The National Youth Tobacco Survey (NYTS) should be continued with consistent rigor, measures, and public access to data

Docket No. CDC-2024-0106 Proposed Data Collection Submitted for Public Comment and Recommendations on National Youth Tobacco Survey, 2021-2023 2025-10861

Pamela Ling, MD MPH; Stanton Glantz, PhD; Weisiyu Abraham Qin, MPH MHA MBA PhD; Dorie Apollonio, PhD MPP; Ben Chaffee, DDS MPH PhD; Vuong Do, PhD MPH; Lauren Lempert, JD MPH; Bonnie Halpern-Felsher, PhD; Vira Pravosud, PhD, MPH, MS; Stuart Gansky, DrPH; Iona Cheng, PhD; Heather Leutwyler, RN, PhD, FNP; Wendy Max, PhD; Chris Shaffer, MS; Nhung Nguyen, PhD; Maya Vijayaraghavan, MD MAS; Ruth Malone, RN, PhD, FAAN; Scarlett Gomez, PhD, MPH; Robin Corelli, PharmD; Yingning Wang, PhD; Suzaynn Schick, PhD; Laura A. Schmidt PhD; Jeremiah Mock, MSc, PhD; Stella Aguinaga Bialous, DrPH, FAAN; Warren Gold MD; Valerie Gribben, MD; Mark Hawes, PhD, LCSW; Sabrina Islam, PhD, MS; Divine Darlington Logo, PhD

University of California San Francisco August 5, 2025

Tobacco is the leading preventable cause of death in the United States, and youth tobacco use perpetuates the epidemic. Public health surveillance of youth tobacco use is a fundamental responsibility of the US Department of Health and Human Services. This responsibility is enshrined in the Family Smoking Prevention and Tobacco Control Act, whose key purpose is "to ensure that the Food and Drug Administration (FDA) has the authority to address issues of particular concern to public health officials, especially the use of tobacco by young people and dependence on tobacco." The National Youth Tobacco Survey (NYTS) is the flagship national study of tobacco use among youth. The NYTS provides the leading benchmarks for tracking youth tobacco use and informing progress made in ending the youth tobacco epidemic. It is therefore critical to continue the NYTS annual survey to enable FDA to fulfill its obligation to protect the health of all Americans, especially youth.

The NYTS has a unique role in tobacco/nicotine² surveillance, utilizing rigorous measures and a nationally representative sample of our nation's youth, with detail about individual tobacco products used, patterns of use, dependence, and important population subgroups that may use tobacco.

NYTS data have been the basis for landmark reports, educational campaigns, prevention and cessation programs, adolescent health, regulatory guidance and decisions from the US Food and

¹ Family Smoking Prevention and Tobacco Control Act section 3(2).

⁻

² All mentions of "tobacco" should be read to include nicotine regardless of source, whether extracted from a tobacco plant, synthetically produced nicotine, or nicotine analogs. This is consistent with the current FDA definition of tobacco products.

Drug Administration,³ as well as for the Centers for Disease Control and Prevention,⁴ the National Cancer Institute,⁵ as well as hundreds of peer-reviewed papers produced by academic and public health organizations. These data consistently reflect current trends in youth tobacco use and have vital implications for tobacco prevention and cessation programs. Importantly, as just noted, these data are essential to inform FDA so it can implement effective, science-based measures to protect youth.

For these reasons, we strongly support the federal Office of Management and Budget (OMB) approval to continue the NYTS in 2026-2028 as a comprehensive survey of tobacco (including all nicotine and related products, including synthetic nicotine and nicotine analogs) among a nationally representative sample of students attending public and private schools in grades 6-12. We support continuing past efforts to modernize the survey, including adding new products that the tobacco industry (broadly defined) continues to introduce to the market, together with specific product names, to measure progress toward meeting strategic goals established by the Family Smoking Prevention and Tobacco Control Act. We support continuing to conduct the survey annually, including increased representation of priority populations with disparities in tobacco use rates.

