vaping products. After New York's policy, tobacco-flavored vapes became the most common type sold; this trend appears distinct from a comparison state, indicating that the change is associated with the policy. Although flavored vaping product sales were not eliminated and vape shops were not included in the data, reduced sales (and subsequently, reduced use) of flavored vaping products is hypothesized to lead to reduced appeal and reduced initiation. Continued monitoring of reported use of these products will help determine the long-term policy effect.

Studying the flavored vaping product sales restriction

New York prohibited the sale of flavored vaping products starting May 18, 2020. The policy only allows tobacco-flavored and unflavored vaping products to be sold.

Methods

To understand how vaping product sales changed over time, we analyzed data on retail sales of vaping products comparing New York (which implemented a flavored vaping product policy) to California (which had no statewide flavored vaping product policy).

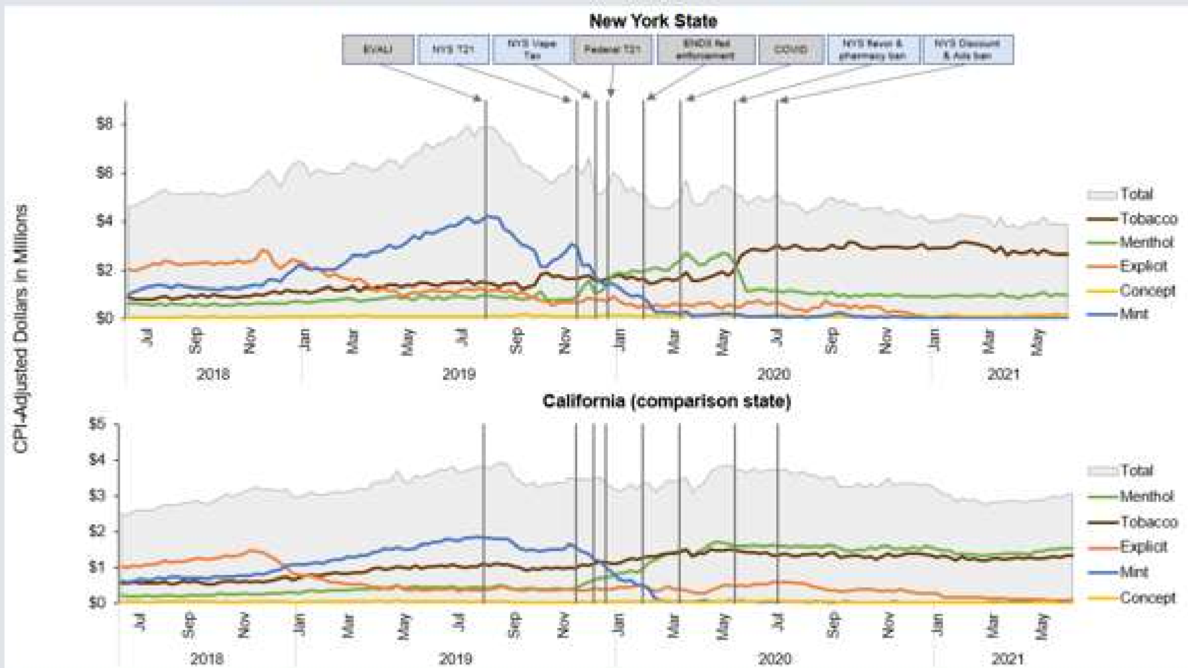
Key takeaway

New York's statewide policy restricting the sale of flavored vaping products appears to have been associated with a shift in vaping product flavors sold in the state, with the most common flavor sold changing from menthol to tobacco flavor.

Findings

After New York's flavored vaping product restriction, menthol vaping product dollar sales in New York dropped and tobacco-flavored vaping products became the most common. This trend appears distinct from California, where menthol continued to be more common than tobacco-flavored vaping products, which suggests that this change may be linked to New York's policy. There continued to be some sales of flavored vaping products (including menthol and explicit flavors such as fruit) after New York's policy went into place. This may be partially related to enforcement challenges due to the COVID-19 pandemic. Reducing the availability of flavored vaping products is expected to decrease the appeal of these products to youth and to lead to reduced youth vaping.

Weekly Dollar Sales of Vaping Products by Flavor Category in New York and California, June 10, 2018 – June 5, 2021, NielsenIQ Scanner Sales Data



Note: EVALI=E-cigarette or Vaping Product Associated Lung Injury. T21=Tobacco 21 (minimum tobacco product sales age). ENDS federal enforcement=FDA prioritized enforcement of flavored cartridge-based electronic nicotine delivery systems (ENDS). Pre-policy changes may be linked to changes in the vaping product landscape, as JUUL made voluntary changes about flavors sold.

Tobacco-Free Outdoors Initiative

Grantees supported the adoption and implementation of tobacco-free outdoors policies, decreasing the number of public places where tobacco use is allowed and thereby reducing the social acceptability of tobacco use. These new policies include restrictions on tobacco use in outdoor public places such as beaches, parks, and playgrounds, and policies prohibiting tobacco use on grounds or near entrances of community colleges, museums, and other public spaces. In 2021, ATFC grantees reported that 36 local communities (two counties and 34 municipalities) adopted new tobacco-free outdoors policies or updated existing policies to include vaping products. In addition to policies passed by local lawmaking bodies in 2021, 91 businesses and organizations voluntarily adopted a tobacco-free outdoors policy for their premises. Most of these policies also cover vaping products.

From 2011 to 2021, ATFC grantees reported that tobacco-free outdoor policies were adopted in New York City and 32 New York counties and 146 municipalities. Cumulatively, since 2011, grantees have reported that nearly 18 million New Yorkers—representing 90% of the state population—live in a jurisdiction that has a tobacco-free outdoors policy.

Smoke-free Multi-unit Housing Policies

With the goal of eliminating non-smokers’ exposure to secondhand smoke, NY TCP grantees worked with multi-unit housing owners, managers, and landlords to increase the number of housing units where smoking is prohibited. Smoke-free homes protect nonsmokers and children from secondhand smoke and have the potential to increase quit attempts among people who smoke. In 2021, 72.4% of New York adults surveyed reported that they support policies that prohibit smoking in multi-unit housing. Support for these policies among New Yorkers is higher than support in the United States (67.2%).

The 2019–2024 NYSDOH Prevention Agenda has set an objective to increase the number of multi-unit housing units that adopt a smoke-free policy by 5,000 units each year. During 2021, ATFC grantees met this annual target, reporting that 5,055 living units were newly covered by a smoke-free policy that prohibits smoking in individual units. Grantees promoted policies that also prohibit smoking in indoor and outdoor common areas. Most of these recent policies also restricted use of vaping products in addition to combustible tobacco products.

Grantees provided support and shared cessation resources when a federal rule required all of the nearly 200,000 federally-funded public housing units in New York State to go smoke-free by mid-2018. Outside of those federally-funded public housing units, grantees have reported that their efforts resulted in approximately 97,582 units being newly covered by a smoke-free multi-unit housing policy that prohibited smoking in all individual units from 2011 to 2021. This represents an annual estimate of more than 8,800 units going smoke-free each year, exceeding the target of 5,000 per year. More than one-quarter of those units were part of local public housing authorities. Facilitating smoke-free policies in multi-unit housing extends secondhand smoke protection to many more New Yorkers. However, because New York has more than 3.6 million New York households that reside in multi-unit housing (excluding the nearly 200,000 federally-funded public housing units now covered by a federal smoke-free rule), grantee reports of new smoke-free multi-unit housing policies represent only about 3% of non-federally-funded public housing units statewide. Some communities in California have adopted municipal-level smoke-free multi-unit housing policies as a broader approach.

Smoke-Free Movies

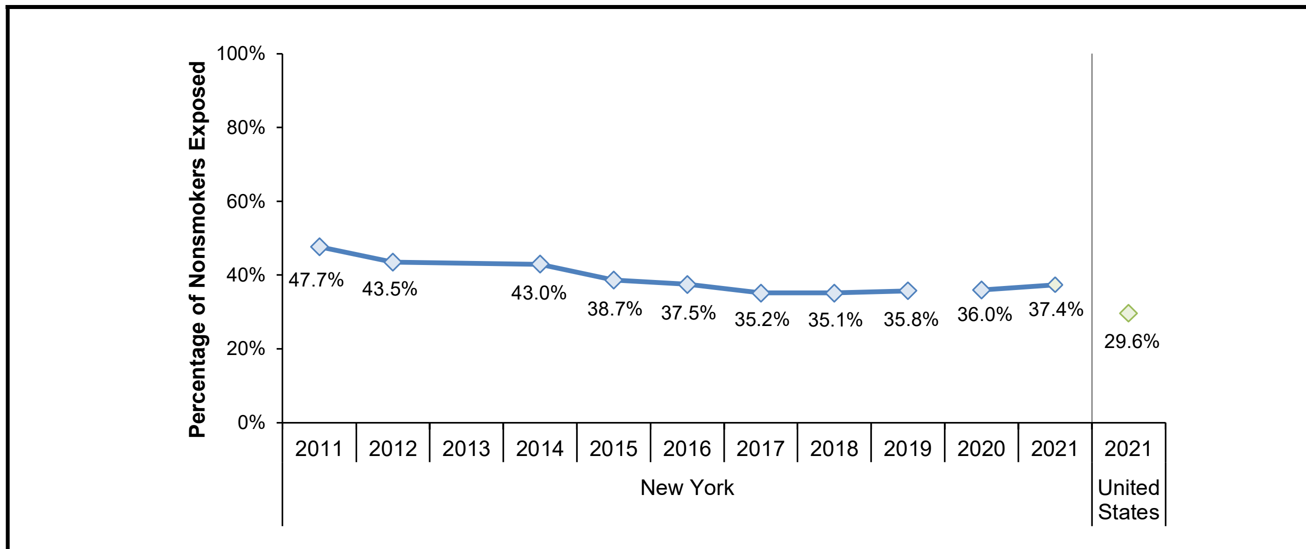
NY TCP grantees work on a smoke-free movies initiative, encouraging entertainment media companies to implement an R rating for movies that include smoking. Tobacco imagery in movies is associated with youth smoking initiation (Office of the Surgeon General, 2012) and a call to action has been endorsed by the American Academy of Pediatrics (AAP, 2021), the Truth Initiative (Truth Initiative, 2023), and others. NY TCP grantees—primarily youth volunteers—conduct education, write letters to the Motion Picture Association, and hold events to engage the community in supporting this initiative.

Source: Adirondack Health Institute, https://ahihealth.org/casa/smoke-free-movies/

Secondhand Smoke Exposure

The 2019–2024 NYSDOH Prevention Agenda targets a reduction in secondhand smoke exposure among nonsmoking New York adults who live in multi-unit housing. In 2021, 37.4% of nonsmoking New York adults in multi-unit housing reported secondhand smoke exposure in their homes (Exhibit 12). Although secondhand smoke exposure among New York nonsmokers in multi-unit housing has decreased since 2011, the trend has been stable in recent years and does not appear to be trending on a path to reach the target of 27.2% by 2024. Multi-unit housing secondhand smoke exposure estimates are higher in New York than in the United States.

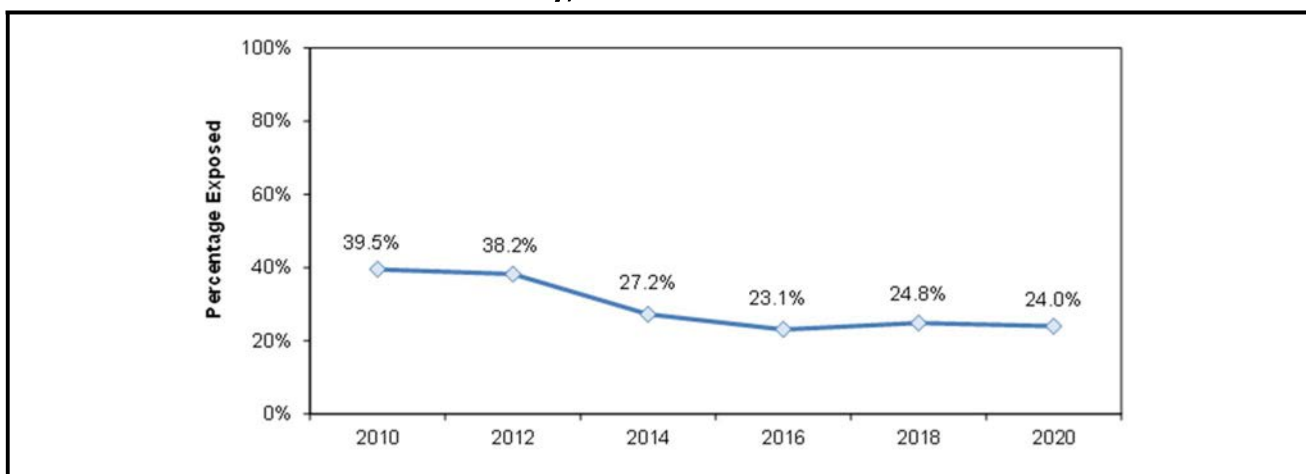
Exhibit 12. Percentage of New York Nonsmokers Living in Multi-unit Housing Who Report Being Exposed to Secondhand Smoke, New York Adult Tobacco Survey, 2011–2021, and National Adult Tobacco Survey, 2021



Note: There is a statistically significant downward trend in secondhand smoke exposure among New York nonsmokers living in multi-unit housing. In 2021, nonsmokers in New York who lived in multi-unit housing were more likely those in the US to report exposure to secondhand smoke ($p < 0.05$).

Youth exposure to secondhand smoke has decreased since 2010 but has remained around 25% for the past several years (Exhibit 13). In 2020, 75.2% of New York middle and high school youth reported that smoking is not allowed anywhere in their homes (data not shown).

Exhibit 13. Percentage of New York Middle School and High School Students Who Were in a Room Where Someone Was Smoking on at Least 1 Day in the Past 7 Days, New York Youth Tobacco Survey, 2010–2020



Note: There is a statistically significant downward trend in secondhand smoke exposure among New York middle school and high school students. NY YTS data are collected in even-numbered years, so we use the 2020 estimate for the report reflecting on calendar year 2021.

Community and Statewide Interventions Discussion

Despite the challenges of the pandemic, ATFC grantees continued working on core tobacco control initiatives focused on the retail environment, tobacco-free outdoors, and smoke-free multi-unit housing. Although grantee efforts have resulted in a small number of local retail environment policies in 2021, a total of 26 local communities had policies in place by the end of 2021, which is approaching the NYSDOH Prevention Agenda target of 30 municipalities by the end of 2024. In 2021, grantees reported local policies that restrict the density of tobacco retailers by limiting the location of retailers (i.e., prohibiting the sale of tobacco products in stores near schools and playgrounds). The adoption of other retail environment policies, such as prohibiting the sale of flavored tobacco products, including menthol cigarettes, has proved more challenging. New York City has a policy restricting the sale of flavored tobacco products but has not yet been successful at restricting sales of menthol cigarettes or other menthol tobacco products. More than half of New York adults support banning the sale of menthol cigarettes and banning the sale of flavored tobacco products other than menthol, and these policies remain a priority for statewide and community intervention, because of their potential to reduce youth initiation and address health disparities. Policies that address menthol cigarettes and other flavored tobacco products are important because they can reduce the impact of targeted industry marketing to Black and African American communities and other populations who are disparately affected by tobacco use. FDA announced proposed product standards in April 2022 that would prohibit menthol cigarettes and flavored cigars (FDA, 2022), citing the scientific evidence supporting flavored tobacco restrictions. However, the effective date of this federal regulation is not yet known, and litigation from the tobacco industry may delay its implementation (Schroth et al., 2019). Pursuing state and local policies aligned with the federal product standards can facilitate public health improvements in advance of federal action.

Grantees' work to advance tobacco-free outdoors policies and smoke-free multi-unit housing policies builds upon more than a decade of work in these areas. Tobacco-free outdoors policies in communities around New York promote a tobacco-free norm throughout the state, and since 2011, grantees have reported that more than 90% of the state's population is covered by a local tobacco-free outdoors policy. Secondhand smoke exposure remains a problem for New York adults and children living in multi-unit housing. After a period of decline, reported rates of secondhand smoke exposure among nonsmoking New York adults and children who live in multi-unit housing have stagnated in recent years. Grantees continue to advocate for smoke-free policies in multi-unit housing complexes through reaching and educating landlords, management companies, and housing authorities, with a focus on protecting New Yorkers living in subsidized and affordable housing. In 2021, grantees met the 2019–2024 NYSDOH Prevention Agenda objective of 5,000 multi-unit housing units that adopt a smoke-free policy per year. Over the past decade, NY TCP grantees have reported helping close to 100,000 housing units become covered by smoke-free policies, but this represents only about 3% of non-federally funded public housing units statewide.

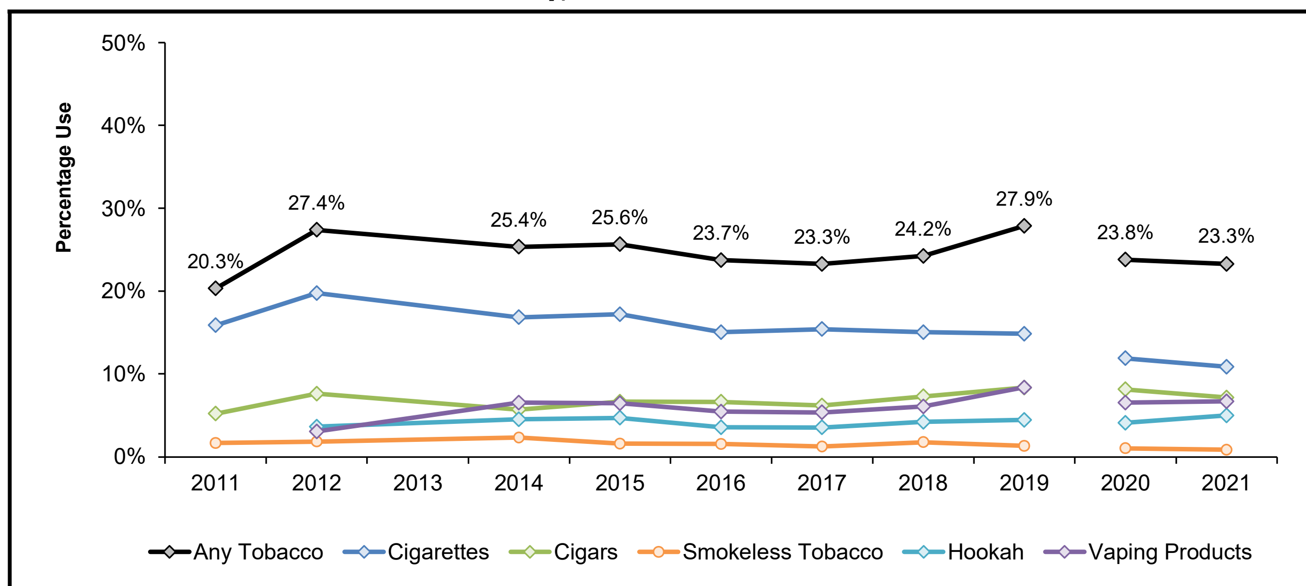
Key Evaluation Questions

This section of the report addresses NY TCP progress regarding key outcome indicators for New York State over time, comparing to the United States as possible. In addition, we document progress toward 2019–2024 NYSDOH Prevention Agenda objectives. We examine trends for the prevalence of adults in New York and the United States who currently use any tobacco product, smoke cigarettes (overall and for specific populations with historically higher rates), smoke cigars, and use vaping products. We present trends regarding the prevalence of youth in New York and nationally who currently use tobacco. We also summarize special studies that address questions related to use of flavored tobacco products and co-use of tobacco and cannabis products.

Adult Tobacco Use Measures

We present trends in New York adult cigarette smoking prevalence from 2011 to 2021, using the Behavioral Risk Factor Surveillance System (BRFSS). We report national cigarette smoking prevalence estimates for comparison from the National Health Interview Survey for 2011 to 2020. For other tobacco control measures, we use the New York Adult Tobacco Survey (NY ATS) and New York's National Adult Tobacco Survey (NY NATS). We do not show estimates for NY ATS for 2013 because the survey was not conducted in that year. New York adult use of any tobacco product was 23.3% in 2021 (Exhibit 14). This represents an increase from 2011, although adult use of any tobacco product has remained close to 25% throughout this time period; cigarettes remained the most common tobacco product used among adults.

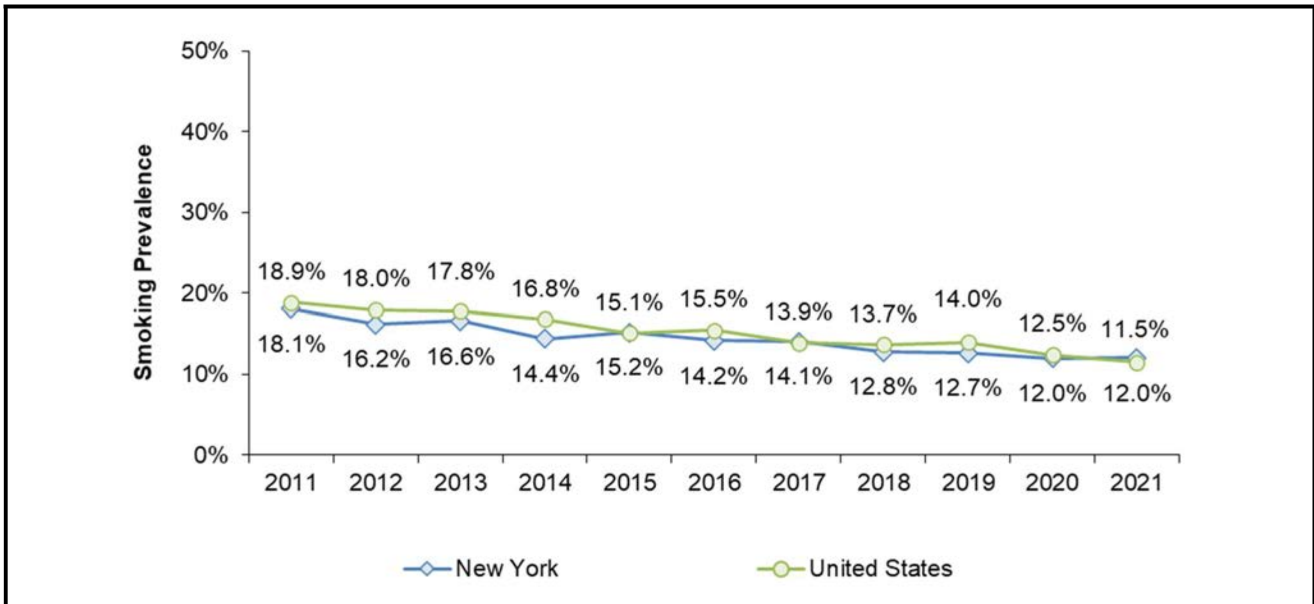
Exhibit 14. Percentage of Adults Who Currently Use Any Tobacco Product in New York, New York Adult Tobacco Survey, 2011–2021



Note: There is a statistically significant upward trend in any tobacco use from 2011 to 2021 among adults in New York State. Due to methodological changes in NY ATS (in 2020) and New York's National Adult Tobacco Survey (in 2019 and in 2020) data collection to improve precision and accuracy of estimates, we show breaks in the trends in the figures for NY ATS and NY NATS. Although estimates from 2020 may not be directly comparable to estimates from previous years, trend analyses account for these methodological changes.

Current cigarette smoking prevalence was 12.0% among New York adults in 2021, down from 18.1% in 2011 (Exhibit 15) and close to the 2019–2024 NYSDOH Prevention Agenda objective of decreasing the prevalence of adult cigarette smoking to 11% by the end of 2024. The downward trend in adult cigarette smoking in New York is similar to the trend in the United States overall. However, CDC reports that New York is one of only 11 U.S. states where the cigarette smoking prevalence was 12.0% or lower in 2021 (California, Colorado, Connecticut, Hawaii, Illinois, Maryland, Massachusetts, New Jersey, New York, Utah, and Washington) (CDC, 2021).

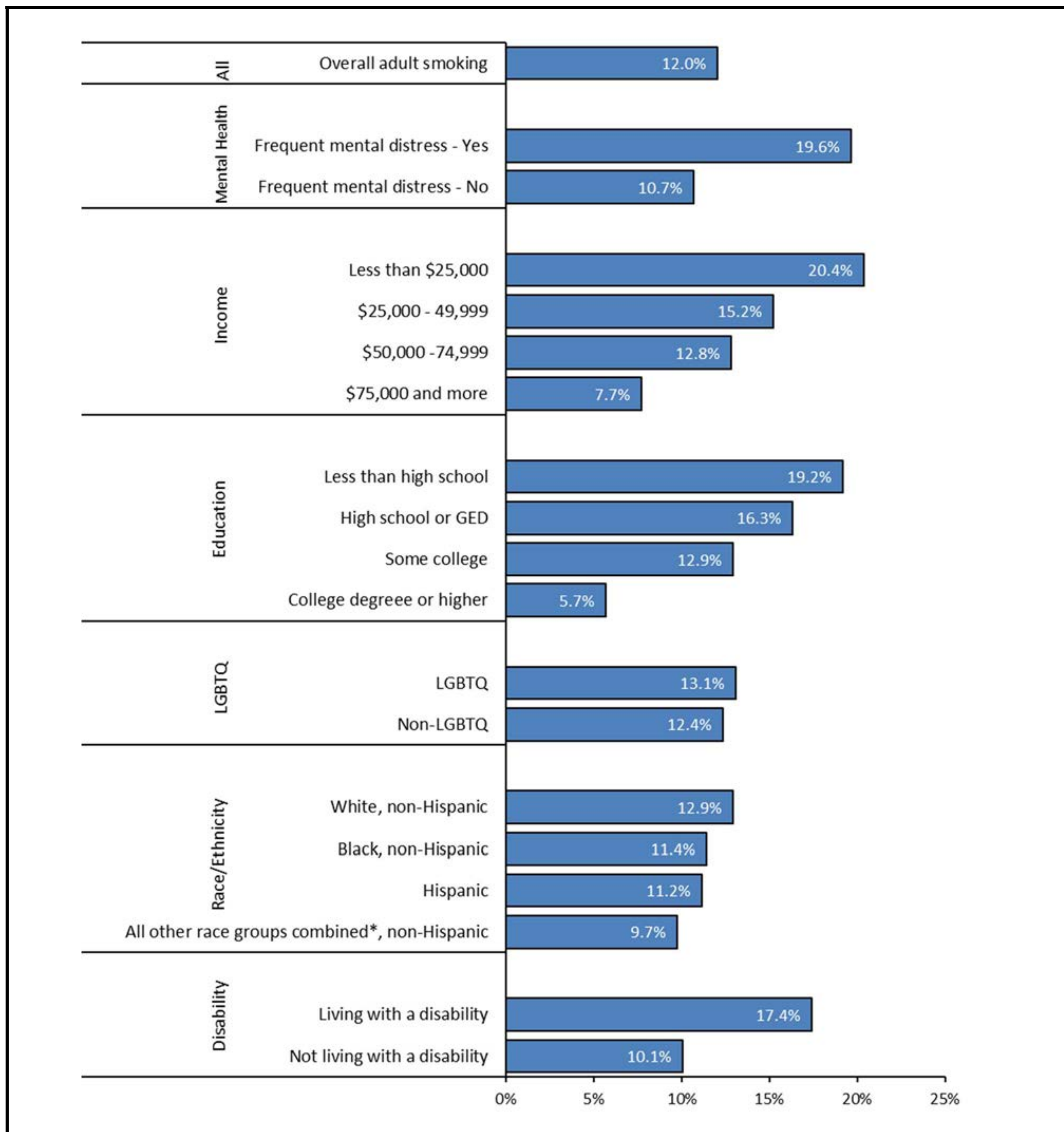
Exhibit 15. Percentage of Adults Who Currently Smoke Cigarettes in New York (Behavioral Risk Factor Surveillance System) 2011–2021 and Nationally (National Health Interview Survey), 2011–2021



Note: There is a statistically significant downward trend in smoking prevalence from 2011 to 2021 among adults in New York State and in the United States.

Although adult cigarette smoking prevalence has decreased, estimates vary across population groups in New York (Exhibit 16). In 2021, cigarette smoking was higher among New York adults who report experiencing frequent mental distress compared with those without frequent mental distress, among those with lower household income compared with those with higher household income levels, among those with lower educational attainment compared with those with higher educational attainment, and among those living with disability compared with those living without disability. There were no statistically significant differences in cigarette smoking prevalence by LGBTQ identity or race/ethnicity in 2021.