Detailed Justification of the Importance of the NYTS Surveillance

1. The detailed information provided by the NYTS on tobacco product use, brands, dependence, and risk factors that reflect the current marketplace is essential to inform national, state, and local policies that prevent youth tobacco use

A key strength and unique contribution of the NYTS is the detailed information it provides on tobacco product use, brands, dependence, and risk factors, which is not collected in other national health surveys. It is important that the NYTS continue to reflect the variety of tobacco products and popular brands available in the current and evolving marketplace. NYTS measures should be regularly updated to reflect novel and popular tobacco and nicotine products, such as the newest e-cigarettes, as well as the latest and most popular brands of heated tobacco products and nicotine pouches, and other new products as they appear. Detailed information, including patterns of use among all relevant sociodemographic subgroups, use of flavored products, product subtypes, and the most popular brands,⁶ is important to inform national tobacco regulation, as well as public health education campaigns and state or local policies to prevent youth tobacco use. NYTS data have been used to capture rapid shifts in the type of tobacco product used (i.e., the rise and dominance of JUUL use in 2017-2019⁷) and show key predictors of e-cigarette use,⁸ and the vaping

_

 $^{^3\} https://www.fda.gov/tobacco-products/youth-and-tobacco/results-annual-national-youth-tobacco-survey-nyts$

⁴ Jamal A, Park-Lee E, Birdsey J, et al. Tobacco Product Use Among Middle and High School Students — National Youth Tobacco Survey, United States, 2024. MMWR Morb Mortal Wkly Rep 2024;73:917–924. DOI: http://dx.doi.org/10.15585/mmwr.mm7341a2.

⁵ Cancer Trends Progress Report. National Cancer Institute, NIH, DHHS, Bethesda, MD, April 2025, https://progressreport.cancer.gov.

⁶ Knopf, A. (2025), Youth tobacco survey results released. The Brown University Child and Adolescent Behavior Letter, 41: 7-7. https://doi.org/10.1002/cbl.30846

⁷ Cullen KA, Gentzke AS, Sawdey MD, et al. e-Cigarette Use Among Youth in the United States, 2019. JAMA. 2019;322(21):2095–2103. doi:10.1001/jama.2019.18387

⁸ Lindpere V, Winickoff JP, Khan AS, Dong J, Michaud TL, Liu J, Dai HD. Reasons for E-cigarette Use, Vaping Patterns, and Cessation Behaviors Among US Adolescents. Nicotine Tob Res. 2023 Apr 6;25(5):975-982. doi: 10.1093/ntr/ntac278. PMID: 36507903; PMCID: PMC10077941.

cessation methods used by adolescents who use e-cigarettes.⁹ In addition, the NYTS provides detailed data on exposure to tobacco marketing in traditional and social media, awareness of public education campaigns, harm perceptions, access to tobacco products, and dependence indicators, ¹⁰ which is pivotal to inform counter-marketing programs and regulations to curb the epidemic of vaping among youth. NYTS data have also been used to assess the population-level impact of national education campaigns such as FDA's "The Real Cost" campaign.¹¹

State-level tobacco prevention efforts, including, for example, the California Youth Tobacco Survey and other state surveys, are benchmarked to the NYTS to understand statewide trends in youth tobacco use.

At the same time, it is important for NYTS to maintain consistent measures of tobacco use over time and ensure that new questions are written in a way that allows for time series analyses that harmonize with past waves of data. The ability of NYTS to demonstrate trends in youth tobacco use over time is a powerful and important function of this surveillance tool.

Continuing to field measures of risk perception, peer norms, access, exposure to advertising, family characteristics, and school connectedness is critical. For instance, studies using NYTS data have demonstrated that youth who perceive low harm from vaping are significantly more likely to initiate use. 12 These variables not only help explain the reasons for tobacco use but also allow researchers and policymakers to better design targeted interventions. Moreover, the inclusion of mental health and contextual factors is timely and important. Given the increasing evidence linking adolescent tobacco with depression 13 and suicidality, 14 inclusion of these data is essential for appropriate public health responses.

Tobacco companies market different products using different messages depending on both sociodemographic and behavioral factors. As a result, there are wide differences in tobacco use and risk factors for tobacco use across different population groups. The NYTS has responded to this challenge by having a sufficient sample size to allow for subgroup analyses that track progress in known tobacco use including variation by age, sex, race/ethnicity, ancestry and sexual/gender minority status, 15 and among people with comorbidities such as mental health symptoms, and other

37781732; PMCID: PMC10995917.

¹⁰ Gentzke AS, Wang TW, Cornelius M, et al. Tobacco Product Use and Associated Factors Among Middle and High School Students — National Youth Tobacco Survey, United States, 2021. MMWR Surveill Summ 2022;71(No. SS-5):1–29. DOI: http://dx.doi.org/10.15585/mmwr.ss7105a1.