Exhibit 16. Percentage of New York Adults Who Currently Smoke Cigarettes, by Key Demographic Characteristics, New York Behavioral Risk Factor Surveillance System, 2021

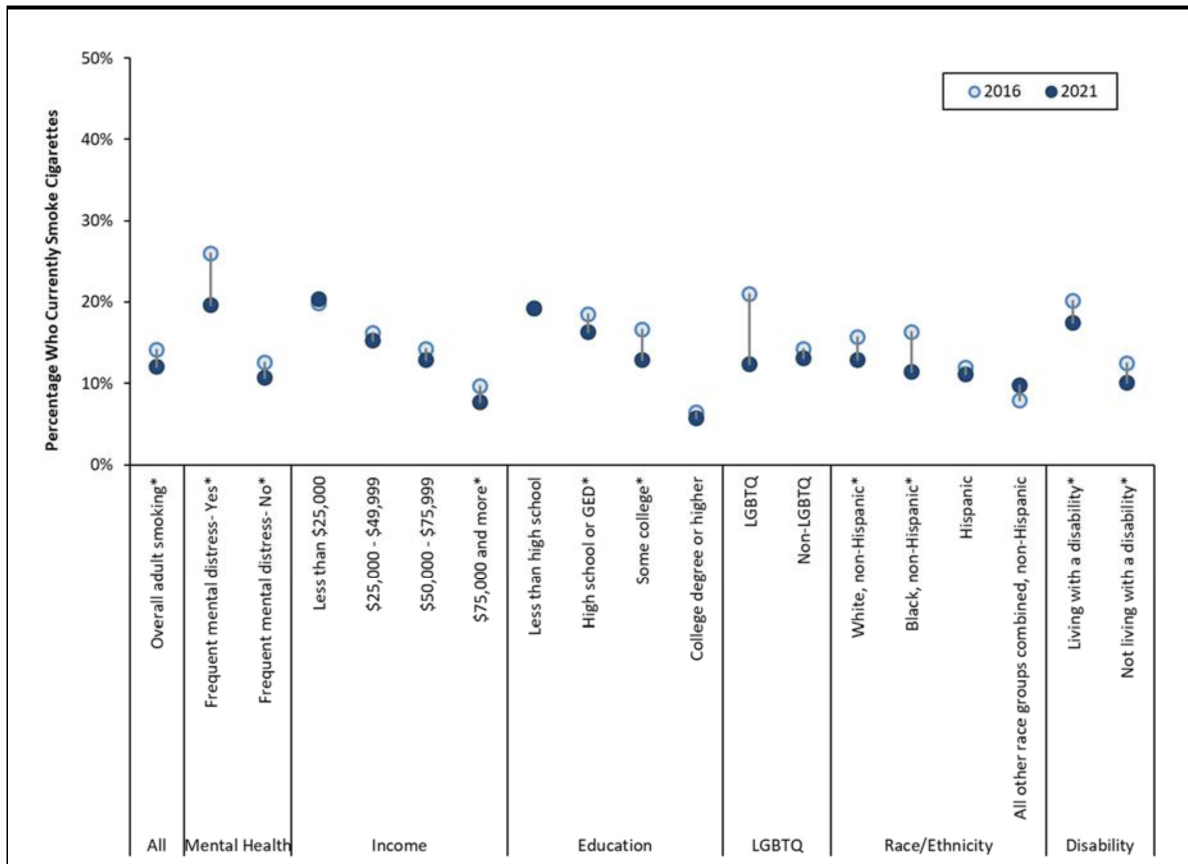


*All other race groups combined includes American Indian or Alaska Native, Asian, Pacific Islander, and any other groups not listed.

Note: Smoking prevalence significantly differs by mental health status (Experienced frequent mental distress greater than did not experience frequent mental distress), household income (smoking was more prevalent among those with an income less than $25,000 vs. each of the other income categories; smoking was less prevalent among those with an income $75,000 or more vs. all other income categories), education level (less than high school, high school/GED greater than some college; less than high school, high school/GED, some college, which were greater than college+), and disability status (living with a disability greater than not living with a disability). LGBTQ status was undetermined for 9.0% of 2021 NY BRFSS respondents.

The percentage of New York adults who reported current cigarette smoking changed from 2016 to 2021, overall and among some demographic groups. However, those changes were not consistent across all New Yorkers (Exhibit 17). Cigarette smoking prevalence among those who experience frequent mental distress decreased from 26.0% in 2016 to 19.6% in 2021 (attaining the Program's 2024 objective of 20.0% early), although it remains higher than among those who do not experience frequent mental distress (10.7%). Similarly, cigarette smoking among adults living with disability decreased from 20.1% in 2016 to 17.4% in 2021, although this is still higher than among those without disability (10.1%). Cigarette smoking has not changed in recent years among New York adults who have an annual household income below $25,000 (19.8% in 2016 and 20.4% in 2021 among those with income less than $25,000) and low education (19.2% in 2016 and in 2021 among those with less than a high school formal education).

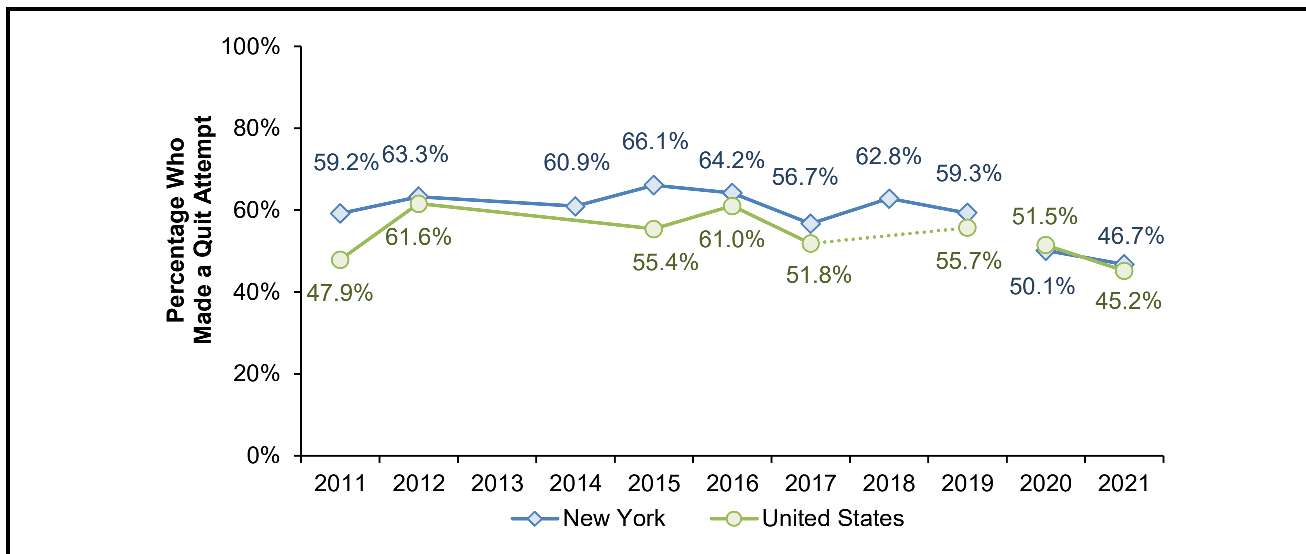
Exhibit 17. Percentage of New York Adults Who Reported Current Cigarette Smoking, by Key Demographic Characteristics, New York Behavioral Risk Factor Surveillance System, 2016 and 2021



*Statistically significant change in current smoking from 2016 to 2021 ($p<0.05$). All other race groups combined includes American Indian or Alaska Native, Asian, Pacific Islander, and any other groups not listed.

Nearly half of New York adults who smoke (46.7%) reported in 2021 that they made a past-year quit attempt (Exhibit 18). The prevalence of past-year quit attempts in the United States was 45.2% in 2021.

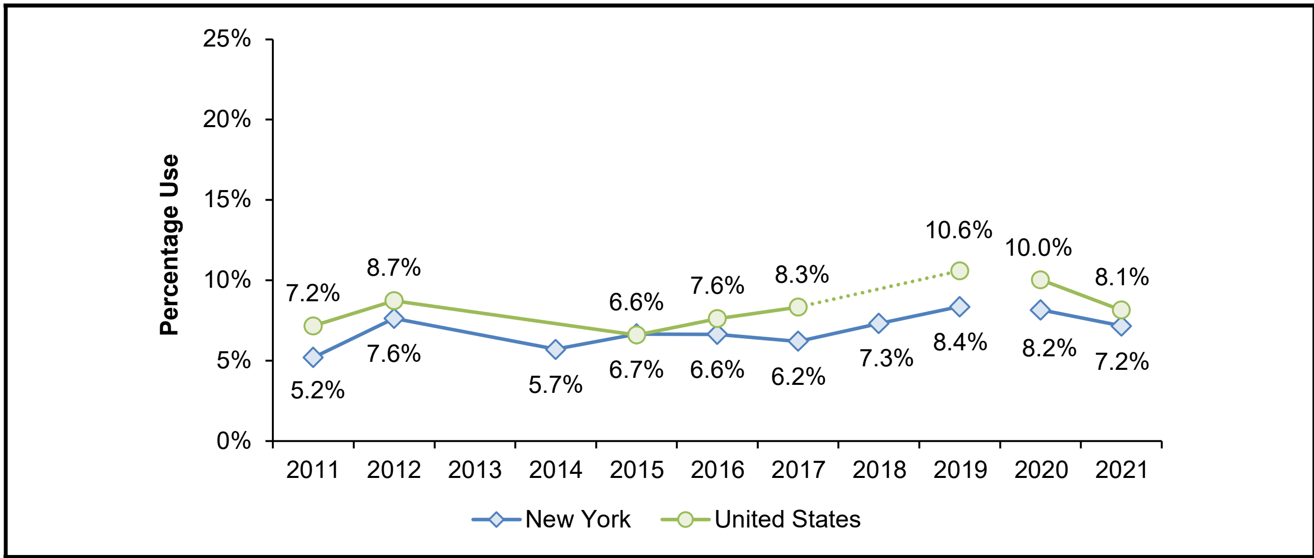
Exhibit 18. Percentage of Adults Who Smoke Cigarettes Made a Quit Attempt in the Past 12 Months, New York Adult Tobacco Survey and National Adult Tobacco Survey, 2011–2021



Note: Due to methodological changes in NY ATS (in 2020) and New York's National Adult Tobacco Survey (in 2019 and in 2020) data collection to improve precision and accuracy of estimates, we show breaks in the trends in the figures for NY ATS and NY NATS. Although estimates from 2020 may not be directly comparable to estimates from previous years, trend analyses account for these methodological changes.

In 2021, 7.2% of New York adults reported current use of cigars (Exhibit 19). National cigar use prevalence was 8.1% in 2021. Most New York adults who use cigars report using them rarely (rather than using them every day or some days). Males reported cigar use more often than females, with 10.9% of males and 3.5% of females reporting current cigar use in 2021 in New York (data not shown). Among all New York adults, 5.7% reported past-month use of traditional cigars and 3.5% reported use of cigarillos or little cigars in 2021 (data not shown).

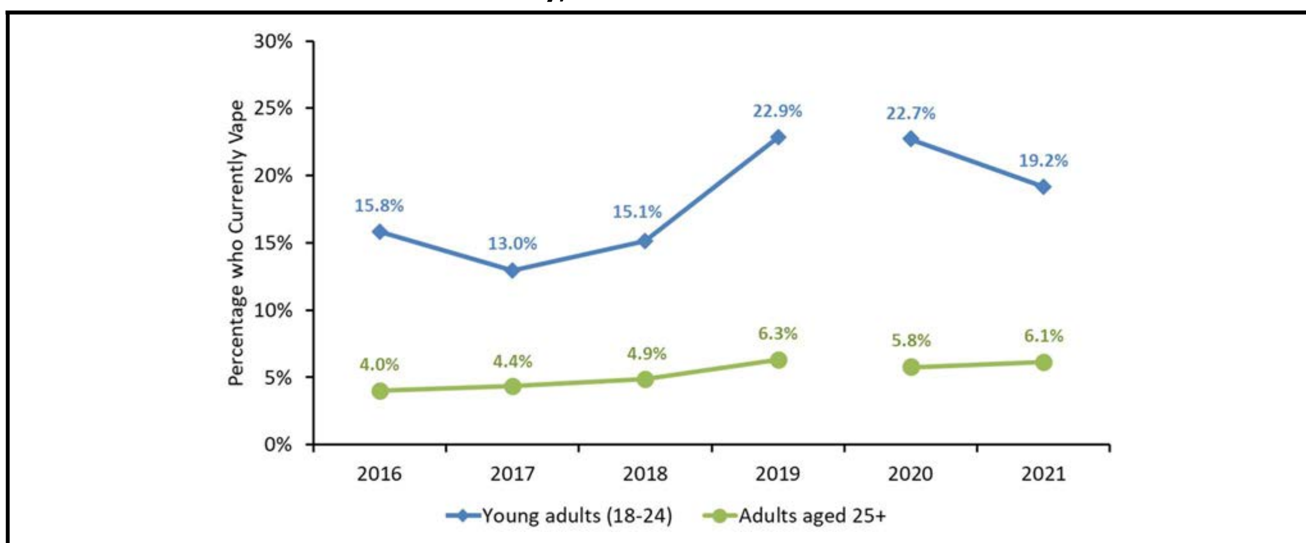
Exhibit 19. Percentage of Adults Who Currently Smoke Cigars, New York Adult Tobacco Survey, 2011–2021, and National Adult Tobacco Survey, 2011–2021



Note: There is a statistically significant upward trend in current cigar use among adults in New York. Since Quarter 4, 2011, data include "rarely" as an additional response option for current cigar use in addition to "Every day," "Some days," and "Not at all." Beginning in 2019, cigar use is defined using two questions: "Do you now use traditional cigars, every day, some days, rarely, or not at all?" and "Do you now use cigarillos or little filtered cigars, every day, some days, rarely, or not at all?" Due to methodological changes in NY ATS (in 2020) and New York's National Adult Tobacco Survey (in 2019 and in 2020) data collection to improve precision and accuracy of estimates, we show breaks in the trends in the figures for NY ATS and NY NATS. Although estimates from 2020 may not be directly comparable to estimates from previous years, trend analyses account for these methodological changes.

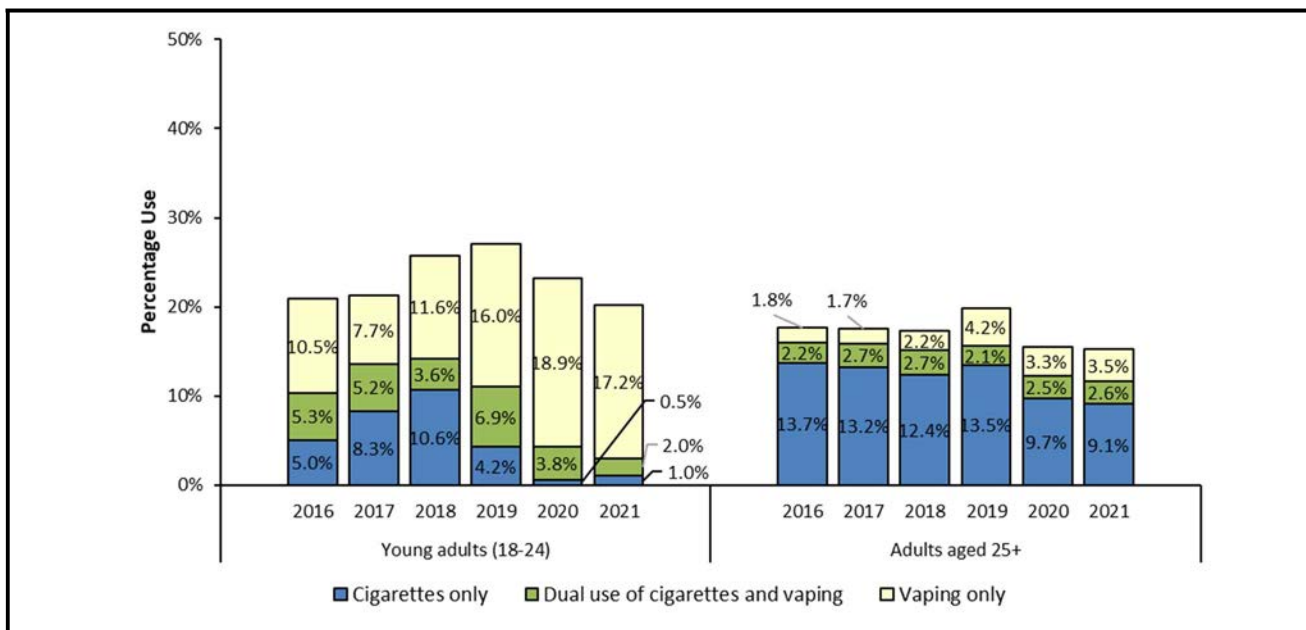
Use of nicotine vaping products in 2021 was 6.7% among New York adults overall, based on NY ATS estimates, and 7.3% nationally (data not shown). However, vaping use prevalence among young adults was much higher than among older adults (Exhibit 20). Current vaping among New York young adults in 2021 was 19.2%, compared with 6.1% among New York adults aged 25 and older (see Exhibit 20). Dual use of vaping products and cigarettes was relatively low among all adults (Exhibit 21). In 2021, 19.2% of young adults aged 18-24 reported vaping (with 17.2% of young adults reporting vaping but not smoking, and 2.0% of young adults reporting using both vaping products and cigarettes). Among adults aged 25 and older, smoking cigarettes was more common than vaping.

Exhibit 20. Percentage of Young Adults (18-24) and Adults Aged 25+ Who Currently Vape, New York Adult Tobacco Survey, 2016–2021



Note: There is a statistically significant difference in current vaping in 2021 between young adults (18-24) and adults aged 25+ in New York. Due to methodological changes in NY ATS (in 2020) and New York's National Adult Tobacco Survey (in 2019 and in 2020) data collection to improve precision and accuracy of estimates, we show breaks in the trends in the figures for NY ATS and NY NATS. Although estimates from 2020 may not be directly comparable to estimates from previous years, trend analyses account for these methodological changes.

Exhibit 21. Percentage of New York Adults Who Currently Use Cigarettes, Vaping products, and Both Cigarettes and Vaping products, By Age Group, New York Adult Tobacco Survey, 2016–2021



Note: Current nicotine vaping product use includes reports of use every day, some days, and rarely.

Current smokeless tobacco use prevalence among New York adults is very low (0.9% in 2021) and remained stable from 2011 to 2021 (data not shown). Adult smokeless tobacco use prevalence is lower in New York than nationally (3.2%).

Discussion of Adult Tobacco Use

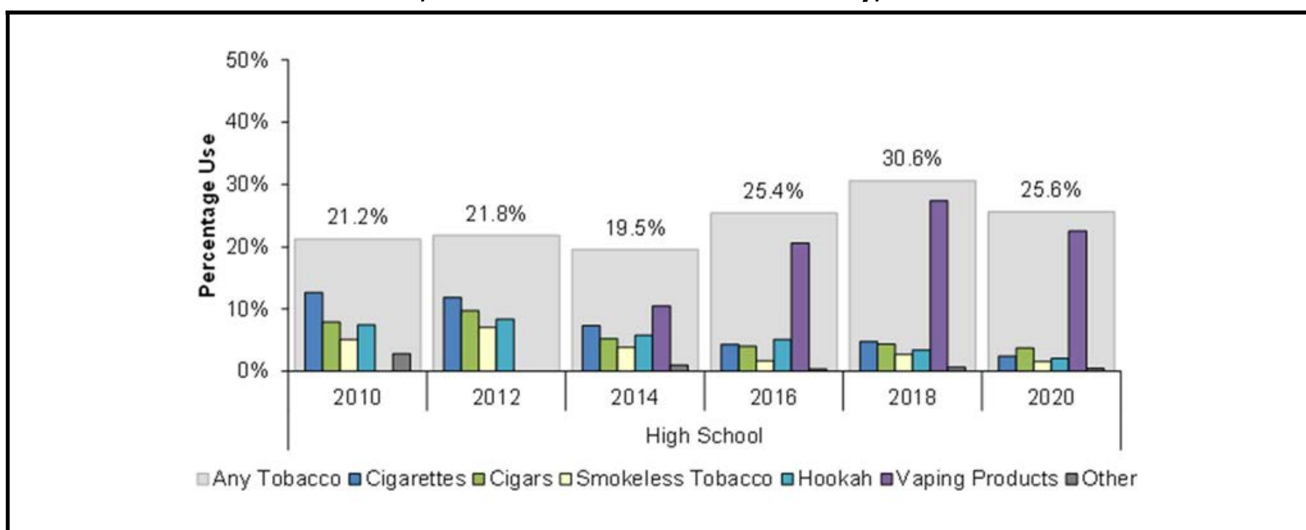
Adult cigarette smoking prevalence has decreased by 33% to 12% in New York over the past decade, although adult use of any tobacco product has remained relatively steady over this time period. Around one-quarter of New York adults report using any tobacco product; cigarettes are the tobacco product most often used, followed by cigars, vaping products, and hookah. Among young adults (aged 18–24), vaping is higher than cigarette smoking, while the opposite is true among adults aged 25 and higher (i.e., cigarette smoking is more common than vaping). For both young adults and older adults, there is little dual use of both of these products. Cigarette smoking continues to be more common among New York adults with frequent mental distress, household income below $25,000, less than high school formal education, and with a disability. These historically marginalized groups face additional challenges including reduced access to medical services and chronic stress. Over the past five years, cigarette smoking prevalence has changed the least among adults with lower levels of income and educational attainment. However, current cigarette smoking prevalence among New York adults with frequent mental distress and those who identify as LGBTQ declined to the levels targeted by the 2019–2024 Prevention Agenda, achieving these objectives early. These improvements are indicative of progress, even as tobacco use remains a public health problem with disproportionate effects on historically marginalized groups.

Youth Tobacco Use Measures

In this section of the report, we present trends in youth tobacco product use as assessed among middle and high school students in New York and nationally. The New York Youth Tobacco Survey (NY YTS) is conducted in even-numbered years; this report includes data from surveys in 2010 through 2020, with 2020 data collected prior to pandemic-related school closures.

Nearly 26% of New York youth reported current use of tobacco products in 2020, with use of vaping products far more common than other types of tobacco products (Exhibit 22). From 2008 through 2012, youth use of tobacco products was around 15%, with youth most often reporting using multiple tobacco products or exclusively smoking cigarettes. As youth vaping product use grew, the exclusive use of all other tobacco products including cigarettes decreased (see Exhibit 22). Youth tobacco product use decreased from 30.6% in 2018 to 25.8% in 2020, due to declines in use of multiple tobacco product types. The 2019–2024 NYSDOH Prevention Agenda includes an objective of decreasing high school student prevalence of any tobacco product use to 19.7% by the end of 2024.

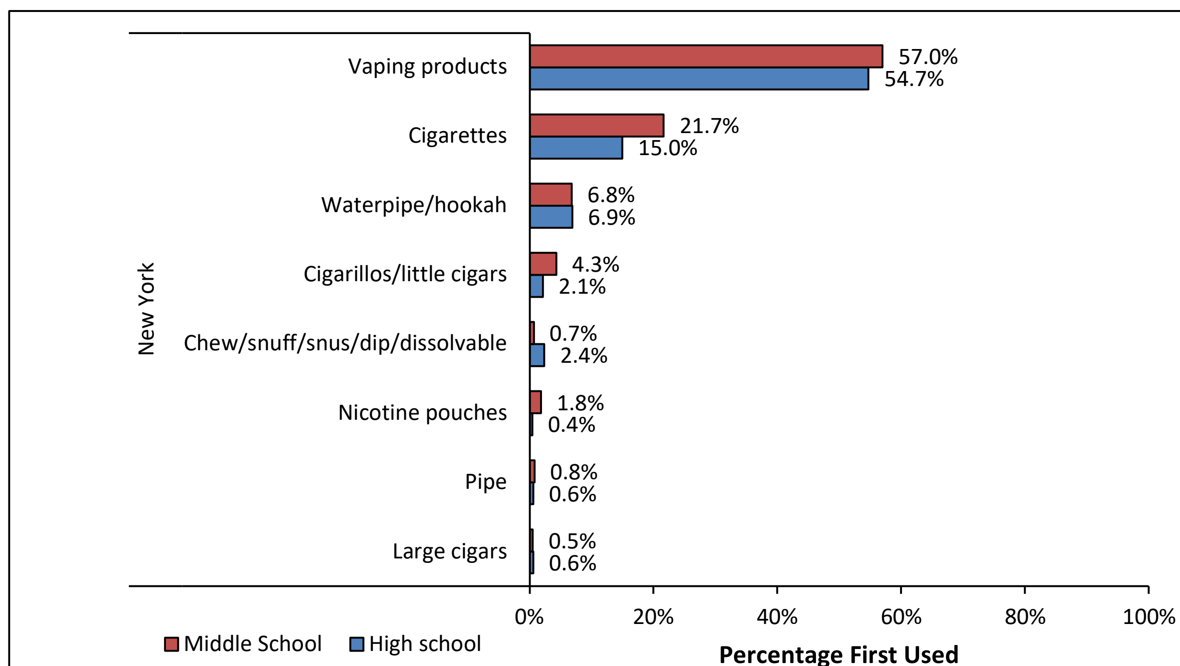
Exhibit 22. Percentage of New York High School Students Reporting Current Use of Any Tobacco Product, New York Youth Tobacco Survey, 2010–2020



Note: There is a statistically significant upward trend in current use of any tobacco product among New York high school students. Current tobacco use is defined by indicating use of cigarettes, cigars (large cigars, cigarillos, or little cigars), smokeless tobacco (chew, snuff, dip, snus, or dissolvable), hookah (or waterpipe), vaping products, or other tobacco products (pipe, bidi, or kretek) on 1 or more days in the past 30 days. Survey questions addressing various tobacco products have varied over time; specifically, data regarding vaping product use were first available in 2014, hookah use data were first available in 2008, bidi and kretek use data were available from 2000 to 2010, pipe use data were available for all years except 2010 and 2012, snus use data were available in 2012, and dissolvable use data were first available in 2014.

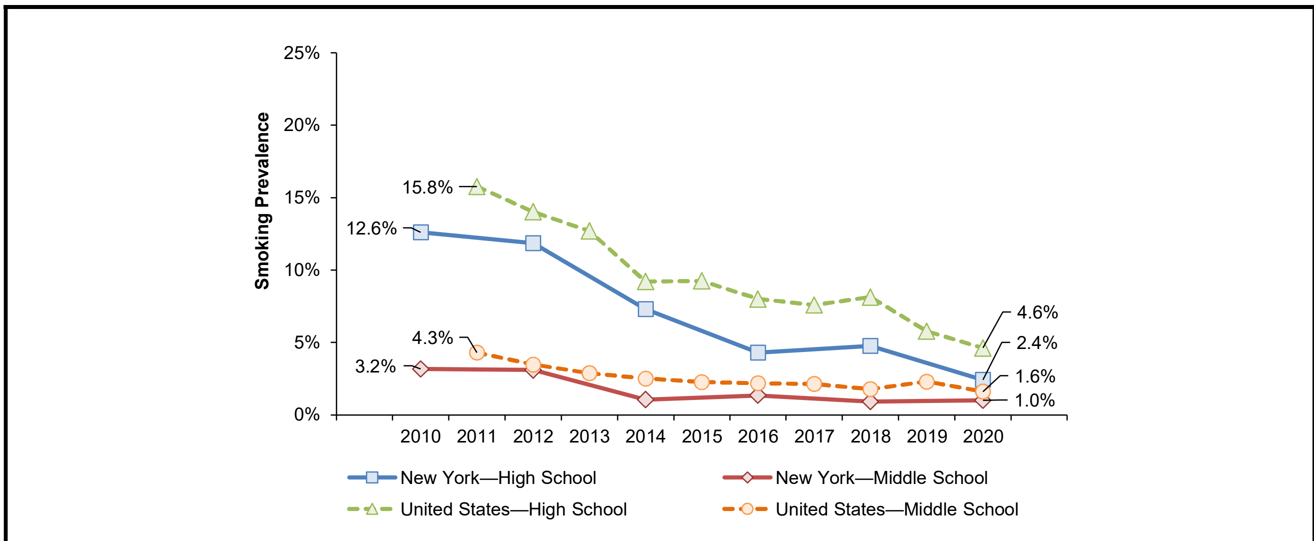
Among middle and high school youth who use tobacco products, more than half reported that the first product they used was a vaping product (Exhibit 23). Cigarettes were the second most common initial product used.