3

⁹ Dai HD, Hanh P, Guenzel N, Morgan M, Kerns E, Winickoff JP. Adoption of Vaping Cessation Methods by US Adolescent E-Cigarette Users. Pediatrics. 2023 Nov 1;152(5):e2023062948. doi: 10.1542/peds.2023-062948. PMID:

¹¹ Aldukhail S, Alabdulkarim A, Agaku IT. Population-level impact of 'The Real Cost' campaign on youth smoking risk perceptions and curiosity, United Sates 2018-2020. Tob Induc Dis. 2023 Dec 12;21:162. doi: 10.18332/tid/174900. PMID: 38090739; PMCID: PMC10714412.

¹² Gentzke, Andrea S. "Tobacco product use among middle and high school students—United States, 2020." *MMWR*. *Morbidity and Mortality Weekly Report* 69 (2020).

¹³ McKenzie, Maria, Craig A. Olsson, Anthony F. Jorm, Helena Romaniuk, and George C. Patton. "Association of adolescent symptoms of depression and anxiety with daily smoking and nicotine dependence in young adulthood: findings from a 10-year longitudinal study." *Addiction* 105, no. 9 (2010): 1652-1659.

¹⁴ Javed, Sana, Sadia Usmani, Zouina Sarfraz, Azza Sarfraz, Aunsa Hanif, Amena Firoz, Rusab Baig et al. "A scoping review of vaping, e-cigarettes and mental health impact: depression and suicidality." *Journal of community hospital internal medicine perspectives* 12, no. 3 (2022): 33.

¹⁵ Mattingly DT, Hart JL. Trends in Current Electronic Cigarette Use Among Youths by Age, Sex, and Race and Ethnicity. JAMA Netw Open. 2024 Feb 5;7(2):e2354872. doi: 10.1001/jamanetworkopen.2023.54872. PMID: 38315486; PMCID: PMC10844997.

factors.⁸ The large sample size and ability to stratify results by these factors should be maintained in order to provide crucial information to design and evaluate programs to continue to make progress toward meeting strategic goals established by the Family Smoking Prevention and Tobacco Control Act and Healthy People 2030.

2. Timely and detailed surveillance is needed in youth tobacco research

While several national surveys have collected data on youth substance use, including Monitoring the Future (MTF), The Youth Risk Behavior Surveillance System (YRBSS), the Population Assessment of Tobacco and Health (PATH) Study, and the National Survey on Drug Use and Health (NSDUH), the NYTS remains unique in its scope, timeliness, and the level of detail specific to youth tobacco use behaviors and related factors. Unlike MTF and NSDUH, which provide broader substance use trends with more limited focus on tobacco use, the NYTS offers more granular, policy-relevant data tailored specifically to tobacco products, marketing exposure, use patterns, and perceptions among youth. Although the PATH Study uses detailed measures, it includes a much smaller sample of youth and operates on a much slower data collection schedule with respect to emerging tobacco products, limiting its utility for timely public health responses and policy evaluation. NYTS addresses these gaps in other datasets by providing depth, precision, and speed in surveillance, enabling researchers, educators, and legislators to respond effectively to emerging trends in youth tobacco use.

3. Transparent public access to NYTS Public Use Datasets are important for researchers and local health officials to inform federal FDA and CDC activities as well as state and local programs

Transparent public access to data is another important function of NYTS. NYTS datasets are widely used by independent researchers, local health officials, and others to provide detailed analysis beyond FDA and CDC reports. The resulting research informs FDA and CDC activities to implement the Family Smoking Prevention and Tobacco Control Act, as well as state and local tobacco control education programs and interventions. Public use datasets from the NYTS should be released promptly. In addition, the datasets from 2020-2023, which were removed from the CDC website, ¹⁶ should be restored, and the 2024 public use dataset should be posted promptly in order to continue to inform the Tobacco Control Act's ability to protect public health.

Conclusion

The NYTS is a critical source of data instrumental to preventing youth tobacco use. The survey should be continued with consistent measures, rigor, and public access as it has for the past 25 years.

¹⁶ About Historical NYTS Data and Documentation. https://www.cdc.gov/tobacco/about-data/surveys/historical-nyts-data-and-documentation.html,