Exhibit 23. First Tobacco Product Used Among NY Middle School and High School Who Ever Used Tobacco by School Level, New York Youth Tobacco Survey, 2020



The prevalence of cigarette smoking among New York high school students has declined 81% over the past 10 years, and in 2020 only 2.4% of New York high school students reported past 30-day use of cigarettes (Exhibit 24). The 2019-2024 NYSDOH Prevention Agenda set a target of decreasing cigarette smoking prevalence to 3.3% by 2024, an objective that New York has achieved early. National high school student cigarette smoking prevalence was 4.6% in 2020. Current cigarette smoking among middle school students was 1.0% in New York and 1.6% nationally.

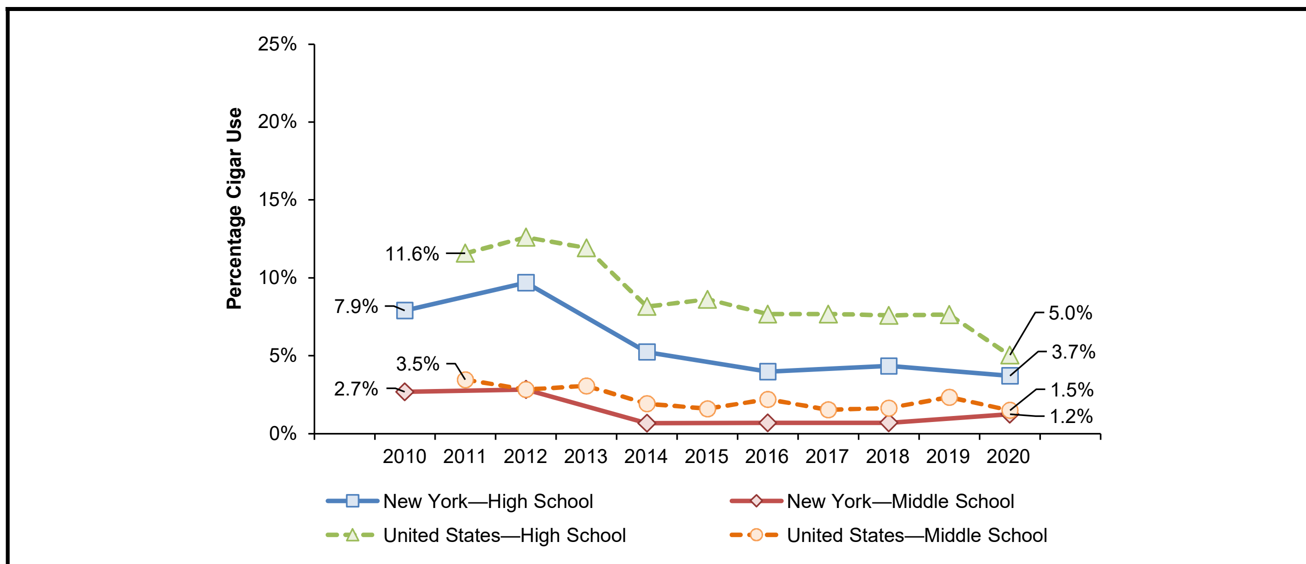
Exhibit 24. Percentage of Middle and High School Students Who Currently Smoke Cigarettes in New York and Nationally, New York Youth Tobacco Survey, 2010–2020, and National Youth Tobacco Survey, 2011–2020



Note: There is a statistically significant downward trend among middle and high school students in New York and in the United States.

Youth cigar use prevalence has declined over the past 10 years in New York and nationally (Exhibit 25). In 2020, 3.7% of high school students in New York reported current cigar use, close to the national rate of 5.0%. Among New York middle school students, only 1.2% reported current cigar use.

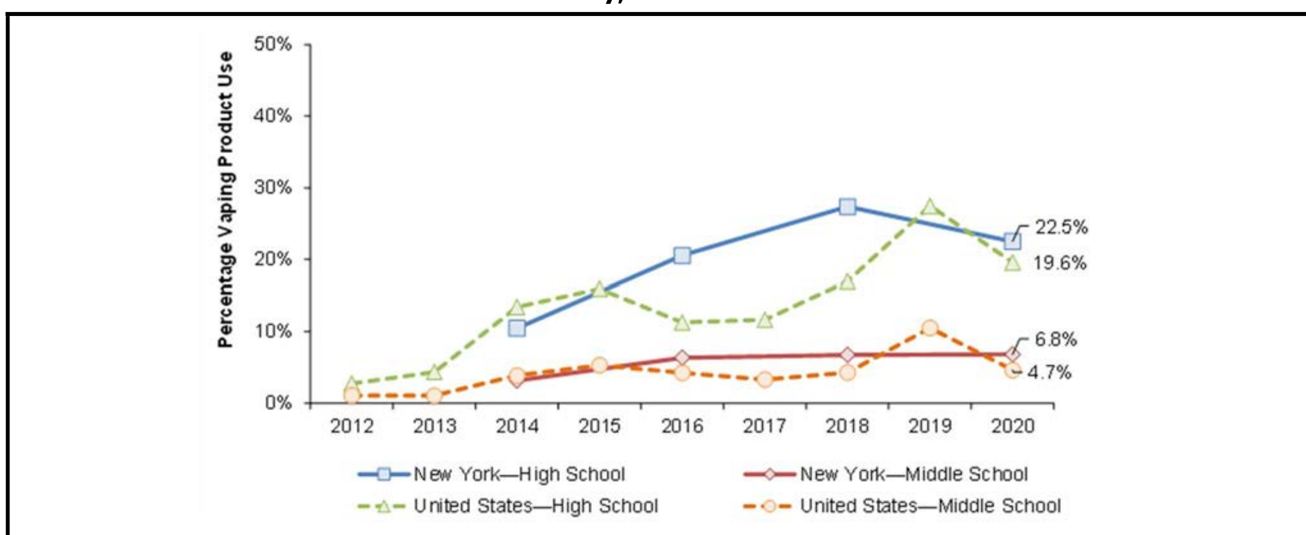
Exhibit 25. Percentage of Middle and High School Students Who Currently Smoke Cigars in New York and Nationally, New York Youth Tobacco Survey, 2010–2020, and National Youth Tobacco Survey, 2011–2020



Note: There is a statistically significant downward trend among middle and high school students in New York and in the United States. Starting in 2014 for New York and 2011 for the United States, questions about other tobacco product use were combined into one current use question with separate response options for each product type.

Although vaping product use among high schoolers in New York and across the United States decreased from 2018 to 2020, 22.5% of New York high school students reported past-month use of vaping products in 2020 (Exhibit 26). Nationally, 19.6% of high school students reported current vaping in 2020. When New York youth who vape were asked how much they want to quit vaping, 35.0% of middle school and 38.4% of high school current vapers in New York reported that they want to quit vaping "somewhat" or "a lot."

Exhibit 26. Percentage of Middle Students and High School Students Who Currently Vape in New York and Nationally, New York Youth Tobacco Survey, 2014–2020, and National Youth Tobacco Survey, 2012–2020

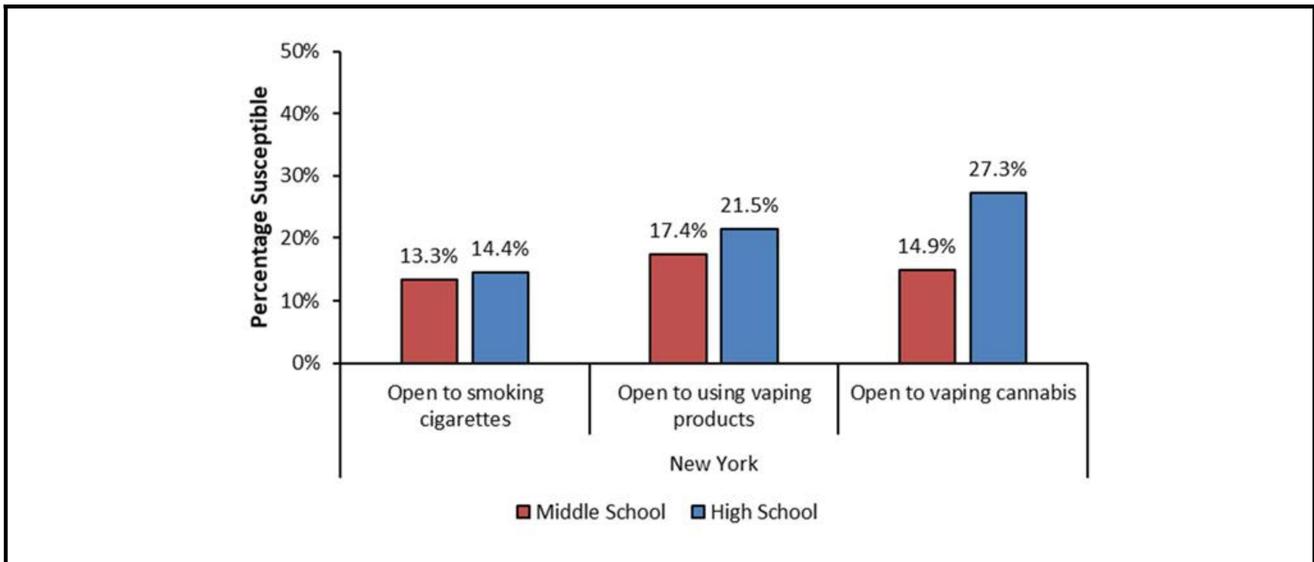


Note: There is a statistically significant upward trend among middle school students in the United States and high school students in New York and in the United States.

Youth use of smokeless tobacco is low, both in New York and in the United States overall. In 2020, only 1.6% of New York high school students and 0.6% of New York middle school students reported current use of smokeless tobacco (data not shown). Nationally, high school smokeless tobacco use was 3.1% and middle school student use was 1.2% in 2020.

Youth surveys also assess susceptibility to tobacco, based on youth responses to questions including about how likely they are to use a specific product soon or how likely they are to use a product if a friend offers it to them. In 2020, 21.5% of New York high school students were open to using vaping products and 14.4% were open to smoking cigarettes (Exhibit 27). Cannabis use susceptibility was even higher, with 27.3% of New York high school students reporting openness to vaping cannabis.

Exhibit 27. Percentage of Middle and High School Students Who Are Susceptible to Smoking Cigarettes, Vaping Nicotine, and Vaping Cannabis, New York Youth Tobacco Survey, 2020



Note: The susceptibility measures for smoking and vaping nicotine use three questions: likelihood of using the product if a friend offers, likelihood of trying the product soon, and the likelihood of trying the product in the next year. The susceptibility measure for vaping cannabis is only based on the likelihood of using the product if a friend offers it; measures for likelihood of trying cannabis soon and in the next year were not available.

The next sections explore two important tobacco control questions in greater detail. First, we present an exploration regarding the proportion of youth and adults that use flavored tobacco products. Second, we report on the co-use of tobacco and cannabis products in New York.

What Proportion of New York Youth and Adults use Flavored Tobacco Products?

Flavored tobacco products are associated with youth appeal and use, and menthol-flavored cigarettes have been disproportionately marketed to historically marginalized populations including Black and LGBTQ communities. Policies to restrict or prohibit the sale of flavored tobacco products have been passed in many state and local jurisdictions. New York City implemented a sales restriction in 2010 on flavored tobacco products (exempting menthol,

mint, and wintergreen flavors and not covering vaping products). New York State implemented a statewide sales restriction on flavored vaping products on May 18, 2020 (including mint, menthol, fruit, sweet, and all non-tobacco flavors), intended to decrease the appeal and use of vaping products among youth. NY TCP grantees educate decision makers throughout the state about the opportunity to reduce the appeal of tobacco products to youth and limit tobacco industry menthol cigarette targeting of youth and Black and/or LGBTQ New Yorkers by restricting the sale of all flavored tobacco products, including flavored cigars and menthol cigarettes. Although FDA proposed product standards in 2022 to prohibit menthol cigarettes and flavored cigars in the future (FDA, 2022), the timeline for federal implementation of these product standards is not certain and tobacco industry lawsuits will likely bring delays. Understanding current use of flavored tobacco products can inform policy decisions about these products.

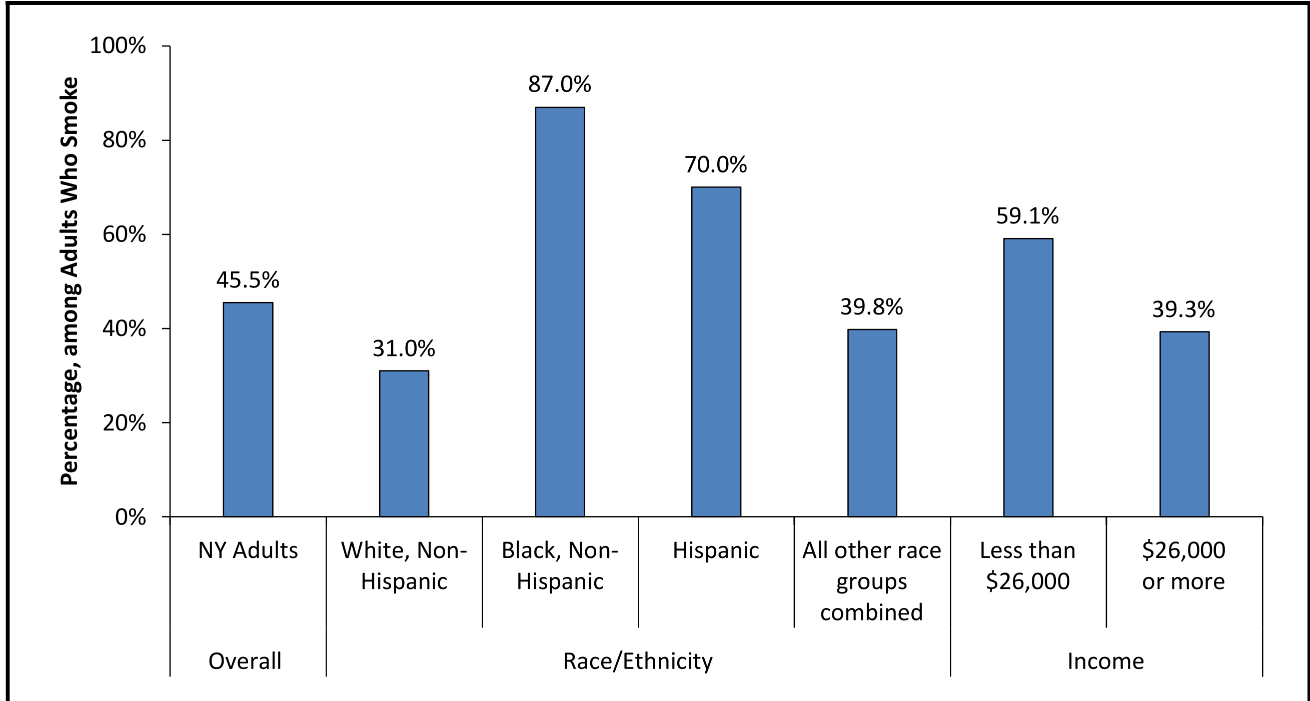
Data and Methods

We analyzed adult and youth surveillance data regarding past 30-day use of flavored tobacco products. Youth data from the New York Youth Tobacco Survey include the most recent administration in early 2020, prior to the New York State flavored vaping product sales restriction. Adult data from the New York Adult Tobacco Survey include estimates from 2020 and 2021. We assessed usual use of menthol cigarettes among adults who smoke cigarettes and estimated the proportion of youth and adults who reported use of flavored cigars and use of flavored vaping products.

Results

Youth cigarette smoking prevalence is less than 3% among both middle school and high school students in New York. Although nearly half of youth who smoke reported that their first cigarette was menthol-flavored and it appears that around half of youth who smoke, smoke menthol, we are not able to report a stable estimate of youth who smoke menthol cigarettes due to low youth cigarette smoking prevalence in the state. Among New York adults who smoke cigarettes, close to half reported usually smoking menthol cigarettes in recent years, with 45.5% of adults who smoke in 2020–2021 reporting usually smoking menthol brands (Exhibit 28). However, usual use of menthol cigarettes varies by race/ethnicity and income. Menthol cigarette use in 2020–2021 was higher among New York adults who smoke who are Black (87.0%) or Hispanic (70.0%) than among those who are White (31.0%) or identify as another race (39.8%) (see Exhibit 28). New York adults who smoke with household income less than $26,000 more often reported smoking menthol cigarettes than those with incomes at or above $26,000 (see Exhibit 28).

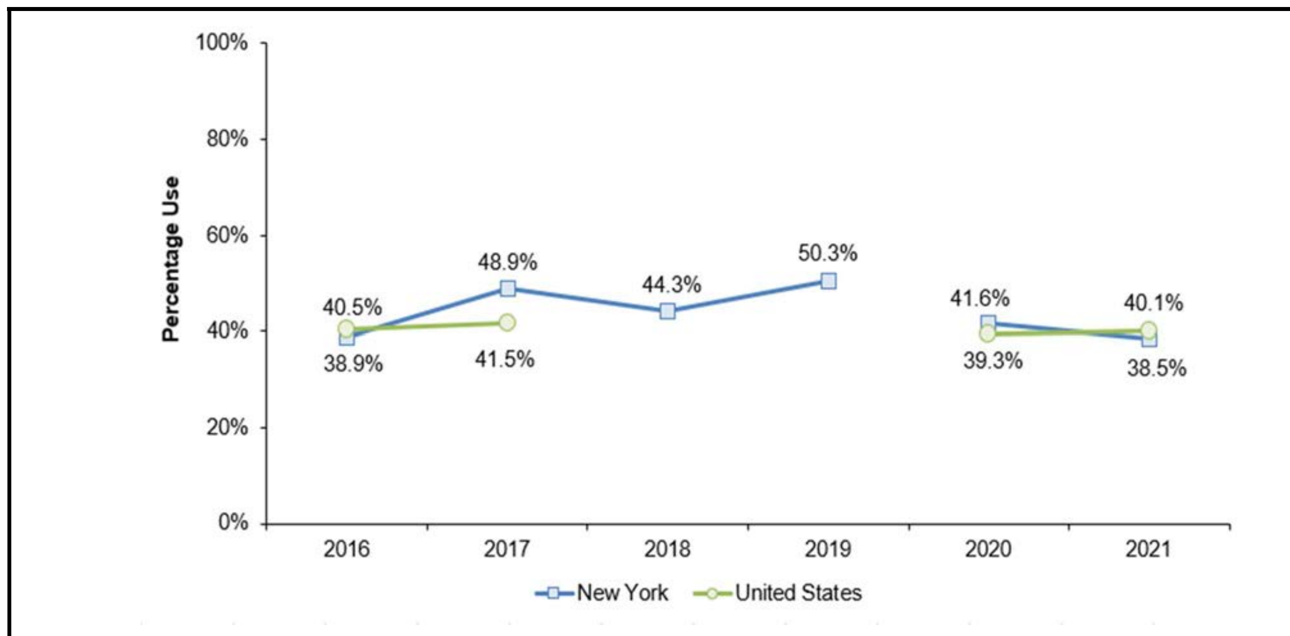
Exhibit 28. Percentage of New York Adults Who Currently Smoke Who Usually Smoke Menthol Cigarettes, by Race/Ethnicity and Income, New York Adult Tobacco Survey, pooled 2020–2021



Note: Because the denominator size for Black non-Hispanic adults who smoke is fewer than 100 respondents (n=91), we encourage caution in interpreting the estimate. The confidence interval is 74.3% to 94.0%. Although the size of the group of Black non-Hispanic New Yorkers who smoke in our sample is small, our finding that menthol use is much higher among Black non-Hispanic people who smoke than White non-Hispanic people who smoke in New York is consistent with national studies (e.g., Delnevo et al., 2020; Mendez & Le, 2021). * All other race groups combined includes American Indian and Alaska Native, Asian, Pacific Islander, and any other groups not listed.

In 2020, less than 4% of New York youth reported use of cigars (3.7% of high school students and 1.2% of middle school students). Among youth who reported past-month cigar use, half indicated that they smoked flavored cigars (50.6%) in 2020 (data not shown). Among adults in New York, 7.2% reported using cigars. Among adults who smoke cigars in New York, 38.5% reported using flavored cigars, similar to the national estimate of 40.1% (Exhibit 29).

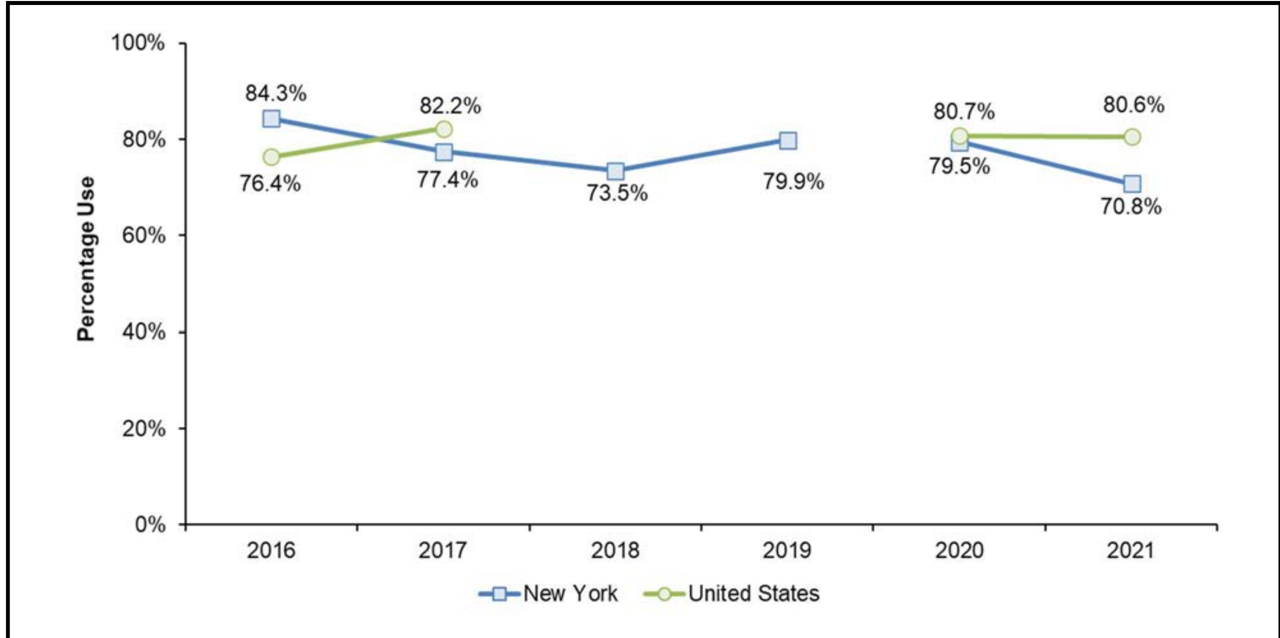
Exhibit 29. Percentage of New York and United States Adults Who Use Cigars and Report Using Flavored Cigars, New York Adult Tobacco Survey and New York National Adult Tobacco Survey, 2016–2021



Note: Due to methodological changes in NY ATS (in 2020) and New York's National Adult Tobacco Survey (in 2019 and in 2020) data collection to improve precision and accuracy of estimates, we show breaks in the trends in the figures for NY ATS and NY NATS. Although estimates from 2020 may not be directly comparable to estimates from previous years, trend analyses account for these methodological changes.

Nearly all New York high school and middle school students who reported vaping in 2020 indicated that they use flavored vaping products (95.8%) (data not shown). These youth data were collected in 2020 prior to pandemic-related school closures and before the flavored vaping product sales restriction went into place; data for 2022 were not available at the time this report was written. Among New York adults who vape, 70.8% reported vaping flavored products in 2021, which was the year after the flavored vaping product restriction was implemented (Exhibit 30). The percentage of adult vapers who used flavored vaping products in 2021 is not statistically different from the 2020 estimate of 79.5%.

Exhibit 30. Percentage of Adult Vapers in New York and the United States Who Used Flavored Vaping products, New York Adult Tobacco Survey and New York National Adult Tobacco Survey, 2016–2021



Note: Due to methodological changes in NY ATS (in 2020) and New York's National Adult Tobacco Survey (in 2019 and in 2020) data collection to improve precision and accuracy of estimates, we show breaks in the trends in the figures for NY ATS and NY NATS. Although estimates from 2020 may not be directly comparable to estimates from previous years, trend analyses account for these methodological changes.

Summary

Youth who use tobacco report using flavored tobacco products, including 96% of youth who vape and 51% of youth who smoke cigars. Adults who consume tobacco also report using flavored tobacco products, but at lower rates than among youth. More than half of youth who use cigarettes initiated with menthol cigarettes. Although youth smoking prevalence is too low to provide a stable estimate of menthol cigarette use, data suggest that half of youth who smoke use menthol cigarettes. Nearly half of New York adults who smoke report using menthol cigarettes, but the prevalence of menthol use is disproportionately higher among historically marginalized groups that have been targeted by the tobacco industry (Lee & Glantz, 2011; Mills et al., 2018). Current use of menthol cigarettes among Black adults who smoke is nearly three times higher than that of White adults who smoke. Similarly, use of menthol cigarettes is more than twice as high for Hispanic/Latino adults who smoke compared to White adults who smoke. In addition, the prevalence of menthol smoking is 50% higher for New York adults who smoke with annual incomes less than $26,000 compared to those with incomes of $26,000 or more. NY TCP promotes policies that restrict the sale of flavored and menthol tobacco products to address youth initiation and racial and financial disparities in tobacco use.

Prevalence of vaping in the past month was more than 3 times higher among youth (16%) than adults (5%) in New York. However, more than 70% of adults who vaped and nearly all high school youth (96%) used flavored vaping products. Adult flavored vaping product use

prevalence did not decrease significantly in 2021, despite the statewide flavored vaping product sales restriction. Analyses of retail sales of vaping products indicate that sales of restricted/flavored vaping products decreased after New York's policy and sales of tobacco-flavored vaping products increased, although flavored vaping product sales did not drop to zero. It is possible that pandemic-related factors limited policy enforcement, and further study will provide additional insights into policy effects.

To What Extent Do New York Youth and Adults Co-use Tobacco and Cannabis?

The state of New York passed the Marijuana Regulation and Taxation Act in March 2021, which legalized cannabis use and possession for adults aged 21 years and older. Cannabis use in the United States has increased among people who use tobacco in recent years and has been associated with initiation of cigarette smoking in adults (Goodwin et al., 2018; Weinberger et al., 2020). Tobacco and cannabis co-use includes using both tobacco products and cannabis products separately or using products that contain both tobacco and cannabis. For example, an individual may smoke cigarettes and vape cannabis. In addition, someone may use blunts, which are cigars or cigar wrappers that contain cannabis; blunt use constitutes co-use because they contain tobacco and cannabis. Tobacco and cannabis co-use trends raise public health questions, including whether tobacco product use prevalence will increase among youth and adults and whether social norms and harm perceptions surrounding tobacco use change. NY TCP collaborates with the New York State Office of Cannabis Management (which oversees cannabis regulation in New York) to discuss priorities and share relevant information and resources. We assessed youth and adult co-use of tobacco and cannabis products to understand use patterns and establish a baseline against which to compare future prevalence estimates.

Data and Methods

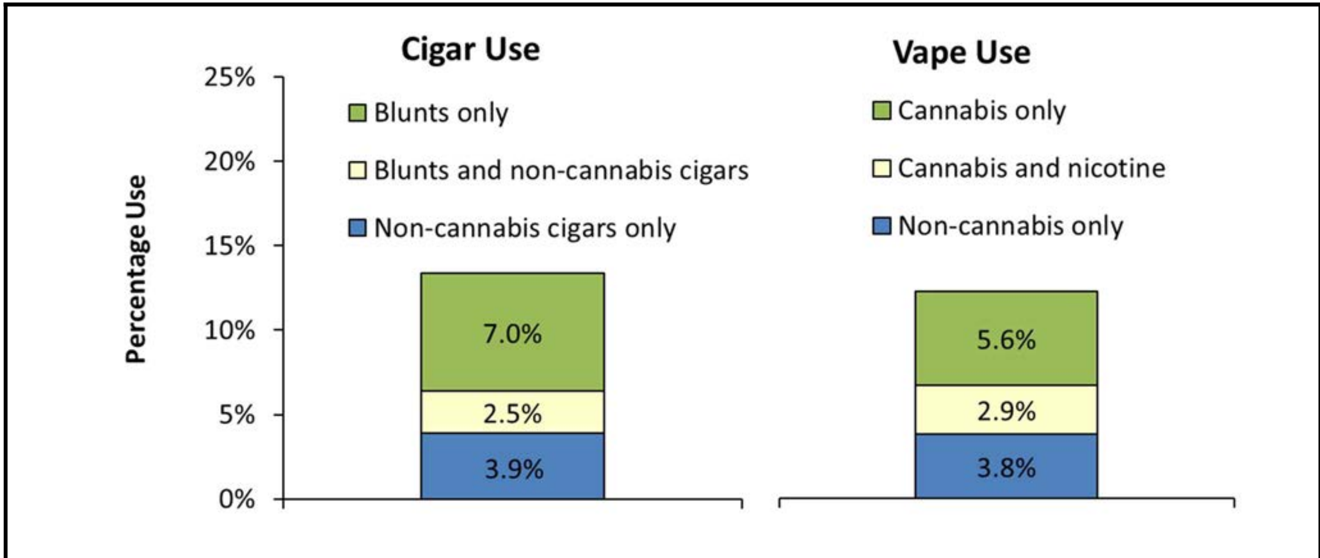
We calculated estimates of current use of cigars, blunts, vaping cannabis, and vaping without cannabis among New York high school youth and among New York adults. We used data from the 2020 New York Youth Tobacco Survey and the 2021 New York Adult Tobacco Survey to assess co-use of tobacco and cannabis products. Regarding vaping, we asked adults survey questions about use of vapes with nicotine and use of vapes with cannabis or marijuana; for youth, we asked about vaping excluding marijuana or cannabis and about vaping marijuana or cannabis. For cigars, we asked about recent use of cigars with questions about traditional cigars/large cigars, cigarillos, and little filtered cigars, and we asked about blunt use with questions regarding smoking part or all of a cigar with marijuana or cannabis (a blunt).

Results

In 2021, 13.4% of New York adults reported current use of cigars and/or blunts, with more adults using these products with cannabis than without cannabis. Specifically, 7.0% of New York adults reported current use of blunts but not cigars and 2.5% used both cigars and blunts; by comparison, 3.9% smoked only tobacco-filled cigars (Exhibit 31). Similarly, more adults

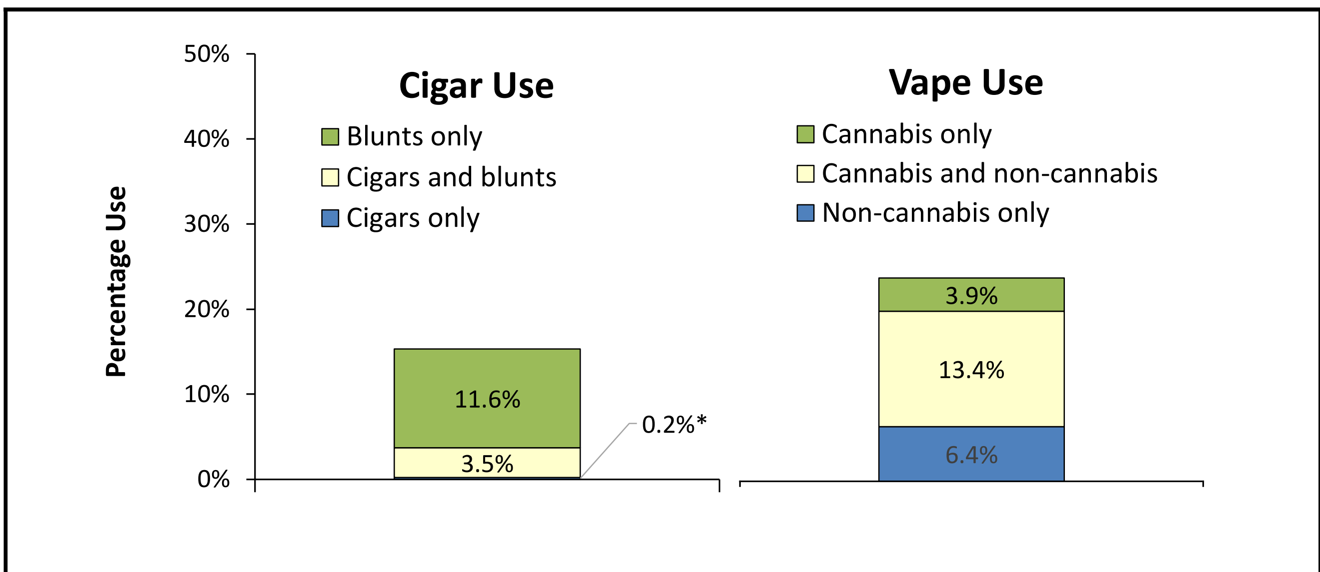
vaped cannabis (5.6% vaped only cannabis and 2.9% vaped both cannabis and nicotine) than vaped only nicotine (3.8%) (see Exhibit 31).

Exhibit 31. Percentage of New York Adults Who Use Cigars, Blunts, or Both and Who Vape Cannabis, Nicotine, or Both, New York Adult Tobacco Survey, 2021



More New York high school students reported using only blunts (11.6%) than using only cigars (0.2%) or using both blunts and cigars (3.5%) in 2020 (although the cigar-only estimate may be unreliable due to the rarity of cigar-only use among high school students who responded to the NY YTS) (Exhibit 32). More New York high school students reported vaping both cannabis and non-cannabis vaping products (13.4%) than vaping only cannabis (3.9%) or vaping only non-cannabis (6.4%) (see Exhibit 32).

Exhibit 32. Percentage of New York High School Students Who Vape Cannabis, Non-cannabis, or Both and Who use Cigars, Blunts, or Both, New York Youth Tobacco Survey, 2020



* This estimate may be unreliable due to the rarity of cigar-only use among survey respondents.

Summary

Among New York adults, co-use of cannabis and tobacco products was more common than exclusive use of tobacco only for cigars and vapes. New York adult cigar use with or without cannabis was 13.4% in 2021, and the majority of New Yorkers who use cigars report smoking blunts. Likewise, more New York adults vaped cannabis only or both cannabis and nicotine than vaped only nicotine. This analysis found that nearly all youth who use any cigar product use blunts, with most using only blunts without also using non-cannabis cigars. Youth vaping product use shows notable overlap between nicotine vapes and cannabis vapes. These findings indicate that cannabis use is as common among youth as tobacco product use. Given this overlap and the public health questions this raises, youth tobacco and cannabis co-use should be assessed routinely and addressed collaboratively between NY TCP and the Office of Cannabis Management.

Discussion

Progress in Changing Tobacco Use

Adult cigarette smoking prevalence has decreased by 33% in New York over the past decade, which will lead to decreased smoking-related illness, fewer smoking-related health care costs, and fewer smoking-related deaths. However, smoking rates are still disproportionately high among some population groups including New Yorkers with lower educational attainment and lower income levels. Some of the NY TCP targets set in the NYSDOH 2019-2024 Prevention Agenda have been achieved early, including reductions in cigarette smoking among adults with frequent mental distress and those identifying as LGBTQ. Although cigarette smoking rates are similar across race/ethnicity groups, adult use of menthol cigarettes is much higher among Black and Hispanic adults than among White adults, which reflects the industry’s targeted marketing of menthol cigarettes to populations that have historically been marginalized (Lee & Glantz, 2011; Richardson et al., 2015). The Program has taken steps to focus on health equity through exploring existing disparities in key outcomes, partnering with agencies and groups who work with population groups disproportionately affected by tobacco use, engaging with community members, and focusing media on equity issues and on reaching those adults with high rates of smoking. Continued strategic planning, engagement with stakeholders and communities, and monitoring of relevant short-term and long-term behavioral outcomes will help the Program advance health equity in their objectives and approaches.

Youth tobacco use continues to be driven by vaping, in New York and nationally. Young adult tobacco use looks more similar to youth tobacco use, with vaping being the most common and cigarette use prevalence below 5%. The statewide sales restriction on flavored vaping products is intended to reduce their availability and youth appeal, with an anticipated reduction in vaping product use among youth and young adults. In addition, recent laws that increased the minimum age to purchase tobacco products and prohibited tobacco product discounts and price promotions have the potential to contribute to decreases in youth initiation of tobacco products that could result in long-term changes in tobacco use prevalence. Continued policy enforcement

and ongoing assessment of behaviors will shed light of the effect of these policies on their intended outcomes over time.

New York levels of cigarette smoking and quit attempts are similar to national estimates. Although it is promising to find decreasing cigarette smoking and sustained reports of quit attempts in New York and the country overall, New York would be able to make stronger progress in changing tobacco-related outcomes if NY TCP received funding more aligned with Best Practices (CDC, 2014). The Program's funding level is less than 20% of the CDC's recommended level, and NY TCP would have greater potential to change these tobacco use outcomes with additional funding for health communications, statewide and community interventions, and cessation-focused efforts.

The tobacco regulatory landscape has shifted in recent years, including the FDA's proposed product standards released in 2022, which would prohibit menthol cigarettes and flavored cigars (FDA, 2022). However, the effective date of the federal product standards is unknown and is likely to be delayed by tobacco industry lawsuits (Schroth et al., 2019). New York has the potential to implement state and local sales restrictions aligned with the federal product standards, which could expand existing statewide policies and facilitate public health improvements in advance of federal action.

Programmatic Recommendations

Overall Recommendations

- Increase funding to at least 50% of CDC's recommended funding level for the state (which would result in Program funding of $101.5 million), to give the Program a greater opportunity to succeed at achieving its 2019–2024 NYSDOH Prevention Agenda objectives.
    - Revenue from the vaping product sales tax could be channeled to NY TCP to support education, intervention, and evaluation. High rates of vaping product use among New York youth require NY TCP to use its limited resources for a broad range of tobacco product types, even as the tobacco product landscape continues to evolve.
    - With additional funding, NY TCP could achieve higher reach and impact with its health communication messaging, conduct additional education about policies to reduce youth exposure and access to tobacco products, implement stronger compliance monitoring, enhance opportunities to promote cessation, and assess the effectiveness of interventions more comprehensively.
- Continue to refine the Program's approach to advance health equity and reach people who smoke with disproportionately high rates of smoking, especially adults who have lower income, those who have lower education, those who experience frequent mental distress, and those living with a disability.
- Develop a strategic plan for addressing tobacco and cannabis co-use, in collaboration with the New York Office of Cannabis Management.

Health Communication Recommendations

- Continue to focus the Program's limited funds available for paid media campaign efforts on high-impact television advertisements, those that graphically depict the health consequences of smoking or elicit strong negative emotions.
- Consider strategies to identify and employ the optimal allocation of campaign advertising across medium (e.g., television vs. digital) and specific channels and programs, especially as New Yorkers' use of media shifts over time.
- Review ad placement strategies to maximize the reach and potential effectiveness of campaigns among populations disproportionately affected by tobacco use.
- Continue to leverage media campaigns to advance tobacco-free norms and policies and reduce disparities and inequities in tobacco-related harms. Consider how cessation media campaigns can support people who smoke menthol cigarettes and flavored cigars to quit tobacco in the context of a potential federal ban on menthol cigarettes and flavored cigars.

Health Systems Change Recommendations

- Actively leverage existing partnerships and engage in new collaborations across the health care sector to promote health systems change and expand insurance coverage for tobacco dependence treatments for all New Yorkers.
- Work with the NY TCP-funded Center for Health Systems Improvement to leverage opportunities to create changes in the state-level context for health systems change that support the institutionalization of tobacco dependence treatment.
- Clarify the Program's plan for how vaping should be addressed in the health care setting and integrate this into health systems interventions.
- Collaborate with the New York State Medicaid Program to conduct additional educational efforts targeting enrollees and providers to promote awareness and use of Medicaid smoking cessation benefits.

Statewide and Community Intervention Recommendations

- Continue to work toward statewide and local restrictions on the sale of all flavored tobacco products, including menthol cigarettes and flavored cigars and cigarillos. More comprehensive flavor restrictions will reduce the appeal of tobacco products, especially among youth and Black people who are disproportionately targeted by industry marketing of menthol cigarettes.
- Increase collaboration with enforcement officials on compliance monitoring and documentation about statewide tobacco control policies including the flavored vaping product sales restriction and encourage or conduct studies regarding whether retailer compliance varies by neighborhood characteristics.
- Educate local and state policy makers and decision makers about trends in co-use of cannabis and tobacco, especially given the recent legalization of adult use marijuana in New York State and monitor whether and how legalization impacts tobacco use and social norms. Through these efforts, capitalize on opportunities to reinvigorate interest in the issue of tobacco use and smoke-free norms among the public and policy makers.
- Continue to integrate a health equity approach in the grantees' community-based work that recognizes the root causes that contribute to health disparities, including tobacco

use and its health consequences. Provide training and technical assistance for grantees to meaningfully engage their communities in this work.

References

American Academy of Pediatrics (AAP). (2021). *Smokefree movies and media.* https://www.aap.org/en/patient-care/tobacco-control-and-prevention/policy-and-advocacy/smokefree-movies-and-media/

Centers for Disease Control and Prevention (CDC). (2021). *BRFSS Prevalence & Trends Data*. https://nccd.cdc.gov/BRFSSPrevalence/rdPage.aspx?rdReport=DPH_BRFSS.ExploreByTopic&irbLocationType=StatesAndMMSA&islClass=CLASS17&islTopic=TOPIC15&islYear=2021&rdRnd=75346

Centers for Disease Control and Prevention (CDC). (2014). *Best Practices for Comprehensive Tobacco Control Programs—2014*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. https://www.cdc.gov/tobacco/stateandcommunity/guides/pdfs/2014/comprehensive.pdf

Centers for Disease Control and Prevention. (2000). *Reducing tobacco use: A report of the Surgeon General*. U.S. Department of Health and Human Services (HHS). https://www.cdc.gov/tobacco/sgr/2000/complete_report/pdfs/fullreport.pdf

Delnevo, C. D., Ganz, O., & Goodwin, R. D. (2020). Banning menthol cigarettes: a social justice issue long overdue. *Nicotine and Tobacco Research, 22*(10), 1673-1675. https://doi.org/10.1093/ntr/ntaa152

Fiore, M. C., Jaén, C. R., Baker, T. B., Bailey, W. C., Benowitz, N. L., Curry, S. J.,... Wewers, M. E. (2008, May). *Treating tobacco use and dependence: 2008 update. Clinical Practice Guideline*. U.S. Department of Health and Human Services. Public Health Service.

Frieden, T. R. (2010). A framework for public health action: The health impact pyramid. *American Journal of Public Health, 100*(4), 590–595. http://dx.doi.org/10.2105/AJPH.2009.185652

Goodwin, R. D., Pacek, L. R., Copeland, J., Moeller, S. J., Dierker, L., Weinberger, A., Gbedemah, M., Zvolensky, M. J., Wall, M. M., & Hasin, D. S. (2018). Trends in daily cannabis use among cigarette smokers: United States, 2002-2014. *American Journal of Public Health*, 108(1), 137–142. https://doi.org/10.2105/AJPH.2017.304050

Institute of Medicine (IOM). (2007). Changing the regulatory landscape. In R. J. Bonnie, Stratton, K. & Wallace, R. B. *Ending the tobacco problem: A blueprint for the nation*. The National Academies Press. https://doi.org/10.17226/11795

Lee, Y. O., & Glantz, S. A. (2011). Menthol: Putting the pieces together. *Tobacco Control*, 20 Suppl 2(Suppl_2), ii1–ii7. https://doi.org/10.1136/tc.2011.043604

Mann, N., Gaber, J., Spinks, G., Nonnemaker, J., & Brown, B., RTI International. (2020). *The health and economic burden of smoking in New York*. New York State Department of Health. https://www.health.ny.gov/prevention/tobacco_control/reports/docs/health_and_economic_burden.pdf

Mann, N., Nonnemaker, J., Chapman, L., Shaikh, A., Thompson, J., & Juster, H. (2018). Comparing the New York State smokers' quitline reach, services offered, and quit outcomes to 44 other state quitlines, 2010 to 2015. *American Journal of Health Promotion*, *32*(5), 1264-1272. https://doi.org/10.1177/0890117117724898

Mantey, D. S., Cooper, M. R., Clendennen, S. L., Pasch, K. E., & Perry, C. L. (2016). E-cigarette marketing exposure is associated with e-cigarette use among US youth. *The Journal of Adolescent Health, 58*(6), 686–690. http://dx.doi.org/10.1016/j.jadohealth.2016.03.003

Mendez, D., & Le, T. T. T. (2021). Consequences of a match made in hell: The harm caused by menthol smoking to the African American population over 1980-2018. *Tobacco Control*, tobaccocontrol-2021-056748. Advance online publication. https://doi.org/10.1136/tobaccocontrol-2021-056748

Mills, S. D., Henriksen, L., Golden, S. D., Kurtzman, R., Kong, A. Y., Queen, T. L., & Ribisl, K. M. (2018). Disparities in retail marketing for menthol cigarettes in the United States, 2015. *Health & Place*, *53*, 62–70. https://doi.org/10.1016/j.healthplace.2018.06.011

National Cancer Institute (NCI). (1991). *Strategies to control tobacco use in the United States: A blueprint for public health action in the 1990s* (NIH Pub. No. 92-3316). U.S. Department of Health and Human Services, National Institutes of Health. https://cancercontrol.cancer.gov/sites/default/files/2020-08/m01_complete.pdf

New York State Department of Health (NYSDOH). (2019). *Prevention agenda 2019-2024: New York State's Health Improvement Plan*. https://www.health.ny.gov/prevention/prevention_agenda/2019-2024/

Nonnemaker, J., Hersey, J., Homsi, G., Busey, A., Hyland, A., Juster, H., & Farrelly, M. (2011). Self-reported exposure to policy and environmental influences on smoking cessation and relapse: A 2-year longitudinal population-based study. *International Journal of Environmental Research and Public Health, 8*(9), 3591–3608. http://dx.doi.org/10.3390/ijerph8093591

Office of the Surgeon General. (2020). *Smoking cessation: A report of the Surgeon General*. U.S. Department of Health and Human Services, Public Health Service. https://www.hhs.gov/sites/default/files/2020-cessation-sgr-full-report.pdf

Office of the Surgeon General. (2012). *Preventing tobacco use among youth and young adults: A report of the Surgeon General*. U.S. Department of Health and Human Services, Public Health Service. https://www.hhs.gov/sites/default/files/preventing-youth-tobacco-use-exec-summary.pdf

Richardson, A., Ganz, O., Pearson, J., Celcis, N., Vallone, D., & Villanti, A.C. (2015). How the industry is marketing menthol cigarettes: The audience, the message and the medium. *Tobacco Control, 24*, 594–600. https://doi.org/10.1136/tobaccocontrol-2014-051657

RTI International. (2022). *2021 independent evaluation report of the New York Tobacco Control Program*. New York State Department of Health. Retrieved from https://www.health.ny.gov/prevention/tobacco_control/docs/2021_independent_evaluation_report.pdf

Schroth, K. R. J., Villanti, A. C., Kurti, M., & Delnevo, C. D. (2019). Why an FDA ban on menthol is likely to survive a tobacco industry lawsuit. *Public Health Reports, 134*(3), 300–306. https://doi.org/10.1177/0033354919841011

Truth Initiative. (2023). *Tobacco's starring role*. https://truthinitiative.org/tobacco-starring-role

U.S. Food and Drug Administration (FDA). (2022, April 28). *FDA proposes rules prohibiting menthol cigarettes and flavored cigars to prevent youth initiation, significantly reduce tobacco-related disease and death* [press release]. https://www.fda.gov/news-events/press-announcements/fda-proposes-rules-prohibiting-menthol-cigarettes-and-flavored-cigars-prevent-youth-initiation

Weinberger, A. H., Delnevo, C. D., Wyka, K., Gbedemah, M., Lee, J., Copeland, J., & Goodwin, R. D. (2020). Cannabis use is associated with increased risk of cigarette smoking initiation, persistence, and relapse among adults in the United States. *Nicotine & Tobacco Research, 22*(8), 1404–1408. https://doi.org/10.1093/ntr/ntz085

Appendix A. 2019–2024 NYSDOH Prevention Agenda Targets and 2021 Updates

Goals and Objectives	Data Source	Baseline Estimate (year)	Current Estimate (2021)	Target Estimate (2024)
3.1 Prevent Initiation of Tobacco Use				
3.1.1 Decrease the prevalence of any tobacco use by high school students	NYS YTS	25.4% (2016)	25.6% (2020)	19.7%
3.1.2 Decrease the prevalence of combustible cigarette use by high school students	NYS YTS	4.3% (2016)	2.4% (2020)	3.3%
3.1.3 Decrease the prevalence of vaping product use by high school students	NYS YTS	20.6% (2016)	22.5% (2020)	15.9%
3.1.4 Decrease the prevalence of combustible cigarette use by young adults age 18–24 years	BRFSS	11.7% (2016)	5.5% (2020)	9.1%
3.1.5 Decrease the prevalence of vaping product use by young adults age 18–24 years	BRFSS	9.1% (2016)	15.1% (BRFSS)	7.0%
3.1.6 Increase the number of municipalities that adopt retail environment policies, including those that restrict the density of tobacco retailers, keep the price of tobacco products high, and prohibit the sale of flavored tobacco products	CAT	15 (2018)	27	30
3.2 Promote Tobacco Use Cessation				
3.2.1 Increase the percentage of smokers who received assistance from their health care provider to quit smoking by 13.1% from 53.1% (2017) to 60.1%.	NYS ATS	53.1% (2017)	48.9%	60.1%
3.2.2 Decrease the prevalence of cigarette smoking by adults ages 18 years and older (among all adults)	BRFSS	14.2% (2016)	12.0%	11.0%
3.2.3 Decrease the prevalence of cigarette smoking by adults ages 18 years and older (among adults with income less than $25,000)	BRFSS	19.8% (2016)	20.4%	15.3%
3.2.4 Decrease the prevalence of cigarette smoking by adults ages 18 years and older (among adults with less than a high school education)	BRFSS	19.2% (2016)	19.2%	14.9%
3.2.5 Decrease the prevalence of cigarette smoking by adults ages 18 years and older (among adults reporting frequent mental distress)	BRFSS	26.0% (2016)	19.6%	20.1%
3.2.6 Decrease the prevalence of cigarette smoking by adults ages 18 years and older (among adults who self-identify as LGBT)	BRFSS	19.3% (2016)*	13.1%	14.9%

Goals and Objectives	Data Source	Baseline Estimate (year)	Current Estimate (2021)	Target Estimate (2024)
3.2.7 Decrease the prevalence of cigarette smoking by adults ages 18 years and older (among adults who are living with any disability)	BRFSS	20.1% (2016)	17.4%	15.6%
3.2.8 Increase the utilization of smoking cessation benefits (counseling and/or medications) among smokers who are enrolled in any Medicaid program	Medicaid Program	20.5% (2016)*	19.9% (2020)	26.2%
3.3 Eliminate Exposure to Secondhand Smoke				
3.3.1 Decrease the percentage of adults (non-smokers) living in multi-unit housing who were exposed to secondhand smoke in their homes	NYS ATS	35.2% (2017)	37.4%	27.2%
3.3.2 Decrease the percentage of youth (middle and high school students) who were in a room where someone was smoking on at least 1 day in the past 7 days	NYS YTS	23.1% (2016)	24.0% (2020)	17.9%
3.3.3 Increase the number of multi-unit housing units (focus should be on housing with higher number of units) that adopt a smoke-free policy by 5000 units each year	CAT	N/A	5,055	[5,000 per year]

BRFSS=Behavioral Risk Factor Surveillance System; CAT=Community Activity Tracking; NYS ATS=New York State Adult Tobacco Survey; NYS YTS=New York State Youth Tobacco Survey; LGBT=Lesbian, Gay, Bisexual, and Transgender

* Pooled data from 2014–2016

Appendix B. NY TCP Programmatic funding and allocation vs. CDC recommendations

The Centers for Disease Control and Prevention (CDC) recommends funding levels for specific NY TCP components and recognizes the importance of foundational programmatic infrastructure and management (CDC, 2014). NY TCP allocated 10% of its funding ($3.8 million) for administration, approximately half of CDC's recommended amount. CDC encourages programs to fund their administration, management, and infrastructure activities at the recommended dollar amount, even if the Program's overall funding is below the CDC-recommended level because of the importance of maintaining Program infrastructure (CDC, 2014). The Program's administration and management efforts include staffing and infrastructure aligned with CDC recommendations. NY TCP coordinates overall programmatic strategy and communicates with program staff, grantees, partners, and the broader NYSDOH. NY TCP's multilevel leadership approach engages staff and stakeholders in planning, communication, and coordinated management. The Program offers professional development, technical assistance, and guidance to reinforce effective and efficient investment of the state's tobacco control funding. NY TCP maintains contracts for the Quitline and tobacco control grantees and oversees grantee reporting systems, tools, and procedures to ensure accountability. The Program connects with regional, state, and local tobacco control stakeholders on a routine basis and in response to emerging issues. In coordination with state- and community-level activities and program initiatives, NY TCP develops and disseminates key messages through community grantees and earned and paid media. The Program collaborates with an independent surveillance and evaluation contractor and shares key tobacco control data and reports with stakeholders and the public.

The Program weighs CDC Best Practices as it navigates the distribution of its available funding across program components. CDC suggests that cessation interventions and state and community interventions receive the highest allocations. NY TCP put 39% of its funding toward state and community interventions, compared with CDC's recommendation of 30%. NY TCP assigned 20% of its funding to cessation interventions, compared with CDC's suggested 34%. NY TCP applied 8% of its funding to surveillance and evaluation, close to the 9% recommended by CDC. The Program put 23% of its FY 2021–2022 funding to health communications interventions, which is the percentage that CDC recommends. Funding amounts across Program components are similar to the prior FY, but the additional funds made available to the Program were primarily applied to health communications. Although NY TCP funding across Program components differs in some ways from CDC-recommended percentages, the most pressing discrepancy is the difference between the overall Program funding level and the CDC's recommendation for funding the Program.

Appendix C. Health Systems for a Tobacco-Free New York Grantees

HSTFNY Grantee	Counties Served
American Lung Association (Hudson Valley)	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester
HRI/Roswell Park-Health Systems for a Tobacco-Free Western NY	Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans, Wyoming
New York University (Metro A)	Bronx (Bronx), New York (Manhattan)
New York University (Metro B)	Kings (Brooklyn), Queens (Queens), Richmond (Staten Island)
North Country Healthy Heart Network (North Country)	Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Montgomery, St. Lawrence, Warren, Washington
Northwell Health (Long Island)	Nassau, Suffolk
St Joseph's Health (Central)	Broome, Chenango, Cortland, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Tioga
St. Peter's Health Partners (Capital)	Albany, Columbia, Delaware, Greene, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie
University of Rochester (Finger Lakes)	Cayuga, Chemung, Livingston, Monroe, Ontario, Schuyler, Seneca, Steuben, Tompkins, Wayne, Yates

Appendix D. Advancing Tobacco-Free Communities Grantees

ATFC Grantee	Counties Served
Capital District Tobacco Free Communities	Albany, Rensselaer, Schenectady
Tobacco-Free CCA	Allegany, Cattaraugus, Chautauqua
NYC Smoke-Free	Bronx (Bronx), Kings (Brooklyn), New York (Manhattan), Queens (Queens), Richmond (Staten Island)
Tobacco Free Broome and Tioga	Broome, Tioga
Onondaga County Health Department	Cayuga, Onondaga, Oswego
Southern Tier Tobacco Awareness Coalition	Chemung, Schuyler, Steuben
Tobacco Free Zone - Cortland, Tompkins, Chenango	Chenango, Cortland, Tompkins
Tobacco-Free Clinton Franklin and Essex Counties	Clinton, Essex, Franklin
Tobacco-Free Action of Columbia & Greene	Columbia, Greene
Tobacco Free Communities in Delaware, Otsego, and Schoharie Counties	Delaware, Otsego, Schoharie
Tobacco Free Action Communities in Ulster, Dutchess, and Sullivan Counties	Dutchess, Sullivan, Ulster
Tobacco-Free Erie-Niagara	Erie, Niagara
Advancing Tobacco-Free Communities of Hamilton, Fulton & Montgomery Counties	Fulton, Hamilton, Montgomery
Tobacco-Free Genesee, Orleans, and Wyoming County	Genesee, Orleans, Wyoming
BRiDGES Tobacco Prevention Program	Herkimer, Madison, Oneida
Tobacco Free St Lawrence, Jefferson, and Lewis Counties	Jefferson, Lewis, St. Lawrence
Smoking and Health Action Coalition of Monroe & Livingston County	Livingston, Monroe
Tobacco Action Coalition of Long Island	Nassau, Suffolk
Tobacco Action Coalition of the Finger Lakes	Ontario, Seneca, Wayne, Yates
POW'R Against Tobacco	Orange, Putnam, Rockland, Westchester
Adirondack Health Institute	Saratoga, Warren, Washington